



# TASSALINI

SINCE 1922, PRECISION MADE GREAT

 Tubi – Reggitubi  
Pipes – Pipe hangers  
Tubes – Colliers  
Tubos – Abrazaderas

  Raccordi  
Unions  
  Raccords  
Racores

  Riduzioni – Tee – Croci  
Reducers – Tees – Crosses  
  Réductions – Tés – Croix  
Reducciones – Tes – Cruces

  Curve  
Bends  
  Coudes  
Codos

  Filtri – Specole  
Filters – Sight glasses  
  Filtres – Regards  
Filtros – Mirillas

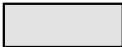
 Rubinetti – Rubinetti di prelievo  
Plug cocks – Sampling plugs  
Robinets – Robinets prise échantillon  
Grifos – Grifos tomamuestras

  Valvole di regolazione flusso/sicurezza/ritegno/pressione depressione  
Flow control/relief/check/vacuum pressure valves  
  Vannes de réglage flux/soupapes de sûreté/clapets de retenue/soupapes de pression dépression  
Válvulas de regulación/seuridad/retención/presión vacío

  Valvole a farfalla  
Butterfly valves  
  Vannes papillon  
Válvulas de mariposa

 Valvole a sfera  
Ball valves  
Vannes à boule  
Válvulas de bola

  Valvole pneumatiche – Valvole manuali  
Pneumatic valves – Manual valves  
  Vannes pneumatiques – Vannes manuelles  
Válvulas neumáticas – Válvulas manuales

 Valvole a membrana  
Diaphragm valves  
Vannes à membrane  
Válvulas de membrana

 Accessori  
Accessories  
Accessoires  
Accesorios

 Raccordi – Valvole  
Unions – Valves  
Raccords – Vannes  
Racores – Válvulas

 Raccordi – Valvole  
Unions – Valves  
Raccords – Vannes  
Racores – Válvulas

 Raccordi – Tee – Curve – Valvole – Norme DIN e ISO  
Unions – Tees – Bends – Valves – DIN and ISO standards  
Raccords – Tés – Coudes – Vannes – Normes DIN et ISO  
Racores – Tes – Codos – Válvulas – Normas DIN e ISO

 Raccordi – Valvole  
Unions – Valves  
Raccords – Vannes  
Racores – Válvulas

SINCE 1922,  
PRECISION MADE GREAT



TASSALINI S.P.A. opera nel campo delle produzioni meccaniche da oltre 80 anni e da 40 anni costruisce valvole e raccordi tecnologicamente avanzati di sua esclusiva progettazione e fabbricazione per l'industria agroalimentare, enologica, delle bevande, chimica e farmaceutica.

La completa gamma dei prodotti è realizzata in acciaio inossidabile AISI 304L e AISI 316L ed è ricavata da materiale laminato o da particolari stampati a caldo, solubilizzati e lavorati meccanicamente; speciale accuratezza è dedicata alla lavorazione delle parti filettate e l'eliminazione delle parti finali delle filettature è eseguita con operazioni meccaniche a garanzia di assoluta sicurezza durante la manipolazione dei pezzi.

La gamma degli articoli prodotti dalla Tassalini s.p.a. è fabbricata secondo le principali norme internazionali (DIN, SMS, RJT BS, ISS IDF, Gas, Eno, Macon e Clamp) e comprende raccordi; riduzioni; tee; curve; filtri e specole; rubinetti; valvole di regolazione, sicurezza e ritegno; valvole a farfalla di diversi tipi, a comando manuale e pneumatico, predisposti per l'inserimento di componenti elettrici; valvole a sfera; valvole pneumatiche, 3-A e di drenaggio; valvole a membrana.

Tutti i prodotti sono normalmente disponibili a magazzino nelle misure standard e l'ufficio tecnico della Tassalini s.p.a. è a disposizione per lo studio di eventuali pezzi speciali

necessari alla realizzazione di particolari impianti.

Gli oltre 7000 metri quadrati di superficie nella nuova sede di Peschiera Borromeo hanno garantito una più puntuale organizzazione della produzione, dei controlli e degli stoccati a magazzino e hanno consentito l'installazione di una serie di macchine utensili di ultima generazione, di concezione estremamente avanzata e operanti con programmi altamente sofisticati.

Una meticolosa serie di controlli e collaudi rappresenta un ulteriore aspetto operativo che concorre a garantire la qualità dei raccordi e delle valvole Tassalini, riconosciuta a livello internazionale.

La Tassalini s.p.a. è presente con una rete capillare di propri rivenditori sul mercato europeo e mondiale.



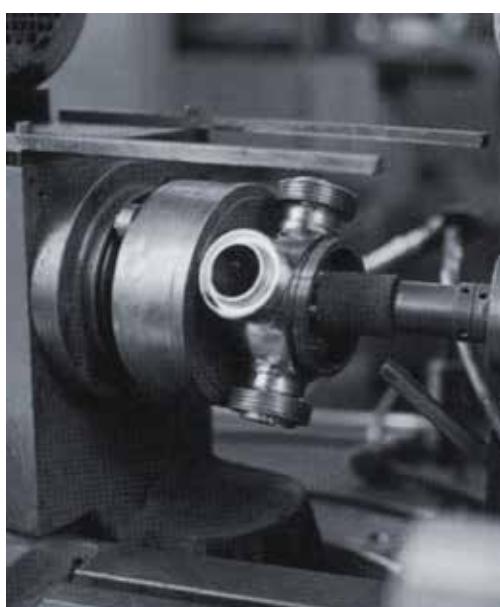
*TASSALINI S.P.A. has been operating in the machined products industry for over 80 years and for the last 40 years has made high-tech valves and fittings of its own exclusive design and manufacture for the food, wine, beverages, chemical and pharmaceutical industries.*

*All Tassalini s.p.a. products are made of AISI 304L and AISI 316L stainless steel from hot-rolled material or press-forged sections, solution heat-treated and machined. Special care is given to the machining of threaded parts while the elimination of threaded ends is carried out by machining to ensure absolute safety to those handling the parts.*

*The range of articles produced by Tassalini s.p.a. is manufactured in conformity with the main international standards (DIN, SMS, RJT BS, ISS IDF, BSP, Eno, Macon, and Clamp standards) and includes unions; reducers; tees; bends; filters and sight glasses; plug cocks; flow control, relief, and check valves; different types of butterfly valves with manual or pneumatic controls, designed for the insertion of electrical components; ball valves; pneumatic, 3-A, and drainage valves; diaphragm valves.*

*All products are stocked in standard dimensions and our engineering department is at the customer's complete disposal to develop customized parts for special systems.*

*Tassalini's new premises in Peschiera Borromeo cover 7000 square metres*



*making it possible to achieve accurate production planning, control and inventory, as well as allowing the installation of a series of latest-generation machine tools, conceived at the most advanced level and operating with highly sophisticated programmes.*

*A meticulous testing and inspection procedure is an additional aspect of operations which helps ensure the quality of Tassalini fittings and valves, recognized worldwide.*

*Tassalini s.p.a. is represented by a complete network of dealers and distributors on European and world markets.*

**TASSALINI S.P.A.** opère depuis plus de 80 ans dans le secteur des productions mécaniques et depuis 40 ans l'entreprise fabrique des vannes et des raccords d'un très haut niveau technologique, entièrement conçus et réalisés par elle-même, destinés à l'industrie agro-alimentaire, œnologique, des boissons, chimique et pharmaceutique.

Sa gamme complète de produits est réalisée en acier inoxydable AISI 304L et AISI 316L et est obtenue à partir de matériaux laminés ou de pièces moulées à chaud, solubilisées et usinées mécaniquement. Un soin tout particulier est réservé à l'usinage des parties filetées et l'élimination des extrémités des filetages est réalisée avec des opérations mécaniques garantissant une sécurité absolue pendant le maniement des pièces.

La gamme des articles produits par Tassalini s.p.a. est fabriquée conformément aux principales normes internationales (DIN, SMS, RJT BS, ISS IDF, Gas, Eno, Macon et Clamp) et se compose de raccords; réductions; tés; coudes; filtres et regards; robinets; vannes de rég

lage, soupapes de sûreté et clapets de retenue; vannes papillon de différents types, à commande manuelle ou pneumatique, prévus pour l'insertion de composantes électriques; vannes à boule; vannes pneumatiques, 3-A et de drainage; vannes à membrane.

Tous les produits sont disponibles en stock pour les mesures standard. Le bureau technique de Tassalini s.p.a. est en outre disponible pour la conception de pièces spéciales s'avérant nécessaires pour la réalisation d'installations particulières.

Avec une superficie de plus de 7000 m<sup>2</sup>, le nouveau siège de Peschiera Borromeo assure une organisation plus rationnelle de la production, des contrôles et du stockage. Il a également permis d'installer toute une série de machines-outils de la dernière génération, d'une conception d'avant-garde et opérant avec des programmes très sophistiqués. Une série méticuleuse de contrôles et d'essais représente un autre aspect du travail qui permet de garantir la qualité des raccords et des vannes Tassalini, une qualité reconnue au niveau international.

La présence de Tassalini s.p.a. sur les marchés européens et mondiaux est assurée grâce à son réseau très serré de revendeurs.

*TASSALINI S.P.A. trabaja en el sector de la producción mecánica desde hace más de 80 años y desde hace 40 años construye válvulas y racores tecnológicamente de vanguardia, de su exclusivo diseño y fabricación, para la industria agroalimenticia, enológica, de bebidas, química y farmacéutica.*

*La gama completa de productos está realizada de acero inoxidable AISI 304L y AISI 316L y se obtiene a partir de material laminado o de piezas estampadas en caliente, solubilizadas y elaboradas mecánicamente; al maquinado de las piezas roscadas se le dedica un esmero especial mientras que la eliminación de las partes terminales de las roscas se efectúa mediante operaciones mecánicas que garantizan totalmente la seguridad durante la manipulación de las piezas.*

*La gama de artículos producidos por Tassalini s.p.a. está fabricada según las principales normas internacionales (DIN, SMS, RJT BS, ISS IDF, Gas, Eno, Macon y Clamp) e incluye racores; reducciones; tes; codos; filtros y mirillas; grifos; válvulas de regulación, de seguridad y de retención; válvulas de mariposa de diferentes tipos, con mando manual o neumático, predisuestos para conexiones con componentes eléctricos; válvulas de bola; válvulas neumáticas, 3-A y de drenaje; válvulas de membrana.*

*Normalmente todos los productos se encuentran disponibles en el almacén en las medidas estándar. Para la realización de sistemas especiales el departamento técnico de Tassalini s.p.a. está a disposición de sus clientes para estudiar las piezas especiales que pudieran ser necesarias.*

*Los más de 7000 metros cuadrados de superficie en la nueva sede de Peschiera Borromeo garantizan una mejor organización de la producción, de los controles y de las existencias del almacén, y han permitido instalar una serie de máquinas herramientas de última generación, de concepción muy avanzada y que trabajan con programas altamente sofisticados.*

*Una meticolosa serie de controles y pruebas representa otro de los aspectos operativos que ayudan a garantizar la calidad de los racores y de las válvulas Tassalini, reconocida en los mercados internacionales.*

*Tassalini s.p.a. está presente sobre el mercado europeo y mundial a través de una red muy extendida y ramificada de sus propios revendedores.*



La completa gamma dei nostri prodotti è realizzata in acciaio inossidabile AISI 304L e AISI 316L.

The complete range of our products is made of AISI 304L and AISI 316L stainless steel.

La gamme complète de nos produits est réalisée en acier inoxydable AISI 304L et AISI 316L.

La gama completa de nuestros productos está realizada en acero inoxidable AISI 304L y AISI 316L.

TIPI DI ACCIAIO INOSSIDABILE E LORO CORRISPONDENZA CON LE PRINCIPALI NORMATIVE ESTERE  
STAINLESS STEEL TYPES AND THEIR CORRESPONDING INTERNATIONAL STANDARDS  
TYPES D'ACIERS INOXYDABLES ET LEUR CORRESPONDANCE AVEC LES PRINCIPALES NORMES INTERNATIONALES

TIPOS DE ACERO INOXIDABLE Y SU CORRESPONDENCIA CON LAS PRINCIPALES NORMAS EXTRANJERAS

Italia Italy Italie Italia	USA USA USA USA	Germania Germany Allemagne Alemania	Francia France France Francia	Svezia Sweden Suède Suecia	Gran Bretagna Great Britain Grande-Bretagne Gran Bretaña
UNI	AISI	WERKSTOFF	AFNOR	SIS	BSI
X2CrNi18-11	304L	1.4306	Z2CN18-10	2352	304S11
X2CrNiMo17-12	316L	1.4404	Z2CND17-12	2348	316S11

COMPOSIZIONE CHIMICA  
CHEMICAL COMPOSITION  
COMPOSITION CHIMIQUE  
COMPOSICIÓN QUÍMICA

AISI 304L		AISI 316L	
	C	C	≤ 0,03
C	≤ 0,03	Cr	≥ 17,00
Cr	≥ 19,00	Ni	≥ 12,00
Ni	≥ 10,00	Mo	≥ 2,25
Si	≤ 0,25	Si	≤ 0,30
Mn	≤ 1,30	Mn	≤ 1,40
S	≤ 0,02	S	≤ 0,02
P	≤ 0,02	P	≤ 0,02

CARATTERISTICHE MECCANICHE  
MECHANICAL CHARACTERISTICS  
CARACTÉRISTIQUES MÉCANIQUES  
CARACTERÍSTICAS MECÁNICAS

AISI 304L			AISI 316L				
Hd	140	÷	190	Hd	18	÷	220
R	55	÷	65	R	65	÷	75
S	≥ 22			S	≥ 23		
AP5	≥ 50			AP5	≥ 50		
C	≥ 65			C	≥ 60		
KI	≥ 25			KI	≥ 18		

GRIT	Max R <sub>a</sub> µm	Max R <sub>a</sub> µ"
120	1,01 - 1,14	40 - 45
150	0,76 - 0,89	30 - 35
240	0,38 - 0,51	15 - 20
400	≤ 0,2	≤ 8

#### ■ 120 GRIT

- Finitura meccanica di precisione / satinatura esterna e interna.
- Precision machine finish / external and internal glazing.
- Finissage mécanique de précision / satinage externe et interne.
- Acabado mecánico de precisión / satinado exterior e interior.

#### ■ 150 GRIT

- Finitura LS: lucidatura esterna e satinatura interna.
- LS finish: external polishing and internal glazing.
- Finissage LS: polissage extérieur et satinage intérieur.
- Acabado LS: pulido exterior y satinado interior.

#### ■ 240 GRIT

- Finitura LL: lucidatura esterna e interna.
- LL finish: external and internal polishing.
- Finissage LL: polissage extérieur et intérieur.
- Acabado LL: pulido exterior e interior.

#### ■ 400 GRIT

- Finitura LE: lucidatura elettrolitica.
- LE finish: electrolytic polishing.
- Finissage LE: polissage électrolytique.
- Acabado LE: pulido electrolítico.

**CODIFICAZIONE**  
**CODING****CODIFICATION**  
**CODIFICACIÓN**Norme  
Standards  
Normes  
NormasMisure  
Sizes  
Mesures  
MedidasTipo di materiale  
Material type  
Type de matériau  
Tipo de material  
4 = AISI 304L  
6 = AISI 316L  
E = EPDM  
N = NBR  
S = Silicone  
T = PTFE  
V = FTMCodice di base  
Basic code  
Code de base  
Código de baseParticolari/Finitura  
Details/Finish  
Détails/Finissage  
Detalles/Acabado**NORME**  
**STANDARDS****NORMES**  
**NORMAS**

D	DIN
S	SMS
B	RJT BS
I	ISS IDF
L	Universali / Universal / Universelles / Universales
U	UNI
G	Gas / BSP / Gas / Gas
E	Eno
K	Clamp
M	Macon

**ABBREVIAZIONI**  
**ABBREVIATIONS****ABBÉVIATIONS**  
**ABREVIACIONES**

BC.	Bocchettone conico
BF.	Bocchettone filettato
BL.	Bocchettone liscio
C.	Cilindro
DE.	Doppio effetto
EC.	Estremità conica
EF.	Estremità filettata
EL.	Estremità liscia
EM.	Estremità mandrinare
ES.	Estremità saldare
E. SM.	Estremità semiraccordo
G.	Girella
MR.	Mandrinare
MT.	Mandrinato
NA.	Normalmente aperta
NC.	Normalmente chiusa
SE.	Semplice effetto
SR.	Saldare
ST.	Saldato
V.	Valvola

ACT.	Actuator
DE.	Double effect
ED.	Expanded
EE.	Expanding end
E. FR.	End ferrule
EG.	Expanding
L.	Liner
ME.	Male end
MP.	Male part
N.	Nut
NC.	Normally closed
NO.	Normally open
PE.	Plain end
SE.	Simple effect
TE.	Taper end
TP.	Taper part
V.	Valve
WD.	Welded
WE.	Welding end
WG.	Welding

BC.	Bout conique
BD.	Bout à dudgeonner
BF.	Bout fileté
BL.	Bout lisse
B. FR.	Bout ferrule
BS.	Bout à souder
DE.	Double effet
DN.	Dudgeonné
DR.	Dudgeonner
É.	Écrou
NF.	Normalement fermée
NO.	Normalement ouverte
PC.	Pièce conique
PF.	Pièce filetée
PL.	Pièce lisse
SD.	Soudé
SE.	Simple effet
SR.	Souder
V.	Vanne
VÉ.	Vérin

C.	Casquillo racor
CIL.	Cilindro
DE.	Doble efecto
EC.	Extremo cónico
EL.	Extremo liso
EM.	Extremo mandrilar
ER.	Extremo roscado
ES.	Extremo soldar
E. SM.	Extremo semiracor
M.	Macho racor
MD.	Mandrilado
MM.	Manguito manguera
MR.	Mandrilar
NA.	Normalmente abierta
NC.	Normalmente cerrada
SD.	Soldado
SE.	Simple efecto
SR.	Soldar
T.	Tuerca
V.	Válvula

#### GOMMA NITRILICA (NBR)

La gomma nitrilica è un elastomero di sintesi particolarmente versatile, in quanto riunisce in sé notevoli combinazioni di proprietà, le cui caratteristiche sono: elevata resistenza alla trazione, all'usura, alla deformazione permanente; campo d'applicazione in un intervallo di temperature da -10°C a +100°C (+15°F +210°F); elevata resistenza ai prodotti derivati dal petrolio, agli olii e ai grassi di qualsiasi natura, sia minerale che vegetale o animale, e in genere a tutti i liquidi e solventi non polari.

Peraltro la gomma nitrilica non è indicata per uso a contatto con idrocarburi aromatici e clorurati come pure con i liquidi polari quali chetoni, esteri, alcoli e acidi minerali.

#### NITRILE RUBBER (NBR)

Nitrile rubber is a very versatile synthetic elastomer because it is made up of valuable combinations of properties which possess the following characteristics: high tensile strength and high resistance to wear and permanent deformation; temperature application range from -10°C to +100°C (+15°F +210°F); high resistance to petroleum derivatives, oils, fats of all kinds whether mineral, vegetable or animal and generally all non-polar liquids and solvents.

Nitrile rubber is not recommended for use in contact with aromatic and chlorinated hydrocarbons or polar liquids such as ketones, esters, alcohols and mineral acids.

#### CAOUTCHOUC NITRILE (NBR)

Le caoutchouc nitrile est un élastomère de synthèse particulièrement souple regroupant de remarquables combinaisons de propriétés et présentant les caractéristiques suivantes: haut niveau de résistance à la traction, à l'usure et à la déformation permanente; champ d'application compris entre -10°C et +100°C (+15°F +210°F); haut niveau de résistance aux produits dérivés du pétrole, aux huiles et aux graisses de toute nature (minérale, végétale ou animale) et, en générale, à tous les liquides et solvants non polaires.

Le caoutchouc nitrile ne doit par contre pas être utilisé au contact avec les hydrocarbures aromatiques et chlorurés ou avec les liquides polaires tels que les cétones, les esters, les alcools et les acides minéraux.

#### CAUCHO DE NITRILO (NBR)

El caucho de nitrilo es un elastómero de síntesis muy versátil, ya que combina diferentes propiedades, cuyas características son las siguientes: elevada resistencia a la tracción, desgaste y deformación permanente; campo de aplicación en un intervalo de temperatura de -10°C a +100°C (+15°F +210°F); elevada resistencia a los productos derivados del petróleo, aceites y grasas de cualquier naturaleza, tanto mineral como vegetal o animal, y en general a todos los líquidos y disolventes no polares.

De todas formas, no se aconseja utilizar el caucho de nitrilo en contacto con hidrocarburos aromáticos y clorurados, así como con líquidos polares como por ejemplo cetonas, ésteres, alcoholes y ácidos minerales.

#### GOMMA SILICONICA (VMQ)

La gomma siliconica comprende una vasta classe di composti silico-organici che presentano, nel loro insieme, un'ampia gamma di proprietà. Le principali sono: campo d'applicazione in un amplissimo intervallo di temperature (da -50°C a +200°C [-60°F +390°F]); purezza fisiologica; notevole resistenza all'invecchiamento atmosferico; ottima resistenza agli agenti ossidanti e alle soluzioni saline; notevole resistenza alle soluzioni acide e alcaline, come pure agli olii vegetali e animali; ottime proprietà di isolamento elettrico.

#### SILICONE RUBBER (VMQ)

Silicone rubber includes a broad class of silico-organic compounds which, as a whole, possess a broad range of properties, of which the principal ones are: wide temperature application range (from -50°C to +200°C [-60°F +390°F]); physiological purity; high resistance to atmospheric ageing; excellent resistance to oxidizing agents and saline solutions; very high resistance to acid and alkaline solutions as well as to vegetable and animal oils; excellent electrical insulation properties.

#### CAOUTCHOUC SILICONE (VMQ)

Le caoutchouc silicone comprend une vaste gamme de composés silico-organiques qui présentent une grande variété de propriétés: champ d'application couvrant une plage de température très large (de -50°C à +200°C [-60°F +390°F]); pureté physiologique; grande résistance au vieillissement atmosphérique; résistance remarquable aux agents oxydants et aux solutions salines; résistance poussée aux solutions acides et alcalines, ainsi qu'aux huiles végétales et animales; excellentes propriétés en matière d'isolation électrique.

#### CAUCHO DE SILICONA (VMQ)

El caucho de silicona comprende una amplia clase de compuestos silico-orgánicos, cuyas principales características son las siguientes: campo de aplicación en un muy amplio intervalo de temperatura (de -50°C a +200°C [-60°F +390°F]); pureza fisiológica; elevada resistencia al envejecimiento atmosférico; excelente resistencia a los agentes oxidantes y soluciones salinas; elevada resistencia a las soluciones ácidas y alcalinas, así como a los aceites vegetales y animales; excelentes propiedades de aislamiento eléctrico.

## GOMMA ETILENPROPILENICA (EPDM)

Il copolimero etilene-propilene deriva le sue peculiari caratteristiche dal fatto di non presentare insaturazioni sulla sua catena principale. Tali caratteristiche si possono così riassumere: eccezionale resistenza all'invecchiamento; eccezionale resistenza all'ozono, ai raggi ultravioletti, al calore; notevole resistenza alla deformazione permanente; campo d'applicazione in ampio intervallo di temperature (da -30°C a +140°C [-20°F +280°F]); basso assorbimento di acqua e notevole impermeabilità al vapore acqueo; elevata resistenza ai liquidi di tipo polare, come chetoni, alcoli, acido acetico, acidi minerali forti e bassi. Di contro le mescole realizzate con questi elastomeri presentano una scarsa resistenza ai liquidi non polari, e quindi anche agli olii minerali e agli idrocarburi in genere.

## ETHYLENE-PROPYLENE RUBBER (EPDM)

Ethylene-propylene rubber copolymer derives its special characteristics from the lack of insaturations on its principal chain. These characteristics can be summarized as follows: exceptional ageing resistance; exceptional resistance to ozone, ultraviolet rays and heat; very high resistance to permanent deformation; wide temperature application range (from -30°C to +140°C [-20°F +280°F]); low water absorption and good steam-proof qualities; high resistance to polar liquids such as ketones, alcohols, acetic acid, strong and low mineral acids.

On the other hand the mixes made from these elastomers show poor resistance to non-polar liquids and therefore to mineral oils and hydrocarbons in general.

## CAOUTCHOUC D'ÉTHYLÈNE-PROPYLÈNE (EPDM)

Les qualités particulières du copolymère d'éthylène-propylène dérivent du fait qu'il ne présente aucune insaturation dans sa chaîne principale. Ses caractéristiques sont les suivantes: résistance exceptionnelle au vieillissement; résistance exceptionnelle à l'ozone, aux rayons ultraviolets et à la chaleur; résistance remarquable à la déformation permanente; champ d'application couvrant une plage de température très large (de -30°C à +140°C [-20°F +280°F]); absorption d'eau très réduite et excellente imperméabilité à la vapeur d'eau; forte résistance aux liquides polaires tels que les cétones, les alcools, l'acide acétique, les acides minéraux forts et bas.

Les mélanges réalisés avec ces élastomères présentent par contre une résistance médiocre aux liquides non polaires et, donc, aux huiles minérales et aux hydrocarbures en général.

## CAUCHO DE ETILENO-PROPILENO (EPDM)

El copolímero etileno-propileno posee características particulares debido a que no presenta insaturaciones en su cadena principal. Dichas características se pueden resumir de la siguiente forma: extraordinaria resistencia al envejecimiento; extraordinaria resistencia al ozono, a los rayos ultravioletas y al calor; elevada resistencia a la deformación permanente; campo de aplicación en un amplio intervalo de temperatura (de -30°C a +140°C [-20°F +280°F]); baja absorción de agua y elevada impermeabilidad al vapor de agua; elevada resistencia a los líquidos de tipo polar, como por ejemplo cetonas, alcoholes, ácido acético, ácidos minerales fuertes y bajos.

Por el contrario, las mezclas realizadas con estos elastómeros presentan una escasa resistencia a líquidos no polares y, por consiguiente, también a los aceites minerales e hidrocarburos en general.

## GOMMA FLUORURATA (FPM-FKM)

Le mescole a base di gomma fluorurata (viton® originale Dupont) si prestano alla realizzazione di articoli elasticci resistenti in modo eccezionale all'azione corrosiva degli acidi e dei solventi. Si tratta di articoli costosi, ma che permettono di realizzare, per via della loro lunga durata in esercizio, notevoli risparmi in sostituzioni e manutenzioni.

Le principali caratteristiche sono: possibilità di impiego in un intervallo di temperature da -15°C a +220°C (+5°F +430°F); elevatissima resistenza a una grande varietà di prodotti chimici quali olii minerali, vegetali, animali, idrocarburi aromatici e alifatici anche ad alta temperatura, benzina e olii combustibili, solventi clorurati e acidi in genere.

Scarsa è invece la resistenza agli esteri, ai solventi chetonici, all'anidride acetica e agli idrati alcalini concentrati caldi.

## FLUORIDATED RUBBER (FPM-FKM)

Mixes based on fluoridated rubber (original Dupont viton®) lend themselves to the manufacture of elastic articles, which are exceptionally resistant to acid and solvent corrosion. These are costly articles but thanks to their long working life they provide considerable savings as replacement parts and in maintenance.

Main characteristics are: temperature application range from -15°C to +220°C (+5°F +430°F); very high resistance to a wide range of chemicals such as mineral, vegetable and animal oils, aromatic and aliphatic hydrocarbons even at high temperatures, gasoline and fuel oils, chlorinated solvents and acids in general.

Resistance to esters, ketonic solvents, acetic anhydride and hot concentrated alkaline hydrates is poor.

## CAOUTCHOUC FLUORURÉ (FPM-FKM)

Les mélanges à base de caoutchouc fluoruré (viton® Dupont original) se prêtent à la réalisation d'articles élastiques présentant une résistance exceptionnelle à l'action corrosive des acides et des solvants. Malgré leur coût élevé, ces articles permettent de réaliser des économies importantes en termes de maintenance et de pièces détachées.

Leur caractéristiques principales sont les suivantes: champ d'application couvrant une plage de température comprise entre -15°C et +220°C (+5°F +430°F); résistance très forte à une grande variété de produits chimiques tels que les huiles minérales, végétales et animales, les hydrocarbures aromatiques et aliphatiques, y compris aux hautes températures, l'essence et les huiles combustibles, les solvants chlorurés et les acides en général.

En revanche, la résistance aux esters, aux solvants cétoniques, à l'anhydride acétique et aux hydrates alcalins concentrés chauds est faible.

## CAUCHO FLUORADO (FPM-FKM)

Las mezclas a base de caucho fluorado (viton® original Dupont) se prestan a la realización de artículos elásticos, al ser extraordinariamente resistentes a la acción corrosiva de ácidos y disolventes. Se trata de artículos costosos, pero que, por su larga duración, permiten ahorrar mucho a nivel de reemplazos y mantenimiento.

Sus principales características son las siguientes: posibilidad de empleo en un intervalo de temperatura de -15°C a +220°C (+5°F +430°F); elevadísima resistencia a una gran variedad de productos químicos, como aceites minerales, vegetales, animales, hidrocarburos aromáticos y alifáticos incluso a temperaturas elevadas, gasolina y aceites combustibles, disolventes clorurados y ácidos en general.

En cambio es escasa su resistencia a ésteres, disolventes de cetonas, anhídrido acético e hidratos alcalinos concentrados calientes.

## PTFE

Il politetrafluoroetilene (PTFE) è un polimero ad altissimo peso molecolare. La molecola è costituita da atomi di fluoro e di carbonio, legati fra di loro da una forza che è chimicamente una delle più elevate; ne deriva una molecola estremamente compatta che conferisce al PTFE quelle caratteristiche che lo rendono una delle materie plastiche più versatili. Le principali proprietà sono: campo di applicazione in un intervallo di temperature da -10°C a +150°C (+15°F +300°F), elevata resistenza ai reagenti chimici e ai solventi, elevata antiadesività, basso coefficiente di attrito, atossicità, resistenza alla trazione, all'usura, agli agenti atmosferici, elevate caratteristiche dielettriche.

Il PTFE è praticamente inerte nei confronti dei composti chimici e degli elementi finora noti; esso viene attaccato solo dai metalli alcalini allo stato elementare, dal trifluoruro di cloro e dal fluoro elementare a temperature e pressioni elevate.

## PTFE

Polytetrafluoroethylene (PTFE) is a polymer with a very high molecular weight. The molecule is made up of fluoride and carbon atoms, knit together by one of the strongest chemical forces; this results in an extremely compact molecule which gives PTFE the characteristics that make it one of the most versatile plastic materials. The principal characteristics are: temperature application range from -10°C to +150°C (+15°F +300°F), resistant to chemical reagents and solvents, high anti-adhesiveness, low friction, atoxic, resistant to tensile stress, resistant to wear, resistant to atmospheric agents, high dielectric properties.

PTFE is practically inert in contact with chemical compounds and other known elements; it is attacked only by metal alkalines in their elementary state, chlorotrifluoride compounds and elementary fluoride at high temperature and pressure.

## PTFE

Le polytétrafluoroéthylène (PTFE) est un polymère à poids moléculaire très lourd. La molécule est constituée par des atomes de fluor et de carbone, liés entre eux par l'une des forces chimiques les plus élevées; le résultat de cette union est une molécule extrêmement compacte qui confère au PTFE des caractéristiques qui en font une des matières plastiques les plus polyvalentes. Ses propriétés principales sont les suivantes: champ d'application couvrant une plage de température comprise entre -10°C et +150°C (+15°F +300°F), résistance remarquable aux réactifs chimiques et aux solvants, anti-adhérence élevée, faible coefficient de frottement, atotoxicité, résistance à la traction, à l'usure et aux agents atmosphériques, caractéristiques diélectriques élevées.

Le PTFE est pratiquement inerte à l'égard des composés chimiques et des éléments connus jusqu'à ce jour; il n'est attaqué que par les métaux alcalins à l'état élémentaire, par le trifluorure de chlore et par le fluor élémentaire aux températures et pressions élevées.

## PTFE

El politetrafluoroetileno (PTFE) es un polímero de muy alto peso molecular. La molécula está constituida por átomos de flúor y de carbono, ligados entre si por una fuerza que químicamente es una de las más elevadas; el resultado es una molécula extremadamente compacta que le confiere al PTFE las características que la vuelven una de las materias plásticas más versátiles. Las propiedades principales son las siguientes: campo de aplicación en un intervalo de temperatura de -10°C a +150°C (+15°F +300°F), elevada resistencia a los reactivos químicos y a los disolventes, elevada antiadherencia, bajo coeficiente de rozamiento, atoxicidad, resistencia a la tracción, al desgaste, a los agentes atmosféricos, elevadas características dieléctricas.

El PTFE prácticamente es inerte con respecto a los compuestos químicos y a los elementos conocidos hasta la actualidad; el mismo es atacado sólo por los metales alcalinos en su estado elemental, por el trifluoruro de cloro y por el flúor elemental a temperaturas y presiones elevadas.

## ELASTOMERI CONSIGLIATI PER I PRINCIPALI FLUIDI E REAGENTI

Ad ogni prodotto corrispondono una o più sigle che identificano gli elastomeri consigliati. Le sigle sono chiuse tra parentesi quando le prestazioni dell'elastomero sono appena sufficienti.

Legenda: NBR Gomma nitrilica  
 VMQ Gomma siliconica  
 EPDM Gomma etilenpropilenica  
 FPM Gomma fluorurata

## RECOMMENDED ELASTOMERS FOR THE MAIN FLUIDS AND REAGENTS

One or more sets of initials correspond to each product to identify the recommended elastomers. The initials are in brackets when the elastomer's performance is hardly sufficient.

Key: NBR Nitrile rubber  
 VMQ silicone rubber  
 EPDM Ethylene-propylene rubber  
 FPM Fluoridated rubber

## ÉLASTOMÈRES CONSEILLÉS POUR LES PRINCIPAUX FLUIDES ET RÉACTIFS

Chaque produit a un ou plusieurs sigles correspondants qui indiquent les types d'élastomères conseillés. Les sigles sont entre parenthèses lorsque les performances de l'élastomère sont tout juste suffisantes.

Legende: NBR Caoutchouc nitrile  
 VMQ Caoutchouc silicone  
 EPDM Caoutchouc d'éthylène-propylène  
 FPM Caoutchouc fluoruré

## ELASTÓMEROS ACONSEJADOS PARA LOS PRINCIPALES FLUIDOS Y REACTIVOS

A cada producto le corresponden varias, o una, siglas identificadoras de los elastómeros aconsejados. Las siglas están encerradas entre paréntesis, cuando las prestaciones del elastómero son apenas suficientes.

Leyenda: NBR Caucho de nitrilo  
 VMQ Caucho de silicona  
 EPDM Caucho de etileno-propileno  
 FPM Caucho fluorado

## A

Acetaldeide	EPDM-VMQ	Acido fluoridrico anidro	(EPDM)	Acqua	EPDM-NBR-VMQ-FPM
Acetammide	EPDM-NBR-(VMQ)	Acido fluorosilicico	EPDM-FPM-(NBR)	Acqua di mare	EPDM-NBR-FPM
Acetilene	EPDM-FPM-(NBR)	Acido formico diluito	EPDM-(NBR)-(VMQ)	Acqua distillata	EPDM-FPM-(NBR)
Acetilricinoleato di butile	EPDM-FPM	Acido fosforico 20%	EPDM-FPM	Acqua ossigenata (90%)	VMQ-(FPM)
Aceto	EPDM-VMQ-(NBR)-(FPM)	Acido fosforico 85%	EPDM-FPM	Acqua regia	NBR-FPM
Acetoacetato di etile	(EPDM)-(VMQ)	Acido gallico	FPM-(EPDM)	Acqua regia	FPM
Acetofenone	EPDM	Acido lattico	EPDM-NBR-VMQ-FPM	Acrilonitrile	EPDM
Acetone	EPDM	Acido maleico	FPM	Adipato di otile	(NBR)
Acido acetico glaciale	EPDM-(VMQ)	Acido malico	NBR-VMQ-FPM	Alcool amilico	EPDM
Acido acetico al 30%	EPDM-VMQ-(NBR)	Acido naftenico	FPM-(NBR)	Alcool benzilico	EPDM-FPM
Acido adipico	NBR	Acido nitrico diluito	EPDM-FPM	Alcool butilico	EPDM-NBR-FPM-(VMQ)
Acido benzoico	FPM-(VMQ)	Acido nitrico concentrato	(FPM)	Alcool etilico	EPDM-NBR
Acido borico	EPDM-NBR-VMQ-FPM	Acido nitrico fumante	-	Alcool isobutilico	EPDM-VMQ-FPM-(NBR)
Acido bromidrico	EPDM-FPM	Acido oleico	(EPDM)-(FPM)	Alcool isopropilico	EPDM-VMQ-FPM-(NBR)
Acido butirrico	EPDM	Acido ossalico	EPDM-FPM	Alcool metilico	EPDM-NBR-VMQ
Acido carbolico	FPM-(EPDM)	Acido palmitico	NBR-(EPDM)	Acido ottilico	EPDM-FPM-(NBR)
Acido carbonico	EPDM-NBR-VMQ-FPM	Acido pirico	FPM	Aldeide benzoica	EPDM
Acido cianidrico	EPDM-FPM	Acido pirolegnoso	(EPDM)	Allume	EPDM
Acido citrico (33%)	EPDM-NBR-VMQ-FPM	Acido solforico diluito (60%)	EPDM-FPM	Alluminato di sodio	EPDM-NBR
Acido cloridrico 37% caldo	FPM-(EPDM)	Acido solforico concentrato	-	Alluminio sulfato	EPDM-NBR-VMQ-FPM
Acido cloridrico 37% freddo	EPDM-FPM-(NBR)	caldo (60%)	FPM-(EPDM)	Amile acetato	(NBR)
Acido cloracetico (25%)	EPDM	Acido solforoso	EPDM-FPM	Amile borato	NBR-FPM
Acido cromico (50%)	EPDM-FPM	Acido stearico	VMQ-(EPDM)	Ammoniaca gass. fredda	EPDM-NBR-FPM
Acido fenico	vd. Fenolo	Acido tannico (10%)	EPDM-NBR	Ammoniaca gass. calda	VMQ-(EPDM)
Acido fluoridrico conc. caldo	(FPM)	Acido tartarico (20%)	EPDM-NBR-VMQ	Ammoniaca liquida	EPDM-NBR
Acido fluoridrico conc. freddo	EPDM-FPM	Acido tricloroaceticoo	(EPDM)-(NBR)	Ammonio carbonato	EPDM

Ammonio cloruro	EPDM-NBR	Creosoto	FPM-(NBR)	Freon - 22	EPDM
Ammonio fosfato		Cresolo	EPDM-FPM	Freon - 31	EPDM
mono-di-tri-basico	EPDM-NBR-(VMQ)	Crotonaldeide	EPDM	Freon - 32	EPDM-NBR
Ammonio idrato	EPDM-VMQ-(FPM)			Freon-112	FPM-(NBR)
Ammonio nitrato	EPDM-NBR			Freon-113	NBR-(FPM)
Ammonio nitrito	EPDM-NBR			Freon -114	EPDM-NBR-(FPM)
Ammonio persolfato	EPDM-(VMQ)			Freon -115	EPDM-NBR-(FPM)
Ammonio solfato	EPDM-NBR	D	FPM	Freon - 142/b	EPDM-NBR
Anidride acetica	NBR-(EPDM)	Decalina	EPDM-(NBR)	Freon - 152/a	EPDM-NBR
Anidride carbonica	NBR-VMQ-FPM-(EPDM)	Detersivi	EPDM-VMQ	Freon - 218	EPDM-NBR-FPM
Anidride maleica	FPM	Diaceton alcool	vd. Butile ftalato	Freon-114/B2	(NBR)-(FPM)
Anidride solforosa	EPDM-VMQ-FPM	Dibutilftalato	FPM	Freon - 502	(FPM)
Anidride solforica	FPM-(EPDM)-(VMQ)	Dicloroetano	FPM	Freon-C-136eC-318	EPDM-NBR-FPM
Anilina	(EPDM)	Dicloropropano	(EPDM)	Freon - BF	(NBR)
Arsenico tricloruro	EPDM	Dietilammina	(EPDM)	Freon - MF	NBR
		Dietanolammina	(EPDM)	Freon - TA	EPDM-NBR-VMQ
		Dietilenglicole	EPDM-NBR-FPM-(VMQ)	Freon - TC	NBR-FPM-(EPDM)
		Difenile	FPM	Freon - TF	NBR-FPM
		Di-isobutilene	FPM-(NBR)		
		Di-isopropilbenzene	FPM	Freon-TMC	FPM-(EPDM)-(NBR)
		Di-isopropilchetone	EPDM	Freon-T-P35	EPDM-NBR-VMQ-FPM
		Dimetilammina	(EPDM)	Freon - T-WD-602	FPM-(EPDM)-(NBR)
		Dimetilanilina	(EPDM)	Furfuolo	(EPDM)
		Dimetilformammide	EPDM-(VMQ)		
		Diossano	(EPDM)		
		Diottifftalato	EPDM		
		Diottilsebacato	(EPDM)-(FPM)		
		Dipropilenglicole	EPDM-NBR-FPM		
		Dowtherm	FPM-(VMQ)		
		E			
		Elio	NBR	G	
		Epicloridrina	(EPDM)	Gas di altoforno	NBR-FPM
		Esafluoruro di zolfo	EPDM-VMQ-FPM	Gas di cockeria	VMQ-FPM
		Esaldeide	EPDM	Gas naturali	NBR-FPM
		Esano	NBR-FPM	Gasolio	NBR-FPM
		Esilenglicole	EPDM-NBR-VMQ-FPM	Gelatina	EPDM-VMQ-FPM
		Esone	EPDM	Glicerina	EPDM-NBR-VMQ-FPM
		Essenza di trementina	NBR-FPM	Glucosio	VMQ-FPM
		Etano	NBR-FPM		
		Etanolammina	(EPDM)-(VMQ)		
		Etere acetico	(EPDM)-(VMQ)		
		Etere dibenzilico	(EPDM)		
		Etere di petrolio	NBR-FPM	I	
		Etere isopropilico	(NBR)	Idrato di bario	EPDM-NBR-VMQ-FPM
		Etilcellosolve	(EPDM)	Idrato di calcio	EPDM-NBR-VMQ-FPM
		Etile acetato	vd. Etere acetico	Idrato di magnesio	EPDM-FPM-(NBR)
		Etile lattato	(EPDM)	Idrato di potassio	EPDM-(NBR)
		Etilendiammina	EPDM-NBR-VMQ	Idrato di sodio	EPDM-(NBR)
		Etilene	NBR-FPM	Idrazina	EPDM
		Etilenglicole	EPDM-NBR-VMQ-FPM	Idrocarburi gassosi	NBR-FPM
		Etilmercaptano	FPM	Idrogeno	EPDM-FPM
		Etilmetilchetone	EPDM	Idrogeno solforato freddo sol.	EPDM
		Etiltriglicole	EPDM	Idrogeno solforato caldo sol.	EPDM
				Iodoformio	EPDM
				Isopropanolo	EPDM-VMQ-FPM-(NBR)
				Isottano	NBR-FPM
		J	JP-4		NBR-FPM
		F		K	
		Fenilbenzene	(FPM)	Kerosene	NBR-FPM
		Fenilidrazina	FPM		
		Fenolo	EPDM-FPM		
		Ferro cloruro	EPDM-NBR-VMQ-FPM		
		Ferro sulfato	EPDM-NBR-FPM-(VMQ)		
		Fluorobenzene	FPM-(VMQ)		
		Fluoro liquido	(FPM)		
		Formaldeide	EPDM-FPM-(NBR)		
		Fosforo liquido	EPDM		
		Fosforo pentafluoruro gass.	(EPDM)		
		Fosforo tricloruro	EPDM-FPM		
		Fosforo trifluoruro gassoso	(EPDM)		
		Freon -11	NBR-FPM		
		Freon-12	NBR-(EPDM)-(FPM)		
		Freon -13	NBR-FPM		
				M	
				Magnesio sulfato	EPDM-NBR-VMQ-FPM

Mercurio	EPDM-NBR-FPM	Piridina	EPDM	<b>U</b>	Urea	EPDM
Metano	NBR-FPM	Polipropilenglicole	NBR			
Metanolo	vd. Alcool metilico	Polivinilacetato (emulsione)	EPDM			
Metilacrilato	(EPDM)	Potassio acetato	EPDM-(NBR)	<b>V</b>		
Metilciclopentano	FPM	Potassio cloruro	EPDM-NBR-VMQ-FPM	Vapor d'acqua		EPDM
Metile oleato	(EPDM)-(FPM)	Potassio nitrato	EPDM-NBR-VMQ-	Vinile acetato		(EPDM)
Metiletilechitone	EPDM	FPM		Vinile cloruro		(FPM)-(EPDM)
Metilmetacrilato	EPDM	Potassio permanganato	EPDM-FPM	Vino		NBR-VMQ-FPM
Metilisobutilcarbinolo	EPDM-(VMQ)	Potassio sulfato	EPDM-NBR-VMQ-FPM			
Metilisobutilchitone	EPDM	Propano	NBR-FPM			
Metilsalicilato	(EPDM)	Propilene	FPM			
Monoclorobenzolo	FPM	Propilenglicole	EPDM-NBR-FPM	<b>W</b>		
Monoetanolammina	(EPDM)-(VMQ)	Propilnitrato	(EPDM)	White spirit		
Monometilanilina	(FPM)					NBR
Monovinilacetilene	EPDM-NBR-VMQ-FPM					
<b>R</b>						
<b>N</b>		Rame solfato	EPDM-NBR-VMQ-FPM	<b>X</b>		
Nafta	NBR-FPM	Resina di legno	NBR-FPM	Xilene		FPM
Naftalina	FPM			Xilolo		vd. Xilene
Nitro di cellulosa	EPDM					
Nitrobenzene	(EPDM)-(FPM)	<b>S</b>		<b>Z</b>		
Nitroetano	(EPDM)	Salamoie	EPDM	Zinco acetato		EPDM-(NBR)
Nitrometano	EPDM	Saponi (soluz. di)	EPDM-NBR-VMQ-FPM	Zinco cloruro		EPDM-NBR-VMQ-FPM
<b>O</b>						
Oleato di butile	vd. Butile oleato	Silicato di etile	EPDM-NBR-FPM	Zinco sulfato		EPDM-NBR-VMQ-FPM
Oleato di metile	vd. Metile oleato	Skydrol - 500	EPDM			
Oleum	EPDM-FPM	Skydrol - 7000	EPDM-(VMQ)-(FPM)			
Olii animali e vegetali commestibili	NBR-VMQ	Sodio bisolfito	EPDM-NBR-VMQ-FPM			
Olii animali e vegetali non commestibili	NBR	Sodio carbonato	EPDM-NBR-FPM			
Olii d'anilina	(EPDM)	Sodio cloruro	EPDM-NBR-VMQ-FPM			
Olio di arachide	NBR-FPM-(VMQ)	Sodio fosfato				
Olio di cocco	EPDM-NBR-VMQ	mono-di-tri-basico	EPDM-NBR-FPM			
Olio di cotone	EPDM-NBR-VMQ-FPM	Sodio ipoclorito	FPM-(EPDM)			
Olio di lino	NBR-FPM-(EPDM)	Sodio iposolfito	EPDM-VMQ-FPM-(NBR)			
Olio di piede di bue	NBR	Sodio metafosfato	EPDM-NBR			
Olio di pino	FPM-(NBR)	Sodio silicato	EPDM-NBR-FPM			
Olio di ricino	VMQ-FPM-(EPDM)	Sodio sulfato	EPDM-NBR-VMQ-FPM			
Olio di semi	NBR-VMQ	Sodio tiosolfato	vd. Sodio iposolfito			
Olio siliconico	EPDM-NBR-FPM	Solfonati	EPDM			
Olio minerale	NBR-FPM	Solfuro di carbonio	FPM			
Olio per trasformatori	NBR-FPM	Solvente nafta	NBR-FPM			
Ortodiclorobenzene	FPM	Stearina	vd. Acido stearico			
Ossido di difenile	EPDM-FPM	Stirene	(FPM)			
Ossido di etilene	VMQ	Stirolo	vd. Stirene			
Ossido di mesitile	(EPDM)	<b>T</b>				
Ossido di propilene	EPDM	Tannino	EPDM			
Ossigeno freddo	EPDM-VMQ-FPM-(NBR)	Terpene	FPM			
Ossigeno (100°-200°C)	(FPM)-(VMQ)	Terpineolo	FPM-(NBR)			
Ozono	EPDM-VMQ-FPM	Tetracloroetano	FPM			
<b>P</b>						
Paradiclorobenzene	FPM	Tetracloruro di carbonio	FPM			
Paraffina	NBR-FPM	Tetra lina	FPM			
Pentano	NBR-FPM	Timolo	EPDM			
Percloroetilene	FPM	Titanato di tetrabutile	FPM			
Perossido di sodio	EPDM-FPM-(NBR)	Titanio tetracloruro	FPM			
Persali	EPDM-FPM-(NBR)-(VMQ)	Toluene	FPM			
Petrolio greggio	NBR-FPM	Toluolo	vd. Toluene			
Pinene	FPM-(NBR)	Triacetina	EPDM-(NBR)			
Piombo acetato	EPDM-(NBR)	Tributilfostato	EPDM			
Piombo tetra etile	FPM-(NBR)	Tributilmercaptano	FPM			
Pydraul - F9	FPM	Tributossietilfostato	EPDM-(FPM)			
Pydraul -150	FPM	Tricloroetilene	FPM			
Pydraul-A 200	FPM	Triclorofluorometano	NBR			
Piralene	VMQ-FPM	Tricesilfostato	EPDM-(FPM)			
		Trietanolammina	EPDM			
		Trietilammina	EPDM			
		Trietylenglicole	EPDM-VMQ-FPM			
		Triottifosfato	EPDM-(FPM)			
		Trinitrotoluolo	(FPM)			
		Turbo-oil 15	NBR-FPM			





## TUBI

- Fabbricati in acciaio inossidabile AISI 304L e AISI 316L; ricavati da nastri ricotti con finitura BA o 2B, saldati in argon con sistema TIG, calibrati, con cordone di saldatura interno laminato a freddo e scordonati esternamente mediante tele abrasive. Solubilizzati in atmosfera controllata.
- Sottoposti a controlli non distruttivi (linea di controllo a correnti parassite), verifica delle caratteristiche meccaniche, controllo dimensionale ed esame delle superfici.
- Prodotti in accordo con le tolleranze dimensionali prescritte dalle norme di fabbricazione ASTM A269 e A270.
- Finiture: decapaggio, satinatura esterna, satinatura esterna e interna, lucidatura elettrolitica.
- Forniti in barre di lunghezza commerciale di 6 metri; a richiesta, disponibili in differenti lunghezze.
- Forniti in fasci reggiati; a richiesta, imballabili in fasci protetti esternamente da polietilene e in casse di legno.

## PIPES

- Made of AISI 304L and AISI 316L stainless steel. Made from annealed sheet with BA or 2B finish, argon welded with the TIG system, gauged, with cold-rolled internal weld bead and debeaded externally with emery cloth. Solution heat-treated in controlled atmosphere.
- Subjected to non-destructive inspection (inspection line with parasite currents), check on mechanical features, dimensional inspection and surface examination.
- Produced in conformity with dimensional tolerance levels stipulated in ASTM A269 and A270 manufacturing standards.
- Finish: pickled, external glazing, external and internal glazing and electrolytic polishing.
- Delivered in merchant bars 6 meters long. On request available in different lengths.
- Delivered in strapped bundles. On request can be delivered in bundles protected externally with polyethylene and in wooden boxes.

## TUBES

- Fabriqués en acier inoxydable AISI 304L et AISI 316L. Obtenus à partir de feuillards recuits avec finissage BA ou 2B, soudés à l'argon avec le système TIG, calibrés, avec bourrelet de soudure intérieur laminé à froid et débourrelés à l'extérieur avec de la toile abrasive. Solubilisés en atmosphère contrôlée.
- Soumis à des contrôles non destructifs (ligne de contrôle à courants parasites), vérification des caractéristiques mécaniques, contrôle des dimensions et examen des surfaces.
- Produits conformes aux tolérances dimensionnelles prescrites par les normes de fabrication ASTM A269 et A270.
- Finissages: décapage, satinage extérieur, satinage extérieur et intérieur, polissage électrolytique.
- Fournis en barres d'une longueur commerciale de 6 mètres; sur demande, disponibles en différentes longueurs.
- Fournis en faisceaux cerclés; sur demande, emballés en faisceaux protégés à l'extérieur par du polyéthylène et dans des caisses en bois.

## TUBOS

- Fabricados de acero inoxidable AISI 304L y AISI 316L; obtenidos a partir de planchas recocidas con acabado BA o 2B, soldados en argón mediante el sistema TIG, calibrados, con cordón de soldadura interior laminado en frío y sin cordón exterior mediante telas abrasivas. Solubilizados en atmósfera controlada.
- Sometidos a controles no destructivos (línea de control de corrientes parásitas), verificación de las características mecánicas, control de las dimensiones y examen de las superficies.
- Producidos de acuerdo a las tolerancias de dimensiones prescritas por las normas de fabricación ASTM A269 y A270.
- Acabados: decapado, satinado exterior, satinado exterior e interior, pulido electrolítico.
- Suministrados en barras de 6 metros de longitud comercial; a pedido, se pueden entregar barras con diferentes longitudes.
- Suministrados en fajos sujetados por flejes; a pedido, se pueden embalar en fajos protegidos exteriormente con polietileno y en cajas de madera.



## REGGITUBI

- Fabbricati in acciaio inossidabile AISI 304L con superficie elettrolucidata.
- Di solida costruzione, garantiscono un sostegno sicuro ed efficace.
- Supporto inferiore collegato ad articolazione con il supporto superiore mediante una cerniera nei modelli 091, 094.
- 091
  - Possibilità di regolazione del serraggio mediante il galletto.
  - Filettatura  $\frac{1}{2}$ " Gas nella parte terminale del reggitubo 091 F per permettere l'eventuale inserimento di un tronchetto filettato disponibile in differenti lunghezze.
- 092
  - Supporto inferiore e supporto superiore uguali. Supporto inferiore corredabile di un tronchetto saldato.
  - Collegamento tra supporto inferiore e supporto superiore mediante galletto o dado esagonale.
- 094
  - Reggitubo di forma ottagonale completo di segmenti plastici per eliminare l'attrito durante la dilatazione delle tubazioni e garantire il totale isolamento dielettrico.
  - Supporto inferiore corredabile di un tronchetto saldato.
  - Filettatura  $\frac{1}{2}$ " Gas nella parte terminale del reggitubo 094 F per permettere l'eventuale inserimento di un tronchetto filettato disponibile in differenti lunghezze.

## PIPE HANGERS

- Made of AISI 304L stainless steel with electropolished surface.
- High strength construction to ensure safe effective support.
- Lower support hinged to upper support in models 091, 094.
- 091
  - Grip adjustability with wing nut.
  - $\frac{1}{2}$ " BSP thread in the terminal part of the pipe hanger 091 F to allow insertion of a threaded pipe available in different lengths.
- 092 •
  - The same lower and upper supports. Lower support may be fitted with welded pipe.
  - Connection between lower and upper support with wing nuts or hexagonal nuts.
- 094
  - Octagonal pipe hanger equipped with plastic segments designed to eliminate friction during expansion of piping and ensure complete dielectric insulation.
  - Lower support may be fitted with welded pipe.
  - $\frac{1}{2}$ " BSP thread in the terminal part of the pipe hanger 094 F to allow insertion of a threaded pipe available in different lengths.

## COLLIERS

- Fabriqués en acier inoxydable AISI 304L, avec surface électropolie.
- D'une construction robuste, ils garantissent un soutien sûr et efficace.
- Support inférieur articulé et raccordé au support supérieur par une charnière pour les modèles 091, 094.
- 091
  - Possibilité de réglage du serrage à l'aide de la vis à oreilles.
  - Filetage  $\frac{1}{2}$ " Gas dans la partie finale du collier 091 F pour permettre l'éventuelle insertion d'un fourreau fileté disponible en différentes longueurs.
- 092
  - Support inférieur et support supérieur identiques. Possibilité d'installer un fourreau soudé sur le support inférieur.
  - Attelage du support inférieur et du support supérieur à l'aide de vis à oreilles ou de écrou 6 pans.
- 094
  - Collier de forme octogonale muni de segments en plastique capables d'éliminer le frottement durant la dilatation des tubes et de garantir une isolation diélectrique totale.
  - Possibilité d'installer un fourreau soudé sur le support inférieur.
  - Filetage  $\frac{1}{2}$ " Gas dans la partie finale du collier 094 F pour permettre l'éventuelle insertion d'un fourreau fileté disponible en différentes longueurs.



## ABRAZADERAS

- Fabricadas de acero inoxidable AISI 304L con superficie pulida eléctricamente.
- De sólida construcción, garantizan un sostén seguro y eficaz.
- Soporte inferior articulado al soporte superior mediante una cremallera en los modelos 091, 094.
- 091
  - Posibilidad de regulación del apriete mediante la tuerca mariposa.
  - Rosca 1/2" Gas en la parte terminal de la abrazadera 091 F para permitir la posible introducción de un espárrago disponible en diferentes longitudes.
- 092
  - Soporte inferior y soporte superior iguales. El soporte inferior se puede entregar junto con un espárrago soldado.
  - Conexión entre el soporte inferior y el soporte superior a través de una tuerca mariposa o bien una tuerca hexagonal.
- 094
  - Abrazadera de forma octagonal completa de segmentos plásticos que permiten eliminar el rozamiento durante la dilatación de los tubos y garantizan el total aislamiento dieléctrico.
  - El soporte inferior se puede entregar junto con un espárrago soldado.
  - Rosca 1/2" Gas en la parte terminal de la abrazadera 094 F para permitir la posible introducción de un espárrago disponible en diferentes longitudes.



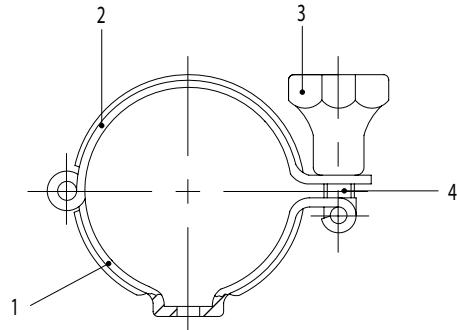
REGGITUBO CERNIERA EL.

HINGED PIPE HANGER PE.

COLLIER CHARNIÈRE BL.

ABRAZADERA CREMALLERA EL.

## 091 L



1. Supporto inferiore  
Lower support  
Support inférieur  
Soporte inferior

2. Supporto superiore  
Upper support  
Support supérieur  
Soporte superior

3. Galletto  
Wing nut  
Vis à oreilles  
Tuerca mariposa

4. Tirante  
Tie rod  
Tirant  
Tirante

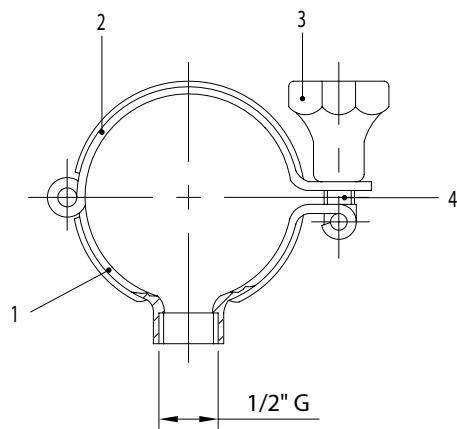
REGGITUBO CERNIERA EF.

HINGED PIPE HANGER ME.

COLLIER CHARNIÈRE BF.

ABRAZADERA CREMALLERA ER.

## 091 F



1. Supporto inferiore  
Lower support  
Support inférieur  
Soporte inferior

2. Supporto superiore  
Upper support  
Support supérieur  
Soporte superior

3. Galletto  
Wing nut  
Vis à oreilles  
Tuerca mariposa

4. Tirante  
Tie rod  
Tirant  
Tirante



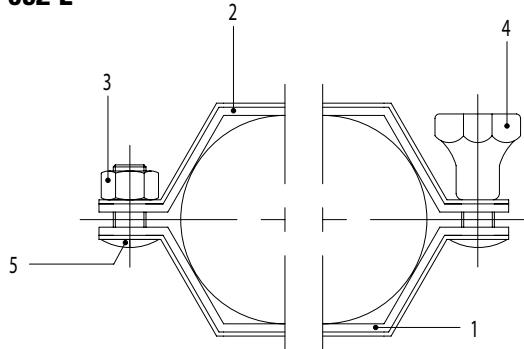
**REGGITUBO ESAGONALE EL.**

**HEX PIPE HANGER PE.**

**COLLIER 6 PANS BL.**

**ABRAZADERA HEXAGONAL EL.**

**092 L**



- |   |  |
|---|--|
| 1. Supporto inferiore<br>Lower support<br>Support inférieur<br>Soporte inferior | 4. Galletto<br>Wing nut<br>Vis à oreilles<br>Tuerca mariposa |
| 2. Supporto superiore<br>Upper support<br>Support supérieur<br>Soporte superior | 5. Vite<br>Screw<br>Vis<br>Tornillo                          |
| 3. Dado esagonale<br>Hexagonal nut<br>Écrou 6 pans<br>Tuerca hexagonal          |  |

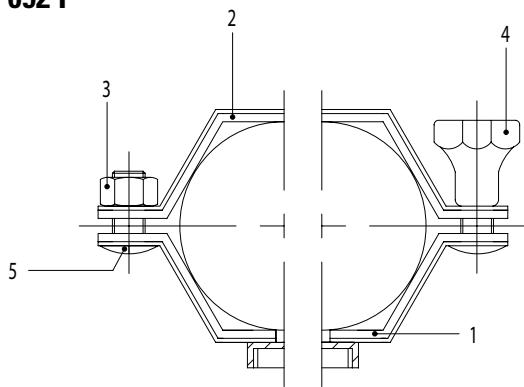
**REGGITUBO ESAGONALE EF.**

**HEX PIPE HANGER ME.**

**COLLIER 6 PANS BF.**

**ABRAZADERA HEXAGONAL ER.**

**092 F**



- |   |  |
|---|--|
| 1. Supporto inferiore<br>Lower support<br>Support inférieur<br>Soporte inferior | 4. Galletto<br>Wing nut<br>Vis à oreilles<br>Tuerca mariposa |
| 2. Supporto superiore<br>Upper support<br>Support supérieur<br>Soporte superior | 5. Vite<br>Screw<br>Vis<br>Tornillo                          |
| 3. Dado esagonale<br>Hexagonal nut<br>Écrou 6 pans<br>Tuerca hexagonal          |  |

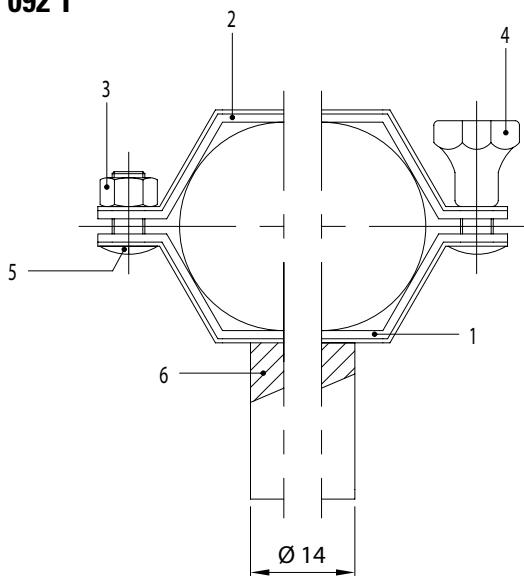
**REGGITUBO ESAGONALE TRONCHETTO**

**STUB HEX PIPE HANGER**

**COLLIER 6 PANS FOURREAU**

**ABRAZADERA HEXAGONAL ESPÁRRAGO**

**092 T**



- |   |  |
|---|--|
| 1. Supporto inferiore<br>Lower support<br>Support inférieur<br>Soporte inferior | 4. Galletto<br>Wing nut<br>Vis à oreilles<br>Tuerca mariposa |
| 2. Supporto superiore<br>Upper support<br>Support supérieur<br>Soporte superior | 5. Vite<br>Screw<br>Vis<br>Tornillo                          |
| 3. Dado esagonale<br>Hexagonal nut<br>Écrou 6 pans<br>Tuerca hexagonal          | 6. Tronchetto<br>Stub<br>Fourreau<br>Espárrago               |



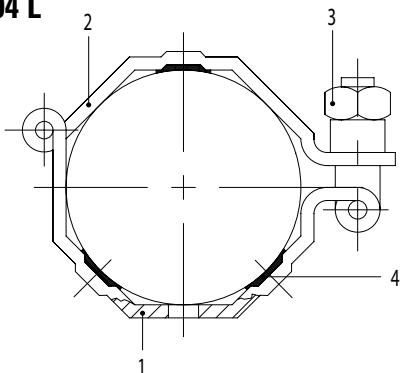
**REGGITUBO OTTAGONALE EL.**

**OCTAGONAL PIPE HANGER PE.**

**COLLIER OCTOGONAL BL.**

**ABRAZADERA OCTAGONAL EL.**

**094 L**



- |   |  |
|---|--|
| 1. Supporto inferiore<br>Lower support<br>Support inférieur<br>Soporte inferior | 3. Ghiera esagonale<br>Hexagonal locking ring<br>Embout exagonal<br>Tuerca hexagonal |
| 2. Supporto superiore<br>Upper support<br>Support supérieur<br>Soporte superior | 4. Segmento plastico<br>Plastic segment<br>Segment plastique<br>Segmento plástico    |

Brevetto n./Patent no./Brevet n./Patente n.  
MI 91 U 000620

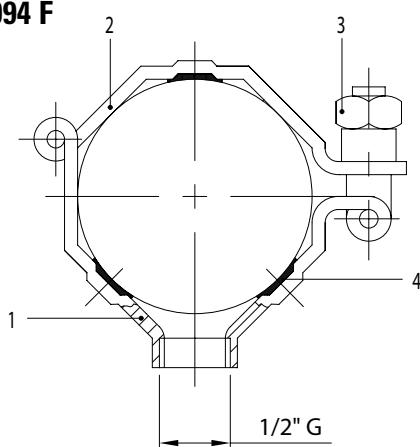
**REGGITUBO OTTAGONALE EF.**

**OCTAGONAL PIPE HANGER ME.**

**COLLIER OCTOGONAL BF.**

**ABRAZADERA OCTAGONAL ER.**

**094 F**



- |   |  |
|---|--|
| 1. Supporto inferiore<br>Lower support<br>Support inférieur<br>Soporte inferior | 3. Ghiera esagonale<br>Hexagonal locking ring<br>Embout exagonal<br>Tuerca hexagonal |
| 2. Supporto superiore<br>Upper support<br>Support supérieur<br>Soporte superior | 4. Segmento plastico<br>Plastic segment<br>Segment plastique<br>Segmento plástico    |

Brevetto n./Patent no./Brevet n./Patente n.  
MI 91 U 000620

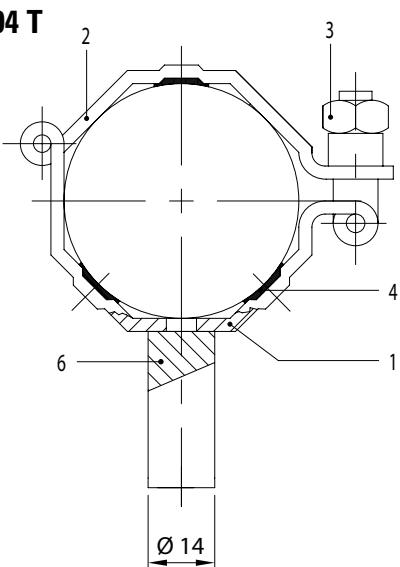
**REGGITUBO OTTAGONALE TRONCHETTO**

**STUB OCTAGONAL PIPE HANGER**

**COLLIER OCTOGONAL FOURREAU**

**ABRAZADERA OCTAGONAL ESPÁRRAGO**

**094 T**



- |  |   |
|--|---|
| 1. Supporto inferiore<br>Lower support<br>Support inférieur<br>Soporte inferior      | 4. Segmento plastico<br>Plastic segment<br>Segment plastique<br>Segmento plástico |
| 2. Supporto superiore<br>Upper support<br>Support supérieur<br>Soporte superior      | 6. Tronchetto<br>Stub<br>Fourreau<br>Espárrago                                    |
| 3. Ghiera esagonale<br>Hexagonal locking ring<br>Embout exagonal<br>Tuerca hexagonal |   |

Brevetto n./Patent no./Brevet n./Patente n.  
MI 91 U 000620



**COMPONENTI**  
**COMPONENTS**

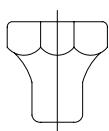
**COMPOSANTES**  
**COMPONENTES**

**095 G**



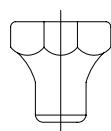
Tronchetto filettato  
Threaded pipe  
Fourreau fileté  
Espirago

**G1**



Galletto acciaio  
Steel wing nut  
Vis à oreilles acier  
Tuerca mariposa acero

**G**



Galletto ABS  
ABS wing nut  
Vis à oreilles ABS  
Tuerca mariposa ABS

**D**



Dado esagonale  
Hexagonal nut  
Écrou 6 pans  
Tuerca hexagonal

**DA**

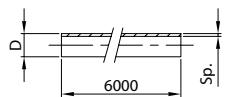


Dado autobloccante  
Self-locking nut  
Écrou de sûreté  
Tuerca de seguridad

**GE**



Ghiera esagonale  
Hexagonal locking ring  
Embout exagonal  
Tuerca hexagonal

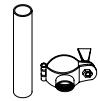


DN	D	Sp.	gr
10	12	1	275
15	18	1	426
20	22	1	526
25	28	1	676
25	28	1,25	838
25	28	1,5	995
32	34	1	826
32	34	1,25	1.026
32	34	1,5	1.221
40	40	1	977
40	40	1,25	1.213
40	40	1,5	1.446
50	52	1	1.277
50	52	1,25	1.589
50	52	1,5	1.897
65	70	1,5	2.573
65	70	2	3.405
80	85	2	4.157
100	101,6	2,11	5.256
100	104	2	5.108
125	129	2	6.360
150	154	2	7.612
200	204	2	10.116
250	254	2	12.620

DN	D	Sp.	gr
1/2"	12,7	1,65	400
3/4"	19	1,65	719
1"	25	1	601
1"	25	1,2	715
1"	25,4	1,25	756
1"	25,4	1,5	898
1"	25,4	1,65	981
1 1/2"	38	1	926
1 1/2"	38	1,2	1.150
1 1/2"	38,1	1,25	1.154
1 1/2"	38,1	1,5	1.375
1 1/2"	38,1	1,65	1.506
2"	50,8	1,25	1.551
2"	50,8	1,5	1.852
2"	50,8	1,65	2.031
2"	51	1,2	1.496
2"	51	1,5	1.859
2 1/2"	63,5	1,5	2.329
2 1/2"	63,5	1,65	2.556
3"	76,2	1,5	2.802
3"	76,2	1,65	3.076
3"	76,2	2	3.711
4"	101,6	2,11	5.256
4"	104	2	5.108

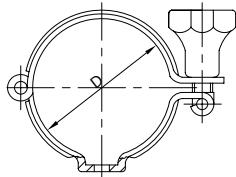


**REGGITUBI**  
PIPE HANGERS  
COLLIERS  
ABRAZADERAS



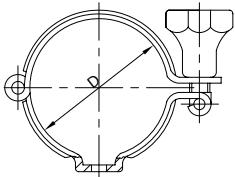
**REGGITUBO CERNIERA EL.**  
**HINGED PIPE HANGER PE.**  
**COLLIER CHARNIÈRE BL.**  
**ABR. CREMALLERA EL.**

**091 L**



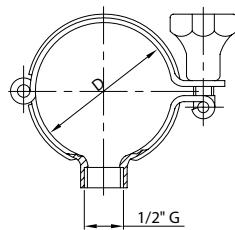
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**HINGED PIPE HANGER PE.**  
**COLLIER CHARNIÈRE BL.**  
**ABR. CREMALLERA EL.**

**091 L**



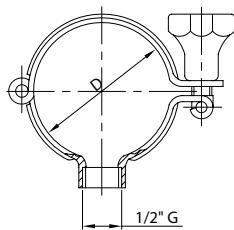
**REGGITUBO CERNIERA EF.**  
**HINGED PIPE HANGER ME.**  
**COLLIER CHARNIÈRE BF.**  
**ABR. CREMALLERA ER.**

**091 F**



**REGGITUBO CERNIERA EF.**  
**HINGED PIPE HANGER ME.**  
**COLLIER CHARNIÈRE BF.**  
**ABR. CREMALLERA ER.**

**091 F**



DN	D	gr
28	28,0	110
34	34,0	120
40	40,0	130
52	52,0	160
70	70,0	210
85	85,0	220
101	101,6	270
104	104,0	270

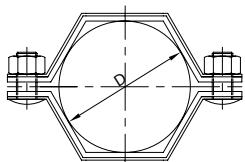
DN	D	gr
25	25,4	110
38	38,1	130
51	50,8	160
63	63,5	200
76	76,1	220
101	101,6	270
104	104,0	270

DN	D	gr
28	28,0	110
34	34,0	120
40	40,0	130
52	52,0	160
70	70,0	210
85	85,0	220
101	101,6	270
104	104,0	270

DN	D	gr
25	25,4	110
38	38,1	130
51	50,8	160
63	63,5	200
76	76,1	220
101	101,6	270
104	104,0	270

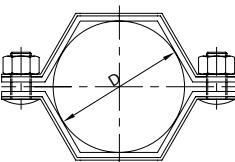
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**HEX PIPE HANGER PE.**  
**COLLIER 6 PANS BL.**  
**ABR. HEXAGONAL EL.**

**092 LD**



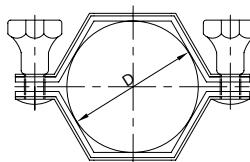
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**HEX PIPE HANGER PE.**  
**COLLIER 6 PANS BL.**  
**ABR. HEXAGONAL EL.**

**092 LD**



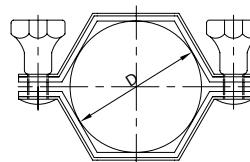
**REGG. ESAGONALE EL.**  
**HEX PIPE HANGER PE.**  
**COLLIER 6 PANS BL.**  
**ABR. HEXAGONAL EL.**

**092 LG**



**REGG. ESAGONALE EL.**  
**HEX PIPE HANGER PE.**  
**COLLIER 6 PANS BL.**  
**ABR. HEXAGONAL EL.**

**092 LG**



DN	D	gr
28	28,0	90
34	34,0	100
40	40,0	120
52	52,0	130
70	70,0	160
85	85,0	190
101	101,6	210
104	104,0	210

DN	D	gr
25	25,4	90
38	38,1	110
51	50,8	130
63	63,5	150
76	76,1	170
101	101,6	210
104	104,0	210

DN	D	gr
28	28,0	90
34	34,0	100
40	40,0	120
52	52,0	130
70	70,0	160
85	85,0	190
101	101,6	210
104	104,0	210

DN	D	gr
25	25,4	90
38	38,1	110
51	50,8	130
63	63,5	150
76	76,1	170
101	101,6	210
104	104,0	210

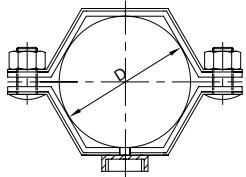


**REGGITUBI**  
**PIPE HANGERS**  
**COLLIERS**  
**ABRAZADERAS**



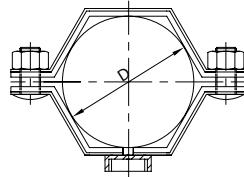
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**HEX PIPE HANGER ME.**  
**COLLIER 6 PANS BF.**  
**ABR. HEXAGONAL ER.**

**092 FD**



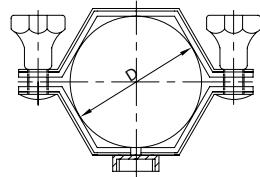
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**HEX PIPE HANGER ME.**  
**COLLIER 6 PANS BF.**  
**ABR. HEXAGONAL ER.**

**092 FD**



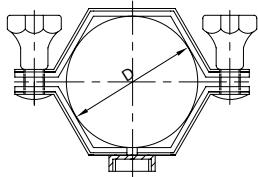
**REGGITUBO ESAGONALE EF.**  
**HEX PIPE HANGER ME.**  
**COLLIER 6 PANS BF.**  
**ABR. HEXAGONAL ER.**

**092 FG**



**REGGITUBO ESAGONALE EF.**  
**HEX PIPE HANGER ME.**  
**COLLIER 6 PANS BF.**  
**ABR. HEXAGONAL ER.**

**092 FG**



<b>DN</b>	<b>D</b>	<b>gr</b>
28	28,0	110
34	34,0	120
40	40,0	140
52	52,0	150
70	70,0	180
85	85,0	210
101	101,6	230
104	104,0	230

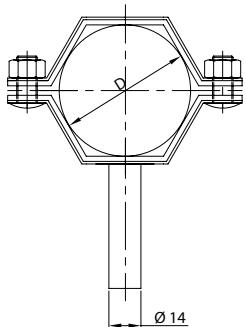
<b>DN</b>	<b>D</b>	<b>gr</b>
25	25,4	110
38	38,1	130
51	50,8	150
63	63,5	170
76	76,1	190
101	101,6	230
104	104,0	230

<b>DN</b>	<b>D</b>	<b>gr</b>
28	28,0	110
34	34,0	120
40	40,0	140
52	52,0	150
70	70,0	180
85	85,0	210
101	101,6	230
104	104,0	230

<b>DN</b>	<b>D</b>	<b>gr</b>
25	25,4	110
38	38,1	130
51	50,8	150
63	63,5	170
76	76,1	190
101	101,6	230
104	104,0	230

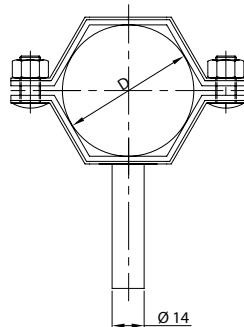
**REGG. ESAG. TRONCHETTO**  
**STUB HEX PIPE HANGER**  
**COLLIER 6 PANS FOURREAU**  
**ABR. ESAG. ESPÁRRAGO**

**092 TD**



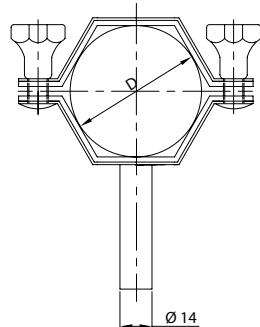
**REGG. ESAG. TRONCHETTO**  
**STUB HEX PIPE HANGER**  
**COLLIER 6 PANS FOURREAU**  
**ABR. ESAG. ESPÁRRAGO**

**092 TD**



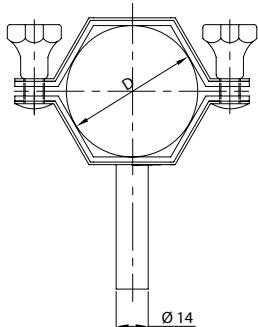
**REGG. ESAG. TRONCHETTO**  
**STUB HEX PIPE HANGER**  
**COLLIER 6 PANS FOURREAU**  
**ABR. ESAG. ESPÁRRAGO**

**092 TG**



**REGG. ESAG. TRONCHETTO**  
**STUB HEX PIPE HANGER**  
**COLLIER 6 PANS FOURREAU**  
**ABR. ESAG. ESPÁRRAGO**

**092 TG**



<b>DN</b>	<b>D</b>	<b>gr</b>
28	28,0	150
34	34,0	160
40	40,0	180
52	52,0	190
70	70,0	220
85	85,0	250
101	101,6	270
104	104,0	270

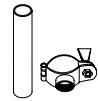
<b>DN</b>	<b>D</b>	<b>gr</b>
25	25,4	150
38	38,1	170
51	50,8	190
63	63,5	210
76	76,1	230
101	101,6	270
104	104,0	270

<b>DN</b>	<b>D</b>	<b>gr</b>
28	28,0	150
34	34,0	160
40	40,0	180
52	52,0	190
70	70,0	220
85	85,0	250
101	101,6	270
104	104,0	270

<b>DN</b>	<b>D</b>	<b>gr</b>
25	25,4	150
38	38,1	170
51	50,8	190
63	63,5	210
76	76,1	230
101	101,6	270
104	104,0	270

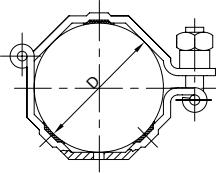


**REGGITUBI**  
PIPE HANGERS  
COLLIERS  
ABRAZADERAS



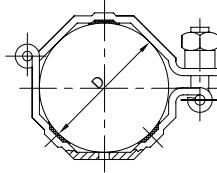
**REGGITUBO OTTAG. EL.  
OCTAG. PIPE HANGER PE.  
COLLIER OCTOGONAL BL.  
ABRAZADERA OCTAG. EL.**

**094 L**



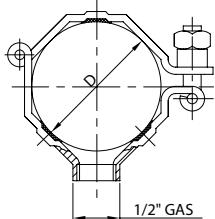
**REGGITUBO OTTAG. EL.  
OCTAG. PIPE HANGER PE.  
COLLIER OCTOGONAL BL.  
ABRAZADERA OCTAG. EL.**

**094 L**



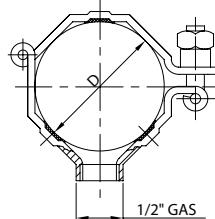
**REGGITUBO OTTAG. EL.  
OCTAG. PIPE HANGER ME.  
COLLIER OCTOGONAL BF.  
ABRAZADERA OCTAG. ER.**

**094 F**



**REGGITUBO OTTAG. EF.  
OCTAG. PIPE HANGER ME.  
COLLIER OCTOGONAL BF.  
ABRAZADERA OCTAG. ER.**

**094 F**



DN	D	gr
28	28,0	110
34	34,0	120
40	40,0	130
52	52,0	160
70	70,0	210
85	85,0	240
101	101,6	270
104	104,0	270

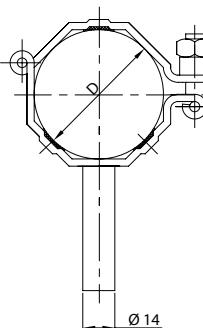
DN	D	gr
25	25,4	110
38	38,1	130
51	50,8	160
63	63,5	200
76	76,1	220
101	101,6	270
104	104,0	270

DN	D	gr
28	28,0	110
34	34,0	120
40	40,0	130
52	52,0	160
70	70,0	210
85	85,0	240
101	101,6	270
104	104,0	270

DN	D	gr
25	25,4	110
38	38,1	130
51	50,8	160
63	63,5	200
76	76,1	220
101	101,6	270
104	104,0	270

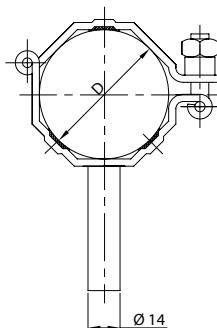
**REGG. OTT. TRONCHETTO  
STUB OCT. PIPE HANGER  
COLLIER OCT. FOURREAU  
ABR. OCT. ESPÁRRAGO**

**094 T**



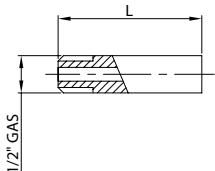
**REGG. OTT. TRONCHETTO  
STUB OCT. PIPE HANGER  
COLLIER OCT. FOURREAU  
ABR. OCT. ESPÁRRAGO**

**094 T**



**TRONCHETTO FILETTATO  
THREADED PIPE  
FOURREAU FILETÉ  
ESPÁRRAGO**

**095 G**

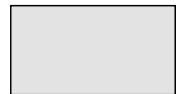
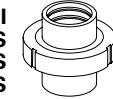


DN	D	gr
28	28,0	130
34	34,0	140
40	40,0	150
52	52,0	180
70	70,0	230
85	85,0	260
101	101,6	290
104	104,0	290

DN	D	gr
25	25,4	130
38	38,1	150
51	50,8	180
63	63,5	220
76	76,1	240
101	101,6	290
104	104,0	290

Cod.	G	L
095 G 50	1/2"	50,0
095 G 100	1/2"	100,0
095 G 150	1/2"	150,0
095 G 200	1/2"	200,0





## RACCORDI

- Ricavati da particolari stampati a caldo o laminati e solubilizzati.
- Accurata lavorazione delle parti filettate per eliminare l'ingrippaggio durante gli accoppiamenti.
- Eliminazione delle parti finali delle filettature con operazioni meccaniche per evitare infortuni durante la manipolazione dei pezzi.
- Finitura standard: lucidatura esterna norme DIN; satinatura esterna norme SMS, BS, ISS.

## UNIONS

- Made from hot-rolled or press-forged material and solution heat-treated.
- Precise machining of the threaded parts to eliminate seizure during coupling.
- Elimination of end parts of threading with mechanical operations to prevent accidents during handling of the pieces.
- Standard finish: external polishing to DIN standards; external glazing to SMS, BS, ISS standards.

## RACCORDES

- Obtenus à partir de pièces moulées à chaud ou laminées et solubilisées.
- Usinage soigné des parties filetées pour éliminer le grippage pendant les assemblages.
- Elimination des parties finales des filetages à l'aide d'opérations mécaniques pour éviter les accidents pendant le maniement des pièces.
- Finissage standard: polissage extérieur normes DIN; satinage extérieur normes SMS, BS, ISS.

## RACORES

- Obtenidos a partir de piezas estampadas en caliente o laminadas y solubilizadas.
- Cuidadosa elaboración de las piezas roscadas para eliminar el agarrotamiento durante los acoplamientos.
- Eliminación de las partes terminales de las roscas con operaciones mecánicas para evitar accidentes durante la manipulación de las piezas.
- Acabado estándar: pulido exterior normas DIN; satinado exterior normas SMS, BS, ISS.

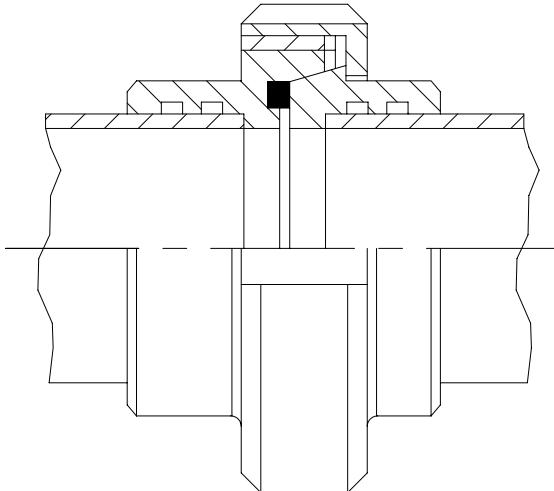


RACCORDI  
UNIONS  
RACCORDS  
RACORES



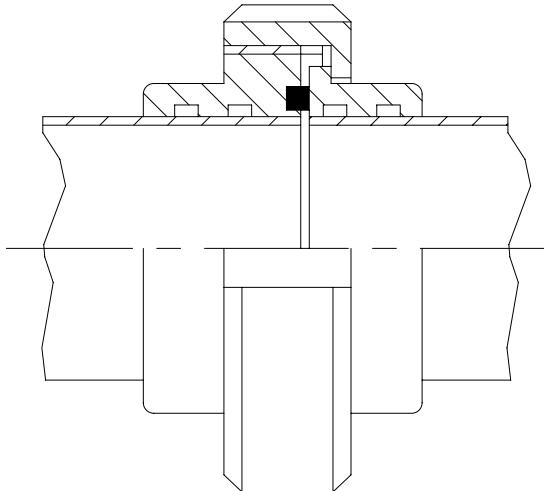
RACCORDO DIN  
DIN UNION

RACCORD DIN  
RACOR DIN



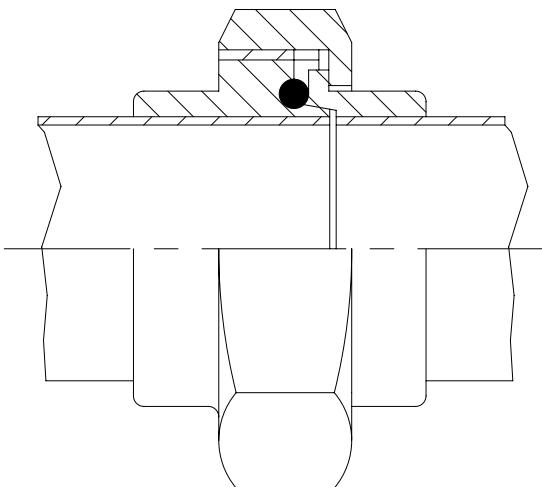
RACCORDO SMS  
SMS UNION

RACCORD SMS  
RACOR SMS



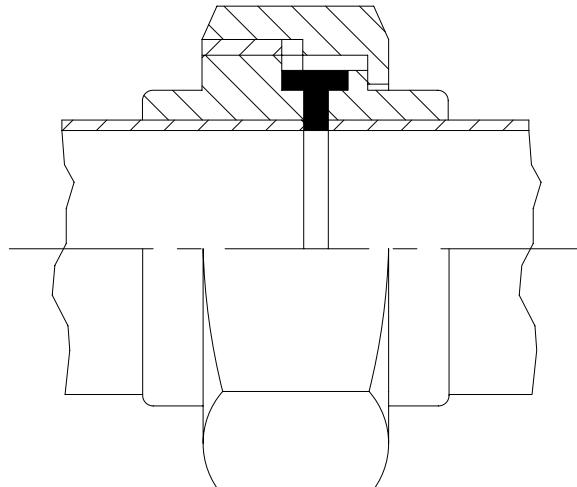
RACCORDO BS  
BS UNION

RACCORD BS  
RACOR BS



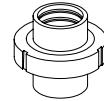
RACCORDO ISS  
ISS UNION

RACCORD ISS  
RACOR ISS





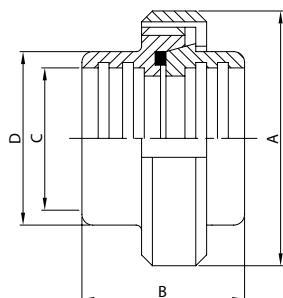
RACCORDI  
UNIONS  
RACCORDES  
RACORES



DIN

RACCORDO MR.  
EG. UNION  
RACCORD DR.  
RACOR MR.

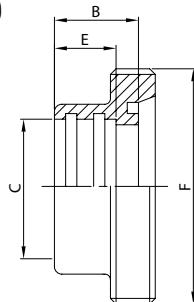
100 D



DN	A	B	C	D	gr
10	38,0	35,0	12,0	18,0	128
15	44,0	35,0	18,0	24,0	159
20	54,0	37,0	22,0	30,0	285
25	63,0	45,0	28,0	35,0	388
32	70,0	51,0	34,0	41,0	481
40	78,0	53,0	40,0	48,0	601
50	92,0	57,0	52,0	61,0	837
65	112,0	65,0	70,0	79,0	1.286
80	127,0	75,0	85,0	93,0	1.724
100	148,0	89,0	101,6	114,0	2.785
104	148,0	89,0	104,0	114,0	2.626

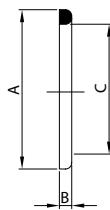
BOCC. FILETTATO MR.  
EG. MALE PART  
NEZ FILETÉ DR.  
MACHO RACOR MR.

101 D



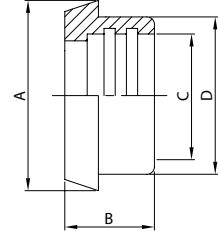
GUARNIZIONE PER RACC.  
SEAL RING FOR UNION  
JOINT DE RACCORD  
JUNTA RACOR

131 D



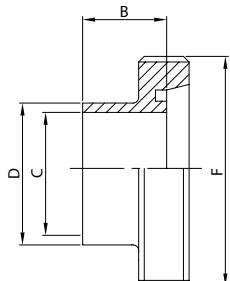
BOCC. CONICO MR.  
EG. TAPER PART  
DOUILLE DR.  
CASQUILLO RACOR MR.

111 D



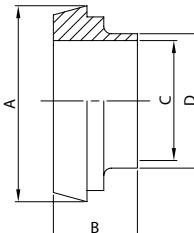
BOCC. FILETTATO SR.  
WG. MALE PART  
NEZ FILETÉ SR.  
MACHO RACOR SR.

102 D



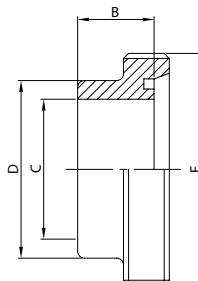
BOCC. CONICO SR.  
WG. TAPER PART  
DOUILLE SR.  
CASQUILLO RACOR SR.

112 D



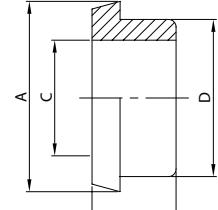
BOCC. FILETT. GROSSO SP.  
WG. MALE PART  
NEZ FILETÉ SR.  
MACHO R. ESPESO SR.

117 D



BOCC. CONICO GROSSO SP.  
WG. THICK TAPER PART  
DOUILLE ÉPAISSE SR.  
CASQUILLO R. ESPESO SR.

119 D



DN	B	C	D	F	gr
10	17,0	10,0	12,0	28-8	31
15	17,0	16,0	18,0	34-8	45
20	18,0	20,0	22,0	44-6	84
25	22,0	25,0	28,0	52-6	109
32	25,0	31,0	34,0	58-6	134
40	26,0	37,0	40,0	65-6	169
50	28,0	49,0	52,0	78-6	224
65	32,0	66,0	70,0	95-6	350
80	37,0	81,0	85,0	110-4	523
100	44,0	97,6	101,6	130-4	675
104	44,0	100,0	104,0	130-4	654

DN	A	B	C	D	F	gr
10	22,0	17,0	10,0	12,0	28-8	22
15	28,0	17,0	16,0	18,0	34-8	31
20	36,0	18,0	20,0	22,0	50	
25	44,0	22,0	25,0	28,0	88	
32	50,0	25,0	31,0	34,0	110	
40	56,0	26,0	37,0	40,0	131	
50	68,0	28,0	49,0	52,0	180	
65	86,0	32,0	66,0	70,0	294	
80	100,0	37,0	81,0	85,0	353	
100	121,0	44,0	97,6	101,6	634	
104	121,0	44,0	100,0	104,0	570	

DN	A	B	C	D	F	gr
10	17,0	10,0	18,0	28-8	42	
15	17,0	16,0	24,0	34-8	59	
20	18,0	20,0	30,0	44-6	108	
25	22,0	25,0	35,0	52-6	149	
32	25,0	31,0	41,0	58-6	189	
40	26,0	37,0	48,0	65-6	248	
50	28,0	49,0	61,0	78-6	350	
65	32,0	66,0	79,0	95-6	531	
80	37,0	81,0	93,0	110-4	719	
100	44,0	97,6	114,0	130-4	1.192	
104	44,0	100,0	114,0	130-4	1.171	
125	34,0	125,0	137,0	160-4	1.230	
150	37,0	150,0	163,0	190-4	2.030	

DN	A	B	C	D	F	gr
10	22,0	17,0	10,0	18,0	28-8	29
15	28,0	17,0	16,0	24,0	34-8	38
20	36,0	18,0	20,0	30,0	50	72
25	44,0	22,0	25,0	35,0	88	115
32	50,0	25,0	31,0	41,0	110	147
40	56,0	26,0	37,0	48,0	131	187
50	68,0	28,0	49,0	61,0	180	266
65	86,0	32,0	66,0	79,0	294	420
80	100,0	37,0	81,0	93,0	353	529
100	121,0	44,0	97,6	114,0	634	1.016
104	121,0	44,0	100,0	114,0	570	910
125	150,0	34,0	125,0	137,0	1.230	910
150	176,0	37,0	150,0	163,0	2.030	1.242



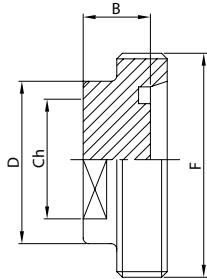
RACCORDI  
UNIONS  
RACCORDS  
RACORES



DIN

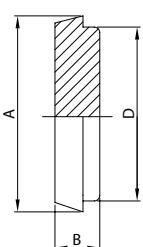
**TAPPO FILETTATO  
BLANK MALE  
OBTURATEUR FILETÉ  
MACHO R. CIEGO**

**104 D**



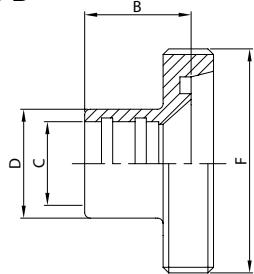
**TAPPO CONICO  
TAPER BLANK  
OBTURATEUR  
CASQUILLO R. CIEGO**

**114 D**



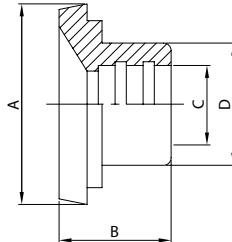
**RIDUZIONE FILETTATA MR.  
EG. MALE REDUCER  
NEZ FILETÉ RÉDUIT DR.  
MACHO R. REDUCER MR.**

**105 D**



**RIDUZIONE CONICA MR.  
EG. TAPER REDUCER  
DOUILLE RÉDUITE DR.  
CASQUILLO R. REDUC. MR.**

**115 D**



DN	B	Ch	D	F	gr
10	18,0	13,0	18,0	28-8	30
15	18,0	19,0	24,0	34-8	50
20	18,0	24,0	30,0	44-6	100
25	17,0	27,0	35,0	52-6	240
32	17,0	32,0	41,0	58-6	290
40	17,0	40,0	48,0	65-6	370
50	17,0	50,0	61,0	78-6	530
65	18,0	65,0	79,0	95-6	800
80	22,0	80,0	93,0	110-4	1.050
100	20,0	100,0	114,0	130-4	1.870

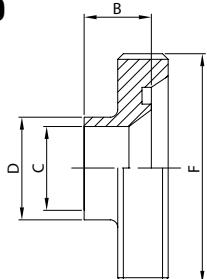
DN	A	B	D	gr
10	22,0	10,0	18,0	25
15	28,0	10,0	24,0	42
20	36,0	12,0	30,0	85
25	44,0	14,0	35,0	140
32	50,0	14,0	41,0	180
40	56,0	14,0	48,0	230
50	68,0	15,0	61,0	380
65	86,0	17,0	79,0	700
80	100,0	17,0	93,0	970
100	121,0	21,0	114,0	1.750
125	150,0	24,0	137,0	3.120
150	176,0	25,0	163,0	4.450

DN	B	C	D	F	gr
32/25	21,0	28,0	35,0	58-6	150
40/25	21,0	28,0	35,0	65-6	200
40/32	23,0	34,0	41,0	65-6	200
50/25	27,0	28,0	35,0	78-6	260
50/32	27,0	34,0	41,0	78-6	340
50/40	28,0	40,0	48,0	78-6	300
65/40	28,0	40,0	48,0	95-6	440
65/50	32,0	52,0	61,0	95-6	460
80/65	34,0	70,0	79,0	110-4	720
100/80	35,0	85,0	93,0	130-4	1.200

DN	A	B	C	D	gr
32/25	50,0	25,0	28,0	35,0	140
40/25	56,0	25,0	28,0	35,0	180
40/32	56,0	28,0	34,0	41,0	180
50/25	68,0	28,0	28,0	35,0	280
50/32	68,0	28,0	34,0	41,0	280
50/40	68,0	31,0	40,0	48,0	300
65/40	86,0	32,0	40,0	48,0	500
65/50	86,0	33,0	52,0	61,0	500
80/65	100,0	38,0	70,0	79,0	540
100/80	121,0	41,0	85,0	93,0	980

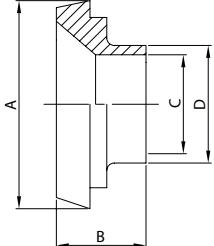
**RIDUZIONE FILETTATA SR.  
WG. MALE REDUCER  
NEZ FILETÉ RÉDUIT SR.  
MACHO R. REDUCCIÓN SR.**

**106 D**



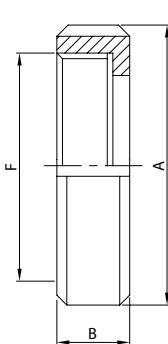
**RIDUZIONE CONICA SR.  
WG. TAPER REDUCER  
DOUILLE RÉDUITE SR.  
CASQUILLO R. REDUC. SR.**

**116 D**



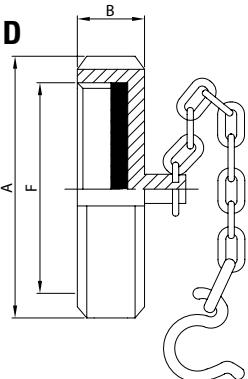
**GIRELLA  
ROUND NUT  
ÉCROU  
TUERCA**

**121 D**



**GIRELLA CIECA + CAT.  
ROUND NUT + CHAIN  
ÉCROU BOUCHON + CH.  
TUERCA CIEGA + CAD.**

**124 D**



DN	B	C	D	F	gr
32/28	23,0	25,0	28,0	58-6	160
40/28	23,0	25,0	28,0	65-6	210
40/34	25,0	31,0	34,0	65-6	220
50/28	25,0	25,0	28,0	78-6	220
50/34	25,0	31,0	34,0	78-6	330
50/40	25,0	37,0	40,0	78-6	330
65/40	28,0	37,0	40,0	95-6	460
65/52	29,0	49,0	52,0	95-6	610
80/70	33,0	66,0	70,0	110-4	840
100/85	35,0	81,0	85,0	130-4	1.250

DN	A	B	C	D	gr
32/28	50,0	18,0	25,0	28,0	135
40/28	56,0	18,0	25,0	28,0	185
40/34	56,0	18,0	31,0	34,0	200
50/28	68,0	19,0	25,0	28,0	285
50/34	68,0	19,0	31,0	34,0	275
50/40	68,0	19,0	37,0	40,0	280
65/40	86,0	21,0	37,0	40,0	515
65/52	86,0	21,0	49,0	52,0	480
80/70	100,0	21,0	66,0	70,0	625
100/85	121,0	25,0	81,0	85,0	880

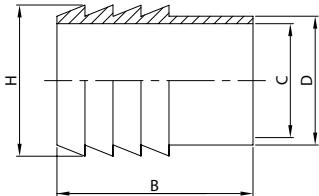
DN	A	B	F	gr
10	38,0	18,0	28-8	69
15	44,0	18,0	34-8	79
20	54,0	21,0	44-6	131
25	63,0	21,0	52-6	170
32	70,0	21,0	58-6	204
40	78,0	21,0	65-6	245
50	92,0	22,0	78-6	328
65	112,0	25,0	95-6	531
80	127,0	30,0	110-4	742
100	148,0	31,0	130-4	986
125	178,0	35,0	160-4	1.465
150	210,0	41,0	190-4	2.277

DN	A	B	F	gr
10	38,0	18,0	28-8	100
15	44,0	18,0	34-8	120
20	54,0	21,0	44-6	180
25	63,0	21,0	52-6	200
32	70,0	21,0	58-6	250
40	78,0	21,0	65-6	290
50	92,0	22,0	78-6	370
65	112,0	25,0	95-6	700
80	127,0	30,0	110-4	970
100	148,0	31,0	130-4	1.400
125	178,0	35,0	160-4	1.800
150	210,0	41,0	190-4	2.200



ATT. PORTAGOMMA EL.  
HOSE CONNECTION PE.  
MANCHON À LIGATURER  
MANGUITO MANGUERA EL.

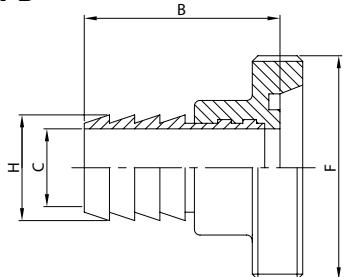
**140 L**



DN	B	C	D	H	gr
28	42,0	25,0	28,0	34,0	80
34	45,0	31,0	34,0	40,0	105
40	52,0	37,0	40,0	46,0	145
52	59,0	49,0	52,0	58,0	210
70	72,0	66,0	70,0	76,0	380
85	73,0	81,0	85,0	93,0	570
101	95,0	97,6	101,6	114,0	1.400

ATT. PORTAG. + BF. MT.  
HOSE CONNECTION + MP. ED.  
NEZ FILETÉ À LIGATURER  
M. M. MACHO MD.

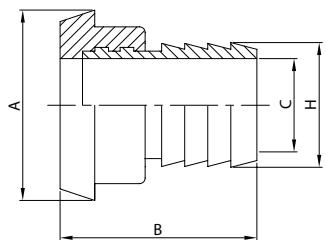
**141 D**



DN	B	C	F	H	gr
25	49,0	25,0	52-6	34,0	212
32	52,0	31,0	58-6	40,0	275
40	58,0	37,0	65-6	46,0	355
50	65,0	49,0	78-6	58,0	490
65	79,0	66,0	95-6	76,0	760
80	82,0	81,0	110-4	93,0	1.170
100	104,0	97,6	130-4	114,0	2.400

ATT. PORTAG. + BC. MT.  
HOSE CONNECTION + TP. ED.  
DOUILLE À LIGATURER  
M. M. CASQUILLO MD.

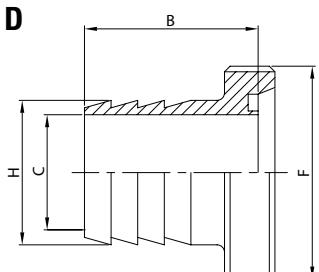
**142 D**



DN	A	B	C	H	gr
25	44,0	49,0	25,0	34,0	165
32	50,0	52,0	31,0	40,0	215
40	56,0	58,0	37,0	46,0	280
50	68,0	65,0	49,0	58,0	410
65	86,0	79,0	66,0	76,0	675
80	100,0	82,0	81,0	93,0	950
100	121,0	104,0	97,6	114,0	2.180

PORTEGRASSO EF.  
HOSE CONNECTION ME.  
PORTE C. NEZ FILETÉ  
M. M. MACHO SR.

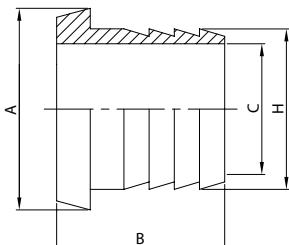
**143 D**



DN	B	C	F	H	gr
10	38,0	10,0	28-8	18,0	80
15	38,0	16,0	34-8	24,0	115
20	38,0	20,0	44-6	30,0	180
25	37,0	25,0	52-6	34,0	212
32	37,0	31,0	58-6	40,0	275
40	42,0	37,0	65-6	46,0	355
50	47,0	49,0	78-6	58,0	490
65	58,0	66,0	95-6	76,0	760
80	62,0	81,0	110-4	93,0	1.170
100	77,0	97,6	130-4	114,0	2.400

PORTEGRASSO EC.  
HOSE CONNECTION TE.  
PORTE C. DOUILLE  
M. M. CASQUILLO SR.

**144 D**

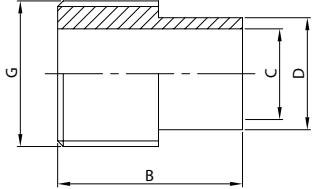


DN	A	B	C	H	gr
10	22,0	36,0	10,0	18,0	65
15	28,0	36,0	16,0	24,0	90
20	36,0	38,0	20,0	30,0	140
25	44,0	40,0	25,0	34,0	165
32	50,0	40,0	31,0	40,0	215
40	56,0	45,0	37,0	46,0	280
50	68,0	51,0	49,0	58,0	410
65	86,0	62,0	66,0	76,0	675
80	100,0	62,0	81,0	93,0	950
100	121,0	80,0	97,6	114,0	2.180



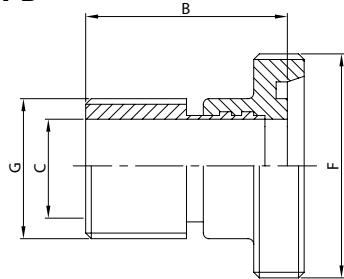
ATT. FILETTATO GAS EL.  
BSP MALE CONNECTION PE.  
PIÈCE FILETÉE GAS  
ROSCA GAS EL.

150 L



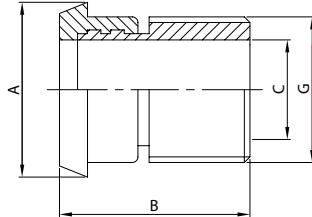
ATT. FILETTATO GAS + BF. MT.  
BSP MALE CONN. + MP. ED.  
PIÈCE FIL. GAS + NEZ FIL.  
MACHO DIN + M. GAS MD.

151 D



ATT. FILETTATO GAS + BC. MT.  
BSP MALE CONN. + TP. ED.  
PIÈCE FIL. GAS + DOUILLE  
C. DIN + M. GAS MD.

152 D



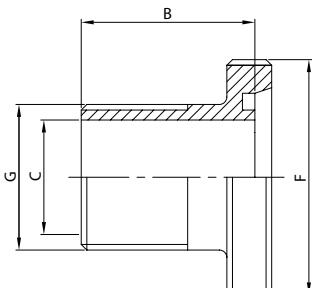
DN	B	C	D	G	gr
28	30,0	25,0	28,0	1"	45
34	33,0	31,0	34,0	1 1/4"	80
40	38,0	37,0	40,0	1 1/2"	110
52	43,0	49,0	52,0	2"	195
70	50,0	66,0	70,0	2 1/2"	240
85	58,0	81,0	85,0	3"	320
101	75,0	97,6	101,6	4"	850

DN	B	C	F	G	gr
25	37,0	25,0	52-6	1"	177
32	40,0	31,0	58-6	1 1/4"	250
40	44,0	37,0	65-6	1 1/2"	320
50	49,0	49,0	78-6	2"	475
65	57,0	66,0	95-6	2 1/2"	620
80	67,0	81,0	110-4	3"	920
100	84,0	97,6	130-4	4"	1.850

DN	A	B	C	G	gr
25	44,0	37,0	25,0	1"	130
32	50,0	40,0	31,0	1 1/4"	190
40	56,0	44,0	37,0	1 1/2"	245
50	68,0	49,0	49,0	2"	395
65	86,0	57,0	66,0	2 1/2"	535
80	100,0	67,0	81,0	3"	700
100	121,0	84,0	97,6	4"	1.630

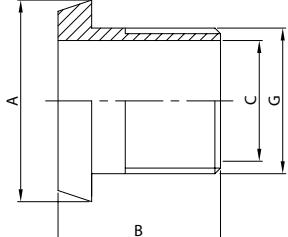
BOCC. FILETTATO EF. GAS  
BSP MALE PART ME.  
ADAPTATEUR NEZ FILETÉ  
MACHO DIN MACHO GAS

153 D



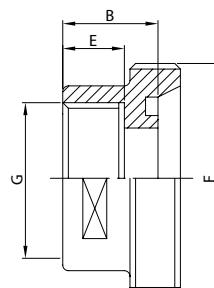
BOCC. CONICO EF. GAS  
BSP TAPER PART ME.  
ADAPTATEUR DOUILLE  
CASQUILLO DIN M. GAS

154 D



BOCC. FILETT. D.I. FT. GAS  
MALE PART I.D. T. BSP  
ADAPT. NEZ FIL./FEM. GAS  
MACHO DIN HEMBRA GAS

161 D



DN	B	C	F	G	gr
25	43,0	25,0	52-6	1"	177
32	43,0	31,0	58-6	1 1/4"	250
40	43,0	37,0	65-6	1 1/2"	320
50	43,0	49,0	78-6	2"	475
65	44,0	66,0	95-6	2 1/2"	620
80	48,0	81,0	110-4	3"	920
100	46,0	97,6	130-4	4"	1.850

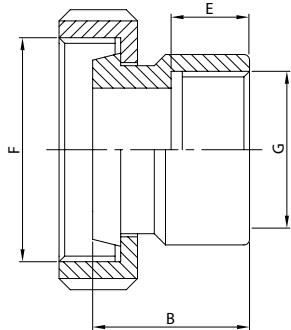
DN	A	B	C	G	gr
25	44,0	43,0	25,0	1"	130
32	50,0	43,0	31,0	1 1/4"	190
40	56,0	43,0	37,0	1 1/2"	245
50	68,0	44,0	49,0	2"	395
65	86,0	46,0	66,0	2 1/2"	535
80	100,0	46,0	81,0	3"	700
100	121,0	50,0	97,6	4"	1.850

DN	B	E	F	G	gr
25	24,0	17,0	52-6	1"	220
32	28,0	17,0	58-6	1 1/4"	270
40	28,0	22,0	65-6	1 1/2"	320
50	33,0	22,0	78-6	2"	400
65	34,0	24,0	95-6	2 1/2"	510
80	37,0	27,0	110-4	3"	740
100	42,0	32,0	130-4	4"	1.150



BC. + G. D.I. FT. GAS  
TP. + N. I.D. T. BSP  
ADAPT. DOUILLE/FEM. GAS  
C. + T. DIN H. GAS

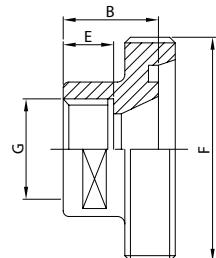
162 D



DN	B	E	F	G	gr
25	32,0	17,0	52-6	1"	325
32	35,0	17,0	58-6	1 1/4"	410
40	37,0	22,0	65-6	1 1/2"	500
50	41,0	22,0	78-6	2"	850
65	46,0	24,0	95-6	2 1/2"	1.245
80	49,0	27,0	110-4	3"	1.640
100	60,0	32,0	130-4	4"	2.200

BOCC. FILETT. D.I. FT. GAS  
MALE PART I.D. T. BSP  
ADAPT. NEZ FIL./FEM. GAS  
MACHO DIN HEMBRA GAS

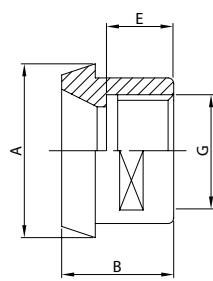
163 D



DN	B	E	F	G	gr
25	24,0	17,0	52-6	3/4"	50
32	28,0	17,0	58-6	1"	65
40	28,0	22,0	65-6	1 1/4"	120
50	33,0	22,0	78-6	1 1/2"	140
65	34,0	24,0	95-6	2"	180
80	37,0	27,0	110-4	2 1/2"	220
100	42,0	32,0	130-4	3 1/2"	290

BOCC. CONICO D.I. FT. GAS  
TAPER PART I.D. T. BSP  
ADAPT. DOUILLE/FEM. GAS  
C. DIN H. GAS REDUCCIÓN

164 D



DN	A	B	E	G	gr
25	44,0	22,0	17,0	3/4"	95
32	50,0	25,0	17,0	1"	120
40	56,0	26,0	22,0	1 1/4"	145
50	68,0	28,0	22,0	1 1/2"	210
65	86,0	32,0	24,0	2"	305
80	100,0	37,0	27,0	2 1/2"	390
100	121,0	44,0	32,0	3 1/2"	790



RACCORDI  
UNIONS  
RACCORDS  
RACORES



SMS

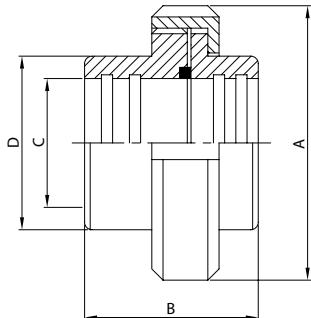
RACCORDO MR.  
EG. UNION  
RACCORD DR.  
RACOR MR.

BOCC. FILETTATO MR.  
EG. MALE PART  
NEZ FILETÉ DR.  
MACHO RACOR MR.

GUARNIZIONE PER RACC.  
SEAL RING FOR UNION  
JOINT DE RACCORD  
JUNTA RACOR

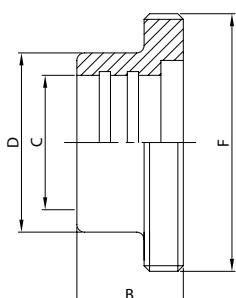
BOCC. LISCIO MR.  
EG. LINER  
DOUILLE DR.  
CASQUILLO RACOR MR.

100 S



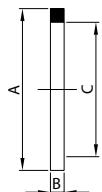
DN	A	B	C	D	gr
25	51,0	38,0	25,4	32,0	225
38	74,0	44,0	38,1	48,0	590
51	84,0	46,0	50,8	61,0	660
63	100,0	56,0	63,5	73,5	1.100
76	114,0	66,0	76,2	86,0	1.450
101	154,0	61,0	101,6	116,0	2.860
104	140,0	61,0	104,0	112,0	1.700

101 S



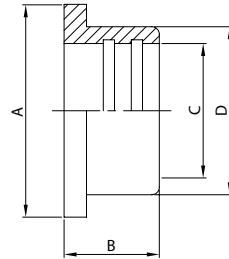
DN	B	C	D	F	gr
25	20,0	25,4	32,0	40-6	70
38	23,0	38,1	48,0	60-6	200
51	25,0	50,8	61,0	70-6	225
63	30,0	63,5	73,5	85-6	390
76	35,0	76,2	86,0	98-6	500
101	30,0	101,6	116,0	132-6	1.140
104	30,0	104,0	112,0	125-4	540

131 S



DN	A	B	C
25	32,0	5,5	25,4
38	48,0	5,5	38,1
51	61,0	5,5	50,8
63	73,5	5,5	63,5
76	86,0	5,5	76,0
101	113,5	5,5	101,5
104	116,0	5,5	104,0

111 S



DN	A	B	C	D	gr
25	35,5	17,0	25,4	32,0	45
38	55,0	20,0	38,1	48,0	120
51	65,0	20,0	50,8	61,0	135
63	80,0	25,0	63,5	73,5	220
76	93,0	30,0	76,2	86,0	310
101	127,0	30,0	101,6	116,0	740
104	118,0	30,0	104,0	112,0	400

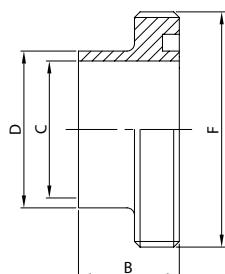
BOCC. FILETTATO SR.  
WG. MALE PART  
NEZ FILETÉ SR. LONG  
MACHO RACOR SR.

BOCC. LISCIO SR.  
WG. LINER  
DOUILLE SR. LONGUE  
CASQUILLO RACOR SR.

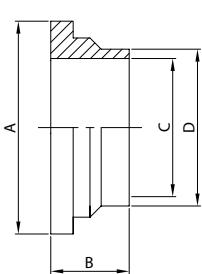
BOCC. FILETT. CORTO SR.  
WG. SHORT MALE PART  
NEZ FILETÉ SR. COURT  
MACHO R. CORTO SR.

BOCC. LISCIO CORTO SR.  
WG. SHORT LINER  
DOUILLE SR. COURTE  
CASQUILLO R. CORTO SR.

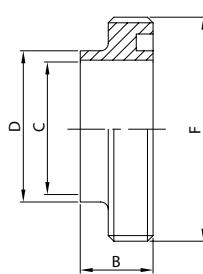
102 S



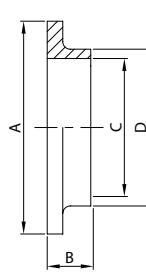
112 S



103 S



113 S



DN	B	C	D	F	gr
25	20,0	22,4	25,4	40-6	65
38	23,0	35,1	38,1	60-6	190
51	25,0	47,8	50,8	70-6	200
63	30,0	60,5	63,5	85-6	370
76	35,0	72,9	76,2	98-6	480
101	30,0	97,6	101,6	132-6	1.000
104	30,0	100,0	104,0	125-4	600

DN	A	B	C	D	gr
25	35,5	17,0	22,4	25,4	20
38	55,0	20,0	35,1	38,1	80
51	65,0	20,0	47,8	50,8	100
63	80,0	25,0	60,5	63,5	180
76	93,0	30,0	72,9	76,2	240
101	127,0	32,0	97,6	101,6	560
104	118,0	30,0	100,0	104,0	340

DN	B	C	D	F	gr
25	15,0	22,4	25,4	40-6	60
38	20,0	35,1	38,1	60-6	180
51	20,0	47,8	50,8	70-6	190
63	24,0	60,5	63,5	85-6	350
76	24,0	72,9	76,2	98-6	460
101	25,0	97,6	101,6	132-6	900
104	25,0	100,0	104,0	125-4	550

DN	A	B	C	D	gr
25	35,5	7,5	22,4	25,4	30
38	55,0	9,0	35,1	38,1	75
51	65,0	9,0	47,8	50,8	80
63	80,0	9,0	60,5	63,5	85
76	93,0	10,0	72,9	76,2	145
101	127,0	12,0	97,6	101,6	290
104	118,0	12,0	100,0	104,0	180



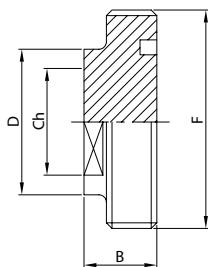
RACCORDI  
UNIONS  
RACCORDS  
RACORES



SMS

**TAPPO FILETTATO  
BLANK MALE  
OBTURATEUR FILETÉ  
MACHO R. CIEGO**

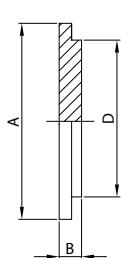
**104 S**



DN	B	Ch	D	F	gr
25	19,0	25,0	32,0	40-6	130
38	23,0	42,0	48,0	60-6	350
51	23,0	50,0	61,0	70-6	590
63	27,0	60,0	73,5	85-6	1.050
76	27,0	72,0	86,0	98-6	1.450
101	28,0	100,0	116,0	132-6	2.810
104	28,0	100,0	112,0	125-4	2.580

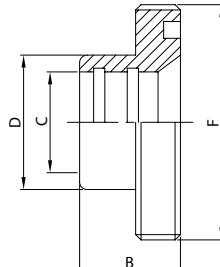
**TAPPO LISCIO  
BLANK LINER  
OBTURATEUR  
CASQUILLO R. CIEGO**

**114 S**



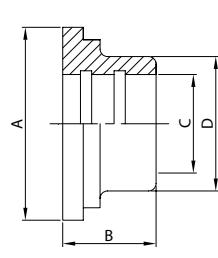
**RIDUZIONE FILETTATA MR.  
EG. MALE REDUCER  
NEZ FILETÉ RÉDUIT DR.  
MACHO R. REDUCCIÓN MR.**

**105 S**



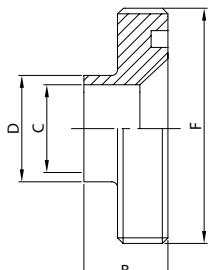
**RIDUZIONE LISCIA MR.  
EG. LINER REDUCER  
DOUILLE RÉDUITE DR.  
CASQUILLO R. REDUC. MR.**

**115 S**



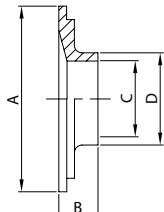
**RIDUZIONE FILETTATA SR.  
WG. MALE REDUCER  
NEZ FILETÉ RÉDUIT SR.  
MACHO R. REDUCCIÓN SR.**

**106 S**



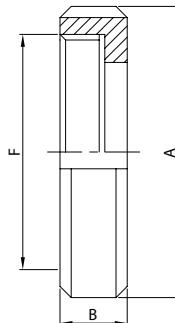
**RIDUZIONE LISCIA SR.  
WG. LINER REDUCER  
DOUILLE RÉDUITE SR.  
CASQUILLO R. REDUC. SR.**

**116 S**



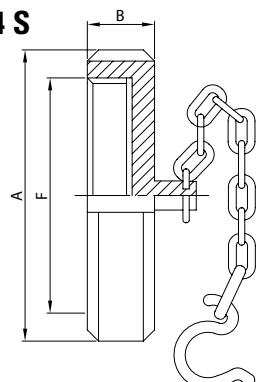
**GIRELLA  
ROUND NUT  
ÉCROU  
TUERCA**

**121 S**



**GIRELLA CIECA + CAT.  
ROUND NUT + CHAIN  
ÉCROU BOUCHON + CH.  
TUERCA CIEGA + CAD.**

**124 S**



DN	B	C	D	F	gr
38/25	19,0	22,4	25,4	60-6	230
51/25	20,0	22,4	25,4	70-6	240
51/38	20,0	35,1	38,1	70-6	280
63/38	24,0	35,1	38,1	85-6	440
63/51	24,0	47,8	50,8	85-6	520
76/38	24,0	35,1	38,1	98-6	580
76/51	24,0	47,8	50,8	98-6	670
76/63	24,0	60,5	63,5	98-6	770
101/63	26,0	60,5	63,5	132-6	1.200
101/76	26,0	72,9	76,2	132-6	1.400

DN	A	B	C	D	gr
38/25	55,0	17,0	22,4	25,4	80
51/25	65,0	17,0	22,4	25,4	120
51/38	65,0	20,0	35,1	38,1	100
63/38	80,0	20,0	35,1	38,1	160
63/51	80,0	20,0	47,8	50,8	130
76/38	93,0	20,0	35,1	38,1	290
76/51	93,0	20,0	47,8	50,8	240
76/63	93,0	20,0	60,5	63,5	200
101/63	127,0	25,0	60,5	63,5	550
101/76	127,0	30,0	72,9	76,2	490

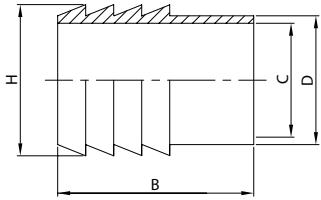
DN	A	B	F	gr
25	51,0	20,0	40-6	110
38	74,0	25,0	60-6	270
51	84,0	26,0	70-6	300
63	100,0	30,0	85-6	490
76	114,0	32,0	98-6	640
101	150,0	32,0	132-6	980
104	140,0	30,0	125-4	780

DN	A	B	F	gr
25	51,0	20,0	40-6	190
38	74,0	25,0	60-6	430
51	84,0	26,0	70-6	540
63	100,0	30,0	85-6	840
76	114,0	32,0	98-6	1.200
101	150,0	32,0	132-6	2.200
104	140,0	30,0	125-4	2.000



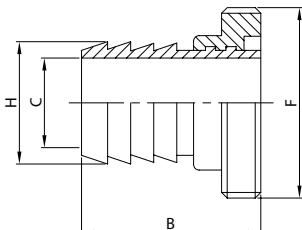
ATT. PORTAGOMMA EL.  
HOSE CONNECTION PE.  
MANCHON À LIGATURER  
MANGUITO MANGUERA EL.

140 L



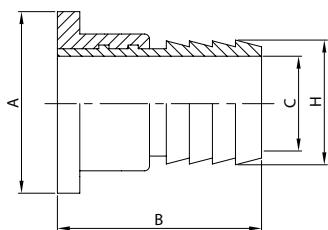
ATT. PORTAG. + BF. MT.  
HOSE CONNECTION + MP. ED.  
NEZ FILETÉ À LIGATURER  
M. M. MACHO MD.

141 S



ATT. PORTAG. + BL. MT.  
HOSE CONNECTION + L. ED.  
DOUILLE À LIGATURER  
M. M. CASQUILLO MD.

142 S



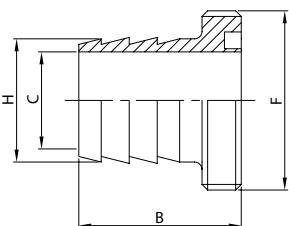
DN	B	C	D	H	gr
25	49,0	22,4	25,4	28,6	100
38	58,0	35,1	38,1	41,3	200
51	67,0	47,8	50,8	54,0	290
63	81,0	60,5	63,5	66,7	320
76	81,0	72,9	76,2	79,4	670
101	95,0	97,6	101,6	109,0	1.400

DN	B	C	F	H	gr
25	49,0	22,4	40-6	28,6	170
38	58,0	35,1	60-6	41,3	400
51	67,0	47,8	70-6	54,0	515
63	81,0	60,5	85-6	66,7	710
76	81,0	72,9	98-6	79,4	1.170
101	95,0	97,6	132-6	109,0	2.540

DN	A	B	C	H	gr
25	35,5	49,0	22,4	28,6	155
38	55,0	58,0	35,1	41,3	320
51	65,0	67,0	47,8	54,0	425
63	80,0	81,0	60,5	66,7	540
76	93,0	81,0	72,9	79,4	980
101	127,0	95,0	97,6	109,0	2.140

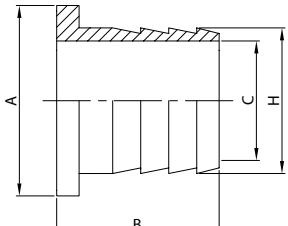
PORTAGOMMA EF.  
HOSE CONNECTION ME.  
PORTE C. NEZ FILETÉ  
M. M. MACHO SR.

143 S



PORTAGOMMA EL.  
HOSE CONNECTION PE.  
PORTE C. DOUILLE  
M. M. CASQUILLO SR.

144 S



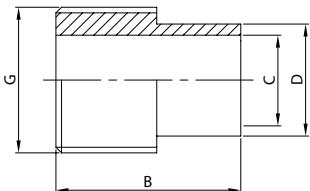
DN	B	C	F	H	gr
25	41,0	22,4	40-6	28,6	170
38	50,0	35,1	60-6	41,3	400
51	55,0	47,8	70-6	54,0	515
63	69,0	60,5	85-6	66,7	710
76	69,0	72,9	98-6	79,4	1.170
101	85,0	97,6	132-6	109,0	2.540

DN	A	B	C	H	gr
25	35,5	33,5	22,4	28,6	145
38	55,0	39,0	35,1	41,3	320
51	65,0	44,0	47,8	54,0	425
63	80,0	54,0	60,5	66,7	540
76	93,0	55,0	72,9	79,4	980
101	127,0	71,0	97,6	109,0	2.140



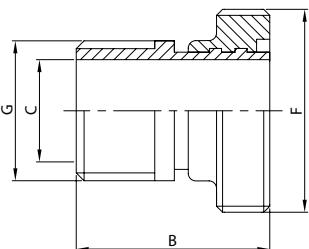
ATT. FILETTATO GAS EL.  
BSP MALE CONNECTION PE.  
PIÈCE FILETÉE GAS  
ROSCA GAS EL.

150 L



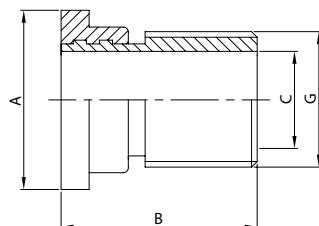
ATT. FILET. GAS + BF. MT.  
BSP MALE CONN. + MP. ED.  
PIÈCE FIL. GAS + NEZ FIL.  
MACHO SMS + M. GAS MD.

151 S



ATT. FILET. GAS + BL. MT.  
BSP MALE CONN. + L. ED.  
PIÈCE FIL. GAS + DOUILLE  
C. SMS + M. GAS MD.

152 S



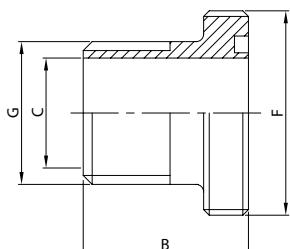
DN	B	C	D	G	gr
25	38,0	22,4	25,4	1"	70
38	45,0	35,1	38,1	1 1/2"	135
51	52,0	47,8	50,8	2"	200
63	60,0	60,5	63,5	2 1/2"	350
76	66,0	72,9	76,2	3"	540
101	75,0	97,6	101,6	4"	850

DN	B	C	F	G	gr
25	38,0	22,4	40-6	1"	140
38	45,0	35,1	60-6	1 1/2"	335
51	52,0	47,8	70-6	2"	425
63	60,0	60,5	85-6	2 1/2"	740
76	66,0	72,9	98-6	3"	1.040
101	75,0	97,6	132-6	4"	1.990

DN	A	B	C	G	gr
25	35,5	38,0	22,4	1"	115
38	55,0	45,0	35,1	1 1/2"	255
51	65,0	52,0	47,8	2"	335
63	80,0	60,0	60,5	2 1/2"	570
76	93,0	66,0	72,9	3"	850
101	127,0	75,0	97,6	4"	1.590

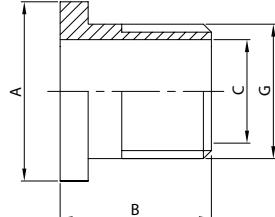
BOCC. FILETTATO EF. GAS  
BSP MALE PART ME.  
ADAPTATEUR NEZ FILETÉ  
MACHO SMS MACHO GAS

153 S



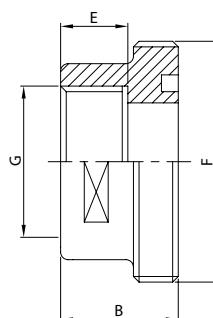
BOCC. LISCIO EF. GAS  
BSP LINER ME.  
ADAPTATEUR DOUILLE  
CASQUILLO SMS M. GAS

154 S



BOCC. FILET. D.I. FT. GAS  
MALE PART I.D. T. BSP  
ADAPT. NEZ FIL./FEM. GAS  
MACHO SMS HEMBRA GAS

161 S



DN	B	C	F	G	gr
25	30,0	22,4	40-6	1"	140
38	42,0	35,1	60-6	1 1/2"	335
51	47,0	47,8	70-6	2"	425
63	55,0	60,5	85-6	2 1/2"	740
76	58,0	72,9	98-6	3"	1.040
101	72,0	97,6	132-6	4"	1.990

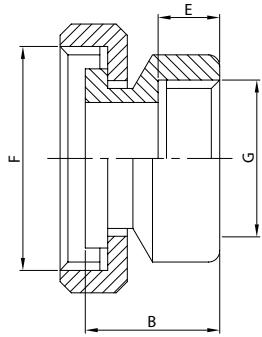
DN	A	B	C	G	gr
25	35,5	28,5	22,4	1"	115
38	55,0	29,0	35,1	1 1/2"	255
51	65,0	34,0	47,8	2"	335
63	80,0	34,0	60,5	2 1/2"	570
76	93,0	40,0	72,9	3"	850
101	127,0	41,0	97,6	4"	1.590

DN	B	E	F	G	gr
25	23,0	17,0	40-6	1"	100
38	32,0	19,0	60-6	1 1/2"	230
51	36,0	23,0	70-6	2"	270
63	42,0	24,0	85-6	2 1/2"	420
76	45,0	27,0	98-6	3"	540
101	50,0	30,0	132-6	4"	1.230



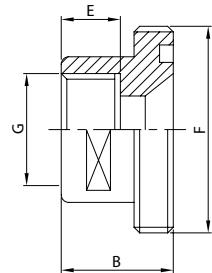
BL. + G. D.I. FT. GAS  
L. + N. I.D. T. BSP  
ADAPT. DOUILLE/FEM. GAS  
C. + T. SMS H. GAS

162 S



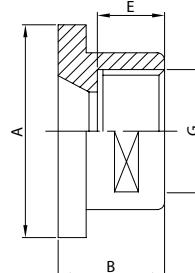
BOCC. FILET. D.I. FT. GAS  
MALE PART I.D. T. BSP  
ADAPT. NEZ FIL./FEM. GAS  
M. SMS H. GAS REDUCCIÓN

163 S



BOCC. LISCIO D.I. FT. GAS  
LINER I.D. T. BSP  
ADAPT. DOUILLE/FEM. GAS  
C. SMS H. GAS REDUCCIÓN

164 S



DN	B	E	F	G	gr
25	30,0	18,0	40-6	1"	200
38	33,0	18,0	60-6	1 1/2"	470
51	35,0	23,0	70-6	2"	540
63	40,0	23,0	85-6	2 1/2"	1.020
76	47,0	28,0	98-6	3"	1.370
101	54,0	28,0	132-6	4"	2.090

DN	B	E	F	G	gr
25	26,0	18,0	40-6	3/4"	70
38	30,0	18,0	60-6	1 1/4"	200
51	35,0	23,0	70-6	1 1/2"	225
63	39,0	23,0	85-6	2"	390
76	44,0	28,0	98-6	2 1/2"	500
101	45,0	28,0	132-6	3 1/2"	1.140

DN	A	B	E	G	gr
25	35,5	28,5	18,0	3/4"	45
38	55,0	29,0	18,0	1 1/4"	120
51	65,0	34,0	23,0	1 1/2"	135
63	80,0	34,0	23,0	2"	220
76	93,0	40,0	28,0	2 1/2"	310
101	127,0	41,0	28,0	3 1/2"	740



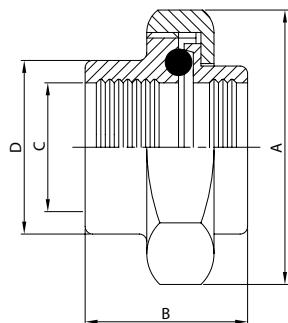
RACCORDI  
UNIONS  
RACCORDS  
RACORES



**RJT BS**

RACCORDO MR.  
EG. UNION  
RACCORD DR.  
RACOR MR.

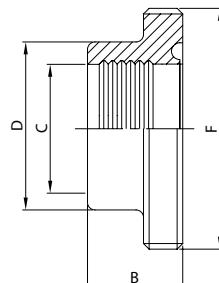
**100 B**



DN	A	B	C	D	gr
25	51,0	41,0	25,4	32,5	285
38	65,0	49,0	38,1	45,2	450
51	80,0	57,0	50,8	58,0	645
63	92,0	65,0	63,5	70,6	940
76	104,0	65,0	76,2	83,3	1.075
101	130,0	65,0	101,6	109,0	1.440

BOCC. FILETTATO MR.  
EG. MALE PART  
NEZ FILETÉ DR.  
MACHO RACOR MR.

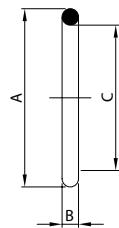
**101 B**



DN	B	C	D	F	gr
25	20,0	25,4	32,5	46-8	100
38	24,0	38,1	45,2	58-8	155
51	28,0	50,8	58,0	73-6	235
63	32,0	63,5	70,6	85-6	290
76	32,0	76,2	83,3	98-6	365
101	32,0	101,6	109,0	123-6	530

GUARNIZIONE PER RACC.  
SEAL RING FOR UNION  
JOINT DE RACCORD  
JUNTA RACOR

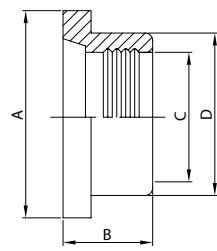
**131 B**



DN	A	B	C
25	39,9	6,6	26,7
38	52,6	6,6	39,4
51	65,3	6,6	52,1
63	78,0	6,6	64,8
76	90,6	6,6	77,4
101	116,1	6,6	102,9

BOCC. LISCIO MR.  
EG. LINER  
DOUILLE DR.  
CASQUILLO RACOR MR.

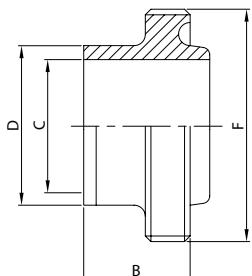
**111 B**



DN	A	B	C	D	gr
25	41,2	20,0	25,4	32,5	60
38	53,9	24,0	38,1	45,2	95
51	66,7	28,0	50,8	58,0	140
63	79,4	32,0	63,5	70,6	200
76	92,0	32,0	76,2	83,3	240
101	117,0	32,0	101,6	109,0	360

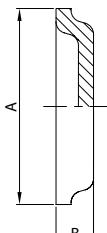
BOCC. FILETTATO SR.  
WG. MALE PART  
NEZ FILETÉ SR. LONG  
MACHO RACOR SR.

**102 B**



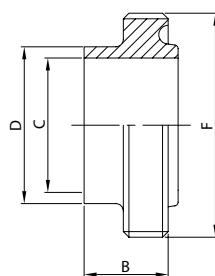
TAPPO LISCIO STAMPATO  
BLANK PRESSED LINER  
OBTURATEUR ESTAMPÉ  
C. R. CIEGO ESTAMPADO

**118 B**



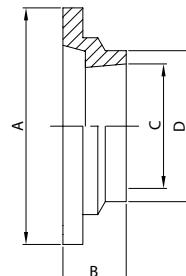
BOCC. FILETT. CORTO SR.  
WG. SHORT MALE PART  
NEZ FILETÉ SR. COURT  
MACHO R. CORTO SR.

**103 B**



BOCC. LISCIO CORTO SR.  
WG. SHORT LINER  
DOUILLE SR. COURTE  
CASQUILLO R. CORTO SR.

**113 B**



DN	B	C	D	F	gr
25	27,0	22,1	25,4	46-8	115
38	27,0	34,8	38,1	58-8	160
51	27,0	47,5	50,8	73-6	240
63	27,0	60,2	63,5	85-6	280
76	27,0	72,9	76,2	98-6	350
101	27,0	97,6	101,6	123-6	540

DN	A	B	C	D	gr
25	41,2	7,5	25		
38	53,9	7,5	40		
51	66,7	7,5	60		
63	79,4	8,7	90		
76	92,0	8,7	115		
101	117,0	8,7	225		

DN	B	C	D	F	gr
25	19,0	22,1	25,4	46-8	115
38	19,0	34,8	38,1	58-8	165
51	19,0	47,5	50,8	73-6	220
63	19,0	60,2	63,5	85-6	295
76	19,0	72,9	76,2	98-6	355
101	19,0	97,6	101,6	123-6	500

DN	A	B	C	D	gr
25	41,2	12,0	22,1	25,4	35
38	53,9	12,0	34,8	38,1	50
51	66,7	12,0	47,5	50,8	60
63	79,4	12,0	60,2	63,5	75
76	92,0	12,0	72,9	76,2	100
101	117,0	12,0	97,6	101,6	155

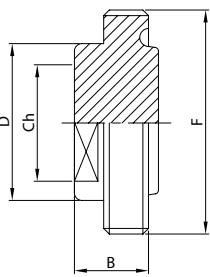


RACCORDI  
UNIONS  
RACCORDS  
RACORES

**RJT BS**

**TAPPO FILETTATO  
BLANK MALE  
OBTURATEUR FILETÉ  
MACHO R. CIEGO**

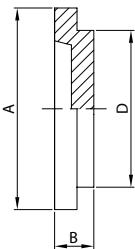
**104 B**



DN	B	Ch	D	F	gr
25	24,0	30,0	38,0	46-8	50
38	24,0	40,0	50,0	58-8	80
51	24,0	55,0	65,5	73-6	130
63	24,0	65,0	76,0	85-6	190
76	24,0	79,5	89,0	98-6	250
101	24,0	104,0	114,0	123-6	390

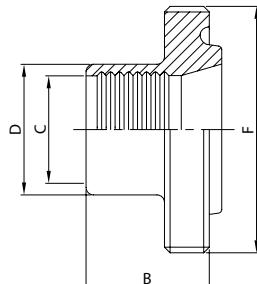
**TAPPO LISCIO  
BLANK LINER  
OBTURATEUR  
CASQUILLO R. CIEGO**

**114 B**



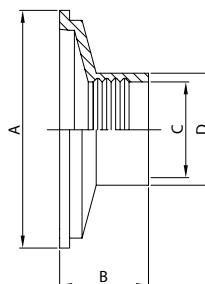
**RIDUZIONE FILETTATA MR.  
EG. MALE REDUCER  
NEZ FILETÉ RÉDUIT DR.  
MACHO R. REDUCCIÓN MR.**

**105 B**



**RIDUZIONE LISCIA MR.  
EG. LINER REDUCER  
DOUILLE RÉDUITE DR.  
CASQUILLO R. REDUC. MR.**

**115 B**



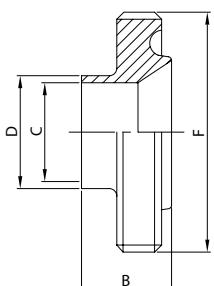
DN	B	Ch	D	F	gr
25	41,2	8,7	32,5	40	
38	53,9	8,7	45,2	70	
51	66,7	8,7	58,0	110	
63	79,4	8,7	70,6	160	
76	92,0	8,7	83,3	210	
101	117,2	8,7	109,0	330	

DN	A	B	D	gr
38/25	30,3	25,4	32,5	190
51/25	30,3	25,4	32,5	280
51/38	35,3	38,1	45,2	330
63/38	35,3	38,1	45,2	350
63/51	35,3	50,8	58,0	410
76/38	40,3	38,1	45,2	440
76/51	40,3	50,8	58,0	510
76/63	40,3	63,5	70,6	580
101/63	40,3	63,5	70,6	640
101/76	40,3	76,2	83,3	740

DN	B	C	D	F	gr
38/25	53,9	28,0	25,4	32,5	150
51/25	66,7	30,0	25,4	32,5	170
51/38	66,7	30,0	38,1	45,2	180
63/38	79,4	35,0	38,1	45,2	210
63/51	79,4	35,0	50,8	58,0	220
76/38	92,0	39,0	38,1	45,2	300
76/51	92,0	39,0	50,8	58,0	310
76/63	92,0	39,0	63,5	70,6	350
101/63	117,2	39,0	63,5	70,6	400
101/76	117,2	39,0	76,2	83,3	430

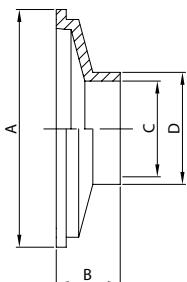
**RIDUZIONE FILETTATA SR.  
WG. MALE REDUCER  
NEZ FILETÉ RÉDUIT SR.  
MACHO R. REDUCCIÓN SR.**

**106 B**



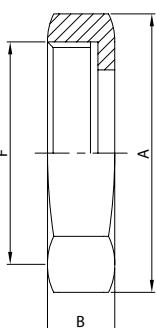
**RIDUZIONE LISCIA SR.  
WG. LINER REDUCER  
DOUILLE RÉDUITE SR.  
CASQUILLO R. REDUC. SR.**

**116 B**



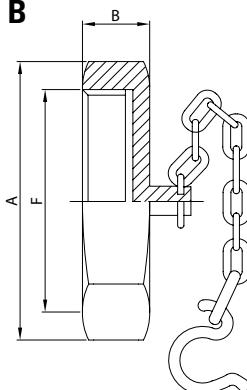
**GIRELLA ESAGONALE  
HEX NUT  
ÉCROU HEXAGONAL  
TUERCA EXAGONAL**

**121 B**



**GIRELLA CIECA + CAT.  
ROUND NUT + CHAIN  
ÉCROU BOUCHON + CH.  
TUERCA CIEGA + CAD.**

**124 B**

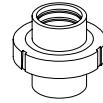


DN	B	C	D	F	gr
38/25	33,0	22,1	25,4	58-8	140
51/25	35,0	22,1	25,4	73-6	290
51/38	35,0	34,8	38,1	73-6	330
63/38	40,0	34,8	38,1	85-6	340
63/51	40,0	47,5	50,8	85-6	390
76/38	44,0	34,8	38,1	98-6	420
76/51	44,0	47,5	50,8	98-6	490
76/63	44,0	60,2	63,5	98-6	560
101/63	44,0	60,2	63,5	123-6	650
101/76	44,0	72,9	76,2	123-6	760

DN	A	B	C	D	gr
38/25	53,9	20,0	22,1	25,4	150
51/25	66,7	20,0	22,1	25,4	170
51/38	66,7	20,0	34,8	38,1	180
63/38	79,4	20,0	34,8	38,1	210
63/51	79,4	20,0	47,5	50,8	220
76/38	92,0	20,0	34,8	38,1	300
76/51	92,0	20,0	47,5	50,8	310
76/63	92,0	20,0	60,2	63,5	350
101/63	117,2	20,0	60,2	63,5	400
101/76	117,2	20,0	72,9	76,2	430

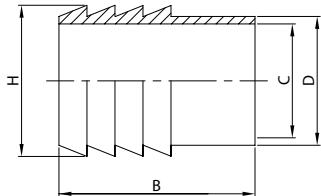
DN	A	B	F	gr
25	51,0	22,2	46-8	125
38	65,0	22,2	58-8	205
51	80,0	22,2	73-6	270
63	92,0	22,2	85-6	450
76	104,0	22,2	98-6	470
101	130,0	22,2	123-6	550

DN	A	B	F	gr
25	51,0	22,2	46-8	230
38	65,0	22,2	58-8	320
51	80,0	22,2	73-6	440
63	92,0	22,2	85-6	600
76	104,0	22,2	98-6	720
101	130,0	22,2	123-6	920



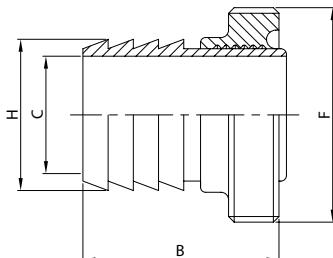
ATT. PORTAGOMMA EL.  
HOSE CONNECTION PE.  
MANCHON À LIGATURER  
MANGUITO MANGUERA EL.

**140 L**



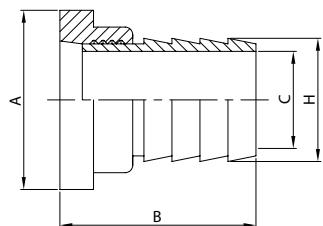
ATT. PORTAG. + BF. MT.  
HOSE CONNECTION + MP. ED.  
NEZ FILETÉ À LIGATURER  
M. M. MACHO MD.

**141 B**



ATT. PORTAG. + BL. MT.  
HOSE CONNECTION + L. ED.  
DOUILLE À LIGATURER  
M. M. CASQUILLO MD.

**142 B**



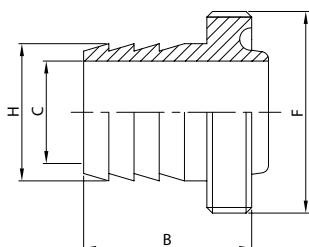
DN	B	C	D	H	gr
25	49,0	22,1	25,4	28,6	100
38	58,0	34,8	38,1	41,3	200
51	67,0	47,5	50,8	54,0	290
63	81,0	60,2	63,5	66,7	320
76	81,0	72,9	76,2	79,4	670
101	95,0	97,6	101,6	109,0	1.400

DN	B	C	F	H	gr
25	44,3	22,1	46-8	28,6	200
38	53,3	34,8	58-8	41,3	355
51	62,3	47,5	73-6	54,0	525
63	76,3	60,2	85-6	66,7	610
76	76,3	72,9	98-6	79,4	1.035
101	90,3	97,6	123-6	109,0	1.930

DN	A	B	C	H	gr
25	41,2	54,5	22,1	28,6	160
38	53,9	63,5	34,8	41,3	295
51	66,7	72,5	47,5	54,0	430
63	79,4	86,5	60,2	66,7	520
76	92,0	86,5	72,9	79,4	910
101	117,0	100,5	97,6	109,0	1.760

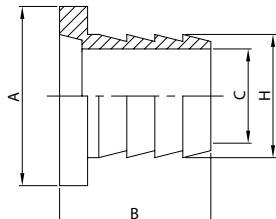
PORTAGOMMA EF.  
HOSE CONNECTION ME.  
PORTE C. NEZ FILETÉ  
M. M. MACHO SR.

**143 B**



PORTAGOMMA EL.  
HOSE CONNECTION PE.  
PORTE C. DOUILLE  
M. M. CASQUILLO SR.

**144 B**



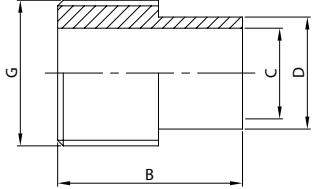
DN	B	C	F	H	gr
25	49,0	22,1	46-8	28,6	200
38	54,0	34,8	58-8	41,3	355
51	59,0	47,5	73-6	54,0	525
63	69,0	60,2	85-6	66,7	610
76	69,0	72,9	98-6	79,4	1.035
101	84,0	97,6	123-6	109,0	1.930

DN	A	B	C	H	gr
25	41,2	40,0	22,1	28,6	160
38	53,9	45,0	34,8	41,3	295
51	66,7	50,0	47,5	54,0	430
63	79,4	60,0	60,2	66,7	520
76	92,0	60,0	72,9	79,4	910
101	117,0	75,0	97,6	109,0	1.760



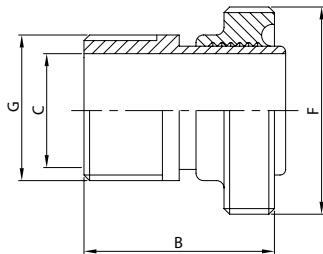
ATT. FILETTATO GAS EL.  
BSP MALE CONNECTION PE.  
PIÈCE FILETÉE GAS  
ROSCA GAS EL.

**150 L**



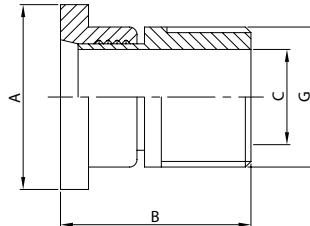
ATT. FILET. GAS + BF. MT.  
BSP MALE CONN. + MP. ED.  
PIÈCE FIL. GAS + NEZ FIL.  
MACHO BS + M. GAS MD.

**151 B**



ATT. FILET. GAS + BL. MT.  
BSP MALE CONN. + L. ED.  
PIÈCE FIL. GAS + DOUILLE  
C. BS + M. GAS MD.

**152 B**



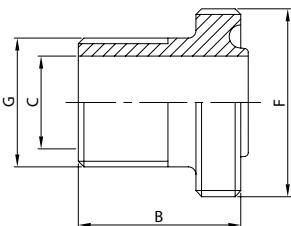
DN	B	C	D	G	gr
25	38,0	22,1	25,4	1"	70
38	45,0	34,8	38,1	1 1/2"	135
51	52,0	47,5	50,8	2"	200
63	60,0	60,2	63,5	2 1/2"	350
76	66,0	72,9	76,2	3"	540
101	75,0	97,6	101,6	4"	850

DN	B	C	F	G	gr
25	33,3	22,1	46-8	1"	160
38	40,3	34,8	58-8	1 1/2"	290
51	47,3	47,5	73-6	2"	435
63	55,3	60,2	85-6	2 1/2"	640
76	61,3	72,9	98-6	3"	905
101	70,3	97,6	123-6	4"	1.380

DN	A	B	C	G	gr
25	41,2	43,5	22,1	1"	130
38	53,9	50,5	34,8	1 1/2"	220
51	66,7	57,5	47,5	2"	340
63	79,4	65,5	60,2	2 1/2"	550
76	92,0	71,5	72,9	3"	780
101	117,0	80,5	97,6	4"	1.210

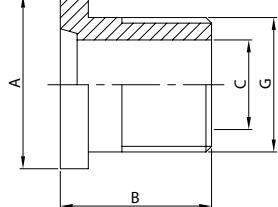
BOCC. FILETTATO EF. GAS  
BSP MALE PART ME.  
ADAPTATEUR NEZ FILETÉ  
MACHO BS MACHO GAS

**153 B**



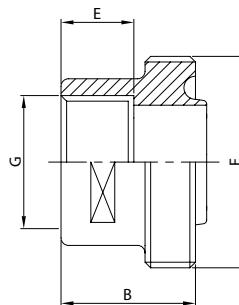
BOCC. LISCIO EF. GAS  
BSP LINER ME.  
ADAPTATEUR DOUILLE  
CASQUILLO BS M. GAS

**154 B**



BOCC. FILET. D.I. FT. GAS  
MALE PART I.D. T. BSP  
ADAPT. NEZ FIL./FEM. GAS  
MACHO BS HEMBRA GAS

**161 B**



DN	B	C	F	G	gr
25	46,3	22,1	46-8	1"	160
38	46,3	34,8	58-8	1 1/2"	290
51	46,3	47,5	73-6	2"	435
63	46,3	60,2	85-6	2 1/2"	640
76	46,3	72,9	98-6	3"	905
101	46,3	97,6	123-6	4"	1.380

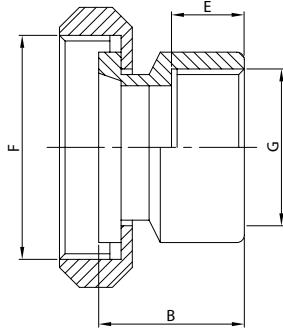
DN	A	B	C	G	gr
25	41,2	38,0	22,1	1"	130
38	53,9	38,0	34,8	1 1/2"	220
51	66,7	38,0	47,5	2"	340
63	79,4	38,0	60,2	2 1/2"	550
76	92,0	40,0	72,9	3"	780
101	117,0	40,0	97,6	4"	1.210

DN	B	E	F	G	gr
25	33,3	20,0	46-8	1"	100
38	36,3	22,0	58-8	1 1/2"	155
51	39,3	24,0	73-6	2"	235
63	39,3	26,0	85-6	2 1/2"	290
76	39,3	26,0	98-6	3"	365
101	39,3	26,0	123-6	4"	530



BL. + G. D.I. FT. GAS  
L. + N. I.D. T. BSP  
ADAPT. DOUILLE/FEM. GAS  
C. + T. BS H. GAS

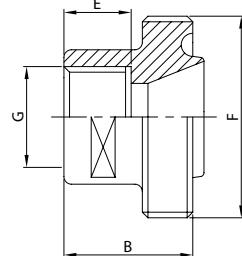
162 B



DN	B	E	F	G	gr
25	30,0	18,0	46-8	1"	230
38	34,0	18,0	58-8	1 1/2"	370
51	38,0	23,0	73-6	2"	470
63	42,0	23,0	85-6	2 1/2"	870
76	45,0	25,0	98-6	3"	1.060
101	45,0	25,0	123-6	4"	1.260

BOCC. FILET. D.I. FT. GAS  
MALE PART I.D. T. BSP  
ADAPT. NEZ FIL./FEM. GAS  
M. BS H. GAS REDUCCIÓN

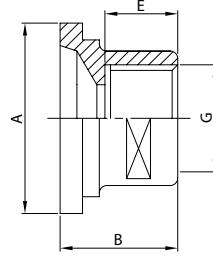
163 B



DN	B	E	F	G	gr
25	25,0	15,0	46-8	3/4"	120
38	29,0	15,0	58-8	1 1/4"	190
51	33,0	20,0	73-6	1 1/2"	280
63	37,0	20,0	85-6	2"	350
76	37,0	25,0	98-6	2 1/2"	440
101	37,0	25,0	123-6	3 1/2"	640

BOCC. LISCIO D.I. FT. GAS  
LINER I.D. T. BSP  
ADAPT. DOUILLE/FEM. GAS  
C. BS H. GAS REDUCCIÓN

164 B



DN	A	B	E	G	gr
25	12,0	20,0	46-8	3/4"	60
38	15,0	24,0	58-8	1 1/4"	95
51	15,0	28,0	73-6	1 1/2"	140
63	20,0	32,0	85-6	2"	200
76	20,0	32,0	98-6	2 1/2"	240
101	20,0	32,0	123-6	3 1/2"	360



RACCORDI  
UNIONS  
RACCORDS  
RACORES

ISS IDF

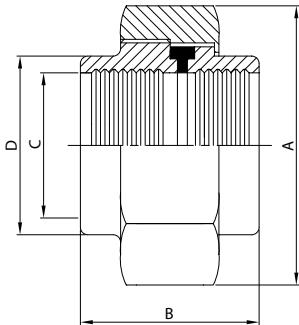
RACCORDO MR.  
EG. UNION  
RACCORD DR.  
RACOR MR.

BOCC. FILETTATO MR.  
EG. MALE PART  
NEZ FILETÉ DR.  
MACHO RACOR MR.

GUARNIZIONE PER RACC.  
SEAL RING FOR UNION  
JOINT DE RACCORD  
JUNTA RACOR

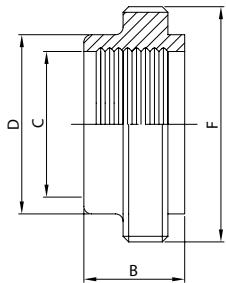
BOCC. LISCIO MR.  
EG. LINER  
DOUILLE DR.  
CASQUILLO RACOR MR.

100 I



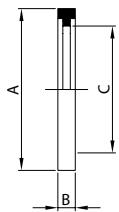
DN	A	B	C	D	gr
25	46,0	40,0	25,4	29,0	265
38	60,0	43,0	38,1	42,5	425
51	75,0	48,0	50,8	56,0	610
63	90,0	58,0	63,5	69,7	935
76	105,0	63,0	76,2	82,3	1.150
101	134,0	63,0	101,6	108,4	1.990

101 I



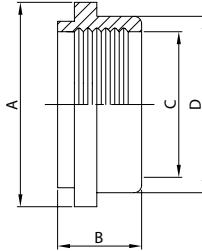
DN	B	C	D	F	gr
25	17,0	25,4	29,0	37-8	50
38	20,0	38,1	42,5	50-8	100
51	20,0	50,8	56,0	64-8	120
63	25,0	63,5	69,7	77-8	195
76	30,0	76,2	82,3	91-8	260
101	30,0	101,6	108,4	118-8	520

131 I



DN	A	B	C
25	32,5	7,0	23,0
38	46,0	7,0	36,0
51	59,5	7,0	49,0
63	73,0	7,0	60,7
76	86,5	7,0	73,2
101	112,5	7,0	98,0

111 I



DN	A	B	C	D	gr
25	33,8	20,0	25,4	29,0	30
38	47,0	20,0	38,1	42,5	50
51	60,5	25,0	50,8	56,0	90
63	74,0	30,0	63,5	69,7	160
76	87,5	30,0	76,2	82,3	190
101	114,1	30,0	101,6	108,4	370

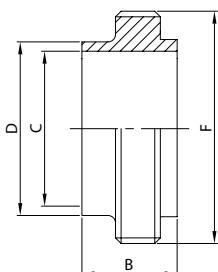
BOCC. FILETTATO SR.  
WG. MALE PART  
NEZ FILETÉ SR. LONG  
MACHO RACOR SR.

BOCC. LISCIO SR.  
WG. LINER  
DOUILLE SR. LONGUE  
CASQUILLO RACOR SR.

TAPPO FILETTATO  
BLANK MALE  
OBTURATEUR FILETÉ  
MACHO R. CIEGO

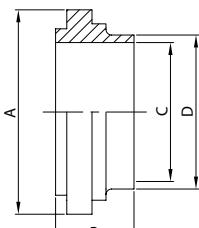
TAPPO LISCIO  
BLANK LINER  
OBTURATEUR  
CASQUILLO R. CIEGO

102 I



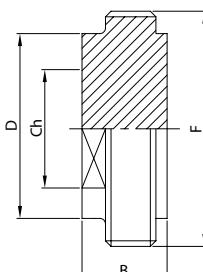
DN	B	C	D	F	gr
25	21,5	22,1	25,4	37-8	70
38	21,5	34,8	38,1	50-8	110
51	21,5	47,5	50,8	64-8	150
63	21,5	60,2	63,5	77-8	210
76	21,5	72,9	76,2	91-8	270
101	21,5	97,6	101,6	118-8	420

112 I



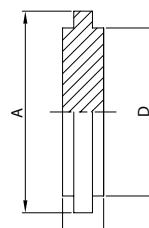
DN	A	B	C	D	gr
25	33,8	21,5	22,1	25,4	38
38	47,0	21,5	34,8	38,1	60
51	60,5	21,5	47,5	50,8	85
63	74,0	21,5	60,2	63,5	130
76	87,5	21,5	72,9	76,2	150
101	114,1	21,5	97,6	101,6	330

104 I



DN	B	Ch	D	F	gr
25	20,0	24,0	29,2	37-8	170
38	20,0	36,0	42,7	50-8	300
51	20,0	48,0	56,2	64-8	500
63	20,0	60,0	69,9	77-8	732
76	20,0	70,0	82,6	91-8	1.020
101	20,0	90,0	108,7	118-8	1.750

114 I



DN	A	B	D	gr
25	33,8	10,5	29,2	60
38	47,0	10,5	42,7	130
51	60,5	10,5	56,2	220
63	74,0	10,5	69,9	330
76	87,5	10,5	82,6	350
101	114,1	10,5	108,7	830



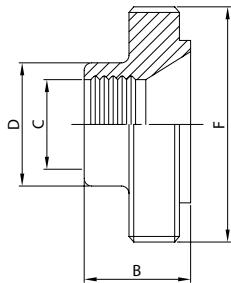
RACCORDI  
UNIONS  
RACCORDS  
RACORES



ISS IDF

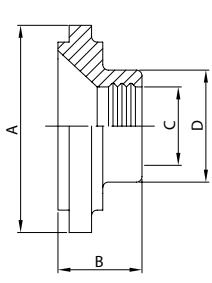
RIDUZIONE FILETTATA MR.  
EG. MALE REDUCER  
NEZ FILETÉ RÉDUIT DR.  
MACHO R. REDUCCIÓN MR.

105 I



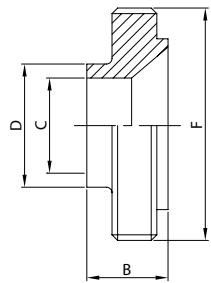
RIDUZIONE LISCIA MR.  
EG. LINER REDUCER  
DOUILLE RÉDUITE DR.  
CASQUILLO R. REDUC. MR.

115 I



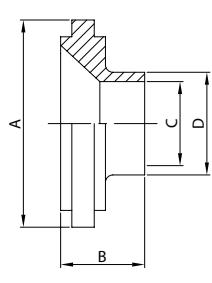
RIDUZIONE FILETTATA SR.  
WG. MALE REDUCER  
NEZ FILETÉ RÉDUIT DR.  
MACHO R. REDUCCIÓN SR.

106 I



RIDUZIONE LISCIA SR.  
WG. LINER REDUCER  
DOUILLE RÉDUITE SR.  
CASQUILLO R. REDUC. SR.

116 I



DN	B	C	D	F	gr
38/25	25,0	25,4	29,2	50-8	120
51/25	25,0	25,4	29,2	64-8	140
51/38	28,0	38,1	42,7	64-8	160
63/38	30,0	38,1	42,7	77-8	230
63/51	30,0	50,8	56,2	77-8	270
76/38	30,0	38,1	42,7	91-8	310
76/51	35,0	50,8	56,2	91-8	360
76/63	35,0	63,5	69,9	91-8	410
101/63	35,0	63,5	69,9	118-8	620
101/76	35,0	76,2	82,6	118-8	730

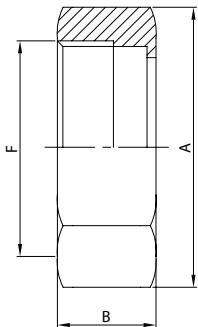
DN	A	B	C	D	gr
38/25	47,0	25,0	25,4	29,0	110
51/25	60,5	25,0	25,4	29,0	185
51/38	60,5	28,0	38,1	42,5	150
63/38	74,0	30,0	38,1	42,5	230
63/51	74,0	30,0	50,8	56,0	205
76/38	87,5	30,0	38,1	42,5	390
76/51	87,5	35,0	50,8	56,0	375
76/63	87,5	35,0	63,5	69,7	320
101/63	114,1	35,0	63,5	69,7	570
101/76	114,1	35,0	76,2	82,3	540

DN	B	C	D	F	gr
38/25	25,0	22,1	25,4	50-8	130
51/25	25,0	22,1	25,4	64-8	180
51/38	25,0	34,8	38,1	64-8	210
63/38	25,0	34,8	38,1	77-8	250
63/51	25,0	47,5	50,8	77-8	290
76/38	25,0	34,8	38,1	91-8	320
76/51	25,0	47,5	50,8	91-8	380
76/63	25,0	60,2	63,5	91-8	430
101/63	25,0	60,2	63,5	118-8	500
101/76	25,0	72,9	76,2	118-8	590

DN	A	B	C	D	gr
38/25	47,0	18,0	22,1	25,4	95
51/25	60,5	18,0	22,1	25,4	165
51/38	60,5	18,0	34,8	38,1	150
63/38	74,0	18,0	34,8	38,1	235
63/51	74,0	18,0	47,5	50,8	190
76/38	87,5	18,0	34,8	38,1	345
76/51	87,5	18,0	47,5	50,8	305
76/63	87,5	18,0	60,2	63,5	250
101/63	114,1	18,0	60,2	63,5	530
101/76	114,1	18,0	72,9	76,2	480

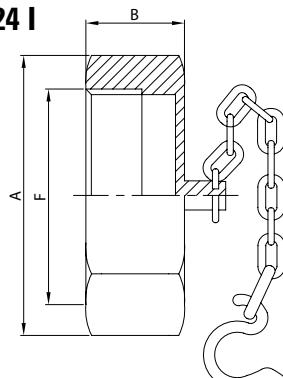
GIRELLA ESAGONALE  
HEX NUT  
ÉCROU HEXAGONAL  
TUERCA EXAGONAL

121 I



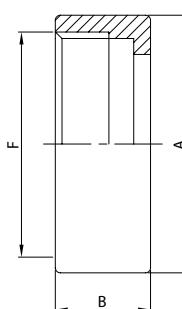
GIRELLA CIECA + CAT.  
ROUND NUT + CHAIN  
ÉCROU BOUCHON + CH.  
TUERCA CIEGA + CAD.

124 I



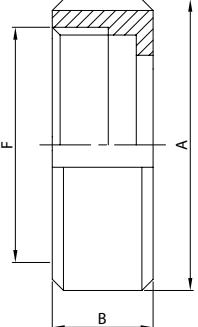
GIRELLA TONDA LISCIA  
ROUND NUT  
ÉCROU ROND LISSE  
TUERCA REDONDA LISA

122 I



GIR. TONDA CON TACCHE  
NOTCHES ROUND NUT  
ÉCROU À CRANS  
TUERCA REDONDA

123 I



DN	A	B	F	gr
25	46,0	30,0	37-8	185
38	60,0	30,0	50-8	275
51	75,0	30,0	64-8	400
63	90,0	30,0	77-8	580
76	105,0	30,0	91-8	700
101	134,0	30,0	118-8	1.100

DN	A	B	F	gr
25	46,0	30,0	37-8	245
38	60,0	30,0	50-8	405
51	75,0	30,0	64-8	620
63	90,0	30,0	77-8	910
76	105,0	30,0	91-8	1.050
101	134,0	30,0	118-8	1.930

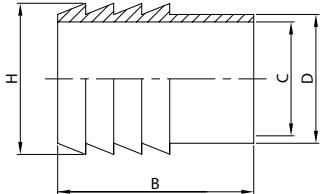
DN	A	B	F	gr
25	44,5	30,0	37-8	130
38	57,0	30,0	50-8	140
51	70,0	30,0	64-8	180
63	85,5	30,0	77-8	290
76	101,5	30,0	91-8	450
101	129,0	30,0	118-8	900

DN	A	B	F	gr
25	48,0	30,0	37-8	165
38	64,0	30,0	50-8	255
51	77,0	30,0	64-8	310
63	91,0	30,0	77-8	360
76	106,0	30,0	91-8	500
101	135,0	30,0	118-8	900



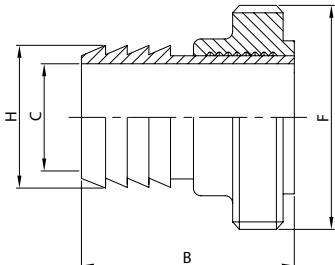
ATT. PORTAGOMMA EL.  
HOSE CONNECTION PE.  
MANCHON À LIGATURER  
MANGUITO MANGUERA EL.

140 L



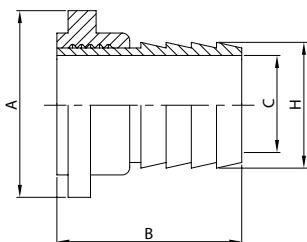
ATT. PORTAG. + BF. MT.  
HOSE CONNECTION + MP. ED.  
NEZ FILETÉ À LIGATURER  
M. M. MACHO MD.

141 I



ATT. PORTAG. + BL. MT.  
HOSE CONNECTION + L. ED.  
DOUILLE À LIGATURER  
M. M. CASQUILLO MD.

142 I



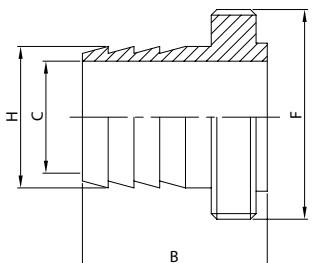
DN	B	C	D	H	gr
25	49,0	22,1	25,4	28,6	100
38	58,0	34,8	38,1	41,3	200
51	67,0	47,5	50,8	54,0	290
63	81,0	60,2	63,5	66,7	320
76	81,0	72,9	76,2	79,4	670
101	95,0	97,6	101,6	109,0	1.400

DN	B	C	F	H	gr
25	49,0	22,1	37-8	28,6	150
38	58,0	34,8	50-8	41,3	300
51	67,0	47,5	64-8	54,0	410
63	81,0	60,2	77-8	66,7	515
76	81,0	72,9	91-8	79,4	930
101	95,0	97,6	118-8	109,0	1.920

DN	A	B	C	H	gr
25	33,8	49,0	22,1	28,6	130
38	47,0	58,0	34,8	41,3	250
51	60,5	67,0	47,5	54,0	380
63	74,0	81,0	60,2	66,7	480
76	87,5	81,0	72,9	79,4	860
101	114,1	95,0	97,6	109,0	1.770

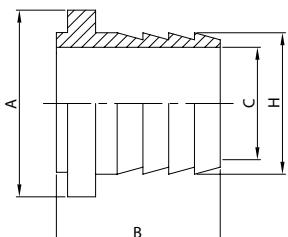
PORTAGOMMA EF.  
HOSE CONNECTION ME.  
PORTE C. NEZ FILETÉ  
M. M. MACHO SR.

143 I



PORTAGOMMA EL.  
HOSE CONNECTION PE.  
PORTE C. DOUILLE  
M. M. CASQUILLO SR.

144 I



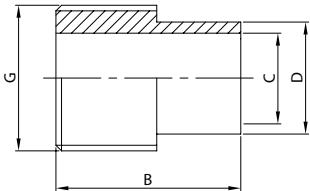
DN	B	C	F	H	gr
25	45,0	22,1	37-8	28,6	150
38	50,0	34,8	50-8	41,3	300
51	55,0	47,5	64-8	54,0	410
63	65,0	60,2	77-8	66,7	515
76	65,0	72,9	91-8	79,4	930
101	80,0	97,6	118-8	109,0	1.920

DN	A	B	C	H	gr
25	33,8	40,0	22,1	28,6	130
38	47,0	45,0	34,8	41,3	250
51	60,5	50,0	47,5	54,0	380
63	75,0	60,0	60,2	66,7	480
76	87,5	70,0	72,9	79,4	860
101	114,1	75,0	97,6	109,0	1.770



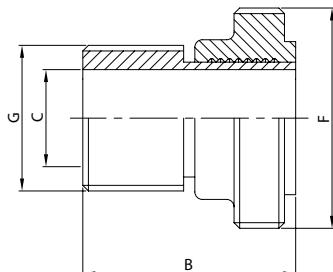
ATT. FILETTATO GAS EL.  
BSP MALE CONNECTION PE.  
PIÈCE FILETÉE GAS  
ROSCA GAS EL.

150 L



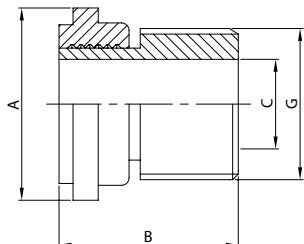
ATT. FILET. GAS + BF. MT.  
BSP MALE CONN. + MP. ED.  
PIÈCE FIL. GAS + NEZ FIL.  
MACHO SMS + M. GAS MD.

151 I



ATT. FILET. GAS + BL. MT.  
BSP MALE CONN. + L. ED.  
PIÈCE FIL. GAS + DOUILLE  
C. FIL + M. GAS MD.

152 I



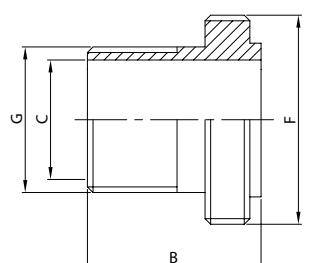
DN	B	C	D	G	gr
25	38,0	22,1	25,4	1"	70
38	45,0	34,8	38,1	1 1/2"	135
51	52,0	47,5	50,8	2"	200
63	60,0	60,2	63,5	2 1/2"	350
76	66,0	72,9	76,2	3"	540
101	75,0	97,6	101,6	4"	850

DN	B	C	F	G	gr
25	38,0	22,1	37-8	1"	120
38	45,0	34,8	50-8	1 1/2"	235
51	52,0	47,5	64-8	2"	320
63	60,0	60,2	77-8	2 1/2"	515
76	66,0	72,9	91-8	3"	800
101	75,0	97,6	118-8	4"	1.370

DN	A	B	C	G	gr
25	33,8	38,0	22,1	1"	100
38	47,0	45,0	34,8	1 1/2"	185
51	60,5	52,0	47,5	2"	290
63	74,0	60,0	60,2	2 1/2"	510
76	87,5	66,0	72,9	3"	730
101	114,1	75,0	97,6	4"	1.220

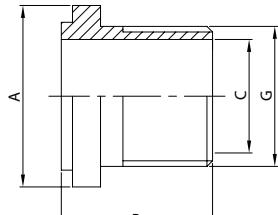
BOCC. FILETTATO EF. GAS  
BSP MALE PART ME.  
ADAPTATEUR NEZ FILETÉ  
MACHO FIL MACHO GAS

153 I



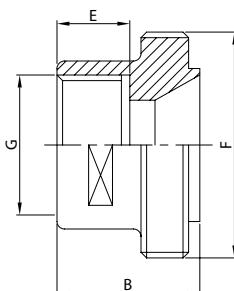
BOCC. LISCIO EF. GAS  
BSP LINER ME.  
ADAPTATEUR DOUILLE  
CASQUILLO FIL M. GAS

154 I



BOCC. FILET. D.I. FT. GAS  
MALE PART I.D. T. BSP  
ADAPT. NEZ FIL./FEM. GAS  
MACHO FIL HEMBRA GAS

161 I



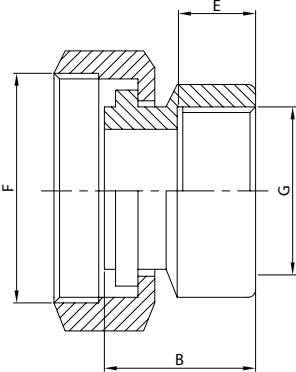
DN	B	C	F	G	gr
25	51,0	22,1	37-8	1"	120
38	51,0	34,8	50-8	1 1/2"	235
51	51,0	47,5	64-8	2"	320
63	51,0	60,2	77-8	2 1/2"	515
76	51,0	72,9	91-8	3"	800
101	51,0	97,6	118-8	4"	1.370

DN	A	B	C	G	gr
25	33,8	38,0	22,1	1"	100
38	47,0	38,0	34,8	1 1/2"	185
51	60,5	38,0	47,5	2"	210
63	74,0	38,0	60,2	2 1/2"	510
76	77,5	40,0	72,9	3"	730
101	114,1	40,0	97,6	4"	1.370

DN	B	E	F	G	gr
25	34,0	20,0	37-8	1"	50
38	37,0	20,0	50-8	1 1/2"	100
51	40,0	25,0	64-8	2"	120
63	44,0	25,0	77-8	2 1/2"	195
76	50,0	30,0	91-8	3"	260
101	60,0	30,0	118-8	4"	520

BL. + G. D.I. FT. GAS  
L. + N. I.D. T. BSP  
ADAPT. DOUILLE/FEM. GAS  
C. + T. FIL H. GAS

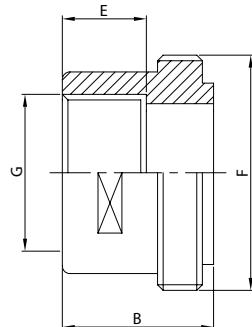
162 I



DN	B	E	F	G	gr
25	34,0	20,0	37-8	1"	290
38	37,0	20,0	50-8	1 1/2"	450
51	40,0	25,0	64-8	2"	620
63	44,0	25,0	77-8	2 1/2"	1.060
76	50,0	30,0	91-8	3"	1.340
101	60,0	30,0	118-8	4"	1.980

BOCC. FILET. D.I. FT. GAS  
MALE PART I.D. T. BSP  
ADAPT. NEZ FIL./FEM. GAS  
M. FIL H. GAS REDUCCIÓN

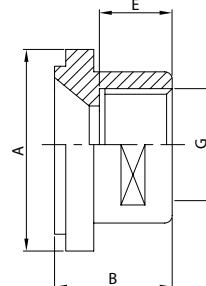
163 I



DN	B	E	F	G	gr
25	34,0	20,0	37-8	3/4"	60
38	37,0	20,0	50-8	1 1/4"	90
51	40,0	25,0	64-8	1 1/2"	160
63	44,0	25,0	77-8	2"	290
76	50,0	30,0	91-8	2 1/2"	350
101	60,0	30,0	118-8	3 1/2"	680

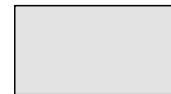
BOCC. LISCIO D.I. FT. GAS  
LINER I.D. T. BSP  
ADAPT. DOUILLE/FEM. GAS  
C. FIL H. GAS REDUCCIÓN

164 I



DN	A	B	E	G	gr
25	33,8	25,0	15,0	3/4"	30
38	47,0	25,0	15,0	1 1/4"	50
51	60,5	30,0	20,0	1 1/2"	90
63	74,0	35,0	25,0	2"	160
76	87,5	35,0	25,0	2 1/2"	190
101	114,1	35,0	25,0	3 1/2"	370





## RIDUZIONI – TEE – CROCI

- Ricavati da tubi elettrouniti con sistema TIG, laminati a freddo e solubilizzati in atmosfera controllata.
- Calibrati internamente ed esternamente al fine di ottenere una buona circolarità.
- Intestati alle estremità per assicurare la perfetta ortogonalità dei piani.
- Riduzioni tornite sulle parti cilindriche in accordo con le tolleranze dimensionali prescritte dalle principali norme internazionali; l'uniformità degli spessori permette la saldatura orbitale.
- Produzione standard: riduzioni concentriche ed eccentriche, tee a saldare e mandrinare, tee ridotti, croci. A richiesta, disponibili corredati di raccordi mandrinati o saldati.
- Finitura standard: lucidatura esterna e satinatura interna grana 120 norme DIN; satinatura esterna e interna grana 120 norme SMS, BS, ISS. Altre finiture a richiesta.

## REDUCERS – TEES – CROSSES

- Made from pipe electrojointed with the TIG method, cold-rolled and solution heat-treated in controlled atmosphere.
- Gauged inside and outside to obtain good roundness.
- Faced on the ends to ensure perfect right angles of planes.
- Reducers turned on the cylindrical parts in conformity with dimensional tolerance levels stipulated by the main international standards. Uniform wall thickness allows for orbital welding.
- Standard production: concentric and eccentric reducers, welding and expanding tees, reduced tees, crosses. On request available with expanded or welded unions.
- Standard finish: 120 grain external polishing and internal glazing to DIN standards; 120 grain external and internal glazing to SMS, BS and ISS standards. Other finishes on request.

## RÉDUCTIONS – TÉS – CROIX

- Obtenus à partir de tubes électrosoudés avec le système TIG, laminés à froid et solubilisés en atmosphère contrôlée.
- Calibrés à l'intérieur et à l'extérieur afin d'obtenir une bonne circularité.
- Façonnés aux extrémités pour assurer l'orthogonalité parfaite des plans.
- Réductions usinées sur les parties cylindriques en respectant les tolérance dimensionnelles imposées par les principales normes internationales; l'uniformité des épaisseurs permet la soudure orbitale.
- Production standard: réductions concentriques et excentriques, tés à souder et à dudgeonner, tés réduits, croix. Sur demande, munis de raccords dudgeonnés ou soudés.
- Finissage standard: polissage extérieur et satinage intérieur grain 120 normes DIN; satinage extérieur et intérieur grain 120 normes SMS, BS, ISS. Autres finissages sur demande.

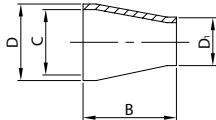
## REDUCCIONES – TES – CRUCES

- Obtenidas a partir de tubos unidos eléctricamente mediante el sistema TIG, laminados en frío y solubilizados en atmósfera controlada.
- Calibradas interior y exteriormente con la finalidad de obtener una forma circular perfecta.
- Trabajadas en los extremos para asegurar que las superficies sean perfectamente ortogonales.
- Reducciones torneadas en las partes cilíndricas de acuerdo a las tolerancias de las dimensiones prescritas por las principales normas internacionales; el espesor de pared uniforme permite la soldadura orbital.
- Producción estándar: reducciones concéntricas y excéntricas, tes a soldar y mandrilar, tes reducidas, cruces. A pedido, se pueden equipar con racores mandrilados o soldados.
- Acabado estándar: pulido exterior y satinado interior grano 120 normas DIN; satinado exterior e interior grano 120 normas SMS, BS, ISS. A pedido, se pueden suministrar otros acabados.



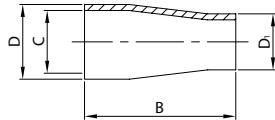
RIDUZIONE CONC. SR.  
WG. CONC. REDUCER  
RÉDUCTION CONC. SR.  
REDUCCIÓN CONC. SR.

**169 L**



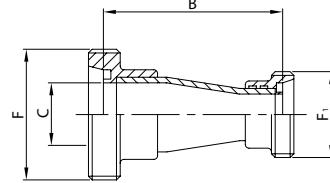
RIDUZIONE CONC. EL.  
CONC. REDUCER PE.  
RÉDUCTION CONC. BL.  
REDUCCIÓN CONC. EL.

**170 L**



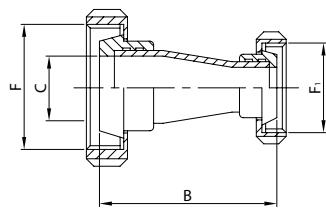
RID. CONC. BF./BF. MT.  
CONC. RED. MP./MP. ED.  
RÉD. CONC. PF./PF. DN.  
RED. CONC. M./M. MD.

**171 D**



RID. CONC. BC.G./BC.G. MT.  
CONC. RED. TP.N./TP.N. ED.  
RÉD. CONC. PC.E./PC.E. DN.  
RED. CONC. C. T./C. T. MD.

**172 D**



DN	B	C	D	D <sub>1</sub>	gr
18/12	38,0	15,5	18,0	12,0	30
22/12	38,0	19,5	22,0	12,0	40
22/18	38,0	19,5	22,0	18,0	40
28/12	38,0	25,0	28,0	12,0	50
28/18	38,0	25,0	28,0	18,0	50
28/22	38,0	25,0	28,0	22,0	50
34/28	67,0	31,0	34,0	28,0	60
40/28	67,0	37,0	40,0	28,0	60
40/34	67,0	37,0	40,0	34,0	60
52/28	67,0	49,0	52,0	28,0	100
52/34	67,0	49,0	52,0	34,0	100
52/40	67,0	49,0	52,0	40,0	110
70/40	67,0	66,0	70,0	40,0	120
70/52	67,0	66,0	70,0	52,0	160
85/40	88,0	81,0	85,0	40,0	180
85/52	67,0	81,0	85,0	52,0	190
85/70	67,0	81,0	85,0	70,0	240
101/52	105,0	97,6	101,6	52,0	300
101/70	72,0	97,6	101,6	70,0	290
101/85	67,0	97,6	101,6	85,0	280
104/52	107,0	100,0	104,0	52,0	300
104/70	72,0	100,0	104,0	70,0	290
104/85	67,0	100,0	104,0	85,0	280

DN	B	C	D	D <sub>1</sub>	gr
18/12	67,0	15,5	18,0	12,0	30
22/12	67,0	19,5	22,0	12,0	40
22/18	67,0	19,5	22,0	18,0	40
28/12	67,0	25,0	28,0	12,0	50
28/18	67,0	25,0	28,0	18,0	50
28/22	67,0	25,0	28,0	22,0	50
34/12	67,0	31,0	34,0	12,0	80
34/18	67,0	31,0	34,0	18,0	80
34/22	98,0	31,0	34,0	22,0	90
34/28	88,0	31,0	34,0	28,0	90
40/12	67,0	37,0	40,0	12,0	100
40/18	67,0	37,0	40,0	18,0	110
40/22	105,0	37,0	40,0	22,0	110
40/28	98,0	37,0	40,0	28,0	120
40/34	88,0	37,0	40,0	34,0	120
52/28	134,0	49,0	52,0	28,0	155
52/34	105,0	49,0	52,0	34,0	210
52/40	98,0	49,0	52,0	40,0	180
70/34	120,0	66,0	70,0	34,0	220
70/40	120,0	66,0	70,0	40,0	220
70/52	105,0	66,0	70,0	52,0	270
85/40	147,0	81,0	85,0	40,0	440
85/52	125,0	81,0	85,0	52,0	430
85/70	105,0	81,0	85,0	70,0	500
101/52	155,0	97,6	101,6	52,0	560
101/70	127,0	97,6	101,6	70,0	550
101/85	120,0	97,6	101,6	85,0	550
104/52	165,0	100,0	104,0	52,0	530
104/70	127,0	100,0	104,0	70,0	525
104/85	120,0	100,0	104,0	85,0	550

DN	B	C	F	F <sub>1</sub>	gr
32/25	94,0	31,0	58-6	52-6	390
40/25	115,0	37,0	65-6	52-6	460
40/32	101,0	37,0	65-6	58-6	500
50/25	128,0	49,0	78-6	52-6	570
50/32	142,0	49,0	78-6	58-6	660
50/40	125,0	49,0	78-6	65-6	670
65/40	130,0	66,0	95-6	65-6	810
65/50	148,0	66,0	95-6	78-6	930
80/65	136,0	81,0	110-4	95-6	1.410
100/80	138,0	97,6	130-4	110-4	2.150
104/80	138,0	100,0	130-4	110-4	3.470



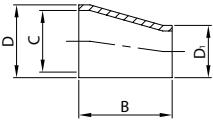
RIDUZIONI  
REDUCERS  
RÉDUCTION  
REDUCCIONES



DIN

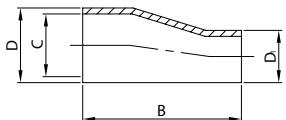
RIDUZIONE ECC. SR.  
WG. ECC. REDUCER  
RÉDUCTION EXC. SR.  
REDUCCIÓN EXC. SR.

179 L



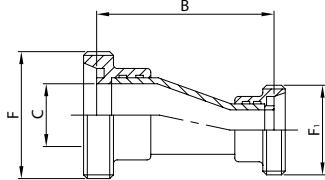
RIDUZIONE ECC. EL.  
ECC. REDUCER PE.  
RÉDUCTION EXC. BL.  
REDUCCIÓN EXC. EL.

180 L



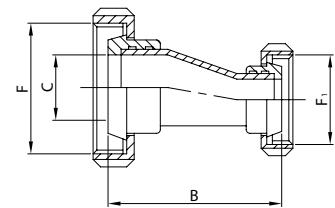
RID. ECC. BF./BF. MT.  
ECC. RED. MP./MP. ED.  
RÉD. EXC. PF./PF. DN.  
RED. EXC. M./M. MD.

181 D



RID. ECC. BC. G./BC. G. MT.  
ECC. RED. TP. N./TP. N. ED.  
RÉD. EXC. PC. E./PC. E. DN.  
RED. EXC. C. T./C. T. MD.

182 D



DN	B	C	D	D <sub>1</sub>	gr
34/28	67,0	31,0	34,0	28,0	60
40/28	67,0	37,0	40,0	28,0	60
40/34	67,0	37,0	40,0	34,0	60
52/28	68,0	49,0	52,0	28,0	100
52/34	67,0	49,0	52,0	34,0	100
52/40	67,0	49,0	52,0	40,0	110
70/40	71,0	66,0	70,0	40,0	120
70/52	67,0	66,0	70,0	52,0	160
85/52	79,0	81,0	85,0	52,0	190
85/70	67,0	81,0	85,0	70,0	240
101/52	110,0	97,6	101,6	52,0	300
101/70	67,0	97,6	101,6	70,0	290
101/85	67,0	97,6	101,6	85,0	280
104/52	110,0	100,0	104,0	52,0	300
104/70	67,0	100,0	104,0	70,0	290
104/85	67,0	100,0	104,0	85,0	280

DN	B	C	D	D <sub>1</sub>	gr
34/28	102,0	31,0	34,0	28,0	120
40/28	110,0	37,0	40,0	28,0	120
40/34	102,0	37,0	40,0	34,0	130
52/28	130,0	49,0	52,0	28,0	160
52/34	120,0	49,0	52,0	34,0	200
52/40	110,0	49,0	52,0	40,0	160
70/40	153,0	66,0	70,0	40,0	230
70/52	130,0	66,0	70,0	52,0	240
85/52	146,0	81,0	85,0	52,0	430
85/70	120,0	81,0	85,0	70,0	500
101/52	150,0	97,6	101,6	52,0	560
101/70	153,0	97,6	101,6	70,0	550
101/85	118,0	97,6	101,6	85,0	550
104/52	148,0	100,0	104,0	52,0	530
104/70	153,0	100,0	104,0	70,0	525
104/85	118,0	100,0	104,0	85,0	550

DN	B	C	F	F <sub>1</sub>	gr
32/25	116,0	31,0	58-6	52-6	422
40/25	123,0	37,0	65-6	52-6	462
40/32	115,0	37,0	65-6	58-6	510
50/25	143,0	49,0	78-6	52-6	572
50/32	133,0	49,0	78-6	58-6	650
50/40	122,0	49,0	78-6	65-6	670
65/40	166,0	66,0	95-6	65-6	875
65/50	143,0	66,0	95-6	78-6	900
80/65	136,0	81,0	110-4	95-6	1.410
100/80	136,0	97,6	130-4	110-4	2.180
104/80	136,0	100,0	130-4	110-4	2.180

DN	B	C	F	F <sub>1</sub>	gr
32/25	116,0	31,0	58-6	52-6	665
40/25	123,0	37,0	65-6	52-6	740
40/32	115,0	37,0	65-6	58-6	805
50/25	143,0	49,0	78-6	52-6	925
50/32	133,0	49,0	78-6	58-6	1.020
50/40	122,0	49,0	78-6	65-6	1.055
65/40	166,0	66,0	95-6	65-6	1.400
65/50	143,0	66,0	95-6	78-6	1.595
80/65	136,0	81,0	110-4	95-6	2.415
100/80	136,0	97,6	130-4	110-4	3.500
104/80	136,0	100,0	130-4	110-4	3.500



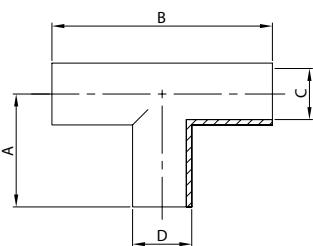
TEE - CROCI  
TEES - CROSSES  
TÉS - CROIX  
TES - CRUCES



DIN

**TEE A MANDRINARE  
EXPANDING TEE  
TÉ À DUDGEONNER  
TE MANDRILAR**

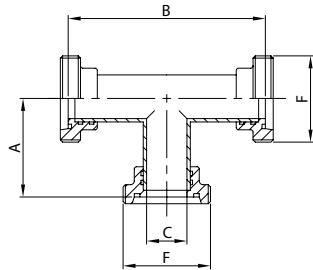
**200 D**



DN	A	B	C	D	gr
10	26,0	52,0	10,0	12,0	35
15	35,0	70,0	16,0	18,0	75
20	40,0	80,0	20,0	22,0	95
25	50,0	100,0	25,0	28,0	120
32	55,0	110,0	31,0	34,0	175
40	60,0	120,0	37,0	40,0	240
50	70,0	140,0	49,0	52,0	310
65	80,0	160,0	66,0	70,0	650
80	90,0	180,0	81,0	85,0	1.070
100	100,0	200,0	97,6	101,6	1.850
104	100,0	200,0	100,0	104,0	1.850
125	124,0	248,0	125,0	129,0	2.250

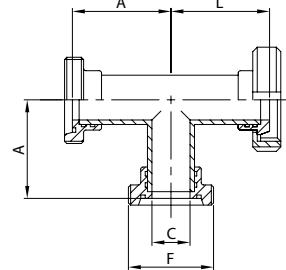
**TEE BF./BF./BF. MT.  
TEE MP./MP./MP. ED.  
TÉ PF./PF./PF. DN.  
TE M./M./M. MD.**

**201 D**



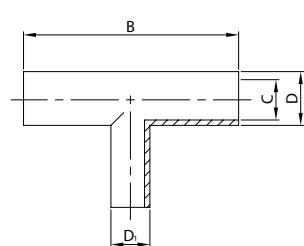
**TEE BF./BF./BC. G. MT.  
TEE MP./MP./TP. N. ED.  
TÉ PF./PF./PC. E. DN.  
TE M./M./C. T. MD.**

**203 D**



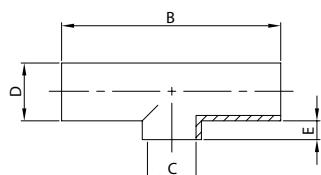
**TEE RIDOTTO EL.  
REDUCING TEE PE.  
TÉ RÉDUIT BL.  
TE REDUCIDA EL.**

**220 D**



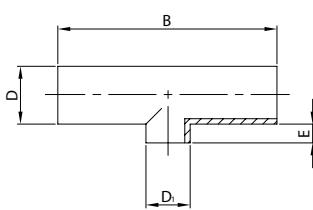
**TEE A SALDARE  
WELDING TEE  
TÉ À SOUDER  
TE SOLDAR**

**240 D**



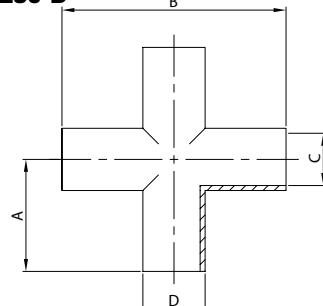
**TEE RIDOTTO SR.  
REDUCING TEE WG.  
TÉ RÉDUIT SR.  
TE REDUCIDA SR.**

**250 D**



**CROCE A MANDRINARE  
EXPANDING CROSS  
CROIX À DUDGEONNER  
CRUZ MANDRILAR**

**230 D**



DN	B	C	D	E	gr
10	52,0	10,0	12,0	3,0	35
15	70,0	16,0	18,0	3,0	75
20	80,0	20,0	22,0	3,0	95
25	100,0	25,0	28,0	3,0	120
32	110,0	31,0	34,0	3,0	175
40	120,0	37,0	40,0	3,0	240
50	140,0	49,0	52,0	3,0	310
65	160,0	66,0	70,0	3,0	650
80	180,0	81,0	85,0	3,0	1.070
100	200,0	97,6	101,6	3,0	1.850
104	200,0	100,0	104,0	3,0	1.850
125	248,0	125,0	129,0	9,5	2.000

DN	B	D	D <sub>1</sub>	E	gr
32/25	110,0	34,0	28,0	3,0	175
40/25	120,0	40,0	28,0	3,0	240
40/32	120,0	40,0	34,0	3,0	240
50/25	140,0	52,0	28,0	3,0	310
50/32	140,0	52,0	34,0	3,0	310
50/40	140,0	52,0	40,0	3,0	310
65/40	160,0	66,0	40,0	3,0	650
80/65	180,0	81,0	45,0	3,0	1.070
100/80	200,0	97,6	101,6	3,0	1.850
104/80	200,0	104,0	85,0	3,0	1.850

DN	A	B	C	D	gr
10	26,0	52,0	10,0	12,0	50
15	35,0	70,0	16,0	18,0	100
20	40,0	80,0	20,0	22,0	130
25	50,0	100,0	25,0	28,0	160
32	55,0	110,0	31,0	34,0	240
40	60,0	120,0	37,0	40,0	320
50	70,0	140,0	49,0	52,0	420
65	80,0	160,0	66,0	70,0	870
80	90,0	180,0	81,0	85,0	1.430
100	100,0	200,0	97,6	101,6	2.470
104	100,0	200,0	100,0	104,0	2.470



RIDUZIONI  
REDUCERS  
RÉDUCTION  
REDUCCIONES



SMS

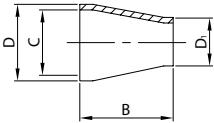
RIDUZIONE CONC. SR.  
WG. CONC. REDUCER  
RÉDUCTION CONC. SR.  
REDUCCIÓN CONC. SR.

RIDUZIONE CONC. EL.  
CONC. REDUCER PE.  
RÉDUCTION CONC. BL.  
REDUCCIÓN CONC. EL.

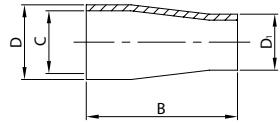
RID. CONC. BF./BF. MT.  
CONC. RED. MP./MP. ED.  
RÉD. CONC. PF./PF. DN.  
RED. CONC. M./M. MD.

RID. CONC. BL.G./BL.G. MT.  
CONC. RED. L.N./L.N. ED.  
RÉD. CONC. PLE./PLE. DN.  
RED. CONC. C.T./C.T. MD.

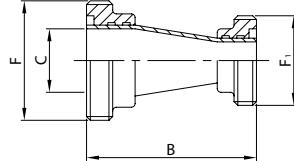
169 L



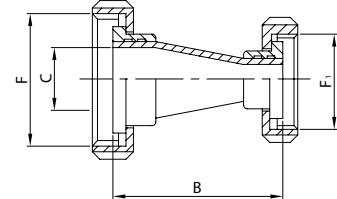
170 L



171 S



172 S



DN	B	C	D	D <sub>1</sub>	gr
38/25	67,0	35,1	38,1	25,4	80
51/25	67,0	47,8	50,8	25,4	100
51/38	67,0	47,8	50,8	38,1	100
63/38	67,0	60,2	63,5	38,1	140
63/51	67,0	60,2	63,5	50,8	160
76/38	67,0	72,9	76,2	38,1	160
76/51	67,0	72,9	76,2	50,8	180
76/63	67,0	72,9	76,2	63,5	220
101/51	107,0	97,6	101,6	50,8	310
101/63	82,0	97,6	101,6	63,5	300
101/76	67,0	97,6	101,6	76,2	280
104/51	109,0	100,0	104,0	50,8	310
104/63	89,0	100,0	104,0	63,5	300
104/76	67,0	100,0	104,0	76,2	280

DN	B	C	D	D <sub>1</sub>	gr
38/25	97,0	35,1	38,1	25,4	110
51/25	115,0	47,8	50,8	25,4	170
51/38	97,0	47,8	50,8	38,1	150
63/38	115,0	60,2	63,5	38,1	230
63/51	97,0	60,2	63,5	50,8	190
76/38	132,0	72,9	76,2	38,1	300
76/51	115,0	72,9	76,2	50,8	260
76/63	97,0	72,9	76,2	63,5	240
101/51	145,0	97,6	101,6	50,8	590
101/63	120,0	97,6	101,6	63,5	580
101/76	120,0	97,6	101,6	76,2	580
104/51	155,0	100,0	104,0	50,8	600
104/63	140,0	100,0	104,0	63,5	590
104/76	127,0	100,0	104,0	76,2	580

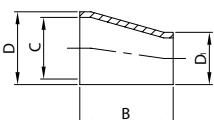
RIDUZIONE ECC. SR.  
WG. ECC. REDUCER  
RÉDUCTION EXC. SR.  
REDUCCIÓN EXC. SR.

RIDUZIONE ECC. EL.  
ECC. REDUCER PE.  
RÉDUCTION EXC. BL.  
REDUCCIÓN EXC. EL.

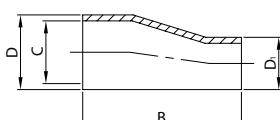
RID. ECC. BF./BF. MT.  
ECC. RED. MP./MP. ED.  
RÉD. EXC. PF./PF. DN.  
RED. EXC. M./M. MD.

RID. ECC. BL.G./BL.G. MT.  
ECC. RED. L.N./L.N. ED.  
RÉD. EXC. PLE./PLE. DN.  
RED. EXC. C.T./C.T. MD.

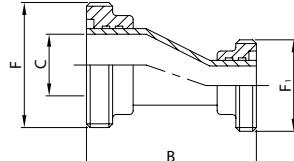
179 L



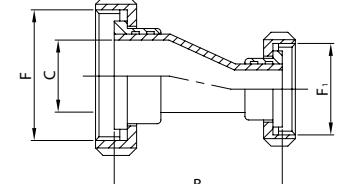
180 L



181 S



182 S



DN	B	C	D	D <sub>1</sub>	gr
38/25	67,0	35,1	38,1	25,4	80
51/25	73,0	47,8	50,8	25,4	100
51/38	67,0	47,8	50,8	38,1	100
63/38	71,0	60,2	63,5	38,1	140
63/51	67,0	60,2	63,5	50,8	160
76/38	80,0	72,9	76,2	38,1	160
76/51	67,0	72,9	76,2	50,8	180
76/63	67,0	72,9	76,2	63,5	220
101/51	110,0	97,6	101,6	50,8	310
101/63	88,0	97,6	101,6	63,5	300
101/76	67,0	97,6	101,6	76,2	280
104/51	115,0	100,0	104,0	50,8	310
104/63	88,0	100,0	104,0	63,5	300
104/76	67,0	100,0	104,0	76,2	280

DN	B	C	D	D <sub>1</sub>	gr
38/25	104,0	35,1	38,1	25,4	125
51/25	120,0	47,8	50,8	25,4	170
51/38	105,0	47,8	50,8	38,1	160
63/38	130,0	60,2	63,5	38,1	200
63/51	103,0	60,2	63,5	50,8	220
76/38	139,0	72,9	76,2	38,1	300
76/51	126,0	72,9	76,2	50,8	280
76/63	105,0	72,9	76,2	63,5	250
101/51	150,0	97,6	101,6	50,8	590
101/63	143,0	97,6	101,6	63,5	670
101/76	128,0	97,6	101,6	76,2	630
104/51	148,0	100,0	104,0	50,8	600
104/63	145,0	100,0	104,0	63,5	590
104/76	128,0	100,0	104,0	76,2	630

DN	B	C	F	F <sub>1</sub>	gr
38/25	104,0	35,1	60-6	40-6	395
51/25	126,0	47,8	70-6	40-6	465
51/38	105,0	47,8	70-6	60-6	585
63/38	130,0	60,5	85-6	60-6	790
63/51	103,0	60,5	85-6	70-6	835
76/38	148,0	72,9	98-6	60-6	1.020
76/51	126,0	72,9	98-6	70-6	1.000
76/63	105,0	72,9	98-6	85-6	1.140
101/63	143,0	97,6	132-6	85-6	2.200
101/76	128,0	97,6	132-6	98-6	2.270
104/76	128,0	100,0	125-4	98-6	2.270

DN	B	C	F	F <sub>1</sub>	gr
38/25	104,0	35,1	60-6	40-6	670
51/25	126,0	47,8	70-6	40-6	760
51/38	105,0	47,8	70-6	60-6	985
63/38	130,0	60,5	85-6	60-6	1.300
63/51	103,0	60,5	85-6	70-6	1.365
76/38	148,0	72,9	98-6	60-6	1.660
76/51	126,0	72,9	98-6	70-6	1.665
76/63	105,0	72,9	98-6	85-6	1.910
101/63	143,0	97,6	132-6	85-6	3.100
101/76	128,0	97,6	132-6	98-6	3.300
104/76	128,0	100,0	125-4	98-6	3.300



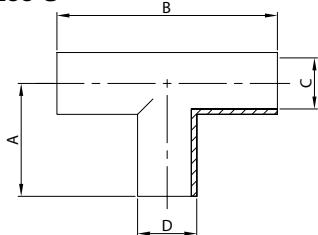
TEE - CROCI  
TEES - CROSSES  
TÉS - CROIX  
TES - CRUCES



SMS

**TEE A MANDRINARE  
EXPANDING TEE  
TÉ À DUDGEONNER  
TE MANDRILAR**

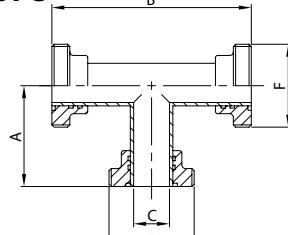
**200 S**



DN	A	B	C	D	gr
25	55,0	110,0	22,4	25,4	190
38	70,0	140,0	35,1	38,1	320
51	82,0	164,0	47,8	50,8	470
63	105,0	210,0	60,5	63,5	680
76	110,0	220,0	72,9	76,2	1.030
101	150,0	300,0	97,6	101,6	1.850
104	150,0	300,0	100,0	104,0	1.850

**TEE BF./BF./BF. MT.  
TEE MP./MP./MP. ED.  
TÉ PF./PF./PF. DN.  
TE M./M./M. MD.**

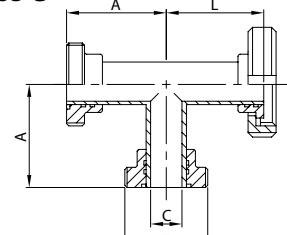
**201 S**



DN	A	B	C	F	gr
25	55,0	110,0	22,4	40-6	400
38	70,0	140,0	35,1	60-6	920
51	82,0	164,0	47,8	70-6	1.145
63	105,0	210,0	60,5	85-6	1.850
76	110,0	220,0	72,9	98-6	2.530
101	150,0	300,0	97,6	132-6	5.270
104	150,0	300,0	100,0	125-4	5.270

**TEE BF./BF./BL. G. MT.  
TEE MP./MP./L. N. ED.  
TÉ PF./PF./PL. E. DN.  
TE M./M./M. MD.**

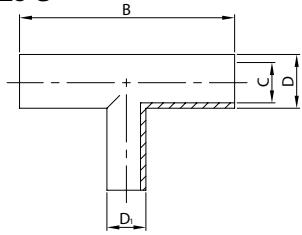
**203 S**



DN	A	C	F	L	gr
25	55,0	22,4	40-6	55,0	485
38	70,0	35,1	60-6	70,0	1.110
51	82,0	47,8	70-6	82,0	1.355
63	105,0	60,5	85-6	105,0	2.170
76	110,0	72,9	98-6	110,0	2.980
101	150,0	97,6	132-6	150,0	5.850
104	150,0	100,0	125-4	150,0	5.850

**TEE RIDOTTO EL.  
REDUCING TEE PE.  
TÉ RÉDUIT BL.  
TE REDUCIDA EL.**

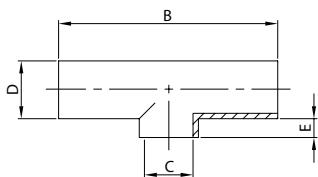
**220 S**



DN	B	C	D	D <sub>1</sub>	gr
38/25	140,0	35,1	38,1	25,4	320
51/25	164,0	47,8	50,8	25,4	470
51/38	164,0	47,8	50,8	38,1	470
63/38	210,0	60,5	63,5	38,1	680
63/51	210,0	60,5	63,5	50,8	680
76/38	220,0	72,9	76,2	38,1	1.030
76/51	220,0	72,9	76,2	50,8	1.030
76/63	220,0	72,9	76,2	63,5	1.030
101/63	300,0	97,6	101,6	63,5	1.850
101/76	300,0	97,6	101,6	76,2	1.850
104/76	300,0	100,0	104,0	76,2	1.850

**TEE A SALDARE  
WELDING TEE  
TÉ À SOUDER  
TE SOLDAR**

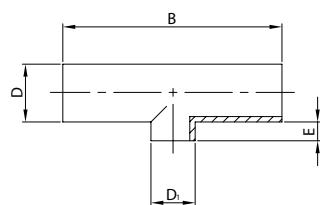
**240 S**



DN	B	C	D	E	gr
25	110,0	22,4	25,4	3,0	190
38	140,0	35,1	38,1	3,0	320
51	164,0	47,8	50,8	3,0	470
63	210,0	60,5	63,5	3,0	680
76	220,0	72,9	76,2	3,0	1.030
101	300,0	97,6	101,6	3,0	1.850
104	300,0	100,0	104,0	3,0	1.850

**TEE RIDOTTO SR.  
REDUCING TEE WG.  
TÉ RÉDUIT SR.  
TE REDUCIDA SR.**

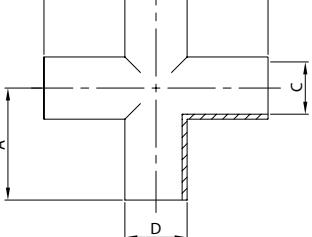
**250 S**



DN	B	D	D <sub>1</sub>	E	gr
38/25	140,0	38,1	25,4	3,0	320
51/25	164,0	50,8	25,4	3,0	470
51/38	164,0	50,8	38,1	3,0	470
63/38	210,0	63,5	38,1	3,0	680
63/51	210,0	63,5	50,8	3,0	680
76/38	220,0	76,2	38,1	3,0	1.030
76/51	220,0	76,2	50,8	3,0	1.030
76/63	220,0	76,2	63,5	3,0	1.030
101/63	300,0	101,6	63,5	3,0	1.850
101/76	300,0	101,6	76,2	3,0	1.850
104/76	300,0	104,0	76,2	3,0	1.850

**CROCE A MANDRINARE  
EXPANDING CROSS  
CROIX À DUDGEONNER  
CRUZ MANDRILAR**

**230 S**



DN	A	B	C	D	gr
25	55,0	110,0	22,4	25,4	253
38	70,0	140,0	35,1	38,1	428
51	82,0	164,0	47,8	50,8	628
63	105,0	210,0	60,5	63,5	908
76	110,0	220,0	72,9	76,2	1.376
101	150,0	300,0	97,6	101,6	2.500
104	150,0	300,0	100,0	104,0	2.500



RIDUZIONI  
REDUCERS  
RÉDUCTION  
REDUCCIONES



**RJT BS**

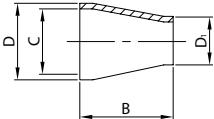
RIDUZIONE CONC. SR.  
WG. CONC. REDUCER  
RÉDUCTION CONC. SR.  
REDUCCIÓN CONC. SR.

RIDUZIONE CONC. EL.  
CONC. REDUCER PE.  
RÉDUCTION CONC. BL.  
REDUCCIÓN CONC. EL.

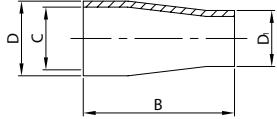
RID. CONC. BF./BF. MT.  
CONC. RED. MP./MP. ED.  
RÉD. CONC. PF./PF. DN.  
RED. CONC. M./M. MD.

RID. CONC. BL.G./BL.G. MT.  
CONC. RED. L.N./L.N. ED.  
RÉD. CONC. PLE./PLE. DN.  
RED. CONC. C.T./C.T. MD.

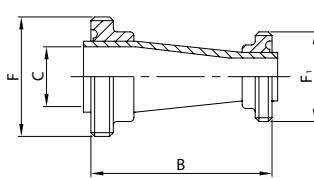
**169 L**



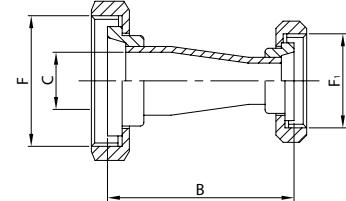
**170 L**



**171 B**



**172 B**



DN	B	C	D	D <sub>1</sub>	gr
38/25	67,0	35,1	38,1	25,4	80
51/25	67,0	47,8	50,8	25,4	100
51/38	67,0	47,8	50,8	38,1	100
63/38	67,0	60,2	63,5	38,1	140
63/51	67,0	60,2	63,5	50,8	160
76/38	67,0	72,9	76,2	38,1	160
76/51	67,0	72,9	76,2	50,8	180
76/63	67,0	72,9	76,2	63,5	220
101/51	107,0	97,6	101,6	50,8	310
101/63	82,0	97,6	101,6	63,5	300
101/76	67,0	97,6	101,6	76,2	280
104/51	109,0	100,0	104,0	50,8	310
104/63	89,0	100,0	104,0	63,5	300
104/76	67,0	100,0	104,0	76,2	280

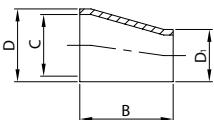
DN	B	C	D	D <sub>1</sub>	gr
38/25	97,0	35,1	38,1	25,4	110
51/25	115,0	47,8	50,8	25,4	170
51/38	97,0	47,8	50,8	38,1	150
63/38	115,0	60,2	63,5	38,1	230
63/51	97,0	60,2	63,5	50,8	190
76/38	132,0	72,9	76,2	38,1	300
76/51	115,0	72,9	76,2	50,8	260
76/63	97,0	72,9	76,2	63,5	240
101/51	145,0	97,6	101,6	50,8	590
101/63	120,0	97,6	101,6	63,5	580
101/76	120,0	97,6	101,6	76,2	580
104/51	155,0	100,0	104,0	50,8	600
104/63	140,0	100,0	104,0	63,5	590
104/76	127,0	100,0	104,0	76,2	580

RIDUZIONE ECC. SR.  
WG. ECC. REDUCER  
RÉDUCTION EXC. SR.  
REDUCCIÓN EXC. SR.

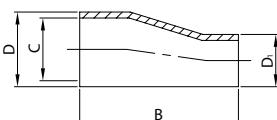
RID. ECC. BF./BF. MT.  
ECC. RED. MP./MP. ED.  
RÉD. EXC. PF./PF. DN.  
RED. EXC. M./M. MD.

RID. ECC. BL.G./BL.G. MT.  
ECC. RED. L.N./L.N. ED.  
RÉD. EXC. PLE./PLE. DN.  
RED. EXC. C.T./C.T. MD.

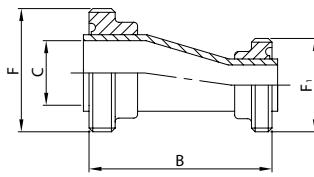
**179 L**



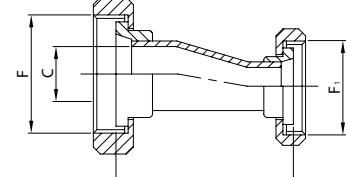
**180 L**



**181 B**



**182 B**



DN	B	C	D	D <sub>1</sub>	gr
38/25	67,0	35,1	38,1	25,4	80
51/25	73,0	47,8	50,8	25,4	100
51/38	67,0	47,8	50,8	38,1	100
63/38	71,0	60,2	63,5	38,1	140
63/51	67,0	60,2	63,5	50,8	160
76/38	80,0	72,9	76,2	38,1	160
76/51	67,0	72,9	76,2	50,8	180
76/63	67,0	72,9	76,2	63,5	220
101/51	110,0	97,6	101,6	50,8	310
101/63	88,0	97,6	101,6	63,5	300
101/76	67,0	97,6	101,6	76,2	280
104/51	115,0	100,0	104,0	50,8	310
104/63	88,0	100,0	104,0	63,5	300
104/76	67,0	100,0	104,0	76,2	280

DN	B	C	D	D <sub>1</sub>	gr
38/25	104,0	35,1	38,1	25,4	125
51/25	120,0	47,8	50,8	25,4	170
51/38	105,0	47,8	50,8	38,1	160
63/38	130,0	60,2	63,5	38,1	200
63/51	103,0	60,2	63,5	50,8	220
76/38	139,0	72,9	76,2	38,1	300
76/51	126,0	72,9	76,2	50,8	280
76/63	105,0	72,9	76,2	63,5	250
101/51	150,0	97,6	101,6	50,8	590
101/63	143,0	97,6	101,6	63,5	670
101/76	128,0	97,6	101,6	76,2	630
104/51	148,0	100,0	104,0	50,8	600
104/63	145,0	100,0	104,0	63,5	590
104/76	128,0	100,0	104,0	76,2	630

DN	B	C	F	F <sub>1</sub>	gr
38/25	94,0	35,1	58-8	46-8	380
51/25	116,0	47,8	73-6	46-8	505
51/38	95,0	47,8	73-6	58-6	550
63/38	120,0	60,5	85-6	58-6	645
63/51	93,0	60,5	85-6	73-6	745
76/38	138,0	72,9	98-6	58-6	840
76/51	116,0	72,9	98-6	73-6	880
76/63	95,0	72,9	98-6	85-6	905
101/63	133,0	97,6	123-6	85-6	1.490
101/76	118,0	97,6	123-6	98-6	1.525

DN	B	C	F	F <sub>1</sub>	gr
38/25	114,0	35,1	58-8	46-8	605
51/25	136,0	47,8	73-6	46-8	765
51/38	115,0	47,8	73-6	58-6	865
63/38	140,0	60,5	85-6	58-6	1.145
63/51	113,0	60,5	85-6	73-6	1.280
76/38	158,0	72,9	98-6	58-6	1.325
76/51	136,0	72,9	98-6	73-6	1.400
76/63	115,0	72,9	98-6	85-6	1.610
101/63	153,0	97,6	123-6	85-6	2.230
101/76	138,0	97,6	123-6	98-6	2.250



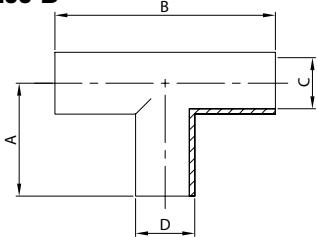
TEE - CROCI  
TEES - CROSSES  
TÉS - CROIX  
TES - CRUCES



RJT BS

**TEE A MANDRINARE  
EXPANDING TEE  
TÉ À DUDGEONNER  
TE MANDRILAR**

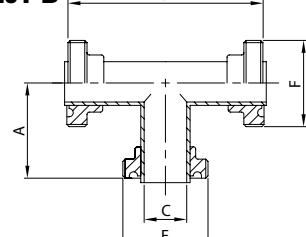
**200 B**



DN	A	B	C	D	gr
25	44,0	88,0	22,4	25,4	170
38	64,0	128,0	35,1	38,1	290
51	89,0	178,0	47,8	50,8	420
63	114,0	228,0	60,5	63,5	610
76	134,0	268,0	72,9	76,2	930
101	174,0	348,0	97,6	101,6	1.620

**TEE BF./BF./BF. MT.  
TEE MP./MP./MP. ED.  
TÉ PF./PF./PF. DN.  
TE M./M./M. MD.**

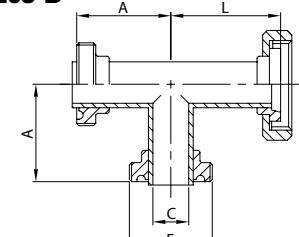
**201 B**



DN	A	B	C	F	gr
25	60,0	120,0	22,4	46-8	490
38	80,0	160,0	35,1	58-8	785
51	105,0	210,0	47,8	73-6	1.175
63	130,0	260,0	60,5	85-6	1.550
76	150,0	300,0	72,9	98-6	2.125
101	190,0	380,0	97,6	123-6	3.440

**TEE BF./BF./BL. G. MT.  
TEE MP./MP./L. N. ED.  
TÉ PF./PF./PL. E. DN.  
TE M./M./C. T. MD.**

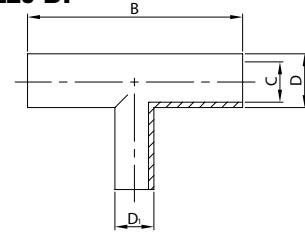
**203 B**



DN	A	C	F	L	gr
25	60,0	22,4	46-8	70,0	575
38	80,0	35,1	58-8	90,0	925
51	105,0	47,8	73-6	115,0	1.350
63	130,0	60,5	85-6	140,0	1.910
76	150,0	72,9	98-6	160,0	2.470
101	190,0	97,6	123-6	200,0	3.820

**TEE RIDOTTO EL.  
REDUCING TEE PE.  
TÉ RÉDUIT BL.  
TE REDUCIDA EL.**

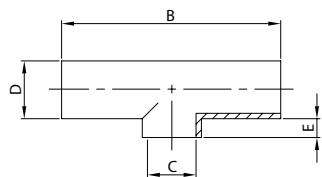
**220 BI**



DN	B	C	D	D <sub>1</sub>	gr
38/25	170,0	35,1	38,1	25,4	320
51/25	220,0	47,8	50,8	25,4	470
51/38	220,0	47,8	50,8	38,1	470
63/38	270,0	60,5	63,5	38,1	680
63/51	270,0	60,5	63,5	50,8	680
76/38	310,0	72,9	76,2	38,1	1.030
76/51	310,0	72,9	76,2	50,8	1.030
76/63	310,0	72,9	76,2	63,5	1.030
101/63	390,0	97,6	101,6	63,5	1.850
101/76	390,0	97,6	101,6	76,2	1.850

**TEE A SALDARE  
WELDING TEE  
TÉ À SOUDER  
TE SOLDAR**

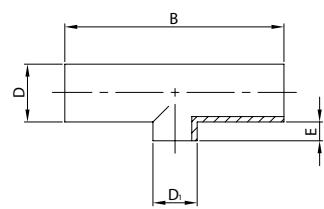
**240 BI**



DN	B	C	D	E	gr
25	88,0	22,4	25,4	3,0	190
38	128,0	35,1	38,1	3,0	320
51	178,0	47,8	50,8	3,0	470
63	228,0	60,5	63,5	3,0	680
76	268,0	72,9	76,2	3,0	1.030
101	348,0	97,6	101,6	3,0	1.850

**TEE RIDOTTO SR.  
REDUCING TEE WG.  
TÉ RÉDUIT SR.  
TE REDUCIDA SR.**

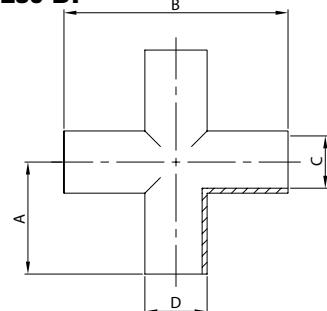
**250 BI**



DN	B	D	D <sub>1</sub>	E	gr
38/25	128,0	38,1	25,4	3,0	320
51/25	178,0	50,8	25,4	3,0	470
51/38	178,0	50,8	38,1	3,0	470
63/38	228,0	63,5	38,1	3,0	680
63/51	228,0	63,5	50,8	3,0	680
76/38	228,0	76,2	38,1	3,0	1.030
76/51	268,0	76,2	50,8	3,0	1.030
76/63	268,0	76,2	63,5	3,0	1.030
101/63	348,0	101,6	63,5	3,0	1.850
101/76	348,0	101,6	76,2	3,0	1.850

**CROCE A MANDRINARE  
EXPANDING CROSS  
CROIX À DUDGEONNER  
CRUZ MANDRILAR**

**230 BI**



DN	A	B	C	D	gr
25	65,0	130,0	22,4	25,4	253
38	85,0	170,0	35,1	38,1	428
51	110,0	220,0	47,8	50,8	628
63	135,0	270,0	60,5	63,5	908
76	155,0	310,0	72,9	76,2	1.376
101	195,0	390,0	97,6	101,6	2.500



RIDUZIONI  
REDUCERS  
RÉDUCTION  
REDUCCIONES



ISS IDF

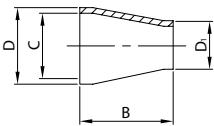
RIDUZIONE CONC. SR.  
WG. CONC. REDUCER  
RÉDUCTION CONC. SR.  
REDUCCIÓN CONC. SR.

RIDUZIONE CONC. EL.  
CONC. REDUCER PE.  
RÉDUCTION CONC. BL.  
REDUCCIÓN CONC. EL.

RID. CONC. BF./BF. MT.  
CONC. RED. MP./MP. ED.  
RÉD. CONC. PF./PF. DN.  
RED. CONC. M./M. MD.

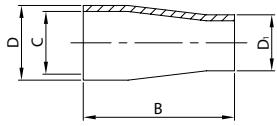
RID. CONC. BL.G./BL.G. MT.  
CONC. RED. L.N./L.N. ED.  
RÉD. CONC. PLE./PLE. DN.  
RED. CONC. C.T./C.T. MD.

169 L



DN	B	C	D	D <sub>1</sub>	gr
38/25	67,0	35,1	38,1	25,4	80
51/25	67,0	47,8	50,8	25,4	100
51/38	67,0	47,8	50,8	38,1	100
63/38	67,0	60,2	63,5	38,1	140
63/51	67,0	60,2	63,5	50,8	160
76/38	67,0	72,9	76,2	38,1	160
76/51	67,0	72,9	76,2	50,8	180
76/63	67,0	72,9	76,2	63,5	220
101/51	107,0	97,6	101,6	50,8	310
101/63	82,0	97,6	101,6	63,5	300
101/76	67,0	97,6	101,6	76,2	280
104/51	109,0	100,0	104,0	50,8	310
104/63	89,0	100,0	104,0	63,5	300
104/76	67,0	100,0	104,0	76,2	280

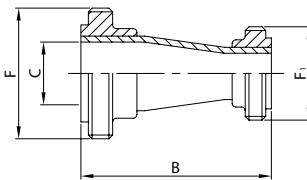
170 L



RIDUZIONE ECC. SR.  
WG. ECC. REDUCER  
RÉDUCTION EXC. SR.  
REDUCCIÓN EXC. SR.

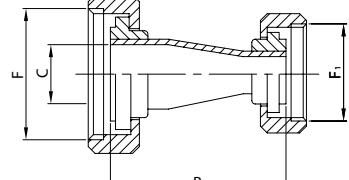
RIDUZIONE ECC. EL.  
ECC. REDUCER PE.  
RÉDUCTION EXC. BL.  
REDUCCIÓN EXC. EL.

171 I



DN	B	C	D	D <sub>1</sub>	gr
38/25	67,0	35,1	38,1	25,4	80
51/25	73,0	47,8	50,8	25,4	100
51/38	67,0	47,8	50,8	38,1	100
63/38	71,0	60,2	63,5	38,1	140
63/51	67,0	60,2	63,5	50,8	160
76/38	80,0	72,9	76,2	38,1	160
76/51	67,0	72,9	76,2	50,8	180
76/63	67,0	72,9	76,2	63,5	220
101/51	110,0	97,6	101,6	50,8	310
101/63	88,0	97,6	101,6	63,5	300
101/76	67,0	97,6	101,6	76,2	280
104/51	115,0	100,0	104,0	50,8	310
104/63	88,0	100,0	104,0	63,5	300
104/76	67,0	100,0	104,0	76,2	280

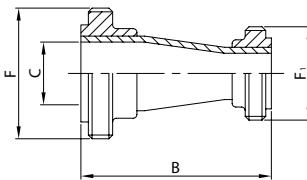
172 I



DN	B	C	F	F <sub>1</sub>	gr
38/25	97,0	35,1	50-8	37-8	260
51/25	115,0	47,8	64-8	37-8	340
51/38	97,0	47,8	64-8	50-8	370
63/38	115,0	60,5	77-8	50-8	525
63/51	97,0	60,5	77-8	64-8	505
76/38	132,0	72,9	91-8	50-8	660
76/51	115,0	72,9	91-8	64-8	640
76/63	97,0	72,9	91-8	77-8	695
101/51	145,0	97,6	101,6	50,8	590
101/63	120,0	97,6	101,6	63,5	580
101/76	120,0	97,6	118-8	77-8	1.305
101/76	120,0	97,6	118-8	91-8	1.360

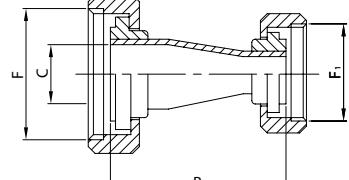
DN	B	C	D	D <sub>1</sub>	gr
38/25	104,0	35,1	38,1	25,4	125
51/25	120,0	47,8	50,8	25,4	170
51/38	105,0	47,8	50,8	38,1	160
63/38	130,0	60,2	63,5	38,1	200
63/51	103,0	60,2	63,5	50,8	220
76/38	139,0	72,9	76,2	38,1	300
76/51	126,0	72,9	76,2	50,8	280
76/63	105,0	72,9	76,2	63,5	250
101/51	150,0	97,6	101,6	50,8	590
101/63	143,0	97,6	101,6	63,5	670
101/76	128,0	97,6	101,6	76,2	630
104/51	148,0	100,0	104,0	50,8	600
104/63	145,0	100,0	104,0	63,5	590
104/76	128,0	100,0	104,0	76,2	630

171 I



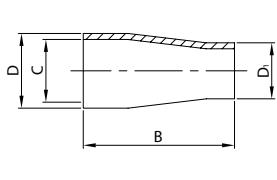
DN	B	C	F	F <sub>1</sub>	gr
38/25	104,0	35,1	50-8	37-8	275
51/25	126,0	47,8	64-8	37-8	340
51/38	105,0	47,8	64-8	50-8	380
63/38	130,0	60,5	77-8	50-8	495
63/51	103,0	60,5	77-8	64-8	535
76/38	148,0	72,9	91-8	50-8	680
76/51	126,0	72,9	91-8	64-8	660
76/63	105,0	72,9	91-8	77-8	705
101/51	150,0	97,6	101,6	50,8	590
101/63	143,0	97,6	101,6	63,5	670
101/76	128,0	97,6	101,6	76,2	630
104/51	148,0	100,0	104,0	50,8	600
104/63	145,0	100,0	104,0	63,5	590
104/76	128,0	100,0	104,0	76,2	630

172 I

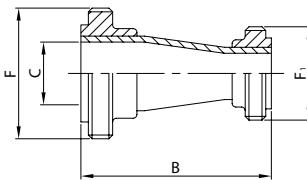


DN	B	C	F	F <sub>1</sub>	gr
38/25	104,0	35,1	50-8	37-8	665
51/25	126,0	47,8	64-8	37-8	875
51/38	105,0	47,8	64-8	50-8	975
63/38	130,0	60,5	77-8	50-8	1.265
63/51	103,0	60,5	77-8	64-8	1.450
76/38	148,0	72,9	91-8	50-8	1.535
76/51	126,0	72,9	91-8	64-8	1.660
76/63	105,0	72,9	91-8	77-8	1.880
101/63	143,0	97,6	118-8	77-8	2.880
101/76	128,0	97,6	118-8	91-8	2.990

180 L



181 I





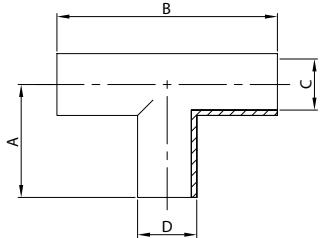
TEE - CROCI  
TEES - CROSSES  
TÉS - CROIX  
TES - CRUCES



ISS IDF

**TEE A MANDRINARE  
EXPANDING TEE  
TÉ À DUDGEONNER  
TE MANDRILAR**

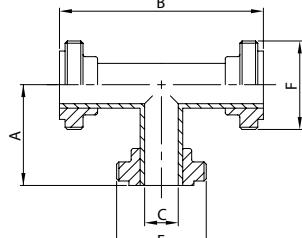
**200 I**



DN	A	B	C	D	gr
25	65,0	130,0	22,4	25,4	190
38	85,0	170,0	35,1	38,1	320
51	110,0	220,0	47,8	50,8	470
63	135,0	270,0	60,5	63,5	680
76	155,0	310,0	72,9	76,2	1.030
101	195,0	390,0	97,6	101,6	1.850

**TEE BF./BF./BF. MT.  
TEE MP./MP./MP. ED.  
TÉ PF./PF./PF. DN.  
TE M./M./M. MD.**

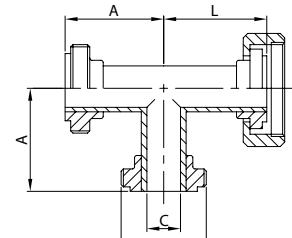
**201 I**



DN	A	B	C	F	gr
25	65,0	130,0	22,4	37-8	340
38	85,0	170,0	35,1	50-8	620
51	110,0	220,0	47,8	64-8	830
63	135,0	270,0	60,5	77-8	1.265
76	155,0	310,0	72,9	91-8	1.810
101	195,0	390,0	97,6	118-8	3.410

**TEE BF./BF./BL. G. MT.  
TEE MP./MP./L. N. ED.  
TÉ PF./PF./PL. E. DN.  
TE M./M./M. MD.**

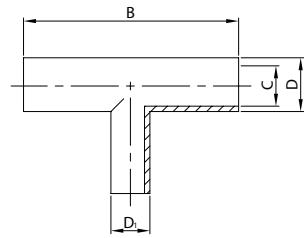
**203 I**



DN	A	C	F	L	gr
25	65,0	22,4	37-8	65,0	505
38	85,0	35,1	50-8	85,0	845
51	110,0	47,8	64-8	110,0	1.200
63	135,0	60,5	77-8	135,0	2.200
76	155,0	72,9	91-8	155,0	2.440
101	195,0	97,6	118-8	195,0	4.360

**TEE RIDOTTO EL.  
REDUCING TEE PE.  
TÉ RÉDUIT BL.  
TE REDUCIDA EL.**

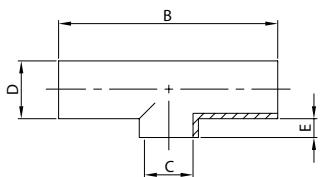
**220 BI**



DN	B	C	D	D <sub>1</sub>	gr
38/25	170,0	35,1	38,1	25,4	320
51/25	220,0	47,8	50,8	25,4	470
51/38	220,0	47,8	50,8	38,1	470
63/38	270,0	60,5	63,5	38,1	680
63/51	270,0	60,5	63,5	50,8	680
76/38	310,0	72,9	76,2	38,1	1.030
76/51	310,0	72,9	76,2	50,8	1.030
76/63	310,0	72,9	76,2	63,5	1.030
101/63	390,0	97,6	101,6	63,5	1.850
101/76	390,0	97,6	101,6	76,2	1.850

**TEE A SALDARE  
WELDING TEE  
TÉ À SOUDER  
TE SOLDAR**

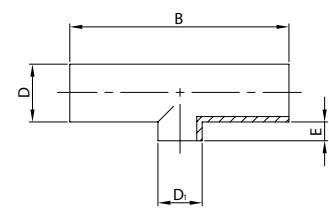
**240 BI**



DN	B	C	D	E	gr
25	88,0	22,4	25,4	3,0	190
38	128,0	35,1	38,1	3,0	320
51	178,0	47,8	50,8	3,0	470
63	228,0	60,5	63,5	3,0	680
76	268,0	72,9	76,2	3,0	1.030
101	348,0	97,6	101,6	3,0	1.850

**TEE RIDOTTO SR.  
REDUCING TEE WG.  
TÉ RÉDUIT SR.  
TE REDUCIDA SR.**

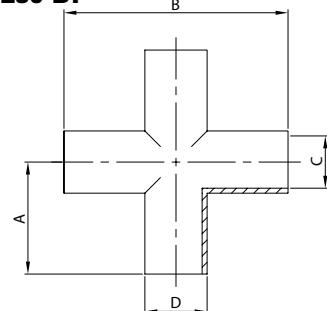
**250 BI**



DN	B	D	D <sub>1</sub>	E	gr
38/25	128,0	38,1	25,4	3,0	320
51/25	178,0	50,8	25,4	3,0	470
51/38	178,0	50,8	38,1	3,0	470
63/38	228,0	63,5	38,1	3,0	680
63/51	228,0	63,5	50,8	3,0	680
76/38	228,0	76,2	38,1	3,0	1.030
76/51	268,0	76,2	50,8	3,0	1.030
76/63	268,0	76,2	63,5	3,0	1.030
101/63	348,0	101,6	63,5	3,0	1.850
101/76	348,0	101,6	76,2	3,0	1.850

**CROCE A MANDRINARE  
EXPANDING CROSS  
CROIX À DUDGEONNER  
CRUZ MANDRILAR**

**230 BI**



DN	A	B	C	D	gr
25	65,0	130,0	22,4	25,4	253
38	85,0	170,0	35,1	38,1	428
51	110,0	220,0	47,8	50,8	628
63	135,0	270,0	60,5	63,5	908
76	155,0	310,0	72,9	76,2	1.376
101	195,0	390,0	97,6	101,6	2.500





## CURVE

- Ricavate da tubi elettrouniti con sistema TIG, laminati a freddo e solubilizzati in atmosfera controllata.
- Calibrate internamente ed esternamente al fine di ottenere una buona circolarità.
- Intestate alle estremità per assicurare la perfetta ortogonalità dei piani.
- Produzione standard: curve a 45°, 90°, 180°. A richiesta, disponibili in differenti spessori e corredate di raccordi mandrinati o saldati.
- Finitura standard: lucidatura esterna e satinatura interna grana 120 norme DIN; satinatura esterna e interna grana 120 norme SMS, BS, ISS. Altre finiture a richiesta.

## BENDS

- Made from pipe electrojointed with the TIG method, cold-rolled and solution heat-treated in controlled atmosphere.
- Gauged inside and outside to obtain good roundness.
- Faced on the ends to ensure perfect right angles of planes.
- Standard production: 45°, 90° and 180° bends. On request available in different thicknesses and available with expanded or welded unions.
- Standard finish: 120 grain external polishing and internal glazing to DIN standards; 120 grain external and internal glazing to SMS, BS and ISS standards. Other finishes on request.

## COUDES

- Obtenus à partir de tubes électrosoudés avec le système TIG, laminés à froid et solubilisés en atmosphère contrôlée.
- Calibrés à l'intérieur et à l'extérieur afin d'obtenir une bonne circularité.
- Façonnés aux extrémités pour assurer l'orthogonalité parfaite des plans.
- Production standard: coudes à 45°, 90°, 180°. Sur demande, disponibles en différentes épaisseurs et munis de raccords dudgeonnés ou soudés.
- Finissage standard: polissage extérieur et satinage intérieur grain 120 normes DIN; satinage extérieur et intérieur grain 120 normes SMS, BS, ISS. Autres finissages sur demande.

## CODOS

- Obtenidos a partir de tubos unidos eléctricamente mediante el sistema TIG, laminados en frío y solubilizados en atmósfera controlada.
- Calibrados interior y exteriormente con la finalidad de obtener una forma circular perfecta.
- Trabajados en los extremos para asegurar que las superficies sean perfectamente ortogonales.
- Producción estándar: codos a 45°, 90°, 180°. A pedido, se pueden suministrar en diferentes espesores y se pueden equipar con racores mandrilados o soldados.
- Acabado estándar: pulido exterior y satinado interior grano 120 normas DIN; satinado exterior e interior grano 120 normas SMS, BS, ISS. A pedido, se pueden suministrar otros acabados.



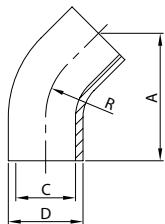
CURVE  
BENDS  
COUDES  
CODOS



DIN

CURVA 45° EL.  
BEND 45° PE.  
COUDE 45° BL.  
CODO 45° EL.

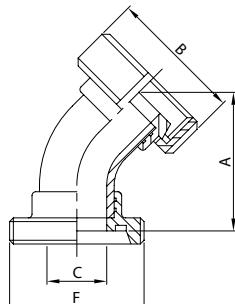
**300 L**



DN	A	C	D	R	gr
12	45,0	10,0	12,0	26,0	40
18	60,0	16,0	18,0	35,0	50
22	65,0	20,0	22,0	40,0	60
28	73,0	25,0	28,0	50,0	62
34	83,0	31,0	34,0	55,0	85
40	89,0	37,0	40,0	60,0	120
52	103,0	49,0	52,0	70,0	190
70	108,0	66,0	70,0	80,0	390
85	120,0	81,0	85,0	90,0	470
101	151,0	97,6	101,6	113,1	800
104	130,0	100,0	104,0	88,0	710

CURVA 45° BF./BC. G. MT.  
BEND 45° MP./TP. N. ED.  
COUDE 45° PF./PC. E. DN.  
CODO 45° M./C. T. MD.

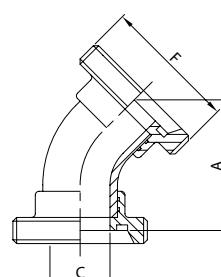
**303 D**



DN	A	B	C	F	gr
25	91,0	63,5	25,0	52-6	439
32	100,3	70,0	31,0	58-6	555
40	104,5	78,0	37,0	65-6	705
50	118,5	92,0	49,0	78-6	990
65	124,5	112,0	66,0	95-6	1.605
80	140,7	127,0	81,0	110-4	2.220
100	166,3	148,0	97,6	130-4	3.585
104	145,4	148,0	100,0	130-4	3.336

CURVA 45° BF./BF. MT.  
BEND 45° MP./MP. ED.  
COUDE 45° PF./PF. DN.  
CODO 45° M./M. MD.

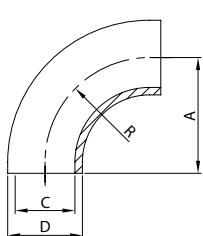
**304 D**



DN	A	C	F	gr
25	96,0	25,0	52-6	325
32	105,6	31,0	58-6	425
40	110,0	37,0	65-6	540
50	124,0	49,0	78-6	750
65	130,5	66,0	95-6	1.150
80	146,0	81,0	110-4	1.670
100	166,3	97,6	130-4	2.778
104	145,4	100,0	130-4	2.646

CURVA 90° ES.  
BEND 90° WE.  
COUDE 90° BS.  
CODO 90° ES.

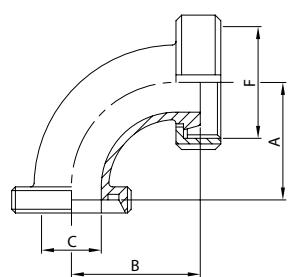
**310 D**



DN	A	C	D	R	gr
10	26,0	10,0	12,0	26,0	18
15	35,0	16,0	18,0	35,0	20
20	40,0	20,0	22,0	40,0	50
25	50,0	25,0	28,0	50,0	65
32	55,0	31,0	34,0	55,0	100
40	60,0	37,0	40,0	60,0	150
50	70,0	49,0	52,0	70,0	190
65	80,0	66,0	70,0	80,0	410
80	90,0	81,0	85,0	90,0	530
100	110,0	97,6	101,6	110,0	810
104	100,0	100,0	104,0	100,0	810
125	188,0	125,0	129,0	188,0	900

CURVA 90° BF./BC. G. ST.  
BEND 90° MP./TP. N. WD.  
COUDE 90° PF./PC. E. SD.  
CODO 90° M./C. T. SD.

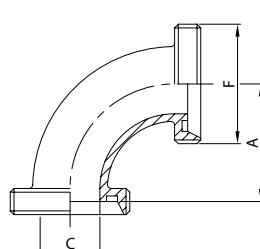
**313 D**



DN	A	B	C	F	gr
25	77,0	77,0	25,0	52-6	465
32	85,0	85,0	31,0	58-6	615
40	92,0	92,0	37,0	65-6	790
50	103,0	103,0	49,0	78-6	1.096
65	117,0	117,0	66,0	95-6	1.730
80	132,0	132,0	81,0	110-4	2.470
100	149,0	149,0	97,6	130-4	3.950
104	149,0	149,0	100,0	130-4	3.950

CURVA 90° BF./BF. ST.  
BEND 90° MP./MP. WD.  
COUDE 90° PF./PF. SD.  
CODO 90° M./M. SD.

**314 D**



DN	A	C	F	gr
25	77,0	25,0	52-6	345
32	85,0	31,0	58-6	460
40	92,0	37,0	65-6	630
50	103,0	49,0	78-6	908
65	117,0	66,0	95-6	1.250
80	132,0	81,0	110-4	1.870
100	149,0	97,6	130-4	3.290
104	149,0	100,0	130-4	3.290

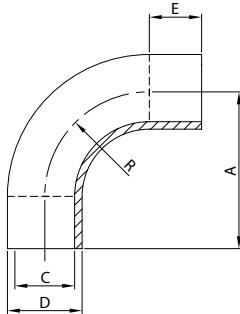


CURVE  
BENDS  
COUDES  
CODOS

DIN

CURVA 90° EM.  
BEND 90° EE.  
COUDE 90° BD.  
CODO 90° EM.

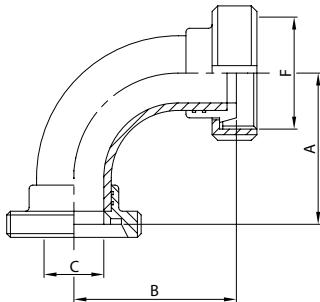
350 D



DN	A	C	D	E	R	gr
10	38,0	10,0	12,0	12,0	26,0	30
15	47,0	16,0	18,0	12,0	35,0	55
20	52,0	20,0	22,0	12,0	40,0	60
25	70,0	25,0	28,0	20,0	50,0	110
32	78,0	31,0	34,0	23,0	55,0	160
40	85,0	37,0	40,0	25,0	60,0	215
50	97,0	49,0	52,0	27,0	70,0	300
65	110,0	66,0	70,0	30,0	80,0	570
80	118,0	81,0	85,0	28,0	90,0	780
100	150,0	97,6	101,6	40,0	110,0	1.200
104	150,0	100,0	104,0	40,0	110,0	1.200

CURVA 90° BF./BC. G. MT.  
BEND 90° MP./TP. N. ED.  
COUDE 90° PF./PC. E. DN.  
CODO 90° M./C. T. MD.

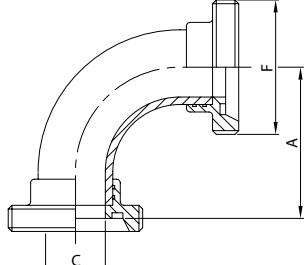
353 D



DN	A	B	C	F	gr
25	77,0	77,0	25,0	52-6	487
32	85,0	85,0	31,0	58-6	630
40	91,0	91,0	37,0	65-6	800
50	103,0	103,0	49,0	78-6	1.100
65	117,0	117,0	66,0	95-6	1.785
80	127,0	127,0	81,0	110-4	2.530
100	159,0	159,0	97,6	130-4	3.970
104	159,0	159,0	100,0	130-4	3.970

CURVA 90° BF./BF. MT.  
BEND 90° MP./MP. ED.  
COUDE 90° PF./PF. DN.  
CODO 90° M./M. MD.

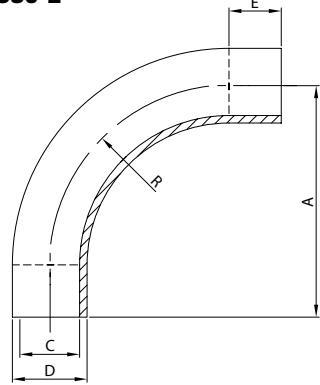
354 D



DN	A	C	F	gr
25	77,0	25,0	52-6	374
32	85,0	31,0	58-6	500
40	91,0	37,0	65-6	625
50	103,0	49,0	78-6	860
65	117,0	66,0	95-6	1.330
80	127,0	81,0	110-4	1.980
100	159,0	97,6	130-4	3.200
104	159,0	100,0	130-4	3.200

CURVA 90° EM.  
BEND 90° EE.  
COUDE 90° BD.  
CODO 90° EM.

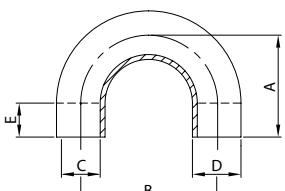
330 L



DN	A	C	D	E	R	gr
28	134,0	25,0	28,0	50,0	84,0	220
34	152,0	31,0	34,0	50,0	102,0	310
40	170,0	37,0	40,0	50,0	120,0	410
52	206,0	49,0	52,0	50,0	156,0	650
70	260,0	66,0	70,0	50,0	210,0	1.400
85	305,0	81,0	85,0	50,0	255,0	2.000
101	354,0	97,6	101,6	50,0	304,0	2.800
104	362,0	100,0	104,0	50,0	312,0	2.900

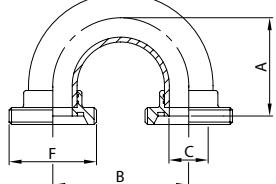
CURVA 180° EL.  
BEND 180° PE.  
COUDE 180° BL.  
CODO 180° EL.

390 L



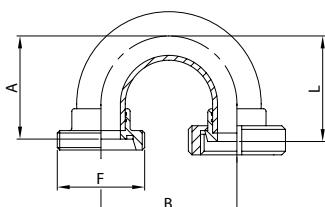
CURVA 180° BF./BF. MT.  
BEND 180° MP./MP. ED.  
COUDE 180° PF./PF. DN.  
CODO 180° M./M. MD.

391 D



CURVA 180° BF./BC. G. MT.  
BEND 180° MP./TP. N. ED.  
COUDE 180° PF./PC. E. DN.  
CODO 180° M./C. T. MD.

393 D



DN	A	B	C	D	E	gr
12	55,0	52,0	9,0	12,0	29,0	60
18	65,0	70,0	15,0	18,0	30,0	110
22	74,0	80,0	19,0	22,0	34,0	120
28	100,0	100,0	25,0	28,0	50,0	185
34	105,0	110,0	31,0	34,0	50,0	240
40	110,0	120,0	37,0	40,0	50,0	350
52	120,0	140,0	49,0	52,0	50,0	410
70	135,0	170,0	66,0	70,0	50,0	970
85	140,0	180,0	81,0	85,0	50,0	1.500
101	150,0	220,0	97,6	101,6	40,0	2.400
104	150,0	220,0	100,0	104,0	40,0	2.400

DN	A	B	C	F	gr
25	107,0	100,0	25,0	52-6	450
32	112,0	110,0	31,0	58-6	580
40	116,0	120,0	37,0	65-6	770
50	126,0	140,0	49,0	78-6	970
65	142,0	170,0	66,0	95-6	1.730
80	149,0	180,0	81,0	110-4	2.700
100	169,0	220,0	97,6	130-4	4.400
104	169,0	220,0	100,0	130-4	4.400

DN	A	B	F	L	gr
25	107,0	100,0	52-6	107,0	562
32	112,0	110,0	58-6	112,0	710
40	116,0	120,0	65-6	116,0	995
50	126,0	140,0	78-6	126,0	1.210
65	142,0	170,0	95-6	142,0	2.185
80	149,0	180,0	110-4	149,0	3.250
100	169,0	220,0	130-4	169,0	5.170
104	169,0	220,0	130-4	169,0	5.170



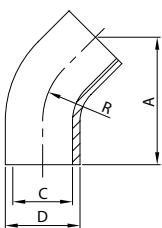
CURVE  
BENDS  
COUDES  
CODOS



SMS

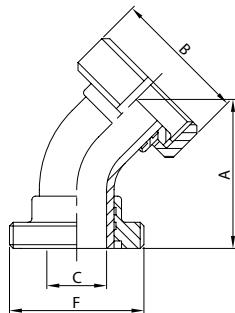
CURVA 45° EL.  
BEND 45° PE.  
COUDE 45° BL.  
CODO 45° EL.

**300 L**



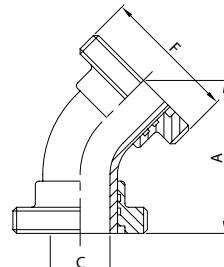
CURVA 45° BF./BL. G. MT.  
BEND 45° MP./L. N. ED.  
COUDE 45° PF./PL. E. DN.  
CODO 45° M./C. T. MD.

**303 S**



CURVA 45° BF./BF. MT.  
BEND 45° MP./MP. ED.  
COUDE 45° PF./PF. DN.  
CODO 45° M./M. MD.

**304 S**



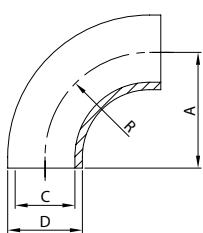
DN	A	C	D	R	gr
25	77,0	22,4	25,4	38,0	70
38	85,5	35,1	38,1	57,0	120
51	109,0	47,8	50,8	76,0	215
63	111,5	60,5	63,5	95,0	350
76	120,0	72,9	76,2	114,0	510
101	151,0	97,6	101,6	113,1	800
104	130,0	100,0	104,0	88,0	710

DN	A	B	C	F	gr
25	80,0	51,0	22,4	40-6	295
38	105,0	74,0	35,1	60-6	710
51	103,0	84,0	47,8	70-6	875
63	115,0	100,0	60,5	85-6	1.450
76	135,0	114,0	72,9	98-6	1.960
101	151,0	151,0	97,6	132-6	3.660

DN	A	C	F	gr
25	80,0	22,4	40-6	210
38	105,0	35,1	60-6	520
51	103,0	47,8	70-6	665
63	115,5	60,5	85-6	1.130
76	135,0	72,9	98-6	1.510
101	151,0	97,6	132-6	3.080

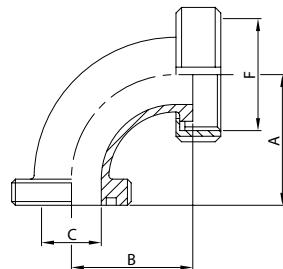
CURVA 90° ES.  
BEND 90° WE.  
COUDE 90° BS.  
CODO 90° ES.

**310 S**



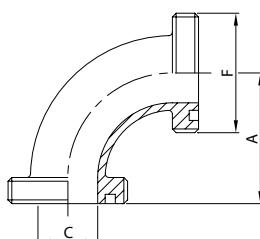
CURVA 90° BF./BL. G. ST.  
BEND 90° MP./L. N. WD.  
COUDE 90° PF./PL. E. SD.  
CODO 90° M./C. T. SD.

**313 S**



CURVA 90° BF./BF. ST.  
BEND 90° MP./MP. WD.  
COUDE 90° PF./PF. SD.  
CODO 90° M./M. SD.

**314 S**



DN	A	C	D	R	gr
25	38,0	22,4	25,4	38,0	45
38	57,0	35,1	38,1	57,0	115
51	76,0	47,8	50,8	76,0	200
63	95,0	60,5	63,5	95,0	320
76	114,0	72,9	76,2	114,0	510
101	110,0	97,6	101,6	110,0	810
104	100,0	100,0	104,0	100,0	850

DN	A	B	C	F	gr
25	55,0	55,0	22,4	40-6	250
38	70,0	70,0	35,1	60-6	650
51	82,0	82,0	47,8	70-6	780
63	105,0	105,0	60,5	85-6	1.265
76	110,0	110,0	72,9	98-6	1.775
101	150,0	150,0	97,6	132-6	3.080

DN	A	C	F	gr
25	55,0	22,4	40-6	175
38	70,0	35,1	60-6	495
51	82,0	47,8	70-6	600
63	105,0	60,5	85-6	1.060
76	110,0	72,9	98-6	1.470
101	150,0	97,6	132-6	2.810



CURVE  
BENDS  
COUDES  
CODOS

SMS

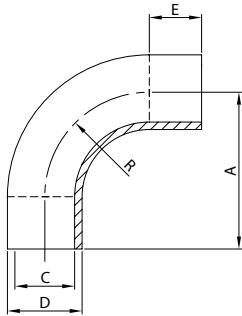
CURVA 90° EM.  
BEND 90° EE.  
COUDE 90° BD.  
CODO 90° EM.

CURVA 90° BF./BL. G. MT.  
BEND 90° MP./L. N. ED.  
COUDE 90° PF./PL. E. DN.  
CODO 90° M./C. T. MD.

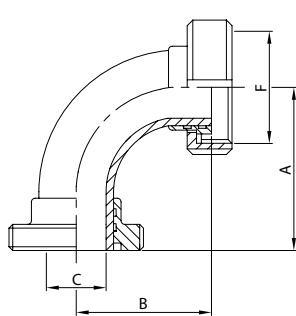
CURVA 90° BF./BF. MT.  
BEND 90° MP./MP. ED.  
COUDE 90° PF./PF. DN.  
CODO 90° M./M. MD.

CURVA 90° EM.  
BEND 90° EE.  
COUDE 90° BD.  
CODO 90° EM.

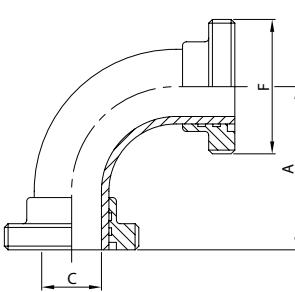
350 S



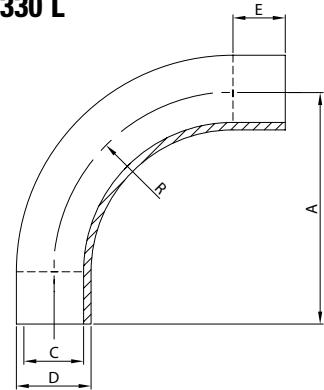
353 S



354 S



330 L



DN	A	C	D	E	R	gr
25	55,0	22,9	25,4	30,0	25,0	90
38	70,0	35,6	38,1	32,0	38,0	180
51	82,0	47,8	50,8	31,0	51,0	300
63	105,0	60,5	63,5	41,0	64,0	490
76	110,0	72,9	76,2	34,0	76,0	900
101	150,0	97,6	101,6	40,0	110,0	1.200
104	150,0	100,0	104,0	40,0	110,0	1.250

DN	A	B	C	F	gr
25	55,0	55,0	22,9	40-6	315
38	70,0	70,0	35,6	60-6	770
51	82,0	82,0	47,8	70-6	960
63	105,0	105,0	60,5	85-6	1.590
76	110,0	110,0	72,9	98-6	2.530
101	150,0	150,0	97,6	132-6	4.110

DN	A	C	F	gr
25	55,0	22,9	40-6	230
38	70,0	35,6	60-6	580
51	82,0	47,8	70-6	750
63	105,0	60,5	85-6	1.270
76	110,0	72,9	98-6	1.900
101	150,0	97,6	132-6	3.530

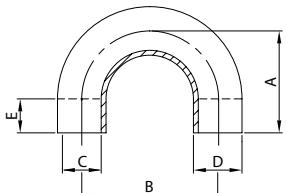
DN	A	C	D	E	R	gr
25	125,0	22,4	25,4	50,0	75,0	190
38	132,0	35,1	38,1	50,0	82,0	300
51	200,0	47,8	50,8	50,0	150,0	630
63	230,0	60,5	63,5	50,0	180,0	870
76	278,0	72,9	76,2	50,0	228,0	1.600
101	354,0	97,6	101,6	50,0	304,0	2.800

CURVA 180° EL.  
BEND 180° PE.  
COUDE 180° BL.  
CODO 180° EL.

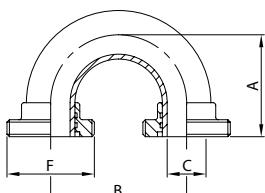
CURVA 180° BF./BF. MT.  
BEND 180° MP./MP. ED.  
COUDE 180° PF./PF. DN.  
CODO 180° M./C. T. MD.

CURVA 180° BF./BL. G. MT.  
BEND 180° MP./L. N. ED.  
COUDE 180° PF./PL. E. DN.  
CODO 180° M./M. MD.

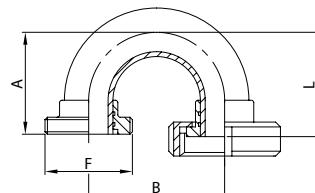
390 L



391 S



393 S



DN	A	B	C	D	E	gr
25	86,5	73,0	22,4	25,4	50,0	170
38	102,0	104,0	35,1	38,1	50,0	250
51	125,5	151,0	47,8	50,8	50,0	480
63	140,0	180,0	60,5	63,5	50,0	700
76	147,0	194,0	72,9	76,2	50,0	1.180
101	150,0	220,0	97,6	101,6	40,0	2.400
104	150,0	220,0	100,4	104,0	40,0	2.400

DN	A	B	C	F	gr
25	86,5	73,0	22,4	40-6	310
38	102,0	104,0	35,1	60-6	650
51	125,5	151,0	47,8	70-6	930
63	140,0	180,0	60,5	85-6	1.480
76	147,0	194,0	72,9	98-6	2.180
101	150,0	220,0	97,6	132-6	4.680

DN	A	B	F	L	gr
25	86,5	73,0	40-6	86,5	395
38	102,0	104,0	60-6	102,0	840
51	125,5	151,0	70-6	125,5	1.140
63	140,0	180,0	85-6	140,0	1.800
76	147,0	194,0	98-6	147,0	2.630
101	150,0	220,0	132-6	150,0	5.260



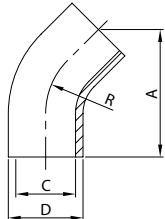
CURVE  
BENDS  
COUDES  
CODOS



RJT BS

CURVA 45° EL.  
BEND 45° PE.  
COUDE 45° BL.  
CODO 45° EL.

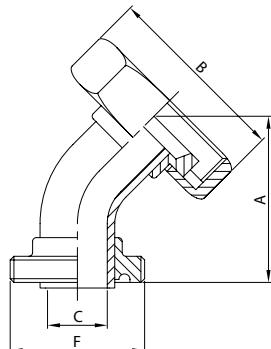
**300 L**



DN	A	C	D	R	gr
25	77,0	22,4	25,4	38,0	70
38	85,5	35,1	38,1	57,0	120
51	109,0	47,8	50,8	76,0	215
63	111,5	60,5	63,5	95,0	350
76	120,0	72,9	76,2	114,0	510
101	151,0	97,6	101,6	113,1	930

CURVA 45° BF./BL. G. MT.  
BEND 45° MP./L. N. ED.  
COUDE 45° PF./PL. E. DN.  
CODO 45° M./C. T. MD.

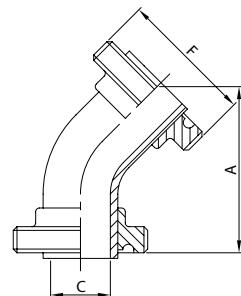
**303 B**



DN	A	B	C	F	gr
25	80,0	51,0	22,4	46-8	355
38	105,0	65,0	35,1	58-8	570
51	103,0	80,0	47,8	73-6	860
63	115,0	92,0	60,5	85-6	1.290
76	135,0	104,0	72,9	98-6	1.585
101	150,2	130,0	97,6	123-6	2.370

CURVA 45° BF./BF. MT.  
BEND 45° MP./MP. ED.  
COUDE 45° PF./PF. DN.  
CODO 45° M./M. MD.

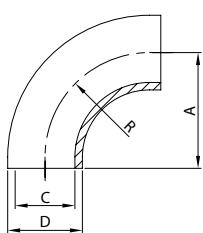
**304 B**



DN	A	C	F	gr
25	80,0	22,4	46-8	270
38	105,0	35,1	58-8	430
51	103,0	47,8	73-6	685
63	115,0	60,5	85-6	930
76	135,0	72,9	98-6	1.240
101	146,0	97,6	123-6	1.990

CURVA 90° ES.  
BEND 90° WE.  
COUDE 90° BS.  
CODO 90° ES.

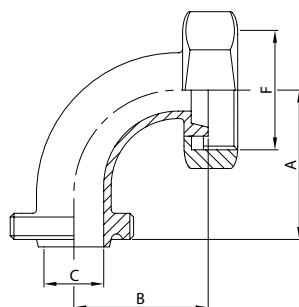
**310 B**



DN	A	C	D	R	gr
25	44,0	22,4	25,4	38,0	45
38	64,0	35,1	38,1	57,0	115
51	89,0	47,8	50,8	76,0	200
63	114,0	60,5	63,5	95,0	320
76	134,0	72,9	76,2	114,0	510
101	174,0	97,6	101,6	110,0	810

CURVA 90° BF./BL. G. ST.  
BEND 90° MP./L. N. WD.  
COUDE 90° PF./PL. E. SD.  
CODO 90° M./C. T. SD.

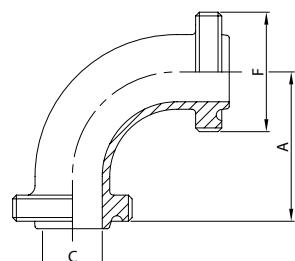
**313 B**



DN	A	B	C	F	gr
25	60,0	70,0	22,4	46-8	320
38	80,0	90,0	35,1	58-8	530
51	105,0	115,0	47,8	73-6	750
63	130,0	140,0	60,5	85-6	1.140
76	150,0	160,0	72,9	98-6	1.435
101	190,0	200,0	97,6	123-6	2.015

CURVA 90° BF./BF. ST.  
BEND 90° MP./MP. WD.  
COUDE 90° PF./PF. SD.  
CODO 90° M./M. SD.

**314 B**



DN	A	C	F	gr
25	60,0	22,4	46-8	275
38	80,0	35,1	58-8	445
51	105,0	47,8	73-6	640
63	130,0	60,5	85-6	910
76	150,0	72,9	98-6	1.220
101	190,0	97,6	123-6	1.810



CURVE  
BENDS  
COUDES  
CODOS

**RJT BS**

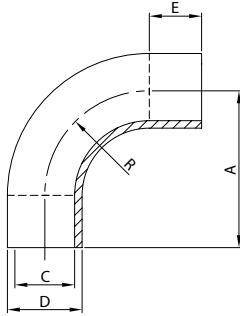
CURVA 90° EM.  
BEND 90° EE.  
COUDE 90° BD.  
CODO 90° EM.

CURVA 90° BF./BL. G. MT.  
BEND 90° MP./L. N. ED.  
COUDE 90° PF./PL. E. DN.  
CODO 90° M./C. T. MD.

CURVA 90° BF./BF. MT.  
BEND 90° MP./MP. ED.  
COUDE 90° PF./PF. DN.  
CODO 90° M./M. MD.

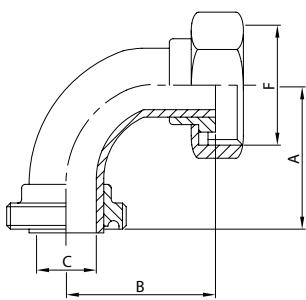
CURVA 90° EM.  
BEND 90° EE.  
COUDE 90° BD.  
CODO 90° EM.

**350 B**



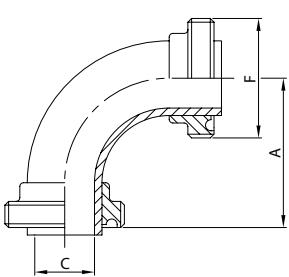
DN	A	C	D	E	R	gr
25	75,0	22,4	25,4	37,0	38,0	90
38	90,0	35,1	38,1	33,0	57,0	180
51	100,0	47,8	50,8	24,0	76,0	300
63	115,0	60,5	63,5	20,0	95,0	490
76	130,0	72,9	76,2	16,0	114,0	900
101	192,5	97,6	101,6	40,0	152,5	1.490

**353 B**



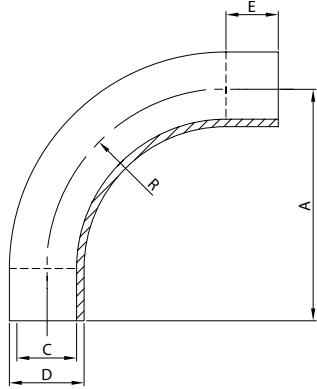
DN	A	B	C	F	gr
25	60,0	70,0	22,4	46-8	375
38	80,0	90,0	35,1	58-8	630
51	105,0	115,0	47,8	73-6	945
63	130,0	140,0	60,5	85-6	1.430
76	150,0	160,0	72,9	98-6	1.975
101	187,8	198,0	97,6	123-6	2.980

**354 B**



DN	A	C	F	gr
25	60,0	22,4	46-8	290
38	80,0	35,1	58-8	490
51	105,0	47,8	73-6	770
63	130,0	60,5	85-6	1.070
76	150,0	72,9	98-6	1.630
101	187,8	97,6	123-6	2.600

**330 L**



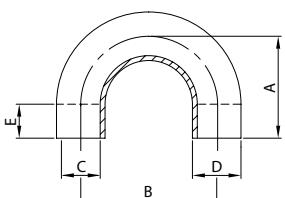
DN	A	C	D	E	R	gr
25	125,0	22,4	25,4	50,0	75,0	190
38	132,0	35,1	38,1	50,0	82,0	300
51	200,0	47,8	50,8	50,0	150,0	630
63	230,0	60,5	63,5	50,0	180,0	870
76	278,0	72,9	76,2	50,0	228,0	1.600
101	354,0	97,6	101,6	50,0	304,0	2.800

CURVA 180° EL.  
BEND 180° PE.  
COUDE 180° BL.  
CODO 180° EL.

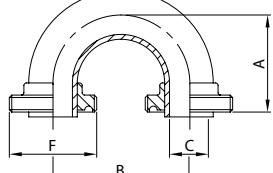
CURVA 180° BF./BF. MT.  
BEND 180° MP./MP. ED.  
COUDE 180° PF./PF. DN.  
CODO 180° M./C. T. MD.

CURVA 180° BF./BL. G. MT.  
BEND 180° MP./L. N. ED.  
COUDE 180° PF./PL. E. DN.  
CODO 180° M./M. MD.

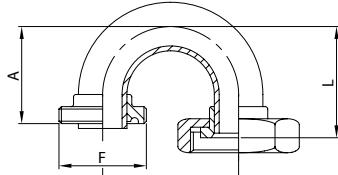
**390 L**



**391 B**



**393 B**



DN	A	B	C	D	E	gr
25	86,5	73,0	22,4	25,4	50,0	170
38	102,0	104,0	35,1	38,1	50,0	250
51	125,5	151,0	47,8	50,8	50,0	480
63	140,0	180,0	60,5	63,5	50,0	700
76	147,0	194,0	72,9	76,2	50,0	1.180
101	150,0	220,0	97,6	101,6	40,0	2.400

DN	A	B	C	F	gr
25	81,8	73,0	22,4	46-8	370
38	97,3	104,0	35,1	58-8	560
51	120,8	151,0	47,8	73-6	950
63	135,3	180,0	60,5	85-6	1.280
76	142,3	194,0	72,9	98-6	1.910
101	145,3	220,0	97,6	123-6	3.460

DN	A	B	F	L	gr
25	81,8	73,0	46-8	92,0	455
38	97,3	104,0	58-8	107,5	700
51	120,8	151,0	73-6	131,0	1.125
63	135,3	180,0	85-6	145,5	1.640
76	142,3	194,0	98-6	152,5	2.255
101	145,3	220,0	123-6	155,5	3.840

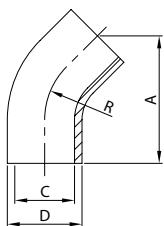


CURVE  
BENDS  
COUDES  
CODOS

ISS IDF

CURVA 45° EL.  
BEND 45° PE.  
COUDE 45° BL.  
CODO 45° EL.

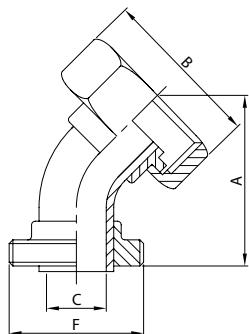
300 L



DN	A	C	D	R	gr
25	77,0	22,4	25,4	38,0	70
38	85,5	35,1	38,1	57,0	120
51	109,0	47,8	50,8	76,0	215
63	111,5	60,5	63,5	95,0	350
76	120,0	72,9	76,2	114,0	510
101	151,0	97,6	101,6	113,1	930

CURVA 45° BF./BL. G. MT.  
BEND 45° MP./L. N. ED.  
COUDE 45° PF./PL. E. DN.  
CODO 45° M./C. T. MD.

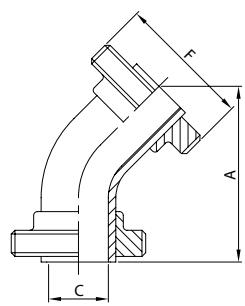
303 I



DN	A	B	C	F	gr
25	80,0	48,0	22,4	37-8	335
38	105,0	64,0	35,1	50-8	545
51	103,0	77,0	47,8	64-8	825
63	115,0	91,0	60,5	77-8	1.285
76	135,0	106,0	72,9	91-8	1.660
101	151,0	135,0	97,6	118-8	2.920

CURVA 45° BF./BF. MT.  
BEND 45° MP./MP. ED.  
COUDE 45° PF./PF. DN.  
CODO 45° M./M. MD.

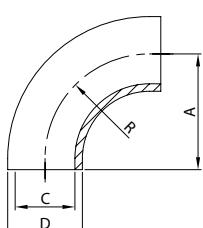
304 I



DN	A	C	F	gr
25	80,0	22,4	37-8	170
38	105,0	35,1	50-8	320
51	103,0	47,8	64-8	455
63	115,0	60,5	77-8	740
76	135,0	72,9	91-8	1.030
101	151,0	97,6	118-8	1.970

CURVA 90° ES.  
BEND 90° WE.  
COUDE 90° BS.  
CODO 90° ES.

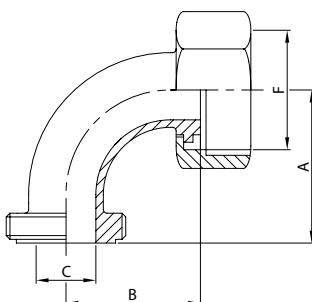
310 I



DN	A	C	D	R	gr
25	38,0	22,4	25,4	38,0	45
38	57,0	35,1	38,1	57,0	115
51	76,0	47,8	50,8	76,0	200
63	95,0	60,5	63,5	95,0	320
76	114,0	72,9	76,2	114,0	510
101	110,0	97,6	101,6	110,0	810

CURVA 90° BF./BL. G. ST.  
BEND 90° MP./L. N. WD.  
COUDE 90° PF./PL. E. SD.  
CODO 90° M./C. T. SD.

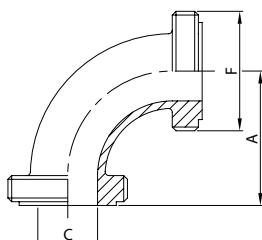
313 I



DN	A	B	C	F	gr
25	65,0	65,0	22,4	37-8	338
38	85,0	85,0	35,1	50-8	560
51	110,0	110,0	47,8	64-8	835
63	135,0	135,0	60,5	77-8	1.240
76	155,0	155,0	72,9	91-8	1.630
101	195,0	195,0	97,6	118-8	2.700

CURVA 90° BF./BF. ST.  
BEND 90° MP./MP. WD.  
COUDE 90° PF./PF. SD.  
CODO 90° M./M. SD.

314 I



DN	A	C	F	gr
25	65,0	22,4	37-8	185
38	85,0	35,1	50-8	335
51	110,0	47,8	64-8	500
63	135,0	60,5	77-8	740
76	155,0	72,9	91-8	1.050
101	195,0	97,6	118-8	1.650



CURVE  
BENDS  
COUDES  
CODOS

ISS IDF

CURVA 90° EM.  
BEND 90° EE.  
COUDE 90° BD.  
CODO 90° EM.

CURVA 90° BF./BL. G. MT.  
BEND 90° MP./L. N. ED.  
COUDE 90° PF./PL. E. DN.  
CODO 90° M./C. T. MD.

CURVA 90° BF./BF. MT.  
BEND 90° MP./MP. ED.  
COUDE 90° PF./PF. DN.  
CODO 90° M./M. MD.

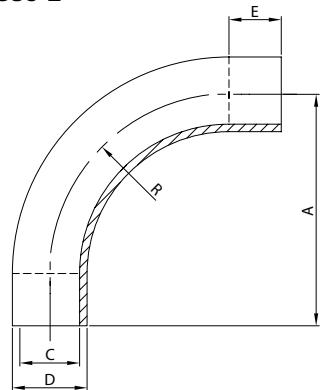
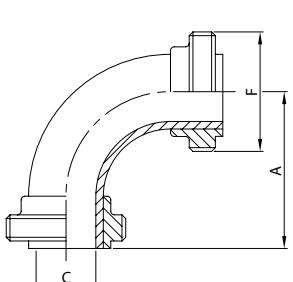
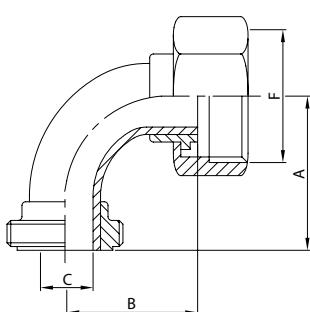
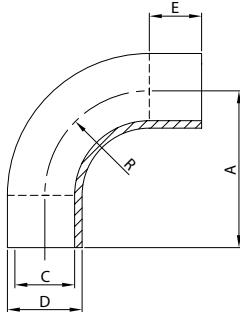
CURVA 90° EM.  
BEND 90° EE.  
COUDE 90° BD.  
CODO 90° EM.

350 I

353 I

354 I

330 L



DN	A	C	D	E	R	gr
25	65,0	22,4	25,4	27,0	38,0	90
38	85,0	35,1	38,1	28,0	57,0	180
51	110,0	47,8	50,8	34,0	76,0	300
63	135,0	60,5	63,5	40,0	95,0	490
76	155,0	72,9	76,2	41,0	114,0	900
101	192,5	97,6	101,6	40,0	152,5	1.490

DN	A	B	C	F	gr
25	65,0	65,0	22,4	37-8	355
38	85,0	85,0	35,1	50-8	605
51	110,0	110,0	47,8	64-8	910
63	135,0	135,0	60,5	77-8	1.425
76	155,0	155,0	72,9	91-8	2.050
101	192,5	192,5	97,6	118-8	3.530

DN	A	C	F	gr
25	65,0	22,4	37-8	190
38	85,0	35,1	50-8	380
51	110,0	47,8	64-8	540
63	135,0	60,5	77-8	880
76	155,0	72,9	91-8	1.420
101	192,5	97,6	118-8	2.580

DN	A	C	D	E	R	gr
25	125,0	22,4	25,4	50,0	75,0	190
38	132,0	35,1	38,1	50,0	82,0	300
51	200,0	47,8	50,8	50,0	150,0	630
63	230,0	60,5	63,5	50,0	180,0	870
76	278,0	72,9	76,2	50,0	228,0	1.600
101	354,0	97,6	101,6	50,0	304,0	2.800

CURVA 180° EL.  
BEND 180° PE.  
COUDE 180° BL.  
CODO 180° EL.

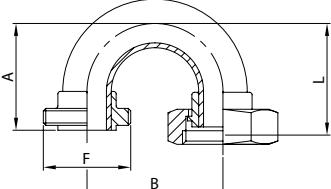
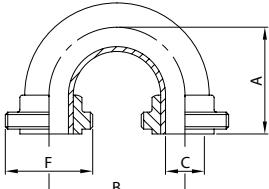
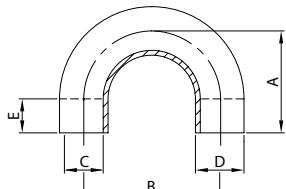
CURVA 180° BF./BF. MT.  
BEND 180° MP./MP. ED.  
COUDE 180° PF./PF. DN.  
CODO 180° M./C. T. MD.

CURVA 180° BF./BL. G. MT.  
BEND 180° MP./L. N. ED.  
COUDE 180° PF./PL. E. DN.  
CODO 180° M./M. MD.

390 L

391 I

393 I



DN	A	B	C	D	E	gr
25	86,5	73,0	22,4	25,4	50,0	170
38	102,0	104,0	35,1	38,1	50,0	250
51	125,5	151,0	47,8	50,8	50,0	480
63	140,0	180,0	60,5	63,5	50,0	700
76	147,0	194,0	72,9	76,2	50,0	1.180
101	150,0	220,0	97,6	101,6	40,0	2.400

DN	A	B	C	F	gr
25	86,5	73,0	22,4	37-8	270
38	102,0	104,0	35,1	50-8	450
51	125,5	151,0	47,8	64-8	720
63	140,0	180,0	60,5	77-8	1.090
76	147,0	194,0	72,9	91-8	1.700
101	150,0	220,0	97,6	118-8	3.440

DN	A	B	F	L	gr
25	86,5	73,0	37-8	86,5	435
38	112,0	104,0	50-8	112,0	675
51	125,5	151,0	64-8	125,5	1.090
63	140,0	180,0	77-8	140,0	1.635
76	147,0	194,0	91-8	147,0	2.330
101	150,0	220,0	118-8	150,0	4.390





FILTRI  
FILTERS  
FILTRES  
FILTROS



## FILTRI

- Parti filtranti facilmente estraibili.
- Produzione standard: cartucce filtranti in lamiera con fori da 1 mm. A richiesta, disponibili con fori da 0,5 mm, 2 mm o 3 mm ed eventuale copertura con rete metallica da 80 a 500 mesh.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.
- Max. pressione di esercizio: 5 bar.

## FILTERS

- Filtering parts easily extractable.
- Standard production: sheet metal filter cartridges with 1 mm holes. On request available with 0.5 mm, 2 mm or 3 mm holes and metal screen cover from 80 to 500 meshes.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.
- Maximum operating pressure: 5 bars.

## FILTRES

- Parties filtrantes facilement extractibles.
- Production standard: cartouches filtrantes en tôle avec trous de 1 mm. Sur demande, disponibles avec des trous de 0,5 mm, 2 mm ou 3 mm et éventuelle couverture avec une grille métallique de 80 à 500 mesh.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.
- Pression d'exploitation maximum: 5 bars.

## FILTROS

- Las piezas filtrantes se pueden extraer fácilmente.
- Producción estándar: cartuchos filtrantes de chapa con orificios de 1 mm. A pedido, se pueden suministrar con orificios de 0,5 mm, 2 mm o 3 mm y, eventualmente, con cobertura de red metálica de 80 a 500 mesh.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.
- Máxima presión de ejercicio: 5 bares.

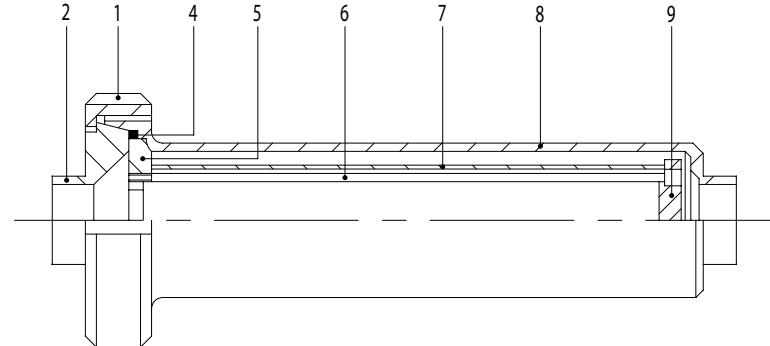


FILTRI  
FILTERS  
FILTRES  
FILTROS



FILTRO LINEA  
LINE FILTER

FILTRE DROIT  
FILTRO LÍNEA



- |  |  |
|--|--|
| 1. Girella<br>Nut<br>Écrou<br>Tuerca   | 6. Tirante<br>Tie rod<br>Tirant<br>Tirante                             |
| 2. Riduzione conica<br>Plain connection<br>Embout lisse réduit<br>Casquillo reducido | 7. Rete filtro<br>Filter<br>Tamis<br>Red filtro                        |
| 4. Guarnizione<br>Seal<br>Joint<br>Junta   | 8. Corpo filtro<br>Filter casing<br>Corps du filtre<br>Cuerpo filtro   |
| 5. Disco superiore<br>Upper disk<br>Disque supérieur<br>Disco superior               | 9. Disco inferiore<br>Lower disk<br>Disque inférieur<br>Disco inferior |

CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	4" 101	D 100 101	4" 104	D 100 104	Mat.	Part. o agg.
1	121	D	65	65	65	65	65	65	65	80	80	100	100	100	100	100	100	4L/6L	
2	116	D	65/25	65/28	65/34	65/38	65/40	65/51	65/52	80/63	80/70	100/76	100/85	100/101	100/101	100/104	100/104	4L/6L	
4	131	D	65	65	65	65	65	65	65	80	80	100	100	100	100	100	100	N	
5	400		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/70	63/70	76/85	76/85	101	101	101	101	6L	05
6	400		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	101	101	101	101	6L	06
7	400		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/70	63/70	76/85	76/85	101	101	101	101	6L	07
8	400		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	101	101	101	101	4L/6L	08
9	400	L	25	28	34	38	40	51	52	63	70	76	85	101	101	101	101	6L	09

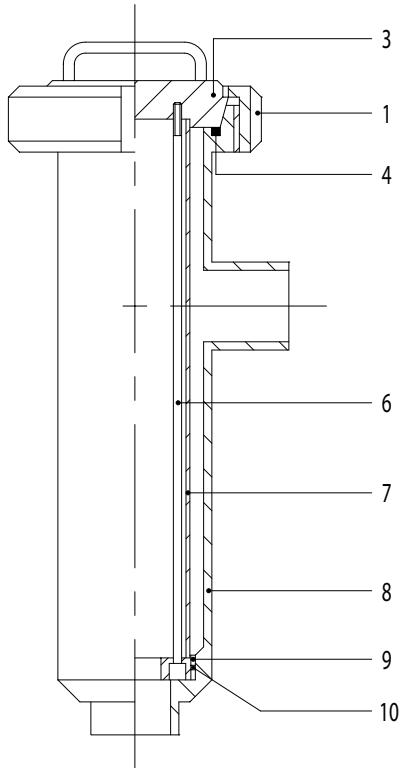


FILTRI  
FILTERS  
FILTRES  
FILTROS



FILTRO 90°  
90° FILTER

FILTRE 90°  
FILTRO 90°



- |   |  |
|---|--|
| 1. Girella<br>Nut<br>Écrou<br>Tuerca                              | 7. Rete filtro<br>Filter<br>Tamis<br>Red filtro                        |
| 3. Tappo speciale<br>Blank<br>Bouchon à poignée<br>Tapón especial | 8. Corpo filtro<br>Filter casing<br>Corps du filtre<br>Cuerpo filtro   |
| 4. Guarnizione<br>Seal<br>Joint<br>Junta                          | 9. Disco inferiore<br>Lower disk<br>Disque inférieur<br>Disco inferior |
| 6. Tirante<br>Tie rod<br>Tirant<br>Tirante                        | 10. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR   |

CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	4" 101	D 100 101	4" 104	D 100 104	Mat.	Part. o agg.
1	121	D	65	65	65	65	65	65	65	80	80	100	100	100	100	100	100	4L/6L	
3	410		65	65	65	65	65	65	65	80	80	100	100	100	100	100	100	4L/6L	03
4	131	D	65	65	65	65	65	65	65	80	80	100	100	100	100	100	100	N	
6	410		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	101	101	101	101	6L	06
7	410		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/70	63/70	76/85	76/85	101	101	101	101	6L	07
8	410		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	101	101	101	101	4L/6L	08
9	410	L	25	28	34	38	40	51	52	63	70	76	85	101	101	101	101	6L	09
10	OR		159	159	159	159	159	159	159	174	174	4350	4350	3375	3375	3375	3375	N	



FILTRI  
FILTERS  
FILTRES  
FILTROS



PORTATA M<sup>3</sup>/H  
FLOWRATE M<sup>3</sup>/H

DÉBIT M<sup>3</sup>/H  
CAUDAL M<sup>3</sup>/H

Velocità del fluido m/sec

Fluid speed m/sec

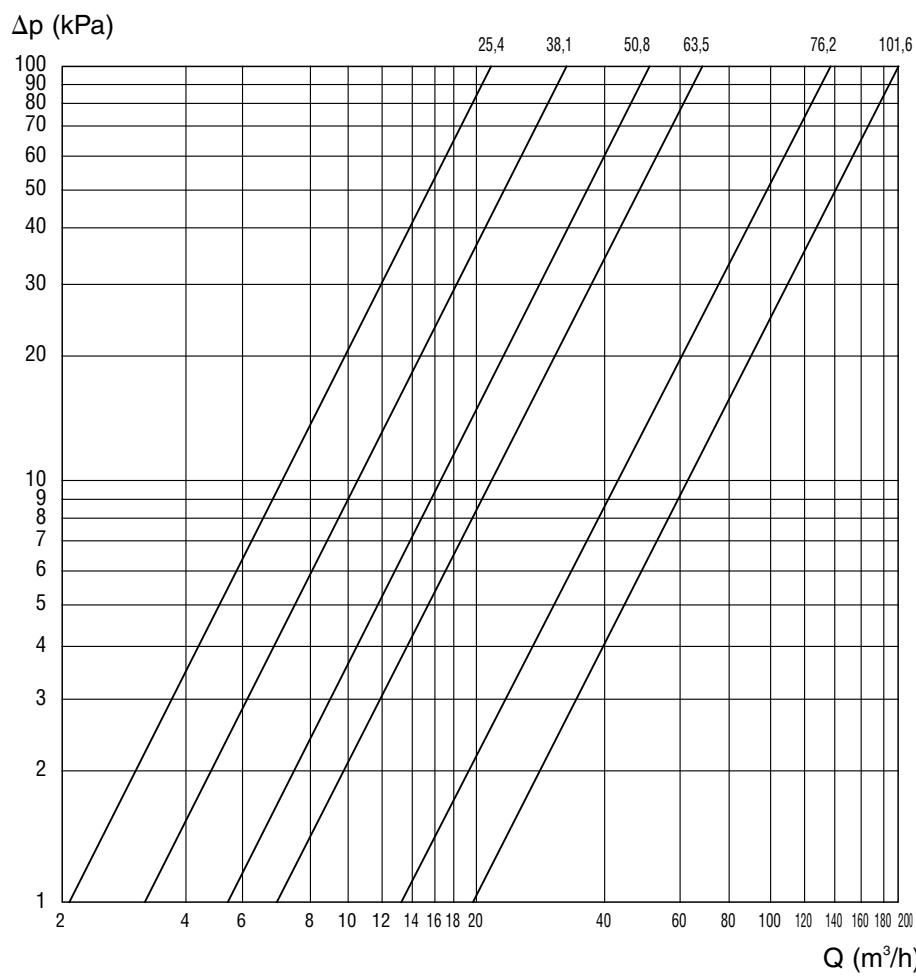
Vitesse du fluide m/sec

Velocidad del fluido m/sec

	0,50	1,00	1,50	2,00
25,4	0,745	1,494	2,239	2,988
28	0,882	1,764	2,646	3,528
34	1,447	2,894	4,341	5,788
38,1	1,785	3,571	5,356	7,142
40	2,041	4,082	6,123	8,164
50,8	3,294	6,588	9,882	13,176
52	3,531	7,063	10,594	14,126
63,5	5,191	10,382	15,573	20,764
70	6,152	11,336	18,460	24,616
76,2	7,509	15,019	22,528	30,038
85	9,270	18,540	27,810	37,080
101,6	14,130	28,260	42,390	56,520

PERDITE DI CARICO  
PRESSURE DROP

PERTES DE CHARGE  
PÉRDIDA DE CARGA





## SPECOLE

- Di solida e robusta costruzione.
- Specole in linea con vetro in borosilicato; a richiesta protezione esterna in plexiglas. Specole piane con dischi in vetro calciosodico temperato.
- Corredate di speciali tiranti e guarnizioni per eliminare le pressioni di carico e le vibrazioni sul vetro.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.
- Temperatura max. di esercizio: 230°C (450°F) per specole in linea, 130° (270°F) per specole piane.

## SIGHT GLASSES

- High strength construction.
- Tubes for line sight glasses in borosilicate glass, on request plexiglas external guard. Discs for radial sight glasses in sodalime glass.
- Equipped with special tie rods and seals to prevent load pressures and vibrations on the glass.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.
- Maximum operating temperature: 230°C (450°F) for line sight glasses, 130° (270°F) for radial sight glasses.

## REGARDS

- Fabrication solide et robuste.
- Regards tubulaires avec verre en borosilicate; sur demande, protection externe en plexiglas. Regards plats avec verre sodocalcique.
- Munis de tirants spéciaux et de joints pour éliminer les pressions de charge et les vibrations sur le verre.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.
- Température de service maximum: 230°C (450°F) pour regards tubulaires, 130° (270°F) pour regards plats.

## MIRILLAS

- Fabricación sólida y robusta.
- Mirillas en línea con vidrio de borosilicato; a pedido, protección exterior de plexiglás. Mirillas planas con vidrio sodocálcico.
- Equipadas con tirantes especiales y con juntas para eliminar las presiones de carga y las vibraciones sobre el vidrio.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.
- Max. temperatura de ejercicio: 230°C (450°F) para mirillas en línea, 130° (270°F) para mirillas planas.

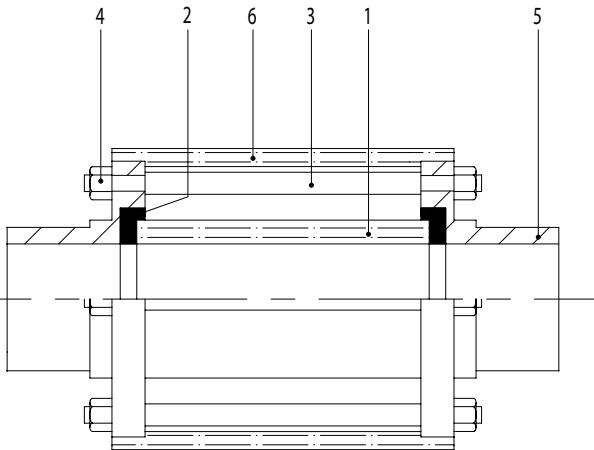


**SPECOLE**  
**SIGHT GLASSES**  
**REGARDS**  
**MIRILLAS**



**SPECOLA**  
**SIGHT GLASS**

**REGARD**  
**MIRILLA**



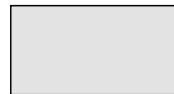
- |  |   |
|--|---|
| 1. Tubo vetro<br>Glass tube<br>Tube verre<br>Tubo vidrio | 4. Dado autobloccante<br>Self-locking nut<br>Écrou de sûreté<br>Tuerca de seguridad |
| 2. Guarnizione<br>Seal<br>Joint<br>Junta                 | 5. Flangia<br>Flange<br>Bride<br>Brida  |
| 3. Tirante<br>Tie rod<br>Tirant<br>Tirante               | 6. Protezione<br>Guard<br>Protection<br>Protección                                  |

DIMENSIONI VETRO E MAX. PRESSIONE DI ESERCIZIO  
GLASS DIMENSION AND MAXIMUM OPERATING PRESSURE  
DIMENSION VERRE ET PRESSION DE SERVICE MAXIMUM  
DIMENSIONES VIDRIO Y PRESIÓN MÁXIMA DE EJERCICIO

DN	Ø E E Ø Ø E Ø E	Spessore Thickness Épaisseur Espesor	Lunghezza Length Longueur Longitud	Bar
25	30 mm	4,5 mm	90 mm	16
28	32 mm	3 mm	90 mm	8
34	40 mm	3,2 mm	90 mm	8
38/40	45 mm	5 mm	90 mm	14
51/52	60 mm	5 mm	90 mm	10
63	70 mm	5 mm	90 mm	9
70	75 mm	5 mm	90 mm	8
76	80 mm	5 mm	90 mm	7
85	90 mm	5 mm	90 mm	6
101	115 mm	6 mm	90 mm	6

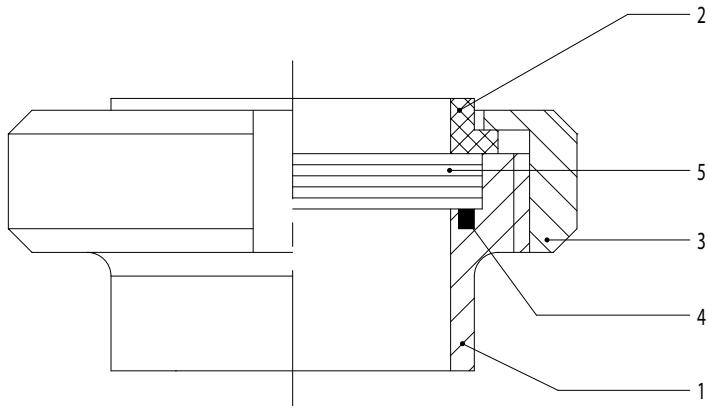
CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	4" 101	D 100 101	4" 104	D 100 104	Mat.	Part. o agg.
1	450		25	28	34	38	40	51	52	63	70	76	85	101	101	104	104	P	01
2	450		25	28	34	38/40	38/40	51/52	51/52	63	70	76	85	101	101	104	104	S/E/V/T	02
3	450		25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	4L	03
4	450		25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	25/104	4L	04
5	450	L	25	28	34	38	40	51	52	63	70	76	85	101	101	104	104	4L/6L	05
6	450		25	28	34	38/40	38/40	51/52	51/52	63	70	76	85	101/104	101/104	101/104	101/104	PG	06



SPECOLA PIANA  
RADIAL SIGHT GLASS

REGARD PLAT  
MIRILLA PLANA



- |  |  |
|--|--|
| 1. Bocchettone filettato<br>Male part<br>Nez fileté<br>Macho racor | 4. Guarnizione<br>Seal<br>Joint<br>Junta |
| 2. Guarnizione vetro<br>Glass seal<br>Joint verre<br>Junta vidrio  | 5. Vetro<br>Glass<br>Verre<br>Vidrio     |
| 3. Girella<br>Nut<br>Écrou<br>Tuerca                               |  |

DIMENSIONI VETRO E MAX. PRESSIONE DI ESERCIZIO  
GLASS DIMENSION AND MAXIMUM OPERATING PRESSURE  
DIMENSION VERRE ET PRESSION DE SERVICE MAXIMUM  
DIMENSIONES VIDRIO Y PRESIÓN MÁXIMA DE EJERCICIO

DN	Ø E E Ø Ø E Ø E	Spessore Thickness Épaisseur Espesor	Bar
25	34 mm	6,5 mm	30
28	44 mm	6,5 mm	25
34	50 mm	6,5 mm	16,5
38	52 mm	6,5 mm	15
40	56 mm	6,5 mm	12,5
51	64 mm	7 mm	10,5
52	68 mm	7 mm	9,5
63	77 mm	8 mm	9
70	80 mm	8 mm	7,5
76	90 mm	8 mm	6,5
85	99 mm	8 mm	5,5
101	118 mm	10 mm	5,5
104	117 mm	10 mm	5,5



SPECOLE  
SIGHT GLASSES  
REGARDS  
MIRILLAS



CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	4" 101	D 100 101	4" 104	D 100 104	Mat.	Part. o agg.
1	441	D		25	32		40		50		65		80		100		104	4/6	01
1	441	S	25			38		51		63		76		101		104		4/6	01
1	441	B	25			38		51		63		76		101				4/6	01
1	441	I	25			38		51		63		76		101				4/6	01
2	440	D		25	32		40		50		65		80		100		104	T	02
2	440	S	25			38		51		63		76		101		104		T	02
2	440	B	25			38		51		63		76		101				T	02
2	440	I	25			38		51		63		76		101				T	02
3	121	D		25	32		40		50		65		80		100		104	4	
3	121	S	25			38		51		63		76		101		104		4	
3	121	B	25			38		51		63		76		101				4	
3	121	I	25			38		51		63		76		101				4	
4	131	D		25	32		40		50		65		80		100		104	N	
4	131	S	25			38		51		63		76		101		104		E	
4	131	B	25			38		51		63		76		101				E	
4	131	I	25			38		51		63		76		101				E	
5	440	D		25	32		40		50		65		80		100		104	P	05
5	440	S	25			38		51		63		76		101		104		P	05
5	440	B	25			38		51		63		76		101				P	05
5	440	I	25			38		51		63		76		101	100		104	P	05



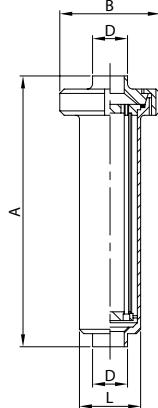
FILTRI  
FILTERS  
FILTRES  
FILTROS



DIN

FILTRO LINEA EL.  
LINE FILTER PE.  
FILTRE DROIT BL.  
FILTRO LÍNEA EL.

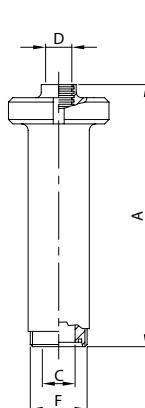
400 L



DN	A	B	D	L	gr
28	320,0	112,0	28,0	70,0	3.000
34	320,0	112,0	34,0	70,0	3.000
40	320,0	112,0	40,0	70,0	3.000
52	420,0	112,0	52,0	70,0	3.300
70	516,0	127,0	70,0	85,0	4.650
85	575,0	148,0	85,0	102,0	5.700
101	700,0	148,0	101,6	129,0	7.000
104	700,0	148,0	104,0	129,0	7.000

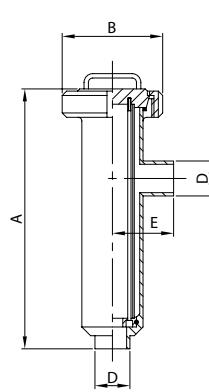
FILTRO LINEA EF./BC. MR.  
LINE FILTER ME./TP. EG.  
FILTRE DROIT BF./PC. DR.  
FILTRO LÍNEA ER./C. MR.

401 D



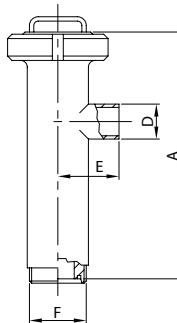
FILTRO 90° EL.  
90° FILTER PE.  
FILTRE 90° BL.  
FILTRO 90° EL.

410 L



FILTRO 90° EF./EL.  
90° FILTER ME./PE.  
FILTRE 90° BF./BL.  
FILTRO 90° ER./EL.

411 D



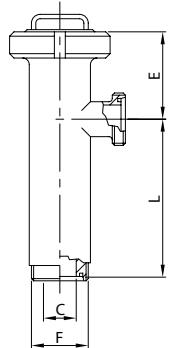
DN	A	C	D	F	gr
25	320,0	25,0	28,0	52-6	3.130
32	320,0	31,0	34,0	58-6	3.170
40	320,0	37,0	40,0	65-6	3.210
50	420,0	49,0	52,0	78-6	3.580
65	521,0	66,0	70,0	95-6	5.030
80	584,0	81,0	85,0	110-4	6.300
100	690,0	97,6	101,6	130-4	8.000
104	690,0	100,0	104,0	130-4	8.000

DN	A	B	D	E	gr
28	306,0	112,0	28,0	70,0	3.100
34	306,0	112,0	34,0	70,0	3.100
40	306,0	112,0	40,0	70,0	3.100
52	406,0	112,0	52,0	72,0	3.400
70	503,0	127,0	70,0	85,0	4.800
85	561,0	148,0	85,0	96,0	5.900
101	662,0	148,0	101,6	117,0	7.200
104	662,0	148,0	104,0	117,0	7.200

DN	A	D	E	F	gr
25	300,0	28,0	70,0	52-6	3.230
32	300,0	34,0	70,0	58-6	3.270
40	300,0	40,0	70,0	65-6	3.310
50	398,0	52,0	72,0	78-6	3.680
65	495,0	70,0	85,0	95-6	5.180
80	553,0	85,0	96,0	110-4	6.700
100	642,0	101,6	117,0	130-4	8.200
104	642,0	104,0	117,0	130-4	8.200

FILTRO 90° EF./EF.  
90° FILTER ME./ME.  
FILTRE 90° BF./BF.  
FILTRO 90° ER./ER.

412 D



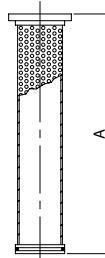
RIVESTIMENTO MESH  
MESH COVERING  
MESH GRILLE  
REVESTIMIENTO MESH

400 612



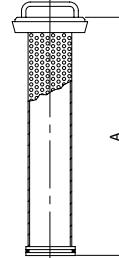
CARTUCCIA FILTRO LINEA  
LINE FILTER CARTRIDGE  
TAMIS FILTRE DROIT  
CARTUCHO FILTRO LÍNEA

400 410



CARTUCCIA FILTRO 90°  
90° FILTER CARTRIDGE  
TAMIS FILTRE 90°  
CARTUCHO FILTRO 90°

410 410



DN	C	E	F	L	gr
25	25,0	100,0	52-6	200,0	3.360
32	31,0	100,0	58-6	200,0	3.440
40	37,0	100,0	65-6	200,0	3.520
50	49,0	115,0	78-6	283,0	3.960
65	66,0	117,0	95-6	378,0	5.560
80	81,0	131,0	110-4	422,0	7.100
100	97,6	120,0	130-4	522,0	9.200
104	100,0	120,0	130-4	522,0	9.200

DN	MESH			
25/40	100/200	300	400	500
51/52	100/200	300	400	500
63/70	100/200	300	400	500
76/85	100/200	300	400	500
101/104	100/200	300	400	500

DN	A
25/40	271,0
51/52	371,0
63/70	466,0
76/85	516,0
101/104	621,0

DN	A
25/40	278,0
51/52	378,0
63/70	473,0
76/85	527,0
101/104	636,0



**SPECOLE**  
SIGHT GLASSES  
REGARDS  
MIRILLAS



**DIN**

**SPECOLA EL.**  
SIGHT GLASS PE.  
REGARD BL.  
MIRILLA EL.

**SPECOLA EF./EF.**  
SIGHT GLASS ME./ME.  
REGARD BF./BF.  
MIRILLA ER./ER.

**SPECOLA BC. G./EF. MT.**  
SIGHT GLASS TP. N./ME. ED.  
REGARD PC. E./BF. DN.  
MIRILLA C. T./ER. MD.

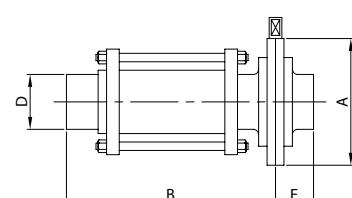
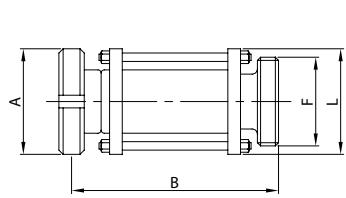
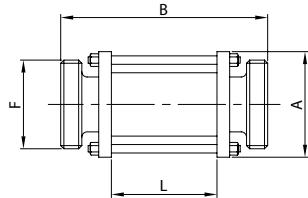
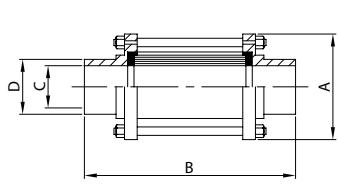
**SPECOLA EL. + V. F. EL.**  
SIGHT GLASS PE. + B. V. PE.  
REGARD BL. + V. P. BL.  
MIRILLA EL. + V. M. EL.

**450 L**

**452 D**

**454 D**

**460 L**



DN	A	B	C	D	gr
28	60,0	143,0	25,0	28,0	400
34	65,0	149,0	31,0	34,0	500
40	70,0	153,0	37,0	40,0	680
52	85,0	157,0	49,0	52,0	860
70	100,0	163,0	66,0	70,0	1.090
85	115,0	169,0	81,0	85,0	1.280
101	140,0	173,0	97,6	101,6	2.760
104	140,0	173,0	100,0	104,0	2.760

DN	A	B	F	L	gr
25	60,0	157,0	52-6	83,0	610
32	65,0	157,0	58-6	83,0	700
40	70,0	157,0	65-6	83,0	920
50	85,0	157,0	78-6	83,0	1.230
65	100,0	161,0	95-6	83,0	1.520
80	115,0	171,0	110-4	83,0	1.770
100	140,0	171,0	130-4	83,0	3.370
104	140,0	171,0	130-4	83,0	3.370

DN	A	B	F	L	gr
25	63,0	157,0	52-6	60,0	750
32	70,0	160,0	58-6	65,0	900
40	78,0	161,0	65-6	70,0	1.180
50	92,0	163,0	78-6	85,0	1.600
65	112,0	169,0	95-6	100,0	2.200
80	127,0	179,0	110-4	115,0	2.630
100	148,0	181,0	130-4	140,0	4.790
104	148,0	181,0	130-4	140,0	4.790

DN	A	B	D	E	gr
28	79,0	151,0	28,0	34,0	760
34	85,0	154,0	34,0	38,0	900
40	92,0	156,0	40,0	38,0	1.180
52	105,0	158,0	52,0	40,0	1.500
70	125,0	162,0	70,0	41,0	1.970
85	137,0	165,0	85,0	42,0	2.430
101	157,0	167,0	101,6	44,0	4.180
104	157,0	167,0	104,0	44,0	4.180

**SPECOLA EF. + V. F. EF.**  
SIGHT GLASS ME. + B. V. ME.  
REGARD BF. + V. P. BF.  
MIRILLA ER. + V. M. ER.

**SPECOLA PIANA ES.**  
SIGHT GLASS WE.  
INDIC. DE CIRC. PLAT BS.  
MIRILLA PLANA ES.

**SPECOLA PIANA EM.**  
SIGHT GLASS EE.  
INDIC. DE CIRC. PLAT BD.  
MIRILLA PLANA EM.

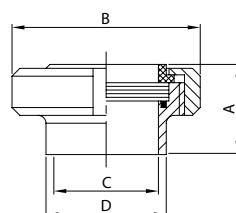
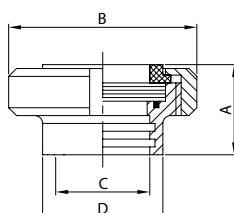
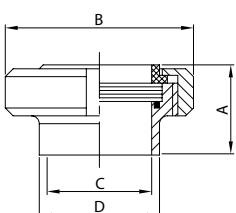
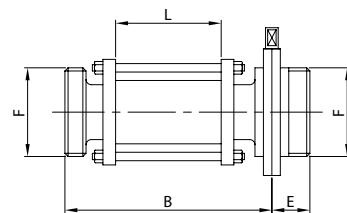
**SPECOLA PIANA ES.**  
SIGHT GLASS WE.  
INDIC. DE CIRC. PLAT BS.  
MIRILLA PLANA ES.

**462 D**

**441 D**

**442 D**

**443 D**



DN	B	E	F	L	gr
25	158,0	34,0	52-6	83,0	1.090
32	158,0	34,0	58-6	83,0	1.310
40	158,0	38,0	65-6	83,0	1.650
50	158,0	38,0	78-6	83,0	2.170
65	161,0	38,0	95-6	83,0	2.650
80	166,0	41,5	110-4	83,0	3.370
100	166,0	44,0	130-4	83,0	5.330
104	166,0	44,0	130-4	83,0	5.330

DN	A	B	C	D	gr
25	35,0	63,0	25,0	35,0	350
32	38,0	70,0	31,0	41,0	420
40	39,0	78,0	37,0	48,0	530
50	42,0	92,0	49,0	61,0	730
65	47,0	112,0	66,0	79,0	1.110
80	52,0	127,0	81,0	93,0	1.590
100	62,0	148,0	97,6	114,0	2.380
104	62,0	148,0	100,0	114,0	2.380

DN	A	B	C	D	gr
25	35,0	63,0	28,0	35,0	330
32	38,0	70,0	34,0	41,0	390
40	39,0	78,0	40,0	48,0	490
50	42,0	92,0	52,0	61,0	680
65	47,0	112,0	70,0	79,0	1.010
80	52,0	127,0	85,0	93,0	1.460
100	62,0	148,0	101,6	114,0	2.180
104	62,0	148,0	104,0	114,0	2.140

DN	A	B	C	D	gr
25	35,0	63,0	25,0	28,0	310
32	38,0	70,0	31,0	34,0	365
40	39,0	78,0	37,0	40,0	416
50	42,0	92,0	49,0	52,0	604
65	47,0	112,0	66,0	70,0	929
80	52,0	127,0	81,0	85,0	1.394
100	62,0	148,0	101,6	104,0	1.863
104	62,0	148,0	100,0	104,0	1.794



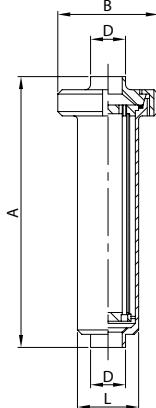
FILTRI  
FILTERS  
FILTRES  
FILTROS



SMS

FILTRO LINEA EL.  
LINE FILTER PE.  
FILTRE DROIT BL.  
FILTRO LÍNEA EL.

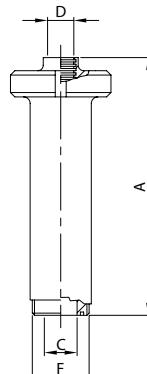
400 L



DN	A	B	D	L	gr
25	320,0	112,0	25,4	70,0	3.000
38	320,0	112,0	38,1	70,0	3.000
51	420,0	112,0	50,8	70,0	3.300
63	516,0	127,0	63,5	85,0	4.650
76	574,0	148,0	76,2	102,0	5.700
101	700,0	148,0	101,6	129,0	7.000

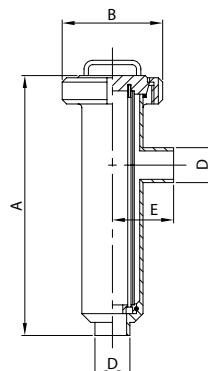
FILTRO LINEA EF./BL. MR.  
LINE FILTER ME./L. EG.  
FILTRE DROIT BF./PL. DR.  
FILTRO LÍNEA ER./C. MR.

401 S



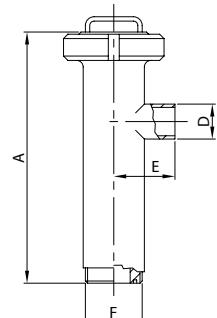
FILTRO 90° EL.  
90° FILTER PE.  
FILTRE 90° BL.  
FILTRO 90° EL.

410 L



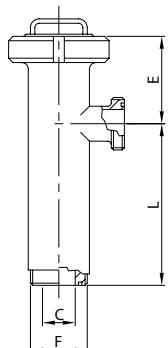
FILTRO 90° EF./EL.  
90° FILTER ME./PE.  
FILTRE 90° BF./BL.  
FILTRO 90° ER./EL.

411 S



FILTRO 90° EF./EF.  
90° FILTER ME./ME.  
FILTRE 90° BF./BF.  
FILTRO 90° ER./ER.

412 S



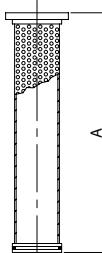
RIVESTIMENTO MESH  
MESH COVERING  
MESH GRILLE  
REVESTIMIENTO MESH

400 612



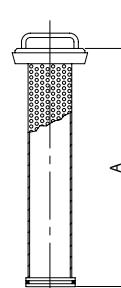
CARTUCCIA FILTRO LINEA  
LINE FILTER CARTRIDGE  
TAMIS FILTRE DROIT  
CARTUCHO FILTRO LÍNEA

400 410



CARTUCCIA FILTRO 90°  
90° FILTER CARTRIDGE  
TAMIS FILTRE 90°  
CARTUCHO FILTRO 90°

410 410



DN	C	E	F	L	gr
25	22,4	99,0	40-6	207,0	3.240
38	35,1	99,0	60-6	207,0	3.500
51	47,8	115,0	70-6	290,0	3.850
63	60,5	117,0	85-6	386,0	5.580
76	72,9	131,0	98-6	430,0	6.900
101	97,6	120,0	132-6	532,0	9.480

DN	MESH			
25/40	100/200	300	400	500
51/52	100/200	300	400	500
63/70	100/200	300	400	500
76/85	100/200	300	400	500
101	100/200	300	400	500

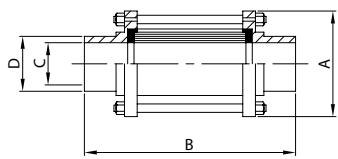
DN	A
25/40	271,0
51/52	371,0
63/70	466,0
76/85	516,0
101	621,0

DN	A
25/40	278,0
51/52	378,0
63/70	473,0
76/85	527,0
101	636,0



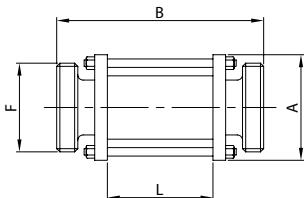
**SPECOLA EL.**  
**SIGHT GLASS PE.**  
**REGARD BL.**  
**MIRILLA EL.**

**450 L**



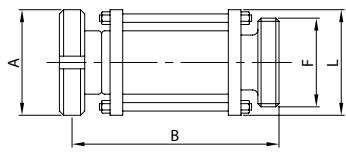
**SPECOLA EF./EF.**  
**SIGHT GLASS ME./ME.**  
**REGARD BF./BF.**  
**MIRILLA ER./ER.**

**452 S**



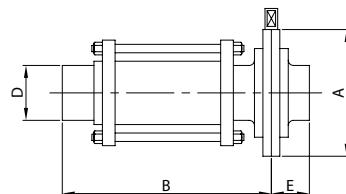
**SPECOLA BL. G./EF. MT.**  
**SIGHT GLASS L. N./ME. ED.**  
**REGARD PL. E./BF. DN.**  
**MIRILLA C. T./ER. MD.**

**454 S**



**SPECOLA EL. + V. F. EL.**  
**SIGHT GLASS PE. + B. V. PE.**  
**REGARD BL. + V. P. BL.**  
**MIRILLA EL. + V. M. EL.**

**460 L**



DN	A	B	C	D	gr
25	55,0	147,0	22,4	25,4	400
38	70,0	153,0	35,1	38,1	620
51	85,0	153,0	47,8	50,8	860
63	95,0	163,0	60,5	63,5	950
76	105,0	173,0	72,9	76,2	1.100
101	140,0	173,0	97,6	101,6	2.760

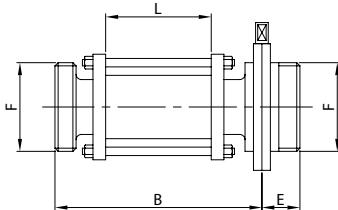
DN	A	B	F	L	gr
25	55,0	165,0	40-6	83,0	550
38	70,0	165,0	60-6	83,0	940
51	85,0	165,0	70-6	83,0	1.270
63	95,0	165,0	85-6	83,0	1.400
76	105,0	165,0	98-6	83,0	1.710
101	140,0	183,0	132-6	83,0	3.760

DN	A	B	F	L	gr
25	51,0	156,0	40-6	55,0	630
38	74,0	159,0	60-6	70,0	1.170
51	84,0	159,0	70-6	85,0	1.500
63	100,0	164,0	85-6	95,0	1.840
76	114,0	169,0	98-6	105,0	2.360
101	150,0	178,0	132-6	140,0	4.980

DN	A	B	D	E	gr
25	79,0	153,0	25,4	34,0	760
38	85,0	156,0	38,1	38,0	1.020
51	105,0	156,0	50,8	40,0	1.500
63	112,0	162,0	63,5	40,0	1.680
76	125,0	167,0	76,2	41,0	1.980
101	157,0	167,0	101,6	44,0	4.180

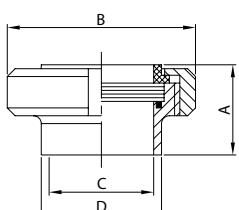
**SPECOLA EF. + V. F. EF.**  
**SIGHT GLASS ME. + B. V. ME.**  
**REGARD BF. + V. P. BF.**  
**MIRILLA ER. + V. M. ER.**

**462 S**



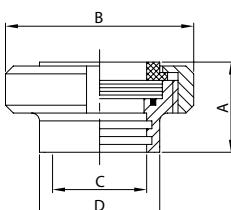
**SPECOLA PIANA ES.**  
**SIGHT GLASS WE.**  
**INDIC. DE CIRC. PLAT BS.**  
**MIRILLA PLANAS ES.**

**441 S**



**SPECOLA PIANA EM.**  
**SIGHT GLASS EE.**  
**INDIC. DE CIRC. PLAT BD.**  
**MIRILLA PLANAS EM.**

**442 S**



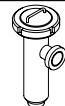
DN	B	E	F	L	gr
25	162,0	34,0	40-6	83,0	990
38	162,0	38,0	60-6	83,0	1.620
51	162,0	40,0	70-6	83,0	2.120
63	163,0	40,0	85-6	83,0	2.450
76	163,0	41,0	98-6	83,0	3.090
101	172,0	44,0	132-6	83,0	5.730

DN	A	B	C	D	gr
25	29,0	51,0	22,4	25,4	220
38	33,0	74,0	35,1	38,1	500
51	36,0	84,0	47,8	50,8	540
63	41,0	100,0	60,5	63,5	990
76	48,0	114,0	72,9	76,2	1.250
101	40,0	150,0	97,6	101,6	2.030

DN	A	B	C	D	gr
25	29,0	51,0	25,4	32,0	220
38	33,0	74,0	38,1	48,0	500
51	36,0	84,0	50,8	61,0	540
63	41,0	100,0	63,5	73,5	990
76	48,0	114,0	76,2	86,0	1.250
101	40,0	154,0	101,6	116,0	2.030



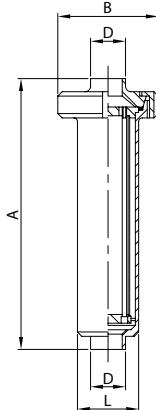
FILTRI  
FILTERS  
FILTRES  
FILTROS



RJT BS

FILTRO LINEA EL.  
LINE FILTER PE.  
FILTRE DROIT BL.  
FILTRO LÍNEA EL.

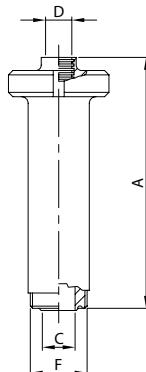
400 L



DN	A	B	D	L	gr
25	320,0	112,0	25,4	70,0	3.000
38	320,0	112,0	38,1	70,0	3.000
51	420,0	112,0	50,8	70,0	3.300
63	516,0	127,0	63,5	85,0	4.650
76	574,0	148,0	76,2	102,0	5.700
101	700,0	148,0	101,6	129,0	7.000

FILTRO LINEA EF./BL. MR.  
LINE FILTER ME./L. EG.  
FILTRE DROIT BF./PL. DR.  
FILTRO LÍNEA ER./C. MR.

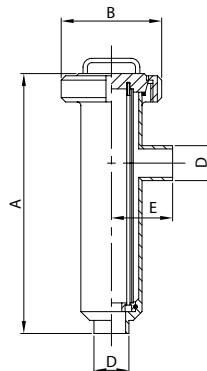
401 B



DN	A	C	D	F	gr
25	327,0	22,1	25,4	46-8	3.070
38	327,0	34,8	38,1	58-8	3.200
51	427,0	47,5	50,8	73-6	3.525
63	529,0	60,2	63,5	85-6	5.040
76	594,0	72,9	76,2	98-6	6.200
101	700,0	97,6	101,6	123-6	8.140

FILTRO 90° EL.  
90° FILTER PE.  
FILTRE 90° BL.  
FILTRO 90° EL.

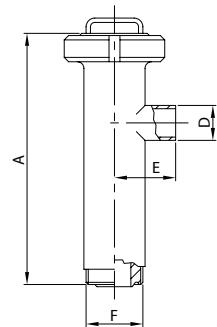
410 L



DN	A	B	D	E	gr
25	307,0	112,0	25,4	70,0	3.100
38	307,0	112,0	38,1	70,0	3.100
51	407,0	112,0	50,8	72,0	3.400
63	503,0	127,0	63,5	85,0	4.800
76	561,0	148,0	76,2	96,0	5.900
101	662,0	148,0	101,6	117,0	7.200

FILTRO 90° EF./EL.  
90° FILTER ME./PE.  
FILTRE 90° BF./BL.  
FILTRO 90° ER./EL.

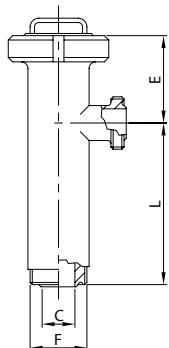
411 B



DN	A	D	E	F	gr
25	306,0	25,4	70,0	46-8	3.200
38	306,0	38,1	70,0	58-8	3.250
51	405,0	50,8	72,0	73-6	3.630
63	503,0	63,5	85,0	85-6	5.090
76	561,0	76,2	96,0	98-6	6.260
101	652,0	101,6	117,0	123-6	7.730

FILTRO 90° EF./EF.  
90° FILTER ME./ME.  
FILTRE 90° BF./BF.  
FILTRO 90° ER./ER.

412 B



DN	C	E	F	L	gr
25	22,1	99,0	46-8	207,0	3.300
38	34,8	99,0	58-8	207,0	3.400
51	47,5	115,0	73-6	290,0	3.870
63	60,2	117,0	85-6	386,0	5.380
76	72,9	131,0	98-6	430,0	6.630
101	97,6	120,0	123-6	532,0	8.600

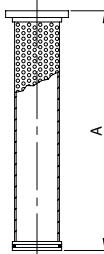
RIVESTIMENTO MESH  
MESH COVERING  
MESH GRILLE  
REVESTIMIENTO MESH

400 612



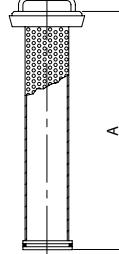
CARTUCCIA FILTRO LINEA  
LINE FILTER CARTRIDGE  
TAMIS FILTRE DROIT  
CARTUCHO FILTRO LÍNEA

400 410



CARTUCCIA FILTRO 90°  
90° FILTER CARTRIDGE  
TAMIS FILTRE 90°  
CARTUCHO FILTRO 90°

410 410



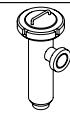
DN	MESH			
25/40	100/200	300	400	500
51/52	100/200	300	400	500
63/70	100/200	300	400	500
76/85	100/200	300	400	500
101	100/200	300	400	500

DN	A
25/40	271,0
51/52	371,0
63/70	466,0
76/85	516,0
101	621,0

DN	A
25/40	278,0
51/52	378,0
63/70	473,0
76/85	527,0
101	636,0



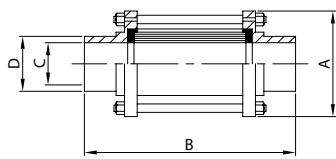
SPECOLE  
SIGHT GLASSES  
REGARDS  
MIRILLAS



RJT BS

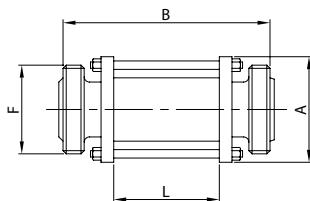
SPECOLA EL.  
SIGHT GLASS PE.  
REGARD BL.  
MIRILLA EL.

450 L



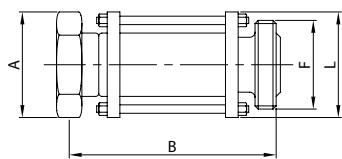
SPECOLA EF./EF.  
SIGHT GLASS ME./ME.  
REGARD BF./BF.  
MIRILLA ER./ER.

452 B



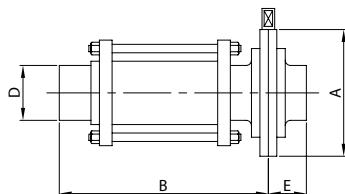
SPECOLA BL. G./EF. MT.  
SIGHT GLASS L. N./ME. ED.  
REGARD PL. E./BF. DN.  
MIRILLA C. T./ER. MD.

454 B



SPECOLA EL. + V. F. EL.  
SIGHT GLASS PE. + B. V. PE.  
REGARD BL. + V. P. BL.  
MIRILLA EL. + V. M. EL.

460 L



DN	A	B	C	D	gr
25	55,0	147,0	22,4	25,4	400
38	70,0	153,0	35,1	38,1	620
51	85,0	153,0	47,8	50,8	860
63	95,0	163,0	60,5	63,5	950
76	105,0	173,0	72,9	76,2	1.100
101	140,0	173,0	97,6	101,6	2.760

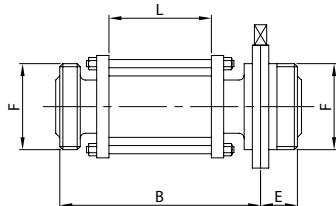
DN	A	B	F	L	gr
25	55,0	155,6	46-8	83,0	550
38	70,0	155,6	58-8	83,0	940
51	85,0	155,6	73-6	83,0	1.270
63	95,0	155,6	85-6	83,0	1.400
76	105,0	155,6	98-6	83,0	1.710
101	140,0	155,6	123-6	83,0	3.760

DN	A	B	F	L	gr
25	51,0	163,3	46-8	55,0	630
38	65,0	166,3	58-8	70,0	1.080
51	80,0	166,3	73-6	85,0	1.480
63	92,0	168,3	85-6	95,0	1.830
76	104,0	173,3	98-6	105,0	2.120
101	130,0	173,3	123-6	140,0	4.170

DN	A	B	D	E	gr
25	79,0	153,0	25,4	34,0	760
38	85,0	156,0	38,1	38,0	1.020
51	105,0	156,0	50,8	40,0	1.500
63	112,0	162,0	63,5	40,0	1.680
76	125,0	167,0	76,2	41,0	1.980
101	157,0	167,0	101,6	44,0	4.180

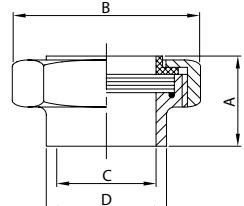
SPECOLA EF. + V. F. EF.  
SIGHT GLASS ME. + B. V. ME.  
REGARD BF. + V. P. BF.  
MIRILLA ER. + V. M. ER.

462 B



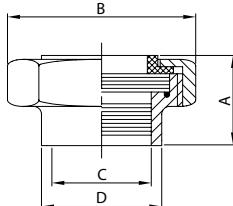
SPECOLA PIANA ES.  
SIGHT GLASS WE.  
INDIC. DE CIRC. PLAT BS.  
MIRILLA PLANA ES.

441 B



SPECOLA PIANA EM.  
SIGHT GLASS EE.  
INDIC. DE CIRC. PLAT BD.  
MIRILLA PLANA EM.

442 B



DN	B	E	F	L	gr
25	157,3	34,0	46-8	83,0	1.030
38	157,3	38,0	58-8	83,0	1.570
51	157,3	40,0	73-6	83,0	2.220
63	158,3	40,0	85-6	83,0	2.250
76	158,3	41,0	98-6	83,0	3.090
101	158,3	44,0	123-6	83,0	5.880

DN	A	B	C	D	gr
25	28,0	51,0	22,1	25,4	290
38	32,0	65,0	34,8	38,1	410
51	36,0	80,0	47,5	50,8	540
63	40,0	92,0	60,2	63,5	890
76	41,0	104,0	72,9	76,2	970
101	42,0	130,0	97,6	101,6	1.200

DN	A	B	C	D	gr
25	28,0	51,0	25,4	32,5	290
38	32,0	65,0	38,1	45,2	410
51	36,0	80,0	50,8	58,0	540
63	40,0	92,0	63,5	70,6	890
76	41,0	104,0	76,2	83,3	970
101	42,0	130,0	101,6	109,0	1.200



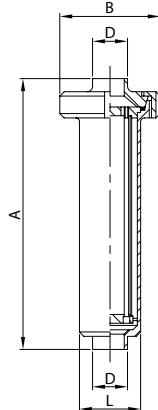
FILTRI  
FILTERS  
FILTRES  
FILTROS



ISS IDF

FILTRO LINEA EL.  
LINE FILTER PE.  
FILTRE DROIT BL.  
FILTRO LÍNEA EL.

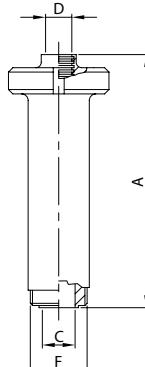
400 L



DN	A	B	D	L	gr
25	320,0	112,0	25,4	70,0	3.000
38	320,0	112,0	38,1	70,0	3.000
51	420,0	112,0	50,8	70,0	3.300
63	516,0	127,0	63,5	85,0	4.650
76	574,0	148,0	76,2	102,0	5.700
101	700,0	148,0	101,6	129,0	7.000

FILTRO LINEA EF./BL. MR.  
LINE FILTER ME./L. EG.  
FILTRE DROIT BF./PL. DR.  
FILTRO LÍNEA ER./C. MR.

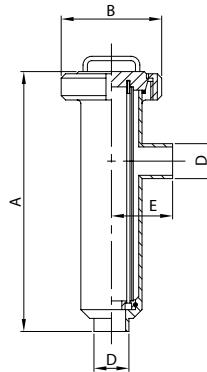
401 I



DN	A	C	D	F	gr
25	327,0	22,1	25,4	37-8	3.050
38	327,0	34,8	38,1	50-8	3.100
51	427,0	47,5	50,8	64-8	3.420
63	529,0	60,2	63,5	77-8	4.845
76	594,0	72,9	76,2	91-8	5.960
101	700,0	97,6	101,6	118-8	7.520

FILTRO 90° EL.  
90° FILTER PE.  
FILTRE 90° BL.  
FILTRO 90° EL.

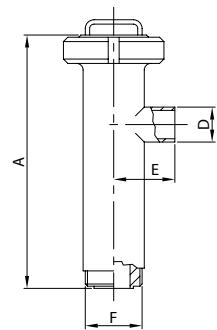
410 L



DN	A	B	D	E	gr
25	307,0	112,0	25,4	70,0	3.100
38	307,0	112,0	38,1	70,0	3.100
51	407,0	112,0	50,8	72,0	3.400
63	503,0	127,0	63,5	85,0	4.800
76	561,0	148,0	76,2	96,0	5.900
101	662,0	148,0	101,6	117,0	7.200

FILTRO 90° EF./EL.  
90° FILTER ME./PE.  
FILTRE 90° BF./BL.  
FILTRO 90° ER./EL.

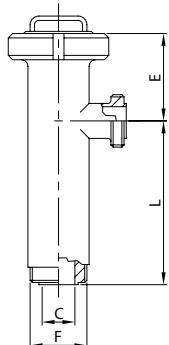
411 I



DN	A	D	E	F	gr
25	306,0	25,4	70,0	37-8	3.150
38	306,0	38,1	70,0	50-8	3.200
51	405,0	50,8	72,0	64-8	3.520
63	503,0	63,5	85,0	77-8	4.990
76	561,0	76,2	96,0	91-8	6.160
101	652,0	101,6	117,0	118-8	7.720

FILTRO 90° EF./EF.  
90° FILTER ME./ME.  
FILTRE 90° BF./BF.  
FILTRO 90° ER./ER.

412 I



DN	C	E	F	L	gr
25	22,1	99,0	37-8	207,0	3.200
38	34,8	99,0	50-8	207,0	3.300
51	47,5	115,0	64-8	290,0	3.620
63	60,2	117,0	77-8	386,0	5.190
76	72,9	131,0	91-8	430,0	6.420
101	97,6	120,0	118-8	532,0	8.240

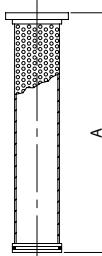
RIVESTIMENTO MESH  
MESH COVERING  
MESH GRILLE  
REVESTIMIENTO MESH

400 612



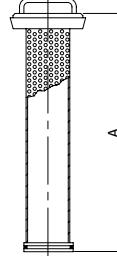
CARTUCCIA FILTRO LINEA  
LINE FILTER CARTRIDGE  
TAMIS FILTRE DROIT  
CARTUCHO FILTRO LÍNEA

400 410



CARTUCCIA FILTRO 90°  
90° FILTER CARTRIDGE  
TAMIS FILTRE 90°  
CARTUCHO FILTRO 90°

410 410



DN	MESH			
25/40	100/200	300	400	500
51/52	100/200	300	400	500
63/70	100/200	300	400	500
76/85	100/200	300	400	500
101	100/200	300	400	500

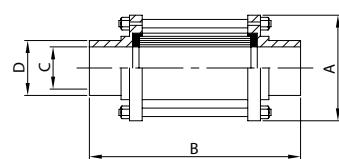
DN	A
25/40	271,0
51/52	371,0
63/70	466,0
76/85	516,0
101	621,0

DN	A
25/40	278,0
51/52	378,0
63/70	473,0
76/85	527,0
101	636,0



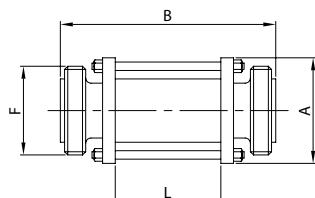
SPECOLA EL.  
SIGHT GLASS PE.  
REGARD BL.  
MIRILLA EL.

450 L



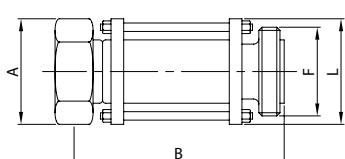
SPECOLA EF./EF.  
SIGHT GLASS ME./ME.  
REGARD BF./BF.  
MIRILLA ER./ER.

452 I



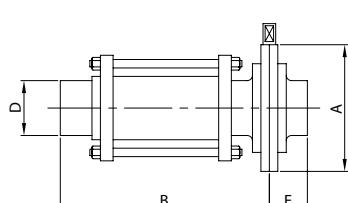
SPECOLA BL. G./EF. MT.  
SIGHT GLASS L. N./ME. ED.  
REGARD PL. E./BF. DN.  
MIRILLA C. T./ER. MD.

454 I



SPECOLA EL. + V. F. EL.  
SIGHT GLASS PE. + B. V. PE.  
REGARD BL. + V. P. BL.  
MIRILLA EL. + V. M. EL.

460 L



DN	A	B	C	D	gr
25	55,0	147,0	22,4	25,4	400
38	70,0	153,0	35,1	38,1	620
51	85,0	153,0	47,8	50,8	860
63	95,0	163,0	60,5	63,5	950
76	105,0	173,0	72,9	76,2	1.100
101	140,0	173,0	97,6	101,6	2.760

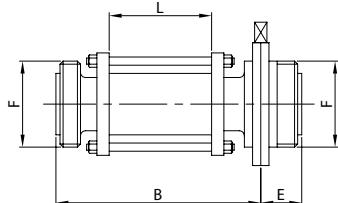
DN	A	B	F	L	gr
25	55,0	165,0	37-8	83,0	550
38	70,0	165,0	50-8	83,0	940
51	85,0	165,0	64-8	83,0	1.270
63	95,0	165,0	77-8	83,0	1.400
76	105,0	165,0	91-8	83,0	1.710
101	140,0	165,0	118-8	83,0	3.760

DN	A	B	F	L	gr
25	46,0	169,0	37-8	55,0	660
38	60,0	169,0	50-8	70,0	1.110
51	75,0	169,0	64-8	85,0	1.560
63	90,0	169,0	77-8	95,0	1.920
76	105,0	169,0	91-8	105,0	2.300
101	134,0	169,0	118-8	140,0	4.730

DN	A	B	D	E	gr
25	79,0	153,0	25,4	34,0	760
38	85,0	156,0	38,1	38,0	1.020
51	105,0	156,0	50,8	40,0	1.500
63	112,0	162,0	63,5	40,0	1.680
76	125,0	167,0	76,2	41,0	1.980
101	157,0	167,0	101,6	44,0	4.180

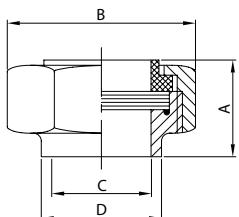
SPECOLA EF. + V. F. EF.  
SIGHT GLASS ME. + B. V. ME.  
REGARD BF. + V. P. BF.  
MIRILLA ER. + V. M. ER.

462 I



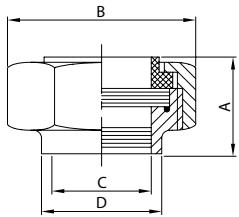
SPECOLA PIANA ES.  
SIGHT GLASS WE.  
INDIC. DE CIRC. PLAT BS.  
MIRILLA PLANA ES.

441 I



SPECOLA PIANA EM.  
SIGHT GLASS EE.  
INDIC. DE CIRC. PLAT BD.  
MIRILLA PLANA EM.

442 I



DN	B	E	F	L	gr
25	162,0	34,0	37-8	83,0	1.010
38	162,0	38,0	50-8	83,0	1.520
51	162,0	40,0	64-8	83,0	2.090
63	163,0	40,0	77-8	83,0	2.310
76	163,0	41,0	91-8	83,0	2.820
101	163,0	44,0	118-8	83,0	5.480

DN	A	B	C	D	gr
25	28,0	46,0	22,1	25,4	300
38	32,0	60,0	34,8	38,1	430
51	36,0	75,0	47,5	50,8	600
63	40,0	90,0	60,2	63,5	940
76	41,0	105,0	72,9	76,2	1.120
101	42,0	134,0	97,6	101,6	1.670

DN	A	B	C	D	gr
25	28,0	46,0	25,4	29,0	200
38	32,0	60,0	38,1	42,5	430
51	36,0	75,0	50,8	56,0	600
63	40,0	90,0	63,5	69,7	940
76	41,0	105,0	76,2	82,3	1.120
101	42,0	134,0	101,6	108,5	1.670





## RUBINETTI

- Ricavati da particolari completi di attacchi stampati a caldo o laminati e solubilizzati.
- Ricopertura dei maschi in bagno galvanico con riporto di cromo durissimo e di elevato spessore.
- Elevato grado di conicità negli accoppiamenti per diminuire la pressione specifica di rotazione dei maschi.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.
- Max. pressione di esercizio: 4 bar.

## PLUG COCKS

- Made from sections complete with couplings, press-forged or hot-rolled and solution heat-treated.
- Plugs coated in galvanic bath with very hard and thick chrome deposit.
- High degree of taper in the couplings to reduce specific rotation pressure of plugs.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.
- Maximum operating pressure: 4 bars.

## ROBINETS

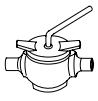
- Obtenus à partir de pièces munies de prises moulées à chaud ou laminées et solubilisées.
- Revêtement des biseaux dans bain galvanique avec report de chrome extrêmement dur et forte épais.
- Niveau de conicité élevé des assemblages afin de diminuer la pression de rotation spécifique des biseaux.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.
- Pression d'exploitation maximum: 4 bars.

## GRIFOS

- Obtenidos de piezas provistas de conexiones estampadas en caliente o laminadas y solubilizadas.
- Recubrimiento de los machos en baño galvánico con agregado de cromo durísimo y de elevado espesor.
- Elevado grado de conicidad en los acoplamientos para disminuir la presión específica de rotación de los machos.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.
- Máxima presión de ejercicio: 4 bares.

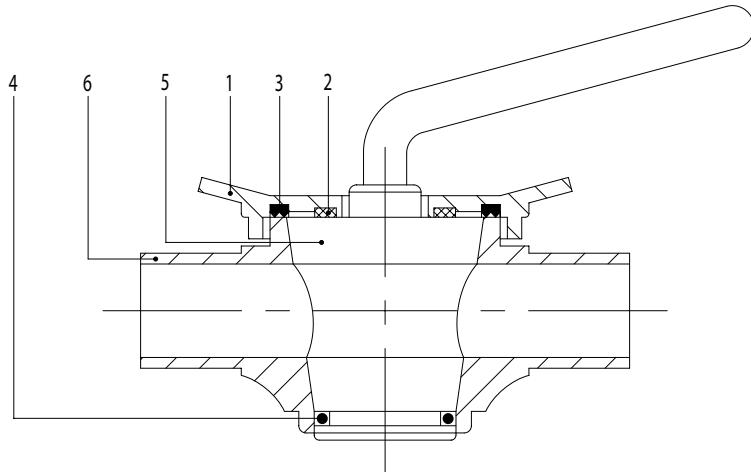


**RUBINETTI**  
**PLUG COCKS**  
**ROBINETS**  
**GRIFOS**



**RUBINETTO 2 VIE**  
**TWO-WAY PLUG COCK**

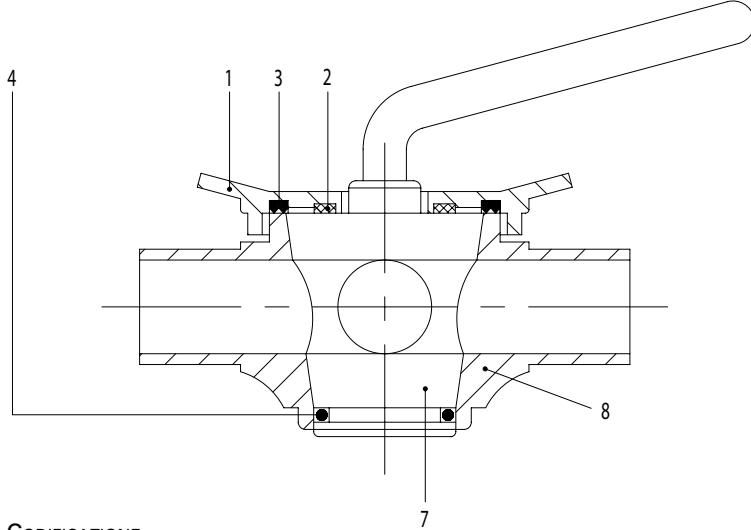
**ROBINET 2 VOIES**  
**GRIFO 2 VÍAS**



- |   |   |
|---|---|
| 1. Coperchio<br>Cover<br>Couvercle<br>Tapa              | 4. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                             |
| 2. Anello PTFE<br>PTFE ring<br>Bague PTFE<br>Junta PTFE | 5. Maschio 2 vie<br>Two-way plug<br>Boisseau 2 voies<br>Macho 2 vías                            |
| 3. Guarnizione a W<br>W seal<br>Joint W<br>Junta W      | 6. Corpo rubinetto 2 vie<br>Two-way plug casing<br>Corps robinet 2 voies<br>Cuerpo grifo 2 vías |

**RUBINETTO 3 VIE**  
**THREE-WAY PLUG COCK**

**ROBINET 3 VOIES**  
**GRIFO 3 VÍAS**



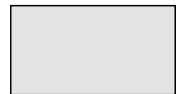
- |   |   |
|---|---|
| 1. Coperchio<br>Cover<br>Couvercle<br>Tapa              | 4. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                               |
| 2. Anello PTFE<br>PTFE ring<br>Bague PTFE<br>Junta PTFE | 7. Maschio 3 vie<br>Three-way plug<br>Boisseau 3 voies<br>Macho 3 vías                            |
| 3. Guarnizione a W<br>W seal<br>Joint W<br>Junta W      | 8. Corpo rubinetto 3 vie<br>Three-way plug casing<br>Corps robinet 3 voies<br>Cuerpo grifo 3 vías |

CODIFICAZIONE  
 CODING  
 CODIFICATION  
 CODIFICACIÓN

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	4" 101	D 100 101	Mat.	Part. o agg.
1	500		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70	76/85	76/85	101	101	4L/6L	01
2	500		25/28	25/28	34/40	34/40	34/40	51/101	51/101	51/101	51/101	51/101	51/101	51/101	51/101	T	02
3	500		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70	76/85	76/85	101	101	E	03
4	OR		4106	4106	153	153	153	162	162	6312	6312	185	185	204	204	E	
5	500		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70	76/85	76/85	101	101	4L/6L	05
6	500	L	25	28	34	38	40	51	52	63	70	76	85	101	101	4L/6L	06
7	510		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70	76/85	76/85	101	101	4L/6L	07
8	510	L	25	28	34	38	40	51	52	63	70	76	85	101	101	4L/6L	08



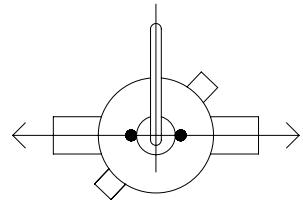
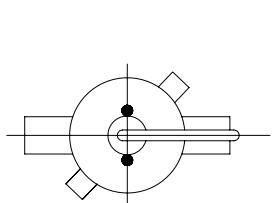
RUBINETTI  
PLUG COCKS  
ROBINETS  
GRIFOS



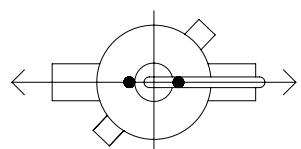
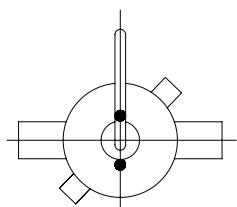
RUBINETTI 2 VIE  
TWO-WAY PLUG COCKS

ROBINETS 2 VOIES  
GRIFOS 2 VÍAS

DIN



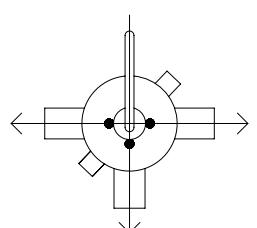
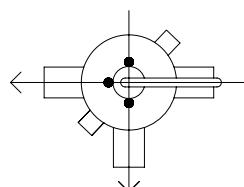
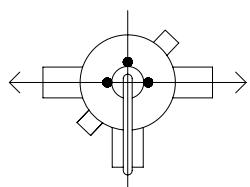
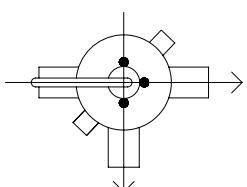
SMS BS ISS



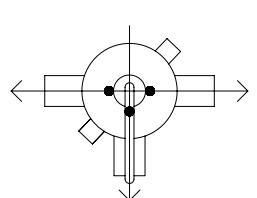
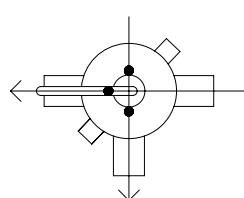
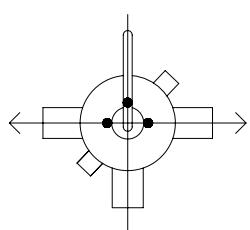
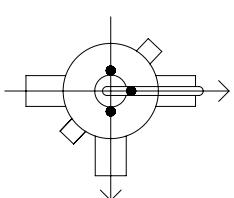
RUBINETTI 3 VIE  
THREE-WAY PLUG COCKS

ROBINETS 3 VOIES  
GRIFOS 3 VÍAS

DIN

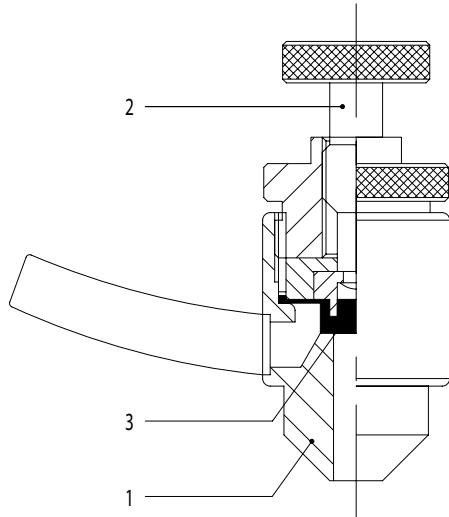


SMS BS ISS





**RUBINETTO PRELIEVO SANITARIO**  
**ROBINET PRISE ÉCHANTILLON SANITAIRE**  
**SANITARY SAMPLING PLUG**  
**GRIFO TOMAMUESTRAS SANITARIO**



1. Corpo rubinetto  
Plug casing  
Corps du robinet  
Cuerpo grifo
2. Maschio  
Plug  
Boisseau  
Macho
3. Guarnizione  
Seal  
Joint  
Junta

CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1/2"	Mat.	Part. o agg.
1	36	W	8	6L	01
1	36	K	12	6L	01
1	36	G	1/4"	6L	01
2	36		12	6L	02
3	36		12	S	03

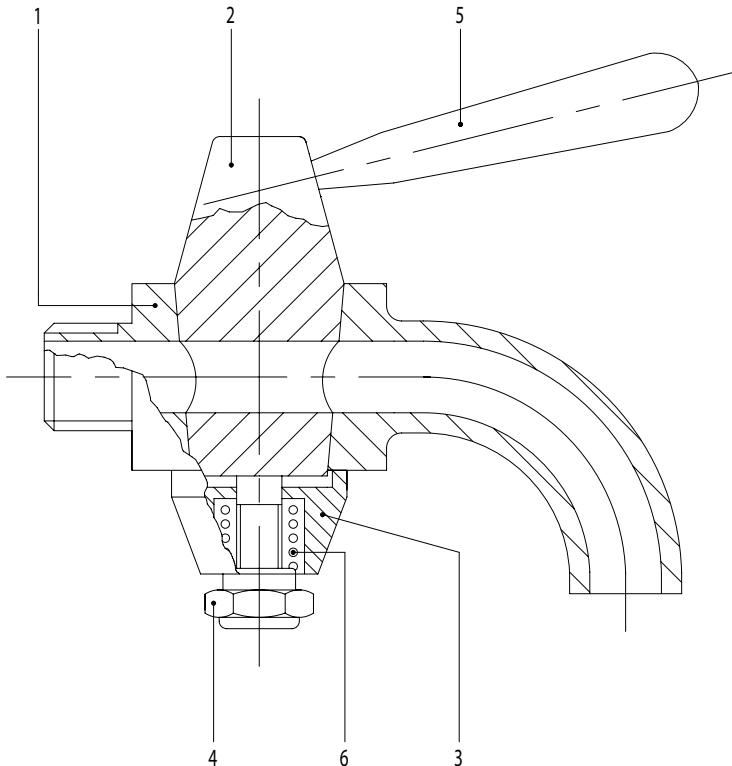


**RUBINETTO PRELIEVO CURVA**

**ROBINET PRISE ÉCHANTILLON COUDE**

**SAMPLING PLUG BEND**

**GRIFO TOMAMUESTRAS CODO**



1. Corpo rubinetto  
Plug casing  
Corps du robinet  
Cuerpo grifo

2. Maschio  
Plug  
Brosseau  
Macho

3. Bussola portamolla  
Spring holder  
Porte-ressort  
Portamuella

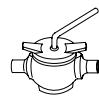
4. Dado autobloccante  
Self-locking nut  
Écrou de sûreté  
Tuerca de seguridad

5. Maniglia  
Handle  
Poignée  
Maneta

6. Molla  
Spring  
Ressort  
Muelle

CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1/4"	3/8"	1/2"	Mat.	Part. o agg.
1	033	G	14	38	12	6L	01
2	033		14/38	14/38	12	6L	02
3	033		14/38	14/38	12	6L	03
4	033		14/38	14/38	12	4L	04
5	033		14/12	14/12	14/12	4L	05
6	033		14/38	14/38	12	4L	06

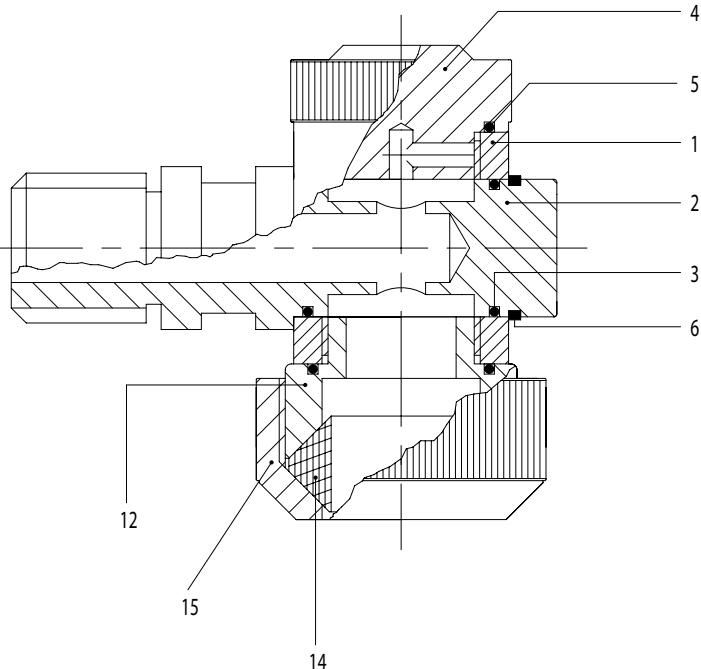


PORALIVELLO SUPERIORE

M. SUPÉRIEUR DE NIVEAU

UPPER LEVEL GAUGE

GRIFO NIVEL SUPERIOR



1. Corpo rubinetto  
Plug casing  
Corps du robinet  
Cuerpo grifo

2. Tampone  
Plug  
Tampon  
Tapón

3. Anello di tenuta OR  
OR seal ring  
Joint torique  
Junta OR

4. Tappo scarico aria  
Air vent plug  
Bouchon décharge air  
Tapón descarga aire

5. Anello di tenuta OR  
OR seal ring  
Joint torique  
Junta OR

6. Seeger  
Snap ring  
Circlips  
Anillo seeger

12. Bussola portavetro  
Glass holder  
Porte-verre  
Portavidrio

14. Guarnizione vetro  
Glass seal  
Joint verre  
Junta vidrio

15. Ghiera serravetro  
Glass locking collar  
Bague blocage verre  
Tuerca bloqueo vidrio

CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1/2"	Mat.	Part. o agg.
1	047		12	6L	01
2	047	G	12	6L	02
3	OR		2056	N	
4	038		12	6L	04
5	OR		2068	N	
6	SEE		A 18	4L	
12	038		12	6L	12
14	038		12	S/V	14
15	038		12	A/4L	15

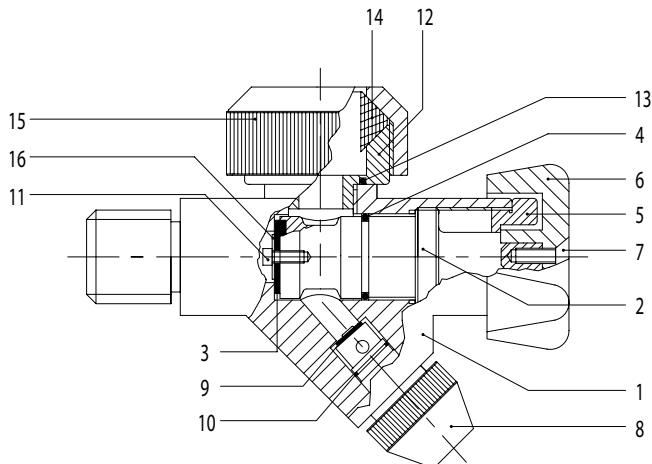


**RUBINETTO PORTALIVELLO**

**ROBINET DE NIVEAU**

**LOWER LEVEL GAUGE**

**GRIFO NIVEL**



- |   |   |
|---|---|
| 1. Corpo rubinetto<br>Plug casing<br>Corps du robinet<br>Cuerpo grifo                 | 9. Guarnizione scarico<br>Drain seal<br>Joint de drainage<br>Junta drenaje                    |
| 2. Tampone<br>Plug<br>Tampon<br>Tapón   | 10. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                          |
| 3. Guarnizione tampone<br>Plug seal<br>Joint tampon<br>Junta tapón                    | 11. Vite<br>Screw<br>Vis<br>Tornillo  |
| 4. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                   | 12. Bussola portavetro<br>Glass holder<br>Porte-verre<br>Portavidrio                          |
| 5. Ghiera di bloccaggio<br>Locking collar<br>Bague de blocage<br>Tuerca de seguridad  | 13. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                          |
| 6. Manopola<br>Handle<br>Poignée<br>Maneta  | 14. Guarnizione vetro<br>Glass seal<br>Joint verre<br>Junta vidrio                            |
| 7. Vite<br>Screw<br>Vis<br>Tornillo   | 15. Ghiera serravetro<br>Glass locking collar<br>Bague blocage verre<br>Tuerca bloqueo vidrio |
| 8. Ugello di prelievo<br>Sampling nozzle<br>Buse prélèvement<br>Boquilla tomamuestras | 16. Rondella<br>Washer<br>Rondelle<br>Arandela  |

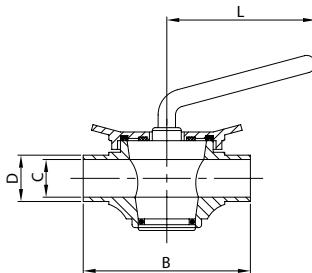
CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1/2"	Mat.	Part. o agg.
1	038	G	12	6L	01
2	038		12	6L	02
3	038		12	E	03
4	OR		3050	N	
5	038		12	A	05
6	038		12	A	06
7	TSV		M4x10	4L	
8	038		12	6L	08
9	038		12	E	09
10	OR		2043	N	
11	TCCE		M3x6	4L	
12	038		12	6L	12
13	OR		2068	N	
14	038		12	S/V	14
15	038		12	A/4L	15
16	RON		RP3	4L	



RUBINETTO 2 VIE EL.  
PLUG COCK 2-WAY PE.  
ROBINET 2 VOIES BL.  
GRIFO 2 VÍAS EL.

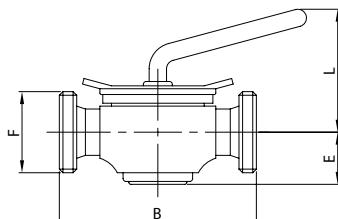
**500 L**



DN	B	C	D	L	gr
28	125,0	25,0	28,0	100,0	1.950
34	160,0	31,0	34,0	115,0	3.050
40	160,0	37,0	40,0	115,0	4.250
52	170,0	49,0	52,0	140,0	6.050
70	200,0	66,0	70,0	160,0	12.600
85	230,0	81,0	85,0	160,0	16.100

RUBINETTO 2 VIE EF.  
PLUG COCK 2-WAY ME.  
ROBINET 2 VOIES BF.  
GRIFO 2 VÍAS ER.

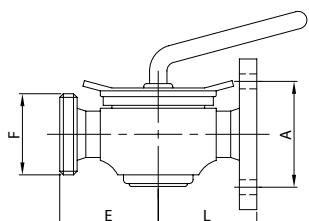
**501 D**



DN	B	E	F	L	gr
25	125,0	38,0	52-6	90,0	2.100
32	160,0	45,0	58-6	117,0	3.400
40	160,0	45,0	65-6	117,0	4.700
50	170,0	55,0	78-6	122,0	6.600
65	200,0	68,0	95-6	142,0	13.350
80	230,0	71,0	110-4	154,0	17.350

RUB. 2 VIE EF./FLANGIA  
PLUG C. 2-WAY ME./FLANGE  
ROBINET 2 VOIES BF./BRIDE  
GRIFO 2 VÍAS ER./BRIDA

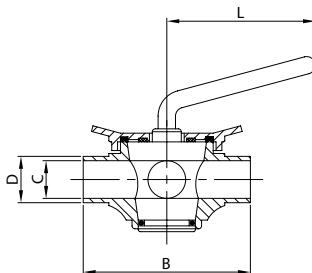
**504 D**



DN	A	E	F	L	gr
25	75,0	62,5	52-6	72,0	2.600
32	90,0	80,0	58-6	89,5	4.150
40	100,0	80,0	65-6	89,5	5.500
50	110,0	85,0	78-6	94,5	7.400
65	130,0	100,0	95-6	109,5	14.300
80	150,0	115,0	110-4	124,5	18.800

RUBINETTO 3 VIE EL.  
PLUG COCK 3-WAY PE.  
ROBINET 3 VOIES BL.  
GRIFO 3 VÍAS EL.

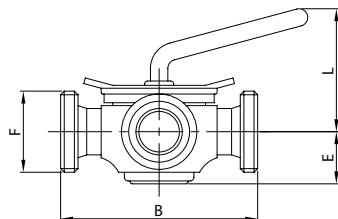
**510 L**



DN	B	C	D	L	gr
28	125,0	25,0	28,0	100,0	2.050
34	160,0	31,0	34,0	115,0	4.500
40	160,0	37,0	40,0	115,0	4.500
52	170,0	49,0	52,0	140,0	6.100
70	200,0	66,0	70,0	160,0	12.400
85	230,0	81,0	85,0	160,0	17.100

RUBINETTO 3 VIE EF.  
PLUG COCK 3-WAY ME.  
ROBINET 3 VOIES BF.  
GRIFO 3 VÍAS ER.

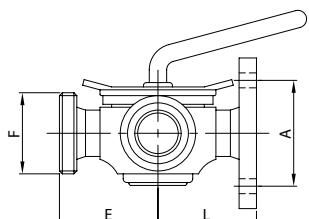
**511 D**



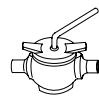
DN	B	E	F	L	gr
25	125,0	38,0	52-6	90,0	2.150
32	160,0	45,0	58-6	117,0	5.000
40	160,0	45,0	65-6	117,0	5.000
50	170,0	55,0	78-6	122,0	6.750
65	200,0	68,0	95-6	142,0	13.350
80	230,0	71,0	110-4	154,0	17.600

RUB. 3 VIE EF./EF./FL.  
PLUG C. 3-WAY ME./ME./FL.  
ROBINET 3 VOIES BF./BF./BR.  
GRIFO 3 VÍAS ER./ER./BR.

**514 D**

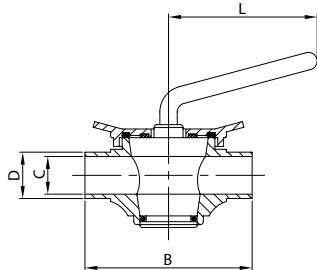


DN	A	E	F	L	gr
25	75,0	62,5	52-6	72,0	2.650
32	90,0	80,0	58-6	89,5	6.000
40	100,0	80,0	65-6	89,5	6.100
50	110,0	85,0	78-6	94,5	7.800
65	130,0	100,0	95-6	109,5	14.700
80	150,0	115,0	110-4	124,5	19.600



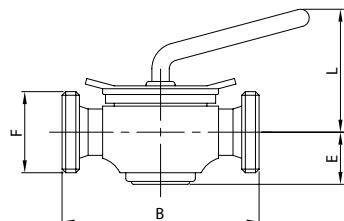
RUBINETTO 2 VIE EL.  
PLUG COCK 2-WAY PE.  
ROBINET 2 VOIES BL.  
GRIFO 2 VÍAS EL.

500 L



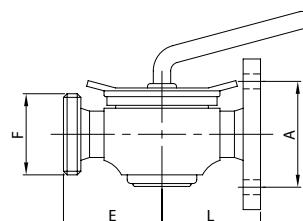
RUBINETTO 2 VIE EF.  
PLUG COCK 2-WAY ME.  
ROBINET 2 VOIES BF.  
GRIFO 2 VÍAS ER.

501 S



RUB. 2 VIE EF./FLANGIA  
PLUG C. 2-WAY ME./FLANGE  
ROBINET 2 VOIES BF./BRIDE  
GRIFO 2 VÍAS ER./BRIDA

504 S



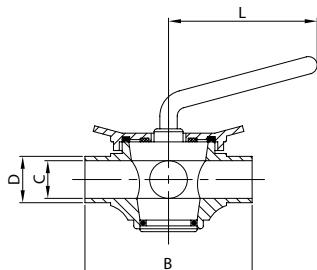
DN	B	C	D	L	gr
25	125,0	22,4	25,4	100,0	1.950
38	160,0	35,1	38,1	115,0	4.250
51	170,0	47,8	50,8	140,0	6.050
63	200,0	60,5	63,5	160,0	12.600
76	230,0	72,9	76,2	160,0	16.150

DN	B	E	F	L	gr
25	125,0	38,0	40-6	90,0	1.950
38	160,0	45,0	60-6	117,0	4.250
51	170,0	55,0	70-6	122,0	6.450
63	200,0	68,0	85-6	142,0	13.650
76	230,0	71,0	98-6	154,0	18.400

DN	A	E	F	L	gr
25	75,0	62,5	40-6	72,0	2.600
38	90,0	80,0	60-6	89,5	5.450
51	110,0	85,0	70-6	94,5	7.300
63	130,0	100,0	85-6	109,5	15.000
76	150,0	115,0	98-6	124,5	18.800

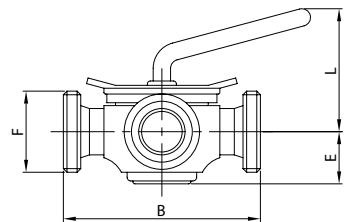
RUBINETTO 3 VIE EL.  
PLUG COCK 3-WAY PE.  
ROBINET 3 VOIES BL.  
GRIFO 3 VÍAS EL.

510 L



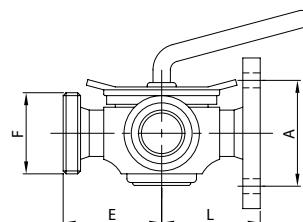
RUBINETTO 3 VIE EF.  
PLUG COCK 3-WAY ME.  
ROBINET 3 VOIES BF.  
GRIFO 3 VÍAS ER.

511 S



RUB. 3 VIE EF./EF./FL.  
PLUG C. 3-WAY ME./ME./FL.  
ROB. 3 VOIES BF./BF./BR.  
GRIFO 3 VÍAS ER./ER./BR.

514 S



DN	B	C	D	L	gr
25	125,0	22,4	25,4	100,0	2.050
38	160,0	35,1	38,1	115,0	4.450
51	170,0	47,8	50,8	140,0	6.100
63	200,0	60,5	63,5	160,0	12.350
76	230,0	72,9	76,2	160,0	17.000

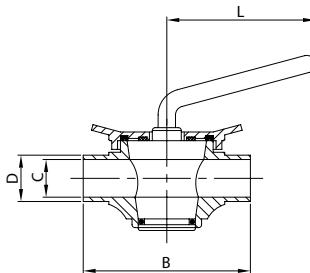
DN	B	E	F	L	gr
25	125,0	38,0	40-6	90,0	2.150
38	160,0	45,0	60-6	117,0	3.850
51	170,0	55,0	70-6	122,0	6.750
63	200,0	68,0	85-6	142,0	12.800
76	230,0	71,0	98-6	154,0	16.550

DN	A	E	F	L	gr
25	75,0	62,5	40-6	72,0	2.650
38	90,0	80,0	60-6	89,5	6.000
51	110,0	85,0	70-6	94,5	7.800
63	130,0	100,0	85-6	109,5	15.300
76	150,0	115,0	98-6	124,5	19.600



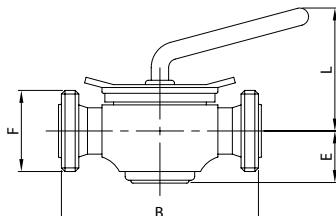
RUBINETTO 2 VIE EL.  
PLUG COCK 2-WAY PE.  
ROBINET 2 VOIES BL.  
GRIFO 2 VÍAS EL.

**500 L**



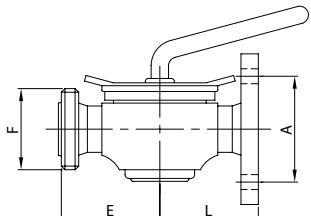
RUBINETTO 2 VIE EF.  
PLUG COCK 2-WAY ME.  
ROBINET 2 VOIES BF.  
GRIFO 2 VÍAS ER.

**501 B**



RUB. 2 VIE EF./FLANGIA  
PLUG C. 2-WAY ME./FLANGE  
ROBINET 2 VOIES BF./BRIDE  
GRIFO 2 VÍAS ER./BRIDA

**504 B**



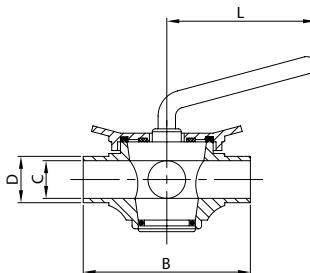
DN	B	C	D	L	gr
25	125,0	22,4	25,4	100,0	1.950
38	160,0	35,1	38,1	115,0	4.250
51	170,0	47,8	50,8	140,0	6.050
63	200,0	60,5	63,5	160,0	12.600
76	230,0	72,9	76,2	160,0	16.150

DN	B	E	F	L	gr
25	125,0	38,0	46-8	90,0	1.950
38	160,0	45,0	58-8	117,0	4.250
51	170,0	55,0	73-6	122,0	6.450
63	200,0	68,0	85-6	142,0	13.650
76	230,0	71,0	98-6	154,0	18.400

DN	A	E	F	L	gr
25	75,0	60,5	46-8	72,0	2.600
38	90,0	80,0	58-8	89,5	5.450
51	110,0	89,0	73-6	94,5	7.300
63	130,0	100,0	85-6	109,5	15.000
76	150,0	115,0	98-6	124,5	18.800

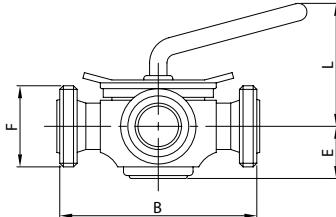
RUBINETTO 3 VIE EL.  
PLUG COCK 3-WAY PE.  
ROBINET 3 VOIES BL.  
GRIFO 3 VÍAS EL.

**510 L**



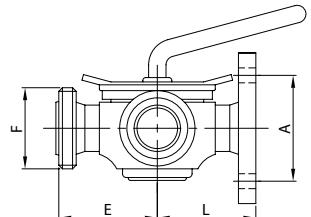
RUBINETTO 3 VIE EF.  
PLUG COCK 3-WAY ME.  
ROBINET 3 VOIES BF.  
GRIFO 3 VÍAS ER.

**511 B**



RUB. 3 VIE EF./EF./FL.  
PLUG C. 3-WAY ME./ME./FL.  
ROB. 3 VOIES BF./BF./BR.  
GRIFO 3 VÍAS ER./ER./BR.

**514 B**



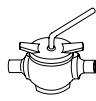
DN	B	C	D	L	gr
25	125,0	22,4	25,4	100,0	2.050
38	160,0	35,1	38,1	115,0	4.450
51	170,0	47,8	50,8	140,0	6.100
63	200,0	60,5	63,5	160,0	12.350
76	230,0	72,9	76,2	160,0	17.000

DN	B	E	F	L	gr
25	125,0	38,0	46-8	90,0	2.350
38	160,0	45,0	58-8	117,0	4.900
51	170,0	55,0	73-6	122,0	6.950
63	200,0	68,0	85-6	142,0	13.250
76	230,0	71,0	98-6	154,0	16.550

DN	A	E	F	L	gr
25	75,0	60,5	46-8	72,0	2.650
38	90,0	80,0	58-8	89,5	6.000
51	110,0	89,0	73-6	94,5	7.900
63	130,0	100,0	85-6	109,5	14.600
76	150,0	115,0	98-6	124,5	19.400



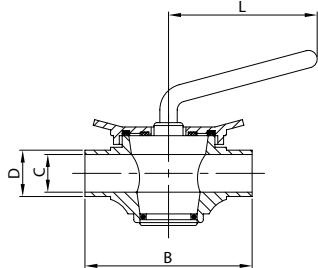
RUBINETTI  
PLUG COCKS  
ROBINETS  
GRIFOS



ISS IDF

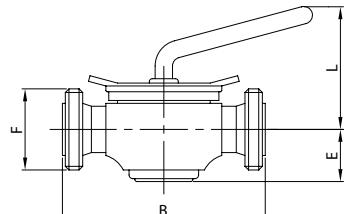
RUBINETTO 2 VIE EL.  
PLUG COCK 2-WAY PE.  
ROBINET 2 VOIES BL.  
GRIFO 2 VÍAS EL.

500 L



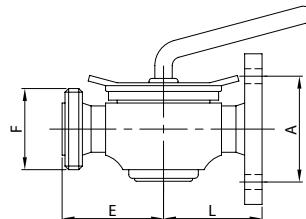
RUBINETTO 2 VIE EF.  
PLUG COCK 2-WAY ME.  
ROBINET 2 VOIES BF.  
GRIFO 2 VÍAS ER.

501 I



RUB. 2 VIE EF./FLANGIA  
PLUG C. 2-WAY ME./FLANGE  
ROBINET 2 VOIES BF./BRIDE  
GRIFO 2 VÍAS ER./BRIDA

504 I



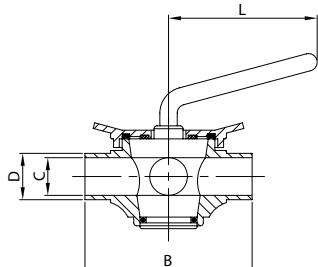
DN	B	C	D	L	gr
25	125,0	22,4	25,4	100,0	1.950
38	160,0	35,1	38,1	115,0	4.250
51	170,0	47,8	50,8	140,0	6.050
63	200,0	60,5	63,5	160,0	12.600
76	230,0	72,9	76,2	160,0	16.150

DN	B	E	F	L	gr
25	125,0	38,0	37-8	90,0	1.950
38	160,0	45,0	50-8	117,0	4.250
51	170,0	55,0	64-8	122,0	6.450
63	200,0	68,0	77-8	142,0	13.650
76	230,0	71,0	91-8	154,0	18.400

DN	A	E	F	L	gr
25	75,0	62,5	37-8	72,0	2.600
38	90,0	80,0	50-8	89,5	5.450
51	110,0	85,0	64-8	94,5	7.300
63	130,0	100,0	77-8	109,5	15.000
76	150,0	115,0	91-8	124,5	18.800

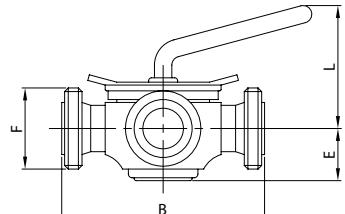
RUBINETTO 3 VIE EL.  
PLUG COCK 3-WAY PE.  
ROBINET 3 VOIES BL.  
GRIFO 3 VÍAS EL.

510 L



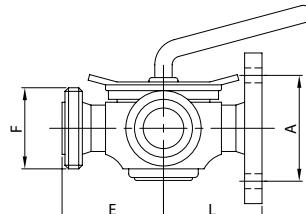
RUBINETTO 3 VIE EF.  
PLUG COCK 3-WAY ME.  
ROBINET 3 VOIES BF.  
GRIFO 3 VÍAS ER.

511 I



RUB. 3 VIE EF./EF./FL.  
PLUG C. 3-WAY ME./ME./FL.  
ROB. 3 VOIES BF./BF./BR.  
GRIFO 3 VÍAS ER./ER./BR.

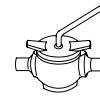
514 I



DN	B	C	D	L	gr
25	125,0	22,4	25,4	100,0	2.050
38	160,0	35,1	38,1	115,0	4.450
51	170,0	47,8	50,8	140,0	6.100
63	200,0	60,5	63,5	160,0	12.350
76	230,0	72,9	76,2	160,0	17.000

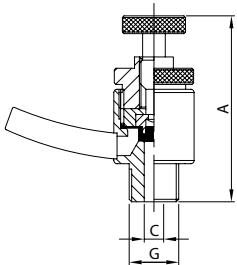
DN	B	E	F	L	gr
25	125,0	38,0	37-8	90,0	2.350
38	160,0	45,0	50-8	117,0	4.900
51	170,0	55,0	64-8	122,0	6.950
63	200,0	68,0	77-8	142,0	13.250
76	230,0	71,0	91-8	154,0	16.550

DN	A	E	F	L	gr
25	75,0	62,5	37-8	72,0	2.650
38	90,0	80,0	50-8	89,5	6.000
51	110,0	85,0	64-8	94,5	7.900
63	130,0	100,0	77-8	109,5	14.600
76	150,0	115,0	91-8	124,5	19.400



RUB. PREL. SANIT. GAS  
SANIT. SAMPL. PLUG BSP  
R. PRISE E. SANIT. GAS  
GRIFO T. SANIT. GAS

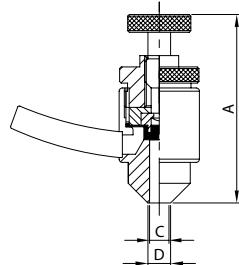
G36



DN	A	C	G	gr
14	57,6	6,0	1/4"	120

RUB. PREL. SANIT. EL.  
SANIT. SAMPL. PLUG PE.  
R. PRISE E. SANIT. BL.  
GRIFO T. SANIT. EL.

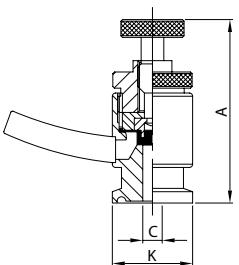
W36



DN	A	C	D	gr
8	57,6	6,0	8,0	120

RUB. PREL. SANIT. E. SM.  
SANIT. SAMPL. PLUG E. FR.  
R. PRISE E. SANIT. B. FR.  
GRIFO T. SANIT. E. SM.

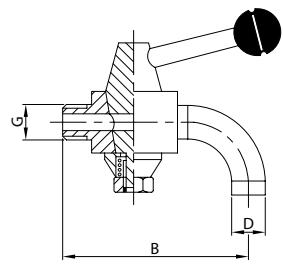
K36



DN	A	C	K	gr
1/2"	12	57,6	9,4	25,0 120

RUB. PRELIEVO CURVA  
SAMPLE COCK BEND  
ROB. PRISE COUDE  
GRIFO TOMAM. CODO

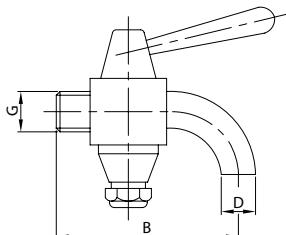
033 G



DN	B	D	G	gr
14	60,0	11,0	1/4"	175
38	60,0	11,0	3/8"	185
12	68,0	13,7	1/2"	330

RUB. PRELIEVO NPT  
SAMPLING PLUG NPT  
R. PRISE ECHANTILLON NPT  
GRIFO TOMAM. NPT

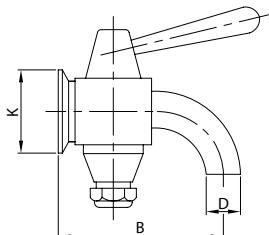
T33



DN	B	D	G	gr
1 1/2"	38	78,0	11,0	3/8" 185

RUB. PRELIEVO E. SM.  
SAMPLING PLUG E. FR.  
R. PRISE ECHANTIL. B. FR.  
GRIFO TOMAM. E. SM.

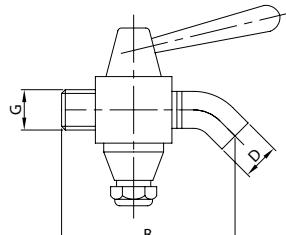
K33



DN	B	D	K	gr
1"	25	68,0	11,0	50,5 200

RUB. PRELIEVO NPT  
SAMPLING PLUG NPT  
R. PRISE ECHANTILLON NPT  
GRIFO TOMAM. NPT

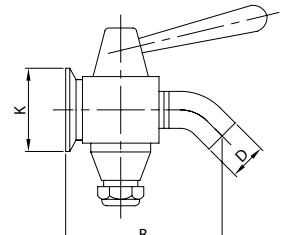
T33 R



DN	B	D	G	gr
1 1/2"	38	84,0	11,0	3/8" 185

RUB. PRELIEVO E. SM.  
SAMPLING PLUG E. FR.  
R. PRISE ECHANTIL. B. FR.  
GRIFO TOMAM. E. SM.

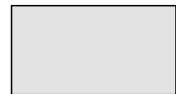
K33 R



DN	B	D	K	gr
1"	25	76,0	11,0	50,5 200



RUBINETTI DI PRELIEVO  
SAMPLING PLUGS  
ROBINETS PRISE ÉCHANTILLON  
GRIFOS TOMAMUESTRAS

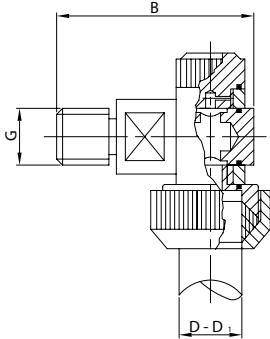


**PORTALIVELLO SUP. GAS**  
UPPER LEVEL GAUGE BSP  
M. SUP. DE NIVEAU GAS  
GRIFO NIVEL SUP. GAS

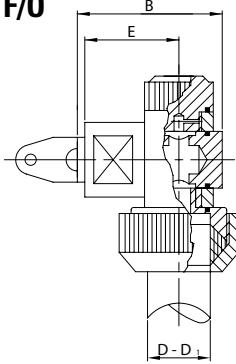
**PORTALIVELLO SUP. FL.**  
UPPER LEVEL GAUGE FL.  
M. SUP. DE NIVEAU BR.  
GRIFO NIVEL SUP. BRIDA

**PORTALIVELLO SUP. NPT**  
UPPER LEVEL GAUGE NPT  
M. SUP. DE NIVEAU NPT  
GRIFO NIVEL SUP. NPT

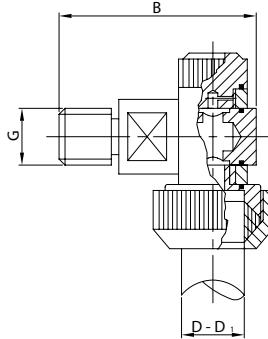
**PORTALIVELLO SUP. E. SM.**  
UPPER LEVEL GAUGE E. FR.  
M. SUP. DE NIVEAU B. FR.  
GRIFO NIVEL SUP. E. SM.

**047 G**

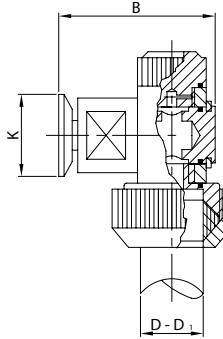
DN	B	D	D <sub>1</sub>	G	gr
12	66,5	22,0	16,0	1/2"	275

**047 F/O**

DN	B	D	D <sub>1</sub>	E	gr
1/2"	51,5	22,0	16,0	30,0	340

**T47**

DN	B	D	D <sub>1</sub>	G	gr	
1 1/2"	38	66,5	16,0	22,0	3/8"	275

**K47**

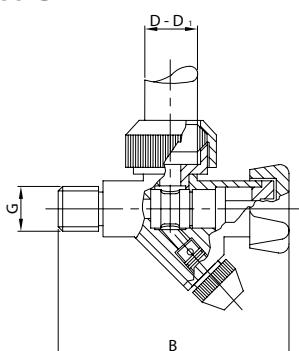
DN	B	D	D <sub>1</sub>	K	gr	
1"	25	56,5	16,0	22,0	50,5	300

**RUB. PORTALIVELLO GAS**  
LOWER LEVEL GAUGE BSP  
ROBINET DE NIVEAU GAS  
GRIFO NIVEL GAS

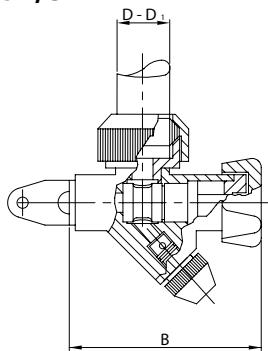
**RUB. PORTALIVELLO FL.**  
LOWER LEVEL GAUGE FL.  
ROBINET DE NIVEAU BR.  
GRIFO NIVEL BRIDA

**RUB. PORTALIVELLO NPT**  
LOWER LEVEL GAUGE NPT  
ROB. DE NIVEAU NPT  
GRIFO NIVEL NPT

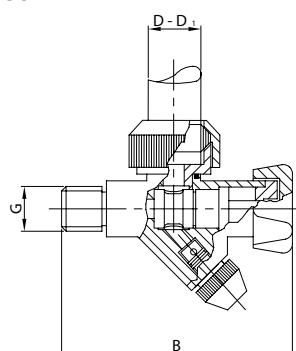
**RUB. PORTALIVELLO E. SM.**  
LOWER LEVEL GAUGE E. FR.  
ROB. DE NIVEAU B. FR.  
GRIFO NIVEL E. SM.

**038 G**

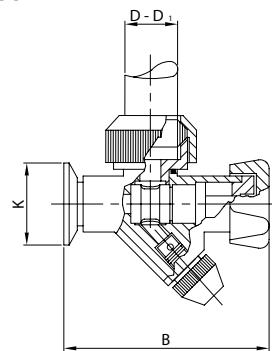
DN	B	D	D <sub>1</sub>	G	gr
12	105,0	22,0	16,0	1/2"	515

**038 F/O**

DN	B	D	D <sub>1</sub>	gr
1/2"	91,0	22,0	16,0	520

**T38**

DN	B	D	D <sub>1</sub>	G	gr	
1 1/2"	38	110,0	16,0	22,0	3/8"	515

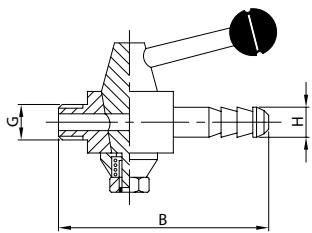
**K38**

DN	B	D	D <sub>1</sub>	K	gr	
1"	25	99,0	16,0	22,0	50,5	530



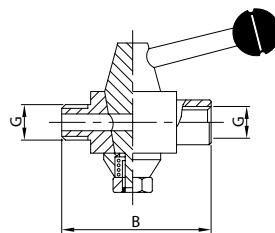
RUB. PREL. PORTAGOMMA  
SAMPL. PLUG HOSE CONN.  
ROB. PRISE É. M. LIGAT.  
GRIFO TOMAM. M. M.

**032 G**



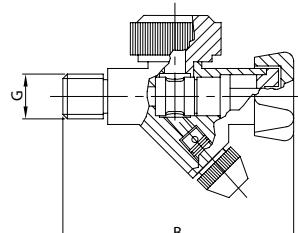
RUB. PRELIEVO F. MA./FE.  
SAMPL. PLUG T. MA./FE.  
ROB. PRISE É. T. MA./FE.  
GRIFO TOMAM. R. M./H.

**032 GMF**



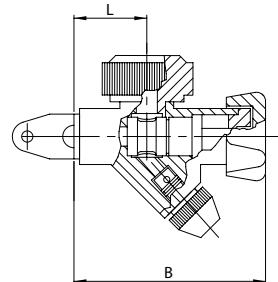
RUBINETTO PRELIEVO  
SAMPLING PLUG  
ROBINET PRISE ÉCH.  
GRIFO TOMAMUESTRAS

**048 G**



RUBINETTO PRELIEVO  
SAMPLING PLUG  
ROBINET PRISE ÉCH.  
GRIFO TOMAMUESTRAS

**048 F/O**



DN	B	G	H	gr
14	70,0	1/4"	12,0	170
38	83,0	3/8"	12,0	180
12	106,0	1/2"	15,0	320

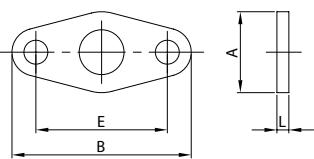
DN	B	G	gr
12	56,0	1/2"	340

DN	B	G	gr
12	105,0	1/2"	490

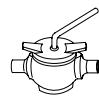
DN	B	L	gr
1/2"	91,0	30,0	460

FLANGIA OVALE  
OVAL FLANGE  
BRIDE OVALE  
BRIDA OVAL

**F/O**



DN	A	B	E	L	gr
1/2"	30,0	60,0	43,0	6,0	20

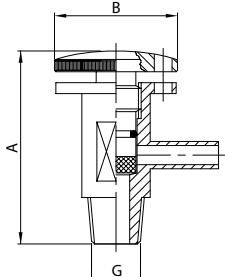


RUB. PREL. BLOCC. GAS  
LOCKABLE S. PLUG BSP  
R. PRISE E. BLOC. GAS  
GRIFO TOM. BLOC. GAS

RUB. PREL. BLOCC. E. SM.  
LOCKABLE S. PLUG E. FR.  
R. PRISE E. BLOC. B. FR.  
GR. TOM. BLOC. E. SM.

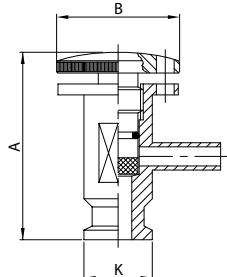
RUB. PREL. BLOCCABILE EL.  
LOCKABLE S. PLUG PE.  
R. PRISE E. BLOC. BL.  
GR. TOM. BLOC. EL.

G37



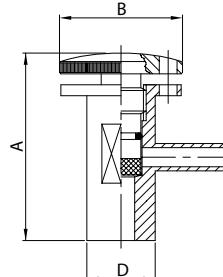
DN	A	B	G	gr
12	67,0	46,0	1/2"	250

K37



DN	A	B	K	gr
1/2" 12	67,0	46,0	1/2"	270

W37



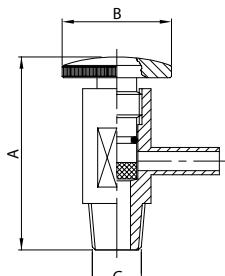
DN	A	B	D	gr
25	67,0	46,0	25,0	300

RUB. PRELIEVO GAS  
SAMPLING PLUG BSP  
ROB. PRISE ECH. GAS  
GRIFO TOMAMUESTRAS GAS

RUB. PRELIEVO E. SM.  
SAMPLING PLUG E FR.  
ROB. PRISE ECH. B. FR.  
GRIFO TOMAMUESTRAS E . SM.

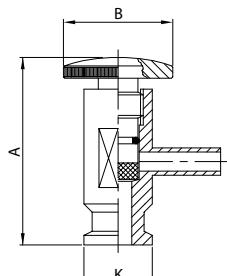
RUB. PRELIEVO EL.  
SAMPLING PLUG PE.  
ROB. PRISE ECH. BL.  
GRIFO TOMAMUESTRAS EL.

G37 NL



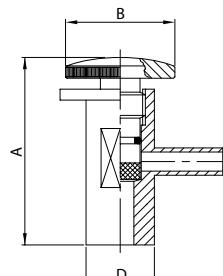
DN	A	B	G	gr
12	67,0	41,0	1/2"	210

K37 NL



DN	A	B	K	gr
1/2" 12	67,0	41,0	1/2"	230

W37 NL



DN	A	B	D	gr
25	67,0	41,0	25,0	260





## VALVOLE DI REGOLAZIONE FLUSSO

- Di solida e robusta costruzione, ricavate da massello di acciaio inossidabile.
- Regolazione della portata del flusso mediante avvitamento della ghiera di regolazione.
- Albero interno in acciaio inossidabile cromato; guarnizione in EPDM.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.
- Max. pressione di esercizio: 15 bar.

## FLOW CONTROL VALVES

- High strength construction from solid stainless steel block.
- Flow control by screwing of the external adjusting device.
- Internal stem of chrome-plated stainless steel. EPDM gasket.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.
- Maximum operating pressure: 15 bars.

## VANNES DE RÉGLAGE FLUX

- Fabrication solide et robuste. Réalisées à partir de blocs d'acier inoxydable.
- Réglage du débit du flux par vissage de la bague de réglage.
- Arbre interne en acier inoxydable chromé; joint en EPDM.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.
- Pression d'exploitation maximum: 15 bars.

## VÁLVULAS DE REGULACIÓN

- Fabricación sólida y robusta, puesto que se obtienen a partir de un lingote de acero inoxidable.
- Regulación del flujo mediante enroscado de la tuerca de regulación.
- Eje interior de acero inoxidable cromado; junta de EPDM.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.
- Máxima presión de ejercicio: 15 bares.

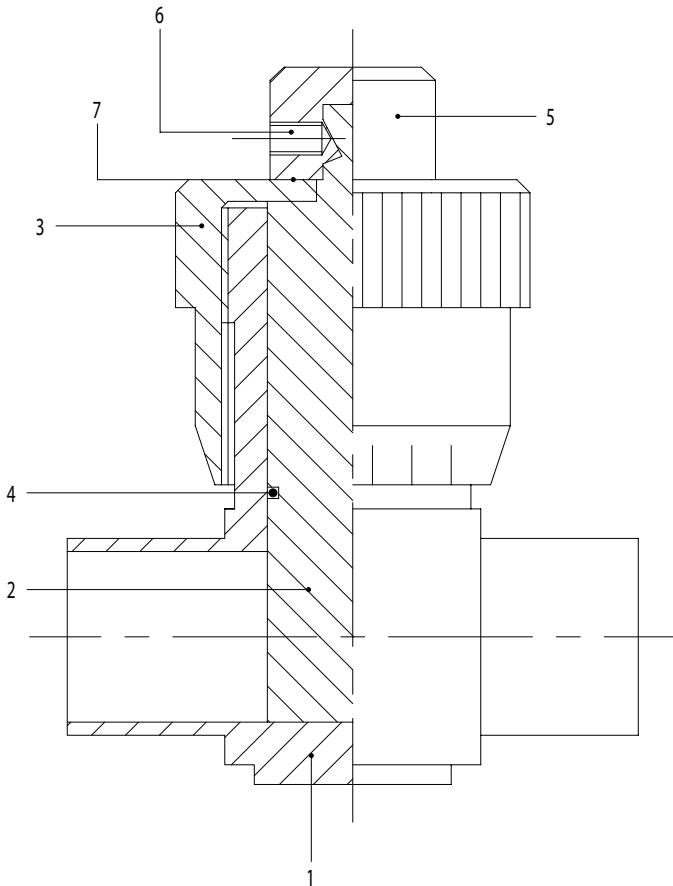


VALVOLA DI REGOLAZIONE FLUSSO

FLOW CONTROL VALVE

VANNE DE RÉGLAGE FLUX

VÁLVULA DE REGULACIÓN

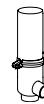


1. Corpo valvola  
Valve casing  
Corps vanne  
Cuerpo
2. Tampone  
Head seal  
Tampon  
Macho
3. Ghiera di regolazione  
Adjusting device  
Bague de réglage  
Tuerca de regulación
4. Anello di tenuta OR  
OR seal ring  
Joint torique  
Junta OR

5. Elemento di bloccaggio  
Locking device  
Élement de blocage  
Elemento de bloqueo
6. Grano  
Dowel  
Cheville  
Pasador
7. Rondella  
Washer  
Rondelle  
Arandela

CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	Mat.	Part. o agg.
1	620	L	25	28	34	38	40	51	52	63	70	76	4L/6L	01
2	620		25/28	25/28	34	38/40	38/40	51/52	51/52	63	70	76	4L/6L	02
3	620		25/28	25/28	34	38/40	38/40	51/52	51/52	63	70	76	4L	03
4	OR		3081	3081	4093	4118	4118	6150	6150	6187	6212	6237	E	
5	620		25/76	25/76	25/76	25/76	25/76	25/76	25/76	25/76	25/76	25/76	4L	05
6	GRA		8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	4L	
7	620		25/76	25/76	25/76	25/76	25/76	25/76	25/76	25/76	25/76	25/76	T	07



## VALVOLE DI SICUREZZA

- Elemento di regolazione della pressione situato all'interno del corpo valvola a garanzia contro manovre accidentali.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.
- Regolabili da 0 a 5 bar; a richiesta, regolabili fino a 12 bar.

## RELIEF VALVES

- Pressure control element located inside valve body to prevent accidental operation.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.
- Adjustable from 0 to 5 bars. On request, adjustable up to 12 bars.

## SOUPAPES DE SÛRETÉ

- Bague de réglage de la pression située dans le corps de la vanne afin d'éviter tout risque de manoeuvre accidentelle.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.
- Réglables de 0 à 5 bars; sur demande, réglables jusqu'à 12 bars.

## VÁLVULAS DE SEGURIDAD

- Tuerca de regulación de la presión situada en el interior del cuerpo de la válvula para impedir que se produzcan maniobras accidentales.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.
- Se pueden regular de 0 a 5 bares; a pedido, se pueden regular hasta 12 bares.

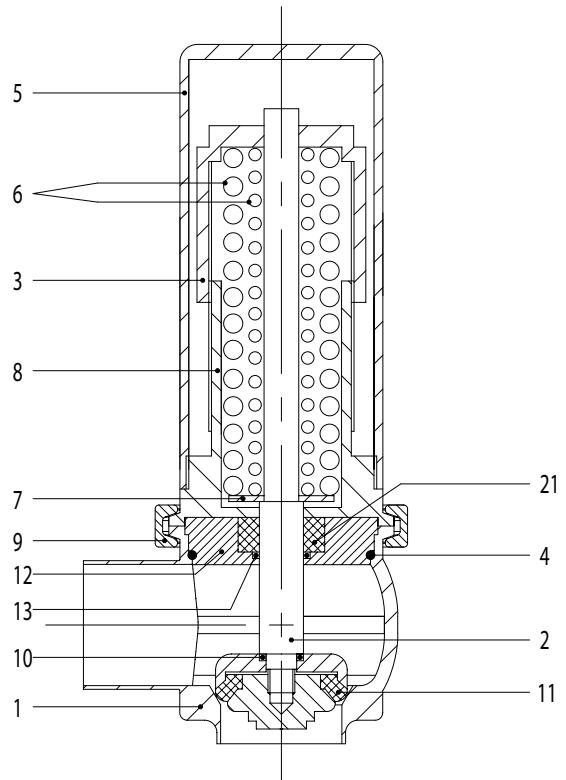


**VALVOLA DI SICUREZZA**

**RELIEF VALVE**

**SOUPAPE DE SÛRETÉ**

**VÁLVULA DE SEGURIDAD**



- |   |   |
|---|---|
| 1. Corpo valvola<br>Valve casing<br>Corps vanne<br>Cuerpo                               | 9. Morsetto Clamp<br>Clamp<br>Collier Clamp<br>Abrazadera Clamp             |
| 2. Tappone<br>Head seal<br>Piston<br>Macho  | 10. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR        |
| 3. Elemento di regolazione<br>Adjusting cap<br>Bague de réglage<br>Tuerca de regulación | 11. Guarnizione a labbro<br>Lip gasket<br>Joint à lèvre<br>Junta de reborde |
| 4. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                     | 12. Testata<br>Head<br>Tête<br>Cabezal                                      |
| 5. Coperchio<br>Cover<br>Couvercle<br>Tapa  | 13. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR        |
| 6. Molla<br>Spring<br>Ressort<br>Muelle   | 21. Bussola PTFE<br>PTFE bush<br>Douille PTFE<br>Casquillo PTFE             |
| 7. Rondella<br>Washer<br>Rondelle<br>Arandela   |   |
| 8. Elemento base<br>Main assembly<br>Élément base<br>Cuerpo interno                     |   |

**CODIFICAZIONE**

**CODING**

**CODIFICATION**

**CODIFICACIÓN**

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	Mat.	Part. o agg.
1	660	L	25	28	34	38	40	51	52	63	70	76	85	4L/6L	01
2	660	L	25	28	34	38	40	51	52	63	70	76	85	6L	02
3	660		25/28	25/28	34/85	34/85	34/85	34/85	34/85	34/85	34/85	34/85	34/85	OT	03
4	OR		4118	4118	149	149	149	156	156	168	4300	4300	6337	N	
5	660		25/28	25/28	34/85	34/85	34/85	34/85	34/85	34/85	34/85	34/85	34/85	4L	05
6	660		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70			4L	06
7	660		25/28	25/28	34/85	34/85	34/85	34/85	34/85	34/85	34/85	34/85	34/85	4L	07
8	660		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63	70	76	85	4L	08
9	K15		25/38	25/38	51	51	51	63	63	76	88	101	101	4L	
10	OR		108	108	108	108	108	108	108	108	108	108	108	2043	N
11	900		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63	70	76	85	T/S/E/V	11
12	660		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63	70	76	85	6L	12
13	OR		18x3,5	18x3,5	18x3,5	18x3,5	18x3,5	18x3,5	18x3,5	18x3,5	18x3,5	18x3,5	18x3,5	NT	
21	660		25/28	25/28	34/85	34/85	34/85	34/85	34/85	34/85	34/85	34/85	34/85	T	21



## VALVOLE DI RITEGNO

- Di solida e robusta costruzione, ricavate da massello di acciaio inossidabile.
- Ampia apertura del diaframma per permettere il passaggio di sostanze solide.
- Guarnizione di tenuta in PTFE o, a richiesta, altri elastomeri.
- Corredate con molle di bassa pressione che consentono il funzionamento della valvola sia in posizione verticale che orizzontale.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.
- Max. pressione di esercizio: 10 bar.

## CHECK VALVES

- High strength construction from solid stainless steel block.
- Wide diaphragm opening to permit passage of solid particles.
- PTFE sealing gasket or other elastomers on request.
- Equipped with low-pressure springs allowing either vertical or horizontal valve operation.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.
- Maximum operating pressure: 10 bars.

## CLAPETS DE RETENUE

- Fabrication solide et robuste. Réalisées à partir de blocs d'acier inoxydable.
- Large ouverture du diaphragme de façon à permettre le passage des substances solides.
- Joints d'étanchéité en PTFE ou, sur demande, avec d'autres élastomères.
- Munies de ressorts à basse pression leur permettant de fonctionner aussi bien en position verticale qu'horizontale.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.
- Pression d'exploitation maximum: 10 bars.

## VÁLVULAS DE RETENCIÓN

- Fabricación sólida y robusta, puesto que se obtienen a partir de un lingote de acero inoxidable.
- Amplia abertura del diafragma para permitir el paso de substancias sólidas.
- Junta de PTFE o, a pedido, otros elastómeros.
- Equipadas con muelles de baja presión que permiten el funcionamiento de la válvula tanto en posición vertical como horizontal.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.
- Máxima presión de ejercicio: 10 bares.



MOLLA  
SPRING  
RESSORT  
MUELLE

Misura valvola Valve size Mesure vanne Medida válvula	Codice molla Spring code Code ressort Código muelle	Ø E E Ø Ø E Ø E	Ø filo Ø wire Ø fil Ø hilo	Lunghezza libera Free length Longueur libre Carrera libre	N. spire No. coils N. tours N. espires
25/28	630 25/28.406	17,9/26	2,2/3	95 mm	15/13
34/40	630 34/40.406	19,1/27	2,8/3,5	95 mm	15/11 3/4
51/52	630 51/52.406	20,25/29,75	3,5/4,5	95 mm	16/13
63/70	630 63/70.406	21/32	4/5	95 mm	14 3/4/10

TAVOLA PRESSIONE DI ESERCIZIO  
OPERATING PRESSURE TABLE  
TABLE PRESSION DE SERVICE  
TABLA PRESIÓN DE EJERCICIO

MOLLE STANDARD  
STANDARD SPRINGS  
RESSORT STANDARD  
MUELLE STANDARD

Codice molla Spring code Code ressort Código muelle	Misura valvola Valve size Mesure vanne Medida válvula				
	1"	1 1/2"	2"	2 1/2"	3"
630 25/28 06	0 - 5 bar	0 - 3 bar	0 - 1,5 bar	0 - 1 bar	0 - 0,5 bar
630 34/40 06	0 - 8 bar	0 - 5 bar	0 - 3 bar	0 - 2 bar	0 - 1 bar
630 51/52 06	0 - 15 bar	0 - 7 bar	0 - 5 bar	0 - 3,5 bar	0 - 2,5 bar
630 63/85 06	0 - 25 bar	0 - 12 bar	0 - 7 bar	0 - 5 bar	0 - 4 bar

Campo pressioni di esercizio molle standard  
Standard springs operating pressure range  
Gamme pression de service ressort standard  
Gama presión de ejercicio muelle standard

MOLLE A TAZZA  
DISC SPRINGS  
RESSORT CONIQUE  
MUELLE CONICO

N. molle No. springs N. ressorts N. muelles	Misura valvola Valve size Mesure vanne Medida válvula		
	2"	52	2 1/2"
46	8 bar	8 bar	
56	9 - 12 bar	9 - 12 bar	8 - 10 bar
60			11 - 12 bar

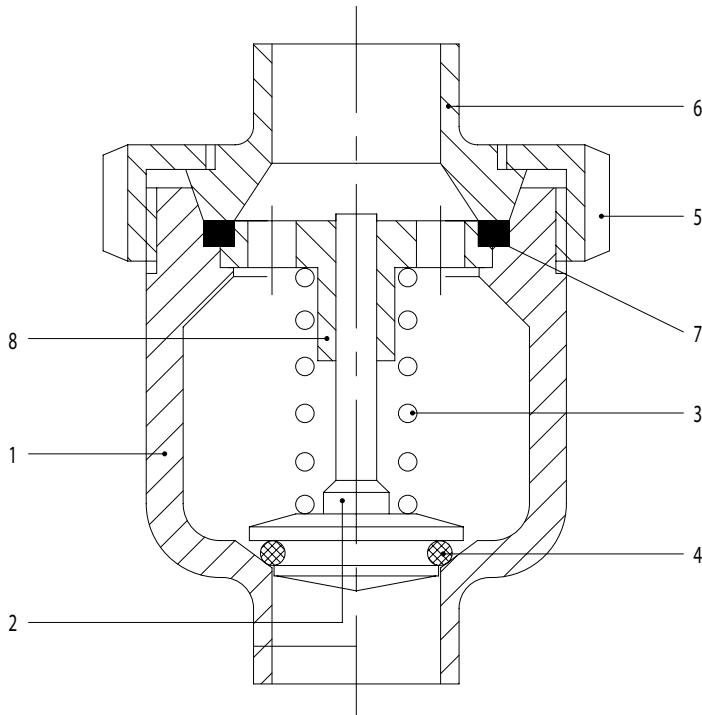


**VALVOLA DI RITEGNO**

**CHECK VALVE**

**CLAPET DE RETENUE**

**VÁLVULA DE RETENCIÓN**



1. Corpo valvola  
 Valve casing  
 Corps vanne  
 Cuerpo

2. Tampone  
 Head seal  
 Piston  
 Macho

3. Molla  
 Spring  
 Ressort  
 Muelle

4. Guarnizione PTFE  
 PTFE seal  
 Joint PTFE  
 Junta PTFE

5. Girella  
 Nut  
 Écrou  
 Tuerca

6. Bocchettone  
 Union  
 Pièce  
 Casquillo

7. Guarnizione  
 Seal  
 Joint  
 Junta

8. Diaframma  
 Diaphragm  
 Diaphragme  
 Diafragma

**CODIFICAZIONE**  
**CODING**  
**CODIFICATION**  
**CODIFICACIÓN**

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	4" 101	D 100 101	Mat.	Part. o agg.
1	641	D		28	34		40		52		70		85		101	4L/6L	01
1	641	S	25			38		51		63		76		101		4L/6L	01
1	641	B	25			38		51		63		76		101		4L/6L	01
1	641	I	25			38		51		63		76		101		4L/6L	01
2	640		25	28	34	38/40	38/40	51/52	51/52	63	70	76	85	101	101	6L	02
3	640		25/34	25/34	25/34	38/40	38/40	51/52	51/52	63/70	63/70	76/85	76/85	101	101	4L	03
4	640		25	28	34	38/40	38/40	51/52	51/52	63	70	76	85	101	101	T/E/S/V	04
5	121	D		40	50		50		65		80		100		100	4L	05
5	121	S	38			51		63		76		101		101		4L	05
5	121	B	38			51		63		76		101		101		4L	05
5	121	I	38			51		63		76		101		101		4L	05
6	116	D		40/28	50/34		50/40		65/52		80/70		100/85		101/101	4L/6L	06
6	116	S	38/25			51/38		63/51		76/63		101/76		101/101		4L/6L	06
6	116	B	38/25			51/38		63/51		76/63		101/76		101/101		4L/6L	06
6	116	I	38/25			51/38		63/51		76/63		101/76		101/101		4L/6L	06
7	131	D		40	50		50		65		80		100			E	07
7	131	S	38			51		63		76		101		101		E	07
7	131	B	38			51		63		76		101		101		E	07
7	131	I	38			51		63		76		101		101		E	07
8	640	D		25	32		40		50		65		80		100	6L	08
8	640	S	25			38		51		63		76		101		6L	08
8	640	B	25			38		51		63		76		101		6L	08
8	640	I	25			38		51		63		76		101		6L	08



**MOLLA**  
**SPRING**  
**RESSORT**  
**MUELLE**

Misura valvola Valve size Mesure vanne Medida válvula	Codice molla Spring code Code ressort Código muelle	Ø E E Ø Ø E Ø E	Ø filo Ø wire Ø fil Ø hilo	Corsa libera Free length Longueur libre Carrera libre	N. spire No. coils N. tours N. espires
12	640 12 03	12,6 mm	0,8 mm	44 mm	20
19	640 19 03	14 mm	0,9 mm	60 mm	16
25/34	640 25/34 03	17,5 mm	1 mm	72 mm	17 3/4
38/40	640 38/40 03	18,1 mm	1,3 mm	70 mm	18
51/52	640 51 03	18,1 mm	1,3 mm	72 mm	15
63/70	640 63/70 03	18,5 mm	1,5 mm	72 mm	18 1/2
76/80	640 76/80 03	24,4 mm	2 mm	70 mm	16
101	640 101 03	25,1 mm	2,3 mm	82 mm	16

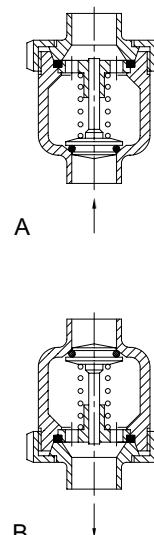
**CAMPO PRESSIONE DI APERTURA**

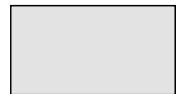
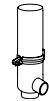
**OPENING PRESSURE RANGE**

**GAMME PRESSION D'OUVERTURE**

**GAMA PRESIÓN DE ABERTURA**

Misura valvola Valve size Mesure vanne Medida válvula	Bar Bars Bars Bares	640 25/34 03	640 38/40 03	640 51 03	640 63/70 03	640 76/80 03
25	A	0,152	0,341	1,000	1,120	1,283
	B	0,116	0,305	0,968	1,084	1,247
28	A	0,119	0,266	0,780	0,870	0,996
	B	0,089	0,236	0,750	0,840	0,966
38/40	A	0,055	0,115	0,219	0,361	0,418
	B	0,029	0,089	0,193	0,334	0,392
51/52	A	0,036	0,067	0,096	0,196	0,228
	B	0,008	0,035	0,069	0,168	0,200
63	A				0,083	0,101
	B				0,057	0,075
70	A				0,073	0,089
	B				0,046	0,061
76	A					0,069
	B					0,040
85	A					0,063
	B					0,036

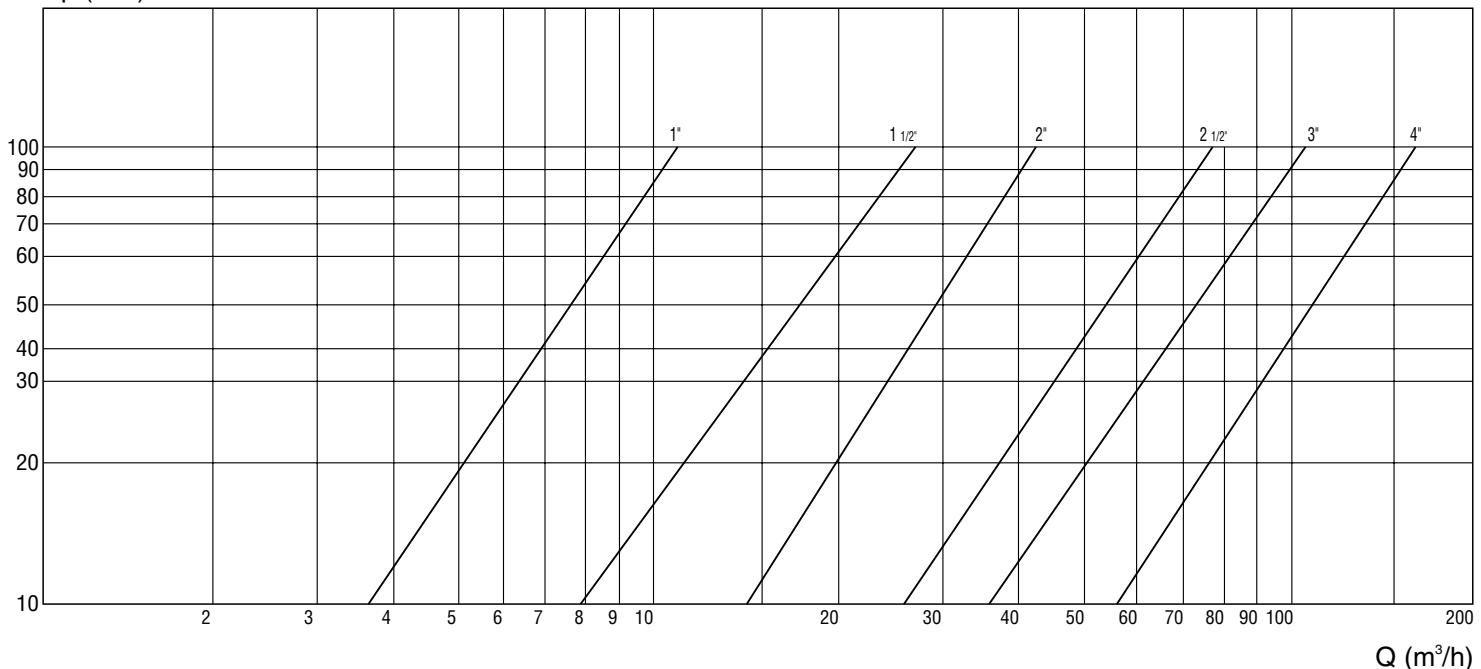




PERDITE DI CARICO  
PRESSURE DROP

PERTES DE CHARGE  
PÉRDIDA DE CARGA

$\Delta p$  (kPa)





## VALVOLE DI PRESSIONE DEPRESSIONE

- Ricavate da particolari stampati a caldo o laminati e solubilizzati.
- Pressione di apertura 0,02 bar, pressione di chiusura 0,01 bar.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.

## VACUUM PRESSURE VALVES

- Made from hot-rolled or press-forged material and solution heat-treated.
- Opening pressure 0.02 bars, closing pressure 0.01 bars.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.

## SOUPAPES DE PRESSION DÉPRESSION

- Obtenues à partir de pièces moulées à chaud et solubilisées.
- Pression d'ouverture 0,02 bars, pression de fermeture 0,01 bars.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.

## VÁLVULAS DE PRESIÓN VACÍO

- Obtenidas a partir de piezas estampadas en caliente o laminadas y solubilizadas.
- Presión de abertura 0,02 bares, presión de cierre 0,01 bares.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.

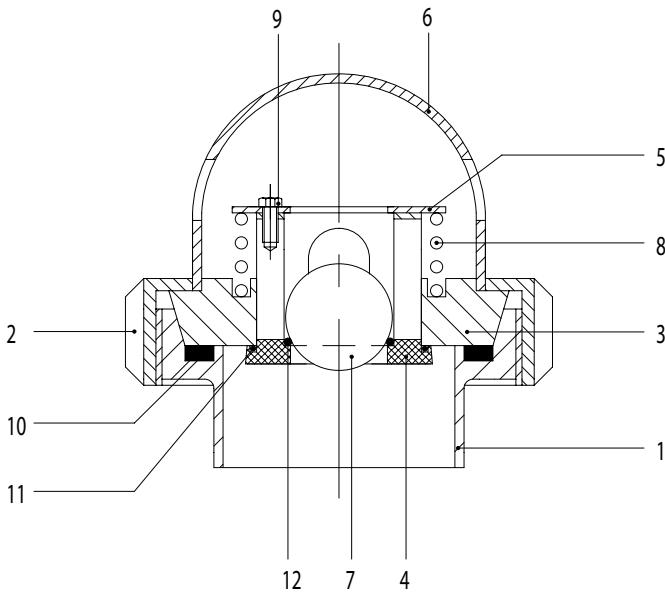


VALVOLA DI PRESSIONE DEPRESSIONE

VACUUM PRESSURE VALVE

SOUPAPE DE PRESSION DÉPRESSION

VÁLVULA DE PRESIÓN VACÍO



- |  |   |
|--|---|
| 1. Bocchettone filettato<br>Male part<br>Pièce filetée<br>Macho racor                    | 7. Sfera<br>Ball<br>Boule<br>Bola                                     |
| 2. Girella<br>Nut<br>Écrou<br>Tuerca   | 8. Molla vuoto<br>Vacuum spring<br>Ressort dépression<br>Muelle vacío |
| 3. Tappo<br>Blank<br>Bouchon<br>Tapón  | 9. Vite<br>Screw<br>Vis<br>Tornillo                                   |
| 4. Elemento di bloccaggio<br>Locking device<br>Élement de blocage<br>Elemento de bloqueo | 10. Guarnizione<br>Seal<br>Joint<br>Junta                             |
| 5. Disco superiore<br>Upper disk<br>Disque supérieur<br>Disco superior                   | 11. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR  |
| 6. Cappellotto<br>Cap<br>Capot<br>Capuchón   | 12. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR  |

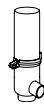
CODIFICAZIONE

CODING

CODIFICATION

CODIFICACIÓN

Pos.	Cod. base	Norme	1 1/2" 38	D 40	2" 51	D 50	2 1/2" 63	D 65	Mat.	Part. o agg.
1	117	D	38	40	51	52	63	70	4L	01
2	121	D	40	40	50	50	65	65	4L	02
3	645		38/40	38/40	51/52	51/52	63/70	63/70	4L	03
4	645		38/40	38/40	51/52	51/52	63/70	63/70	T/A	04
5	645		38/40	38/40	51/52	51/52	63/70	63/70	4	05
6	645		38/40	38/40	51/52	51/52	63/70	63/70	4	06
7	645		38/40	38/40	51/52	51/52	63/70	63/70	4	07
8	645		38/40	38/40	51/52	51/52	63/70	63/70	4	08
9	TCCE		M3x6	M3x6	M3x6	M3x6	M3x6	M3x6	4	
10	131	D	40	40	50	50	65	65	N	10
11	OR		3062	3062	3093	3093	2175	2175	N	
12	OR		2106	2106	2137	2137	3118	3118	N	

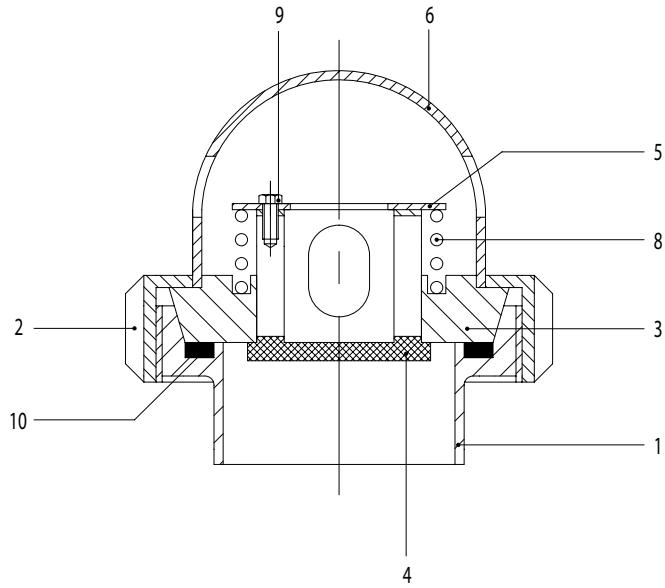


**VALVOLA DI DEPRESSIONE**

**VACUUM VALVE**

**SOUPAPE DE DÉPRESSION**

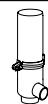
**VÁLVULA DE VACÍO**



- |  |   |
|--|---|
| 1. Bocchettone filettato<br>Male part<br>Pièce filetée<br>Macho racor                    | 6. Cappellotto<br>Cap<br>Capot<br>Capuchón                            |
| 2. Girella<br>Nut<br>Écrou<br>Tuerca   | 8. Molla vuoto<br>Vacuum spring<br>Ressort dépression<br>Muelle vacío |
| 3. Tappo<br>Blank<br>Bouchon<br>Tapón  | 9. Vite<br>Screw<br>Vis<br>Tornillo                                   |
| 4. Elemento di bloccaggio<br>Locking device<br>Element de blocage<br>Elemento de bloqueo | 10. Guarnizione<br>Seal<br>Joint<br>Junta                             |
| 5. Disco superiore<br>Upper disk<br>Disque supérieur<br>Disco superior                   |   |

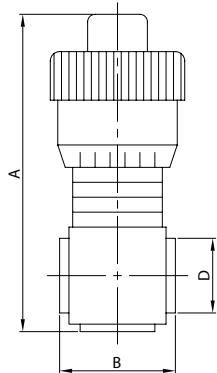
**CODIFICAZIONE**  
**CODING**  
**CODIFICATION**  
**CODIFICACIÓN**

Pos.	Cod. base	Norme	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	Mat.	Part. o agg.
1	117	D	38	40	51	52	63	70	4L	01
2	121	D	40	40	50	50	65	65	4L	02
3	645		38/40	38/40	51/52	51/52	63/70	63/70	4L	03
4	645		38/40	38/40	51/52	51/52	63/70	63/70	T/A	04
5	645		38/40	38/40	51/52	51/52	63/70	63/70	4	05
6	645		38/40	38/40	51/52	51/52	63/70	63/70	4	06
8	645		38/40	38/40	51/52	51/52	63/70	63/70	4	08
9	TCCE		M3x6	M3x6	M3x6	M3x6	M3x6	M3x6	4	
10	131	D	40	40	50	50	65	65	N	10



V. REGOLAZIONE FLUSSO SR.  
 FLOW CONTROL V. WG.  
 V. RÉGLAGE FLUX SR.  
 V. REGULACIÓN SR.

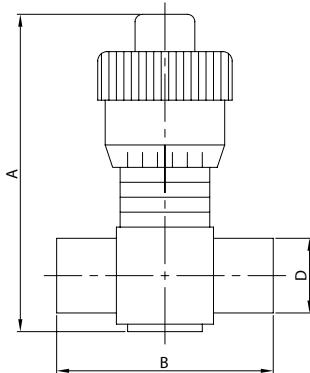
619 L



DN	A	B	D	gr
28	127,0	43,0	28,0	1.220
34	140,0	50,0	34,0	2.200
40	165,0	60,0	40,0	2.820
52	200,0	70,0	52,0	3.760
70	253,0	87,0	70,0	7.420

V. REGOLAZIONE FLUSSO EL.  
 FLOW CONTROL V. PE.  
 V. RÉGLAGE FLUX BL.  
 V. REGULACIÓN EL.

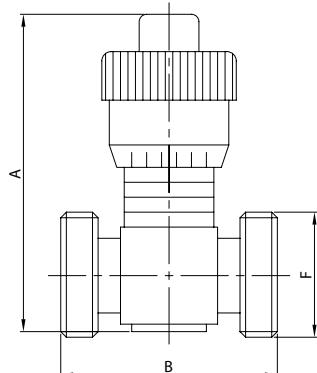
620 L



DN	A	B	D	gr
28	127,0	83,0	28,0	1.250
34	140,0	90,0	34,0	2.260
40	165,0	100,0	40,0	2.860
52	200,0	124,0	52,0	3.820
70	253,0	137,0	70,0	7.460

V. REGOLAZIONE FLUSSO EF.  
 FLOW CONTROL V. ME.  
 V. RÉGLAGE FLUX BF.  
 V. REGULACIÓN ER.

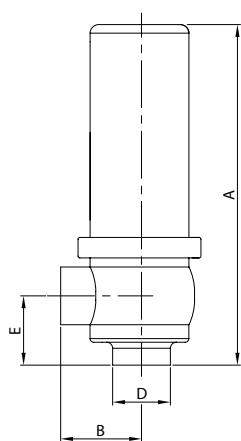
621 D



DN	A	B	F	gr
25	127,0	101,0	52-6	1.440
32	140,0	114,0	58-6	2.560
40	165,0	126,0	65-6	3.150
50	200,0	140,0	78-6	4.200
65	253,0	167,0	95-6	8.300

VALVOLA SICUREZZA EL.  
 RELIEF VALVE PE.  
 SOUPAPE SÛRETÉ BL.  
 VÁLVULA SEGURIDAD EL.

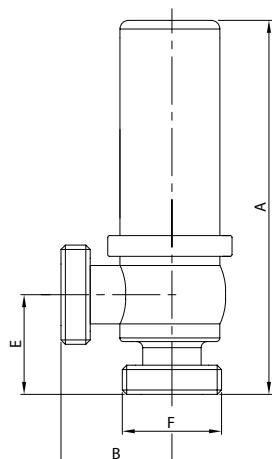
660 L



DN	A	B	D	E	gr
28	190,0	45,0	28,0	30,0	2.185
34	233,0	55,0	34,0	38,0	2.160
40	234,0	56,0	40,0	39,0	2.280
52	245,0	65,0	52,0	45,0	2.910
70	270,0	80,0	70,0	57,0	4.650
85	286,0	95,0	85,0	66,0	6.200

VALVOLA SICUREZZA EF.  
 RELIEF VALVE ME.  
 SOUPAPE SÛRETÉ BF.  
 VÁLVULA SEGURIDAD ER.

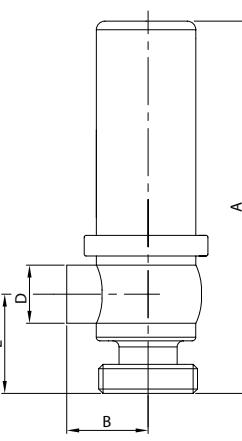
661 D



DN	A	B	E	F	gr
25	211,0	59,0	51,0	52-6	2.445
32	254,0	69,0	59,0	58-6	2.500
40	255,0	69,0	60,0	65-6	3.300
50	266,0	78,0	66,0	78-6	3.470
65	295,0	95,0	82,0	95-6	5.410
80	321,0	114,0	101,0	110-4	7.400

VALVOLA SICUREZZA EL./EF.  
 RELIEF VALVE PE./ME.  
 SOUPAPE SÛRETÉ BL./BF.  
 VÁLVULA SEGURIDAD EL./ER.

662 D

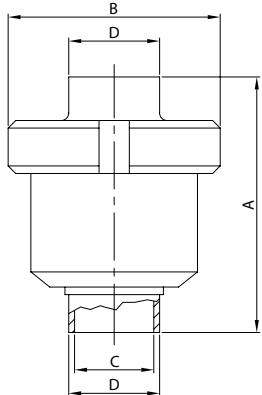


DN	A	B	D	E	gr
25	211,0	45,0	28,0	51,0	2.315
32	254,0	55,0	34,0	59,0	2.330
40	255,0	56,0	40,0	60,0	3.020
50	266,0	65,0	52,0	66,0	3.190
65	295,0	80,0	70,0	82,0	5.030
80	321,0	95,0	85,0	101,0	6.800



**VALVOLA RITEGNO ES.**  
**CHECK VALVE WE.**  
**CLAPET RETENUE BS.**  
**VÁLVULA RETENCIÓN ES.**

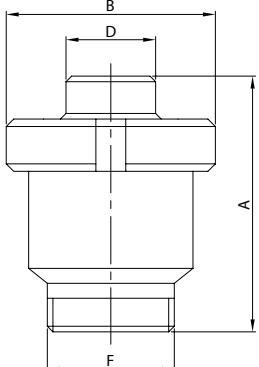
**641 D**



DN	A	B	C	D	gr
25	87,0	78,0	25,0	28,0	1.100
32	89,0	92,0	31,0	34,0	1.650
40	97,0	92,0	37,0	40,0	1.530
50	101,5	112,0	49,0	52,0	2.440
65	119,5	138,0	66,0	70,0	4.010
80	132,0	148,0	81,0	85,0	5.340
100	118,0	148,0	97,6	101,6	6.330
104	118,0	148,0	100,0	104,0	6.330

**V. RITEGNO EF./BC. MR.**  
**CHECK V. ME./TP. EG.**  
**C. RETENUE BF./PC. DR.**  
**V. RETENCIÓN ER./C. MR.**

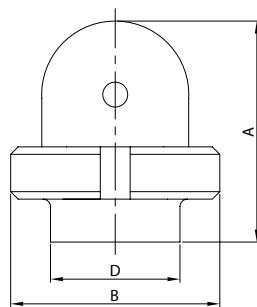
**642 D**



DN	A	B	D	F	gr
25	89,0	78,0	35,0	52-6	1.120
32	94,0	92,0	41,0	58-6	1.670
40	105,0	92,0	48,0	65-6	1.560
50	109,5	112,0	61,0	78-6	2.500
65	132,5	138,0	79,0	95-6	4.170
80	133,5	148,0	93,0	110-4	5.550
100	126,0	158,0	114,0	130-4	7.050
104	126,0	158,0	114,0	130-4	7.050

**V. PRESS. DEPRESSIONE EL.**  
**VACUUM PRESSURE V. PE.**  
**S. PRESS. DÉPRESSION BL.**  
**V. PRESIÓN VACÍO EL.**

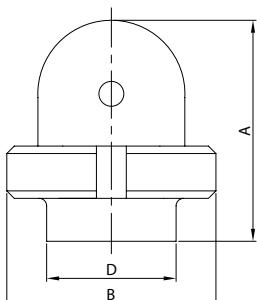
**645 L**



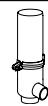
DN	A	B	D	gr
40	74,0	78,0	40,0	685
52	84,0	92,0	52,0	1.040
70	93,5	112,0	70,0	1.720

**VALVOLA DEPRESSIONE EL.**  
**VACUUM VALVE PE.**  
**SOUPAPE DÉPRESSION BL.**  
**VÁLVULA VACÍO EL.**

**646 L**

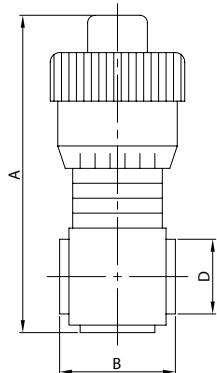


DN	A	B	D	gr
40	74,0	78,0	40,0	663
52	84,0	92,0	52,0	973
70	93,5	112,0	70,0	1.360



V. REGOLAZIONE FLUSSO SR.  
 FLOW CONTROL V. WG.  
 V. RÉGLAGE FLUX SR.  
 V. REGULACIÓN SR.

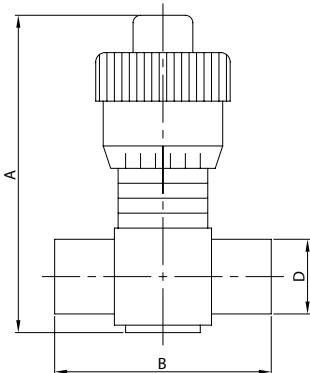
**619 L**



DN	A	B	D	gr
25	126,0	43,0	25,4	1.220
38	165,0	60,0	38,1	2.820
51	200,0	70,0	50,8	3.760
63	230,0	83,0	63,5	5.580
76	274,0	95,0	76,2	7.400

V. REGOLAZIONE FLUSSO EL.  
 FLOW CONTROL V. PE.  
 V. RÉGLAGE FLUX BL.  
 V. REGULACIÓN EL.

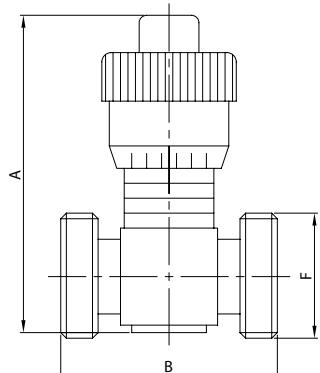
**620 L**



DN	A	B	D	gr
25	126,0	83,0	25,4	1.250
38	165,0	100,0	38,1	2.860
51	200,0	124,0	50,8	3.820
63	230,0	133,0	63,5	5.640
76	274,0	145,0	76,2	7.460

V. REGOLAZIONE FLUSSO EF.  
 FLOW CONTROL V. ME.  
 V. RÉGLAGE FLUX BF.  
 V. REGULACIÓN ER.

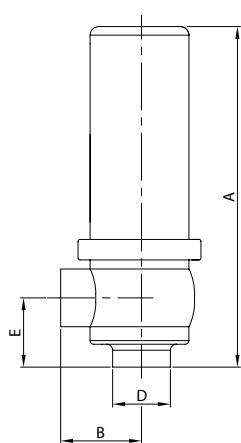
**621 S**



DN	A	B	F	gr
25	126,0	83,0	40-6	1.350
38	165,0	106,0	60-6	3.200
51	200,0	120,0	70-6	4.360
63	230,0	143,0	85-6	6.560
76	274,0	165,0	98-6	8.680

VALVOLA SICUREZZA EL.  
 RELIEF VALVE PE.  
 SOUPAPE SÛRETÉ BL.  
 VÁLVULA SEGURIDAD EL.

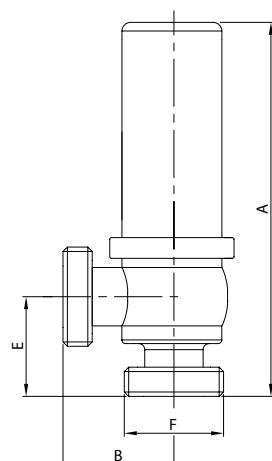
**660 L**



DN	A	B	D	E	gr
25	190,0	45,0	25,4	30,0	2.185
38	233,0	56,0	38,1	38,0	2.270
51	245,0	65,0	50,8	45,0	2.910
63	261,0	70,0	63,5	52,0	4.550
76	276,0	80,0	76,2	60,0	6.100

VALVOLA SICUREZZA EF.  
 RELIEF VALVE ME.  
 SOUPAPE SÛRETÉ BF.  
 VÁLVULA SEGURIDAD ER.

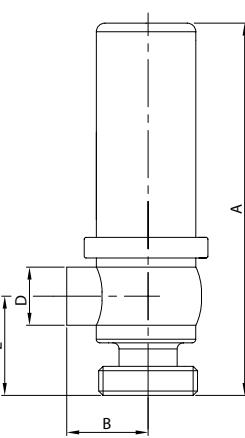
**661 S**



DN	A	B	E	F	gr
25	214,0	60,0	45,0	40-6	2.325
38	253,0	76,0	58,0	60-6	2.650
51	265,0	85,0	65,0	70-6	3.310
63	285,0	94,0	76,0	85-6	5.290
76	300,0	104,0	84,0	98-6	7.060

VALVOLA SICUREZZA EL./EF.  
 RELIEF VALVE PE./ME.  
 SOUPAPE SÛRETÉ BL./BF.  
 VÁLVULA SEGURIDAD EL./ER.

**662 S**

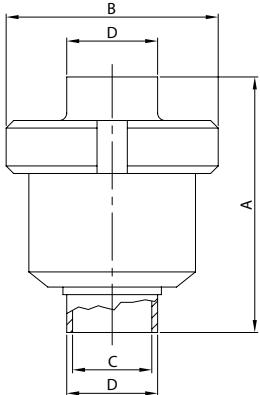


DN	A	B	D	E	gr
25	214,0	45,0	25,4	45,0	2.255
38	253,0	56,0	38,1	58,0	2.460
51	265,0	65,0	50,8	65,0	3.110
63	285,0	70,0	63,5	76,0	4.920
76	300,0	80,0	76,2	84,0	6.580



VALVOLA RITEGNO ES.  
 CHECK VALVE WE.  
 CLAPET RETENUE BS.  
 VÁLVULA RETENCIÓN ES.

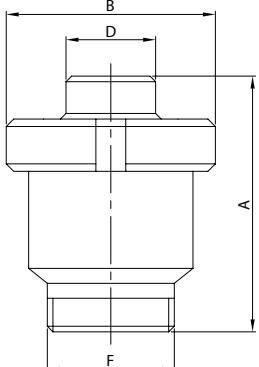
641 S



DN	A	B	C	D	gr
25	76,0	74,0	22,4	25,4	1.100
38	98,0	84,0	35,1	38,1	1.530
51	94,0	100,0	47,8	50,8	2.440
63	108,0	114,0	60,5	63,5	4.010
76	126,0	154,0	72,9	76,2	5.340
101	118,0	154,0	97,6	101,6	6.330

V. RITEGNO EF./BL. MR.  
 CHECK V. ME./L. EG.  
 C. RETENUE BF./PL. DR.  
 V. RETENCIÓN ER./C. MR.

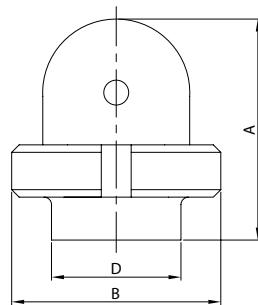
642 S



DN	A	B	D	F	gr
25	79,5	74,0	32,0	40-6	1.120
38	102,0	84,0	48,0	60-6	1.560
51	100,0	100,0	61,0	70-6	2.500
63	122,5	114,0	73,5	85-6	4.170
76	132,0	154,0	86,0	98-6	5.550
101	127,0	154,0	116,0	132-6	7.050

V. PRESS. DEPRESSIONE EL.  
 VACUUM PRESSURE V. PE.  
 S. PRESS. DÉPRESSION BL.  
 V. PRESIÓN VACÍO EL.

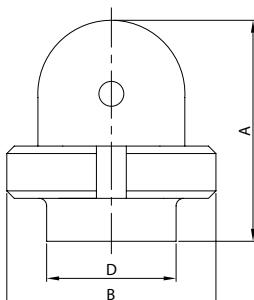
645 L



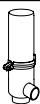
DN	A	B	D	gr
38	74,0	78,0	38,1	685
51	84,0	92,0	50,8	1.050
63	93,5	112,0	63,5	1.750

VALVOLA DEPRESSIONE EL.  
 VACUUM VALVE PE.  
 S. DÉPRESSION BL.  
 VÁLVULA VACÍO EL.

646 L

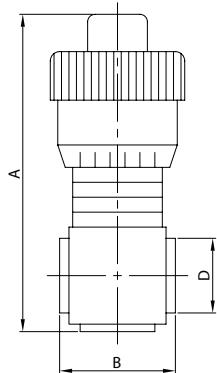


DN	A	B	D	gr
38	74,0	78,0	38,1	663
51	84,0	92,0	50,8	983
63	93,5	112,0	63,5	1.618



V. REGOLAZIONE FLUSSO SR.  
 FLOW CONTROL V. WG.  
 V. RÉGLAGE FLUX SR.  
 V. REGULACIÓN SR.

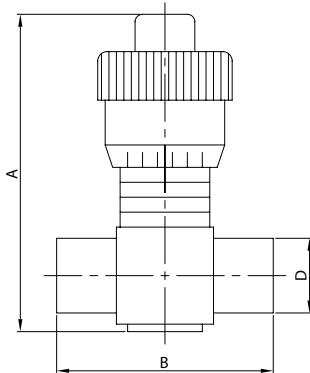
619 L



DN	A	B	D	gr
25	126,0	43,0	25,4	1.220
38	165,0	60,0	38,1	2.820
51	200,0	70,0	50,8	3.760
63	230,0	83,0	63,5	5.580
76	274,0	95,0	76,2	7.400

V. REGOLAZIONE FLUSSO EL.  
 FLOW CONTROL V. PE.  
 V. RÉGLAGE FLUX BL.  
 V. REGULACIÓN EL.

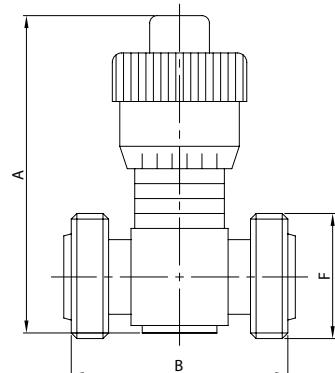
620 L



DN	A	B	D	gr
25	126,0	83,0	25,4	1.250
38	165,0	100,0	38,1	2.860
51	200,0	124,0	50,8	3.820
63	230,0	133,0	63,5	5.640
76	274,0	145,0	76,2	7.460

V. REGOLAZIONE FLUSSO EF.  
 FLOW CONTROL V. ME.  
 V. RÉGLAGE FLUX BF.  
 V. REGULACIÓN ER.

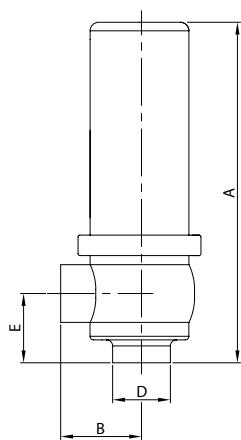
621 B



DN	A	B	F	gr
25	126,0	97,0	46-8	1.450
38	165,0	114,0	58-8	3.140
51	200,0	124,0	73-6	4.240
63	230,0	137,0	85-6	6.140
76	274,0	149,0	98-6	8.100

VALVOLA SICUREZZA EL.  
 RELIEF VALVE PE.  
 SOUPAPE SÛRETÉ BL.  
 VÁLVULA SEGURIDAD EL.

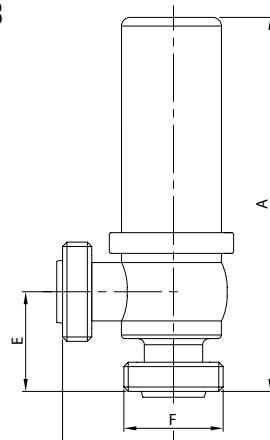
660 L



DN	A	B	D	E	gr
25	190,0	45,0	25,4	30,0	2.185
38	233,0	56,0	38,1	38,0	2.270
51	245,0	65,0	50,8	45,0	2.910
63	261,0	70,0	63,5	52,0	4.550
76	276,0	80,0	76,2	60,0	6.100

VALVOLA SICUREZZA EF.  
 RELIEF VALVE ME.  
 SOUPAPE SÛRETÉ BF.  
 VÁLVULA SEGURIDAD ER.

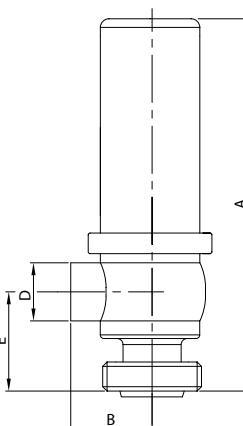
661 B



DN	A	B	E	F	gr
25	214,0	69,0	54,0	46-8	2.385
38	257,0	80,0	62,0	58-8	2.590
51	269,0	89,0	69,0	76-6	3.390
63	285,0	94,0	76,0	85-6	5.110
76	300,0	104,0	84,0	98-6	6.800

VALVOLA SICUREZZA EL./EF.  
 RELIEF VALVE PE./ME.  
 SOUPAPE SÛRETÉ BL./BF.  
 VÁLVULA SEGURIDAD EL./ER.

662 B

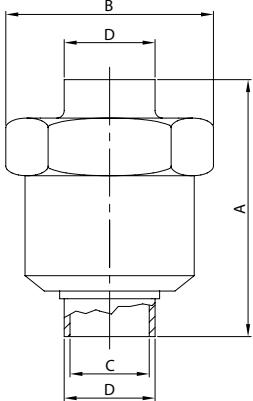


DN	A	B	D	E	gr
25	214,0	45,0	25,4	54,0	2.285
38	257,0	56,0	38,1	62,0	2.430
51	269,0	65,0	50,8	69,0	3.150
63	285,0	70,0	63,5	76,0	4.830
76	300,0	80,0	76,2	84,0	6.450



VALVOLA RITEGNO ES.  
 CHECK VALVE WE.  
 CLAPET RETENUE BS.  
 VÁLVULA RETENCIÓN ES.

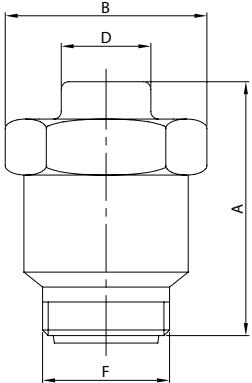
641 B



DN	A	B	C	D	gr
25	85,0	65,0	22,4	25,4	1.100
38	94,0	80,0	35,1	38,1	1.530
51	93,0	92,0	47,8	50,8	2.440
63	106,0	104,0	60,5	63,5	4.010
76	111,0	130,0	72,9	76,2	5.340
101	118,0	130,0	97,6	101,6	6.330

V. RITEGNO EF./BL. MR.  
 CHECK V. ME./L. EG.  
 C. RETENUE BF./PL. DR.  
 V. RETENCIÓN ER./C. MR.

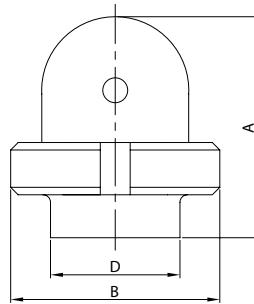
642 B



DN	A	B	D	F	gr
25	92,0	65,0	32,5	46-8	1.120
38	104,0	80,0	45,0	58-8	1.560
51	106,0	92,0	58,0	73-6	2.500
63	125,5	104,0	70,5	85-6	4.170
76	128,0	130,0	83,5	98-6	5.550
101	124,0	130,0	109,5	123-6	7.050

V. PRESS. DEPRESSIONE EL.  
 VACUUM PRESSURE V. PE.  
 S. PRESS. DÉPRESSION BL.  
 V. PRESIÓN VACÍO EL.

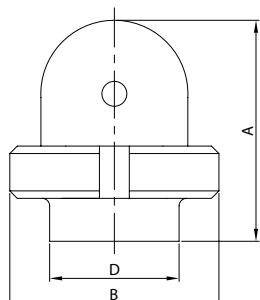
645 L



DN	A	B	D	gr
38	74,0	78,0	38,1	685
51	84,0	92,0	50,8	1.050
63	93,5	112,0	63,5	1.750

VALVOLA DEPRESSIONE EL.  
 VACUUM VALVE PE.  
 S. DÉPRESSION BL.  
 VÁLVULA VACÍO EL.

646 L

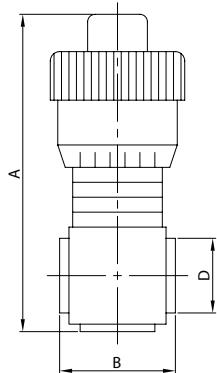


DN	A	B	D	gr
38	74,0	78,0	38,1	663
51	84,0	92,0	50,8	983
63	93,5	112,0	63,5	1.618



V. REGOLAZIONE FLUSSO SR.  
 FLOW CONTROL V. WG.  
 V. RÉGLAGE FLUX SR.  
 V. REGULACIÓN SR.

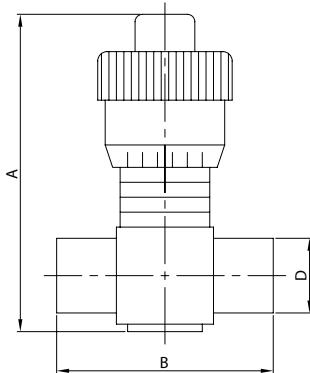
619 L



DN	A	B	D	gr
25	126,0	43,0	25,4	1.220
38	165,0	60,0	38,1	2.820
51	200,0	70,0	50,8	3.760
63	230,0	83,0	63,5	5.580
76	274,0	95,0	76,2	7.400

V. REGOLAZIONE FLUSSO EL.  
 FLOW CONTROL V. PE.  
 V. RÉGLAGE FLUX BL.  
 V. REGULACIÓN EL.

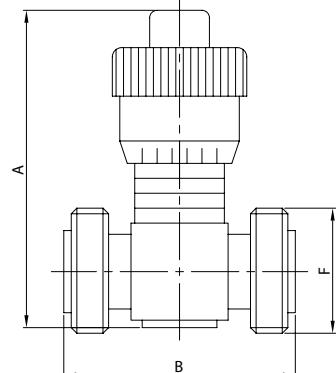
620 L



DN	A	B	D	gr
25	126,0	83,0	25,4	1.250
38	165,0	100,0	38,1	2.860
51	200,0	124,0	50,8	3.820
63	230,0	133,0	63,5	5.640
76	274,0	145,0	76,2	7.460

V. REGOLAZIONE FLUSSO EF.  
 FLOW CONTROL V. ME.  
 V. RÉGLAGE FLUX BF.  
 V. REGULACIÓN ER.

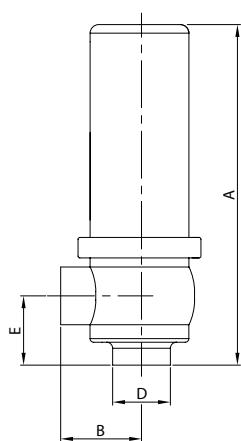
621 I



DN	A	B	F	gr
25	126,0	86,0	37-8	1.360
38	165,0	103,0	50-8	3.040
51	200,0	113,0	64-8	4.060
63	230,0	126,0	77-8	6.000
76	274,0	138,0	91-8	7.940

VALVOLA SICUREZZA EL.  
 RELIEF VALVE PE.  
 SOUPAPE SÛRETÉ BL.  
 VÁLVULA SEGURIDAD EL.

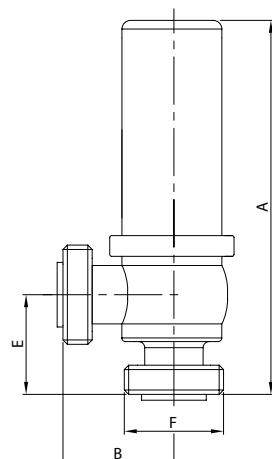
660 L



DN	A	B	D	E	gr
25	190,0	45,0	25,4	30,0	2.185
38	233,0	56,0	38,1	38,0	2.270
51	245,0	65,0	50,8	45,0	2.910
63	261,0	70,0	63,5	52,0	4.550
76	276,0	80,0	76,2	60,0	6.100

VALVOLA SICUREZZA EF.  
 RELIEF VALVE ME.  
 SOUPAPE SÛRETÉ BF.  
 VÁLVULA SEGURIDAD ER.

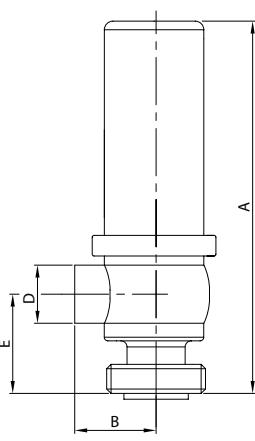
661 I



DN	A	B	E	F	gr
25	211,0	66,0	51,0	37-8	2.325
38	254,0	77,0	59,0	50-8	2.470
51	266,0	86,0	66,0	64-8	3.150
63	282,0	91,0	73,0	77-8	4.940
76	298,0	101,0	82,0	91-8	6.620

VALVOLA SICUREZZA EL./EF.  
 RELIEF VALVE PE./ME.  
 SOUPAPE SÛRETÉ BL./BF.  
 VÁLVULA SEGURIDAD EL./ER.

662 I

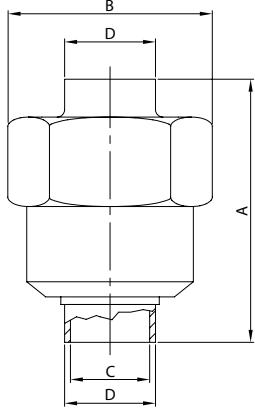


DN	A	B	D	E	gr
25	211,0	45,0	25,4	51,0	2.255
38	254,0	56,0	38,1	59,0	2.370
51	266,0	65,0	50,8	66,0	3.030
63	282,0	70,0	63,5	73,0	4.745
76	298,0	80,0	76,2	82,0	6.360



VALVOLA RITEGNO ES.  
 CHECK VALVE WE.  
 CLAPET RETENUE BS.  
 VÁLVULA RETENCIÓN ES.

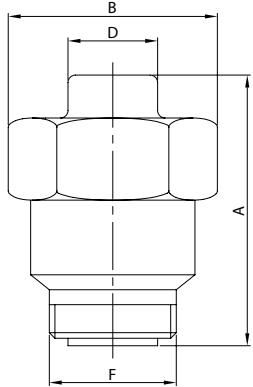
641 I



DN	A	B	C	D	gr
25	83,0	60,0	22,4	25,4	1.100
38	91,0	75,0	35,1	38,1	1.530
51	106,0	90,0	47,8	50,8	2.440
63	123,0	105,0	60,5	63,5	4.010
76	130,5	134,0	72,9	76,2	5.340
101	135,0	134,0	97,6	101,6	6.330

V. RITEGNO EF./BL. MR.  
 CHECK V. ME./L. EG.  
 C. RETENUE BF./PL. DR.  
 V. RETENCIÓN ER./C. MR.

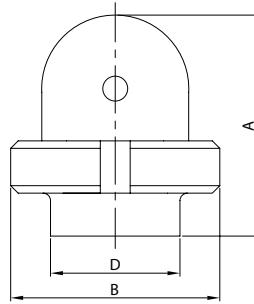
642 I



DN	A	B	D	F	gr
25	83,0	60,0	28,0	37-8	1.120
38	91,0	75,0	42,5	50-8	1.560
51	106,0	90,0	56,0	64-8	2.500
63	123,0	105,0	69,5	77-8	4.170
76	130,5	134,0	82,0	91-8	5.550
101	135,0	134,0	108,4	118-8	7.050

V. PRESS. DEPRESSIONE EL.  
 VACUUM PRESSURE V. PE.  
 S. PRESS. DÉPRESSION BL.  
 V. PRESIÓN VACÍO EL.

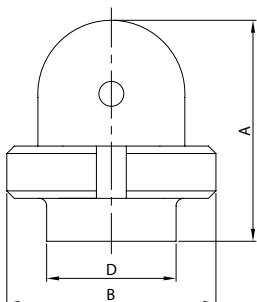
645 L



DN	A	B	D	gr
38	74,0	78,0	38,1	685
51	84,0	92,0	50,8	1.050
63	93,5	112,0	63,5	1.750

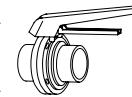
VALVOLA DEPRESSIONE EL.  
 VACUUM VALVE PE.  
 S. DÉPRESSION BL.  
 VÁLVULA VACÍO EL.

646 L



DN	A	B	D	gr
38	74,0	78,0	38,1	663
51	74,0	92,0	50,8	983
63	93,5	112,0	63,5	1.618





## VALVOLE A FARFALLA

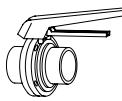
- Ricavate da particolari stampati a caldo e solubilizzati.
- Otturatori ricavati da particolari in acciaio inossidabile AISI 316L, stampati a caldo e solubilizzati, lavorati meccanicamente su tutte le superfici e rettificati sulle parti rotanti.
- Applicazione standard di 2 bussole in PTFE sugli alberi degli otturatori per eliminare l'attrito nelle rotazioni.
- Guarnizioni prodotte con stampaggio a compressione e con elastomeri di ottima qualità. Standard silicone; a richiesta EPDM, FTM, FTM rivestito PTFE, PTFE + silicone.
- Possibilità di intercambiabilità tra le varie unificazioni.
- Ampia gamma di comandi manuali per soddisfare le differenti necessità impiantistiche.
- Semplicità, sicurezza e affidabilità delle manovre.
- Comandi pneumatici orizzontali e verticali a semplice effetto, doppio effetto e di regolazione flusso, corredabili di contatto di prossimità, microinterruttore (elettrico o pneumatico), elettrovalvola (24 V CA, 24 V CC, 48 V CA), connettore.
- Produzione standard: da DN 25 a DN 250.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.
- Max. pressione di esercizio: 7 bar; per guarnizioni in PTFE: 2 bar.

## BUTTERFLY VALVES

- Made from press-forged and solution heat-treated blanks.
- Shutters made from press-forged and solution heat-treated AISI 316L stainless steel pieces machined over the entire surface and ground on the revolving parts.
- Standard fitting of two PTFE bushes on the shutter stems to eliminate rotation friction.
- Seal rings compression-pressed from first grade elastomers. Standard silicone. On request EPDM, FTM, PTFE-coated FTM, PTFE + silicone.
- Interchangeability between the different standards available.
- Wide range of manual controls to meet different system requirements.
- Simple, safe and reliable operating.
- Horizontal and vertical single-, double-effect, and modulating pneumatic controls. Can be equipped with proximity contact, microswitch (electric or pneumatic), solenoid valve (24 V AC, 24 V DC, 48 V AC), connector.
- Standard production: from DN 25 to DN 250.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.
- Maximum operating pressure: 7 bars; 2 bars for PTFE seal rings.

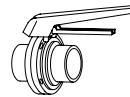
## VANNES PAPILLON

- Obtenues à partir de pièces moulées à chaud et solubilisées.
- Obturateurs réalisés à l'aide d'éléments en acier inoxydable AISI 316L moulés à chaud et solubilisés, usinés mécaniquement sur toutes les surfaces et rectifiés sur les parties pivotantes.
- Application standard de 2 douilles en PTFE sur les arbres des obturateurs pour éliminer le frottement dans les rotations.
- Joints moulés sous pression et réalisés avec des élastomères de haute qualité. Standard silicone; sur demande, EPDM, FTM, FTM revêtu PTFE, PTFE + silicone.
- Interchangeabilité possible entre les différents standards.
- Vaste gamme de commandes manuelles pour répondre aux différentes exigences des installations.
- Simplicité, sécurité et fiabilité des manoeuvres.
- Commandes pneumatiques horizontales et verticales à simple effet, double effet et pour le réglage du flux; peuvent être munies de contact de proximité, minirupteur (électrique ou pneumatique), électrovanne (24 V CA, 24 V CC, 48 V CA), connecteur.
- Production standard: de DN 25 à DN 250.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.
- Pression d'exploitation maximum: 7 bars; pour les joints en PTFE: 2 bars.



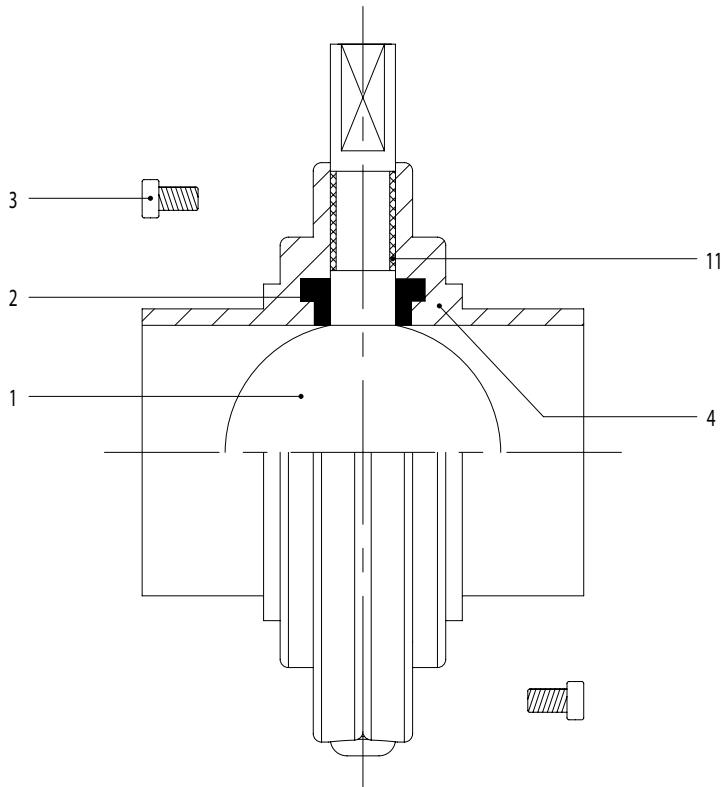
## VÁLVULAS DE MARIPOSA

- Obtenidas a partir de piezas estampadas en caliente y solubilizadas.
- Obturadores obtenidos de piezas de acero inoxidable AISI 316L estampadas en caliente y solubilizadas, trabajadas mecánicamente en todas las superficies y rectificadas en las partes giratorias.
- Aplicación estándar de 2 camisas de PTFE en los ejes de los obturadores para eliminar el rozamiento en las rotaciones.
- Juntas producidas mediante estampado bajo compresión y con elastómeros de óptima calidad. Estándar silicona; a pedido, EPDM, FTM, FTM revestido PTFE, PTFE + silicona.
- Posibilidad de intercambio entre las distintas unificaciones.
- Amplia gama de mandos manuales para satisfacer las distintas exigencias de las instalaciones.
- Simplicidad, seguridad y fiabilidad de las maniobras.
- Mandos neumáticos horizontales y verticales de simple efecto, doble efecto y de regulación del flujo que se pueden equipar con microsensor, microrruptor (eléctrico o pneumático), electroválvula (24 V CA, 24 V CC, 48 V CA), conector.
- Producción estándar: de DN 25 a DN 250.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.
- Máxima presión de ejercicio: 7 bares; para juntas en PTFE: 2 bares.



VALVOLA A FARFALLA  
BUTTERFLY VALVE

VANNE PAPILLON  
VÁLVULA DE MARIPOSA



1. Otturatore  
Butterfly  
Papillon  
Obturador

2. Guarnizione  
Seal  
Joint  
Junta

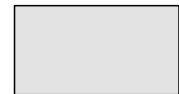
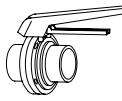
3. Vite  
Screw  
Vis  
Tornillo

4. Flangia  
Flange  
Bride  
Brida

11. Bussola PTFE  
PTFE bush  
Douille PTFE  
Camisa PTFE

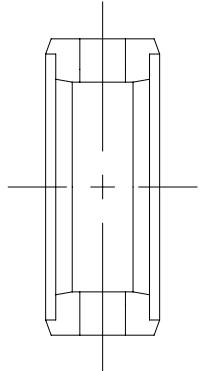
CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	4" 101	D 100 101	4" 104	D 100 104	Mat.	Part. o agg.
1	700		25/28	25/28	34/38	34/38	40	51/52	51/52	63	70/76	70/76	85	101	101	104	104	6L	01
2	700		25/28	25/28	34/38	34/38	40	51/52	51/52	63	70/76	70/76	85	101	101	104	104	S/E/N/T	02
3	TCC		6x12	6x12	6x12	6x12	6x12	6x12	6x12	6x12	6x12	6x12	6x12	6x12	6x12	6x12	6x12	4L	
4	701	L	25	28	34	38	40	51	52	63	70	76	85	101	101	104	104	4L/6L	
11	700		25/28	25/28	34/104	34/104	34/104	34/104	34/104	34/104	34/104	34/104	34/104	34/104	34/104	34/104	34/104	T	

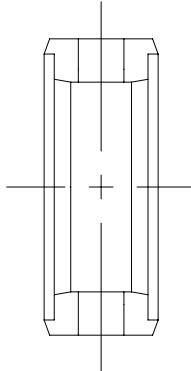


GUARNIZIONI  
SEAL RINGS

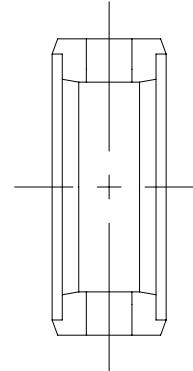
JOINTS  
JUNTAS



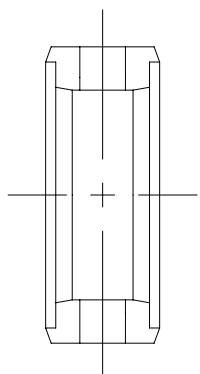
■ SILICONE  
-50°C +200°C  
-60°F +390°F



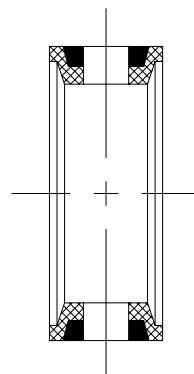
■ EPDM  
-30°C +140°C  
-20°F +280°F



■ FTM  
-15°C +200°C  
+5°F +390°F



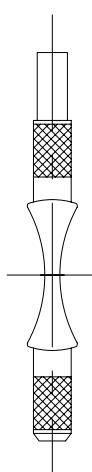
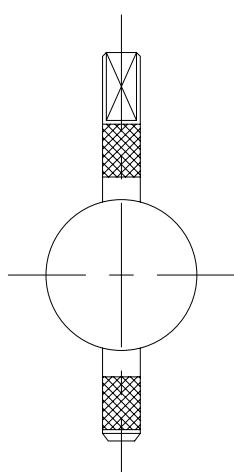
■ FTM  
RIVESTITO PTFE  
-10°C +200°C  
+15°F +390°F

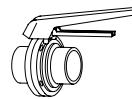


■ PTFE + SILICONE  
-10°C +90°C  
+15°F +190°F

OTTURATORE  
BUTTERFLY

PAPILLON  
OBTURADOR



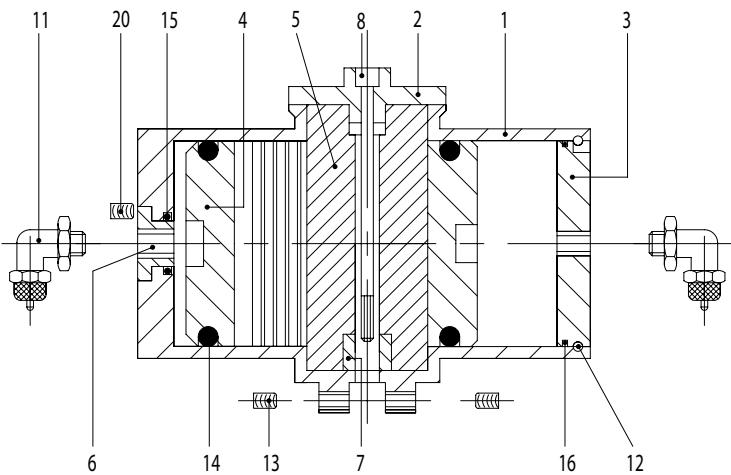


CILINDRO PNEUMATICO DOPPIO EFFETTO

DOUBLE EFFECT PNEUMATIC ACTUATOR

VÉRIN PNEUMATIQUE DOUBLE EFFET

CILINDRO NEUMÁTICO DOBLE EFECTO



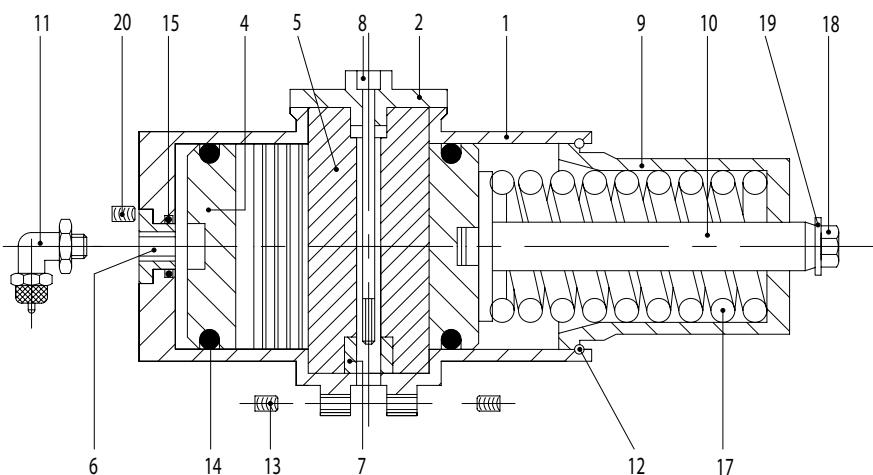
1. Cilindro Cylinder Cylindre Cilindro	7. Adattatore otturatore Shutter adapter Adaptateur obturateur Adaptador obturador
2. Tappo Blank Bouchon Tapón	8. Vite fissaggio otturatore Shutter set screw Vis fixation obturateur Tornillo fijación obturador
3. Flangia Flange Bride Brida	9. Coperchio molla Spring cover Couvercle ressort Tapa muelle
4. Ingranaggio orizzontale Horizontal gear Engrenage horizontal Engranaje horizontal	10. Albero portamolla Spring shaft Arbre porte-ressort Eje portamuñequilla
5. Ingranaggio verticale Vertical gear Engrenage vertical Engranaje vertical	11. Raccordo aria Air union Raccord air Racor del aire
6. Attacco aria Air inlet Prise air Entrada aire	12. Anello di bloccaggio Locking ring Bague de blocage Anillo de fijación
13. Grano Dowel Cheville Pasador	13. Grano Dowel Cheville Pasador
14. Anello di tenuta OR OR seal ring Joint torique Junta OR	14. Anello di tenuta OR OR seal ring Joint torique Junta OR
15. Anello di tenuta OR OR seal ring Joint torique Junta OR	15. Anello di tenuta OR OR seal ring Joint torique Junta OR
16. Anello di tenuta OR OR seal ring Joint torique Junta OR	16. Anello di tenuta OR OR seal ring Joint torique Junta OR
17. Molla Spring Ressort Muelle	17. Molla Spring Ressort Muelle
18. Vite Screw Vis Tornillo	18. Vite Screw Vis Tornillo
19. Rondella Washer Rondelle Arandela	19. Rondella Washer Rondelle Arandela
20. Grano Dowel Cheville Pasador	20. Grano Dowel Cheville Pasador

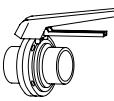
CILINDRO PNEUMATICO SEMPLICE EFFETTO

SIMPLE EFFECT PNEUMATIC ACTUATOR

VÉRIN PNEUMATIQUE SIMPLE EFFET

CILINDRO NEUMÁTICO SIMPLE EFECTO



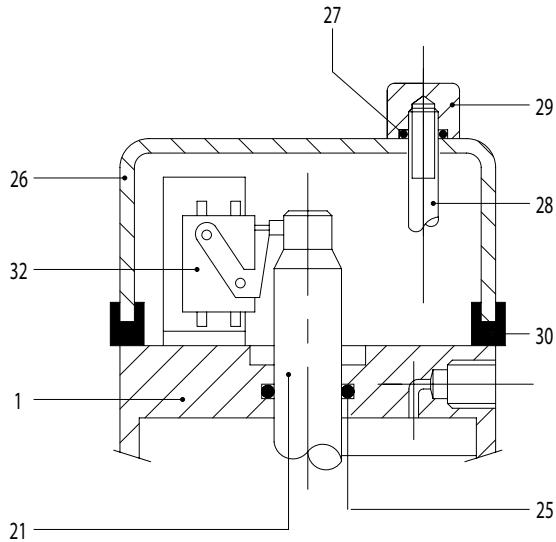


TESTATA CILINDRO COMPLETA DI MICROINTERRUTTORE

CYLINDER HEAD COMPLETE WITH MICROSWITCH

TÈTE DE CYLINDRE MUNIE DE MINIRUPTEUR

CABEZAL DEL CILINDRO DOTADO DE MICRORRUPTOR

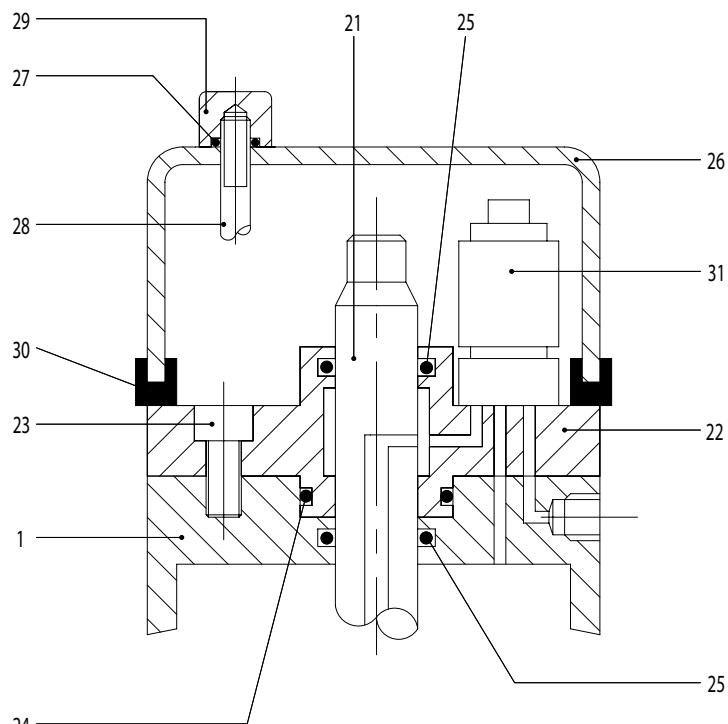


TESTATA CILINDRO COMPLETA DI ELETTROVALVOLA

CYLINDER HEAD COMPLETE WITH SOLENOID VALVE

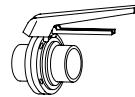
TÈTE DE CYLINDRE MUNIE D'ÉLECTROVANNE

CABEZAL DEL CILINDRO DOTADO DE ELECTROVÁLVULA



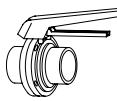
1. Cilindro  
Cylinder  
Cylindre  
Cilindro
21. Perno  
Spindle  
Came  
Perno
22. Distributore aria  
Air distributor  
Distributeur air  
Distribuidor aire
23. Vite  
Screw  
Vis  
Tornillo
24. Anello di tenuta OR  
OR seal ring  
Joint torique  
Junta OR
25. Anello di tenuta OR  
OR seal ring  
Joint torique  
Junta OR

26. Cappellotto  
Cap  
Capot  
Capuchón
27. Anello di tenuta OR  
OR seal ring  
Joint torique  
Junta OR
28. Tirante  
Tie rod  
Tirant  
Tirante
29. Dado tirante  
Tie rod nut  
Écrou tirant  
Tuerca tirante
30. Guarnizione cappellotto  
Cap seal  
Joint capot  
Junta capuchón
31. Elettrovalvola  
Solenoid valve  
Électrovanne  
Electroválvula
32. Microinterruttore  
Microswitch  
Minirupteur  
Microrruptor

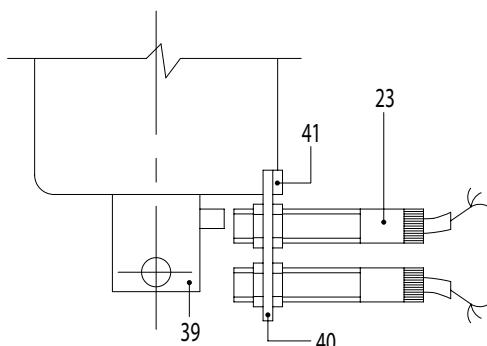
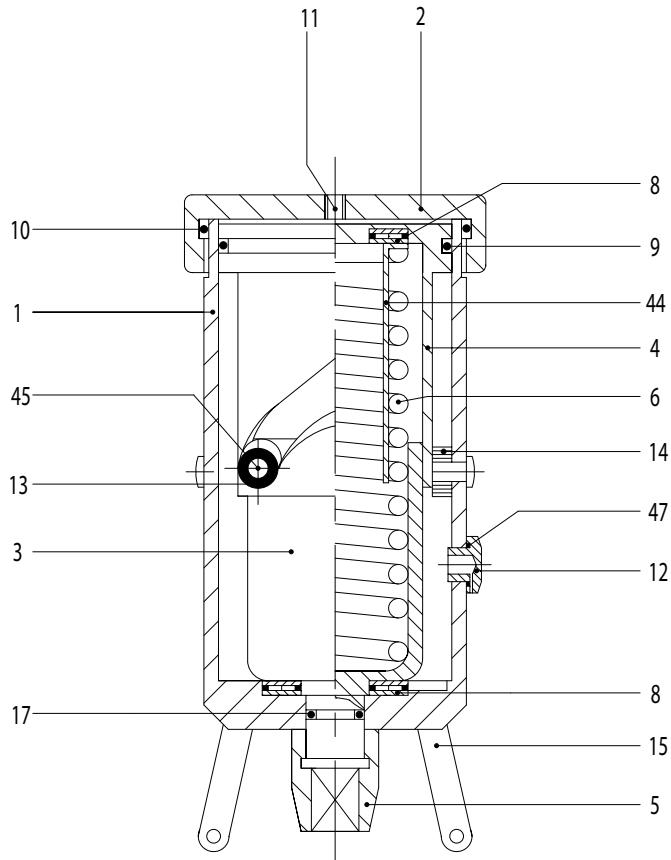


CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

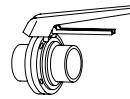
Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	4" 101	D 100 101	Mat.	Part. o agg.
1	7C1		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	101	101	4L	01
2	7C1		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	101	101	4L	02
3	7C1		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	101	101	4L	03
4	7C1		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	101	101	A	04
5	7C1		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	101	101	T	05
6	7C1													101	101	4L	06
7	7C1		25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	101	101	4L	07
8	7C1		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	101	101	4L	08
9	7C1									63/85	63/85	63/85	63/85	101	101	4L	09
10	7C2									63/85	63/85	63/85	63/85	101	101	4L	10
11	800		1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	OT	
12	7C2		63x2	63x2	63x2	63x2	63x2	63x2	63x2	76x2	76x2	76x2	76x2	88x2	88x2	4L	
13	GRA		8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	4L	
14	OR		152	152	152	152	152	152	152	6237	6237	6237	6237	6275	6275	E	
15	OR													123	123	E	
16	OR		152	152	152	152	152	152	152	4250	4250	4250	4250	177	177	E	
17	7C2		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85			4L	17
18	TE									10x20	10x20	10x20	10x20	10x20	10x20	4L	
19	RON									10x2	10x2	10x2	10x2	10x2	10x2	4L	
20	GRA													6x10	6x10	4L	
21	7C1									63/85	63/85	63/85	63/85	101	101	4L	
22	7C1													101	101	4L	22
23	TCCE													6x30	6x30	4L	
24	OR													3081	3081	E	
25	OR													123	123	E	
26	7C1		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	101	101	4L	26
27	OR		108	108	108	108	108	108	108	108	108	108	108	108	108	E	
28	7C1		25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	4L	28
29	7C1		25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	4L	29
30	7C1		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	101	101	E	
31	015		U	U	U	U	U	U	U	U	U	U	U	U	U		
32	014		1	1	1	1	1	1	1	1	1	1	1	1	1		



CILINDRO PNEUMATICO SEMPLICE EFFETTO VERTICALE  
SIMPLE EFFECT VERTICAL PNEUMATIC ACTUATOR  
VÉRIN PNEUMATIQUE SIMPLE EFFET VERTICALE  
CILINDRO NEUMÁTICO SIMPLE EFECTO VERTICAL



1. Cilindro Cylinder Cylindre Cilindro	13. Rullino bronzo Bronze roller Molette bronze Rodillo de bronce
2. Tappo Blank Bouchon Tapón	14. Rullino bronzo Bronze roller Molette bronze Rodillo de bronce
3. Cilindro rotativo Rotary cylinder Cylindre rotatif Cilindro rotativo	15. Staffa Bracket Bride Estríbo
4. Pistone Piston Piston Pistón	17. Anello di tenuta OR OR seal ring Joint torique Junta OR
5. Adattatore Adapter Adaptateur Adaptador	23. Contatto di prossimità Proximity contact Contact de proximité Microsensor
6. Molla Spring Ressort Muelle	39. Adattatore Adapter Adaptateur Adaptador
8. Reggispingita Thrust block Butée Cojinete de empuje	40. Staffa contatto prossimità Proximity contact bracket Bride contact proximité Estríbo del micromensor
9. Anello di tenuta OR OR seal ring Joint torique Junta OR	41. Vite per staffa Bracket screw Vis de bride Tornillo para estríbo
10. Anello di tenuta OR OR seal ring Joint torique Junta OR	44. Guida molla Spring holder Guide ressort Guia muelle
11. Attacco aria Air inlet Prise air Entrada aire	45. Perno rullino Roller pin Came molette Perno rodillo
12. Scarico aria Air vent Décharge air Descarga aire	47. Rondella Washer Rondelle Arandela



**UNITÀ DI CONTROLLO COMPLETA DI 2**

MICROINTERRUTTORI, ELETTROVALVOLA, CONNETTORE

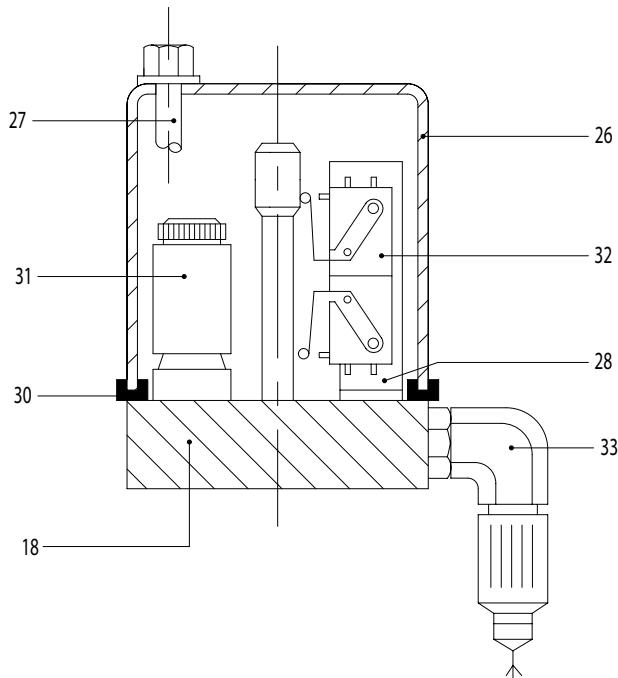
**CONTROL UNIT COMPLETE WITH 2 MICROSWITCHES,  
SOLENOID VALVE, CONNECTOR**

**UNITÉ DE CONTRÔLE MUNIE DE 2 MINIRUPTEURS,**

**ÉLECTROVANNE, CONNECTEUR**

**UNIDAD DE CONTROL DOTADA DE 2 MICRORRUPTORES,**

**ELECTROVÁLVULA, CONECTOR**



**18. Base unità di controllo**

Control unit base

Base unité de contrôle

Base unidad de control

**26. Cappellotto**

Cap

Capot

Capuchón

**27. Tirante**

Tie rod

Tirant

Tirante

**28. Supporto microinterruttore**

Microswitch support

Support minirupteur

Soporte microrruptor

**30. Guarnizione cappellotto**

Cap seal

Joint capot

Junta capuchón

**31. Elettrovalvola**

Solenoid valve

Électrovanne

Electroválvula

**32. Microinterruttore**

Microswitch

Minirupteur

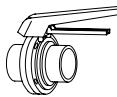
Microrruptor

**33. Connettore**

Connector

Connecteur

Conector

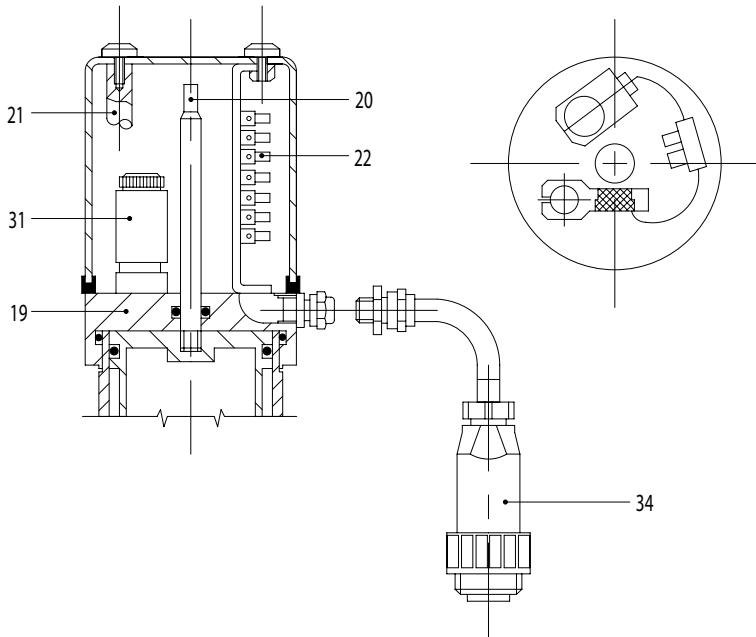


**UNITÀ DI CONTROLLO COMPLETA DI ELETTROVALVOLA  
E CONNETTORE**

**CONTROL UNIT COMPLETE WITH SOLENOID VALVE  
AND CONNECTOR**

**UNITÉ DE CONTRÔLE MUNIE D'ÉLECTROVANNE  
ET DE CONNECTEUR**

**UNIDAD DE CONTROL DOTADA DE ELECTROVÁLVULA  
Y CONECTOR**



**UNITÀ DI CONTROLLO COMPLETA DI 2  
CONTATTI DI PROSSIMITÀ**

**CONTROL UNIT COMPLETE WITH 2  
PROXIMITY CONTACTS**

**UNITÉ DE CONTRÔLE MUNIE DE 2  
CONTACTS DE PROXIMITÉ**

**UNIDAD DE CONTROL DOTADA DE 2  
MICROSENSORES**

**19. Base unità di controllo  
Control unit base  
Base unité de contrôle  
Base unidad de control**

**20. Perno  
Spindle  
Came  
Perno**

**21. Tirante  
Tie rod  
Tirant  
Tirante**

**22. Morsettiera  
Terminal strip  
Barrette raccordement  
Tablero de bornes**

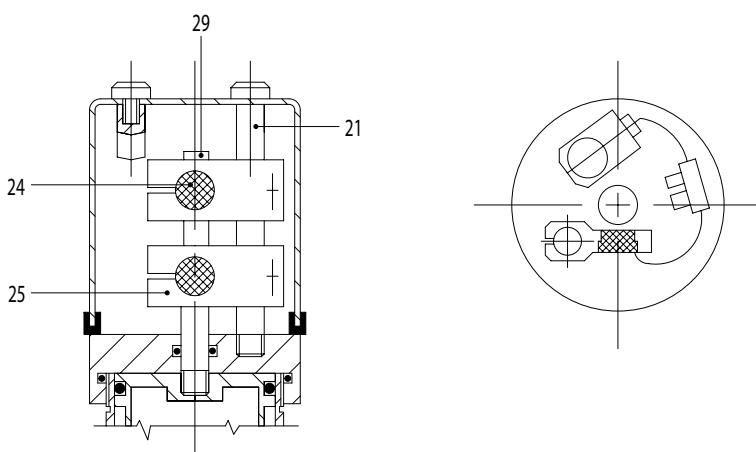
**24. Contatto di prossimità  
Proximity contact  
Contact de proximité  
Microsensor**

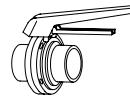
**25. Supporto contatto di prossimità  
Proximity contact support  
Support contact de proximité  
Soporte microsensor**

**29. Perno contatto prossimità  
Proximity contact pin  
Came contact proximité  
Perno del microsensor**

**31. Elettrovalvola  
Solenoid valve  
Électrovanne  
Electroválvula**

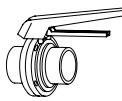
**34. Connettore  
Connector  
Connecteur  
Conector**





CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1" - 2" 25/52	2 1/2" - 4" 63/101	Mat.	Part. o agg.
1	7C4		25/101	25/101	4L	01
2	7C4		25/101	25/101	4L	02
3	7C4		25/101	25/101	4L	03
4	7C4		25/101	25/101	A	04
5	7C4		25/101	25/101	4L	05
6	7C4		25/101	25/101	4L	06
8	7C4		25/101	25/101	AC	08
9	OR		6237	6237	E	
10	OR		177	177	E	
11	800		1/8"	1/8"	OT	
12	7C4		25/101	25/101	4	14
13	RUL		14x7	14x7	B	13
14	RUL		14x5	14x5	B	14
15	7C4		25/52	63/101	4L	15
17	OR		117	117	E	
18	7C4		25/101	25/101	4L	18
19	7C4		25/101	25/101	4L	19
20	7C4		25/101	25/101	4L	20
21	7C4		25/101	25/101	4L	21
22	7C4		25/101	25/101	4	22
23	013		O	O		
24	013		S	S		
25	013		1S	1S		
26	7C4		51/52	51/52	4L	26
27	7C4		25/101	25/101	4L	27
28	014		1S	1S		
29	7C4		25/101	25/101	4L	29
30	800		51/52	51/52	E	30
31	015		U	U		
32	014		1	1		
33	030		H	H		
34	030		S	S		
39	7C4		25/101	25/101	4L	39
40	7C4		25/101	25/101	4L	40
41	7C4		6MAx12	6MAx12	4L	
44	7C4		25/101	25/101	4L	44
45	7C4		25/101	25/101	4	45
47	7C4		25/101	25/101	N	47

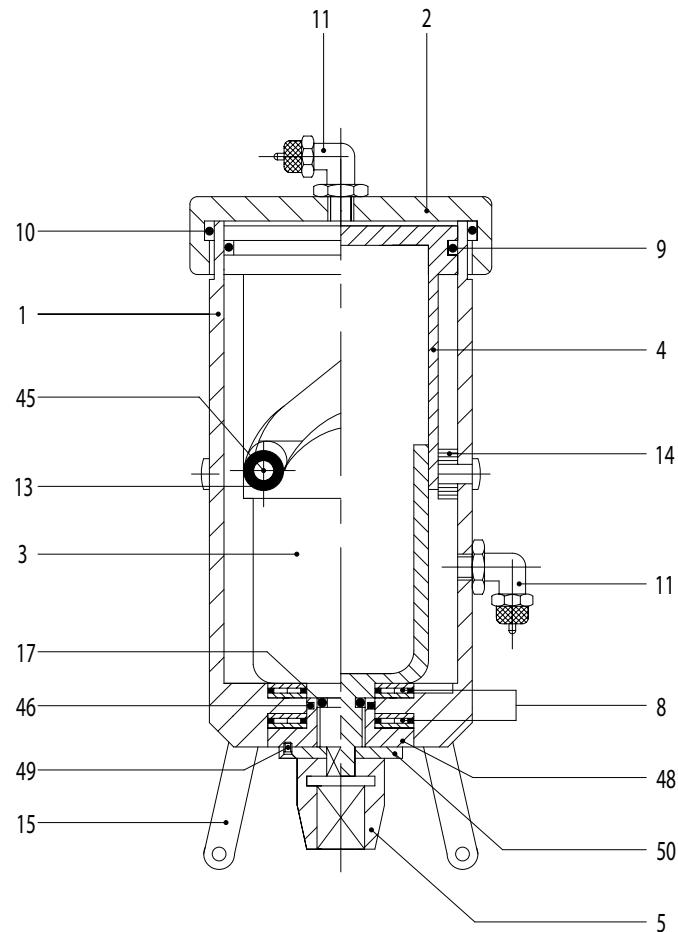


CILINDRO PNEUMATICO DOPPIO EFFETTO VERTICALE

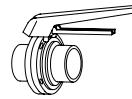
DOUBLE EFFECT VERTICAL PNEUMATIC ACTUATOR

VÉRIN PNEUMATIQUE DOUBLE EFFET VERTICALE

CILINDRO NEUMÁTICO DOBLE EFECTO VERTICAL

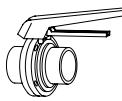


1. Cilindro Cylinder Cylindre Cilindro	15. Staffa Bracket Bride Estribo
2. Tappo Blank Bouchon Tapón	17. Anello di tenuta OR OR seal ring Joint torique Junta OR
3. Cilindro rotativo Rotary cylinder Cylindre rotatif Cilindro rotativo	23. Contatto di prossimità Proximity contact Contact de proximité Microsensor
4. Pistone Piston Piston Pistón	39. Adattatore Adapter Adaptateur Adaptador
5. Adattatore Adapter Adaptateur Adaptador	40. Staffa contatto prossimità Proximity contact bracket Bride contact proximité Estribo del microsensor
8. Reggispingita Thrust block Butée Cojinetes de empuje	41. Vite per staffa Bracket screw Vis de bride Tornillo para estribo
9. Anello di tenuta OR OR seal ring Joint torique Junta OR	45. Perno rullino Roller pin Came molette Perno rodillo
10. Anello di tenuta OR OR seal ring Joint torique Junta OR	46. Anello di tenuta OR OR seal ring Joint torique Junta OR
11. Raccordo aria Air union Raccord air Racor aire	48. Ghiera di bloccaggio Locking collar Bague de blocage Tuerca de seguridad
13. Rullino bronzo Bronze roller Molette bronze Rodillo de bronce	49. Vite Screw Vis Tornillo
14. Rullino bronzo Bronze roller Molette bronze Rodillo de bronce	50. Disco di chiusura Closing disk Plateau de fermeture Disco de cierre



CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1"-2" 25/52	2 1/2"-4" 63/101	Mat.	Part. o agg.
1	7C5		25/101	25/101	4L	01
2	7C4		25/101	25/101	4L	02
3	7C5		25/101	25/101	4L	03
4	7C4		25/101	25/101	A	04
5	7C4		25/101	25/101	4L	05
8	7C4		25/101	25/101	AC	08
9	OR		6237	6237	E	
10	OR		177	177	E	
11	S6522		1/8"	1/8"	OT	
13	RUL		14x7	14x7	B	13
14	RUL		14x5	14x5	B	14
15	7C4		25/52	63/101	4L	15
17	OR		117	117	E	
23	013		0	0		
39	7C4		25/101	25/101	4L	39
40	7C4		25/101	25/101	4L	40
41	7C4		6MAx12	6MAx12	4L	
45	7C4		25/101	25/101	4	45
46	OR		3081	3081	N	
48	7C5		25/101	25/101	4	48
49	TSV		M3x8	M3x8	4L	
50	7C5		25/101	25/101	4	50

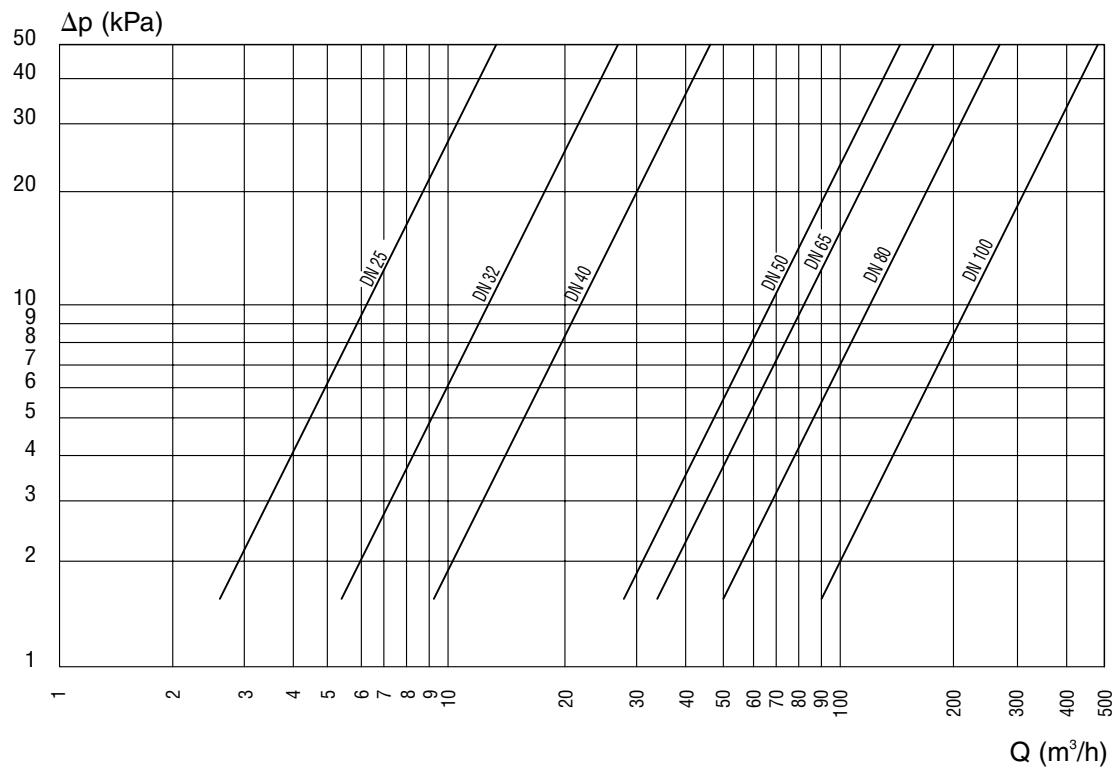


PERDITE DI CARICO  
PRESSURE DROP

PERTES DE CHARGE  
PÉRDIDA DE CARGA

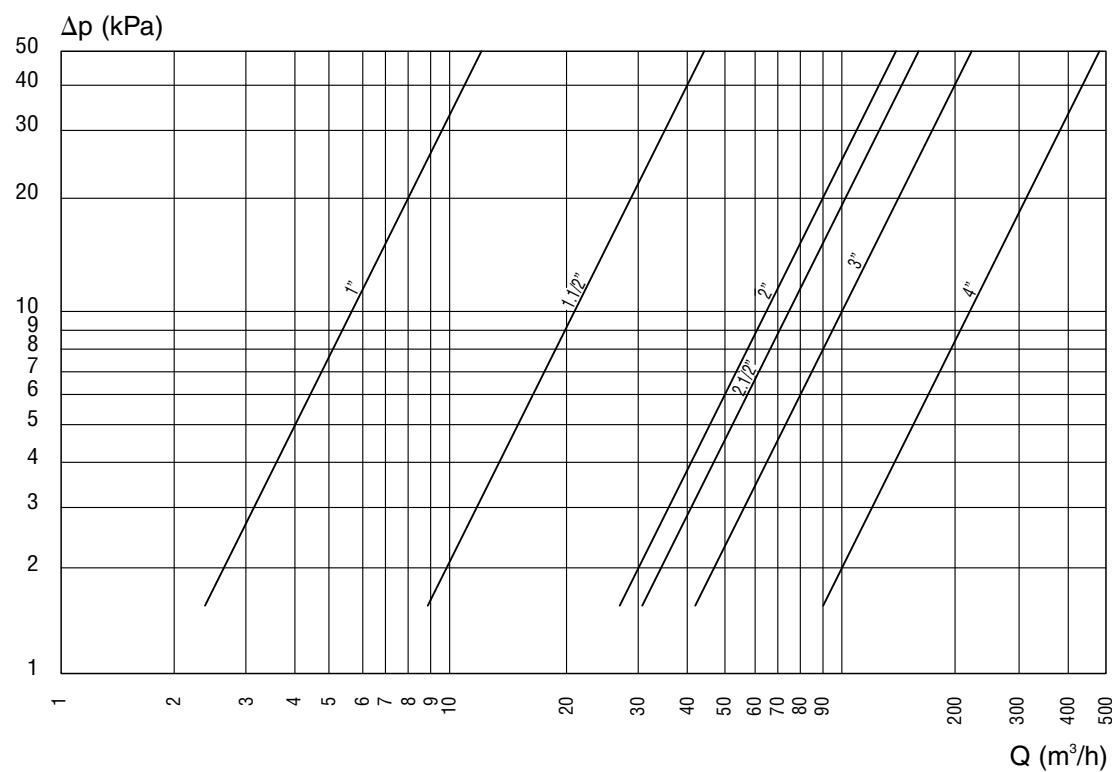
VALVOLE A FARFALLA DIN  
DIN BUTTERFLY VALVES

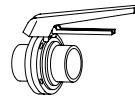
VANNES PAPILLON DIN  
VÁLVULAS DE MARIPOSA DIN



VALVOLA A FARFALLA SMS, RJT BS, ISS IDF, CLAMP  
SMS, RJT BS, ISS IDF, CLAMP BUTTERFLY VALVES

VANNES PAPILLON SMS, RJT BS, ISS IDF, CLAMP  
VÁLVULAS DE MARIPOSA SMS, RJT BS, ISS IDF, CLAMP



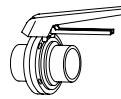


**SCALA DI TORSIONE**  
**TORQUE RATINGS**

**ECHELLE DE TORSION**  
**ESCALA DE TORSIÓN**

GUARNIZIONE SILICONE  
JOINT SILICONE  
SILICONE SEAL  
JUNTA SILICONE

Diametro Diameter Diametre Diámetro	Aperta [90°] Open [90°] Ouverte [90°] Abierta [90°]	Chiusa [0°] Closed [0°] Fermée [0°] Cerrada [0°]
1"	1 Nm	5 Nm
1 1/2"	1 Nm	5 Nm
2"	2 Nm	17 Nm
2 1/2"	5 Nm	28 Nm
3"	6 Nm	32 Nm



## VALVOLE A FARFALLA A CERNIERA

- Ricavate da particolari stampati a caldo e solubilizzati.
- Otturatori ricavati da particolari in acciaio inossidabile AISI 316L stampati a caldo e solubilizzati, lavorati meccanicamente su tutte le superfici e rettificati sulle parti rotanti.
- Facilità di accesso durante le operazioni di pulizia.
- Applicazione standard di 2 bussole in PTFE sugli alberi degli otturatori per eliminare l'attrito nelle rotazioni.
- Guarnizioni prodotte con stampaggio a compressione e con elastomeri di ottima qualità. Standard silicone; a richiesta, EPDM, FTM, FTM rivestito PTFE, PTFE + silicone.
- Semplicità, sicurezza e affidabilità delle manovre.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.
- Max. pressione di esercizio: 2 bar.

## HINGED BUTTERFLY VALVES

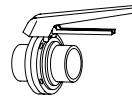
- Made from press-forged and solution heat-treated blanks.
- Shutters made from press-forged and solution heat-treated AISI 316L stainless steel pieces machined over the entire surface and ground on the revolving parts.
- Easy access for cleaning.
- Standard fitting of two PTFE bushes on the shutter stems to eliminate rotation friction.
- Seal rings compression-pressed from first grade elastomers. Standard silicone. On request EPDM, FTM, PTFE-coated FTM, PTFE + silicone.
- Simple, safe and reliable operating.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.
- Maximum operating pressure: 2 bars.

## VANNES PAPILLON À CHARNIÈRE

- Obtenues à partir de pièces moulées à chaud et solubilisées.
- Obturateurs réalisés à l'aide d'éléments en acier inoxydable AISI 316L moulés à chaud et solubilisés, usinés mécaniquement sur toutes les surfaces et rectifiés sur les parties pivotantes.
- Simplicité d'accès durant les opérations d'entretien.
- Application standard de 2 douilles en PTFE sur les arbres des obturateurs pour éliminer le frottement dans les rotations.
- Joints moulés sous pression et réalisés avec des élastomères de haute qualité. Standard silicone; sur demande, EPDM, FTM, FTM revêtu PTFE, PTFE + silicone.
- Simplicité, sécurité et fiabilité des manoeuvres.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.
- Pression de service maximale: 2 bars.

## VÁLVULAS DE MARIPOSA DE CREMALLERA

- Obtenidas a partir de piezas de acero inoxidable AISI 316L estampadas en caliente y solubilizadas.
- Obturadores obtenidos de piezas estampadas en caliente y solubilizadas, trabajadas mecánicamente en todas las superficies y rectificadas en las partes giratorias.
- Facilidad de acceso durante las operaciones de limpieza.
- Aplicación estándar de 2 camisas en PTFE en los ejes de los obturadores para eliminar el rozamiento en las rotaciones.
- Juntas producidas mediante estampado bajo compresión y con elastómeros de óptima calidad. Estándar silicona; a pedido, EPDM, FTM, FTM revestido PTFE, PTFE + silicona.
- Simplicidad, seguridad y fiabilidad de las maniobras.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.
- Máxima presión de ejercicio: 2 bares.

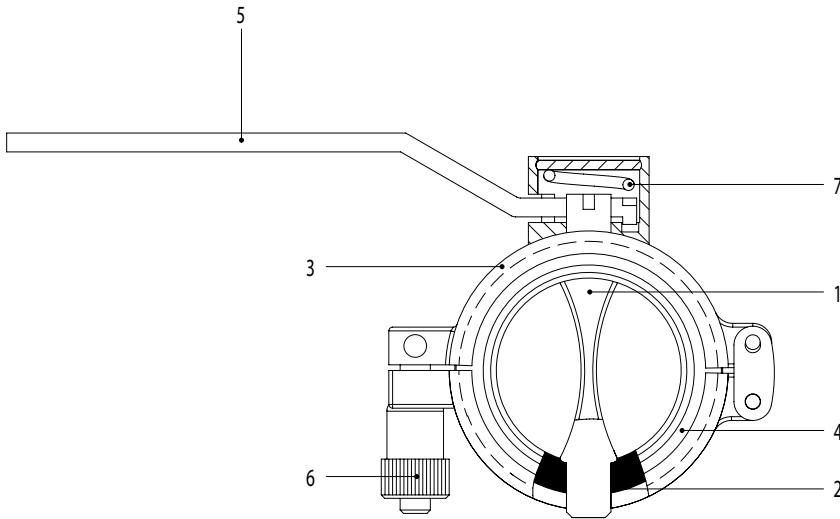


VALVOLA A FARFALLA A CERNIERA

HINGED BUTTERFLY VALVE

VANNE PAPILLON À CHARNIÈRE

VÁLVULA DE MARIPOSA DE CREMALLERA



1. Otturatore  
Butterfly  
Papillon  
Obturador

2. Guarnizione  
Seal  
Joint  
Junta

3. Morsetto  
Clamp  
Collier  
Abrazadera

4. Flangia  
Flange  
Bride  
Brida

5. Maniglia  
Handle  
Poignée  
Maneta

6. Ghiera  
Locking ring  
Embout  
Tuerca

7. Molla  
Spring  
Ressort  
Muelle

CODIFICAZIONE

CODING

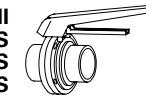
CODIFICATION

CODIFICACIÓN

Pos.	Cod. base	Norme	2" 51	Mat.	Part. o agg.
1	730		51/52	6L	01
2	700		51/52	S/E/V/T	02
3	730		51/52	4L	03
4	730	L	51/52	4L	04
5	730		51/52	4L	05
6	730		51/52	4L	06
7	730		51/52	AC	07

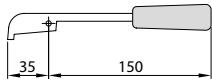


MANIGLIE - GUARNIZIONI  
HANDLES - SEAL RINGS  
POIGNÉES - JOINTS  
MANETAS - JUNTAS



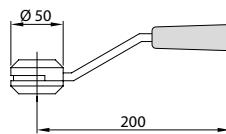
MAN. CON BLOCCAGGIO  
HANDLE WITH BLOCKING  
POIGNÉE AVEC BLOCAGE  
MANETA CON BLOCAJE

7M2



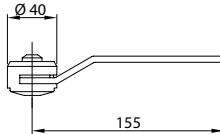
MANIGLIA DI REG. 2 POS.  
OPENING HANDLE 2 POS.  
POIGNÉE DE REGL. 2 POS.  
MANETA DE REGUL. 2 POS.

7M3



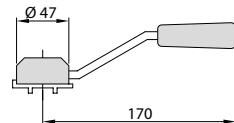
MANIGLIA DI REG. 4 POS.  
OPENING HANDLE 4 POS.  
POIGNÉE DE REGL. 4 POS.  
MANETA DE REGUL. 4 POS.

7M12



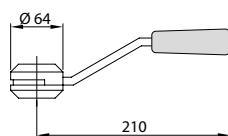
MANIGLIA DI REG. 7 POS.  
OPENING HANDLE 7 POS.  
POIGNÉE DE REGL. 7 POS.  
MANETA DE REGUL. 7 POS.

7M9



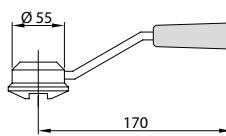
MANIGLIA DI REG. 10 POS.  
OPENING HANDLE 10 POS.  
POIGNÉE DE REGL. 10 POS.  
MANETA DE REGUL. 10 POS.

7M4



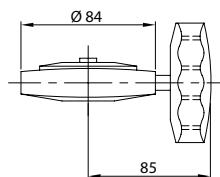
MANIGLIA DI REG. 20 POS.  
OPENING HANDLE 20 POS.  
POIGNÉE DE REGL. 20 POS.  
MANETA DE REGUL. 20 POS.

7M5



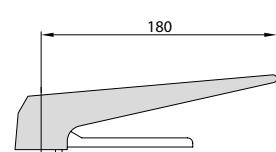
TESTA DI REG. MICROMET.  
MICROMETRIC HANDLE  
TÊTE MICROMÉTRIQUE  
CABEZAL DE REG. MICROM.

7M6



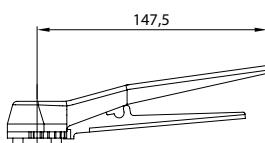
MANIGLIA ABS CON LEVA  
ABS HANDLE WITH LEVER  
POIGNÉE ABS AVEC LEVIER  
MANETA A GATILLO ABS

7M8



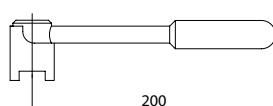
MAN. CON LEVA 7 POS.  
H. WITH LEVER 7 POS.  
P. AVEC LEVIER 7 POS.  
MAN. A GATILLO 7 POS.

7M11



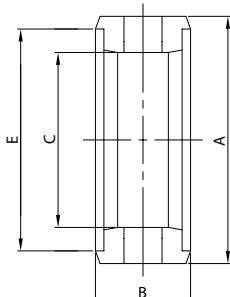
MANIGLIA V. F. 125/254  
HANDLE B. V. 125/254  
POIGNÉE V. P. 125/254  
MANETA V. M. 125/254

7M7

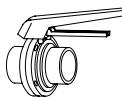


GUARNIZIONE VALVOLA FARFALLA  
BUTTERFLY VALVE SEAL RING  
JOINT VANNE PAPILLON  
JUNTA VÁLVULA MARIPOSA

700 02

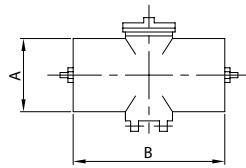


DIAM.	A	B	C	E
25/28	43,6	24,0	27,6	37,0
34/38	52,4	25,0	35,4	45,8
40	55,5	25,0	38,7	48,9
51/52	65,2	25,0	48,8	57,7
60/63	76,2	25,0	59,2	68,6
70/76	88,7	27,0	69,5	81,1
85	99,0	27,0	79,8	91,2
101/104	119,0	27,0	100,6	111,2



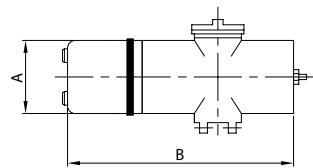
C. PNEUMATICO DE  
PNEUMATIC ACT. DE  
VÉ. PNEUMATIQUE DE  
CIL. NEUMÁTICO DE

**7C1 L**



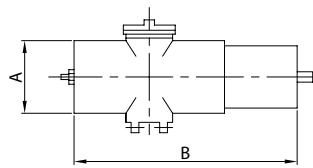
C. PNEUM. DE UN. CONTR.  
PNEUM. ACT. DE CONTR. UN.  
VÉ. PNEUM. DE UN. CONTR.  
CIL. NEUM. DE UN. CONTR.

**7C1 UC**



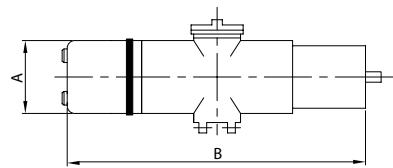
C. PNEUMATICO SE  
PNEUMATIC ACT. SE  
VÉ. PNEUMATIQUE SE  
CIL. NEUMÁTICO SE

**7C2 L**



C. PNEUM. SE UN. CONTR.  
PNEUM. ACT. SE CONTR. UN.  
VÉ. PNEUM. SE UN. CONTR.  
CIL. NEUM. SE UN. CONTR.

**7C2 UC**



DN	A	B	gr
25/52	60,0	138,5	1.460
63/85	76,0	161,0	2.100
101/104	89,0	180,0	2.960

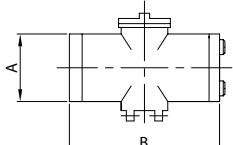
DN	A	B	gr
25/52	80,0	254,5	2.860
63/85	80,0	277,0	3.500
101/104	89,0	302,0	4.960

DN	A	B	gr
25/52	76,0	240,0	2.190
63/85	89,0	260,0	3.150

DN	A	B	gr
25/52	80,0	356,0	3.590
63/85	80,0	376,0	4.550

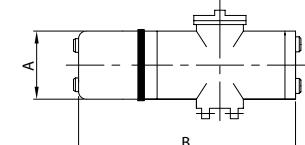
C. PN. DE V. FARF. 129/204  
PN. ACT. DE B.V. 129/204  
VÉ. PN. DE V. PAP. 129/204  
CIL. PN. DE V. MARIP. 129/204

**7C3**



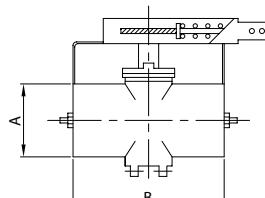
C. PN. U.C. V. FARF. 129/204  
PN. ACT. C. UN. B. V. 129/204  
VÉ. PN. UN. C. V. PAP. 129/204  
CIL. PN. U.C. V. MAR. 129/204

**7C3 UC**



C. PNEUM. REGOL. FLUSSO  
REGUL. FLUX PNEUM. ACT.  
VÉ. PNEUM. RÉGULATION  
CIL. NEUM. REGULACIÓN

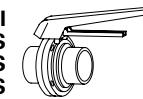
**7C1 LM**



DN	A	B	gr
129/204	89,0	196,0	3.560

DN	A	B	gr
129/204	89,0	293,0	5.560

DN	A	B	gr
25/104	89,0	180,0	4.160



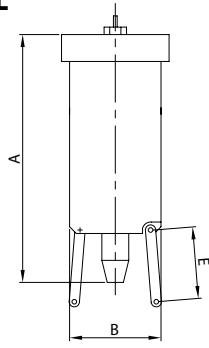
C. PNEUM. SE VERTICALE  
PNEUM. ACT. SE VERTICAL  
VÉ. PNEUM. SE VERTICALE  
CIL. NEUM. SE VERTICAL

C. PNEUM. SE UN. CONTR.  
CONTR. UNIT SE PN. ACT.  
VÉ. PNEUM. SE UN. CONTR.  
CIL. NEUM. SE UN. CONTR.

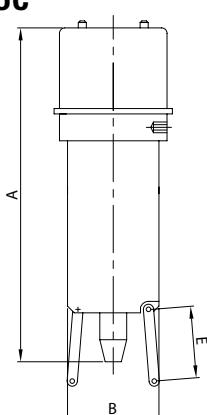
C. PNEUM. DE VERTICALE  
PNEUM. ACT. DE VERTICAL  
VÉ. PNEUM. DE VERTICALE  
CIL. NEUM. DE VERTICAL

C. PNEUM. DE UN. CONTR.  
CONTR. UNIT SE PN. ACT.  
VÉ. PNEUM. SE UN. CONTR.  
CIL. NEUM. SE UN. CONTR.

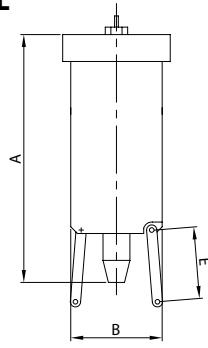
7C4 L



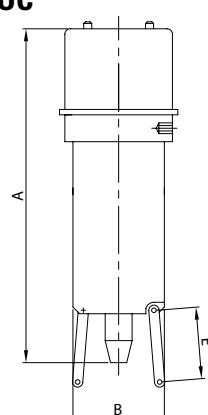
7C4 UC



7C5 L



7C5 UC



DN	A	B	E	gr
25/52	211,0	76,0	64,0	3.700
63/85	211,0	76,0	58,0	3.700
101/104	211,0	76,0	61,0	3.700

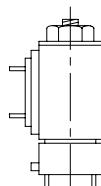
DN	A	B	E	gr
25/52	316,0	76,0	64,0	3.900
63/85	316,0	76,0	58,0	3.900
101/104	316,0	76,0	61,0	3.900

DN	A	B	E	gr
25/52	211,0	76,0	64,0	3.700
63/85	211,0	76,0	58,0	3.700
101/104	211,0	76,0	61,0	3.700

DN	A	B	E	gr
25/52	316,0	76,0	64,0	3.900
63/85	316,0	76,0	58,0	3.900
101/104	316,0	76,0	61,0	3.900

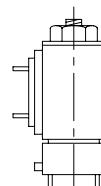
ELETTROVALVOLA NC.  
SOLENOID VALVE NC.  
ÉLECTROVANNE NF.  
ELECTROVÁLVULA NC.

015 NC



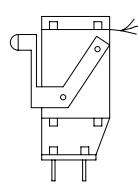
ELETTROVALVOLA NA.  
SOLENOID VALVE NO.  
ÉLECTROVANNE NO.  
ELECTROVÁLVULA NA.

015 NA



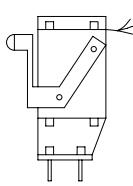
MICROINTERRUTTORE  
MICROSWITCH  
MINIRUPTEUR  
MICRORUPTOR

014 1



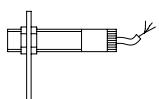
MICROINT. PNEUMATICO  
PNEUM. MICROSWITCH  
MINIRUPTEUR PNEUM.  
MICRORUPTOR NEUM.

014 2



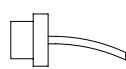
CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

013 0



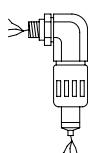
CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

013 S



CONNETTORE  
CONNECTOR  
CONNECTEUR  
CONNECTOR

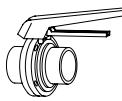
030 H



CONNETTORE  
CONNECTOR  
CONNECTEUR  
CONNECTOR

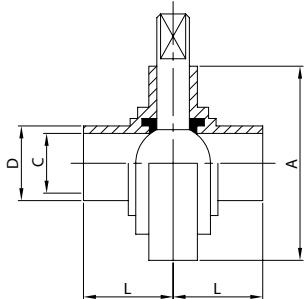
030 S





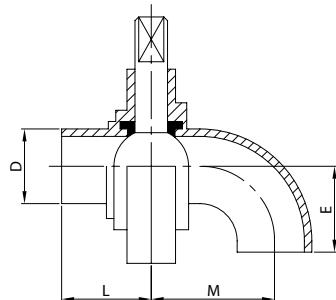
V. FARFALLA EL./EL.  
BUTTERFLY V. PE./PE.  
V. PAPILLON BL./BL.  
V. MARIPOSA EL./EL.

711 L



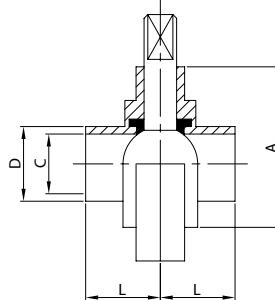
V. FARFALLA EL./CURVA  
BUTTERFLY V. PE./BEND  
V. PAPILLON BL./COUDE  
V. MARIPOSA EL./CURVA

714 L



V. FARFALLA ES./ES.  
BUTTERFLY V. WE./WE.  
V. PAPILLON BS./BS.  
V. MARIPOSA ES./ES.

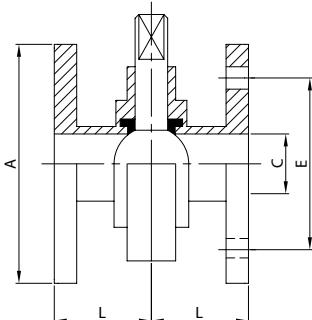
777 L



DN	A	C	D	L	gr
28	79,0	25,0	28,0	32,0	725
34	85,0	31,0	34,0	38,0	805
40	92,0	37,0	40,0	38,0	990
52	105,0	49,0	52,0	40,0	1.270
70	125,0	66,0	70,0	41,0	1.755
85	137,0	81,0	85,0	42,0	2.300
101	157,0	97,6	101,6	44,0	2.300
104	157,0	100,0	104,0	44,0	2.300
129	180,0	124,0	129,0	40,0	4.900
154	212,0	149,0	154,0	40,0	6.200
204	256,0	199,0	204,0	45,0	9.300
254	306,0	249,0	254,0	45,0	11.900

V. FARFALLA FL./FL.  
BUTTERFLY V. FL./FL.  
V. PAPILLON BR./BR.  
V. MARIPOSA BR./BR.

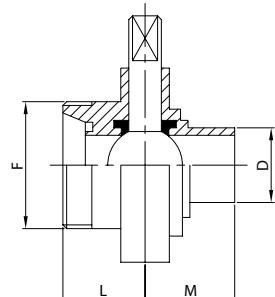
755 L



DN	D	E	L	M	gr
28	28,0	50,0	32,0	80,0	790
34	34,0	56,0	38,0	86,0	905
40	40,0	67,0	38,0	97,0	1.140
52	52,0	72,0	40,0	102,0	1.460
70	70,0	85,0	41,0	115,0	2.165
85	85,0	98,0	42,0	128,0	2.830
101	101,6	110,0	44,0	140,0	3.650
104	104,0	110,0	44,0	140,0	3.650

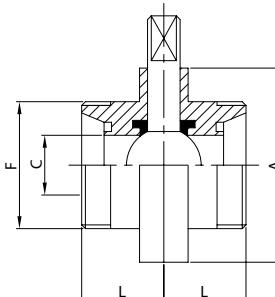
V. FARFALLA EF./EL.  
BUTTERFLY V. ME./PE.  
V. PAPILLON BF./BL.  
V. MARIPOSA ER./EL.

712 D



V. FARFALLA EF./EF.  
BUTTERFLY V. ME./ME.  
V. PAPILLON BF./BF.  
V. MARIPOSA ER./ER.

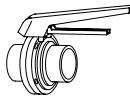
722 D



DN	A	C	E	L	gr
28	100,0	25,0	75,0	43,5	2.025
34	120,0	31,0	90,0	47,5	3.000
40	130,0	37,0	100,0	47,5	3.490
52	140,0	49,0	110,0	49,5	3.970
70	160,0	66,0	130,0	50,5	5.155
85	190,0	81,0	150,0	51,5	7.600
101	210,0	97,6	170,0	53,5	8.840
104	210,0	100,0	170,0	53,5	8.840

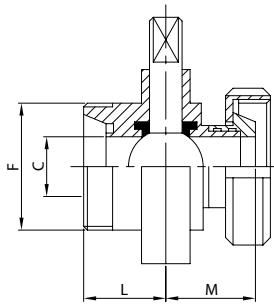
DN	D	F	L	M	gr
25	28,0	52-6	32,0	32,0	845
32	34,0	58-6	34,0	38,0	1.015
40	40,0	65-6	38,0	38,0	1.220
50	52,0	78-6	38,0	40,0	1.570
65	70,0	95-6	38,0	41,0	2.000
80	85,0	110-4	41,5	42,0	2.750
100	101,6	130-4	44,0	44,0	3.390
104	104,0	130-4	44,0	44,0	3.390

DN	A	C	F	L	gr
25	79,0	25,0	52-6	32,0	965
32	85,0	31,0	58-6	34,0	1.225
40	92,0	37,0	65-6	38,0	1.450
50	105,0	49,0	78-6	38,0	1.870
65	125,0	66,0	95-6	38,0	2.255
80	137,0	81,0	110-4	41,5	3.200
100	157,0	97,6	130-4	44,0	3.940
104	157,0	100,0	130-4	44,0	3.940



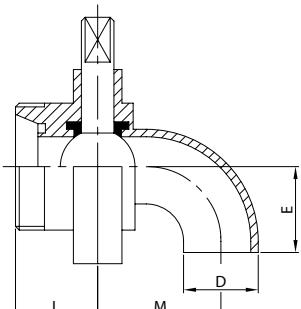
V. FARFALLA EF./BC. G. MT.  
BUTTERF. V. ME./TP. N. ED.  
V. PAPILLON BF./PC. E. DN.  
V. MARIPOSA ER./C. T. MD.

723 D



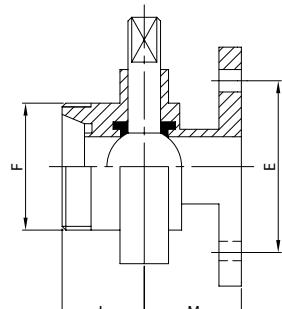
V. FARFALLA EF./CURVA  
BUTTERFLY V. ME./BEND  
V. PAPILLON BF./COUDE  
V. MARIPOSA ER./CURVA

724 D



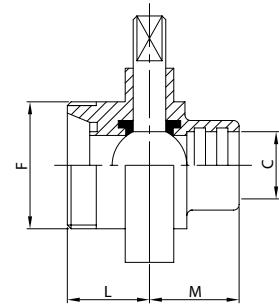
V. FARFALLA EF./FLANGIA  
BUTTERFLY V. ME./FLANGE  
V. PAPILLON BF./BRIDE  
V. MARIPOSA ER./BRIDA

725 D



V. FARFALLA EF./EM. D.I.  
BUTTERFLY V. ME./EE. I.D.  
V. PAPILLON BF./BD. D.I.  
V. MARIPOSA ER./EM. D.I.

762 D



DN	C	F	L	M	gr
25	25,0	52-6	34,0	41,0	1.090
32	31,0	58-6	34,0	45,0	1.315
40	37,0	65-6	38,0	44,0	1.595
50	49,0	78-6	38,0	46,0	2.090
65	66,0	95-6	38,0	48,0	2.835
80	81,0	110-4	41,5	51,0	3.900
100	97,6	130-4	44,0	53,0	5.160
104	100,0	130-4	44,0	53,0	5.160

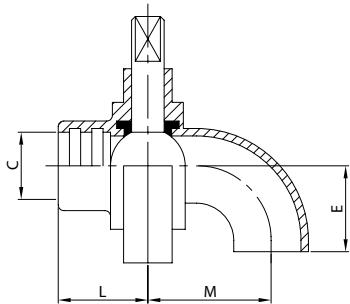
DN	D	E	L	M	gr
25	28,0	50,0	34,0	80,0	910
32	34,0	56,0	34,0	86,0	1.115
40	40,0	67,0	38,0	97,0	1.370
50	52,0	72,0	38,0	102,0	1.760
65	70,0	85,0	38,0	115,0	2.410
80	85,0	98,0	41,5	128,0	3.280
100	101,6	110,0	44,0	140,0	4.200
104	104,0	110,0	44,0	140,0	4.200

DN	E	F	L	M	gr
25	75,0	52-6	34,0	43,5	1.500
32	90,0	58-6	34,0	47,5	2.115
40	100,0	65-6	38,0	47,5	2.470
50	110,0	78-6	38,0	49,5	2.920
65	130,0	95-6	38,0	50,5	3.700
80	150,0	110-4	41,5	51,5	5.400
100	170,0	130-4	44,0	53,5	6.390
104	170,0	130-4	44,0	53,5	6.390

DN	C	F	L	M	gr
25	28,0	52-6	34,0	29,0	965
32	34,0	58-6	34,0	32,0	1.225
40	40,0	65-6	38,0	34,0	1.450
50	52,0	78-6	38,0	36,0	1.870
65	70,0	95-6	38,0	39,0	2.255
80	85,0	110-4	41,5	42,0	3.200
100	101,6	130-4	44,0	44,0	3.940
104	104,0	130-4	44,0	44,0	3.940

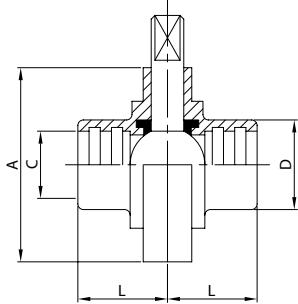
V. FARFAL. EM. D.I./CURVA  
BUTTERFL. V. EE. I.D./BEND  
V. PAPILL. BD. D.I./COUDE  
V. MARIP. EM. D.I./CURVA

764 D



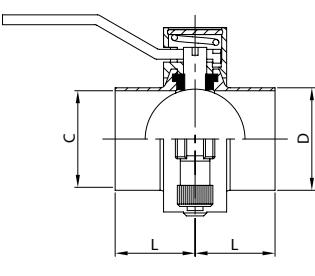
V. FARFALLA EM./EM. D.I.  
BUTTERFLY V. EE./EE. I.D.  
V. PAPILLON BD./BD. D.I.  
V. MARIPOSA EM./EM. D.I.

766 D



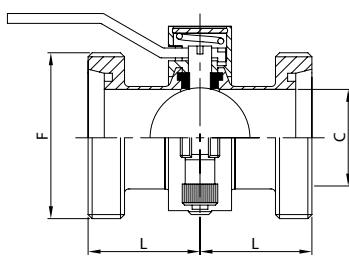
V. FARF. CERNIERA EL./EL.  
HINGED B. V. PE./PE.  
V. PAP. CHARNIÈRE BL./BL.  
V. M. CREMALLERA EL./EL.

730 L



V. FARF. CERNIERA EF./EF.  
HINGED B. V. ME./ME.  
V. PAP. CHARNIÈRE BF./BF.  
V. M. CREMALLERA ER./ER.

731 D

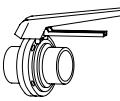


DN	C	E	L	M	gr
25	28,0	50,0	29,0	80,0	910
32	34,0	56,0	32,0	86,0	1.115
40	40,0	67,0	34,0	97,0	1.370
50	52,0	72,0	36,0	102,0	1.760
65	70,0	85,0	39,0	115,0	2.410
80	85,0	98,0	42,0	128,0	3.280
100	101,6	110,0	44,0	140,0	4.200
104	104,0	110,0	44,0	140,0	4.200

DN	A	C	D	L	gr
25	79,0	28,0	35,0	29,0	965
32	85,0	34,0	41,0	32,0	1.225
40	92,0	40,0	48,0	34,0	1.450
50	105,0	52,0	61,0	36,0	1.870
65	125,0	70,0	79,0	39,0	2.255
80	137,0	85,0	93,0	42,0	3.200
100	157,0	101,6	114,0	44,0	3.940
104	157,0	104,0	114,0	44,0	3.940

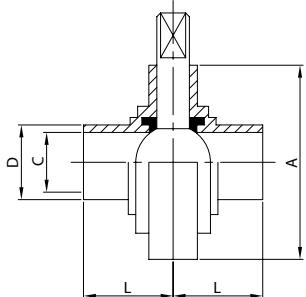
DN	C	D	L	gr
52	49,0	52,0	40,0	850

DN	C	F	L	gr
50	49,0	78-6	38,0	1.100



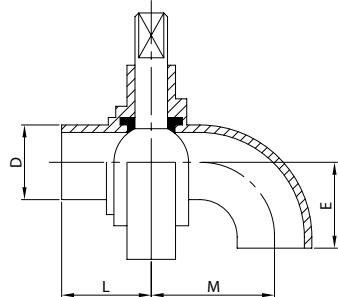
V. FARFALLA EL./EL.  
BUTTERFLY V. PE./PE.  
V. PAPILLON BL./BL.  
V. MARIPOSA EL./EL.

711 L



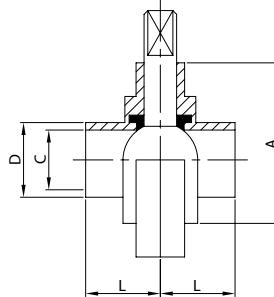
V. FARFALLA EL./CURVA  
BUTTERFLY V. PE./BEND  
V. PAPILLON BL./COUDE  
V. MARIPOSA EL./CURVA

714 L



V. FARFALLA ES./ES.  
BUTTERFLY V. WE./WE.  
V. PAPILLON BS./BS.  
V. MARIPOSA ES./ES.

777 L



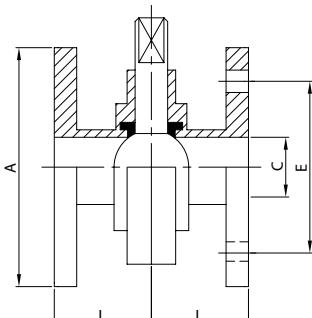
DN	A	C	D	L	gr
25	79,0	22,4	25,4	34,0	725
38	85,0	35,1	38,1	38,0	805
51	105,0	47,8	50,8	40,0	1.270
63	112,0	60,5	63,5	40,0	1.460
76	125,0	72,9	76,2	41,0	1.755
101	157,0	97,6	101,6	44,0	2.840

DN	D	E	L	M	gr
25	25,4	40,0	34,0	70,0	770
38	38,1	55,0	38,0	85,0	920
51	50,8	75,0	40,0	105,0	1.470
63	63,5	85,0	40,0	115,0	1.780
76	76,2	85,0	41,0	115,0	2.265
101	101,6	110,0	44,0	140,0	3.650

DN	A	C	D	L	gr
25	79,0	22,4	25,4	30,0	700
38	85,0	35,1	38,1	30,0	780
51	105,0	47,8	50,8	30,0	1.230
63	112,0	60,5	63,5	30,0	1.420
76	125,0	72,9	76,2	30,0	1.700
101	157,0	97,6	101,6	30,0	2.750

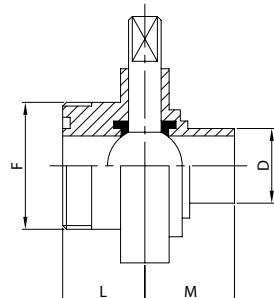
V. FARFALLA FL./FL.  
BUTTERFLY V. FL./FL.  
V. PAPILLON BR./BR.  
V. MARIPOSA BR./BR.

755 L



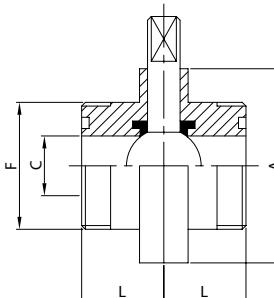
V. FARFALLA EF./EL.  
BUTTERFLY V. ME./PE.  
V. PAPILLON BF./BL.  
V. MARIPOSA ER./EL.

712 S



V. FARFALLA EF./EF.  
BUTTERFLY V. ME./ME.  
V. PAPILLON BF./BF.  
V. MARIPOSA ER./ER.

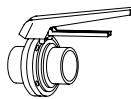
722 S



DN	A	C	E	L	gr
25	100,0	22,4	75,0	43,5	2.025
38	120,0	35,1	90,0	47,5	3.000
51	140,0	47,8	110,0	49,5	3.970
63	160,0	60,5	130,0	49,5	4.860
76	190,0	72,9	150,0	50,5	5.200
101	210,0	97,6	170,0	53,5	8.840

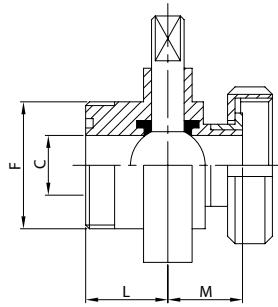
DN	D	F	L	M	gr
25	25,4	40-6	34,0	34,0	805
38	38,1	60-6	38,0	38,0	1.085
51	50,8	70-6	40,0	40,0	1.480
63	63,5	85-6	40,0	40,0	1.780
76	76,2	98-6	41,0	41,0	2.255
101	101,6	132-6	44,0	44,0	3.390

DN	A	C	F	L	gr
25	79,0	22,4	40-6	34,0	885
38	85,0	35,1	60-6	38,0	1.365
51	105,0	47,8	70-6	40,0	1.690
63	112,0	60,5	85-6	40,0	2.100
76	125,0	72,9	98-6	41,0	2.755
101	157,0	97,6	132-6	44,0	3.940



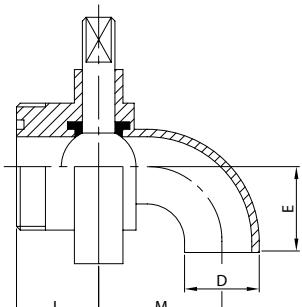
V. FARFALLA EF./BL. G. MT.  
BUTTERFLY V. ME./L. N. ED.  
V. PAPILLON BF./PL. E. DN.  
V. MARIPOSA ER./C. T. MD.

723 S



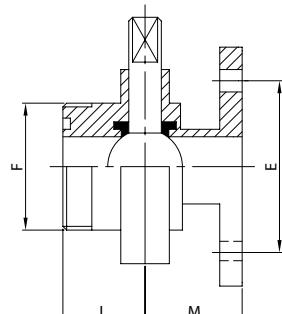
V. FARFALLA EF./CURVA  
BUTTERFLY V. ME./BEND  
V. PAPILLON BF./COUDE  
V. MARIPOSA ER./CURVA

724 S



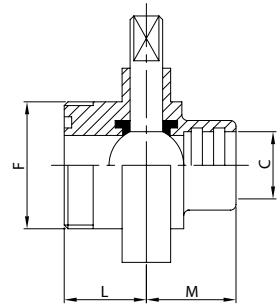
V. FARFALLA EF./FLANGIA  
BUTTERFLY V. ME./FLANGE  
V. PAPILLON BF./BRIDE  
V. MARIPOSA ER./BRIDA

725 S



V. FARFALLA EF./EM. D.I.  
BUTTERFLY V. ME./EE. I.D.  
V. PAPILLON BF./BD. D.I.  
V. MARIPOSA ER./EM. D.I.

762 S



DN	C	F	L	M	gr
25	22,4	40-6	34,0	34,0	960
38	35,1	60-6	38,0	38,0	1.475
51	47,8	70-6	40,0	40,0	1.915
63	60,5	85-6	40,0	40,0	2.490
76	72,9	98-6	41,0	41,0	3.205
101	97,6	132-6	44,0	44,0	5.110

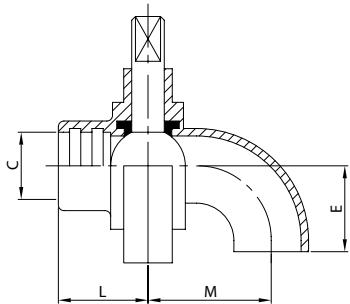
DN	D	E	L	M	gr
25	25,4	40,0	34,0	70,0	850
38	38,1	55,0	38,0	85,0	1.200
51	50,8	75,0	40,0	105,0	1.680
63	63,5	85,0	40,0	115,0	2.100
76	76,2	85,0	41,0	115,0	2.765
101	101,6	110,0	44,0	140,0	4.200

DN	E	F	L	M	gr
25	75,0	40-6	34,0	43,5	1.455
38	90,0	60-6	38,0	47,5	2.185
51	110,0	70-6	40,0	49,5	2.830
63	130,0	85-6	40,0	49,5	3.480
76	150,0	98-6	41,0	50,5	3.980
101	170,0	132-6	44,0	53,5	6.390

DN	C	F	L	M	gr
25	25,4	40-6	34,0	34,0	885
38	38,1	60-6	38,0	38,0	1.365
51	50,8	70-6	40,0	40,0	1.690
63	63,5	85-6	40,0	40,0	2.100
76	76,2	98-6	41,0	41,0	2.755
101	101,6	132-6	44,0	44,0	3.940

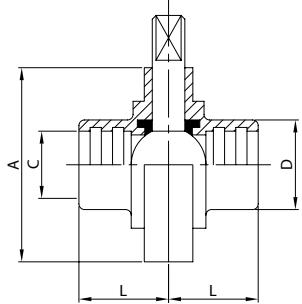
V. FARFAL. EM. D.I./CURVA  
BUTTERFL. V. EE. I.D./BEND  
V. PAPILL. BD. D.I./COUDE  
V. MARIP. EM. D.I./CURVA

764 S



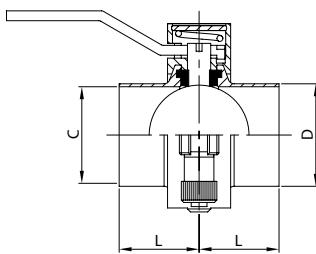
V. FARFALLA EM./EM. D.I.  
BUTTERFLY V. EE./EE. I.D.  
V. PAPILLON BD./BD. D.I.  
V. MARIPOSA EM./EM. D.I.

766 S



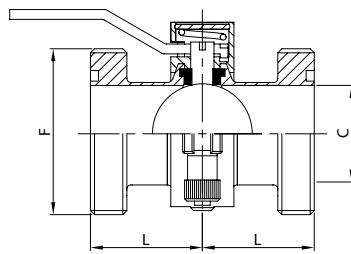
V. FARF. CERNIERA EL./EL.  
HINGED B. V. PE./PE.  
V. PAP. CHARNIÈRE BL./BL.  
V. M. CREMALLERA EL./EL.

730 L



V. FARF. CERNIERA EF./EF.  
HINGED B. V. ME./ME.  
V. PAP. CHARNIÈRE BF./BF.  
V. M. CREMALLERA ER./ER.

731 S

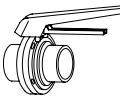


DN	C	E	L	M	gr
25	25,4	40,0	34,0	70,0	850
38	38,1	55,0	38,0	85,0	1.200
51	50,8	75,0	40,0	105,0	1.680
63	63,5	85,0	40,0	115,0	2.100
76	76,2	85,0	41,0	115,0	2.765
101	101,6	110,0	44,0	140,0	4.200

DN	A	C	D	L	gr
25	79,0	25,4	32,0	34,0	885
38	85,0	38,1	48,0	38,0	1.365
51	105,0	50,8	61,0	40,0	1.690
63	112,0	63,5	73,5	40,0	2.100
76	125,0	76,2	86,0	41,0	2.755
101	157,0	101,6	116,0	44,0	3.940

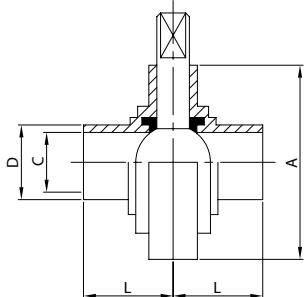
DN	C	D	L	gr
51	47,8	50,8	40,0	850

DN	C	F	L	gr
51	47,8	70-6	45,0	1.050



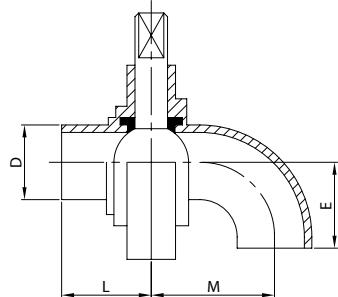
V. FARFALLA EL./EL.  
BUTTERFLY V. PE./PE.  
V. PAPILLON BL./BL.  
V. MARIPOSA EL./EL.

711 L



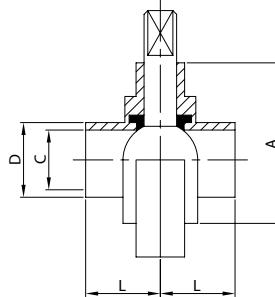
V. FARFALLA EL./CURVA  
BUTTERFLY V. PE./BEND  
V. PAPILLON BL./COUDE  
V. MARIPOSA EL./CURVA

714 L



V. FARFALLA ES./ES.  
BUTTERFLY V. WE./WE.  
V. PAPILLON BS./BS.  
V. MARIPOSA ES./ES.

777 L



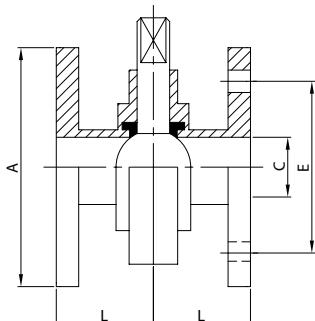
DN	A	C	D	L	gr
25	79,0	22,4	25,4	34,0	725
38	85,0	35,1	38,1	38,0	805
51	105,0	47,8	50,8	40,0	1.270
63	112,0	60,5	63,5	40,0	1.460
76	125,0	72,9	76,2	41,0	1.755
101	157,0	97,6	101,6	44,0	2.840

DN	D	E	L	M	gr
25	25,4	40,0	34,0	70,0	770
38	38,1	55,0	38,0	85,0	920
51	50,8	75,0	40,0	105,0	1.470
63	63,5	85,0	40,0	115,0	1.780
76	76,2	85,0	41,0	115,0	2.265
101	101,6	110,0	44,0	140,0	3.650

DN	A	C	D	L	gr
25	79,0	22,4	25,4	30,0	700
38	85,0	35,1	38,1	30,0	780
51	105,0	47,8	50,8	30,0	1.230
63	112,0	60,5	63,5	30,0	1.420
76	125,0	72,9	76,2	30,0	1.700
101	157,0	97,6	101,6	30,0	2.750

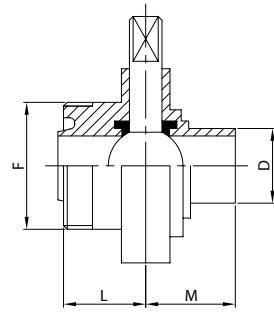
V. FARFALLA FL./FL.  
BUTTERFLY V. FL./FL.  
V. PAPILLON BR./BR.  
V. MARIPOSA BR./BR.

755 L



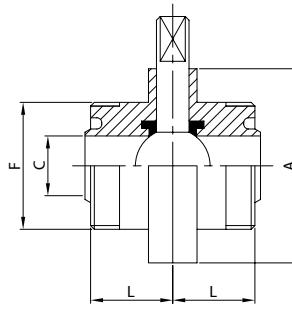
V. FARFALLA EF./EL.  
BUTTERFLY V. ME./PE.  
V. PAPILLON BF./BL.  
V. MARIPOSA ER./EL.

712 B



V. FARFALLA EF./EF.  
BUTTERFLY V. ME./ME.  
V. PAPILLON BF./BF.  
V. MARIPOSA ER./ER.

722 B



DN	A	C	E	L	gr
25	100,0	22,4	75,0	43,5	2.025
38	120,0	35,1	90,0	47,5	3.000
51	140,0	47,8	110,0	49,5	3.970
63	160,0	60,5	130,0	49,5	4.860
76	190,0	72,9	150,0	50,5	5.200
101	210,0	97,6	170,0	53,5	8.840

DN	D	F	L	M	gr
25	25,4	46-8	34,0	34,0	845
38	38,1	58-8	38,0	38,0	1.035
51	50,8	73-6	40,0	40,0	1.580
63	63,5	85-6	40,0	40,0	1.880
76	76,2	98-6	41,0	41,0	2.255
101	101,6	123-6	44,0	44,0	3.540

DN	A	C	F	L	gr
25	79,0	22,4	46-8	34,0	965
38	85,0	35,1	58-8	38,0	1.265
51	105,0	47,8	73-6	40,0	1.890
63	112,0	60,5	85-6	40,0	2.300
76	125,0	72,9	98-6	41,0	2.755
101	157,0	97,6	123-6	44,0	4.240



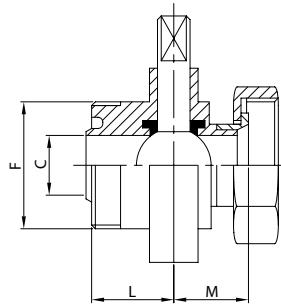
V. FARFALLA EF./BL. G. MT.  
BUTTERFLY V. ME./L. N. ED.  
V. PAPILLON BF./PL. E. DN.  
V. MARIPOSA ER./C. T. MD.

V. FARFALLA EF./CURVA  
BUTTERFLY V. ME./BEND  
V. PAPILLON BF./COUDE  
V. MARIPOSA ER./CURVA

V. FARFALLA EF./FLANGIA  
BUTTERFLY V. ME./FLANGE  
V. PAPILLON BF./BRIDE  
V. MARIPOSA ER./BRIDA

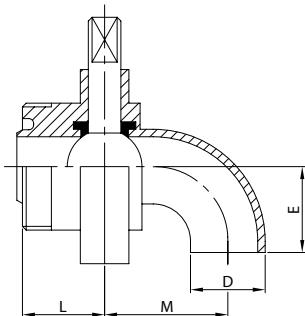
V. FARFALLA EF./EM. D.I.  
BUTTERFLY V. ME./EE. I.D.  
V. PAPILLON BF./BD. D.I.  
V. MARIPOSA ER./EM. D.I.

723 B



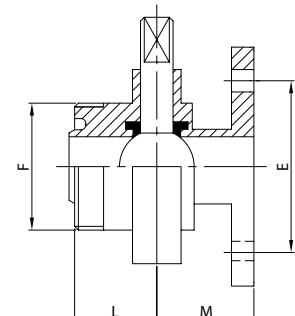
DN	C	F	L	M	gr
25	22,4	46-8	34,0	39,5	1.030
38	35,1	53-8	38,0	43,5	1.330
51	47,8	73-6	40,0	45,5	1.990
63	60,5	85-6	40,0	45,5	2.530
76	72,9	98-6	41,0	46,5	2.965
101	97,6	123-6	44,0	49,5	4.450

724 B



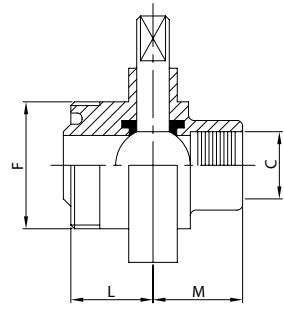
DN	D	E	L	M	gr
25	25,4	40,0	34,0	70,0	890
38	38,1	55,0	38,0	85,0	1.150
51	50,8	75,0	40,0	105,0	1.780
63	63,5	85,0	40,0	115,0	2.200
76	76,2	85,0	41,0	115,0	2.765
101	101,6	110,0	44,0	140,0	4.350

725 B



DN	E	F	L	M	gr
25	75,0	46-8	34,0	43,5	1.495
38	90,0	53-8	38,0	47,5	2.135
51	110,0	73-6	40,0	49,5	2.930
63	130,0	85-6	40,0	49,5	3.580
76	150,0	98-6	41,0	50,5	3.980
101	170,0	123-6	44,0	53,5	6.540

762 B



DN	C	F	L	M	gr
25	25,4	46-8	34,0	34,0	985
38	38,1	53-8	38,0	38,0	1.265
51	50,8	73-6	40,0	40,0	1.890
63	63,5	85-6	40,0	40,0	2.300
76	76,2	98-6	41,0	41,0	2.755
101	101,6	123-6	44,0	44,0	4.240

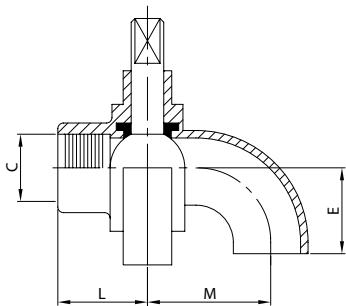
V. FARFAL. EM. D.I./CURVA  
BUTTERFL. V. EE. I.D./BEND  
V. PAPILL. BD. D.I./COUDE  
V. MARIP. EM. D.I./CURVA

V. FARFALLA EM./EM. D.I.  
BUTTERFLY V. EE./EE. I.D.  
V. PAPILLON BD./BD. D.I.  
V. MARIPOSA EM./EM. D.I.

V. FARF. CERNIERA EL./EL.  
HINGED B. V. PE./PE.  
V. PAP. CHARNIÈRE BL./BL.  
V. M. CREMALLERA EL./EL.

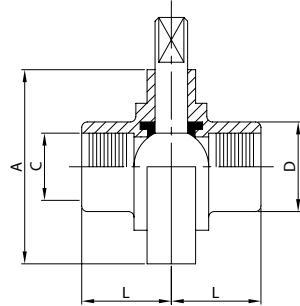
V. FARF. CERNIERA EF./EF.  
HINGED B. V. ME./ME.  
V. PAP. CHARNIÈRE BF./BF.  
V. M. CREMALLERA ER./ER.

764 B



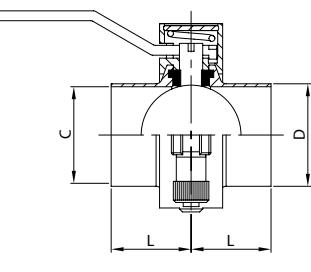
DN	C	E	L	M	gr
25	25,4	40,0	34,0	70,0	890
38	38,1	55,0	38,0	85,0	1.150
51	50,8	75,0	40,0	105,0	1.780
63	63,5	85,0	40,0	115,0	2.200
76	76,2	85,0	41,0	115,0	2.765
101	101,6	110,0	44,0	140,0	4.350

766 B



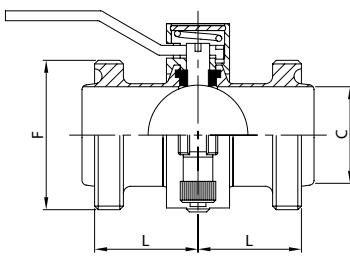
DN	A	C	D	L	gr
25	79,0	25,4	32,5	34,0	985
38	85,0	38,1	45,2	38,0	1.265
51	105,0	50,8	58,0	40,0	1.890
63	112,0	63,5	70,6	40,0	2.300
76	125,0	76,2	83,3	41,0	2.755
101	157,0	101,6	109,0	44,0	4.240

730 L

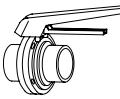


DN	C	D	L	gr
51	47,8	50,8	40,0	850

731 B

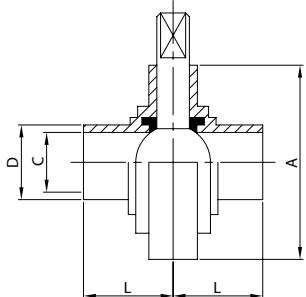


DN	C	F	L	gr
51	47,8	73-6	45,0	1.100



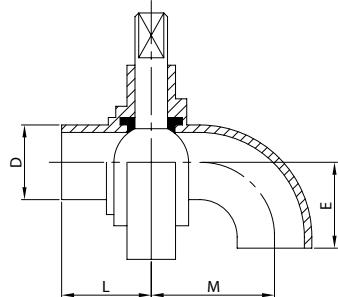
V. FARFALLA EL./EL.  
BUTTERFLY V. PE./PE.  
V. PAPILLON BL./BL.  
V. MARIPOSA EL./EL.

711 L



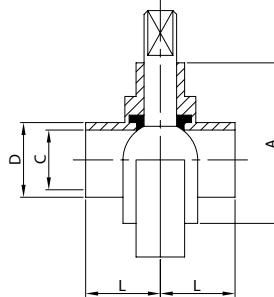
V. FARFALLA EL./CURVA  
BUTTERFLY V. PE./BEND  
V. PAPILLON BL./COUDE  
V. MARIPOSA EL./CURVA

714 L



V. FARFALLA ES./ES.  
BUTTERFLY V. WE./WE.  
V. PAPILLON BS./BS.  
V. MARIPOSA ES./ES.

777 L



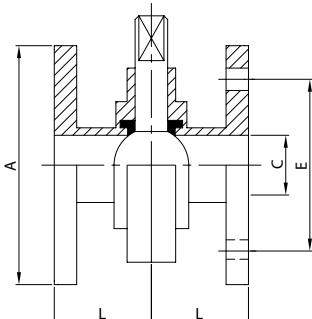
DN	A	C	D	L	gr
25	79,0	22,4	25,4	34,0	725
38	85,0	35,1	38,1	38,0	805
51	105,0	47,8	50,8	40,0	1.270
63	112,0	60,5	63,5	40,0	1.460
76	125,0	72,9	76,2	41,0	1.755
101	157,0	97,6	101,6	44,0	2.840

DN	D	E	L	M	gr
25	25,4	40,0	34,0	70,0	770
38	38,1	55,0	38,0	85,0	920
51	50,8	75,0	40,0	105,0	1.470
63	63,5	85,0	40,0	115,0	1.780
76	76,2	85,0	41,0	115,0	2.265
101	101,6	110,0	44,0	140,0	3.650

DN	A	C	D	L	gr
25	79,0	22,4	25,4	30,0	700
38	85,0	35,1	38,1	30,0	780
51	105,0	47,8	50,8	30,0	1.230
63	112,0	60,5	63,5	30,0	1.420
76	125,0	72,9	76,2	30,0	1.700
101	157,0	97,6	101,6	30,0	2.750

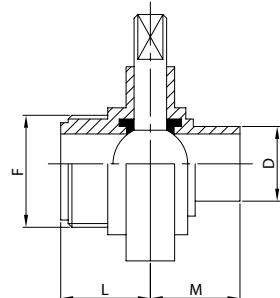
V. FARFALLA FL./FL.  
BUTTERFLY V. FL./FL.  
V. PAPILLON BR./BR.  
V. MARIPOSA BR./BR.

755 L



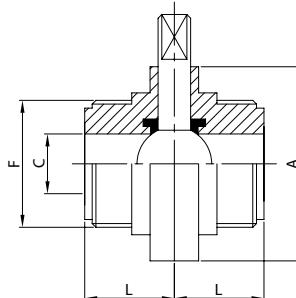
V. FARFALLA EF./EL.  
BUTTERFLY V. ME./PE.  
V. PAPILLON BF./BL.  
V. MARIPOSA ER./EL.

712 I



V. FARFALLA EF./EF.  
BUTTERFLY V. ME./ME.  
V. PAPILLON BF./BF.  
V. MARIPOSA ER./ER.

722 I



DN	A	C	E	L	gr
25	100,0	22,4	75,0	43,5	2.025
38	120,0	35,1	90,0	47,5	3.000
51	140,0	47,8	110,0	49,5	3.970
63	160,0	60,5	130,0	49,5	4.860
76	190,0	72,9	150,0	50,5	5.200
101	210,0	97,6	170,0	53,5	8.840

DN	D	F	L	M	gr
25	25,4	37-8	34,0	34,0	825
38	38,1	50-8	38,0	38,0	985
51	50,8	64-8	40,0	40,0	1.450
63	63,5	77-8	40,0	40,0	1.640
76	76,2	91-8	41,0	41,0	1.980
101	101,6	118-8	44,0	44,0	3.140

DN	A	C	F	L	gr
25	79,0	22,4	37-8	34,0	925
38	85,0	35,1	50-8	38,0	1.165
51	105,0	47,8	64-8	40,0	1.630
63	112,0	60,5	77-8	40,0	1.820
76	125,0	72,9	91-8	41,0	2.210
101	157,0	97,6	118-8	44,0	3.440



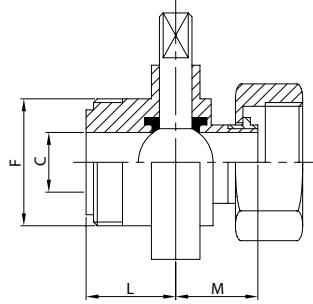
V. FARFALLA EF./BL. G. MT.  
BUTTERFLY V. ME./L. N. ED.  
V. PAPILLON BF./PL. E. DN.  
V. MARIPOSA ER./C. T. MD.

V. FARFALLA EF./CURVA  
BUTTERFLY V. ME./BEND  
V. PAPILLON BF./COUDE  
V. MARIPOSA ER./CURVA

V. FARFALLA EF./FLANGIA  
BUTTERFLY V. ME./FLANGE  
V. PAPILLON BF./BRIDE  
V. MARIPOSA ER./BRIDA

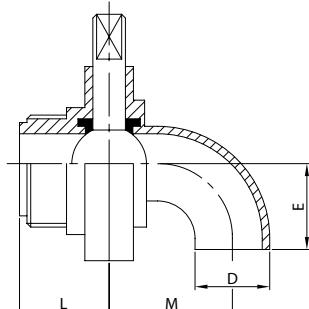
V. FARFALLA EF./EM. D.I.  
BUTTERFLY V. ME./EE. I.D.  
V. PAPILLON BF./BD. D.I.  
V. MARIPOSA ER./EM. D.I.

723 I



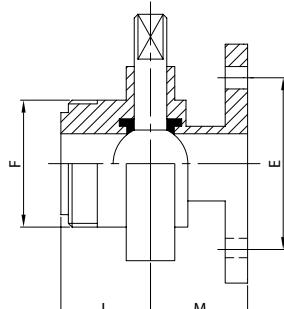
DN	C	F	L	M	gr
25	22,4	37-8	34,0	34,0	1.000
38	35,1	50-8	38,0	38,0	1.300
51	47,8	64-8	40,0	40,0	1.930
63	60,5	77-8	40,0	40,0	2.530
76	72,9	91-8	41,0	41,0	2.965
101	97,6	118-8	44,0	44,0	4.450

724 I



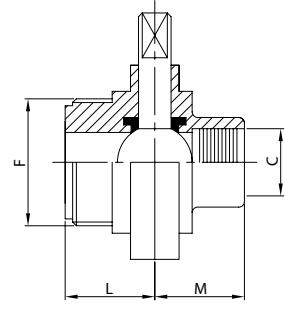
DN	D	E	L	M	gr
25	25,4	40,0	34,0	70,0	870
38	38,1	55,0	38,0	85,0	1.100
51	50,8	75,0	40,0	105,0	1.650
63	63,5	85,0	40,0	115,0	1.960
76	76,2	85,0	41,0	115,0	2.490
101	101,6	110,0	44,0	140,0	3.950

725 I



DN	E	F	L	M	gr
25	75,0	37-8	34,0	43,5	1.475
38	90,0	50-8	38,0	47,5	2.080
51	110,0	64-8	40,0	49,5	2.800
63	130,0	77-8	40,0	49,5	3.340
76	150,0	91-8	41,0	50,5	3.705
101	170,0	118-8	44,0	53,5	6.140

762 I



DN	C	F	L	M	gr
25	25,4	37-8	34,0	34,0	925
38	38,1	50-8	38,0	38,0	1.165
51	50,8	64-8	40,0	40,0	1.630
63	63,5	77-8	40,0	40,0	1.820
76	76,2	91-8	41,0	41,0	2.210
101	101,6	118-8	44,0	44,0	3.440

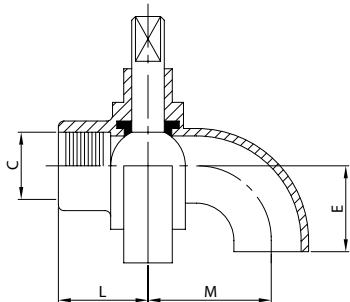
V. FARFAL. EM. D.I./CURVA  
BUTTERFLY V. EE. I.D./BEND  
V. PAPILL. BD. D.I./COUDE  
V. MARIP. EM. D.I./CURVA

V. FARFALLA EM./EM. D.I.  
BUTTERFLY V. EE./EE. I.D.  
V. PAPILLON BD./BD. D.I.  
V. MARIPOSA EM./EM. D.I.

V. FARF. CERNIERA EL./EL.  
HINGED B. V. PE./PE.  
V. PAP. CHARNIÈRE BL./BL.  
V. M. CREMALLERA EL./EL.

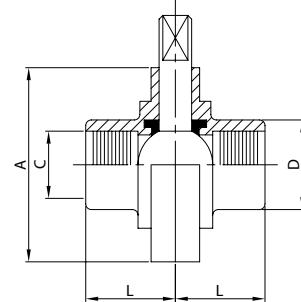
V. FARF. CERNIERA EF./EF.  
HINGED B. V. ME./ME.  
V. PAP. CHARNIÈRE BF./BF.  
V. M. CREMALLERA ER./ER.

764 I



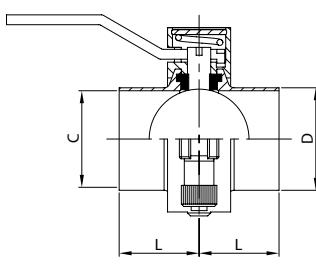
DN	C	E	L	M	gr
25	25,4	40,0	34,0	70,0	890
38	38,1	55,0	38,0	85,0	1.150
51	50,8	75,0	40,0	105,0	1.780
63	63,5	85,0	40,0	115,0	2.200
76	76,2	85,0	41,0	115,0	2.765
101	101,6	110,0	44,0	140,0	4.350

766 I



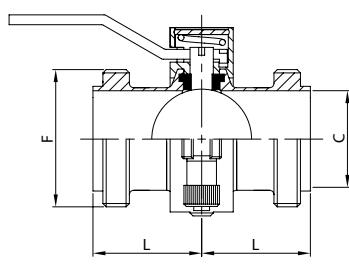
DN	A	C	D	L	gr
25	79,0	25,4	29,0	34,0	925
38	85,0	38,1	42,5	38,0	1.165
51	105,0	50,8	56,0	40,0	1.630
63	112,0	63,5	69,7	40,0	1.820
76	125,0	76,2	82,3	41,0	2.210
101	157,0	101,6	108,4	44,0	3.440

730 L



DN	C	D	L	gr
51	47,8	50,8	40,0	850

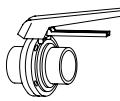
731 I



DN	C	F	L	gr
51	47,8	64-8	48,0	950

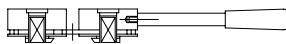


**VALVOLE DI DRENAGGIO**  
**DRAINAGE VALVES**  
**VANNES DE DRAINAGE**  
**VÁLVULAS DE DRENAJE**



**MANIGLIA V. DRENAGGIO**  
**DRAINAGE V. HANDLE**  
**POIGNÉE V. DRAINAGE**  
**MANETA V. DRENAJE**

**7N1**

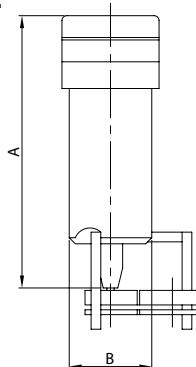


**C. PNEUM. VERTICALE DE.**  
**PNEUM. C. DE. VERTICAL**  
**V. PNEUM. VERTICALE DE.**  
**C. NEUM. VERTICALE DE.**

**VALVOLA DRENAGGIO EL.**  
**DRAINAGE VALVE PE.**  
**VANNE DRAINAGE BL.**  
**VÁLVULA DRENAGE EL.**

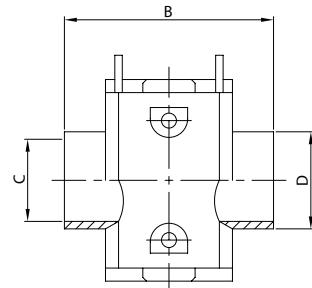
**VALVOLA DRENAGGIO EF.**  
**DRAINAGE VALVE ME.**  
**VANNE DRAINAGE BF.**  
**VÁLVULA DRENAGE ER.**

**7C7 L**



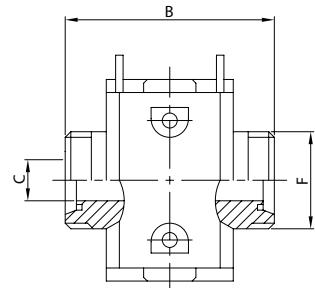
<b>DN</b>	<b>A</b>	<b>B</b>	<b>gr</b>
<b>38/76</b>	293,0	76,0	4.200

**788 L**



<b>DN</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>gr</b>
<b>40</b>	128,0	37,0	40,0	2.190
<b>52</b>	132,0	49,0	52,0	3.120
<b>70</b>	154,0	66,0	70,0	5.800

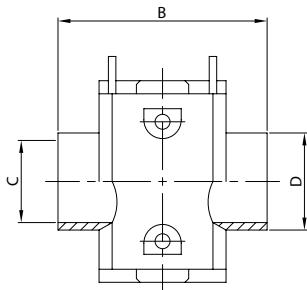
**788 D**



<b>DN</b>	<b>B</b>	<b>C</b>	<b>F</b>	<b>gr</b>
<b>40</b>	128,0	37,0	65-6	2.650
<b>50</b>	128,0	49,0	78-6	3.720
<b>65</b>	148,0	66,0	95-6	6.300

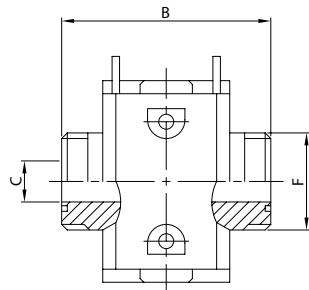
**VALVOLA DRENAGGIO EL.**  
**DRAINAGE VALVE PE.**  
**VANNE DRAINAGE BL.**  
**VÁLVULA DRENAGE EL.**

**788 L**



**VALVOLA DRENAGGIO EF.**  
**DRAINAGE VALVE ME.**  
**VANNE DRAINAGE BF.**  
**VÁLVULA DRENAGE ER.**

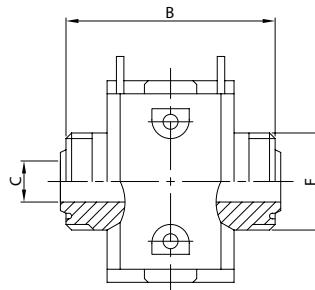
**788 S**



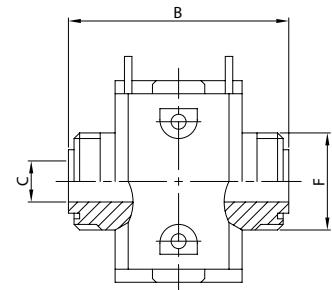
**VALVOLA DRENAGGIO EF.**  
**DRAINAGE VALVE ME.**  
**VANNE DRAINAGE BF.**  
**VÁLVULA DRENAGE ER.**

**VALVOLA DRENAGGIO EF.**  
**DRAINAGE VALVE ME.**  
**VANNE DRAINAGE BF.**  
**VÁLVULA DRENAGE ER.**

**788 B**



**788 I**



<b>DN</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>gr</b>
<b>38</b>	128,0	35,1	38,1	2.190
<b>51</b>	132,0	47,8	50,8	3.120
<b>76</b>	154,0	72,9	76,2	5.800

<b>DN</b>	<b>B</b>	<b>C</b>	<b>F</b>	<b>gr</b>
<b>38</b>	128,0	35,1	60-6	2.570
<b>51</b>	132,0	47,8	70-6	3.550
<b>76</b>	154,0	72,9	98-6	6.800

<b>DN</b>	<b>B</b>	<b>C</b>	<b>F</b>	<b>gr</b>
<b>38</b>	137,4	34,8	58-8	2.570
<b>51</b>	141,4	47,5	73-6	4.950
<b>76</b>	163,4	72,9	98-6	6.800

<b>DN</b>	<b>B</b>	<b>C</b>	<b>F</b>	<b>gr</b>
<b>38</b>	128,0	34,8	50-8	2.370
<b>51</b>	132,0	47,5	64-8	3.500
<b>76</b>	154,0	72,9	91-8	6.260





## VALVOLE A SFERA

- Di solida e robusta costruzione.
- Parti a contatto con il fluido costruite esclusivamente in acciaio inossidabile AISI 316L. A richiesta, disponibili in acciaio inossidabile AISI 304L.
- Facilmente sterilizzabili. Elementi interni facilmente raggiungibili durante le fasi di lavaggio CIP nei modelli 50 e 51.
- Facilmente disassemblabili. Disassemblaggio in linea nei modelli 90 e 91. Guarnizione sanitaria nel modello 90.
- Sfera contenuta all'interno delle flange e conseguente alleggerimento della struttura e riduzione dell'ingombro valvola nel modello 81; un'estremità a saldare e un'estremità a richiesta a norme DIN, SMS, RJT, ISS, Gas, Eno, Macon.
- Corredabili di comandi manuali o pneumatici.
- Comandi pneumatici orizzontali e verticali a semplice effetto, doppio effetto e di regolazione flusso, corredabili di contatto di prossimità, microinterruttore (elettrico o pneumatico), elettrovalvola (24V CA, 24 V CC, 48 V CA), connettore.
- Massima pressione di esercizio: 10 bar.
- Possibilità di intercambiabilità tra le varie unificazioni.
- Finitura standard: lucidatura esterna e satinatura interna grana 150. Altre finiture a richiesta.

## BALL VALVES

- Heavy duty construction.
- Parts in contact with the fluid made exclusively of AISI 316L stainless steel. On request available in AISI 304L stainless steel.
- Easy to sterilize. Internal parts easy to reach during CIP process in models 50 and 51.
- Easy to disassemble. On-line disassembly in models 90 and 91. Sanitary gasket in model 90.
- Ball contained in the flange with resulting lightening of the structure and reduction of valve volume in the 81 model. One welded end and one end, on request, produced in conformity with DIN, SMS, RJT, ISS, BSP, Eno and Macon standards.
- Can be equipped with manual or pneumatic controls.
- Horizontal and vertical single-, double-effect, and modulating pneumatic controls. Can be equipped with proximity contact, microswitch (electrical or pneumatic), solenoid valve (24 V AC, 24 V DC, 48 V AC), connector.
- Maximum operating pressure: 10 bars.
- Interchangeability between the different standards available.
- Standard finish: 150 grain external polishing and internal glazing. Other finishes on request.

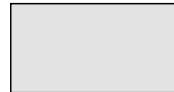
## VANNES À BOULE

- Fabrication solide et robuste.
- Parties en contact avec le fluide fabriquées exclusivement en acier inoxydable AISI 316L. Sur demande, disponibles en acier inoxydable AISI 304L.
- Facilement stérilisables. Élèmes internes faciles à atteindre durant les opérations de lavage CIP pour les modèles 50 et 51.
- Facilement démontables. Démontage en ligne pour les modèles 90 et 91. Joint sanitaire pour le modèle 90.
- La boule contenue à l'intérieur des brides allège la structure et réduit l'encombrement de la vanne modèle 81; un bout à souder et un bout, sur demande, conforme aux normes DIN, SMS, RJT, ISS, Gas, Eno, Macon.
- Peuvent être munies de commandes manuelles ou pneumatiques.
- Commandes pneumatiques horizontales et verticales à simple effet, double effet et pour le réglage du flux; peuvent être munies de contact de proximité, minirupteur (électrique ou pneumatique), électrovanne (24 V CA, 24 V CC, 48 V CA), connecteur.
- Pression d'exploitation maximum: 10 bars.
- Interchangeabilité possible entre les différentes standards.
- Finissage standard: polissage extérieur et satinage intérieur grain 150. Autres finissages sur demande.



## VÁLVULAS DE BOLA

- De fabricación sólida y robusta.
- Las partes que están en contacto con el fluido se fabrican exclusivamente en acero inoxidable AISI 316L. A pedido, se pueden suministrar en acero inoxidable AISI 304L.
- Fácilmente esterilizables. Los elementos internos son fácilmente accesibles durante las fases de lavado CIP en los modelos 50 y 51.
- Se pueden desmontar fácilmente. Desmontaje en línea en los modelos 90 y 91. Junta sanitaria en el modelo 90.
- Bola alojada en el interior de las bridas con consiguiente aligeramiento de la estructura y reducción de las dimensiones de la válvula en el modelo 81; un extremo para soldar y un extremo a pedido según normas DIN, SMS, RJT, ISS, Gas, Eno, Macon.
- Equipadas con mandos manuales o neumáticos.
- Mandos neumáticos horizontales y verticales de simple efecto, doble efecto y de regulación del flujo que se pueden equipar con microsensor, microrruptor (eléctrico o neumático), electroválvula (24 V CA, 24 V CC, 48 V CA), conector.
- Máxima presión de ejercicio: 10 bares.
- Posibilidad de intercambio entre las distintas unificaciones.
- Acabado estándar: pulido exterior y satinado interior grano 150. A pedido, se pueden suministrar otros acabados.

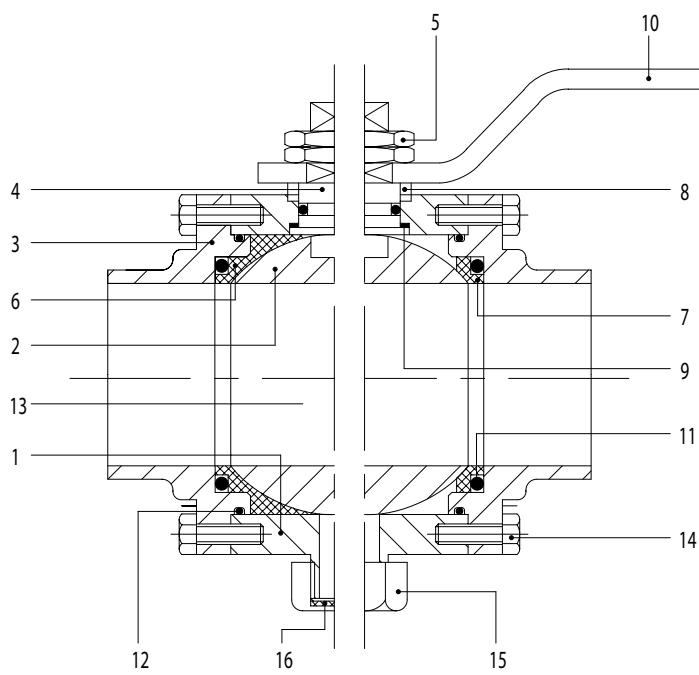


**VALVOLA A SFERA CON DRENAGGIO**

**DRAINAGE BALL VALVE**

**VANNE À BOULE AVEC DRAINAGE**

**VÁLVULA DE BOLA CON DRENAJE**



50

51

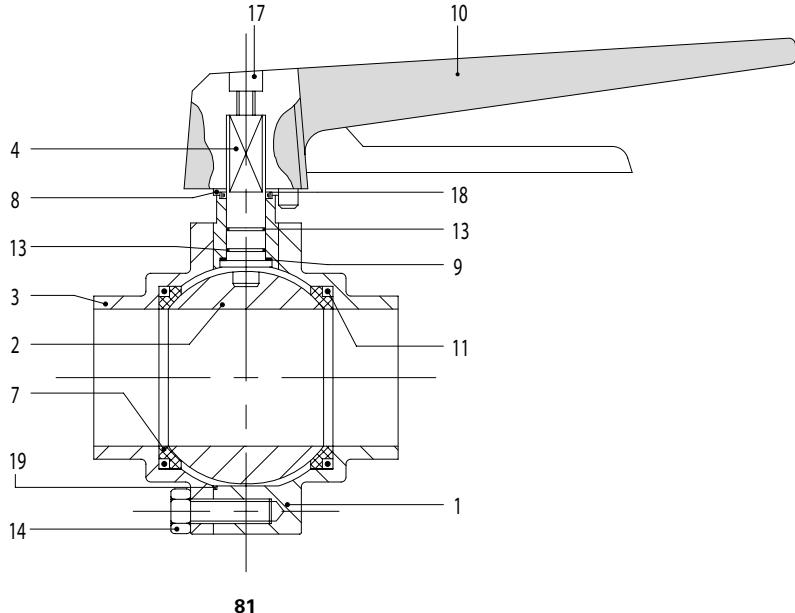
- |   |   |
|---|---|
| 1. Corpo valvola<br>Valve body<br>Corps vanne<br>Cuerpo                           | 9. Rondella<br>Washer<br>Rondelle<br>Arandela                                 |
| 2. Sfera<br>Ball<br>Boule<br>Bola   | 10. Maniglia<br>Handle<br>Poignée<br>Maneta                                   |
| 3. Flangia<br>Flange<br>Bride<br>Brida  | 11. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR          |
| 4. Perno<br>Spindle<br>Pivot<br>Perno   | 12. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR          |
| 5. Dado esagonale<br>Hexagonal nut<br>Ècrou hexagonal<br>Tuerca hexagonal         | 13. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR          |
| 6. Guarnizione sanitaria<br>Sanitary gasket<br>Joint sanitaire<br>Junta sanitaria | 14. Vite esagonale<br>Hexagonal screw<br>Vis hexagonale<br>Tornillo hexagonal |
| 7. Guarnizione<br>Gasket<br>Joint<br>Junta  | 15. Dado esagonale<br>Hexagonal nut<br>Ècrou hexagonal<br>Tuerca hexagonal    |
| 8. Distanziale<br>Spacer<br>Entretoise<br>Distanciador                            | 16. Pastiglia PTFE<br>PTFE pin<br>Pastille PTFE<br>Pastilla PTFE              |

CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1"	1 1/2"	2"	2 1/2"	3"	4"	Mat.	Part. o agg.
1	K51		25	38	51	63	76	101	6L	01
2	K51		25	38	51	63	76	101	6L	02
3	K51	K	1"	1 1/2"	2"	2 1/2"	3"	4"	6L	03
3	K51	W	25	38	51	63	76	101	6L	03
4	K51		25	38/101	38/101	38/101	38/101	38/101	4L	04
5	K51		25	38/101	38/101	38/101	38/101	38/101	4L	05
6	K51		25	38	51	63	76	101	T	06
7	K51		25	38	51	63	76	101	T	07
8	K51		25	38/101	38/101	38/101	38/101	38/101	4L	08
9	K51		25	38/101	38/101	38/101	38/101	38/101	T	09
10	K51		25	38/101	38/101	38/101	38/101	38/101	4L	10
11	OR		3106	4162	158	6275	6312	6450	N	
12	OR		3125	3200	3262	3325	3400	3550	N	
13	OR		3043	3050	3050	3050	3050	3050	N	
14	VE		6x12	6x16	6x16	6x16	6x16	6x16	4L	
15	K51		25/101	25/101	25/101	25/101	25/101	25/101	4L	15
16	K51		25/101	25/101	25/101	25/101	25/101	25/101	T	16



**VALVOLA A SFERA**  
**BALL VALVE**  
**VANNE À BOULE**  
**VÁLVULA DE BOLA**



- |   |   |
|---|---|
| 1. Corpo valvola<br>Valve body<br>Corps vanne<br>Cuerpo | 10. Maniglia<br>Handle<br>Poignée<br>Maneta                               |
| 2. Sfera<br>Ball<br>Boule<br>Bola                       | 11. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR      |
| 3. Flangia<br>Flange<br>Bride<br>Brida                  | 13. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR      |
| 4. Perno<br>Spindle<br>Pivot<br>Perno                   | 14. Vite esagonale<br>Hexagonal screw<br>Vis 6 pans<br>Tornillo hexagonal |
| 7. Guarnizione<br>Gasket<br>Joint<br>Junta              | 17. Vite brugola<br>Allen screw<br>Vis Allen<br>Tornillo Allen            |
| 8. Distanziale<br>Spacer<br>Entretoise<br>Distanciador  | 18. Rondella PTFE<br>PTFE washer<br>Rondelle PTFE<br>Arandela PTFE        |
| 9. Rondella<br>Washer<br>Rondelle<br>Arandela           | 19. Anello PTFE<br>PTFE ring<br>Joint PTFE<br>Junta PTFE                  |

CODIFICAZIONE  
 CODING  
 CODIFICATION  
 CODIFICACIÓN

Pos.	Cod. base	Norme	1 1/2" 38	D 40 40	2"51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	Mat.	Part. o agg.
1	81		38/40	38/40	51/52	51/52	63	70	76	85	6L	01
2	71		38/40	38/40	51/52	51/52	63	70	76	85	6L	02
3	71	W	38	40	51	52	63	70	76	85	6L	03
3	71	D		40		50		65		80	6L	03
3	71	S	38		51		63		76		6L	03
3	71	B	38		51		63		76		6L	03
3	71	I	38		51		63		76		6L	03
4	71		38/40	38/40	51/52	51/52	63	70	76	85	4L	04
7	71		38/40	38/40	51/52	51/52	63	70	76	85	T	07
8	71		38/52	38/52	38/52	38/52	63/85	63/85	63/85	63/85	4L	08
9	71		38/52	38/52	38/52	38/52	63/85	63/85	63/85	63/85	T	09
10	7M8		25/76	25/76	25/76	25/76	25/76	25/76	25/76	85/101	A	
11	OR		3181	3181	3218	3218	4275	177	4325	4337	N	
13	OR		108	108	108	108	2043	2043	2043	2043	N	
14	VE		6x16	6x16	6x16	6x16	6x16	6x16	6x16	6x16	4L	
17	TCCE		6x16	6x16	6x16	6x16	6x16	6x16	6x16	6x16	4L	
18	91		38/52	38/52	38/52	38/52	63/85	63/85	63/85	63/85	T	18
19	71		38/40	38/40	51/52	51/52	63	70	76	85	T	19

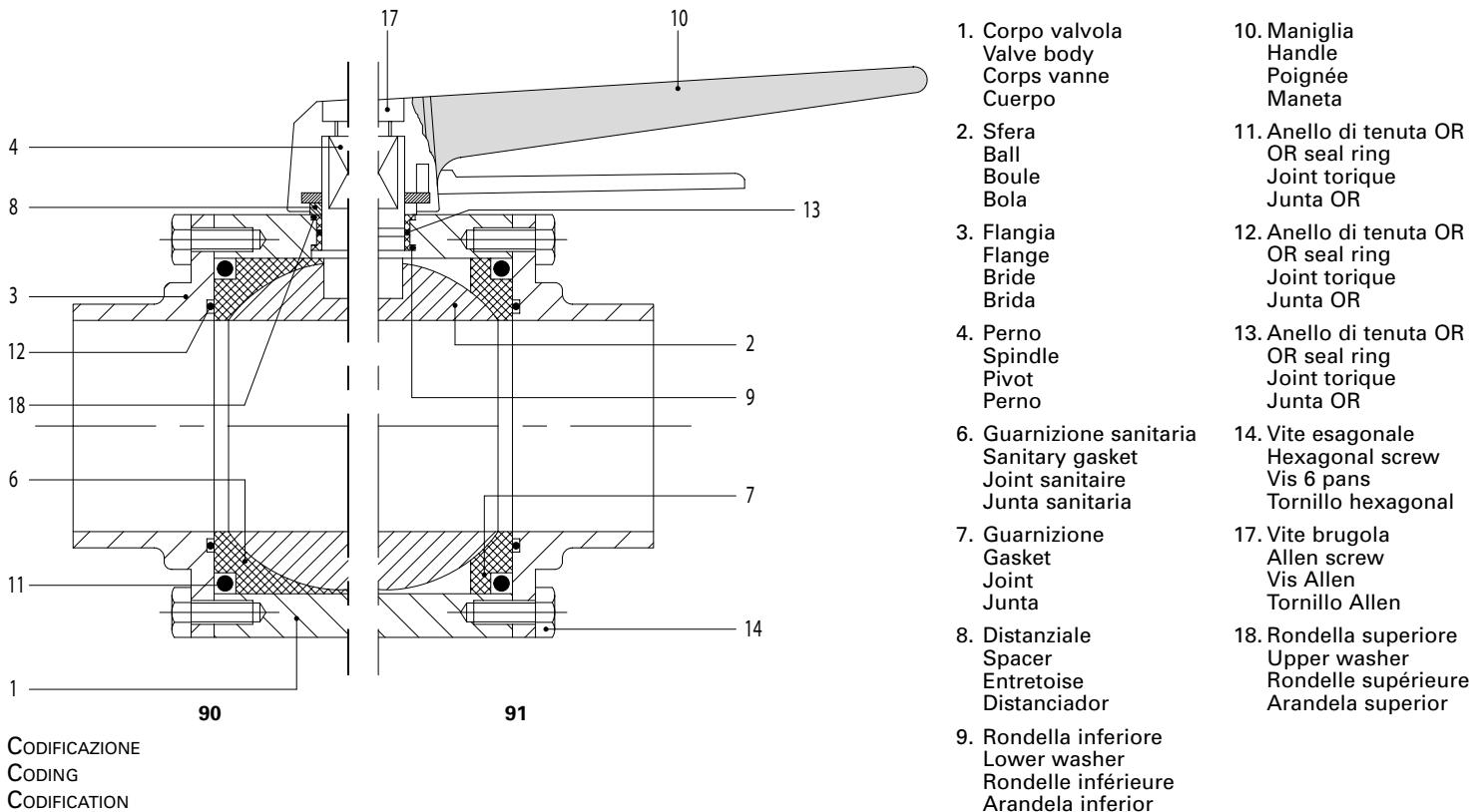


**VALVOLA A SFERA ESTRAIBILE**

**EXTRACTABLE BALL VALVE**

**VANNE À BOULE EXTRACTIBLE**

**VÁLVULA DE BOLA ESTRAÍBLE**



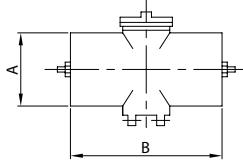
CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1'' 25	D 25 28	D 32 34	1 1/2'' 38	D 40 40	2'' 51	D 50 52	2 1/2'' 63	D 65 70	3'' 76	D 80 85	Mat.	Part. o agg.
1	91		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70	76/85	76/85	6L	01
2	91		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70	76/85	76/85	6L	02
3	91	W	25	28	34	38	40	51	52	63	70	76	85	6L	03
3	91	D		25	32		40		50		65		80	6L	03
3	91	S	25			38		51		63		76		6L	03
3	91	B	25			38		51		63		76		6L	03
3	91	I	25			38		51		63		76		6L	03
4	91		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70	76/85	76/85	4L	04
6	90		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70	76/85	76/85	T	06
7	91		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63/70	63/70	76/85	76/85	T	07
8	91		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	4L	08
9	91		25/40	25/40	25/40	25/40	25/40	51/85	51/85	51/85	51/85	51/85	51/85	T	09
10	7M8		25/52	25/52	25/52	25/52	25/52	25/52	25/52	63/85	63/85	63/85	63/85	A	
11	OR		4131	4131	6200	6200	6200	6250	6250	6337	6337	189	189	N	
12	OR		2106	2106	3162	3162	3162	3206	3206	3256	3256	3300	3300	N	
13	OR		2043	2043	2043	2043	2043	2050	2050	2050	2050	2050	2050	N	
14	VE		6X12	6X12	6X16	6X16	6X16	6X16	6X16	6X16	6X16	6X16	6X16	4L	
17	TCCE		6X16	6X16	6X16	6X16	6X16	6X16	6X16	6X16	6X16	6X16	6X16	4L	
18	91		25/40	25/40	25/40	25/40	25/40	51/85	51/85	51/85	51/85	51/85	51/85	T	18



CILINDRO PNEUM. DE.  
PNEUM. ACTUATOR DE.  
VÉRIN PNEUM. DE.  
CILINDRO NEUM. DE.

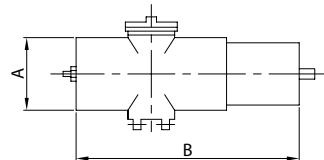
7C1 L



DN	A	B	gr
25/52	60,0	138,5	1.460
63/85	76,0	161,0	2.100
101/104	89,0	180,0	2.960

CILINDRO PNEUM. SE.  
PNEUM. ACTUATOR SE.  
VÉRIN PNEUM. SE.  
CILINDRO NEUM. SE.

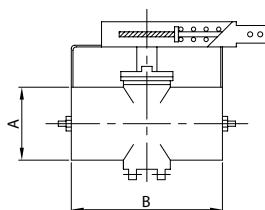
7C2 L



DN	A	B	gr
25/52	76,0	240,0	2.190
63/85	89,0	260,0	3.150

C. PNEUM. REGOL. FLUSSO  
REGUL. FLUX PNEUM. ACT.  
VÉ. PNEUM. RÉGULATION  
CIL. NEUM. REGULACIÓN

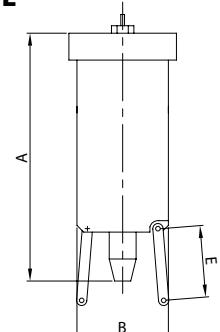
7C1 L M



DN	A	B	gr
25/104	89,0	180,0	4.160

C. PNEUM. SE. VERTICALE  
PNEUM. ACT. SE. VERTICAL  
VÉ. PNEUM. SE. VERTICALE  
CIL. NEUM. SE. VERTICAL

7C4 L



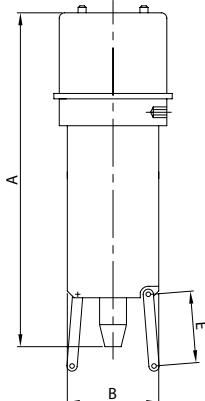
DN	A	B	E	gr
25/52	211,0	76,0	64,0	3.700
63/104	211,0	76,0	58,0	3.700

C. PN. UNITÀ CONTR.  
CONTR. UNIT PN. ACT.  
VÉ. PN. UNITÉ CONTR.  
CIL. N. UNIDAD CONTR.

STAFFA  
BRACKET  
SUPPORT  
BRIDA

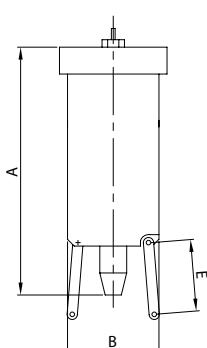
STAFFA  
BRACKET  
SUPPORT  
BRIDA

7C4 UC



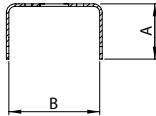
DN	A	B	E	gr
25/52	316,0	76,0	64,0	3.900
63/104	316,0	76,0	58,0	3.900

7C5 L



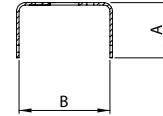
DN	A	B	E	gr
25/52	211,0	76,0	64,0	3.700
63/104	211,0	76,0	58,0	3.700

7C9 91



DN	A	B	gr
25	59,0	46,0	200
38	62,0	62,0	210
51	66,5	74,0	240
63	68,5	88,0	260
76	66,0	99,0	260
101	75,5	126,0	330

7C9 51



ELETTROVALVOLA  
SOLENOID VALVE  
ÉLECTROVANNE  
ELECTROVÁLVULA

MICROINTERRUTTORE  
MICROSWITCH  
MINIRUPTEUR  
MICRORRUPTOR

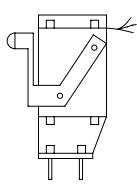
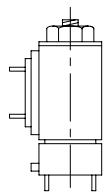
CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

CONNETTORE  
CONNECTOR  
CONNECTEUR  
CONNECTOR

015 NC

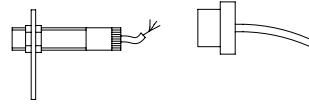
015 NA

014 1



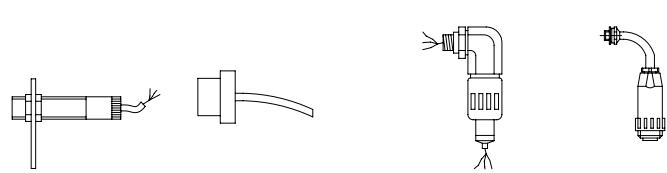
013 O

013 S



030 H

030 S





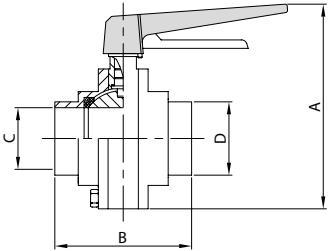
VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



DIN

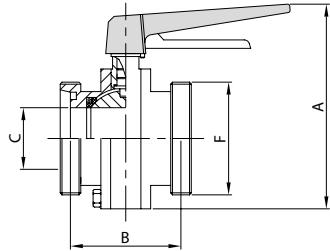
VALVOLA SFERA EL.  
BALL VALVE PE.  
VANNE BOULE BL.  
VÁLVULA BOLA EL.

**W81**



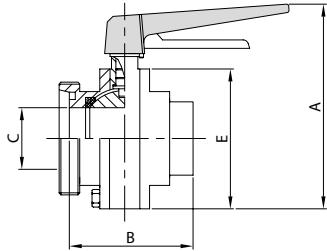
VALVOLA SFERA EF.  
BALL VALVE ME.  
VANNE BOULE BF.  
VÁLVULA BOLA ER.

**D81**



VALVOLA SFERA EL./EF.  
BALL VALVE PE./ME.  
VANNE BOULE BL./BF.  
VÁLVULA BOLA EL./ER.

**WD81**



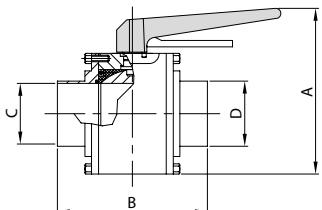
DN	A	B	C	D	gr
40	138,0	73,0	37,0	40,0	1.600
52	155,0	80,0	49,0	52,0	2.600
70	187,0	112,0	66,0	70,0	4.700
85	204,0	121,0	81,0	85,0	5.500

DN	A	B	C	F	gr
40	138,0	73,0	37,0	65-6	1.900
50	155,0	76,0	49,0	78-6	2.900
65	187,0	106,0	66,0	96-6	5.300
80	204,0	114,0	81,0	110-4	6.300

DN	A	B	C	E	gr
40	138,0	73,0	37,0	81,0	1.750
50	155,0	78,0	49,0	98,0	2.750
65	187,0	109,0	66,0	130,0	5.000
80	204,0	117,5	81,0	147,0	5.800

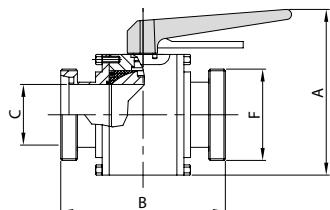
V. SFERA ESTRAIBILE SANIT. EL.  
SANIT. EXTRACTABLE BALL V. PE.  
V. BOULE EXTRACT. SANIT. BL.  
V. BOLA EXTRAIBLE SANIT. EL.

**W90**



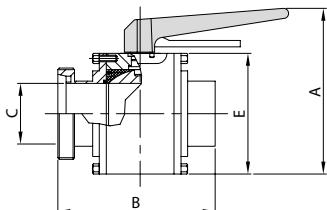
V. SFERA ESTRAIBILE SANIT. EF.  
SANIT. EXTRACTABLE BALL V. ME.  
V. BOULE EXTRACT. SANIT. BF.  
V. BOLA EXTRAIBLE SANIT. ER.

**D90**



V. SFERA ESTR. SANIT. EL./EF.  
SANIT. EXTRACT. BALL V. PE./ME.  
V. BOULE EXTR. SANIT. BL./BF.  
V. BOLA EXTR. SANIT. EL./ER.

**WD90**



DN	A	B	C	D	gr
28	110,0	95,0	25,0	28,0	1.130
34	130,0	109,0	31,0	34,0	2.070
40	130,0	109,0	37,0	40,0	2.070
52	145,0	124,0	49,0	52,0	2.800
70	168,0	135,0	66,0	70,0	4.840
85	182,0	158,0	81,0	85,0	7.480

DN	A	B	C	F	gr
25	110,0	110,0	25,0	52-6	1.330
32	130,0	121,0	31,0	58-6	2.370
40	130,0	121,0	37,0	65-6	2.370
50	145,0	132,0	49,0	78-6	3.100
65	168,0	150,0	66,0	95-6	5.440
80	182,0	167,0	81,0	110-4	8.080

DN	A	B	C	E	gr
25	110,0	102,0	25,0	60,0	1.230
32	130,0	115,0	31,0	80,0	2.220
40	130,0	115,0	37,0	80,0	2.220
50	145,0	128,0	49,0	95,0	2.950
65	168,0	142,0	66,0	118,0	5.140
80	182,0	162,0	81,0	132,0	7.780



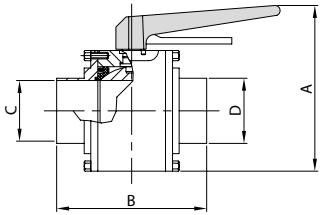
VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



DIN

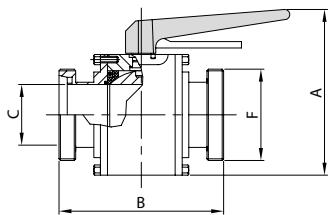
V. SFERA ESTRAIBILE EL.  
EXTRACTABLE BALL V. PE.  
V. BOULE EXTRACTIBLE BL.  
V. BOLA EXTRAIBLE EL.

W91



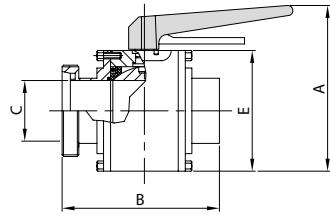
V. SFERA ESTRAIBILE EF.  
EXTRACTABLE BALL V. ME.  
V. BOULE EXTRACTIBLE BF.  
V. BOLA EXTRAIBLE ER.

D91



V. SFERA ESTRAIBILE EL./EF.  
EXTRACTABLE BALL V. PE./ME.  
V. BOULE EXTRACTIBLE BL./BF.  
V. BOLA EXTRAIBLE EL./ER.

WD91



DN	A	B	C	D	gr
28	110,0	95,0	25,0	28,0	1.120
34	130,0	109,0	31,0	34,0	2.060
40	130,0	109,0	37,0	40,0	2.060
52	145,0	124,0	49,0	52,0	2.780
70	168,0	135,0	66,0	70,0	4.820
85	182,0	158,0	81,0	85,0	7.450

DN	A	B	C	F	gr
25	110,0	110,0	25,0	52-6	1.320
32	130,0	121,0	31,0	58-6	2.360
40	130,0	121,0	37,0	65-6	2.360
50	145,0	132,0	49,0	78-6	3.080
65	168,0	150,0	66,0	95-6	5.420
80	182,0	167,0	81,0	110-4	8.050

DN	A	B	C	E	gr
25	110,0	102,0	25,0	60,0	1.220
32	130,0	115,0	31,0	80,0	2.210
40	130,0	115,0	37,0	80,0	2.210
50	145,0	128,0	49,0	95,0	2.930
65	168,0	142,0	66,0	118,0	5.120
80	182,0	162,0	81,0	132,0	7.750



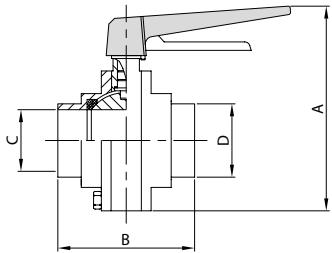
VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



SMS

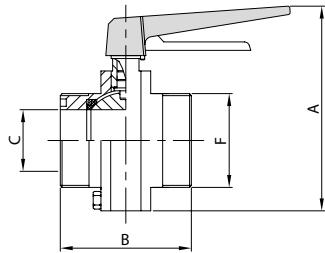
VALVOLA SFERA EL.  
BALL VALVE PE.  
VANNE BOULE BL.  
VÁLVULA BOLA EL.

W81



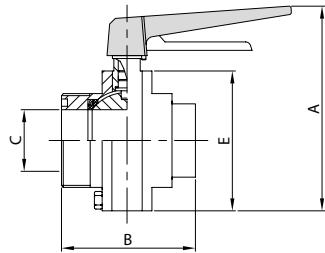
VALVOLA SFERA EF.  
BALL VALVE ME.  
VANNE BOULE BF.  
VÁLVULA BOLA ER.

S81



VALVOLA SFERA EL./EF.  
BALL VALVE PE./ME.  
VANNE BOULE BL./BF.  
VÁLVULA BOLA EL./ER.

WS81



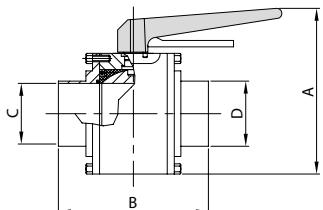
DN	A	B	C	D	gr
38	138,0	73,0	35,1	38,1	1.600
51	155,0	80,0	47,8	50,8	2.600
63	176,0	97,0	60,5	63,5	4.000
76	190,0	109,0	72,9	76,2	5.000

DN	A	B	C	F	gr
38	138,0	87,0	35,1	60-6	1.900
51	155,0	90,0	47,8	70-6	2.900
63	176,0	105,0	60,5	85-6	4.600
76	190,0	121,0	72,9	98-6	5.600

DN	A	B	C	E	gr
38	138,0	80,0	35,1	81,0	1.750
51	155,0	85,0	47,8	98,0	2.750
63	176,0	101,0	60,5	119,0	4.300
76	190,0	115,0	72,9	133,0	5.300

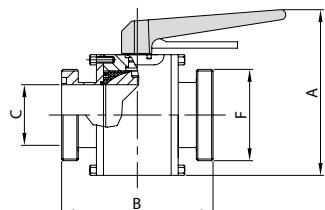
V. SFERA ESTRAIBILE SANIT. EL.  
SANIT. EXTRACTABLE BALL V. PE.  
V. BOULE EXTRACT. SANIT. BL.  
V. BOLA EXTRAIBLE SANIT. EL.

W90



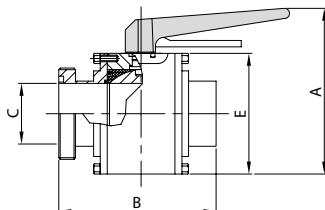
V. SFERA ESTRAIBILE SANIT. EF.  
SANIT. EXTRACTABLE BALL V. ME.  
V. BOULE EXTRACT. SANIT. BF.  
V. BOLA EXTRAIBLE SANIT. ER.

S90



V. SFERA ESTR. SANIT. EL./EF.  
SANIT. EXTRACT. BALL V. PE./ME.  
V. BOULE EXTR. SANIT. BL./BF.  
V. BOLA EXTR. SANIT. EL./ER.

WS90



DN	A	B	C	D	gr
25	110,0	95,0	22,1	25,4	1.130
38	130,0	109,0	34,8	38,1	2.070
51	145,0	124,0	47,5	50,8	2.800
63	168,0	135,0	60,2	63,5	4.840
76	182,0	158,0	72,0	76,2	7.480

DN	A	B	C	F	gr
25	110,0	95,0	22,1	40-6	1.330
38	130,0	121,0	34,8	60-6	2.370
51	145,0	132,0	47,5	70-6	3.100
63	168,0	146,0	60,2	85-6	5.440
76	182,0	157,0	72,0	98-6	8.080

DN	A	B	C	E	gr
25	110,0	95,0	22,1	60,0	1.230
38	130,0	115,0	34,8	80,0	2.220
51	145,0	128,0	47,5	95,0	2.950
63	168,0	140,0	60,2	118,0	5.140
76	182,0	157,0	72,0	132,0	7.780



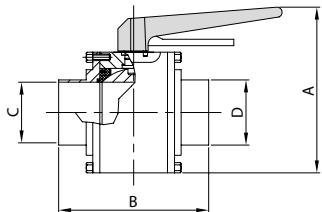
VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



SMS

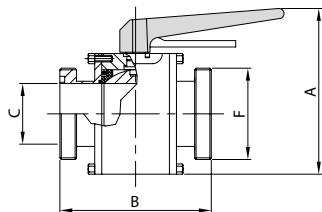
V. SFERA ESTRAIBILE EL.  
EXTRACTABLE BALL V. PE.  
V. BOULE EXTRACTIBLE BL.  
V. BOLA EXTRAIBLE EL.

W91



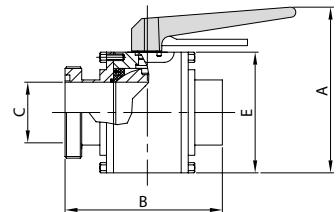
V. SFERA ESTRAIBILE EF.  
EXTRACTABLE BALL V. ME.  
V. BOULE EXTRACTIBLE BF.  
V. BOLA EXTRAIBLE ER.

S91



V. SFERA ESTRAIBILE EL./EF.  
EXTRACTABLE BALL V. PE./ME.  
V. BOULE EXTRACTIBLE BL./BF.  
V. BOLA EXTRAIBLE EL./ER.

WS91



DN	A	B	C	D	gr
25	110,0	95,0	22,1	25,4	1.120
38	130,0	109,0	34,8	38,1	2.060
51	145,0	124,0	47,5	50,8	2.780
63	168,0	135,0	60,2	63,5	4.820
76	182,0	158,0	72,0	76,2	7.450

DN	A	B	C	F	gr
25	110,0	95,0	22,1	40-6	1.320
38	130,0	121,0	34,8	60-6	2.360
51	145,0	132,0	47,5	70-6	3.080
63	168,0	146,0	60,2	85-6	5.420
76	182,0	157,0	72,0	98-6	8.050

DN	A	B	C	E	gr
25	110,0	95,0	22,1	60,0	1.220
38	130,0	115,0	34,8	80,0	2.210
51	145,0	128,0	47,5	95,0	2.930
63	168,0	140,0	60,2	118,0	5.120
76	182,0	157,0	72,0	132,0	7.750



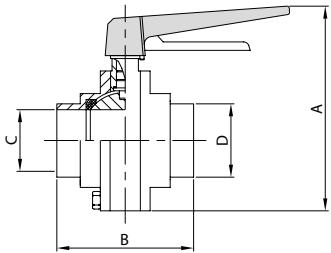
VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



**RJT BS**

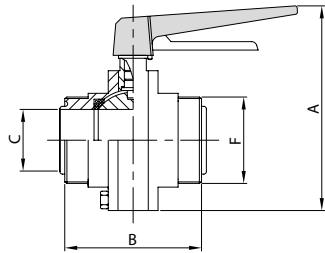
VALVOLA SFERA EL.  
BALL VALVE PE.  
VANNE BOULE BL.  
VÁLVULA BOLA EL.

**W81**



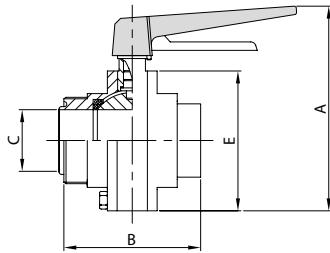
VALVOLA SFERA EF.  
BALL VALVE ME.  
VANNE BOULE BF.  
VÁLVULA BOLA ER.

**B81**



VALVOLA SFERA EL./EF.  
BALL VALVE PE./ME.  
VANNE BOULE BL./BF.  
VÁLVULA BOLA EL./ER.

**WB81**



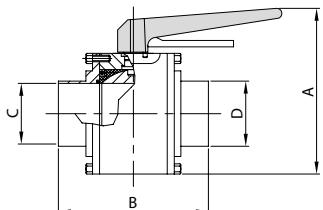
DN	A	B	C	D	gr
38	138,0	73,0	35,1	38,1	1.600
51	155,0	80,0	47,8	50,8	2.600
63	176,0	97,0	60,5	63,5	4.000
76	190,0	109,0	72,9	76,2	5.000

DN	A	B	C	F	gr
38	138,0	88,0	34,8	58-8	1.900
51	155,0	94,0	47,5	73-6	2.900
63	176,0	102,0	60,2	85-6	4.600
76	190,0	116,0	72,9	98-6	5.600

DN	A	B	C	E	gr
38	138,0	80,5	34,8	81,0	1.750
51	155,0	87,0	47,5	98,0	2.750
63	176,0	99,5	60,2	119,0	4.300
76	190,0	112,5	72,9	133,0	5.300

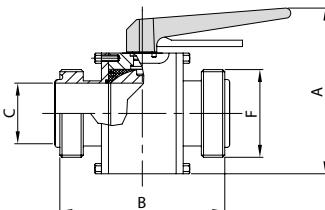
V. SFERA ESTRAIBILE SANIT. EL.  
SANIT. EXTRACTABLE BALL V. PE.  
V. BOULE EXTRACT. SANIT. BL.  
V. BOLA EXTRAIBLE SANIT. EL.

**W90**



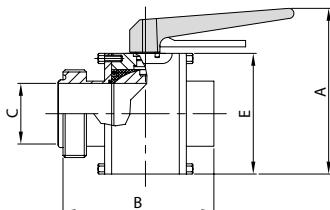
V. SFERA ESTRAIBILE SANIT. EF.  
SANIT. EXTRACTABLE BALL V. ME.  
V. BOULE EXTRACT. SANIT. BF.  
V. BOLA EXTRAIBLE SANIT. ER.

**B90**



V. SFERA ESTR. SANIT. EL./EF.  
SANIT. EXTRACT. BALL V. PE./ME.  
V. BOULE EXTR. SANIT. BL./BF.  
V. BOLA EXTR. SANIT. EL./ER.

**WB90**



DN	A	B	C	D	gr
25	110,0	95,0	22,1	25,4	1.130
38	130,0	109,0	34,8	38,1	2.070
51	145,0	124,0	47,5	50,8	2.800
63	168,0	135,0	60,2	63,5	4.840
76	182,0	158,0	72,0	76,2	7.480

DN	A	B	C	F	gr
25	110,0	106,0	22,1	46-8	1.330
38	130,0	121,0	34,8	58-8	2.370
51	145,0	132,0	47,5	73-6	3.100
63	168,0	146,0	60,2	85-6	5.440
76	182,0	157,0	72,0	98-6	8.080

DN	A	B	C	E	gr
25	110,0	100,0	22,1	60,0	1.230
38	130,0	115,0	34,8	80,0	2.220
51	145,0	128,0	47,5	95,0	2.950
63	168,0	140,0	60,2	118,0	5.140
76	182,0	157,0	72,0	132,0	7.780



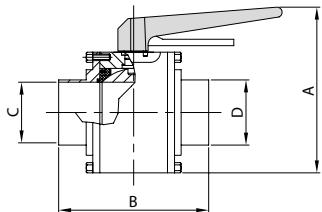
VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



RJT BS

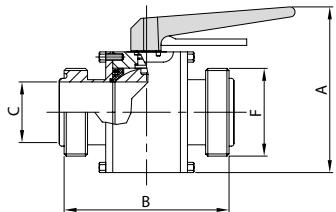
V. SFERA ESTRAIBILE EL.  
EXTRACTABLE BALL V. PE.  
V. BOULE EXTRACTIBLE BL.  
V. BOLA EXTRAIBLE EL.

W91



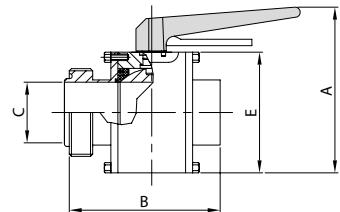
V. SFERA ESTRAIBILE EF.  
EXTRACTABLE BALL V. ME.  
V. BOULE EXTRACTIBLE BF.  
V. BOLA EXTRAIBLE ER.

B91



V. SFERA ESTRAIBILE EL./EF.  
EXTRACTABLE BALL V. PE./ME.  
V. BOULE EXTRACTIBLE BL./BF.  
V. BOLA EXTRAIBLE EL./ER.

WB91



DN	A	B	C	D	gr
25	110,0	95,0	22,1	25,4	1.120
38	130,0	109,0	34,8	38,1	2.060
51	145,0	124,0	47,5	50,8	2.780
63	168,0	135,0	60,2	63,5	4.820
76	182,0	158,0	72,0	76,2	7.450

DN	A	B	C	F	gr
25	110,0	106,0	22,1	46-8	1.320
38	130,0	121,0	34,8	58-8	2.360
51	145,0	132,0	47,5	73-6	3.080
63	168,0	146,0	60,2	85-6	5.420
76	182,0	157,0	72,0	98-6	8.050

DN	A	B	C	E	gr
25	110,0	100,0	22,1	60,0	1.220
38	130,0	115,0	34,8	80,0	2.210
51	145,0	128,0	47,5	95,0	2.930
63	168,0	140,0	60,2	118,0	5.120
76	182,0	157,0	72,0	132,0	7.750



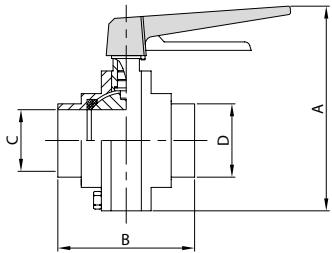
VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



ISS IDF

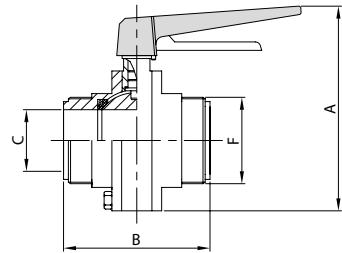
VALVOLA SFERA EL.  
BALL VALVE PE.  
VANNE BOULE BL.  
VÁLVULA BOLA EL.

W81



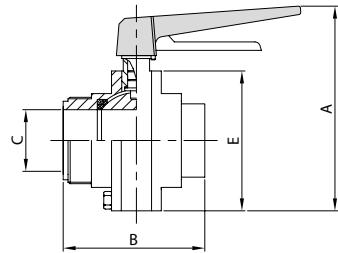
VALVOLA SFERA EF.  
BALL VALVE ME.  
VANNE BOULE BF.  
VÁLVULA BOLA ER.

I81



VALVOLA SFERA EL./EF.  
BALL VALVE PE./ME.  
VANNE BOULE BL./BF.  
VÁLVULA BOLA EL./ER.

WI81



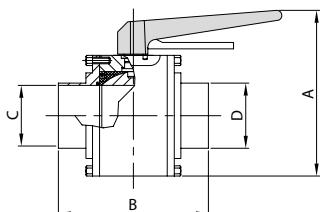
DN	A	B	C	D	gr
38	138,0	73,0	35,1	38,1	1.600
51	155,0	80,0	47,8	50,8	2.600
63	176,0	97,0	60,5	63,5	4.000
76	190,0	109,0	72,9	76,2	5.000

DN	A	B	C	F	gr
38	138,0	93,0	34,8	50-8	1.900
51	155,0	104,0	47,5	64-8	2.900
63	176,0	120,0	60,2	77-8	4.600
76	190,0	131,0	72,9	91-8	5.600

DN	A	B	C	E	gr
38	138,0	83,0	34,8	81,0	1.750
51	155,0	92,0	47,5	98,0	2.750
63	176,0	108,0	60,2	119,0	4.300
76	190,0	120,0	72,9	133,0	5.300

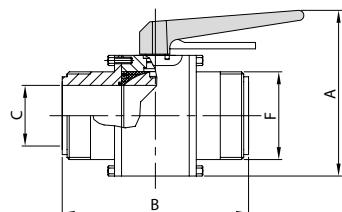
V. SFERA ESTRAIBILE SANIT. EL.  
SANIT. EXTRACTABLE BALL V. PE.  
V. BOULE EXTRACT. SANIT. BL.  
V. BOLA EXTRAIBLE SANIT. EL.

W90



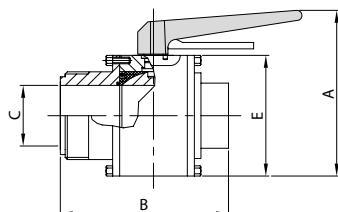
V. SFERA ESTRAIBILE SANIT. EF.  
SANIT. EXTRACTABLE BALL V. ME.  
V. BOULE EXTRACT. SANIT. BF.  
V. BOLA EXTRAIBLE SANIT. ER.

I90



V. SFERA ESTR. SANIT. EL./EF.  
SANIT. EXTRACT. BALL V. PE./ME.  
V. BOULE EXTR. SANIT. BL./BF.  
V. BOLA EXTR. SANIT. EL./ER.

WI90



DN	A	B	C	D	gr
25	110,0	95,0	22,1	25,4	1.130
38	130,0	109,0	34,8	38,1	2.070
51	145,0	124,0	47,5	50,8	2.800
63	168,0	135,0	60,2	63,5	4.840
76	182,0	158,0	72,0	76,2	7.480

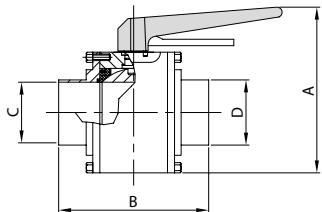
DN	A	B	C	F	gr
25	110,0	96,0	22,1	37-8	1.330
38	130,0	121,0	34,8	50-8	2.370
51	145,0	132,0	47,5	64-8	3.100
63	168,0	146,0	60,2	77-8	5.440
76	182,0	157,0	72,0	91-8	8.080

DN	A	B	C	E	gr
25	110,0	95,0	22,1	60,0	1.230
38	130,0	115,0	34,8	80,0	2.220
51	145,0	128,0	47,5	95,0	2.950
63	168,0	140,0	60,2	118,0	5.140
76	182,0	157,0	72,0	132,0	7.780



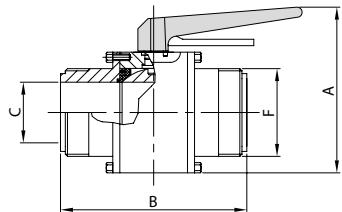
V. SFERA ESTRAIBILE EL.  
EXTRACTABLE BALL V. PE.  
V. BOULE EXTRACTIBLE BL.  
V. BOLA EXTRAIBLE EL.

W91



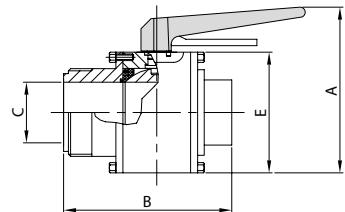
V. SFERA ESTRAIBILE EF.  
EXTRACTABLE BALL V. ME.  
V. BOULE EXTRACTIBLE BF.  
V. BOLA EXTRAIBLE ER.

I91



V. SFERA ESTRAIBILE EL./EF.  
EXTRACTABLE BALL V. PE./ME.  
V. BOULE EXTRACTIBLE BL./BF.  
V. BOLA EXTRAIBLE EL./ER.

WI91



DN	A	B	C	D	gr
25	110,0	95,0	22,1	25,4	1.120
38	130,0	109,0	34,8	38,1	2.060
51	145,0	124,0	47,5	50,8	2.780
63	168,0	135,0	60,2	63,5	4.820
76	182,0	158,0	72,0	76,2	7.450

DN	A	B	C	F	gr
25	110,0	96,0	22,1	37-8	1.320
38	130,0	121,0	34,8	50-8	2.360
51	145,0	132,0	47,5	64-8	3.080
63	168,0	146,0	60,2	77-8	5.420
76	182,0	157,0	72,0	91-8	8.050

DN	A	B	C	E	gr
25	110,0	95,0	22,1	60,0	1.220
38	130,0	115,0	34,8	80,0	2.210
51	145,0	128,0	47,5	95,0	2.930
63	168,0	140,0	60,2	118,0	5.120
76	182,0	157,0	72,0	132,0	7.750



VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



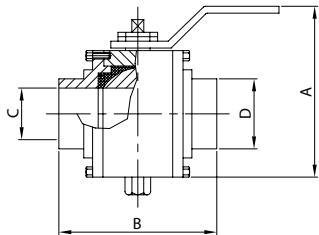
**CLAMP**

V. SFERA SAN. DRENAGGIO EL.  
SAN. DRAINAGE BALL V. PE.  
V. BOULE SAN. DRAINAGE BL.  
V. BOLA SAN. DRENAGE EL.

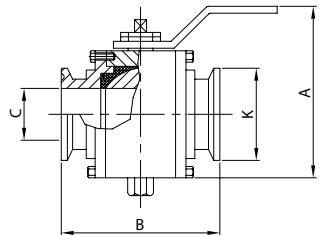
V. SFERA SAN. DR. E. SM.  
SAN. DR. BALL V. E. FR.  
V. BOULE SAN. DR. B. FR.  
V. BOLA SAN. DR. E. SM.

V. SFERA SAN. DR. EL./E. SM.  
SAN. DR. BALL V. PE./E. FR.  
V. BOULE SAN. DR. BL./B. FR.  
V. BOLA SAN. DR. EL./E. SM.

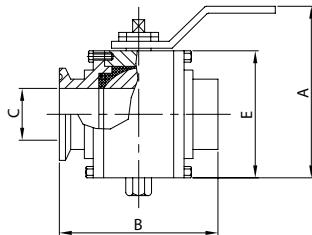
**W50**



**K50**



**WK50**



DN	A	B	C	D	gr
1"	25	90,0	95,0	22,1	25,4 1.100
1 1/2"	38	110,0	107,0	34,8	38,1 2.090
2"	51	126,0	118,0	47,5	50,8 3.140
2 1/2"	63	143,0	135,0	60,2	63,5 4.730
3"	76	163,0	158,0	72,0	76,2 6.940
4"	101	202,0	170,0	97,4	101,6 13.570

DN	A	B	C	K	gr
1"	25	90,0	95,0	22,1	50,5 1.120
1 1/2"	38	110,0	107,0	34,8	50,5 2.120
2"	51	126,0	118,0	47,5	64,0 3.190
2 1/2"	63	143,0	135,0	60,2	77,5 4.790
3"	76	163,0	158,0	72,0	91,0 7.010
4"	101	202,0	170,0	97,4	119,0 13.670

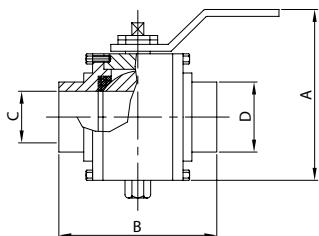
DN	A	B	C	E	gr
1"	25	90,0	95,0	22,1	58,0 1.110
1 1/2"	38	110,0	107,0	34,8	77,0 2.105
2"	51	126,0	118,0	47,5	93,0 3.165
2 1/2"	63	143,0	135,0	60,2	113,0 4.760
3"	76	163,0	158,0	72,0	129,0 6.975
4"	101	202,0	170,0	97,4	169,0 13.620

VALVOLA SFERA DRENAGGIO EL.  
DRAINAGE BALL VALVE PE.  
VANNE BOULE DRAINAGE BL.  
VÁLVULA BOLA DRENAGE EL.

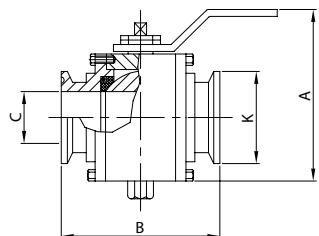
V. SFERA DRENAGGIO E. SM.  
DRAINAGE BALL V. E. FR.  
V. BOULE DRAINAGE B. FR.  
V. BOLA DRENAGE E. SM.

V. SFERA DRENAGGIO EL./E. SM.  
DRAINAGE BALL V. PE./E. FR.  
V. BOULE DRAINAGE BL./B. FR.  
V. BOLA DRENAGE EL./E. SM.

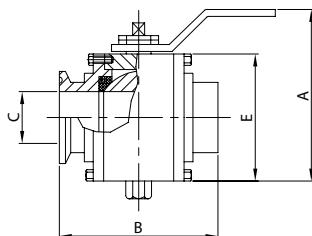
**W51**



**K51**



**WK51**



DN	A	B	C	D	gr
1"	25	90,0	95,0	22,1	25,4 1.090
1 1/2"	38	110,0	107,0	34,8	38,1 2.080
2"	51	126,0	118,0	47,5	50,8 3.120
2 1/2"	63	143,0	135,0	60,0	63,5 4.710
3"	76	163,0	158,0	72,0	76,2 6.910
4"	101	202,0	170,0	97,0	101,6 13.530

DN	A	B	C	K	gr
1"	25	90,0	95,0	22,1	50,5 1.110
1 1/2"	38	110,0	107,0	34,8	50,5 2.110
2"	51	126,0	118,0	47,5	64,0 3.170
2 1/2"	63	143,0	135,0	60,0	77,5 4.770
3"	76	163,0	158,0	72,0	91,0 6.980
4"	101	202,0	170,0	97,0	119,0 13.630

DN	A	B	C	E	gr
1"	25	90,0	95,0	22,1	58,0 1.110
1 1/2"	38	110,0	107,0	34,8	77,0 2.095
2"	51	126,0	118,0	47,5	93,0 3.145
2 1/2"	63	143,0	135,0	60,0	113,0 4.740
3"	76	163,0	158,0	72,0	129,0 6.945
4"	101	202,0	170,0	97,0	169,0 13.580





## VALVOLE PNEUMATICHE

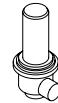
- Realizzate seguendo rigorosamente i criteri e i test imposti dalle norme 3-A.
- Parti a contatto con il fluido costruite esclusivamente in acciaio inossidabile AISI 316L.
- Completo autodrenaggio della valvola garantito dalla forma sferica interna e dalla lucidatura delle parti interne.
- Elementi di tenuta facilmente raggiungibili durante le fasi di lavaggio CIP.
- Facilità di manutenzione consentita dall'assemblaggio della valvola mediante un morsetto Clamp a 3 ganasce.
- Entrata aria nella testata superiore della valvola e distribuzione nella parte inferiore tramite il pistone interno.
- Assoluta sicurezza durante le operazioni di montaggio e smontaggio garantita da un speciale dispositivo per il costante contenimento in compressione delle molle.
- Presenza di una speciale bussola a garanzia della perfetta coassialità del cilindro rispetto al corpo valvola, per la facilitazione dello scorrimento delle parti in movimento, la completa tenuta del prodotto e la totale igienicità durante le fasi di lavaggio CIP, consentite anche dalla presenza di un anello di tenuta OR nella parte finale.
- Facilmente sterilizzabili.
- Produzione standard: estremità Clamp o estremità a saldare. A richiesta, disponibili con estremità filettate norme DIN, SMS, RJT, ISS.
- Finitura standard: lucidatura esterna e satinatura interna grana 150 (finitura LS); a richiesta, lucidatura esterna e interna grana 240 (finitura LL), lucidatura elettrolitica grana 400 (finitura LE).
- Massima pressione di esercizio: 5 bar.

## PNEUMATIC VALVES

- Produced in strict conformity with criteria and tests required by 3-A standards.
- Parts in contact with the fluid made exclusively of AISI 316L stainless steel.
- Full self-drainage of valve due to spherical internal shape and polishing of internal parts.
- Seal members easy to access during CIP process.
- Easy maintenance due to assembly of valve using 3-piece clamp.
- Air entry into the upper head of the valve and distribution in the lower part by an internal piston.
- Absolute safety during assembly and disassembly, ensured by a special device to keep the springs under constant compression.
- Special bushing to ensure perfect coaxiality of cylinder and valve body, to facilitate moving parts, full product sealing and total hygiene during CIP process thanks also to the OR seal ring in terminal part.
- Easy to sterilize.
- Standard production: Clamp or welded ends. Available on request with threaded ends to DIN, SMS, RJT and ISS standards.
- Standard finish: 150 grain external polishing and internal glazing (LS finish); on request 240 grain external and internal polishing (LL finish), 400 grain electrolytic polishing (LE finish).
- Maximum operating pressure: 5 bars.

## VANNES PNEUMATIQUES

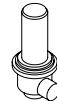
- Réalisées en respectant scrupuleusement les critères et les tests imposés par les normes 3-A.
- Parties en contact avec le fluide fabriquées exclusivement en acier inoxydable AISI 316L.
- Autodrainage complet de la vanne garanti par la forme interne sphérique et le polissage des parties internes.
- Éléments d'étanchéité faciles à atteindre durant les opérations de lavage CIP.
- Entretien facile grâce à l'assemblage de la vanne avec un collier Clamp 3 pièces.
- Admission de l'air par la partie supérieure de la vanne et refoulement dans la partie inférieure à l'aide du piston interne.
- Sécurité absolue au cours des opérations de montage et démontage grâce à un dispositif spécial assurant le maintien constant sous compression des ressorts.
- Présence d'une douille spéciale garantissent la parfaite coaxialité du cylindre par rapport au corps de la vanne, facilitant le glissement des pièces en mouvement, assurant l'étanchéité totale du produit et une hygiène complète lors des opérations de lavage CIP. Ces propriétés sont rendues possibles aussi par la présence d'un joint torique dans la partie finale.
- Facilement stérilisables.



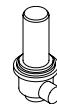
- Production standard: bouts Clamp ou bouts à souder. Sur demande, disponibles avec bouts filetés conformes aux normes DIN, SMS, RJT, ISS.
- Finissage standard: polissage extérieur et satinage intérieur grain 150 (finissage LS); sur demande, polissage extérieur et intérieur grain 240 (finissage LL), polissage électrolytique grain 400 (polissage LE).
- Pression d'exploitation maximum: 5 bars.

## VÁLVULAS NEUMÁTICAS

- Realizadas respetando rigurosamente los criterios y los tests establecidos por las normas 3-A.
- Las partes que están en contacto con el fluido se fabrican exclusivamente en acero inoxidable AISI 316L.
- Completo autodrenaje de la válvula garantizado por la forma interior esférica y por el pulido de las partes interiores.
- Elementos de cierre a los que se puede llegar fácilmente durante el proceso de lavado CIP.
- Facilidad de mantenimiento gracias al ensamblado de la válvula mediante una abrazadera de 3 mordazas.
- Entrada de aire por la parte superior de la válvula y distribución en la parte inferior mediante el pistón interno.
- Absoluta seguridad durante las operaciones de montaje y desmontaje, garantizada por un dispositivo especial que permite mantener constantemente bajo compresión los muelles.
- Presencia de un casquillo especial para garantizar la perfecta coaxialidad del cilindro con respecto al cuerpo de la válvula, para facilitar el desplazamiento de las partes en movimiento, el cierre perfecto del producto y la más completa higiene durante las fases de lavado CIP, gracias también a la presencia de una junta OR en la parte final.
- Fácilmente esterilizables.
- Producción estandar: extremos Clamp o extremos para soldar. A pedido, disponibles con extremos fileteados según normas DIN, SMS, RJT, ISS.
- Acabado estándar: pulido exterior y satinado interior grano 150 (acabado LS); a pedido, pulido exterior e interior grano 240 (acabado LL), pulido electrolítico grano 400 (acabado LE).
- Máxima presión de ejercicio: 5 bares.



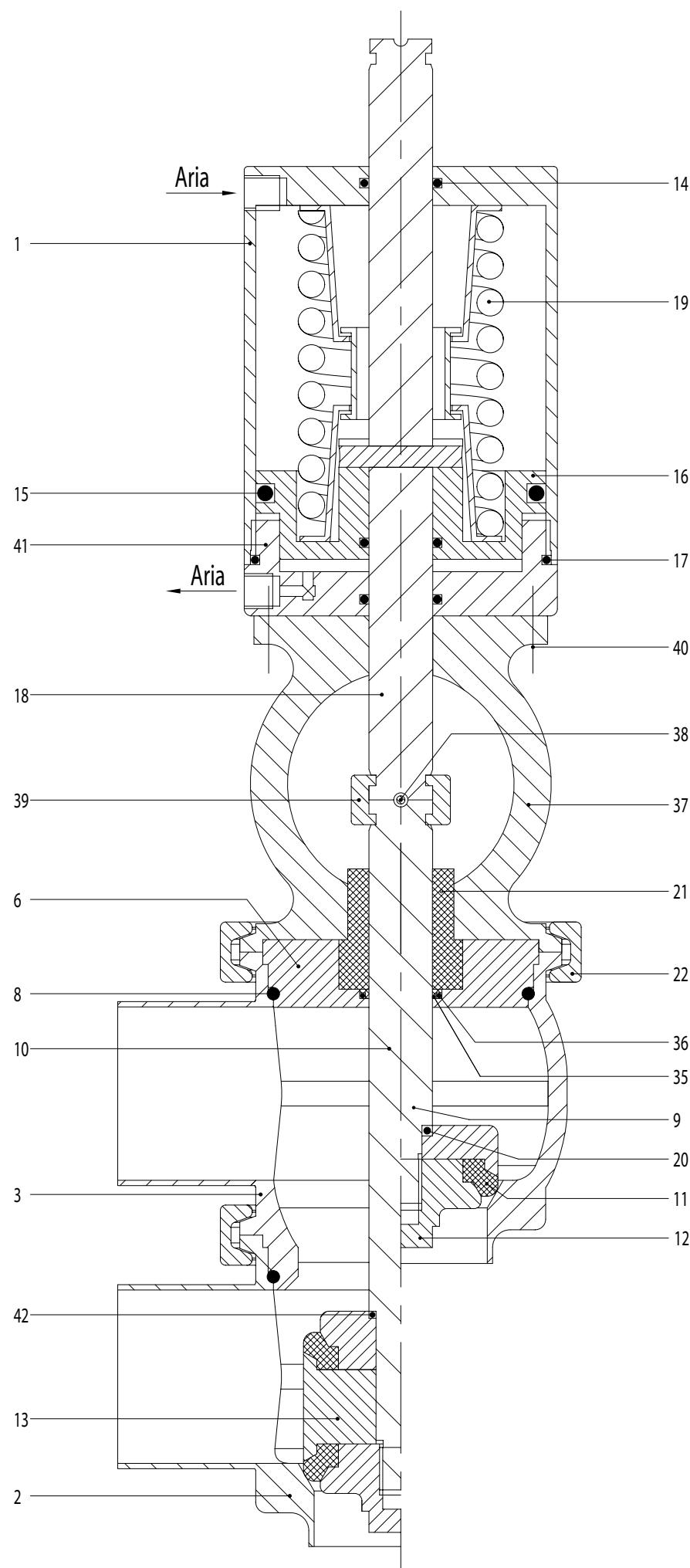
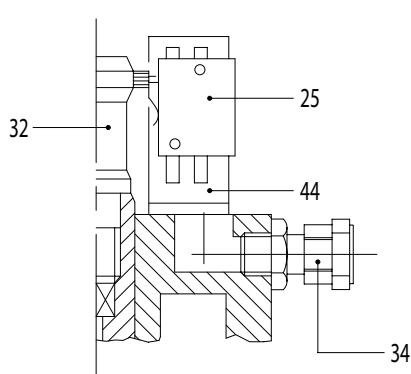
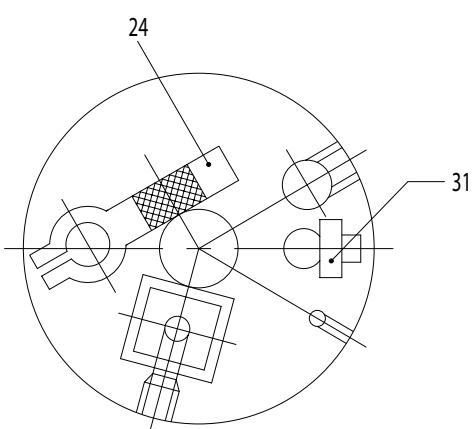
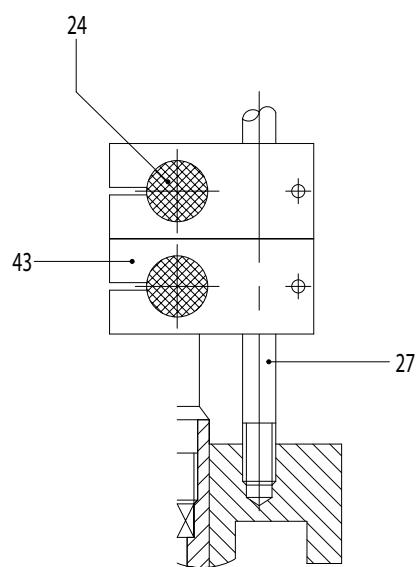
1. Cilindro Cylinder Cylindre Cilindro	15. Anello di tenuta OR OR seal ring Joint torique Junta OR	32. Perno microinterruttore Microswitch pin Pivot minirupteur Perno microrruptor
2. Corpo valvola Valve body Corps vanne Cuerpo válvula	16. Pistone Piston Piston Pistón	34. Pressacavo Cable-grommet Serre-câble Sujeta cables
3. Corpo intermedio Middle body Corps intermédiaire Cuerpo intermedio	17. Anello di tenuta OR OR seal ring Joint torique Junta OR	35. Rondella PTFE PTFE washer Rondelle PTFE Arandela PTFE
6. Testata Head Tête Cabezal	18. Albero Shaft Arbre Eje	36. Anello di tenuta OR OR seal ring Joint torique Junta OR
8. Anello di tenuta OR OR seal ring Joint torique Junta OR	19. Molla Spring Ressort Muelle	37. Lanterna Lantern Lanterne Linterna
9. Otturatore v. pn. 2 vie Shutter 2-way pn. v. Obturateur v. pn. 2 v. Obturador v. neum. 2 v.	20. Anello di tenuta OR OR seal ring Joint torique Junta OR	38. Vite Screw Vis Tornillo
10. Otturatore v. pn. 3 vie Shutter 3-way pn. v. Obturateur v. pn. 3 v. Obturador v. neum. 3 v.	21. Bussola PTFE PTFE bush Douille PTFE Casquillo PTFE	39. Anello di raccordo Joining ring Bague de raccord Anillo de conexión
11. Guarnizione a labbro Lip gasket Joint à lèvre Junta de reborde	22. Morsetto Clamp Clamp Collier Clamp Abrazadera Clamp	40. Vite Screw Vis Tornillo
12. Ghiera di bloccaggio Locking collar Bague de blocage Tuerca de seguridad	24. Contatto di prossimità Proximity contact Contact de proximité Microsensor	41. Tappo Blank Bouchon Tapón
13. Distanziale Spacer Entretoise Distanciador	25. Microinterruttore Microswitch Minirupteur Microrruptor	42. Anello di tenuta OR Or seal ring Joint torique Junta OR
14. Anello di tenuta OR OR seal ring Joint torique Junta OR	27. Tirante Tie rod Tirant Tirante	43. Supporto contatto di prossimità Proximity contact support Support contact de proximité Soporte microssensor
	31. Morsetteria Terminal strip Bornier Tablero de bornes	44. Supporto microinterruttore Microswitch support Support minirupteur Soporte microrruptor

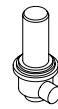
CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1" 25	DN 25 28	DN 32 34	1 1/2" 38	DN 40 40	2" 51	DN 50 52	2 1/2" 63	DN 65 70	3" 76	DN 80 85	Mat.	Part. o agg.
1	900		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	4L	01
2	900		25	28	34	38	40	51	52	63	70	76	85	6L	02
3	900		25	28	34	38	40	51	52	63	70	76	85	6L	03
6	900		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	6L	06
7	900		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63	70	76	85	6L	07
8	OR		149	149	149	149	149	168	168	4300	4300	6337	6337	N	
9	9T2		25	28	34	38	40	51/52	51/52	63	70	76	85	6L	09
10	9T4		25	28	34	38	40	51/52	51/52	63	70	76	85	6L	10
11	900		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63	70	76	85	T	11
12	900		25/28	25/28	34/40	34/40	34/40	51/52	51/52	63	70	76	85	6L	12
13	900		25	28	34	38	40	51/52	51/52	63	70	76	85	6L	13
14	OR		123	123	123	123	123	123	123	123	123	123	123	N	
15	OR		6237	6237	6237	6237	6237	6275	6275	185	185	6387	6387	N	
16	900		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	AL	16
17	OR		3262	3262	3262	3262	3262	3300	3300	3375	3375	3400	3400	N	
18	900		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	4CR	18
19	900		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	AC	19
20	OR		108	108	108	108	108	108	108	108	108	108	108	N	
21	900		25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	T	21
22	K13		51	51	51	51	51	76	76	89	89	101	101	4L	22
24	013		S	S	S	S	S	S	S	S	S	S	S		
25	014		1	1	1	1	1	1	1	1	1	1	1		
27	900		25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	4L	27
31	900		25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	4	31
32	900		25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	4	32
34	010 1		PG7	PG7	PG7	PG7	PG7	PG7	PG7	PG7	PG7	PG7	PG7		
35	900		25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	T	35
36	OR		3075	3075	3075	3075	3075	3075	3075	3075	3075	3075	3075	N	
37	900		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	4L	37
38	TSVCE		4x28	4x28	4x28	4x28	4x28	4x28	4x28	4x28	4x28	4x28	4x28	4L	
39	900		25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	25/85	4L	39
40	TE		6x16	6x16	6x16	6x16	6x16	6x16	6x16	6x16	6x16	6x16	6x16	4L	
41	900		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/70	63/70	76/85	76/85	4L	41
42	OR		2043	2043	2043	2043	2043	2043	2043	2043	2043	2043	2043	N	
43	013		1S	1S	1S	1S	1S	1S	1S	1S	1S	1S	1S		
44	014		1S	1S	1S	1S	1S	1S	1S	1S	1S	1S	1S		



**VALVOLA PNEUMATICA**  
**PNEUMATIC VALVE**  
**VANNE PNEUMATIQUE**  
**VÁLVULA NEUMÁTICA**





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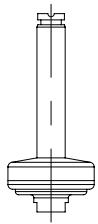
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**SHUTTERS**      **OBTURADORES**

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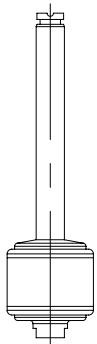
OTTURATORE V. PN. 2 VIE  
SHUTTER PN. V. 2-WAY  
OBTURATEUR V. PN. 2 VOIES  
OBTURADOR V. N. 2 VÍAS

OTTURATORE V. PN. 3 VIE  
SHUTTER PN. V. 3-WAY  
OBTURATEUR V. PN. 3 VOIES  
OBTURADOR V. N. 3 VÍAS

**9T2**



**9T4**



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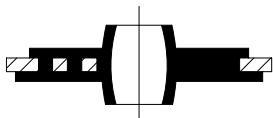
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**GASKETS**      **JUNTAS**

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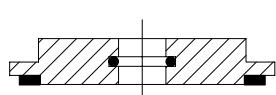
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TWO-LIP GASKET  
JOINT À DEUX LÈVRES  
JUNTA DE REBORDE DOBLE

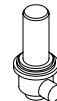
GUARNIZIONE METALLICA CON OR  
METALLIC GASKET WITH OR  
JOINT MÉTALLIQUE AVEC OR  
JUNTA METÁLICA CON OR

**8G1**



**8G2**



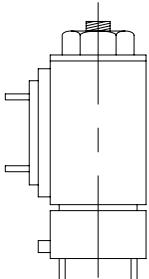


**COMPONENTI ELETTRICI**  
**ELECTRICAL PARTS**

**PIÈCES ÉLECTRIQUES**  
**PIEZAS ELÉCTRICAS**

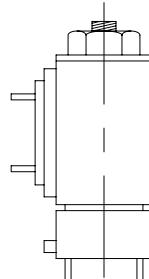
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SOLENOID VALVE NO.  
ÉLECTROVANNE NO.  
ELECTROVÁLVULA NA.

**015 NA**



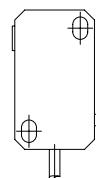
ELETTROVALVOLA NC.  
SOLENOID VALVE NC.  
ÉLECTROVANNE NF.  
ELECTROVÁLVULA NC.

**015 NC**



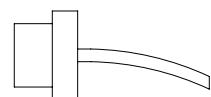
CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

**013 A**  
**013 A/N**  
**013 A/N/EX**



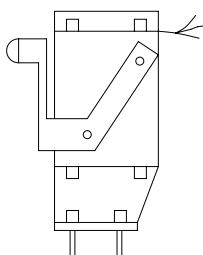
CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

**013 S**



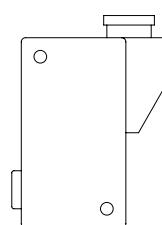
MICROINTERRUTTORE  
MICROSWITCH  
MINIRUPTEUR  
MICRORRUPTOR

**014 1**



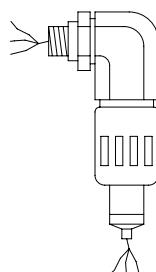
MICROINTERRUTTORE PNEUMATICO  
PNEUMATIC MICROSWITCH  
MINIRUPTEUR PNEUMATIQUE  
MICRORRUPTOR NEUMÁTICO

**014 2**



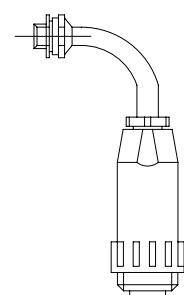
CONNETTORE  
CONNECTOR  
CONNECTEUR  
CONECTOR

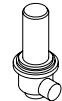
**030 H**



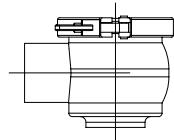
CONNETTORE  
CONNECTOR  
CONNECTEUR  
CONECTOR

**030 S**

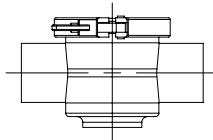




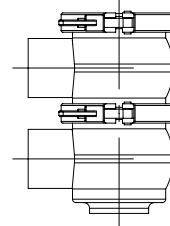
COMBINAZIONI  
BODY COMBINATIONS  
COMBINAISONS  
COMBINACIONES



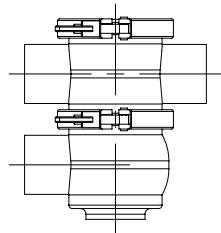
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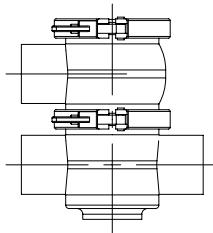
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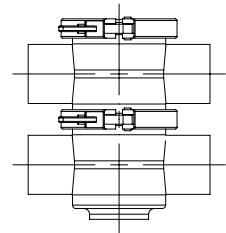
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TL

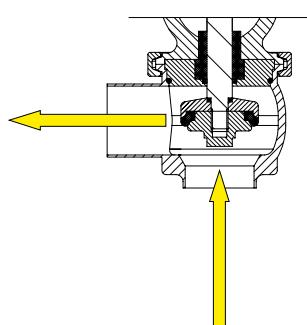


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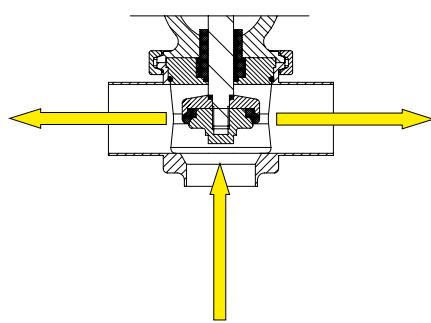
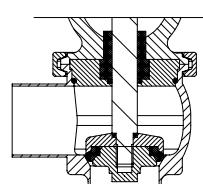


TT

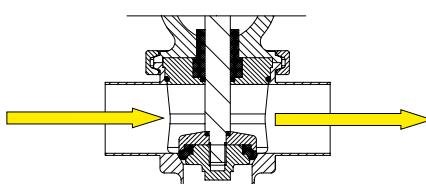
DIAGRAMMI DI FLUSSO  
FLOWCHARTS  
DIAGRAMMES DE FLUX  
DIAGRAMAS DE FLUJO

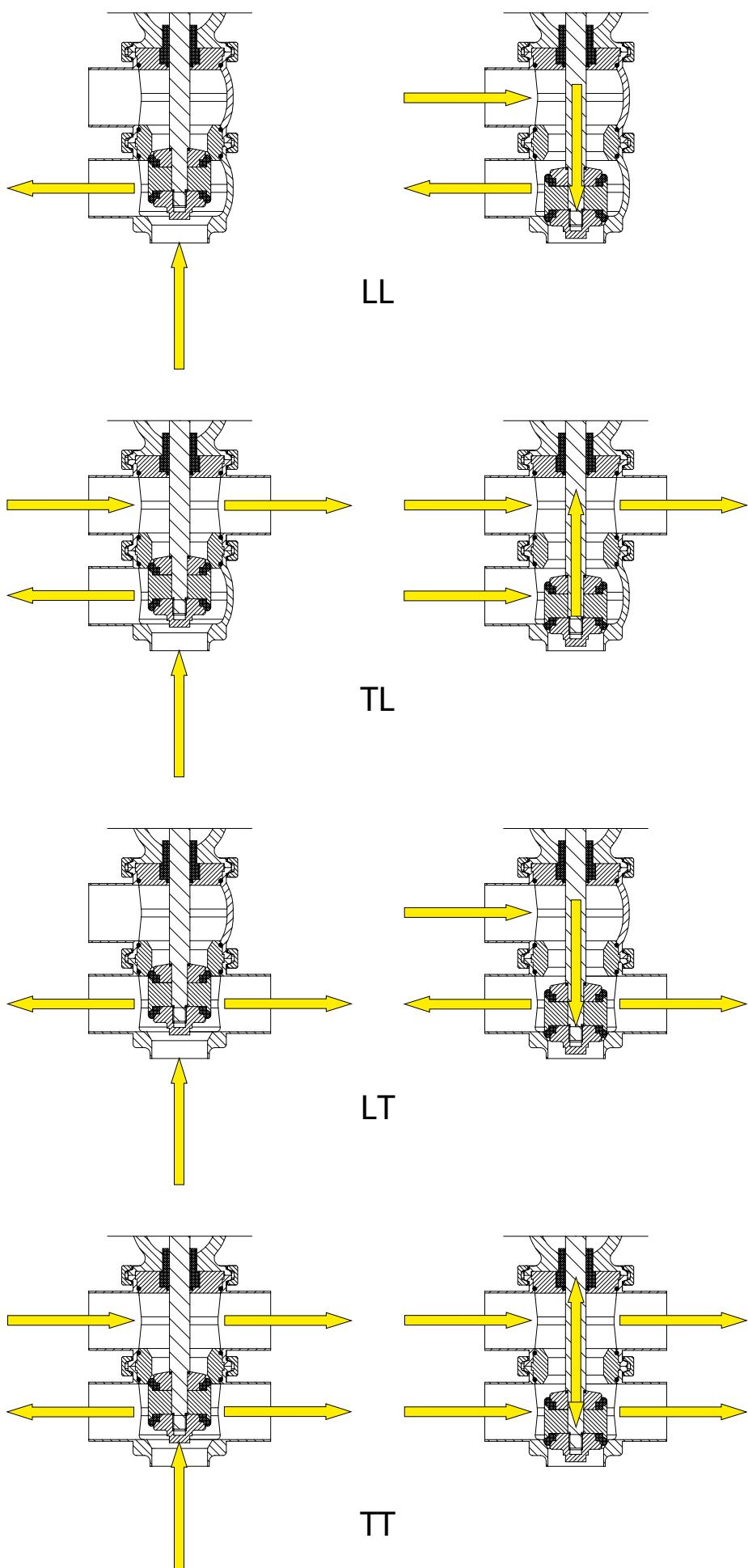
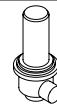


L



T





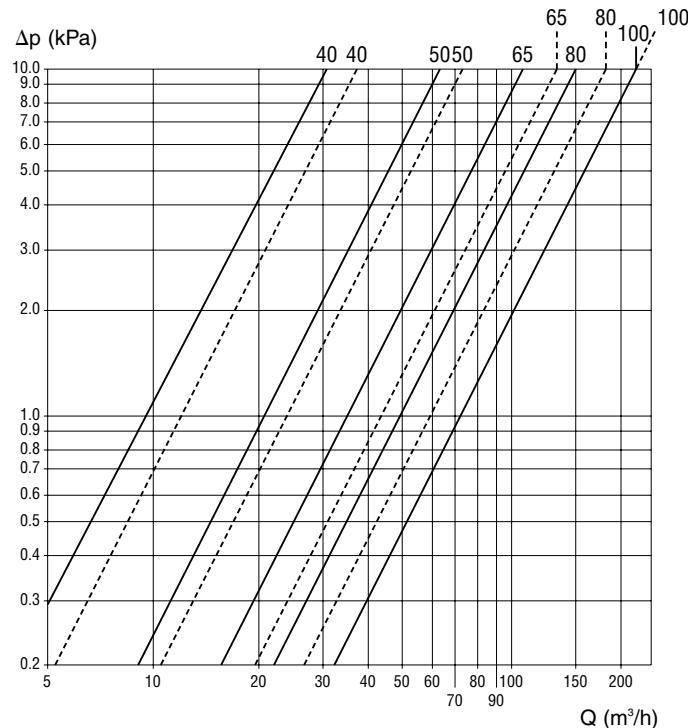


PERDITE DI CARICO  
PRESSURE DROP

PERTES DE CHARGE  
PÉRDIDA DE CARGA

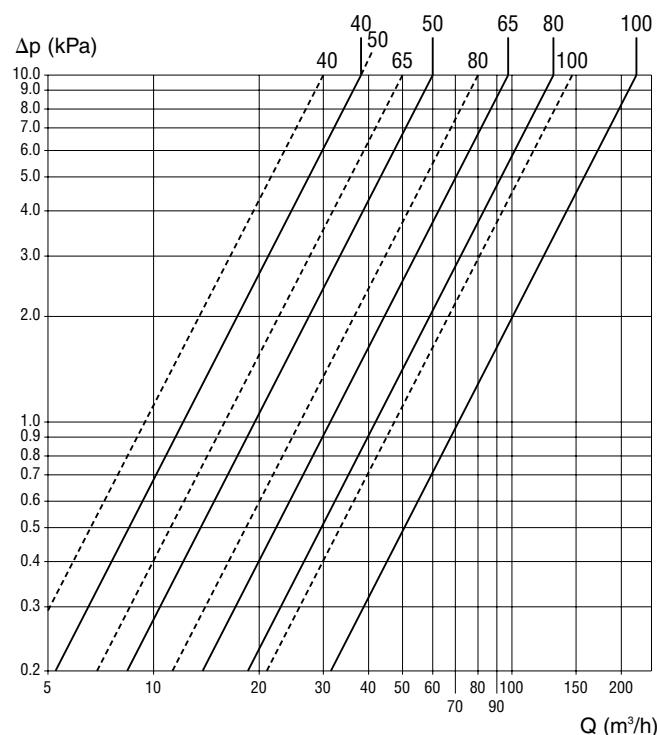
VALVOLA PNEUMATICA 2 VIE L  
PNEUMATIC VALVE 2-WAY L

VANNE PNEUMATIQUE 2 VOIES L  
VÁLVULA NEUMÁTICA 2 VÍAS L



VALVOLA PNEUMATICA 3 VIE LL  
PNEUMATIC VALVE 3-WAY LL

VANNE PNEUMATIQUE 3 VOIES LL  
VÁLVULA NEUMÁTICA 3 VÍAS LL





## VALVOLE MANUALI

- Di solida e robusta costruzione e di facile e veloce accesso per le operazioni di pulizia.
- Comandi manuali dotati di vite a passo rapido con sicurezza di svitamento.
- Finitura standard: lucidatura esterna e satinatura interna grana 120.
- Max. pressione di esercizio: 6 bar.

## MANUAL VALVES

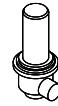
- Heavy duty construction and easy, fast access for cleaning operations.
- Manual controls with fast-pitch screw with safe unscrewing.
- Standard finish: 120 grain external polishing and internal glazing.
- Maximum operating pressure: 6 bars.

## VANNES MANUELLES

- Fabrication solide et robuste. Accès facile et rapide pour les opérations de nettoyage.
- Commandes manuelles munies de vis à pas rapide avec dévissage sûr.
- Finissage standard: polissage extérieur et satinage intérieur grain 120.
- Pression d'exploitation maximum: 6 bars.

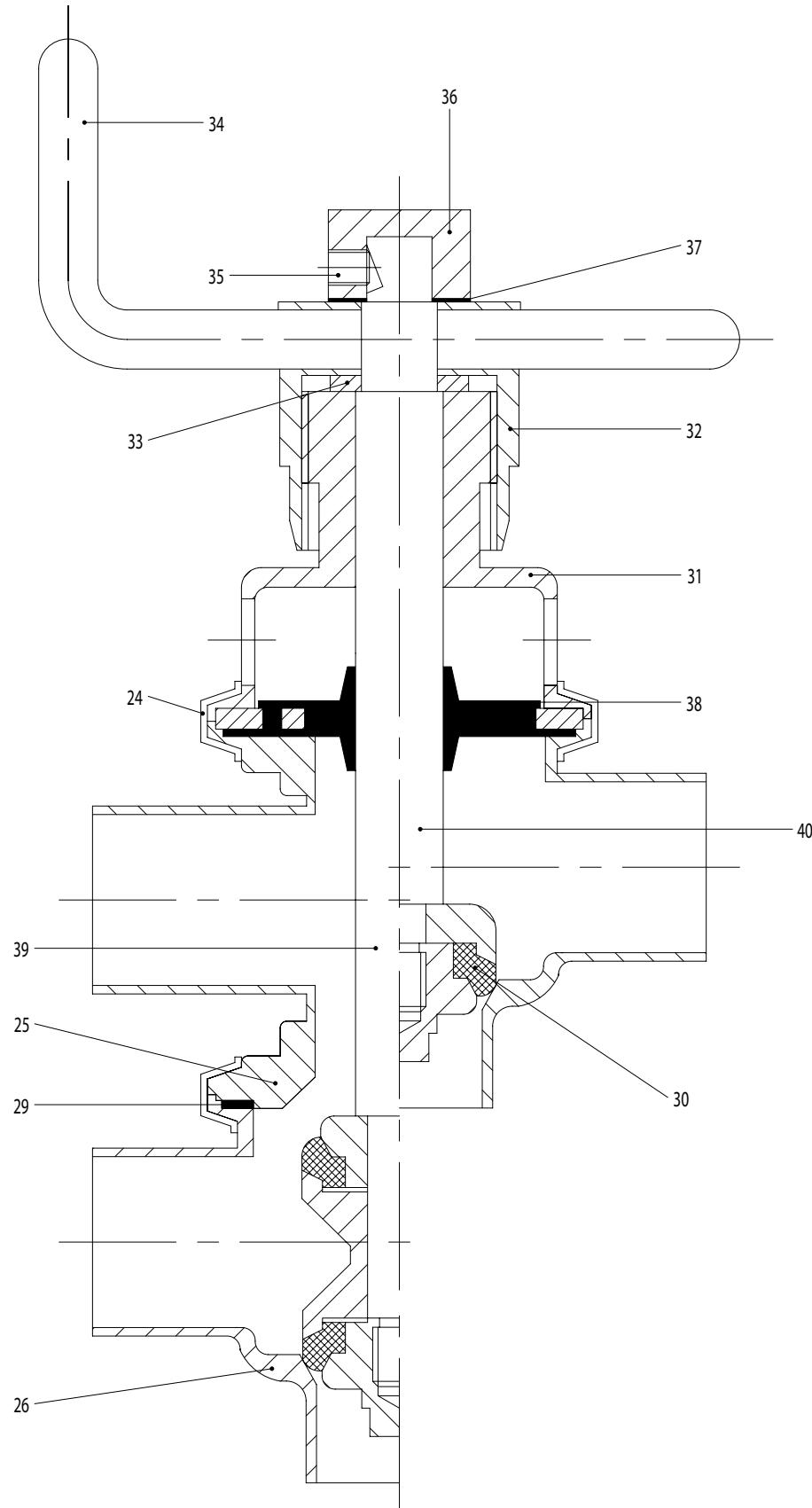
## VÁLVULAS MANUALES

- De sólida y robusta construcción y de fácil y rápido acceso para las operaciones de limpieza.
- Mandos manuales dotados de tornillo de paso rápido con seguridad de desenroscado.
- Acabado estándar: pulido exterior y satinado interior grano 120.
- Máxima presión de ejercicio: 4 bares.



VALVOLA MANUALE  
MANUAL VALVE

VANNE MANUELLE  
VÁLVULA MANUAL



- 24. Collare  
Collar  
Collier  
Collarín
- 25. Corpo intermedio  
Middle body  
Corps intermédiaire  
Cuerpo intermedio
- 26. Corpo inferiore  
Lower body  
Corps inférieur  
Cuerpo inferior
- 29. Guarnizione  
Seal  
Joint  
Junta
- 30. Guarnizione a labbro  
Lip gasket  
Joint à lèvre  
Junta de reborde
- 31. Corpo valvola manuale  
Manual valve body  
Corps vanne manuelle  
Cuerpo válvula manual
- 32. Corpo manovra esterno  
External operating body  
Corps manoeuvre ext.  
Cuerpo maniobra ext.
- 33. Rondella  
Washer  
Rondelle  
Arandela
- 34. Maniglia  
Handle  
Poignée  
Maneta
- 35. Grano  
Dowel  
Cheville  
Pasador
- 36. Tappo  
Plug  
Bouchon  
Tapón
- 37. Rondella  
Washer  
Rondelle  
Arandela
- 38. Guarniz. doppio labbro  
Two-lip gasket  
Joint à deux lèvres  
Junta de reborde doble
- 39. Pistone v. pn. 3 vie  
Piston 3-way pn. v.  
Piston v. pn. 3 voies  
Pistón v. n. 3 vías
- 40. Pistone v. pn. 2 vie  
Piston 2-way pn. v.  
Piston v. 2 voies  
Pistón v. n. 2 vías



CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1" 25	D 25 28	D 32 34	1 1/2" 38	D 40 40	2" 51	D 50 52	2 1/2" 63	D 65 70	3" 76	D 80 85	4" 101	D 100 101	Mat.	Part. o agg.
24	800		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/85	63/85	63/85	63/85	101	101	4L	24
25	800		25	28	34	38	40	51	52	63	70	76	85	101	101	4L	25
26	800		25	28	34	38	40	51	52	63	70	76	85	101	101	4L	26
29	800		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/85	63/85	63/85	63/85	101	101	N	29
30	800		25/28	25/28	34	38/40	38/40	51/52	51/52	63	70	76	85	101	101	E/S/T/V	30
31	850		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/85	63/85	63/85	63/85	101	101	4L	31
32	850		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/85	63/85	63/85	63/85	101	101	4L	32
33	850		25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	AC	33
34	SE		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/85	63/85	63/85	63/85	101	101	4L	34
35	GRA		8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	8x10	BA	
36	850		25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	4	36
37	850		25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	25/101	4	37
38	8G1		25/40	25/40	25/40	25/40	25/40	51/52	51/52	63/85	63/85	63/85	63/85	101	101	E/S	38
39	850		25	28	34	38	40	51	52	63	70	76	85	101	101	4L	39
40	850		25	28	34	38	40	51	52	63	70	76	85	101	101	4L	40



## VALVOLE PNEUMATICHE DI DRENAGGIO

- Parti a contatto con il fluido costruite esclusivamente in acciaio inossidabile AISI 316L.
- Entrata aria nella testata superiore della valvola e distribuzione nella parte inferiore tramite il pistone interno.
- Assoluta sicurezza durante le operazioni di montaggio e smontaggio garantita da uno speciale dispositivo per il costante contenimento in compressione delle molle.
- Nessuna possibilità di contatto tra prodotto e liquido di lavaggio CIP.
- Progettazione sanitaria che garantisce un completo autodrenaggio di tutte le parti interne durante le fasi di lavaggio CIP.
- Tamponi di chiusura bilanciati per evitare eventuali colpi di ariete durante le fasi di lavorazione.
- Perfetta tenuta durante le fasi di lavaggio CIP assicurata da speciali guarnizioni.
- Finitura standard: lucidatura esterna e satinatura interna grana 120. Altre finiture a richiesta.
- Max. pressione di esercizio: 5 bar.

## DRAINAGE PNEUMATIC VALVES

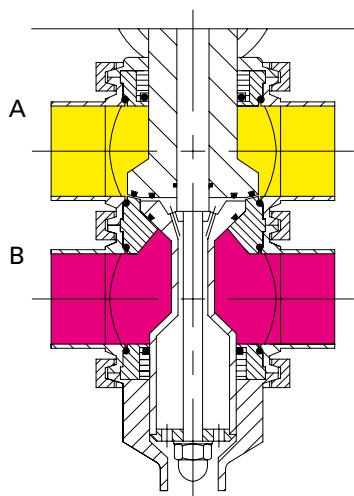
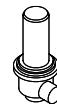
- Parts in contact with the fluid made exclusively of AISI 316L stainless steel.
- Air entry into the upper head of the valve and distribution in the lower part by an internal piston.
- Absolute safety during assembly and disassembly, ensured by a special device to keep the springs under constant compression.
- No chance of contact between the product and the CIP washing liquid.
- Sanitary design ensuring complete self-drainage of all internal parts during CIP washing phases.
- Balanced closing plugs to prevent ram effect during processing steps.
- Perfect seal during CIP washing, ensured by special gaskets.
- Standard finish: 120 grain external polishing and internal glazing. Other finishes on request.
- Maximum operating: pressure 5 bars.

## VANNES PNEUMATIQUES DE DRAINAGE

- Parties en contact avec le fluide fabriquées exclusivement en acier inoxydable AISI 316L.
- Admission de l'air par la partie supérieure de la vanne et refoulement dans la partie inférieure à l'aide du piston interne.
- Sécurité absolue au cours des opérations de montage et démontage, grâce à un dispositif spécial assurant le maintien constant sous compression des ressorts.
- Aucune possibilité de contact entre le produit et le liquide de lavage CIP.
- Conception sanitaire garantissant un drainage automatique complet de toutes les parties intérieures pendant les phases de lavage CIP.
- Tampons de fermeture équilibrés pour éviter les éventuels coups de bâlier pendant les phases d'usinage.
- Etanchéité parfaite pendant les phases de lavage CIP, assurée par des joints spéciaux.
- Finissage standard: polissage extérieur et satinage intérieur grain 120. Autres finissages sur demande.
- Pression de service maximale: 5 bars.

## VÁLVULAS NEUMÁTICAS DE DRENAJE

- Las partes que están en contacto con el fluido son fabricadas exclusivamente en acero inoxidable AISI 316L.
- Entrada de aire por la parte superior de la válvula y distribución en la parte inferior mediante el pistón interno.
- Absoluta seguridad durante las operaciones de montaje y desmontaje, garantizada por un dispositivo especial que permite mantener constantemente bajo compresión los muelles.
- Ninguna posibilidad de contacto entre el producto y el líquido de lavado CIP.
- Proyecto sanitario que garantiza un completo autodrenaje de todas las partes internas durante las fases de lavado CIP.
- Tapones de cierre balanceados para evitar posibles golpes de ariete durante las fases de trabajo.
- Cierre hermético durante las fases de lavado CIP, asegurado por juntas especiales.
- Acabado estándar: pulido exterior y satinado interior grano 120. A pedido, se pueden suministrar otros acabados.
- Máxima presión de ejercicio: 5 bares.

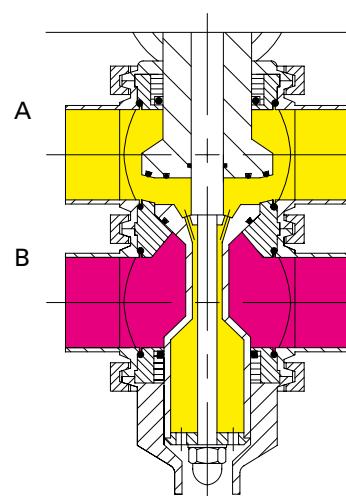


Posizione di lavoro.  
Il prodotto di lavaggio (A) non può mescolarsi con il fluido (B).  
Eventuali perdite fuoriescono dalla valvola senza alcuna possibilità di contatto tra prodotto e liquido di lavaggio CIP.

Working position.  
The washing product (A) cannot mix with the fluid (B). Any leaks run out of the valve with no chance of contact between the product and the CIP liquid.

Position de travail. Le produit de lavage (A) ne peut se mélanger avec le liquide (B). Les éventuelles fuites sortent de la vanne sans aucune possibilité de contact entre le produit et le liquide de lavage CIP.

Posición de trabajo. El producto de lavado (A) no se puede mezclar con el fluido (B). Eventualmente se pueden verificar pérdidas de la válvula sin que exista la posibilidad de que el producto y el líquido de lavado CIP entren en contacto.

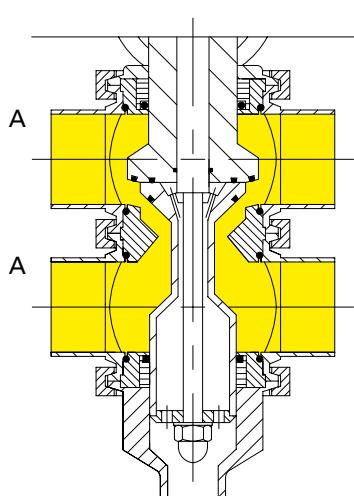


Posizione di lavoro e contemporaneo lavaggio della guarnizione del tampone di chiusura superiore. Eventuali perdite fuoriescono dalla valvola senza alcuna possibilità di contatto tra prodotto e liquido di lavaggio CIP.

Working and simultaneous washing position for the upper closing plug gasket. Any leaks run out of the valve with no chance of contact between the product and the CIP liquid.

Position de travail et lavage simultané du joint du tampon de fermeture supérieure. Les éventuelles fuites sortent de la vanne sans aucune possibilité de contact entre le produit et le liquide de lavage CIP.

Posición de trabajo y lavado simultáneo de la junta del tapón de cierre superior. Eventualmente se pueden verificar pérdidas de la válvula sin que exista la posibilidad de que el producto y el líquido de lavado CIP entren en contacto.

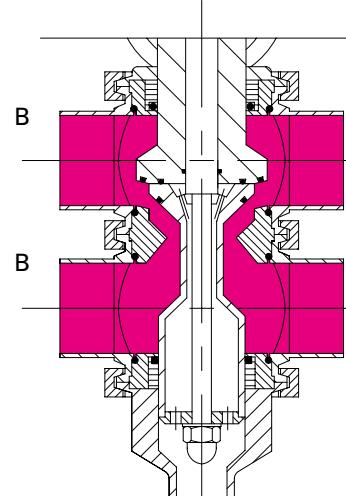


Posizione di lavaggio totale.

Complete washing position.

Position de lavage complète.

Posición de lavado completo.

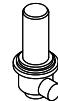


Posizione di lavoro totale.

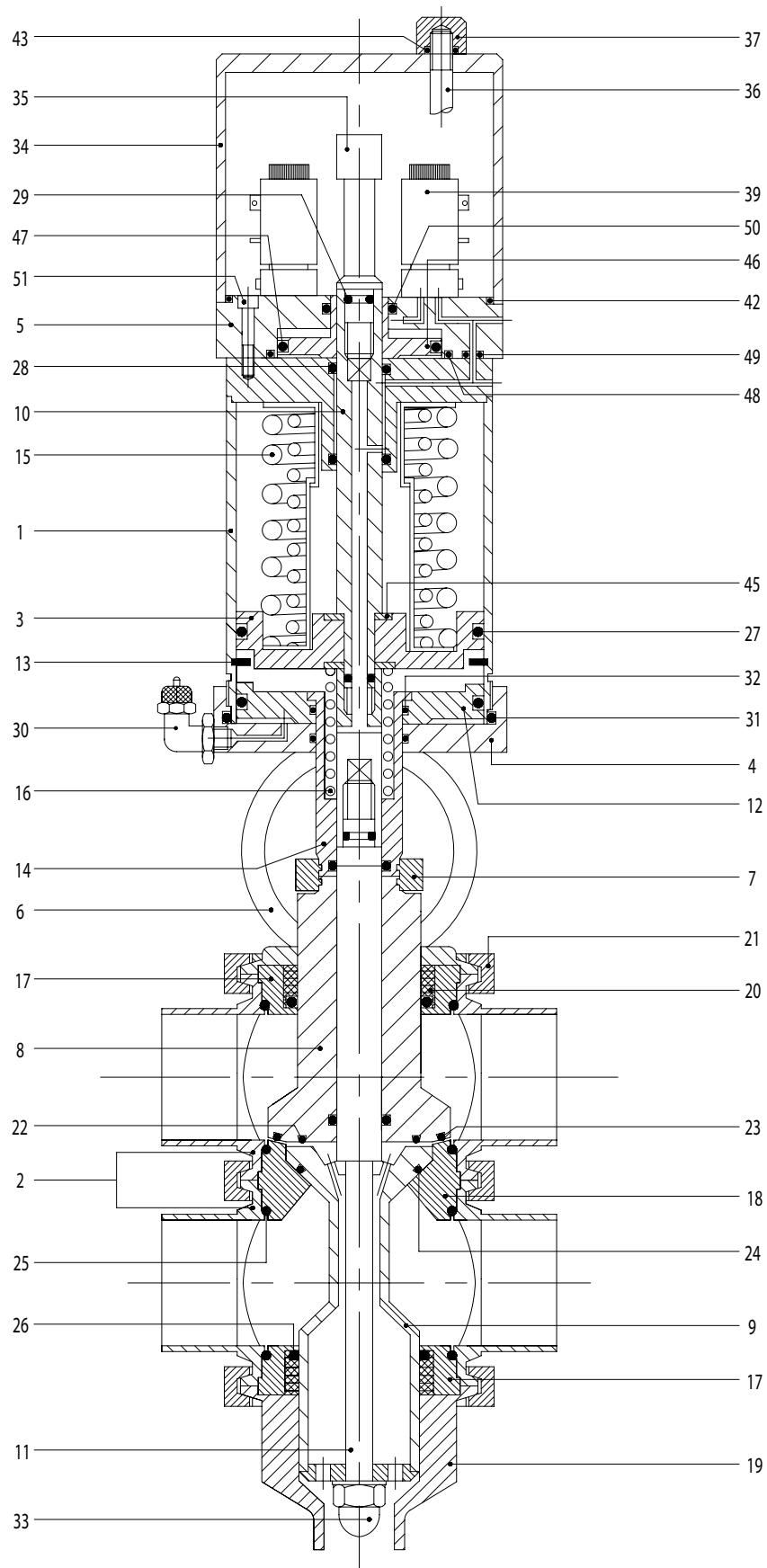
Complete working position.

Position de travail complète.

Posición de trabajo completo.



VALVOLA PNEUMATICA DI DRENAGGIO  
DRAINAGE PNEUMATIC VALVE  
VANNE PNEUMATIQUE DE DRAINAGE  
VÁLVULA NEUMÁTICA DE DRENAGE





1. Cilindro	17. Testata	33. Dado
Cylinder	Head	Nut
Cylindre	Tête	Écrou
Cilindro	Cabezal	Tuerca
2. Corpo valvola	18. Testata intermedia	34. Cappellotto
Valve body	Middle head	Cap
Corps vanne	Tête intermédiaire	Capot étanche
Cuerpo válvula	Cabezal intermedio	Capuchón
3. Pistone	19. Corpo di protezione	35. Perno contatto prossimità
Piston	Guard body	Proximity contact pin
Piston	Corps de protection	Came contact de proximité
Pistón	Cuerpo de protección	Perno del microsensor
4. Base	20. Bussola PTFE	36. Tirante
Cover	PTFE bush	Tie rod
Base	Douille PTFE	Tirant
Base	Camisa PTFE	Tirante
5. Base unità di controllo	21. Morsetto Clamp	37. Dado per cappellotto
Control unit cover	Clamp	Cap nut
Base unité de contrôle	Collier Clamp	Écrou pour capot
Base unidad de control	Abrazadera Clamp	Tuerca para capuchón
6. Lanterna	22. Anello di tenuta OR	39. Elettrovalvola
Lantern	OR seal ring	Solenoid valve
Lanterne	Joint torique	Électrovanne
Linterna	Junta OR	Electroválvula
7. Elem. di accoppiamento	23. Anello di tenuta OR	42. Anello di tenuta OR
Coupling member	OR seal ring	OR seal ring
Élément d'assemblage	Joint torique	Joint torique
Elemento de acoplamiento	Junta OR	Junta OR
8. Tampone di chiusura	24. Anello di tenuta OR	43. Anello di tenuta OR
Closing plug	OR seal ring	OR seal ring
Tampon de fermeture	Joint torique	Joint torique
Tapón de cierre	Junta OR	Junta OR
9. Tamp. chiusura e scarico	25. Anello di tenuta OR	45. Rondella
Closing and drain plug	OR seal ring	Washer
T. fermeture et décharge	Joint torique	Rondelle
Tapón de cierre y descarga	Junta OR	Arandela
10. Albero pistone	26. Anello di tenuta OR	46. Pistone superiore
Piston rod	OR seal ring	Upper piston
Arbre piston	Joint torique	Piston supérieur
Eje pistón	Junta OR	Pistón superior
11. Albero tampone	27. Anello di tenuta OR	47. Anello di tenuta OR
Head seal	OR seal ring	OR seal ring
Arbre tampon	Joint torique	Joint torique
Eje tapón	Junta OR	Junta OR
12. Pistone di drenaggio	28. Anello di tenuta OR	48. Anello di tenuta OR
Drainage piston	OR seal ring	OR seal ring
Piston de drainage	Joint torique	Joint torique
Pistón drenaje	Junta OR	Junta OR
13. Seeger	29. Anello di tenuta OR	49. Anello di tenuta OR
Snap ring	OR seal ring	OR seal ring
Circlips	Joint torique	Joint torique
Anillo seeger	Junta OR	Junta OR
14. Portamolla	30. Attacco aria	50. Anello di tenuta OR
Spring holder	Air coupling	OR seal ring
Porte-ressort	Prise air	Joint torique
Portamueller	Entrada aire	Junta OR
15. Molla	31. Anello di tenuta OR	51. Vite
Spring	OR seal ring	Screw
Ressort	Joint torique	Vis
Muelle	Junta OR	Tornillo
16. Molla corsa parziale	32. Anello di tenuta OR	
Partial travel spring	OR seal ring	
Ressort course partielle	Joint torique	
Muelle carrera parcial	Junta OR	



VALVOLE PNEUMATICHE DI DRENAGGIO  
DRAINAGE PNEUMATIC VALVES  
VANNES PNEUMATIQUES DE DRAINAGE  
VÁLVULAS NEUMÁTICAS DE DRENAJE



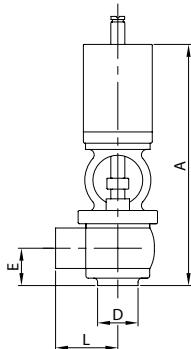
CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	2" 51	2 1/2" 63	3" 76	Mat.	Part. o agg.
1	830		51	63/76	63/76	4L	01
2	836		51	63	76	6L	02
3	830		51	63/76	63/76	AC	03
4	830		51	63/76	63/76	4L	04
5	830		51	63/76	63/76	4L	05
6	830		51	63/76	63/76	4L	06
7	830		51	63/76	63/76	4L	07
8	830		51	63	76	6L	08
9	830		51	63	76	6L	09
10	830		51	63/76	63/76	6L	10
11	830		51	63	76	6L	11
12	830		51	63/76	63/76	AC	12
13	SEE		J 100	J 108	J 108	AC	
14	830		51	63/76	63/76	4L	14
15	830		51	63/76	63/76	4L	15
16	830		51	63/76	63/76	4L	16
17	830		51	63/76	63/76	6L	17
18	830		51	63/76	63/76	6L	18
19	830		51	63/76	63/76	4L	19
20	830		51	63/76	63/76	T	20
21	K 13		76	101	101	4L	
22	OR		4143	159	159	N	
23	OR		6200	6275	6275	N	
24	OR		147	6237	6237	N	
25	OR		168	6337	6337	N	
26	OR		6187	6212	6212	N	
27	OR		185	6387	6387	N	
28	OR		123	123	123	N	
29	OR		108	108	108	N	
30	800		1/8"	1/8"	1/8"	OT	30
31	OR		4412	4437	4437	N	
32	OR		3137	3137	3137	N	
33	830		34/76	34/76	34/76	4L	33
34	830		51	63/76	63/76	4L	34
35	830		34/76	34/76	34/76	4L	35
36	830		34/76	34/76	34/76	4L	36
37	830		34/76	34/76	34/76	4L	37
39	015		U	U	U		
42	OR		2540	2450	2450	N	
43	OR		108	108	108	N	
45	830		34/76	34/76	34/76	4L	45
46	830		51/76	51/76	51/76	4L	46
47	OR		6275	6275	6275	N	
48	OR		2325	2325	2325	N	
49	OR		2010	2010	2010	N	
50	OR		3100	3100	3100	N	
51	TCC		6x25	6x25	6x25	4L	



V. PNEUMATICA 2 V. L EL.  
PNEUMATIC V. 2 W. L PE.  
V. PNEUMATICA 2 V. L BL.  
V. NEUMÁTICA 2 V. L EL.

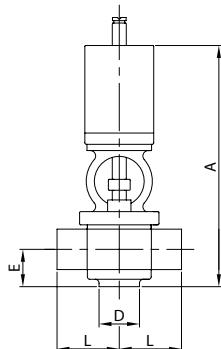
900 L



DN	A	D	E	L	gr
28	243,0	28,0	38,0	45,0	3.510
34	252,0	34,0	44,0	50,0	3.720
40	256,0	40,0	45,0	56,0	3.720
52	315,0	52,0	53,0	70,0	6.500
70	334,0	70,0	59,5	78,0	8.300
85	372,0	85,0	66,0	93,0	13.660
101	453,0	101,6	90,5	135,0	19.200

V. PNEUMATICA 3 V. T EL.  
PNEUMATIC V. 3 W. T PE.  
V. PNEUMATICA 3 V. T BL.  
V. NEUMÁTICA 3 V. T EL.

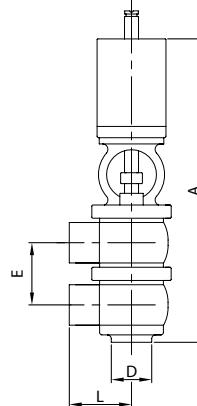
905 L



DN	A	D	E	L	gr
28	243,0	28,0	38,0	45,0	3.510
34	252,0	34,0	44,0	50,0	3.720
40	256,0	40,0	45,0	56,0	3.720
52	315,0	52,0	53,0	70,0	6.500
70	334,0	70,0	59,5	78,0	8.300
85	372,0	85,0	66,0	93,0	13.660
101	453,0	101,6	90,5	135,0	19.200

V. PNEUMATICA 3 V. LL EL.  
PNEUMATIC V. 3 W. LL PE.  
V. PNEUMATICA 3 V. LL BL.  
V. NEUMÁTICA 3 V. LL EL.

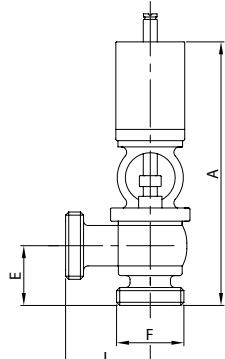
910 L



DN	A	D	E	L	gr
28	301,0	28,0	58,0	45,0	4.670
34	316,0	34,0	64,0	50,0	5.100
40	326,0	40,0	70,0	56,0	5.100
52	395,0	52,0	80,0	70,0	9.100
70	435,0	70,0	101,0	78,0	11.650
85	483,0	85,0	112,0	93,0	18.200
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 2 V. L EF.  
PNEUMATIC V. 2 W. L ME.  
V. PNEUMATICA 2 V. L BF.  
V. NEUMÁTICA 2 V. L ER.

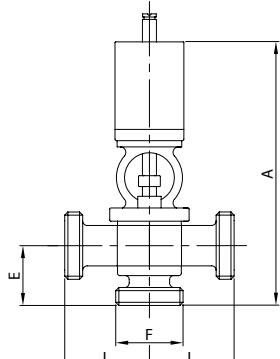
901 D



DN	A	E	F	L	gr
25	262,0	57,0	52-6	58,0	3.750
32	271,0	63,0	58-6	61,0	4.020
40	275,0	64,0	65-6	60,0	4.080
50	334,0	72,0	78-6	73,0	6.980
65	355,0	80,5	95-6	81,0	8.980
80	397,0	91,0	110-4	89,0	14.740
100	477,5	115,0	130-4	152,0	20.680

V. PNEUMATICA 3 V. T EF.  
PNEUMATIC V. 3 W. T ME.  
V. PNEUMATICA 3 V. T BF.  
V. NEUMÁTICA 3 V. T ER.

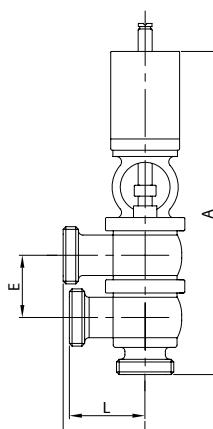
906 D



DN	A	E	F	L	gr
25	262,0	57,0	52-6	58,0	3.870
32	271,0	63,0	58-6	61,0	4.170
40	275,0	64,0	65-6	60,0	4.260
50	334,0	72,0	78-6	73,0	7.220
65	355,0	80,5	95-6	81,0	9.320
80	397,0	91,0	110-4	89,0	15.280
100	477,5	115,0	130-4	152,0	21.420

V. PNEUMATICA 3 V. LL EF.  
PNEUMATIC V. 3 W. LL ME.  
V. PNEUMATICA 3 V. LL BF.  
V. NEUMÁTICA 3 V. LL ER.

911 D

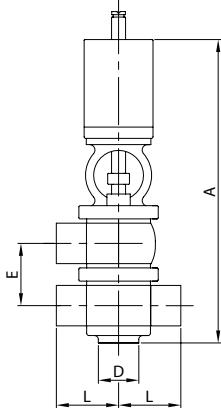


DN	A	E	L	M	gr
25	320,0	58,0	58,0	93,0	5.030
32	335,0	64,0	61,0	96,0	5.550
40	345,0	70,0	60,0	95,0	5.640
50	414,0	80,0	73,0	108,0	9.820
65	456,0	101,0	81,0	116,0	12.670
80	508,0	112,0	89,0	124,0	19.820
100	648,5	171,0	152,0	152,0	25.220



V. PNEUMATICA 3 V. LT EL.  
PNEUMATIC V. 3 W. LT PE.  
V. PNEUMATICA 3 V. LT BL.  
V. NEUMÁTICA 3 V. LT EL.

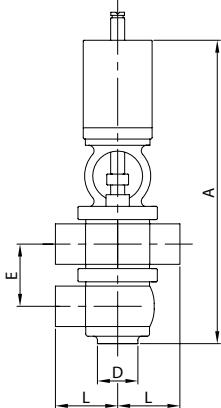
915 L



DN	A	D	E	L	gr
28	301,0	28,0	58,0	45,0	4.670
34	316,0	34,0	64,0	50,0	5.100
40	326,0	40,0	70,0	56,0	5.100
52	395,0	52,0	80,0	70,0	9.100
70	435,0	70,0	101,0	78,0	11.650
85	483,0	85,0	112,0	93,0	18.200
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 4 V. TL EL.  
PNEUMATIC V. 4 W. TL PE.  
V. PNEUMATICA 4 V. TL BL.  
V. NEUMÁTICA 4 V. TL EL.

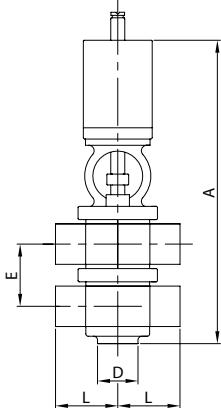
920 L



DN	A	D	E	L	gr
28	301,0	28,0	58,0	45,0	4.670
34	316,0	34,0	64,0	50,0	5.100
40	326,0	40,0	70,0	56,0	5.100
52	395,0	52,0	80,0	70,0	9.100
70	435,0	70,0	101,0	78,0	11.650
85	483,0	85,0	112,0	93,0	18.200
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 5 V. TT EL.  
PNEUMATIC V. 5 W. TT PE.  
V. PNEUMATICA 5 V. TT BL.  
V. NEUMÁTICA 5 V. TT EL.

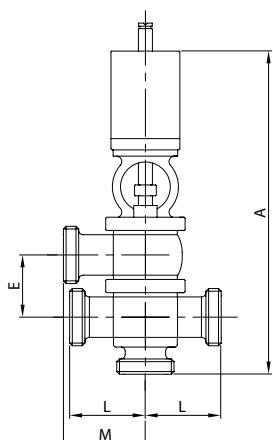
925 L



DN	A	D	E	L	gr
28	301,0	28,0	58,0	45,0	4.670
34	316,0	34,0	64,0	50,0	5.100
40	326,0	40,0	70,0	56,0	5.100
52	395,0	52,0	80,0	70,0	9.100
70	435,0	70,0	101,0	78,0	11.650
85	483,0	85,0	112,0	93,0	18.200
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 3 V. LT EF.  
PNEUMATIC V. 3 W. LT ME.  
V. PNEUMATICA 3 V. LT BF.  
V. NEUMÁTICA 3 V. LT ER.

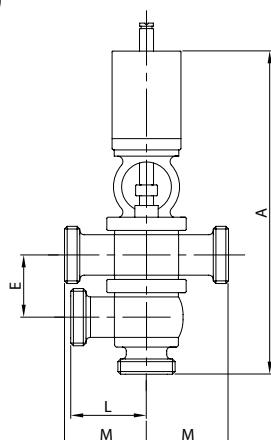
916 D



DN	A	E	L	M	gr
25	320,0	58,0	58,0	93,0	5.150
32	335,0	64,0	61,0	96,0	5.700
40	345,0	70,0	60,0	95,0	5.820
50	414,0	80,0	73,0	108,0	10.060
65	456,0	101,0	81,0	116,0	13.010
80	508,0	112,0	89,0	124,0	20.360
100	648,5	171,0	152,0	152,0	25.960

V. PNEUMATICA 4 V. TL EF.  
PNEUMATIC V. 4 W. TL ME.  
V. PNEUMATICA 4 V. TL BF.  
V. NEUMÁTICA 4 V. TL ER.

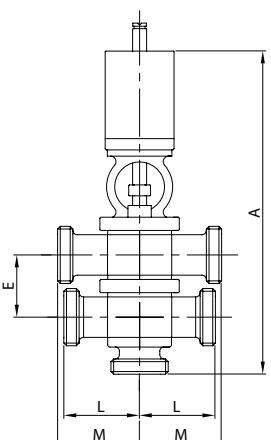
921 D



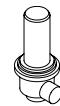
DN	A	E	L	M	gr
25	320,0	58,0	58,0	93,0	5.270
25	320,0	58,0	58,0	93,0	5.150
32	335,0	64,0	61,0	96,0	5.700
40	345,0	70,0	60,0	95,0	5.820
50	414,0	80,0	73,0	108,0	10.060
65	456,0	101,0	81,0	116,0	13.010
80	508,0	112,0	89,0	124,0	20.360
100	648,5	171,0	152,0	152,0	25.960

V. PNEUMATICA 5 V. TT EF.  
PNEUMATIC V. 5 W. TT ME.  
V. PNEUMATICA 5 V. TT BF.  
V. NEUMÁTICA 5 V. TT ER.

926 D

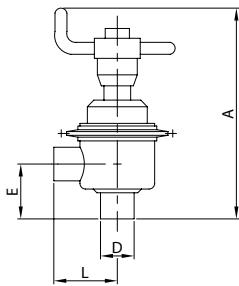


DN	A	E	L	M	gr
25	320,0	58,0	58,0	93,0	5.270
32	335,0	64,0	61,0	96,0	5.850
40	345,0	70,0	60,0	95,0	6.000
50	414,0	80,0	73,0	108,0	10.300
65	456,0	101,0	81,0	116,0	13.350
80	508,0	112,0	89,0	124,0	20.900
100	648,5	171,0	152,0	152,0	26.700



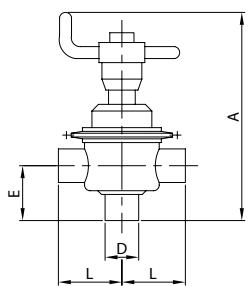
V. MANUALE 2 V. L EL.  
MANUAL V. 2 W. L PE.  
V. MANUELLE 2 V. L BL.  
V. MANUAL 2 V. L EL.

**850 L**



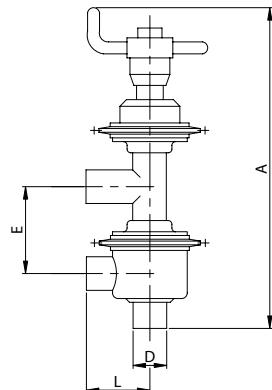
V. MANUALE 3 V. T EL.  
MANUAL V. 3 W. T PE.  
V. MANUELLE 3 V. T BL.  
V. MANUAL 3 V. T EL.

**855 L**



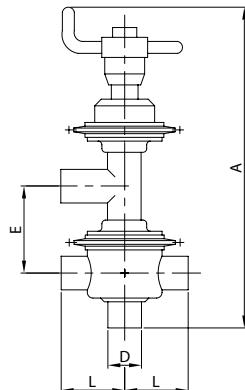
V. MANUALE 3 V. LL EL.  
MANUAL V. 3 W. LL PE.  
V. MANUELLE 3 V. LL BL.  
V. MANUAL 3 V. LL EL.

**860 L**



V. MANUALE 4 V. LT EL.  
MANUAL V. 4 W. LT PE.  
V. MANUELLE 4 V. LT BL.  
V. MANUAL 4 V. LT EL.

**865 L**



DN	A	D	E	L	gr
28	245,0	28,0	44,5	66,5	2.150
34	254,0	34,0	53,0	66,5	2.170
40	250,0	40,0	49,0	66,5	2.170
52	290,0	52,0	58,0	74,0	2.880
70	365,0	70,0	71,0	95,0	4.500
85	388,0	85,0	83,0	95,0	7.750

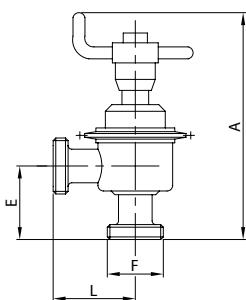
DN	A	D	E	L	gr
28	245,0	28,0	44,5	66,5	2.200
34	254,0	34,0	53,0	66,5	2.190
40	250,0	40,0	49,0	66,5	2.200
52	290,0	52,0	58,0	74,0	2.730
70	365,0	70,0	71,0	95,0	4.780
85	388,0	85,0	83,0	95,0	7.840

DN	A	D	E	L	gr
28	326,0	28,0	81,0	66,5	2.540
34	335,0	34,0	81,0	66,5	2.550
40	331,0	40,0	81,0	66,5	2.560
52	385,0	52,0	95,0	74,0	3.230
70	480,0	70,0	115,0	95,0	5.850
85	519,0	85,0	131,0	95,0	9.100

DN	A	D	E	L	gr
28	326,0	28,0	81,0	66,5	2.600
34	335,0	34,0	81,0	66,5	2.610
40	331,0	40,0	81,0	66,5	2.600
52	385,0	52,0	95,0	74,0	3.260
70	480,0	70,0	115,0	95,0	5.950
85	519,0	85,0	131,0	95,0	9.250

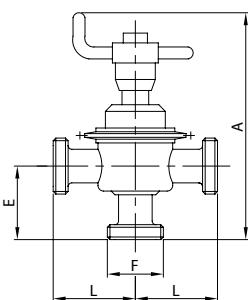
V. MANUALE 2 V. L EF.  
MANUAL V. 2 W. L ME.  
V. MANUELLE 2 V. L BF.  
V. MANUAL 2 V. L ER.

**851 D**



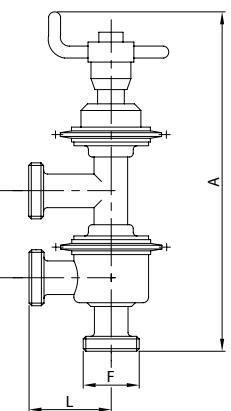
V. MANUALE 3 V. T EF.  
MANUAL V. 3 W. T ME.  
V. MANUELLE 3 V. T BF.  
V. MANUAL 3 V. T ER.

**856 D**



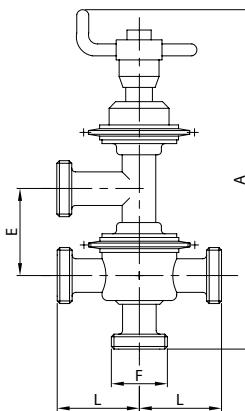
V. MANUALE 3 V. LL EF.  
MANUAL V. 3 W. LL ME.  
V. MANUELLE 3 V. LL BF.  
V. MANUAL 3 V. LL ER.

**861 D**



V. MANUALE 4 V. LT EF.  
MANUAL V. 4 W. LT ME.  
V. MANUELLE 4 V. LT BF.  
V. MANUAL 4 V. LT ER.

**866 D**

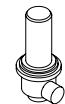


DN	A	E	F	L	gr
25	259,0	59,0	52-6	81,0	2.300
32	268,0	67,0	58-6	81,0	2.350
40	263,0	62,0	65-6	80,0	2.400
50	303,0	71,0	78-6	87,0	2.990
65	380,0	86,0	95-6	110,0	4.950
80	405,0	100,0	110-4	112,0	8.350

DN	A	E	F	L	gr
25	259,0	59,0	52-6	81,0	2.380
32	268,0	67,0	58-6	81,0	2.450
40	263,0	62,0	65-6	80,0	2.520
50	303,0	71,0	78-6	87,0	3.150
65	380,0	86,0	95-6	110,0	5.300
80	405,0	100,0	110-4	112,0	8.740

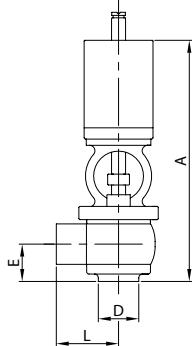
DN	A	E	F	L	gr
25	340,0	81,0	52-6	81,0	2.740
32	349,0	81,0	58-6	81,0	2.800
40	344,0	81,0	65-6	80,0	2.890
50	398,0	95,0	78-6	87,0	3.650
65	495,0	115,0	95-6	110,0	6.420
80	536,0	131,0	110-4	112,0	10.000

DN	A	E	F	L	gr
25	340,0	81,0	52-6	81,0	2.840
32	349,0	81,0	58-6	81,0	2.920
40	344,0	81,0	65-6	80,0	3.020
50	398,0	95,0	78-6	87,0	3.820
65	495,0	115,0	95-6	110,0	6.710
80	536,0	131,0	110-4	112,0	10.450



V. PNEUMATICA 2 V. L EL.  
PNEUMATIC V. 2 W. L PE.  
V. PNEUMATICA 2 V. L BL.  
V. NEUMÁTICA 2 V. L EL.

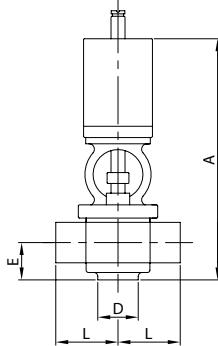
900 L



DN	A	D	E	L	gr
25	241,0	25,4	38,0	45,0	3.510
38	253,0	38,1	43,5	56,0	3.720
51	315,0	50,8	53,0	70,0	6.500
63	329,0	63,5	57,0	78,0	8.250
76	366,0	76,2	65,5	85,0	10.850
101	453,0	101,6	90,5	135,0	19.200

V. PNEUMATICA 3 V. T EL.  
PNEUMATIC V. 3 W. T PE.  
V. PNEUMATICA 3 V. T BL.  
V. NEUMÁTICA 3 V. T EL.

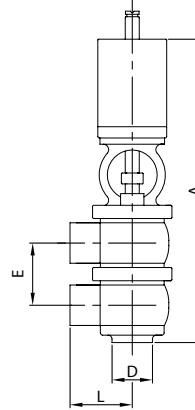
905 L



DN	A	D	E	L	gr
25	241,0	25,4	38,0	45,0	3.510
38	253,0	38,1	43,5	56,0	3.720
51	315,0	50,8	53,0	70,0	6.500
63	329,0	63,5	57,0	78,0	8.250
76	366,0	76,2	65,5	85,0	10.850
101	453,0	101,6	90,5	135,0	19.200

V. PNEUMATICA 3 V. LL EL.  
PNEUMATIC V. 3 W. LL PE.  
V. PNEUMATICA 3 V. LL BL.  
V. NEUMÁTICA 3 V. LL EL.

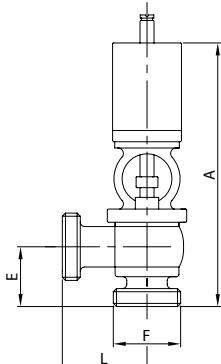
910 L



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 2 V. L EF.  
PNEUMATIC V. 2 W. L ME.  
V. PNEUMATICA 2 V. L BF.  
V. NEUMÁTICA 2 V. L ER.

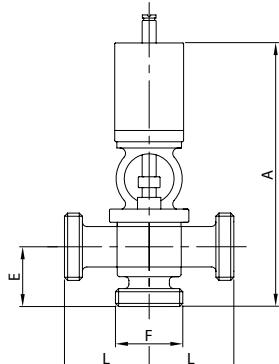
901 S



DN	A	E	F	L	gr
25	256,0	53,0	40-6	58,0	3.630
38	273,0	63,5	60-6	60,0	4.080
51	335,0	73,0	70-6	73,0	6.880
63	353,0	81,0	85-6	81,0	8.950
76	390,0	89,5	98-6	89,0	11.770
101	477,5	115,0	132-6	160,0	21.000

V. PNEUMATICA 3 V. T EF.  
PNEUMATIC V. 3 W. T ME.  
V. PNEUMATICA 3 V. T BF.  
V. NEUMÁTICA 3 V. T ER.

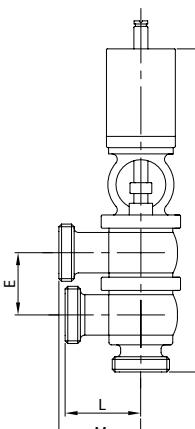
906 S



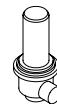
DN	A	E	F	L	gr
25	256,0	53,0	40-6	58,0	3.690
38	273,0	63,5	60-6	60,0	4.260
51	335,0	73,0	70-6	73,0	7.070
63	355,0	81,0	85-6	81,0	9.300
76	390,0	89,5	98-6	89,0	12.230
101	477,5	115,0	132-6	160,0	21.900

V. PNEUMATICA 3 V. LL EF.  
PNEUMATIC V. 3 W. LL ME.  
V. PNEUMATICA 3 V. LL BF.  
V. NEUMÁTICA 3 V. LL ER.

911 S

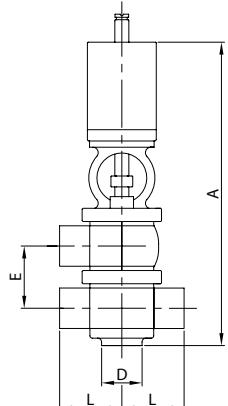


DN	A	E	L	M	gr
25	310,0	54,0	58,0	93,0	4.850
38	340,0	67,0	60,0	95,0	5.640
51	415,0	80,0	73,0	108,0	9.670
63	449,0	96,0	81,0	116,0	12.050
76	493,0	103,0	89,0	124,0	16.480
101	648,5	171,0	160,0	160,0	25.700



V. PNEUMATICA 3 V. LT EL.  
PNEUMATIC V. 3 W. LT PE.  
V. PNEUMATICA 3 V. LT BL.  
V. NEUMÁTICA 3 V. LT EL.

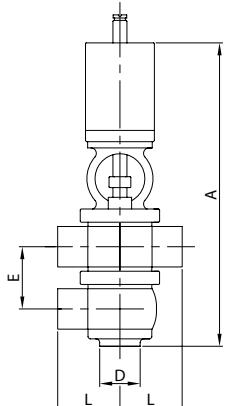
**915 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 4 V. TL EL.  
PNEUMATIC V. 4 W. TL PE.  
V. PNEUMATICA 4 V. TL BL.  
V. NEUMÁTICA 4 V. TL EL.

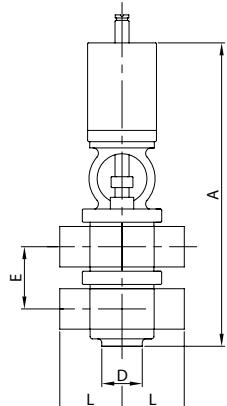
**920 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 5 V. TT EL.  
PNEUMATIC V. 5 W. TT PE.  
V. PNEUMATICA 5 V. TT BL.  
V. NEUMÁTICA 5 V. TT EL.

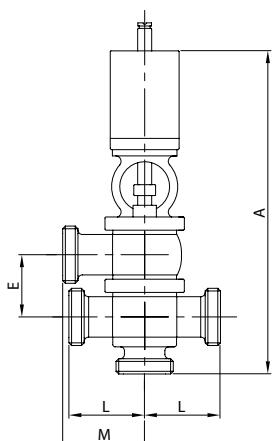
**925 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 3 V. LT EF.  
PNEUMATIC V. 3 W. LT ME.  
V. PNEUMATICA 3 V. LT BF.  
V. NEUMÁTICA 3 V. LT ER.

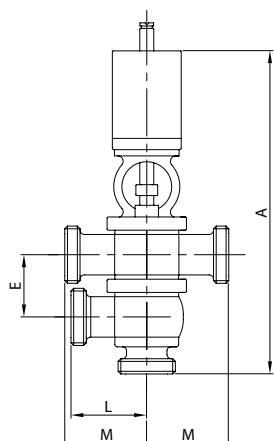
**916 S**



DN	A	E	L	M	gr
25	310,0	54,0	58,0	93,0	4.910
38	340,0	67,0	60,0	95,0	5.820
51	415,0	80,0	73,0	108,0	9.860
63	449,0	96,0	81,0	116,0	12.400
76	493,0	103,0	89,0	124,0	16.940
101	648,5	171,0	160,0	160,0	26.600

V. PNEUMATICA 4 V. TL EF.  
PNEUMATIC V. 4 W. TL ME.  
V. PNEUMATICA 4 V. TL BF.  
V. NEUMÁTICA 4 V. TL ER.

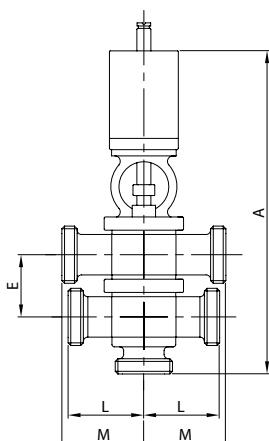
**921 S**



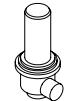
DN	A	E	L	M	gr
25	310,0	54,0	58,0	93,0	4.910
38	340,0	67,0	60,0	95,0	5.820
51	415,0	80,0	73,0	108,0	9.860
63	449,0	96,0	81,0	116,0	12.400
76	493,0	103,0	89,0	124,0	16.940
101	648,5	171,0	160,0	160,0	26.600

V. PNEUMATICA 5 V. TT EF.  
PNEUMATIC V. 5 W. TT ME.  
V. PNEUMATICA 5 V. TT BF.  
V. NEUMÁTICA 5 V. TT ER.

**926 S**



DN	A	E	L	M	gr
25	310,0	54,0	58,0	93,0	4.970
38	340,0	67,0	60,0	95,0	6.000
51	415,0	80,0	73,0	108,0	10.050
63	449,0	96,0	81,0	116,0	12.750
76	493,0	103,0	89,0	124,0	17.400
101	648,5	171,0	160,0	160,0	27.500



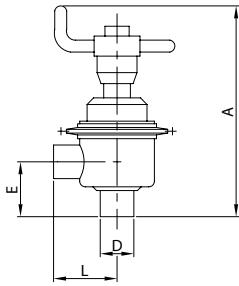
V. MANUALE 2 V. L EL.  
MANUAL V. 2 W. L PE.  
V. MANUELLE 2 V. L BL.  
V. MANUAL 2 V. L EL.

V. MANUALE 3 V. T EL.  
MANUAL V. 3 W. T PE.  
V. MANUELLE 3 V. T BL.  
V. MANUAL 3 V. T EL.

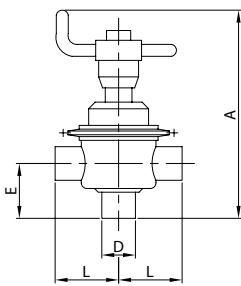
V. MANUALE 3 V. LL EL.  
MANUAL V. 3 W. LL PE.  
V. MANUELLE 3 V. LL BL.  
V. MANUAL 3 V. LL EL.

V. MANUALE 4 V. LT EL.  
MANUAL V. 4 W. LT PE.  
V. MANUELLE 4 V. LT BL.  
V. MANUAL 4 V. LT EL.

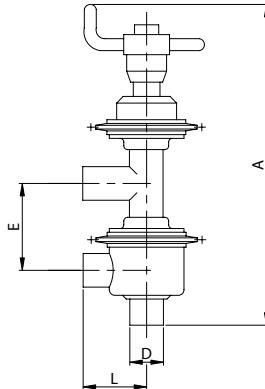
850 L



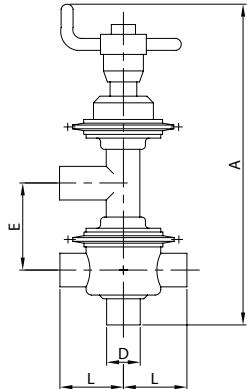
855 L



860 L



865 L



DN	A	D	E	L	gr
25	251,5	25,4	50,5	66,5	2.185
38	251,0	38,1	50,0	66,5	2.180
51	290,0	50,8	58,5	74,0	2.700
63	361,0	63,5	67,5	95,0	4.530
76	372,0	76,2	76,0	95,0	4.740

DN	A	D	E	L	gr
25	251,5	25,4	50,5	66,5	2.200
38	251,0	38,1	50,0	66,5	2.200
51	290,0	50,8	58,5	74,0	2.730
63	361,0	63,5	67,5	95,0	4.700
76	372,0	76,2	76,0	95,0	4.740

DN	A	D	E	L	gr
25	332,5	25,4	81,0	66,5	2.540
38	332,0	38,1	81,0	66,5	2.560
51	385,0	50,8	95,0	74,0	3.230
63	476,0	63,5	115,0	95,0	5.750
76	503,0	76,2	131,0	95,0	5.950

DN	A	D	E	L	gr
25	332,5	25,4	81,0	66,5	2.570
38	332,0	38,1	81,0	66,5	2.600
51	385,0	50,8	95,0	74,0	3.250
63	476,0	63,5	115,0	95,0	5.900
76	503,0	76,2	131,0	95,0	6.200

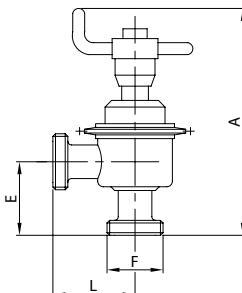
V. MANUALE 2 V. L EF.  
MANUAL V. 2 W. L ME.  
V. MANUELLE 2 V. L BF.  
V. MANUAL 2 V. L ER.

V. MANUALE 3 V. T EF.  
MANUAL V. 3 W. T ME.  
V. MANUELLE 3 V. T BF.  
V. MANUAL 3 V. T ER.

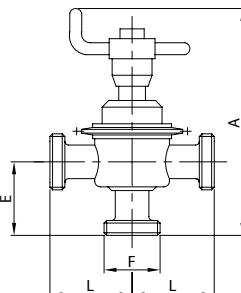
V. MANUALE 3 V. LL EF.  
MANUAL V. 3 W. LL ME.  
V. MANUELLE 3 V. LL BF.  
V. MANUAL 3 V. LL ER.

V. MANUALE 4 V. LT EF.  
MANUAL V. 4 W. LT ME.  
V. MANUELLE 4 V. LT BF.  
V. MANUAL 4 V. LT ER.

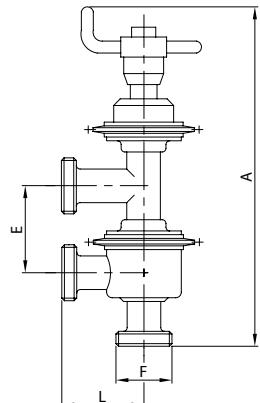
851 S



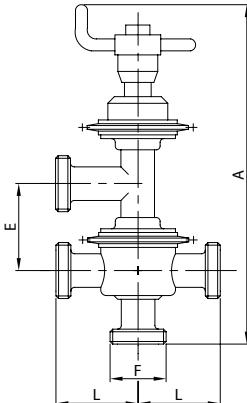
856 S



861 S



866 S



DN	A	E	F	L	gr
25	251,5	50,5	40-6	66,5	2.260
38	251,0	50,0	60-6	66,5	2.380
51	290,0	58,5	70-6	74,0	2.930
63	361,0	67,5	85-6	95,0	4.900
76	372,0	76,0	98-6	95,0	5.240

DN	A	E	F	L	gr
25	251,5	50,5	40-6	66,5	2.300
38	251,0	50,0	60-6	66,5	2.500
51	290,0	58,5	70-6	74,0	3.100
63	361,0	67,5	85-6	95,0	5.300
76	372,0	76,0	98-6	95,0	5.420

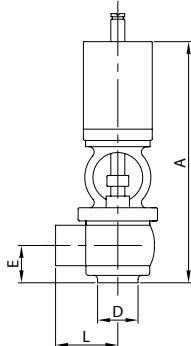
DN	A	E	F	L	gr
25	332,5	81,0	40-6	66,5	2.645
38	332,0	81,0	60-6	66,5	2.850
51	385,0	95,0	70-6	74,0	3.570
63	476,0	115,0	85-6	95,0	6.340
76	503,0	131,0	98-6	95,0	6.700

DN	A	E	F	L	gr
25	332,5	81,0	40-6	66,5	2.710
38	332,0	81,0	60-6	66,5	3.000
51	385,0	95,0	70-6	74,0	3.700
63	476,0	115,0	85-6	95,0	6.680
76	503,0	131,0	98-6	95,0	7.200



V. PNEUMATICA 2 V. L EL.  
PNEUMATIC V. 2 W. L PE.  
V. PNEUMATICA 2 V. L BL.  
V. NEUMÁTICA 2 V. L EL.

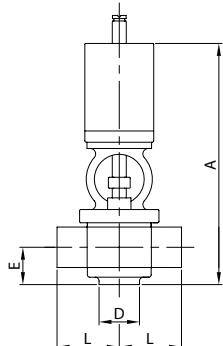
**900 L**



DN	A	D	E	L	gr
25	241,0	25,4	38,0	45,0	3.510
38	253,0	38,1	43,5	56,0	3.720
51	315,0	50,8	53,0	70,0	6.500
63	329,0	63,5	57,0	78,0	8.250
76	366,0	76,2	65,5	85,0	10.850
101	453,0	101,6	90,5	135,0	19.200

V. PNEUMATICA 3 V. T EL.  
PNEUMATIC V. 3 W. T PE.  
V. PNEUMATICA 3 V. T BL.  
V. NEUMÁTICA 3 V. T EL.

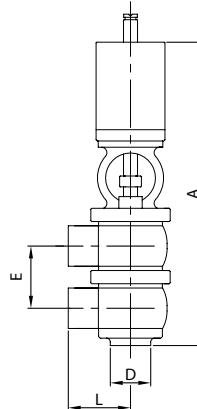
**905 L**



DN	A	D	E	L	gr
25	241,0	25,4	38,0	45,0	3.510
38	253,0	38,1	43,5	56,0	3.720
51	315,0	50,8	53,0	70,0	6.500
63	329,0	63,5	57,0	78,0	8.250
76	366,0	76,2	65,5	85,0	10.850
101	453,0	101,6	90,5	135,0	19.200

V. PNEUMATICA 3 V. LL EL.  
PNEUMATIC V. 3 W. LL PE.  
V. PNEUMATICA 3 V. LL BL.  
V. NEUMÁTICA 3 V. LL EL.

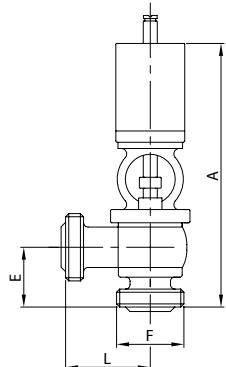
**910 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 2 V. L EF.  
PNEUMATIC V. 2 W. L ME.  
V. PNEUMATICA 2 V. L BF.  
V. NEUMÁTICA 2 V. L ER.

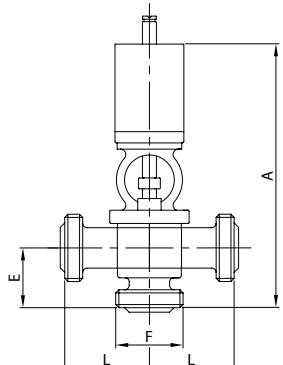
**901 B**



DN	A	E	F	L	gr
25	264,7	61,7	46-8	58,0	3.740
38	276,7	67,2	58-8	60,0	4.050
51	338,7	76,7	73-6	73,0	6.940
63	352,7	80,7	85-6	81,0	8.840
76	389,7	89,2	98-6	89,0	11.560
101	476,7	114,2	123-6	158,7	20.200

V. PNEUMATICA 3 V. T EF.  
PNEUMATIC V. 3 W. T ME.  
V. PNEUMATICA 3 V. T BF.  
V. NEUMÁTICA 3 V. T ER.

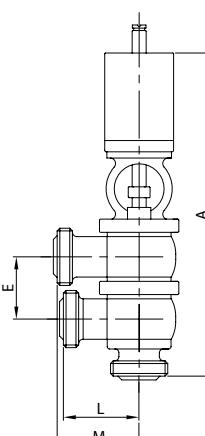
**906 B**



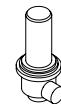
DN	A	E	F	L	gr
25	264,7	61,7	46-8	58,0	3.855
38	276,7	67,2	58-8	60,0	4.215
51	338,7	76,7	73-6	73,0	7.160
63	352,7	80,7	85-6	81,0	9.135
76	389,7	89,2	98-6	89,0	11.915
101	476,7	114,2	123-6	158,7	20.700

V. PNEUMATICA 3 V. LL EF.  
PNEUMATIC V. 3 W. LL ME.  
V. PNEUMATICA 3 V. LL BF.  
V. NEUMÁTICA 3 V. LL ER.

**911 B**

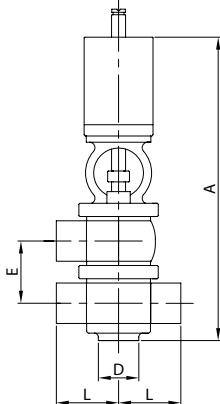


DN	A	E	L	M	gr
25	318,7	54,0	58,0	93,0	5.075
38	343,7	67,0	60,0	95,0	5.595
51	418,7	80,0	73,0	108,0	9.760
63	448,7	96,0	81,0	116,0	11.885
76	492,7	103,0	89,0	124,0	16.165
101	647,7	171,0	158,7	158,7	24.500



V. PNEUMATICA 3 V. LT EL.  
PNEUMATIC V. 3 W. LT PE.  
V. PNEUMATICA 3 V. LT BL.  
V. NEUMÁTICA 3 V. LT EL.

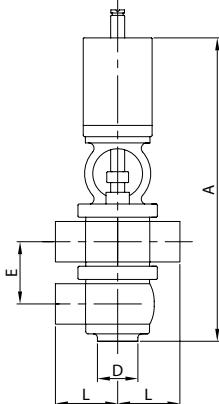
**915 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 4 V. TL EL.  
PNEUMATIC V. 4 W. TL PE.  
V. PNEUMATICA 4 V. TL BL.  
V. NEUMÁTICA 4 V. TL EL.

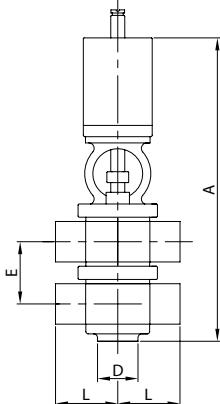
**920 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 5 V. TT EL.  
PNEUMATIC V. 5 W. TT PE.  
V. PNEUMATICA 5 V. TT BL.  
V. NEUMÁTICA 5 V. TT EL.

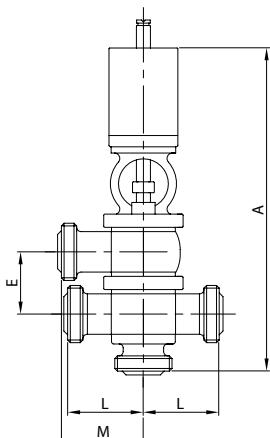
**925 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 3 V. LT EF.  
PNEUMATIC V. 3 W. LT ME.  
V. PNEUMATICA 3 V. LT BF.  
V. NEUMÁTICA 3 V. LT ER.

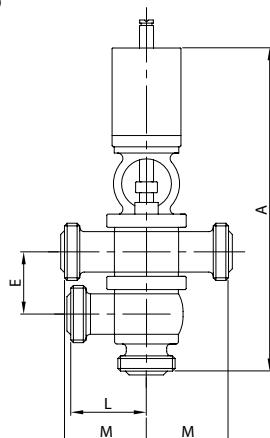
**916 B**



DN	A	E	L	M	gr
25	318,7	54,0	58,0	93,0	5.130
38	343,7	67,0	60,0	95,0	5.760
51	418,7	80,0	73,0	108,0	9.980
63	448,7	96,0	81,0	116,0	12.180
76	492,7	103,0	89,0	124,0	16.520
101	647,7	171,0	158,7	158,7	25.000

V. PNEUMATICA 4 V. TL EF.  
PNEUMATIC V. 4 W. TL ME.  
V. PNEUMATICA 4 V. TL BF.  
V. NEUMÁTICA 4 V. TL ER.

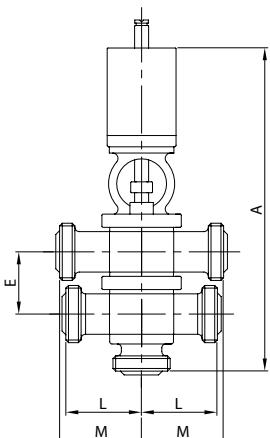
**921 B**



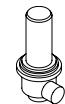
DN	A	E	L	M	gr
25	318,7	54,0	58,0	93,0	5.130
38	343,7	67,0	60,0	95,0	5.760
51	418,7	80,0	73,0	108,0	9.980
63	448,7	96,0	81,0	116,0	12.180
76	492,7	103,0	89,0	124,0	16.520
101	647,7	171,0	158,7	158,7	25.000

V. PNEUMATICA 5 V. TT EF.  
PNEUMATIC V. 5 W. TT ME.  
V. PNEUMATICA 5 V. TT BF.  
V. NEUMÁTICA 5 V. TT ER.

**926 B**

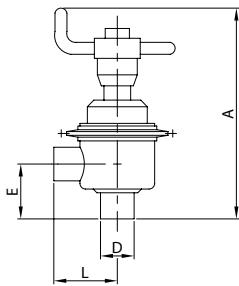


DN	A	E	L	M	gr
25	318,7	54,0	58,0	93,0	5.245
38	343,7	67,0	60,0	95,0	5.925
51	418,7	80,0	73,0	108,0	10.200
63	448,7	96,0	81,0	116,0	12.475
76	492,7	103,0	89,0	124,0	16.815
101	647,7	171,0	158,7	158,7	25.500



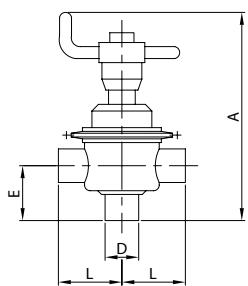
V. MANUALE 2 V. L EL.  
MANUAL V. 2 W. L PE.  
V. MANUELLE 2 V. L BL.  
V. MANUAL 2 V. L EL.

**850 L**



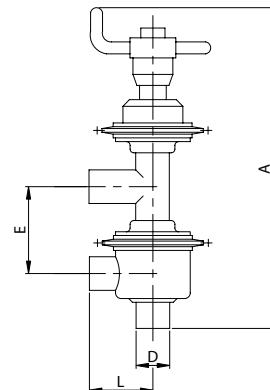
V. MANUALE 3 V. T EL.  
MANUAL V. 3 W. T PE.  
V. MANUELLE 3 V. T BL.  
V. MANUAL 3 V. T EL.

**855 L**



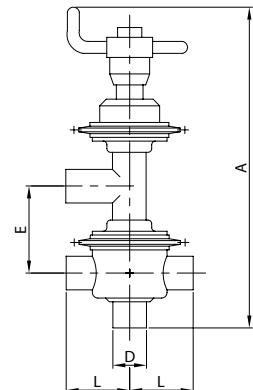
V. MANUALE 3 V. LL EL.  
MANUAL V. 3 W. LL PE.  
V. MANUELLE 3 V. LL BL.  
V. MANUAL 3 V. LL EL.

**860 L**



V. MANUALE 4 V. LT EL.  
MANUAL V. 4 W. LT PE.  
V. MANUELLE 4 V. LT BL.  
V. MANUAL 4 V. LT EL.

**865 L**



DN	A	D	E	L	gr
25	251,5	25,4	50,5	66,5	2.185
38	251,0	38,1	50,0	66,5	2.180
51	290,0	50,8	58,5	74,0	2.700
63	361,0	63,5	67,5	95,0	4.530
76	372,0	76,2	76,0	95,0	4.740

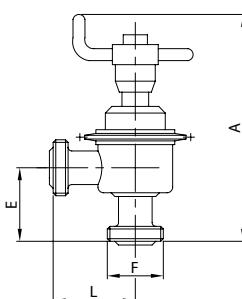
DN	A	D	E	L	gr
25	251,5	25,4	50,5	66,5	2.200
38	251,0	38,1	50,0	66,5	2.200
51	290,0	50,8	58,5	74,0	2.730
63	361,0	63,5	67,5	95,0	4.700
76	372,0	76,2	76,0	95,0	4.740

DN	A	D	E	L	gr
25	332,5	25,4	81,0	66,5	2.540
38	332,0	38,1	81,0	66,5	2.560
51	385,0	50,8	95,0	74,0	3.230
63	476,0	63,5	115,0	95,0	5.750
76	503,0	76,2	131,0	95,0	5.950

DN	A	D	E	L	gr
25	332,5	25,4	81,0	66,5	2.570
38	332,0	38,1	81,0	66,5	2.600
51	385,0	50,8	95,0	74,0	3.250
63	476,0	63,5	115,0	95,0	5.900
76	503,0	76,2	131,0	95,0	6.200

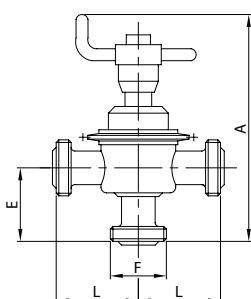
V. MANUALE 2 V. L EF.  
MANUAL V. 2 W. L ME.  
V. MANUELLE 2 V. L BF.  
V. MANUAL 2 V. L ER.

**851 B**



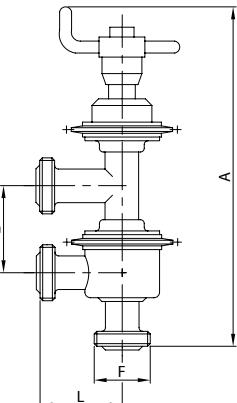
V. MANUALE 3 V. T EF.  
MANUAL V. 3 W. T ME.  
V. MANUELLE 3 V. T BF.  
V. MANUAL 3 V. T ER.

**856 B**



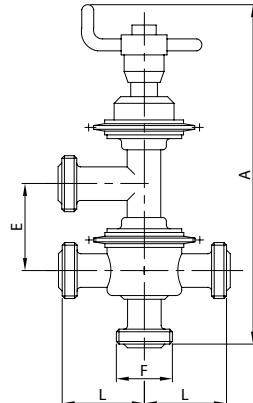
V. MANUALE 3 V. LL EF.  
MANUAL V. 3 W. LL ME.  
V. MANUELLE 3 V. LL BF.  
V. MANUAL 3 V. LL ER.

**861 B**



V. MANUALE 4 V. LT EF.  
MANUAL V. 4 W. LT ME.  
V. MANUELLE 4 V. LT BF.  
V. MANUAL 4 V. LT ER.

**866 B**

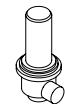


DN	A	E	F	L	gr
25	283,0	69,5	46-8	85,5	2.290
38	282,5	69,0	58-8	85,5	2.340
51	321,5	77,5	73-6	93,0	2.940
63	392,5	86,5	85-6	114,0	4.810
76	403,5	95,0	98-6	114,0	5.100

DN	A	E	F	L	gr
25	283,0	69,5	46-8	85,5	2.300
38	282,5	69,0	58-8	85,5	2.430
51	321,5	77,5	73-6	93,0	3.100
63	392,5	86,5	85-6	114,0	5.150
76	403,5	95,0	98-6	114,0	5.300

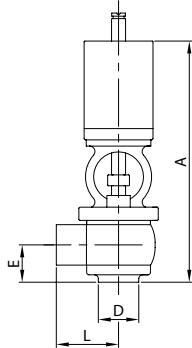
DN	A	E	F	L	gr
25	364,0	81,0	46-8	85,5	2.690
38	363,5	81,0	58-8	85,5	2.790
51	416,5	95,0	73-6	93,0	3.590
63	507,5	115,0	85-6	114,0	6.190
76	534,5	131,0	98-6	114,0	6.500

DN	A	E	F	L	gr
25	364,0	81,0	46-8	85,5	2.770
38	363,5	81,0	58-8	85,5	2.900
51	416,5	95,0	73-6	93,0	3.720
63	507,5	115,0	85-6	114,0	6.480
76	534,5	131,0	98-6	114,0	6.930



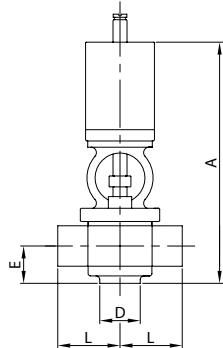
V. PNEUMATICA 2 V. L EL.  
PNEUMATIC V. 2 W. L PE.  
V. PNEUMATICA 2 V. L BL.  
V. NEUMÁTICA 2 V. L EL.

900 L



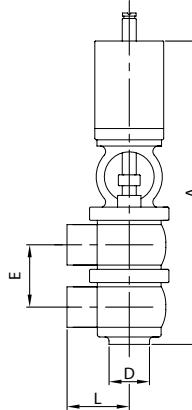
V. PNEUMATICA 3 V. T EL.  
PNEUMATIC V. 3 W. T PE.  
V. PNEUMATICA 3 V. T BL.  
V. NEUMÁTICA 3 V. T EL.

905 L



V. PNEUMATICA 3 V. LL EL.  
PNEUMATIC V. 3 W. LL PE.  
V. PNEUMATICA 3 V. LL BL.  
V. NEUMÁTICA 3 V. LL EL.

910 L



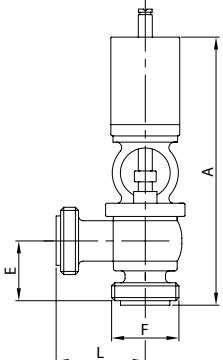
DN	A	D	E	L	gr
25	241,0	25,4	38,0	45,0	3.510
38	253,0	38,1	43,5	56,0	3.720
51	315,0	50,8	53,0	70,0	6.500
63	329,0	63,5	57,0	78,0	8.250
76	366,0	76,2	65,5	85,0	10.850
101	453,0	101,6	90,5	135,0	19.200

DN	A	D	E	L	gr
25	241,0	25,4	38,0	45,0	3.510
38	253,0	38,1	43,5	56,0	3.720
51	315,0	50,8	53,0	70,0	6.500
63	329,0	63,5	57,0	78,0	8.250
76	366,0	76,2	65,5	85,0	10.850
101	453,0	101,6	90,5	135,0	19.200

DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

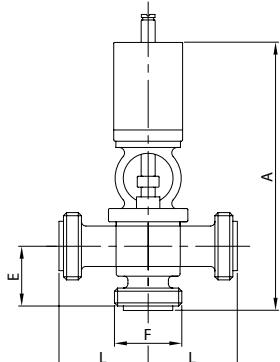
V. PNEUMATICA 2 V. L EF.  
PNEUMATIC V. 2 W. L ME.  
V. PNEUMATICA 2 V. L BF.  
V. NEUMÁTICA 2 V. L ER.

901 I



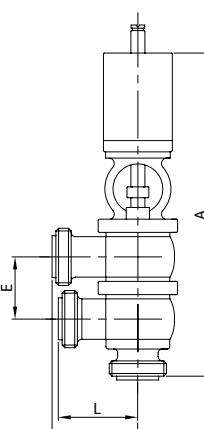
V. PNEUMATICA 3 V. T EF.  
PNEUMATIC V. 3 W. T ME.  
V. PNEUMATICA 3 V. T BF.  
V. NEUMÁTICA 3 V. T ER.

906 I



V. PNEUMATICA 3 V. LL EF.  
PNEUMATIC V. 3 W. LL ME.  
V. PNEUMATICA 3 V. LL BF.  
V. NEUMÁTICA 3 V. LL ER.

911 I



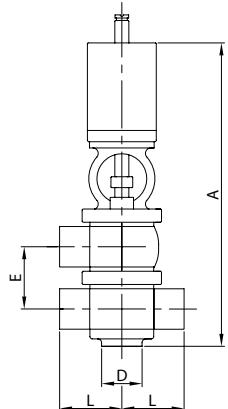
DN	A	E	F	L	gr
25	252,5	59,5	37-8	61,0	3.650
38	274,5	65,0	50-8	63,0	3.940
51	336,5	74,5	64-8	76,0	6.800
63	350,5	78,5	77-8	84,0	8.670
76	387,5	87,0	91-8	92,0	11.390
101	474,5	112,0	118-8	156,5	20.040

DN	A	E	F	L	gr
25	252,5	59,5	37-8	61,0	3.720
38	274,5	65,0	50-8	63,0	4.050
51	336,5	74,5	64-8	76,0	6.950
63	350,5	78,5	77-8	84,0	8.880
76	387,5	87,0	91-8	92,0	11.660
101	474,5	112,0	118-8	156,5	20.460

DN	A	E	L	M	gr
25	316,5	54,0	61,0	96,0	4.880
38	341,5	67,0	63,0	98,0	5.430
51	416,5	80,0	76,0	111,0	9.550
63	446,5	96,0	84,0	119,0	11.630
76	490,5	103,0	92,0	127,0	15.910
101	645,5	171,0	156,5	156,5	24.260

V. PNEUMATICA 3 V. LT EL.  
PNEUMATIC V. 3 W. LT PE.  
V. PNEUMATICA 3 V. LT BL.  
V. NEUMÁTICA 3 V. LT EL.

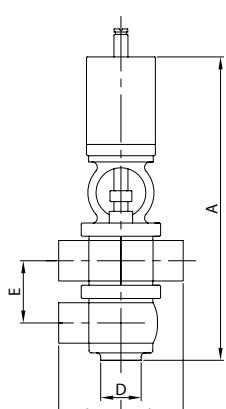
**915 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 4 V. TL EL.  
PNEUMATIC V. 4 W. TL PE.  
V. PNEUMATICA 4 V. TL BL.  
V. NEUMÁTICA 4 V. TL EL.

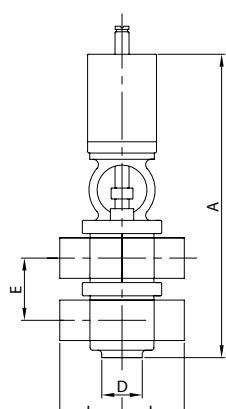
**920 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 5 V. TT EL.  
PNEUMATIC V. 5 W. TT PE.  
V. PNEUMATICA 5 V. TT BL.  
V. NEUMÁTICA 5 V. TT EL.

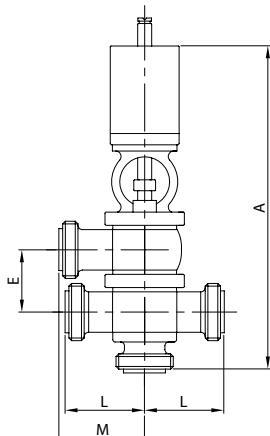
**925 L**



DN	A	D	E	L	gr
25	295,0	25,4	54,0	45,0	4.670
38	320,0	38,1	67,0	56,0	5.100
51	395,0	50,8	80,0	70,0	9.100
63	425,0	63,5	96,0	78,0	11.000
76	469,0	76,2	103,0	85,0	15.100
101	624,0	101,6	171,0	135,0	23.000

V. PNEUMATICA 3 V. LT EF.  
PNEUMATIC V. 3 W. LT ME.  
V. PNEUMATICA 3 V. LT BF.  
V. NEUMÁTICA 3 V. LT ER.

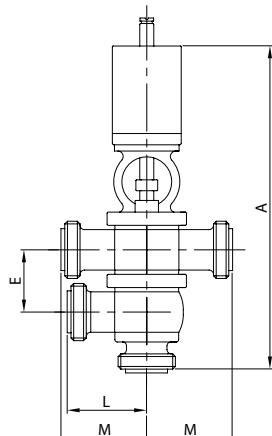
**916 I**



DN	A	E	L	M	gr
25	316,5	54,0	61,0	96,0	4.950
38	341,5	67,0	63,0	98,0	5.540
51	416,5	80,0	76,0	111,0	9.700
63	446,5	96,0	84,0	119,0	11.840
76	490,5	103,0	92,0	127,0	16.180
101	645,5	171,0	156,5	156,5	24.680

V. PNEUMATICA 3-A 4 V. TL EF.  
PNEUMATIC V. 4 W. TL ME.  
V. PNEUMATICA 4 V. TL BF.  
V. NEUMÁTICA 4 V. TL ER.

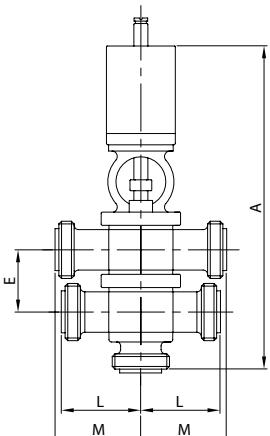
**921 I**



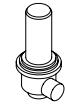
DN	A	E	L	M	gr
25	316,5	54,0	61,0	96,0	4.950
38	341,5	67,0	63,0	98,0	5.540
51	416,5	80,0	76,0	111,0	9.700
63	446,5	96,0	84,0	119,0	11.840
76	490,5	103,0	92,0	127,0	16.180
101	645,5	171,0	156,5	156,5	24.680

V. PNEUMATICA 5 V. TT EF.  
PNEUMATIC V. 5 W. TT ME.  
V. PNEUMATICA 5 V. TT BF.  
V. NEUMÁTICA 5 V. TT ER.

**926 I**

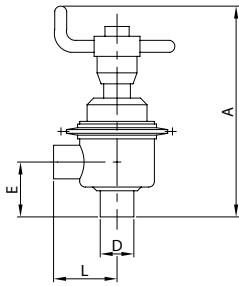


DN	A	E	L	M	gr
25	316,5	54,0	61,0	96,0	5.020
38	341,5	67,0	63,0	98,0	5.650
51	416,5	80,0	76,0	111,0	9.850
63	446,5	96,0	84,0	119,0	12.050
76	490,5	103,0	92,0	127,0	16.450
101	645,5	171,0	156,5	156,5	25.100



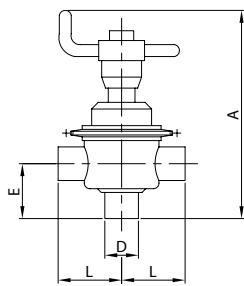
**V. MANUALE 2 V. L EL.**  
**MANUAL V. 2 W. L PE.**  
**V. MANUELLE 2 V. L BL.**  
**V. MANUAL 2 V. L EL.**

**850 L**



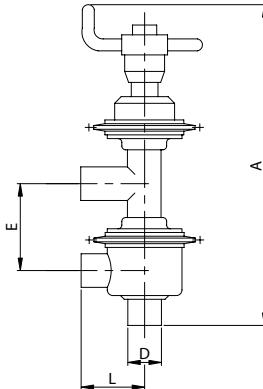
**V. MANUALE 3 V. T EL.**  
**MANUAL V. 3 W. T PE.**  
**V. MANUELLE 3 V. T BL.**  
**V. MANUAL 3 V. T EL.**

**855 L**



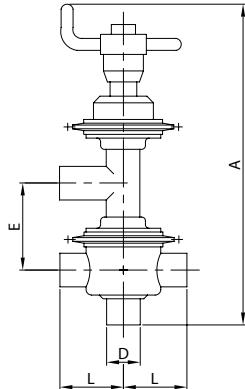
**V. MANUALE 3 V. LL EL.**  
**MANUAL V. 3 W. LL PE.**  
**V. MANUELLE 3 V. LL BL.**  
**V. MANUAL 3 V. LL EL.**

**860 L**



**V. MANUALE 4 V. LT EL.**  
**MANUAL V. 4 W. LT PE.**  
**V. MANUELLE 4 V. LT BL.**  
**V. MANUAL 4 V. LT EL.**

**865 L**



DN	A	D	E	L	gr
25	251,5	25,4	50,5	66,5	2.185
38	251,0	38,1	50,0	66,5	2.180
51	290,0	50,8	58,5	74,0	2.700
63	361,0	63,5	67,5	95,0	4.530
76	372,0	76,2	76,0	95,0	4.740

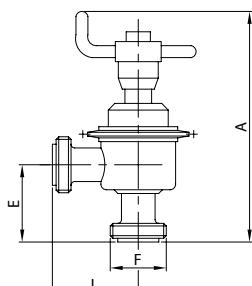
DN	A	D	E	L	gr
25	251,5	25,4	50,5	66,5	2.200
38	251,0	38,1	50,0	66,5	2.200
51	290,0	50,8	58,5	74,0	2.730
63	361,0	63,5	67,5	95,0	4.700
76	372,0	76,2	76,0	95,0	4.740

DN	A	D	E	L	gr
25	332,5	25,4	81,0	66,5	2.540
38	332,0	38,1	81,0	66,5	2.560
51	385,0	50,8	95,0	74,0	3.230
63	476,0	63,5	115,0	95,0	5.750
76	503,0	76,2	131,0	95,0	5.950

DN	A	D	E	L	gr
25	332,5	25,4	81,0	66,5	2.570
38	332,0	38,1	81,0	66,5	2.600
51	385,0	50,8	95,0	74,0	3.250
63	476,0	63,5	115,0	95,0	5.900
76	503,0	76,2	131,0	95,0	6.200

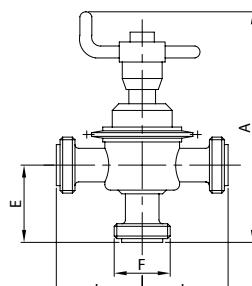
**V. MANUALE 2 V. L EF.**  
**MANUAL V. 2 W. L ME.**  
**V. MANUELLE 2 V. L BF.**  
**V. MANUAL 2 V. L ER.**

**851 I**



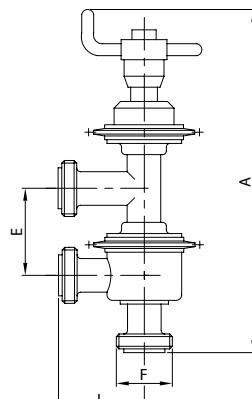
**V. MANUALE 3 V. T EF.**  
**MANUAL V. 3 W. T ME.**  
**V. MANUELLE 3 V. T BF.**  
**V. MANUAL 3 V. T ER.**

**856 I**



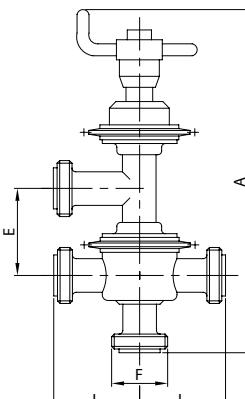
**V. MANUALE 3 V. LL EF.**  
**MANUAL V. 3 W. LL ME.**  
**V. MANUELLE 3 V. LL BF.**  
**V. MANUAL 3 V. LL ER.**

**861 I**



**V. MANUALE 4 V. LT EF.**  
**MANUAL V. 4 W. LT ME.**  
**V. MANUELLE 4 V. LT BF.**  
**V. MANUAL 4 V. LT ER.**

**866 I**



DN	A	E	F	L	gr
25	273,0	72,0	37-8	88,0	2.240
38	272,5	71,5	50-8	88,0	2.280
51	311,5	80,0	64-8	95,5	2.820
63	382,5	89,0	77-8	116,5	4.720
76	393,5	97,5	91-8	116,5	5.000

DN	A	E	F	L	gr
25	273,0	72,0	37-8	88,0	2.270
38	272,5	71,5	50-8	88,0	2.350
51	311,5	80,0	64-8	95,5	2.900
63	382,5	89,0	77-8	116,5	4.990
76	393,5	97,5	91-8	116,5	5.130

DN	A	E	F	L	gr
25	354,0	81,0	37-8	88,0	2.600
38	353,5	81,0	50-8	88,0	2.700
51	406,5	95,0	64-8	95,5	3.400
63	497,5	115,0	77-8	116,5	6.050
76	524,5	131,0	91-8	116,5	6.340

DN	A	E	F	L	gr
25	354,0	81,0	37-8	88,0	2.670
38	353,5	81,0	50-8	88,0	2.800
51	406,5	95,0	64-8	95,5	3.490
63	497,5	115,0	77-8	116,5	6.290
76	524,5	131,0	91-8	116,5	6.720

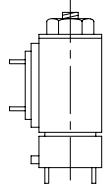


COMPONENTI ELETTRICI  
ELECTRICAL PARTS  
PIÈCES ÉLECTRIQUES  
PIEZAS ELÉCTRICAS



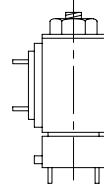
ELETTROVALVOLA NC.  
SOLENOID VALVE NC.  
ÉLECTROVANNE NF.  
ELECTROVÁLVULA NC.

**015 NC**



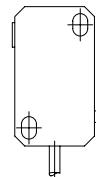
ELETTROVALVOLA NA.  
SOLENOID VALVE NO.  
ÉLECTROVANNE NO.  
ELECTROVÁLVULA NA.

**015 NA**



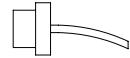
CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

**013 A**  
**013 A/N**  
**013 A/N/EX**



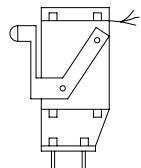
CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

**013 S**



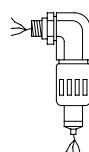
MICROINTERRUTTORE  
MICROSWITCH  
MINIRUPTEUR  
MICRORRUPTOR

**014 1**



CONNETTORE  
CONNECTOR  
CONNECTEUR  
CONECTOR

**014 2**



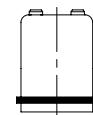
CONNETTORE  
CONNECTOR  
CONNECTEUR  
CONECTOR

**030 S**



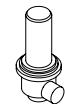
UNITÀ DI CONTROLLO  
CONTROL UNIT  
UNITÉ DE CONTRÔLE  
UNIDAD DE CONTROL

**900 UC 4**





**VALVOLE PNEUMATICHE DI DRENAGGIO**  
**DRAINAGE PNEUMATIC VALVES**  
**VANNES PNEUMATIQUES DE DRAINAGE**  
**VÁLVULAS NEUMÁTICAS DE DRENAGE**



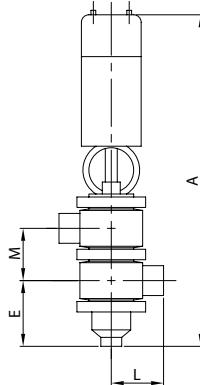
V. PN. DRENAG. 2 V. LL EL.  
 DRAIN. PN. V. 2 W. LL PE.  
 V. PN. DRAINAGE 2 V. LL BL.  
 V. PN. DRENAJE 2 V. LL EL.

V. PN. DRENAG. 3 V. LT EL.  
 DRAIN. PN. V. 3 W. LT PE.  
 V. PN. DRAINAGE 3 V. LT BL.  
 V. PN. DRENAJE 3 V. LT EL.

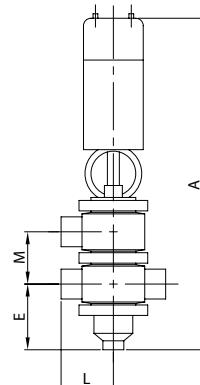
V. PN. DRENAG. 3 V. TL EL.  
 DRAIN. PN. V. 3 W. TL PE.  
 V. PN. DRAINAGE 3 V. TL BL.  
 V. PN. DRENAJE 3 V. TL EL.

V. PN. DRENAG. 3 V. LLL EL.  
 DRAIN. PN. V. 3 W. LLL PE.  
 V. PN. DRAIN. 3 V. LLL BL.  
 V. PN. DRENAJE 3 V. LLL EL.

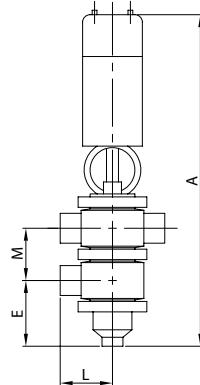
830 DL



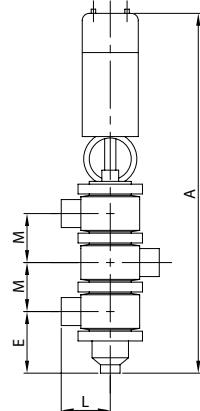
832 DL



835 DL



840 DL



DN	A	E	L	M	gr
51	586,0	103,0	75,0	79,0	16.500
63	646,0	108,0	90,0	91,0	21.500
76	680,0	118,0	95,0	110,0	25.000

DN	A	E	L	M	gr
51	586,0	103,0	75,0	79,0	16.600
63	646,0	108,0	90,0	91,0	21.700
76	680,0	118,0	95,0	110,0	25.200

DN	A	E	L	M	gr
51	586,0	103,0	75,0	79,0	16.600
63	646,0	108,0	90,0	91,0	21.700
76	680,0	118,0	95,0	110,0	25.200

DN	A	E	L	M	gr
51	665,0	103,0	75,0	79,0	14.400
63	737,0	108,0	90,0	91,0	18.400
76	790,0	118,0	95,0	110,0	22.000

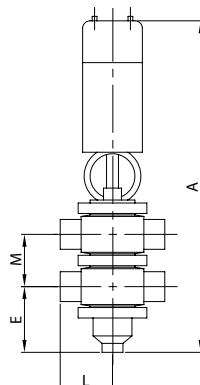
V. PN. DRENAG. 4 V. TT EL.  
 DRAIN. PN. V. 4 W. TT PE.  
 V. PN. DRAINAGE 4 V. TT BL.  
 V. PN. DRENAJE 4 V. TT EL.

V. PN. DRENAG. 4 V. TLL EL.  
 DRAIN. PN. V. 4 W. TLL PE.  
 V. PN. DRAIN. 4 V. TLL BL.  
 V. PN. DRENAJE 4 V. TLL EL.

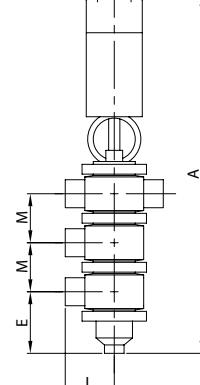
V. PN. DRENAG. 5 V. TTL EL.  
 DRAIN. PN. V. 5 W. TTL PE.  
 V. PN. DRAIN. 5 V. TTL BL.  
 V. PN. DRENAJE 5 V. TTL EL.

V. PN. DRENAG. 6 V. TTT EL.  
 DRAIN. PN. V. 6 W. TTT PE.  
 V. PN. DRAIN. 6 V. TTT BL.  
 V. PN. DRENAJE 6 V. TTT EL.

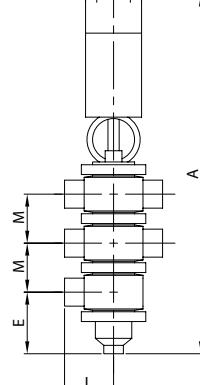
836 DL



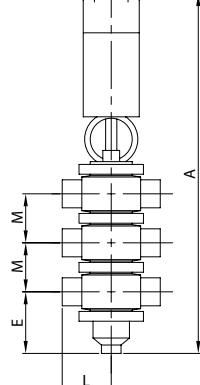
842 DL



844 DL



846 DL



DN	A	E	L	M	gr
51	586,0	103,0	75,0	79,0	16.700
63	646,0	108,0	90,0	91,0	22.000
76	680,0	118,0	95,0	110,0	25.500

DN	A	E	L	M	gr
51	665,0	103,0	75,0	79,0	14.400
63	737,0	108,0	90,0	91,0	18.400
76	790,0	118,0	95,0	110,0	22.000

DN	A	E	L	M	gr
51	665,0	103,0	75,0	79,0	14.500
63	737,0	108,0	90,0	91,0	18.500
76	790,0	118,0	95,0	110,0	22.000

DN	A	E	L	M	gr
51	665,0	103,0	75,0	79,0	14.600
63	737,0	108,0	90,0	91,0	18.700
76	790,0	118,0	95,0	110,0	22.200





## VALVOLE A MEMBRANA

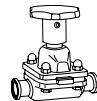
- Realizzate seguendo rigorosamente i criteri e i test imposti dalle norme 3-A.
- Corpo in acciaio inossidabile AISI 316L realizzato mediante stampaggio a caldo, solubilizzato, lavorato meccanicamente e lucidato.
- Comandi manuali e pneumatici in acciaio inossidabile AISI 316L per sterilizzazioni a elevate temperature.
- Membrane in EPDM o PTFE. Membrane in EPDM e supporti elastici per le membrane in PTFE telati per conferire maggiore resistenza meccanica.
- Perfetta tenuta e completo isolamento da fattori inquinanti esterni.
- Completo autodrenaggio di tutte le parti interne durante le fasi di lavaggio CIP.
- Manutenzioni ridotte "top entry" con facilità di accesso e senza necessità di smontare la valvola dall'impianto.
- Produzione standard: estremità Clamp o estremità a saldare. A richiesta, disponibili con estremità filettate norme DIN, SMS, RJT, ISS o estremità flangiate UNI, DIN, ANSI.
- Finitura standard: lucidatura esterna e satinatura interna grana 150 (finitura LS); a richiesta, lucidatura esterna e interna grana 240 (finitura LL), lucidatura elettrolitica grana 400 (finitura LE).
- Max. pressione di esercizio: 7 bar.

## DIAPHRAGM VALVES

- Produced in strict conformity with criteria and tests required by 3-A standards.
- Press-forged, solution heat-treated, machined and polished AISI 316L stainless steel body.
- AISI 316L stainless steel manual and pneumatic controls for high temperature sterilization.
- EPDM or PTFE diaphragms. EPDM diaphragms and elastic supports for the PTFE diaphragms fabric-finished to give high mechanical strength.
- Perfect seal and complete insulation from external pollutants.
- Complete self-drainage of all internal parts during CIP process.
- Reduced top-entry maintenance with easy access and no need to remove the valve from the system.
- Standard production: Clamp or welded ends. Available on request with threaded ends to DIN, SMS, RJT and ISS standards or flanged ends to UNI, DIN, ANSI standards.
- Standard finish: 150 grain external polishing and internal glazing (LS finish); on request 240 grain external and internal polishing (LL finish), 400 grain electrolytic polishing (LE finish).
- Maximum operating pressure: 7 bars.

## VANNES À MEMBRANE

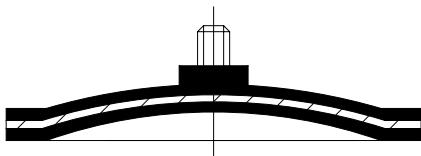
- Réalisées en respectant scrupuleusement les critères et les tests imposés par les normes 3-A.
- Corps en acier inoxydable AISI 316L réalisé par moulage à chaud, solubilisé, usiné mécaniquement et poli.
- Commandes manuelles et pneumatiques en acier inoxydable AISI 316L pour les stérilisations aux hautes températures.
- Membranes en EPDM ou PTFE. Membranes en EPDM et supports élastiques pour les membranes en PTFE toileées pour conférer une meilleure résistance mécanique.
- Etanchéité parfaite et isolation complète contre les facteurs polluants extérieurs.
- Autodrainage complet de toutes les parties internes durant les opérations de lavage CIP.
- Opérations d'entretien réduites "top entry", facilité d'accès et aucune nécessité de démonter la vanne de l'installation.
- Production standard: bouts Clamp ou bouts à souder. Sur demande, disponibles avec bouts filetés conformes aux normes DIN, SMS, RJT, ISS ou bouts bridés UNI, DIN, ANSI.
- Finissage standard: polissage extérieur et satinage intérieur grain 150 (finissage LS); sur demande, polissage extérieur et intérieur grain 240 (finissage LL), polissage électrolytique grain 400 (finissage LE).
- Pression d'exploitation maximum: 7 bars.



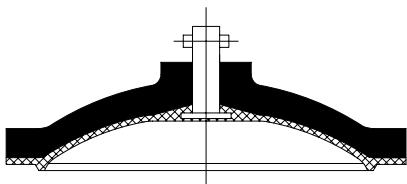
## VÁLVULAS DE MEMBRANA

- Realizadas respectando rigurosamente los criterios y los test establecidos por las normas 3-A.
- Cuerpo de acero inoxidable AISI 316L realizado mediante estampado en caliente, solubilizado, trabajado mecánicamente y pulido.
- Mandos manuales y neumáticos de acero inoxidable AISI 316L para esterilizaciones a elevadas temperaturas.
- Membranas de EPDM o PTFE. Membranas de EPDM y soportes elásticos para las membranas de PTFE entrelados para otorgar mayor resistencia mecánica.
- Cierre perfecto y aislamiento completo de factores contaminantes exteriores.
- Autodrenaje completo de todas las piezas interiores durante el proceso de lavado CIP.
- Mantenimientos reducidos "top entry" con facilidad de acceso y sin necesidad de desmontar la válvula del sistema.
- Producción estándar: extremos Clamp o extremos para soldar. A pedido, disponibles con extremos fileteados según normas DIN, SMS, RJT, ISS o extremos rebordeados UNI, DIN, ANSI.
- Acabado estándar: pulido exterior y satinado interior grano 150 (acabado LS); a pedido, pulido exterior e interior grano 240 (acabado LL), pulido electrolítico grano 400 (acabado LE).
- Máxima presión de ejercicio: 7 bares.

MEMBRANE  
DIAPHRAGMS  
MEMBRANES  
MEMBRANAS



■ EPDM  
-40°C + 150°C  
-40°F + 300°F

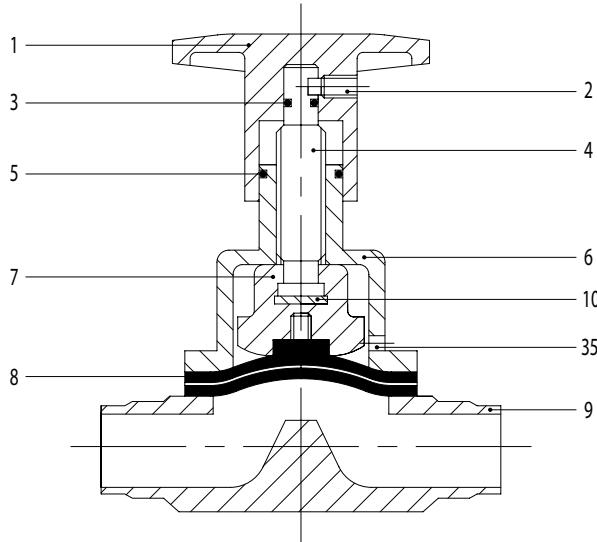


■ PTFE  
-10°C + 150°C  
+15°F + 300°F



VALVOLA A MEMBRANA  
DIAPHRAGM VALVE

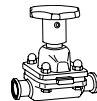
VANNE À MEMBRANE  
VÁLVULA DE MEMBRANA



- |  |  |
|--|--|
| 1. Volantino<br>Handwheel<br>Volant<br>Manivela  | 6. Comando<br>Control<br>Commande<br>Mando                       |
| 2. Grano<br>Dowel<br>Cheville<br>Pasador   | 7. Compressore<br>Compressor<br>Compresseur<br>Compressor        |
| 3. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                      | 8. Membrana<br>Diaphragm<br>Membrane<br>Membrana                 |
| 4. Stelo<br>Spindle<br>Came<br>Varilla   | 9. Corpo valvola<br>Valve casing<br>Corps vanne<br>Cuerpo        |
| 5. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                      | 10. Reggispinta<br>Thrust bearing<br>Butée<br>Cojinete de empuje |
| 35. Foro rilevaz. perdite<br>Leakage detection hole<br>Trous relèvement pertes<br>Orificio desc. pérdida |  |

CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1/2"	3/4"	1"	1 1/2"	2"	Mat.	Part. o agg.
1	57		12/19	12/19	25	38	51	6L	01
2	GRA		M6	M6	M6	M8	M8	4L	
3	OR		2018	2018	106	114	114	N	
4	57		12/19	12/19	25	38	51	6L	04
5	OR		3056	3056	3068	3100	3100	N	
6	57		12	19	25	38	51	6L	06
7	57	E	12	19	25	38	51	6L	07
7	57	T	12	19	25	38	51	6L	07
8	57		12	19	25	38	51	E/T	08
9	57	W	12,7	19,05	25,4	38,1	50,8	6L	09
9	57	W	21,3	26,9	33,7	48,3	60,3	6L	09
9	57	L	12	18/22	28	40	52	6L	09
9	57	D	10	15/20	25	40	50	6L	09
9	57	K	12	19	25	38	51	6L	09
10	57	E	12/19	12/19	25	38/51	38/51	OT	10
10	57	T	12/19	12/19	25	38/51	38/51	OT	10



VALVOLA A MEMBRANA PNEUMATICA

NORMALMENTE APERTA

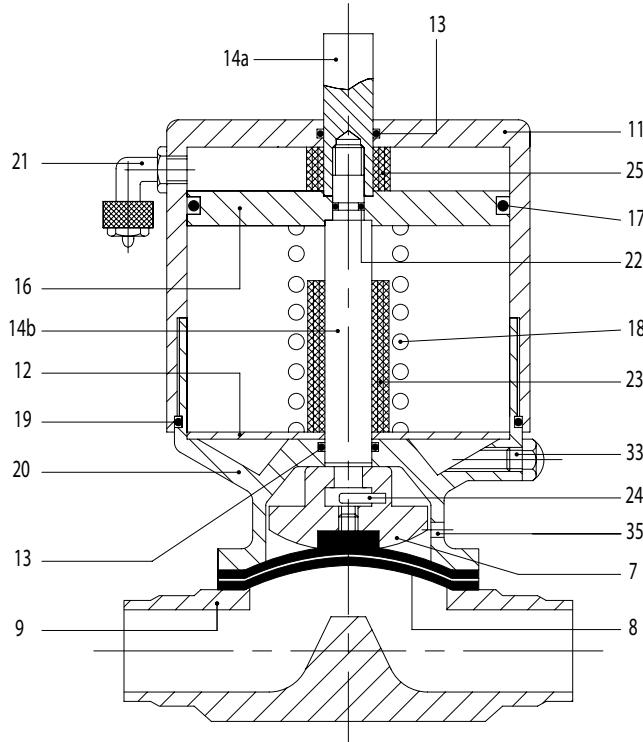
NORMALLY OPEN PNEUMATIC DIAPHRAGM VALVE

VANNE À MEMBRANE PNEUMATIQUE

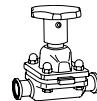
NORMALEMENT OUVERTE

VÁLVULA NEUMÁTICA DE MEMBRANA

NORMALMENTE ABIERTA



- |   |  |
|---|--|
| 7. Compressore<br>Compressor<br>Compresseur<br>Compresor                        | 18. Molla<br>Spring<br>Ressort<br>Muelle   |
| 8. Membrana<br>Diaphragm<br>Membrane<br>Membrana                                | 19. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                     |
| 9. Corpo valvola<br>Valve body<br>Corps vanne<br>Cuerpo                         | 20. Cilindro<br>Cylinder<br>Cylindre<br>Cilindro   |
| 11. Cappellotto cilindro<br>Cylinder cap<br>Capot cylindre<br>Capuchón cilindro | 21. Raccordo aria<br>Air union<br>Raccord air<br>Conexión para aire                                      |
| 12. Disco<br>Disc<br>Disque<br>Disco  | 22. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                     |
| 13. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR            | 23. Distanziale<br>Spacer<br>Entretoise<br>Distanciador  |
| 14a. Stelo superiore<br>Upper stem<br>Tige supérieure<br>Varilla superior       | 24. Spina<br>Plug<br>Broche<br>Enchufe   |
| 14b. Stelo inferiore<br>Lower stem<br>Tige inférieure<br>Varilla inferior       | 25. Distanziale superiore<br>Upper spacer<br>Entretoise supérieure<br>Distanciador superior              |
| 15. Pistone<br>Piston<br>Piston<br>Pistón                                       | 33. Uscita aria<br>Air vent<br>Décharge air<br>Descarga de aire  |
| 16. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR            | 35. Foro rilevaz. perdite<br>Leakage detection hole<br>Trous relèvement pertes<br>Orificio desc. pérdida |



**VALVOLA A MEMBRANA PNEUMATICA**

**NORMALMENTE CHIUSA**

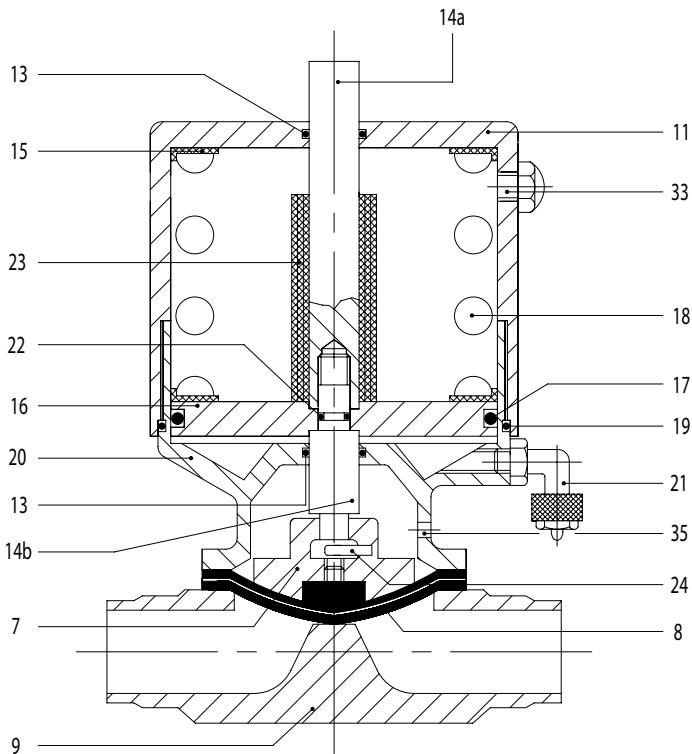
**NORMALLY CLOSED PNEUMATIC DIAPHRAGM VALVE**

**VANNE À MEMBRANE PNEUMATIQUE**

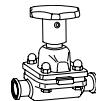
**NORMALEMENT FERMÉE**

**VÁLVULA NEUMÁTICA DE MEMBRANA**

**NORMALMENTE CERRADA**



- |  |  |
|--|--|
| 7. Compressore<br>Compressor<br>Compresseur<br>Compresor   | 17. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                     |
| 8. Membrana<br>Diaphragm<br>Membrane<br>Membrana   | 18. Molla<br>Spring<br>Ressort<br>Muelle   |
| 9. Corpo valvola<br>Valve body<br>Corps vanne<br>Cuerpo  | 19. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                     |
| 11. Cappellotto cilindro<br>Cylinder cap<br>Capot cylindre<br>Capuchón cilindro                          | 20. Cilindro<br>Cylinder<br>Cylindre<br>Cilindro   |
| 13. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                     | 21. Raccordo aria<br>Air union<br>Raccord air<br>Racor del aire  |
| 14a. Stelo superiore<br>Upper stem<br>Tige supérieure<br>Varilla superior                                | 22. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                     |
| 14b. Stelo inferiore<br>Lower stem<br>Tige inférieure<br>Varilla inferior                                | 23. Distanziale<br>Spacer<br>Entretoise<br>Distanciator  |
| 15. Guida molla<br>Spring holder<br>Guide ressort<br>Guía muelle   | 24. Spina<br>Plug<br>Broche<br>Enchufe   |
| 16. Pistone<br>Piston<br>Piston<br>Pistón  | 33. Uscita aria<br>Air vent<br>Décharge air<br>Descarga de aire  |
| 33. Foro rilevaz. perdite<br>Leakage detection hole<br>Trous relèvement pertes<br>Orificio desc. pérdida | 35. Foro rilevaz. perdite<br>Leakage detection hole<br>Trous relèvement pertes<br>Orificio desc. pérdida |



**VALVOLA A MEMBRANA PNEUMATICA**

NORMALMENTE APERTA CON UNITÀ DI CONTROLLO

**NORMALLY OPEN PNEUMATIC DIAPHRAGM**

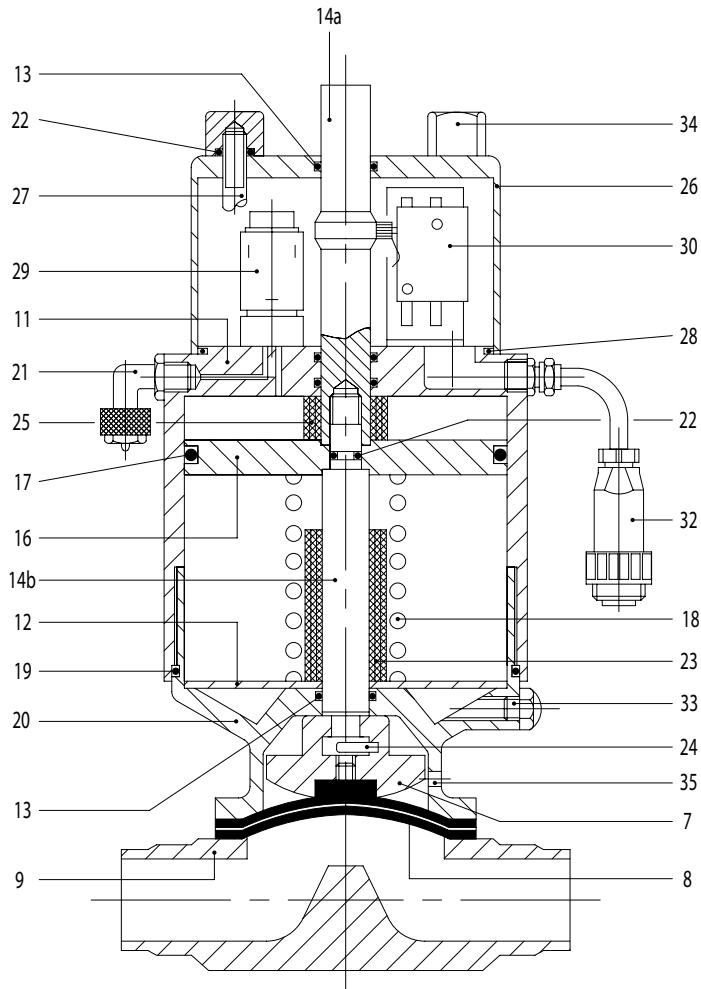
VALVE WITH CONTROL UNIT

**VANNE À MEMBRANE PNEUMATIQUE**

NORMALEMENT OUVERTE AVEC UNITÉ DE CONTRÔLE

**VÁLVULA NEUMÁTICA DE MEMBRANA**

NORMALMENTE ABIERTA CON UNIDAD DE CONTROL



7. Compressore	21. Raccordo aria
Compressor	Air union
Compresseur	Raccord air
Compresor	Racor del aire
8. Membrana	22. Anello di tenuta OR
Diaphragm	OR seal ring
Membrane	Joint torique
Membrana	Junta OR
9. Corpo valvola	23. Distanziale
Valve body	Spacer
Corps vanne	Entretoise
Cuerpo	Distanciador
11. Cappellotto cilindro	24. Spina
Cylinder cap	Plug
Capot cylindre	Broche
Capuchón cilindro	Enchufe
12. Disco	25. Distanziale superiore
Disc	Upper spacer
Disque	Entretoise supérieure
Disco	Distanciador
13. Anello di tenuta OR	26. Cappellotto unità contr.
OR seal ring	Control unit cap
Joint torique	Capot unité contrôle
Junta OR	Capuc. unidad control
14a. Stelo superiore	27. Tirante
Upper stem	Tie rod
Tige supérieure	Tirant
Varilla superior	Tirante
14b. Stelo inferiore	28. Anello di tenuta OR
Lower stem	OR seal ring
Tige inférieure	Joint torique
Varilla inferior	Junta OR
16. Pistone	29. Elettrovalvola
Piston	Solenoid valve
Piston	Électrovanne
Pistón	Electroválvula
17. Anello di tenuta OR	30. Microinterruttore
OR seal ring	Microswitch
Joint torique	Minirupteur
Junta OR	Microrruptor
18. Molla	32. Connettore
Spring	Connector
Ressort	Connecteur
Muelle	Conector
19. Anello di tenuta OR	33. Uscita aria
OR seal ring	Air vent
Joint torique	Décharge air
Junta OR	Descarga de aire
20. Cilindro	34. Dado
Cylinder	Nut
Cylindre	Écrou
Cilindro	Tuerca
35. Foro rilevaz. perdite	35. Leakage detection hole
	Trous relèvement pertes
	Orificio desc. pérdida



**VALVOLA A MEMBRANA PNEUMATICA**

NORMALMENTE CHIUSA CON UNITÀ DI CONTROLLO

**NORMALLY CLOSED PNEUMATIC DIAPHRAGM**

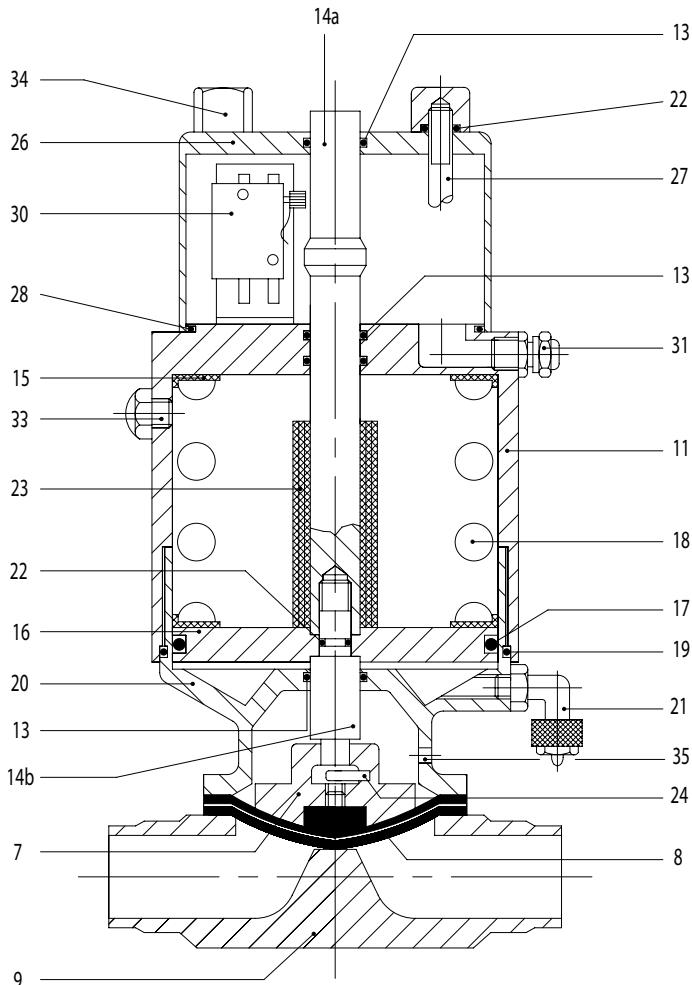
VALVE WITH CONTROL UNIT

**VANNE À MEMBRANE PNEUMATIQUE**

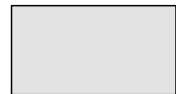
NORMALEMENT FERMÉE AVEC UNITÉ DE CONTRÔLE

**VÁLVULA NEUMÁTICA DE MEMBRANA**

NORMALMENTE CERRADA CON UNIDAD DE CONTROL



7.	Compressore Compressor Comresseur Compresor	20.	Cilindro Cylinder Cylindre Cilindro
8.	Membrana Diaphragm Membrane Membrana	21.	Raccordo aria Air union Raccord air Racor del aire
9.	Corpo valvola Valve body Corps vanne Cuerpo	22.	Anello di tenuta OR OR seal ring Joint torique Junta OR
11.	Cappellotto cilindro Cylinder cap Capot cylindre Capuchón cilindro	23.	Distanziale Spacer Entretroise Distanciador
13.	Anello di tenuta OR OR seal ring Joint torique Junta OR	24.	Spina Plug Broche Enchufe
14a.	Stelo superiore Upper stem Tige supérieure Varilla superior	26.	Cappellotto unità contr. Control unit cap Capot unité contrôle Capuc. unidad control
14b.	Stelo inferiore Lower stem Tige inférieure Varilla inferior	27.	Tirante Tie rod Tirant Tirante
15.	Guida molla Spring holder Guide ressort Guía muelle	28.	Anello di tenuta OR OR seal ring Joint torique Junta OR
16.	Pistone Piston Piston Pistón	30.	Microinterruttore Microswitch Minirupteur Microrruptor
17.	Anello di tenuta OR OR seal ring Joint torique Junta OR	31.	Pressacavo Cable-grommet Presse-câble Sujetacables
18.	Molla Spring Ressort Muelle	33.	Uscita aria Air vent Décharge air Descarga de aire
19.	Anello di tenuta OR OR seal ring Joint torique Junta OR	34.	Dado Nut Écrou Tuerca
21.		35.	Foro rilevaz. perdite Leakage detection hole Trous relèvement pertes Orificio desc. pérdida



CODIFICAZIONE  
CODING  
CODIFICATION  
CODIFICACIÓN

Pos.	Cod. base	Norme	1/2"	3/4"	1"	1 1/2"	2"	Mat.	Part. o agg.
7	57	E	12	19	25	38	51	6L	07
7	57	T	12	19	25	38	51	6L	07
8	57		12	19	25	38	51	E	08
8	57		12	19	25	38	51	T	08
9	57	W	12,7	19,05	25,4	38,1	50,8	6L	09
9	57	K	12	19	25	38	51	6L	09
11	58		12	19/25	19/25	38/51	38/51	4L	11
12	58	NA	12	19/25	19/25	38/51	38/51	4L	12
13	OR		3056	123	123	123	123	N	
14a	58	NA	12	19	25	38	51	6L	14a
14b	58	NA	12	19/25	19/25	38/51	38/51	6L	14b
14a	58	NC	12	19	25	38	51	6L	14a
14b	58	NC	12	19/25	19/25	38/51	38/51	6L	14b
15	58		12	12	12	12	12	T	15
16	58		12	19/25	19/25	38/51	38/51	AL	16
17	OR		6150	6275	6275	6400	6400	N	
18	58		NA 12	12	12	NA 38/51	NA 38/51	4L	18
19	OR		3206	3325	3325	3450	3450	N	
20	58		12	19	25	38	51	6L	20
21	58		1/8"	1/8"	1/8"	1/8"	1/8"	4L	
22	OR		106	108	108	108	108	N	
23	58	NA	12	19	25	38	51	T	23
23	58	NC	12	19	25	38	51	T	23
24	58		3x15	3x15	3x15	3x15	3x15	6L	24
25	58	NA	12	19	25	38	51	T	25
26	60		12	19/25	19/25	38/51	38/51	4L	26
27	60		12/51	12/51	12/51	12/51	12/51	4L	27
28	OR		2262	2300	2300	2375	2375	N	
29	015		U	U	U	U	U		
30	014		1	1	1	1	1		
31	026		12/51	12/51	12/51	12/51	12/51	4L	31
32	030 S		S	S	S	S	S		
33	58		1/8"	1/8"	1/8"	1/8"	1/8"	4L	33
34	60		12/51	12/51	12/51	12/51	12/51	4L	34



CONNESSIONI  
ENDS  
BOUTS  
EXTREMOS

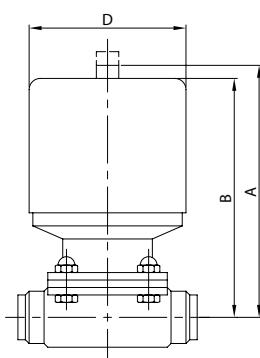
DN	BS				SCHEDULE			ISO		DIN					
	D.E.	+16	18	Sp.	5S	10S	40S	D.E.	Sp.	Serie 1		Serie 2		Serie 3	
		swg	swg							D.E.	Sp.	D.E.	Sp.	D.E.	Sp.
15	12,70	1,63	1,22	21,34	1,65	2,11	2,77	21,3	1,6	18	1	19	1,5	20	2
20	19,05	1,63	1,22	26,67	1,65	2,11	2,87	26,9	1,6	22	1	23	1,5	24	2
25	25,40	1,63	1,22	33,40	1,65	2,77	3,38	33,7	2,0	28	1	29	1,5	30	2
40	38,10	1,63	1,22	48,26	1,65	2,77	3,68	48,3	2,0	40	1	41	1,5	42	2
50	50,80	1,63	1,22	60,33	1,65	2,77	3,91	60,3	2,6	52	1	53	1,5	54	2

#### VALORI CV E KV

CV AND KV VALUES  
VALEURS CV ET KV  
VALORES CV Y KV

%	DN 15 1/2"		DN 20 3/4"		DN 25 1"		DN 40 1 1/2"		DN 50 2"	
APERTURA OPENING OUVERTURE APERTURA	CV (US gal/min)	KV (l/s)								
100	6,7	1,6	13,3	3,16	20	4,76	50	12	101	24,04
90	6,4	1,5	12,8	3,04	19,2	4,57	48	11,4	97	23,1
80	6,11	1,45	12,3	2,9	18,4	4,37	46	11	92,9	22,1
70	5,85	1,4	11,7	2,8	17,6	4,2	44	10,5	88,9	21,15
60	5,58	1,32	11,2	2,65	16,8	4	42	10	84,83	20,2
50	4,65	1,1	9,3	2,2	14	3,33	35	8,4	70,7	16,83
40	3,7	0,9	7,45	1,76	11,2	2,66	28	6,7	56,5	13,46
30	2,8	0,65	5,6	1,3	8,4	2	21	5	42,4	10,1
20	1,85	0,43	3,7	0,9	5,6	1,33	14	3,8	28,27	6,73
10	0,92	0,21	1,85	0,43	2,8	0,66	7	1,66	14,13	3,36
0	0	0	0	0	0	0	0	0	0	0

DIMENSIONI, VOLUMI E TEMPI DI MANOVRA  
DIMENSIONS, AIR VOLUMES AND OPERATING TIMES  
DIMENSIONS, VOLUMES ET TEMPS DE MANOEUVRE  
DIMENSIONES, VOLUMENES Y TIEMPOS DE MANIOBRA

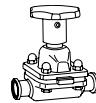


Diam. valvola Valve diam. Diam. vanne Diam. válvula	A	B	D	Vol. Aria chiude Air closes Air ferme Aire cierra	Vol. Aria apre Air opens Air ouvre Aire abre	Tempi Time Temps Tiempos
mm	mm	mm	mm	cm³	cm³	s
15	118	111	60	50	20	1
20	127	120	89	230	65	1
25	132	124	89	230	65	1
40	196	186	129	1000	250	2
50	210	200	129	1000	350	2

Diam. valvola Valve diam. Diam. vanne Diam. válvula	A	B	D	Vol. Aria chiude Air closes Air ferme Aire cierra	Vol. Aria apre Air opens Air ouvre Aire abre	Tempi Time Temps Tiempos
in	in	in	in	in³	in³	s
1/2"	4 5/8"	4 3/8"	2 3/8"	3	1	1
3/4"	5"	4 5/8"	3 1/2"	13	4	1
1"	5 1/4"	4 7/8"	3 1/2"	13	4	1
1 1/2"	7 5/8"	7 3/8"	5 1/8"	60,5	15	2
2"	8 1/4"	7 7/8"	5 1/8"	61	20	2



VALVOLE A MEMBRANA  
DIAPHRAGM VALVES  
VANNES À MEMBRANE  
VÁLVULAS DE MEMBRANA



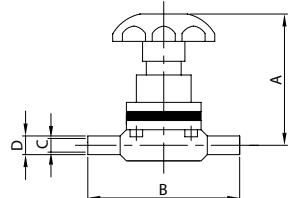
MICROVALVOLA M. EL.  
D. MICROVALVE PE.  
MINIVANNE MEMBR. EL.  
MICROVALVULA M. EL.

MICROVALVOLA M. E. SM.  
D. MICROVALVE E. FR.  
MINIVANNE MEMBR. B. FR.  
MICROVALVULA M. E. SM.

V. MEMBRANA EL.  
DIAPHRAGM V. PE.  
V. MEMBRANA BL.  
V. MEMBRANA EL.

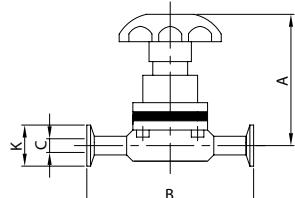
V. MEMBRANA E. SM.  
DIAPHRAGM V. E. FR.  
V. MEMBRANA B. FR.  
V. MEMBRANA E. SM.

**S57W**



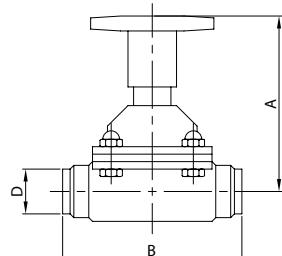
DN	A	B	C	D	gr
6	66,5	67,0	3,9	6,3	190
9	66,5	67,0	7,1	9,5	190
12	66,5	67,0	9,4	12,7	190

**S57K**



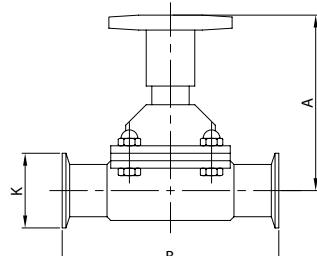
DN	A	B	C	K	gr
12	66,5	67,0	9,4	25,0	200

**57W**



DN	A	B	D	gr
12	78,0	89,0	12,7	840
19	79,0	102,0	19,0	1.200
25	92,0	114,0	25,4	1.680
38	112,0	140,0	38,1	3.140
51	135,0	159,0	50,8	5.040

**57K**



DN	A	B	K	gr
12	78,0	89,0	25,0	840
19	79,0	102,0	25,0	1.200
25	92,0	114,0	50,5	1.680
38	112,0	140,0	50,5	3.140
51	135,0	159,0	64,0	5.040

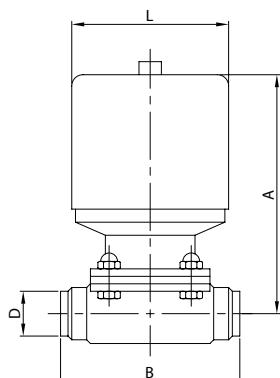
V. M. PNEUMATICA EL.  
PNEUMATIC D. V. PE.  
V. M. PNEUMATIQUE BL.  
V. M. NEUMÁTICA EL.

V. M. PNEUMATICA E. SM.  
PNEUMATIC D. V. E. FR.  
V. M. PNEUMATIQUE B. FR.  
V. M. NEUMÁTICA E. SM.

V. M. UN. CONTROLLO EL.  
D. V. CONTROL UNIT PE.  
V. M. UN. CONTRÔLE BL.  
V. M. UN. CONTROL EL.

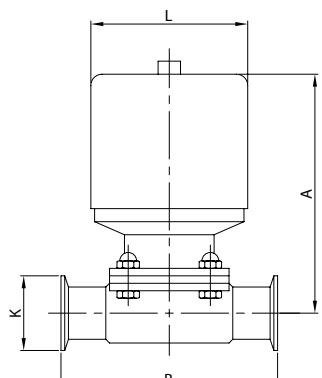
V. M. UN. CONTROLLO E. SM.  
D. V. CONTROL UNIT E. FR.  
V. M. UN. CONTRÔLE B. FR.  
V. M. UN. CONTROL E. SM.

**58W**



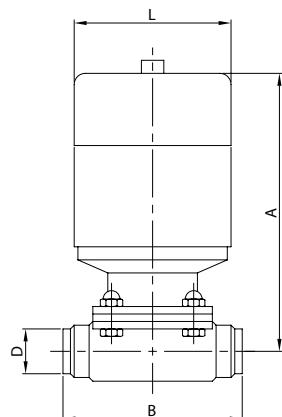
DN	A	B	D	L	gr
12	107,0	89,0	12,7	60,0	1.360
19	120,0	102,0	19,0	90,0	2.460
25	124,0	114,0	25,4	90,0	2.780
38	186,0	140,0	38,1	127,0	6.880
51	200,0	159,0	50,8	127,0	8.160

**58K**



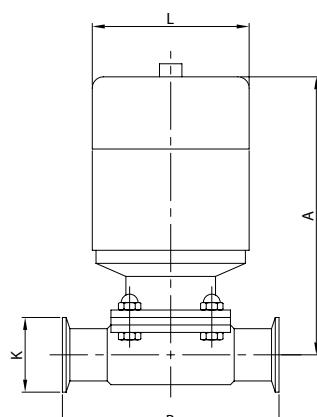
DN	A	B	K	L	gr
12	107,0	89,0	25,0	60,0	1.360
19	120,0	102,0	25,0	90,0	2.460
25	124,0	114,0	50,5	90,0	2.780
38	186,0	140,0	50,5	127,0	6.880
51	200,0	159,0	64,0	127,0	8.160

**60W**



DN	A	B	D	L	gr
12	183,0	89,0	12,7	60,0	1.660
19	197,0	102,0	19,0	90,0	3.010
25	201,0	114,0	25,4	90,0	3.330
38	263,0	140,0	38,1	127,0	7.880
51	277,0	159,0	50,8	127,0	9.160

**60K**



DN	A	B	K	L	gr
12	183,0	89,0	25,0	60,0	1.660
19	197,0	102,0	25,0	90,0	3.010
25	201,0	114,0	50,5	90,0	3.330
38	263,0	140,0	50,5	127,0	7.880
51	277,0	159,0	64,0	127,0	9.160



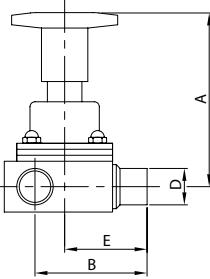
V. MEMBRANA 3 V. T EL.  
DIAPHRAGM V. 3 W. T PE.  
V. MEMBRANE 3 V. T BL.  
V. MEMBRANA 3 V. T EL.

V. MEMBR. 3 V. T E. SM.  
DIAPHR. V. 3 W. T FR.  
V. MEMBR. 3 V. T B. FR.  
V. MEMBR. 3 V. T E. SM.

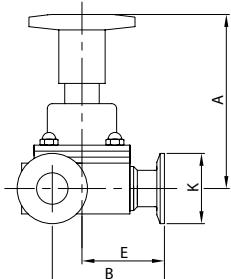
V. M. PNEUM. 3 V. T EL.  
PNEUM. D. V. 3 W. T PE.  
V. M. PNEUM. 3 V. T BL.  
V. M. NEUM. 3 V. T EL.

V. M. PN. 3 V. T E. SM.  
PN. D. V. 3 W. T E. FR.  
V. M. PN. 3 V. T B. FR.  
V. M. NEUM. 3 V. T E. SM.

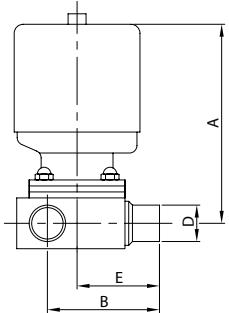
## ZDT 57W



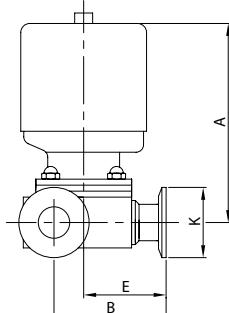
## ZDT 57K



## ZDT 58W



## ZDT 58K



DN	A	B	D	E	gr
12	97,5	56,5	12,7	44,5	840
19	99,0	66,5	19,0	51,0	1.200
25	120,0	80,0	25,4	57,0	1.680
38	156,0	101,5	38,1	70,0	3.140
51	182,0	118,5	50,8	79,5	5.040

DN	A	B	E	K	gr
12	97,5	56,5	44,5	25,0	840
19	99,0	66,5	51,0	25,0	1.200
25	120,0	80,0	57,0	50,5	1.680
38	156,0	101,5	70,0	50,5	3.140
51	182,0	118,5	79,5	64,0	5.040

DN	A	B	D	E	gr
12	111,0	56,5	12,7	44,5	1.360
19	123,0	66,5	19,0	51,0	2.460
25	129,0	80,0	25,4	57,0	2.780
38	189,0	101,5	38,1	70,0	6.880
51	201,0	118,5	50,8	79,5	8.160

DN	A	B	E	K	gr
12	111,0	56,5	44,5	25,0	1.360
19	123,0	66,5	51,0	25,0	2.460
25	129,0	80,0	57,0	50,5	2.780
38	189,0	101,5	70,0	50,5	6.880
51	201,0	118,5	79,5	64,0	8.160

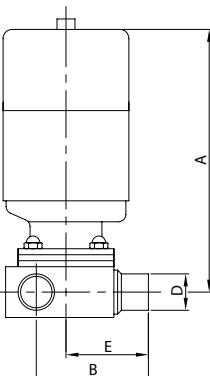
V. M. UN. C. 3 V. T EL.  
D. V. C. UNIT 3 W. T PE.  
V. M. UN. CONTR. 3 V. T BL.  
V. M. UN. CONTR. 3 V. T EL.

V. M. UN. C. 3 V T E. SM.  
D. V. C. UN. 3 W. T E. FR.  
V. M. UN. C. 3 V. T B. FR.  
V. M. UN. C. 3 V. T E. SM.

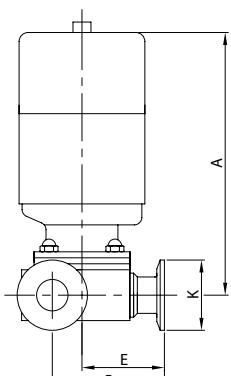
V. M. PRELIEVO EL.  
SAMPLING D. V. PE.  
V. M. PRISE ECHANT. EL.  
V. M. TOMAMUESTRAS EL.

V. M. PRELIEVO E. SM.  
SAMPLING D. V. E. FR.  
V. M. PRISE ECHANT. B. FR.  
V. M. TOMAM. E. SM.

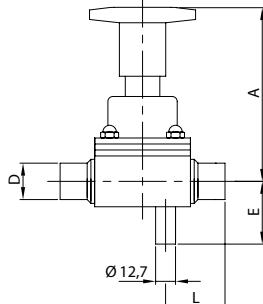
## ZDT 60W



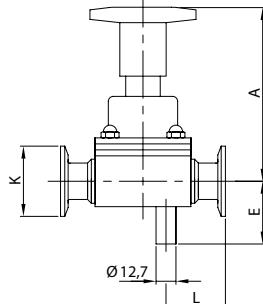
## ZDT 60K



## ZDL 57W



## ZDL 57K



DN	A	B	D	E	gr
12	187,0	56,5	12,7	44,5	1.660
19	200,0	66,5	19,0	51,0	3.010
25	206,0	80,0	25,4	57,0	3.330
38	266,0	101,5	38,1	70,0	7.880
51	278,0	118,5	50,8	79,5	9.160

DN	A	B	E	K	gr
12	187,0	56,5	44,5	25,0	1.660
19	200,0	66,5	51,0	25,0	3.010
25	206,0	80,0	57,0	50,5	3.330
38	266,0	101,5	70,0	50,5	7.880
51	278,0	118,5	79,5	64,0	9.160

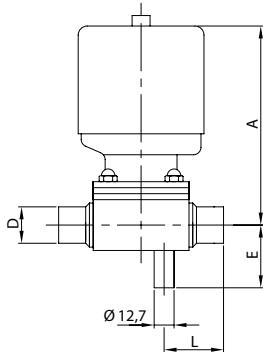
DN	A	D	E	L	gr
12	94,5	12,7	34,5	27,0	840
19	96,0	19,0	39,0	32,0	1.200
25	116,0	25,4	42,0	37,0	1.680
38	155,0	38,1	59,0	42,0	3.140
51	182,0	50,8	66,0	46,0	5.040

DN	A	E	K	L	gr
12	94,5	34,5	25,0	27,0	840
19	96,0	39,0	25,0	32,0	1.200
25	116,0	42,0	50,5	37,0	1.680
38	155,0	59,0	50,5	42,0	3.140
51	182,0	66,0	64,0	46,0	5.040



V. M. PNEUM. PRELIEVO EL.  
SAMPLING PN. D. V. PE.  
V. M. PN. PRISE ECH. EL.  
V. M. NEUM. TOMAM. EL.

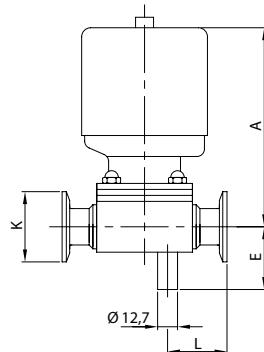
### ZDL 58W



DN	A	D	E	L	gr
12	107,0	12,7	34,5	27,0	1.360
19	120,0	19,0	39,0	32,0	2.460
25	124,0	25,4	42,0	37,0	2.780
38	186,0	38,1	59,0	42,0	6.880
51	200,0	50,8	66,0	46,0	8.160

V. M. PNEUM. PREL. E. SM.  
SAMPL. PN. D. V. E. FR.  
V. M. PN. PRISE ECH. B. FR.  
V. M. NEUM. TOMAM. E. SM.

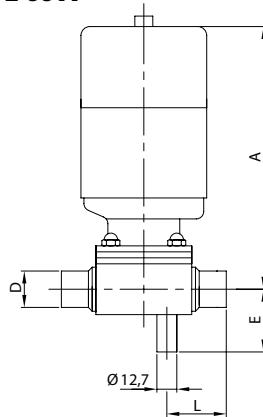
### ZDL 58K



DN	A	E	K	L	gr
12	107,0	34,5	25,0	27,0	1.360
19	120,0	39,0	25,0	32,0	2.460
25	124,0	42,0	50,5	37,0	2.780
38	186,0	59,0	50,5	42,0	6.880
51	200,0	66,0	64,0	46,0	8.160

V. M. PNEUM. PREL. E. SM.  
SAMPL. PN. D. V. E. FR.  
V. M. PN. PRISE ECH. B. FR.  
V. M. NEUM. TOMAM. E. SM.

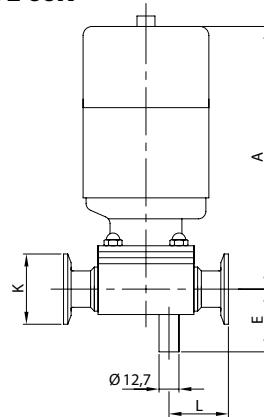
### ZDL 60W



DN	A	D	E	L	gr
12	183,0	12,7	34,5	27,0	1.660
19	197,0	19,0	39,0	32,0	3.010
25	201,0	25,4	42,0	37,0	3.330
38	263,0	38,1	59,0	42,0	7.880
51	277,0	50,8	66,0	46,0	9.160

V. M. U. C. PREL. E. SM.  
SAMPL. D. V. C. UN. E. FR.  
V. M. U. C. PRISE ECH. B. FR.  
V. M. U. C. TOMAM. E. SM.

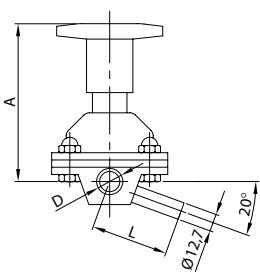
### ZDL 60K



DN	A	E	K	L	gr
12	183,0	34,5	25,0	27,0	1.660
19	197,0	39,0	25,0	32,0	3.010
25	201,0	42,0	50,5	37,0	3.330
38	263,0	59,0	50,5	42,0	7.880
51	277,0	66,0	64,0	46,0	9.160

V. M. PRELIEVO 20° EL.  
20° SAMPLING D. V. PE.  
V. M. PRISE ECH. 20° EL.  
V. M. TOMAM. 20° EL.

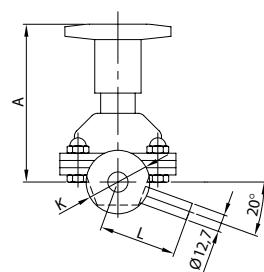
### D2L 57W



DN	A	D	L	gr
12	94,5	12,7	46,0	840
19	96,0	19,0	50,0	1.200
25	116,0	25,4	55,0	1.680
38	155,0	38,1	71,0	3.140
51	182,0	50,8	84,0	5.040

V. M. PRELIEVO 20° E. SM.  
20° SAMPLING D. V. E. FR.  
V. M. PRISE ECH. 20° B. FR.  
V. M. TOMAM. 20° E. SM.

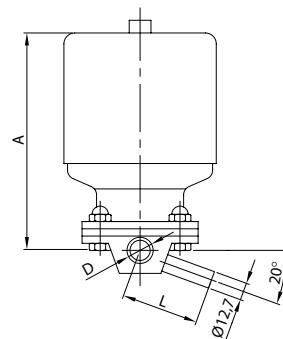
### D2L 57K



DN	A	K	L	gr
12	94,5	25,0	46,0	840
19	96,0	25,0	50,0	1.200
25	116,0	50,5	55,0	1.680
38	155,0	50,5	71,0	3.140
51	182,0	64,0	84,0	5.040

V. M. PNEUM. PREL. 20° EL.  
20° SAMPL. PN. D. V. PE.  
V. M. PN. PR. ECH. 20° BL.  
V. M. NEUM. TOMAM. 20° EL.

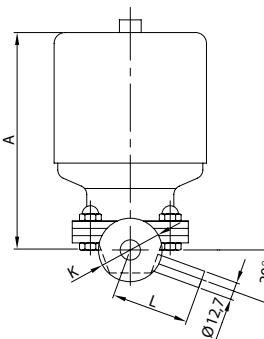
### D2L 58W



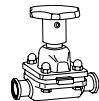
DN	A	D	E	L	gr
12	107,0	12,7	46,0	1.360	1.360
19	120,0	19,0	50,0	2.460	2.460
25	124,0	25,4	55,0	2.780	2.780
38	186,0	38,1	71,0	6.880	6.880
51	200,0	50,8	84,0	8.160	8.160

V. M. PN. PREL. 20° E. SM.  
20° SAMPL. PN. D. V. E. FR.  
V. M. PN. PR. ECH. 20° B. FR.  
V. M. N. TOMAM. 20° E. SM.

### D2L 58K



DN	A	K	L	gr
12	107,0	25,0	46,0	1.360
19	120,0	25,0	50,0	2.460
25	124,0	50,5	55,0	2.780
38	186,0	50,5	71,0	6.880
51	200,0	64,0	84,0	8.160



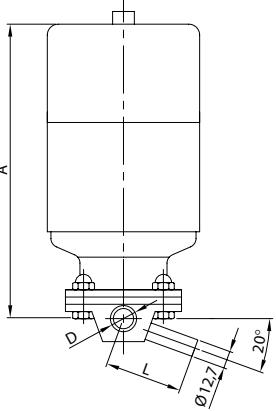
V. M. U. C. PREL. 20° EL.  
20° SAMPL. D. V. C. UN. PE.  
V. M. U. C. PR. ECH. 20° EL.  
V. M. U. C. TOMAM. 20° EL.

V. M. U. C. PREL. 20° E. SM.  
20° SAMPL. D. V. C. UN. E. FR.  
V. M. U. C. PR. ECH. 20° B. FR.  
V. M. U. C. TOMAM. 20° E. SM.

V. M. FONDO SERBATOIO EL.  
TANK BOTTOM D. V. PE.  
V. M. FOND CUVE BL.  
V. M. FONDO TANQUE EL.

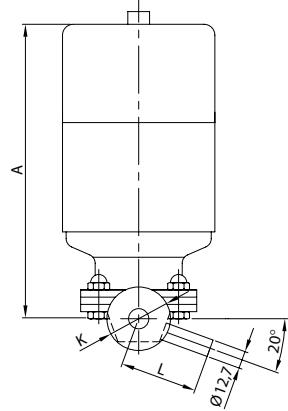
V. M. FONDO SERB. E. SM.  
TANK BOTTOM D. V. E. FR.  
V. M. FOND CUVE B. FR.  
V. M. FONDO TANQUE E. SM.

### D2L 60W



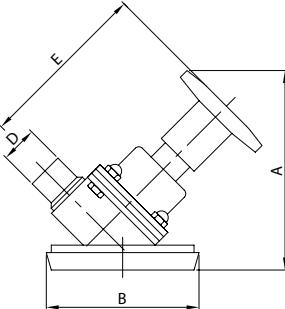
DN	A	D	L	gr
1/2 12	183,0	12,7	46,0	1.660
3/4 19	197,0	19,0	50,0	3.010
1 25	201,0	25,4	55,0	3.330
1 1/2 38	263,0	38,1	71,0	7.880
2 51	277,0	50,8	84,0	9.160

### D2L 60K



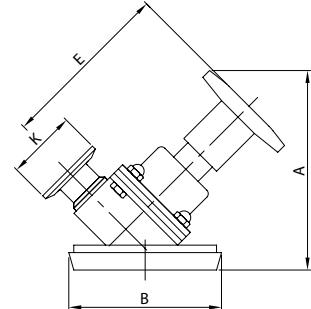
DN	A	K	L	gr
1/2 12	183,0	25,0	46,0	1.660
3/4 19	197,0	25,0	50,0	3.010
1 25	201,0	50,5	55,0	3.330
1 1/2 38	263,0	50,5	71,0	7.880
2 51	277,0	64,0	84,0	9.160

### KTB 57W



DN	A	B	D	E	gr
1/2 12	117,0	68,0	12,7	94,5	1.040
3/4 19	123,0	86,0	19,0	96,0	1.550
1 25	142,0	100,0	25,4	116,0	2.030
1 1/2 38	181,0	121,0	38,1	155,0	4.090
2 51	206,0	150,0	50,8	182,0	7.090

### KTB 57K



DN	A	B	E	K	gr
1/2 12	117,0	68,0	94,5	25,0	1.040
3/4 19	123,0	86,0	96,0	25,0	1.550
1 25	142,0	100,0	116,0	50,5	2.030
1 1/2 38	181,0	121,0	155,0	50,5	4.090
2 51	206,0	150,0	182,0	64,0	7.090

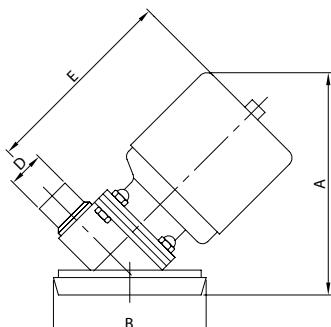
V. M. PNEUM. F. SERB. EL.  
TANK B. PNEUM. D. V. PE.  
V. M. PN. FOND CUVE BL.  
V. M. NEUM. F. TANQUE EL.

V. M. PN. F. SERB. E. SM.  
TANK B. PNEUM. D. V. E. FR.  
V. M. PN. FOND CUVE B. FR.  
V. M. N. F. TANQUE E. SM.

V. M. U. C. F. SERB. EL.  
TANK B. D. V. C. UN. PE.  
V. M. U. C. F. CUVE BL.  
V. M. U. C. F. TANQUE EL.

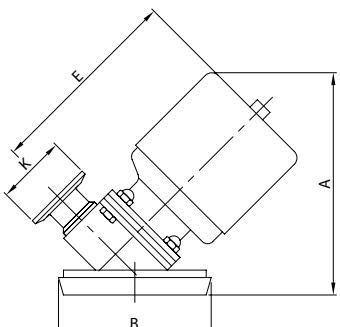
V. M. U. C. F. SERB. E. SM.  
TANK B. D. V. C. UN. E. FR.  
V. M. U. C. F. CUVE B. FR.  
V. M. U. C. F. TANQUE E. SM.

### KTB 58W



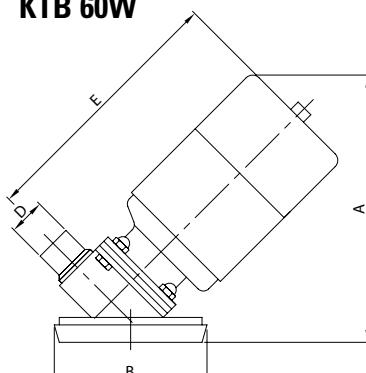
DN	A	B	D	E	gr
1/2 12	125,0	68,0	12,7	107,0	1.560
3/4 19	147,0	86,0	19,0	120,0	2.810
1 25	151,0	100,0	25,4	124,0	3.130
1 1/2 38	209,0	121,0	38,1	186,0	7.830
2 51	226,0	150,0	50,8	200,0	10.210

### KTB 58K



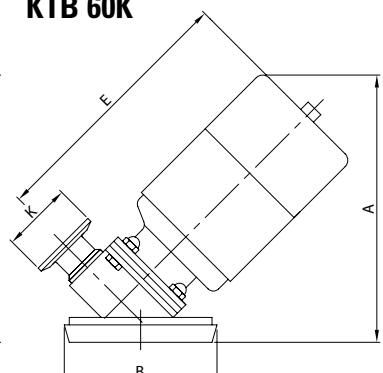
DN	A	B	E	K	gr
1/2 12	125,0	68,0	107,0	25,0	1.560
3/4 19	147,0	86,0	120,0	25,0	2.810
1 25	151,0	100,0	124,0	50,5	3.130
1 1/2 38	209,0	121,0	186,0	50,5	7.830
2 51	226,0	150,0	200,0	64,0	10.210

### KTB 60W

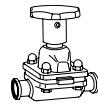


DN	A	B	D	E	gr
1/2 12	180,0	68,0	12,7	183,0	1.860
3/4 19	202,0	86,0	19,0	197,0	3.360
1 25	207,0	100,0	25,4	201,0	3.680
1 1/2 38	264,0	121,0	38,1	263,0	8.830
2 51	282,0	150,0	50,8	277,0	11.210

### KTB 60K

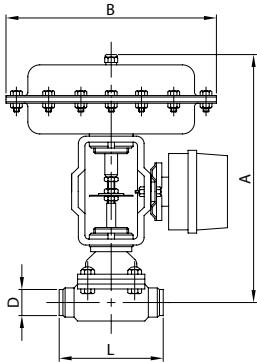


DN	A	B	E	K	gr
1/2 12	180,0	68,0	183,0	25,0	1.860
3/4 19	202,0	86,0	197,0	25,0	3.360
1 25	207,0	100,0	201,0	50,5	3.680
1 1/2 38	264,0	121,0	263,0	50,5	8.830
2 51	282,0	150,0	277,0	64,0	11.210



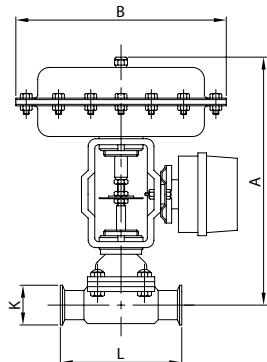
V. M. MODULANTE EL.  
 MODULATING D. V. PE.  
 V. M. MODULANTE BL.  
 V. M. MODULANTE EL.

**59W**



V. M. MODULANTE E. SM.  
 MODULATING D. V. E. FR.  
 V. M. MODULANTE B. FR.  
 V. M. MODULANTE E. SM.

**59K**



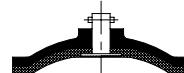
MEMBRANA EPDM  
 EPDM DIAPHRAGM  
 MEMBRANE EPDM  
 MEMBRANA EPDM

**57 E 08**



MEMBRANA PTFE  
 PTFE DIAPHRAGM  
 MEMBRANE PTFE  
 MEMBRANA PTFE

**57 T 08**

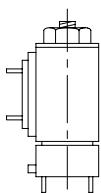


DN	A	B	D	L	gr
1/2 12	305,5	290,0	12,7	89,011,840	
3/4 19	307,0	290,0	19,0	102,012,200	
1 25	311,0	290,0	25,4	114,012,680	
1 1/2 38	330,5	290,0	38,1	140,014,140	
2 51	345,5	290,0	50,8	159,016,040	

DN	A	B	K	L	gr
1/2 12	305,5	290,0	25,0	89,011,840	
3/4 19	307,0	290,0	25,0	102,012,200	
1 25	311,0	290,0	50,5	114,012,680	
1 1/2 38	330,5	290,0	50,5	140,014,140	
2 51	345,5	290,0	64,0	159,016,040	

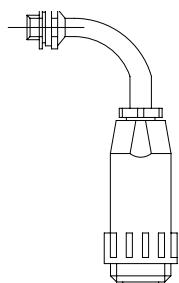
ELETTROVALVOLA NC.  
 SOLENOID VALVE NC.  
 ÉLECTROVANNE NF.  
 ELECTROVÁLVULA NC.

**015 NC**



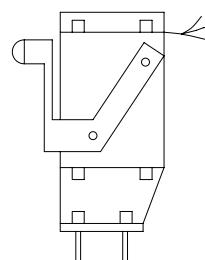
CONNETTORE  
 CONNECTOR  
 CONNECTEUR  
 CONECTOR

**030 S**



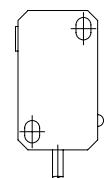
MICROINTERRUTTORE  
 MICROSWITCH  
 MINIRUPTEUR  
 MICRORRUPTOR

**014 1**



CONTATTO DI PROSSIMITÀ  
 PROXIMITY CONTACT  
 CONTACT DE PROXIMITÉ  
 MICROSENSOR

**013 A**  
**013 A/N**  
**013 A/N/EX**







## ACCESSORI

- Realizzati con acciaio di ottima qualità solubilizzato.
- Elevata robustezza.

## ACCESSORIES

- Made of top grade solution heat-treated steel.
- High strength.

## ACCESOIRÉS

- Réalisés avec un acier inoxydable d'excellente qualité solubilisé.
- Haut niveau de robustesse.

## ACCESORIOS

- Realizados en acero de excelente calidad, solubilizado.
- Elevada resistencia.

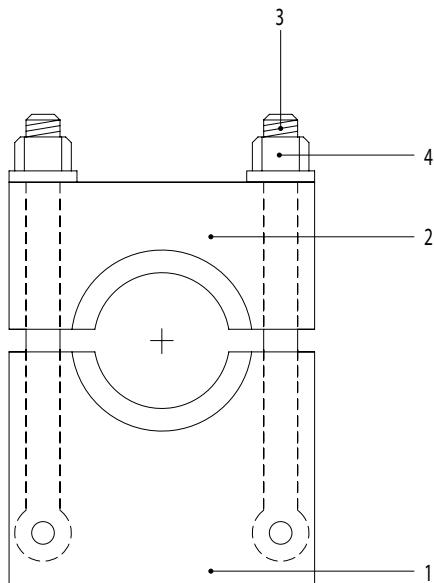


MORSA PER MANDRINARE

CLAMPING BLOCK FOR EXPANDING

MÂCHOIRE À DUDGEONNER

MORDAZA PARA MANDRILAR



1. Basamento  
Bottom block  
Base  
Base

2. Parte mobile  
Upper part  
Partie mobile  
Parte móvil

3. Perno  
Spindle  
Tige filetée  
Perno

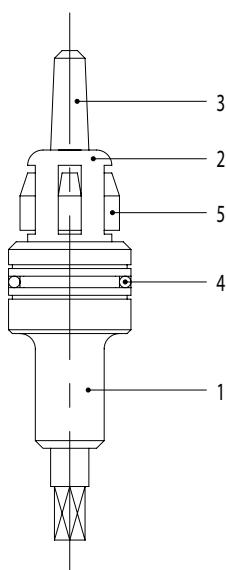
4. Dado  
Nut  
Écrou  
Tuerca

MANDRINO

EXPANDER

DUDGEON

MANDRIL



1. Corpo  
Body  
Corps  
Cuerpo

2. Gabbia per rulli  
Roller cage  
Porte-roulement  
Jaula para rodillos

3. Spina  
Pin  
Tige  
Eje

4. Cuscinetto  
Ball bearing  
Palier  
Cojinete

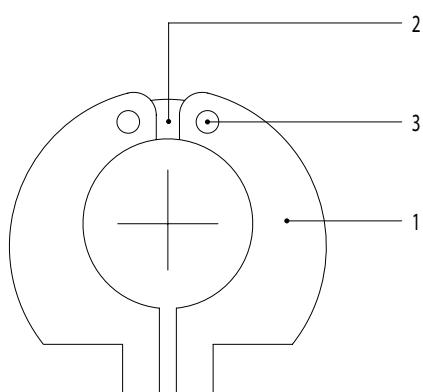
5. Rulli  
Rollers  
Roulements  
Rodillos

STRINGITUBO TAGLIO TUBI

CUTTING WRENCH

MÂCHOIRE COUPE-TUBE

ABRAZADERA PARA CORTAR TUBOS



1. Ganascia  
Clamp jaw  
Mâchoire  
Pinza

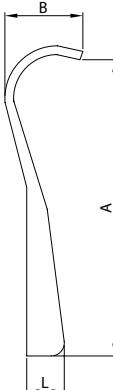
2. Linguetta  
Clamp joint  
Barrette  
Lengüeta

3. Spina  
Pin  
Soupille  
Pasador elástico



**CHIAVE PER RACCORDI**  
SPANNER FOR NUTS  
CLE À RACCORDS  
LLAVE RACOR

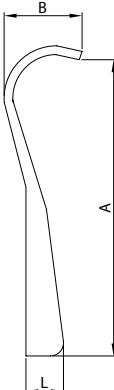
**950 DS**



DN	A	B	L	gr
28	255,0	55,0	25,0	330
34	255,0	55,0	25,0	330
40	255,0	55,0	25,0	330
52	255,0	55,0	25,0	330
70	255,0	55,0	25,0	330
85	255,0	55,0	25,0	330
101	255,0	55,0	25,0	330

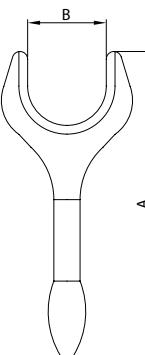
**CHIAVE PER RACCORDI**  
SPANNER FOR NUTS  
CLE À RACCORDS  
LLAVE RACOR

**950 DS**



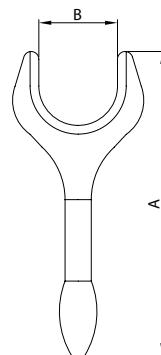
**CHIAVE PER RACCORDI**  
SPANNER FOR NUTS  
CLE À RACCORDS  
LLAVE RACOR

**950 B**



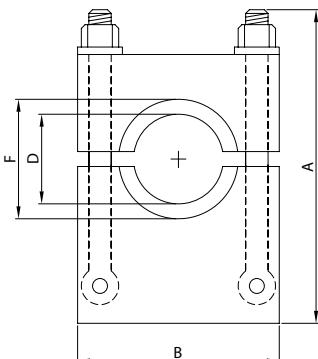
**CHIAVE PER RACCORDI**  
SPANNER FOR NUTS  
CLE À RACCORDS  
LLAVE RACOR

**950 I**



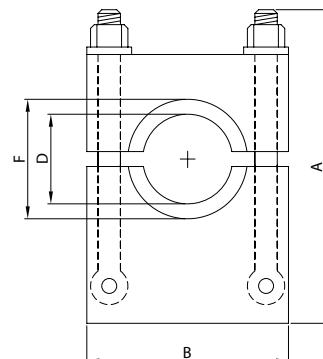
**MORSA PER MR.**  
CLAMPING BLOCK FOR EG.  
MACHOIRE À DR.  
MORDAZA PARA MR.

**955 D**



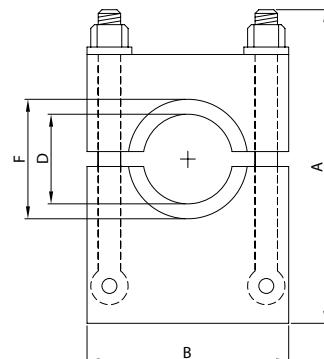
**MORSA PER MR.**  
CLAMPING BLOCK FOR EG.  
MACHOIRE À DR.  
MORDAZA PARA MR.

**955 S**



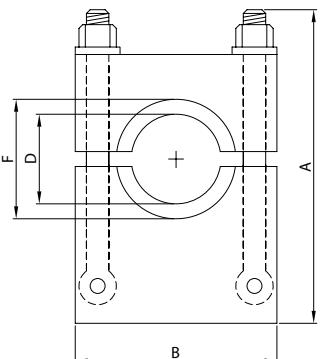
**MORSA PER MR.**  
CLAMPING BLOCK FOR EG.  
MACHOIRE À DR.  
MORDAZA PARA MR.

**955 B**



**MORSA PER MR.**  
CLAMPING BLOCK FOR EG.  
MACHOIRE À DR.  
MORDAZA PARA MR.

**955 I**



DN	A	B	D	F	gr
25	138,0	110,0	35,0	52,0	2.250
32	138,0	110,0	41,0	58,0	2.300
40	150,0	130,0	48,0	65,0	3.000
50	165,0	140,0	61,0	78,0	3.350
65	190,0	150,0	78,0	95,0	4.200
80	195,0	180,0	93,0	110,0	7.000
100	230,0	200,0	114,0	130,0	8.200

DN	A	B	D	F	gr
25	136,0	110,0	32,0	40,0	3.050
38	136,0	110,0	48,0	60,0	4.600
51	165,0	140,0	61,0	70,0	4.900
63	175,0	150,0	73,5	85,0	6.500
76	190,0	160,0	86,0	98,0	7.000
101	200,0	180,0	116,0	132,0	8.200

DN	A	B	D	F	gr
25	136,0	110,0	32,5	46,0	3.050
38	136,0	110,0	45,2	58,0	4.600
51	165,0	140,0	58,0	73,0	4.900
63	175,0	150,0	70,6	85,0	6.500
76	190,0	160,0	83,3	98,0	7.000
101	200,0	180,0	109,0	123,0	8.200

DN	A	B	D	F	gr
25	136,0	110,0	29,0	37-8	3.050
38	136,0	110,0	42,5	50-8	4.600
51	165,0	140,0	56,0	64-8	4.900
63	175,0	150,0	69,7	77-8	6.500
76	190,0	160,0	82,3	91-8	7.000
101	200,0	180,0	108,4	118-8	8.200

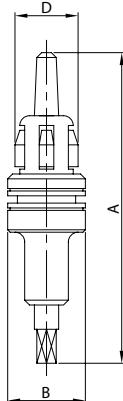


ACCESSORI  
ACCESSORIES  
ACCESSIONS  
ACCESORIOS



**MANDRINO  
EXPANDER  
DUDGEON  
MANDRIN**

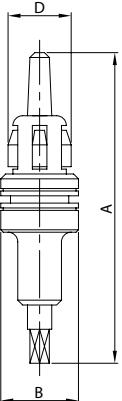
**960 L**



DN	A	B	D	gr
28	205,0	35,0	28,0	540
34	210,0	42,0	34,0	840
40	210,0	47,0	40,0	1.125
52	210,0	59,0	52,0	1.725
70	250,0	77,0	70,0	3.100
85	260,0	88,0	85,0	4.300
101	270,0	107,0	101,6	6.350

**MANDRINO  
EXPANDER  
DUDGEON  
MANDRIN**

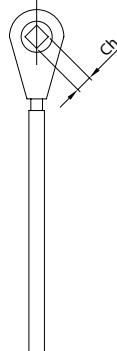
**960 L**



DN	A	B	D	gr
25	205,0	35,0	25,4	465
38	210,0	42,0	38,1	1.140
51	210,0	59,0	50,8	1.725
63	250,0	77,0	63,5	2.845
76	260,0	88,0	76,2	3.840
101	270,0	107,0	101,6	6.350

**CHIAVE PER MANDRINO  
SPANNER FOR EXPANDER  
CLE À DUDGEON  
LLAVE PARA MANDRIN**

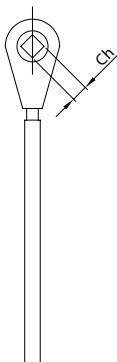
**961 L**



DN	Ch	gr
28	8,0	400
34	10,0	700
40	12,0	700
52	14,0	1.200
70	16,0	1.200
85	22,0	1.800
101	22,0	1.800

**CHIAVE PER MANDRINO  
SPANNER FOR EXPANDER  
CLE À DUDGEON  
LLAVE PARA MANDRIN**

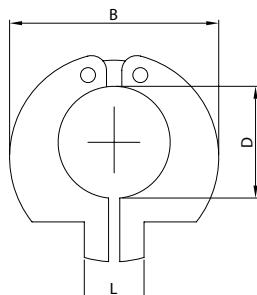
**961 L**



DN	Ch	gr
25	8,0	400
38	12,0	700
51	14,0	1.200
63	16,0	1.200
76	20,0	1.800
101	22,0	1.800

**STRINGITUBO TAGLIO TUBI  
CUTTING WRENCH  
MÂCHOIRE COUPE TUBE  
ABR. PARA CORTAR TUBOS**

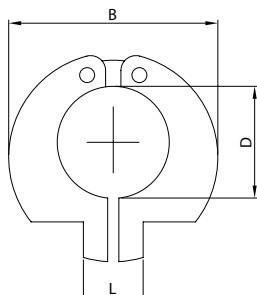
**965 L**



DN	B	D	L	gr
28	77,0	28,0	23,0	420
38	77,0	34,0	23,0	520
40	77,0	40,0	23,0	640
52	87,0	52,0	30,0	780
70	107,0	70,0	32,0	1.030
85	120,0	85,0	35,0	1.280
101	147,0	101,6	57,0	1.900

**STRINGITUBO TAGLIO TUBI  
CUTTING WRENCH  
MÂCHOIRE COUPE TUBE  
ABR. PARA CORTAR TUBOS**

**965 L**

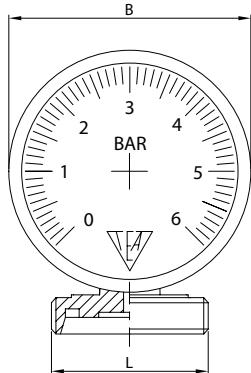


DN	B	D	L	gr
25	77,0	25,4	23,0	400
38	77,0	38,1	23,0	580
51	87,0	50,8	30,0	760
63	107,0	63,5	42,0	980
76	120,0	76,2	52,0	1.150
101	147,0	101,6	57,0	1.900



**MANOMETRO RADIALE  
PRESS. G. RADIAL CONN.  
MANOMÈTRE D'ÉQUERRE  
MAN. ROSCA INFERIOR**

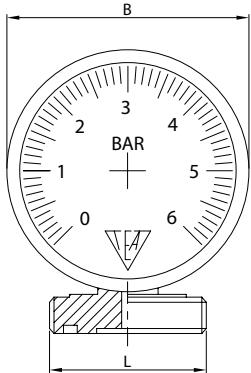
**990 D**



DN	B	L	gr
40	96,0	65,0	980
50	96,0	78,0	1.100

**MANOMETRO RADIALE  
PRESS. G. RADIAL CONN.  
MANOMÈTRE D'ÉQUERRE  
MAN. ROSCA INFERIOR**

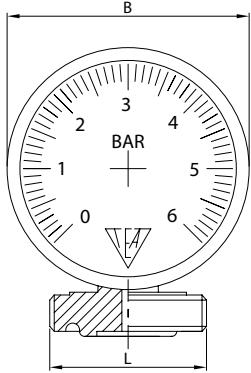
**990 S**



DN	B	L	gr
38	96,0	60,0	980
51	96,0	70,0	1.100

**MANOMETRO RADIALE  
PRESS. G. RADIAL CONN.  
MANOMÈTRE D'ÉQUERRE  
MAN. ROSCA INFERIOR**

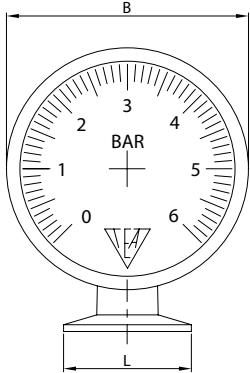
**990 B**



DN	B	L	gr
38	96,0	58,0	980
51	96,0	73,0	1.100

**MANOMETRO RADIALE  
PRESS. G. RADIAL CONN.  
MANOMÈTRE D'ÉQUERRE  
MAN. ROSCA INFERIOR**

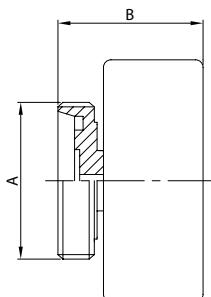
**990 K**



DN	B	L	gr
38	96,0	51,0	950
51	96,0	64,0	1.000

**MANOMETRO ASSIALE  
PRESS. G. BACK CONN.  
MANOMÈTRE VERTICAL  
MAN. SALIDA DETRÁS**

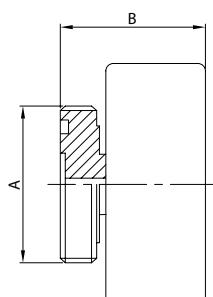
**991 D**



DN	A	B	gr
40	65,0	58,0	980
50	78,0	58,0	1.100

**MANOMETRO ASSIALE  
PRESS. G. BACK CONN.  
MANOMÈTRE VERTICAL  
MAN. SALIDA DETRÁS**

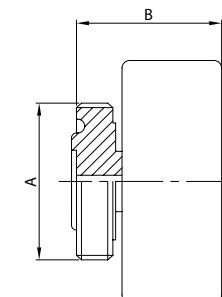
**991 S**



DN	A	B	gr
38	60,0	58,0	980
51	70,0	58,0	1.100

**MANOMETRO ASSIALE  
PRESS. G. BACK CONN.  
MANOMÈTRE VERTICAL  
MAN. SALIDA DETRÁS**

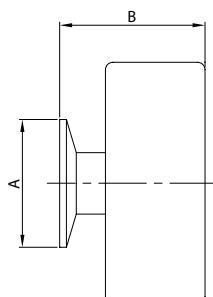
**991 B**



DN	A	B	gr
38	58,0	58,0	980
51	73,0	58,0	1.100

**MANOMETRO ASSIALE  
PRESS. G. BACK CONN.  
MANOMÈTRE VERTICAL  
MAN. SALIDA DETRÁS**

**991 K**



DN	A	B	gr
38	51,0	58,0	950
51	64,0	58,0	1.000



ACCESSORI  
ACCESSORIES  
ACCESSIONS  
ACCESORIOS



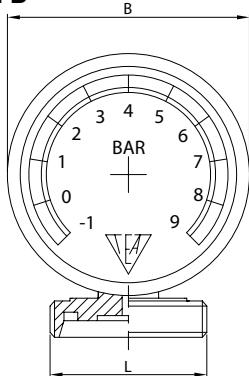
MANOVUOTOM. RADIALE  
PRESS./DEPR. G. RAD. CONN.  
VUOTOM. D'ÉQUERRE  
VUOTOM. ROSCA INF.

MANOVUOTOM. RADIALE  
PRESS./DEPR. G. RAD. CONN.  
VUOTOM. D'ÉQUERRE  
VUOTOM. ROSCA INF.

MANOVUOTOM. RADIALE  
PRESS./DEPR. G. RAD. CONN.  
VUOTOM. D'ÉQUERRE  
VUOTOM. ROSCA INF.

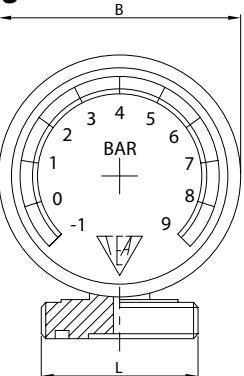
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PRESS./DEPR. G. RAD. CONN.  
VUOTOM. D'ÉQUERRE  
VUOTOM. ROSCA INF.

**992 D**



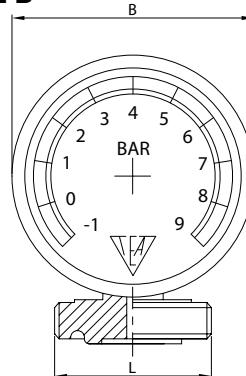
DN	B	L	gr
40	96,0	65,0	980
50	96,0	78,0	1.100

**992 S**



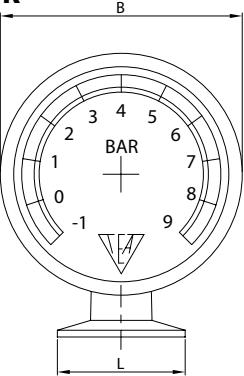
DN	B	L	gr
38	96,0	60,0	980
51	96,0	70,0	1.100

**992 B**



DN	B	L	gr
38	96,0	58,0	980
51	96,0	73,0	1.100

**992 K**



DN	B	L	gr
38	96,0	51,0	950
51	96,0	64,0	1.000

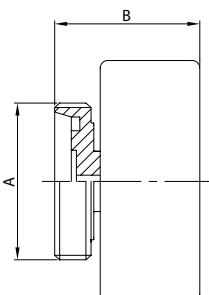
MANOVUOTOM. ASSIALE  
PR./DEPR. G. BACK CONN.  
VUOTOMÈTRE VERTICAL  
VUOTOM. SALIDA DETRÁS

MANOVUOTOM. ASSIALE  
PR./DEPR. G. BACK CONN.  
VUOTOMÈTRE VERTICAL  
VUOTOM. SALIDA DETRÁS

MANOVUOTOM. ASSIALE  
PR./DEPR. G. BACK CONN.  
VUOTOMÈTRE VERTICAL  
VUOTOM. SALIDA DETRÁS

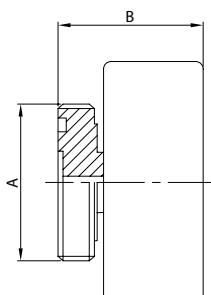
MANOVUOTOM. ASSIALE  
PR./DEPR. G. BACK CONN.  
VUOTOMÈTRE VERTICAL  
VUOTOM. SALIDA DETRÁS

**993 D**



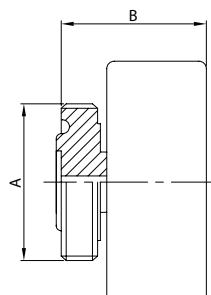
DN	A	B	gr
40	65,0	58,0	980
50	78,0	58,0	1.100

**993 S**



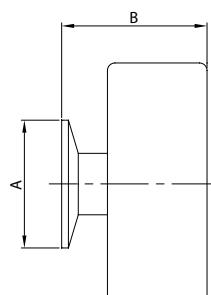
DN	A	B	gr
38	60,0	58,0	980
51	70,0	58,0	1.100

**993 B**



DN	A	B	gr
38	58,0	58,0	980
51	73,0	58,0	1.100

**993 K**

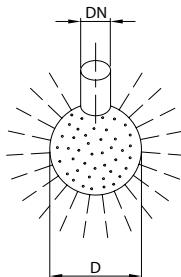


DN	A	B	gr
38	51,0	58,0	950
51	64,0	58,0	1.000



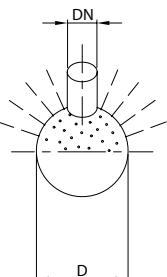
SFERA LAVAGGIO  
WASHING BALL  
BOULE DE LAVAGE  
BOLA DIFUSORA

**017 A**



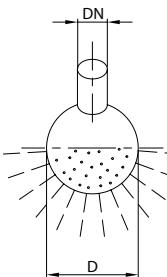
SFERA LAVAGGIO  
WASHING BALL  
BOULE DE LAVAGE  
BOLA DIFUSORA

**017 B**



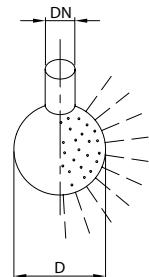
SFERA LAVAGGIO  
WASHING BALL  
BOULE DE LAVAGE  
BOLA DIFUSORA

**017 C**



SFERA LAVAGGIO  
WASHING BALL  
BOULE DE LAVAGE  
BOLA DIFUSORA

**017 D**



DN	D	gr
L28	65,0	100
G34	65,0	150
L32	65,0	105
L38	65,0	110
L22	50,0	60
G12	50,0	100
L28	50,0	70
G114	90,0	400
L38	90,0	200
L60	120,0	650
L22	40,0	40

DN	D	gr
L28	65,0	100
G34	65,0	150
L32	65,0	105
L38	65,0	110
L22	50,0	60
G12	50,0	100
L28	50,0	70
G114	90,0	400
L38	90,0	200
L60	120,0	650

DN	D	gr
L28	65,0	100
G34	65,0	150
L32	65,0	105
L38	65,0	110
L22	50,0	60
G12	50,0	100
L28	50,0	70
G114	90,0	400
L38	90,0	200
L60	120,0	650

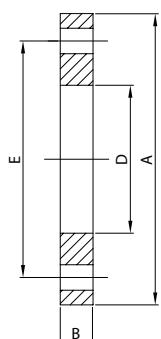
DN	D	gr
L28	65,0	100
G34	65,0	150
L32	65,0	105
L38	65,0	110
L22	50,0	60
G12	50,0	100
L28	50,0	70
G114	90,0	400
L38	90,0	200
L60	120,0	650

FLANGIA UNI2276 PN6  
FLANGE UNI2276 PN6  
BRIDE UNI2276 PN6  
BRIDA UNI2276 PN6

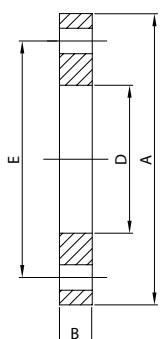
FLANGIA UNI2278 PN16  
FLANGE UNI2278 PN16  
BRIDE UNI2278 PN16  
BRIDA UNI2278 PN16

FL. UNI2278 PN16 LEGGERA  
FL. UNI2278 PN16 LIGHT  
BR. UNI2278 PN16 LEGÈRE  
BR. UNI2278 PN16 LIGERA

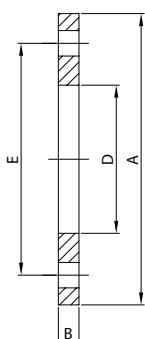
**276 U**



**278 U**



**278 UL**

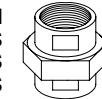


DN	A	B	D	E	gr
15	80,0	10,0	22,0	55,0	350
20	90,0	12,0	27,5	65,0	500
25	100,0	12,0	34,0	75,0	650
32	120,0	14,0	43,0	90,0	1.100
40	130,0	14,0	49,0	100,0	1.250
50	140,0	14,0	61,5	110,0	1.350
65	160,0	14,0	77,0	130,0	1.700
80	190,0	16,0	90,0	150,0	2.650
100	210,0	16,0	115,5	170,0	3.000
125	240,0	18,0	141,0	200,0	3.950
150	265,0	20,0	170,0	225,0	4.900

DN	A	B	D	E	gr
15	95,0	12,0	22,0	65,0	700
20	105,0	14,0	27,5	75,0	850
25	115,0	14,0	34,0	85,0	1.100
32	140,0	16,0	43,0	100,0	1.700
40	150,0	16,0	49,0	110,0	1.900
50	165,0	18,0	61,5	125,0	2.550
65	185,0	18,0	77,0	145,0	3.150
80	200,0	20,0	90,0	160,0	3.700
100	220,0	22,0	115,5	180,0	4.600
125	250,0	24,0	141,0	210,0	6.100
150	285,0	24,0	170,0	240,0	7.650

DN	A	B	D	E	gr
15	95,0	8,0	22,0	65,0	400
20	105,0	8,0	27,5	75,0	480
25	115,0	8,0	34,0	85,0	560
32	140,0	8,0	43,0	100,0	800
40	150,0	10,0	49,0	110,0	1.100
50	165,0	10,0	61,5	125,0	1.400
65	185,0	10,0	77,0	145,0	1.700
80	200,0	12,0	90,0	160,0	2.160
100	220,0	12,0	115,5	180,0	2.400
125	250,0	12,0	141,0	210,0	3.050
150	285,0	14,0	170,0	240,0	4.340





## RACCORDI GAS

- Ricavati da particolari stampati a caldo o laminati e solubilizzati.
- Accurata lavorazione delle parti filettate per eliminare l'ingrippaggio durante gli accoppiamenti.
- Eliminazione delle parti finali delle filettature con operazioni meccaniche per evitare infortuni durante la manipolazione dei pezzi.
- Finitura standard: lucidatura esterna e satinatura interna grana 120.
- Per gli altri articoli a norme Gas valgono le informazioni tecniche fornite nei relativi capitoli.

## BSP UNIONS

- Made from hot-rolled or press-forged material and solution heat-treated.
- Precise machining of the threaded parts to eliminate seizure during coupling.
- Elimination of end parts of threading with mechanical operations to prevent accidents during handling of the pieces.
- Standard finish: 120 grain external polishing and internal glazing.
- For the other BSP standards articles the technical details supplied in the respective chapters apply.

## RACCORDES GAS

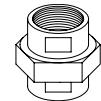
- Obtenus à partir de pièces moulées à chaud ou laminées et solubilisées.
- Usinage soigné des parties filetées pour éliminer le grippage pendant les assemblages.
- Elimination des parties finales des filetages à l'aide d'opérations mécaniques pour éviter les accidents pendant le maniement des pièces.
- Finissage standard: polissage extérieur et satinage intérieur grain 120.
- Pour les autres articles conformes aux normes Gas, voir les informations techniques fournies dans les chapitres correspondants.

## RACORES GAS

- Obtenidos a partir de piezas estampadas en caliente o laminadas y solubilizadas.
- Cuidadosa elaboración de las piezas roscadas para eliminar el agarrotamiento durante los acoplamientos.
- Eliminación de las partes terminales de las roscas con operaciones mecánicas para evitar accidentes durante la manipulación de las piezas.
- Acabado estándar: pulido exterior y satinado interior grano 120.
- Para los otros artículos fabricados según las normas Gas son válidos los datos técnicos proporcionados en los capítulos correspondientes.



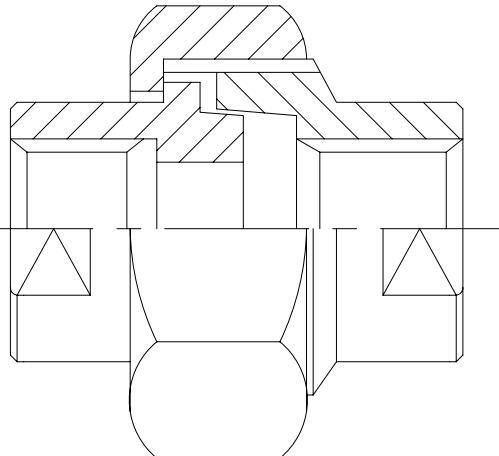
RACCORDI  
UNIONS  
RACCORDES  
RACORES

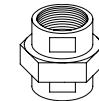


GAS

RACCORDO GAS  
BSP UNION

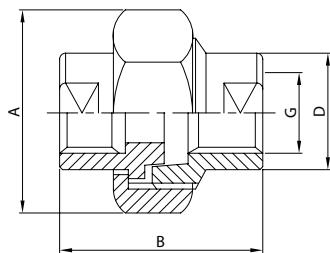
RACCORD GAS  
RACOR GAS





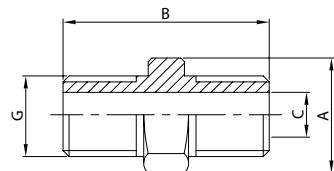
**RACCORDO F. FE.  
UNION T. FE.  
RACCORD F. FE.  
ENLACE JUNTA CONICA**

**020 G**



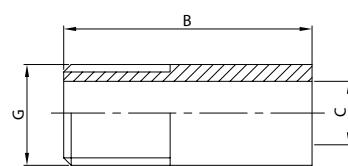
**NIPPLO F. MA.  
NIPPLE T. MA.  
NIPPLE F. MA.  
MACHON R. M.**

**021 G**



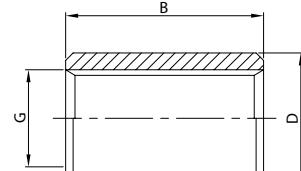
**TRONCHETTO F. MA.  
THREADED T. MA.  
TRONCON F. MA.  
ENTRONQUE R. M.**

**022 G**



**MANICOTTO F. FE.  
SOCKET T. FE.  
MANCHON F. FE.  
MANGUITO R. H.**

**023 G**



DN	A	B	D	G	gr
14	32,0	42,0	19,0	1/4"	115
38	36,0	45,0	23,0	3/8"	155
12	46,0	48,0	28,0	1/2"	275
34	50,0	52,0	34,0	3/4"	330
100	55,0	58,0	40,0	1"	400
114	70,0	65,0	50,0	1 1/4"	740
112	75,0	70,0	56,0	1 1/2"	870
200	90,0	78,0	70,0	2"	950

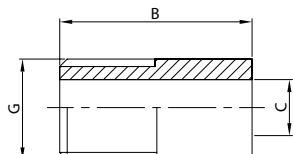
DN	A	B	C	G	gr
14	19,0	31,0	9,0	1/4"	25
38	22,0	34,0	11,0	3/8"	40
12	27,0	38,0	15,0	1/2"	60
34	32,0	42,0	20,0	3/4"	110
100	41,0	46,0	25,0	1"	170
114	50,0	52,0	32,0	1 1/4"	260
112	55,0	55,0	38,0	1 1/2"	300
200	70,0	60,0	50,0	2"	510
212	90,0	65,0	63,0	2 1/2"	850
300	96,0	72,0	75,0	3"	900

DN	B	C	G	gr
14	25,0	9,0	1/4"	12
38	30,0	12,5	3/8"	20
12	35,0	15,7	1/2"	32
34	40,0	21,0	3/4"	60
100	40,0	26,6	1"	85
114	45,0	35,0	1 1/4"	122
112	50,0	41,0	1 1/2"	165
200	60,0	52,5	2"	250
212	65,0	68,9	2 1/2"	295
300	70,0	78,0	3"	625

DN	B	D	G	gr
14	25,0	20,0	1/4"	35
38	27,0	22,0	3/8"	35
12	31,0	27,0	1/2"	60
34	35,0	34,0	3/4"	100
100	40,0	39,0	1"	135
114	45,0	49,0	1 1/4"	235
112	50,0	56,0	1 1/2"	280
200	55,0	70,0	2"	700
212	60,0	87,0	2 1/2"	950
300	65,0	99,0	3"	985

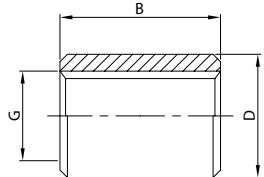
**TRONCHETTO F. MA.  
THREADED T. MA.  
TRONCON F. MA.  
ENTRONQUE R. M.**

**022 GL**



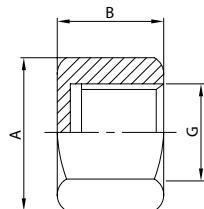
**MANICOTTO F. FE.  
SOCKET T. FE.  
MANCHON F. FE.  
MANGUITO R. H.**

**023 GL**



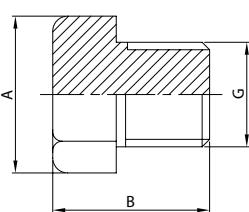
**TAPPO F. MA.  
BLANK T. MA.  
BOUCHON F. FE.  
TAPÓN R. H.**

**024 G**



**TAPPO F. MA.  
BLANK T. MA.  
BOUCHON F. MA.  
TAPÓN R. M.**

**025 G**



DN	B	C	G	gr
14	18,0	9,0	1/4"	10
38	20,0	12,5	3/8"	20
12	25,0	15,7	1/2"	40
34	30,0	21,0	3/4"	60
100	35,0	26,6	1"	100
114	40,0	35,0	1 1/4"	140
112	40,0	41,0	1 1/2"	160
200	45,0	52,5	2"	200

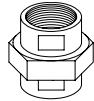
DN	B	D	G	gr
14	18,0	20,0	1/4"	30
38	20,0	22,0	3/8"	40
12	25,0	27,0	1/2"	60
34	30,0	34,0	3/4"	100
100	35,0	39,0	1"	140
114	40,0	49,0	1 1/4"	230
112	40,0	56,0	1 1/2"	260
200	45,0	70,0	2"	300

DN	A	B	G	gr
14	19,0	14,0	1/4"	20
38	22,0	16,0	3/8"	40
12	27,0	17,0	1/2"	50
34	32,0	20,0	3/4"	80
100	41,0	22,0	1"	140
114	50,0	24,0	1 1/4"	190
112	55,0	27,0	1 1/2"	260
200	70,0	30,0	2"	420

DN	A	B	G	gr
14	19,0	19,0	1/4"	30
38	22,0	21,0	3/8"	40
12	27,0	24,0	1/2"	80
34	32,0	27,0	3/4"	140
100	41,0	29,0	1"	240
114	50,0	33,0	1 1/4"	420
112	55,0	35,0	1 1/2"	580
200	70,0	38,0	2"	980



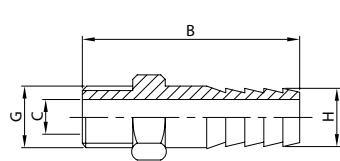
RACCORDI  
UNIONS  
RACCORDS  
RACORES



GAS

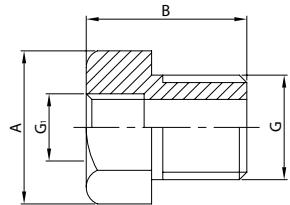
**PORTAGOMMA F. MA.**  
**HOSE CONNECTION T. MA.**  
**PORTE C. F. MA.**  
**ENTRONQUE MANGUERA**

**026 G**



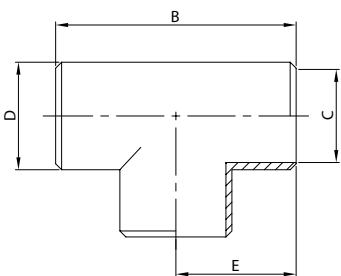
**RIDUZIONE F. MA/FE.**  
**REDUCER T. MA./FE.**  
**REDUCTION F. MA./FE.**  
**REDUCCIÓN R. M./H.**

**027 G**



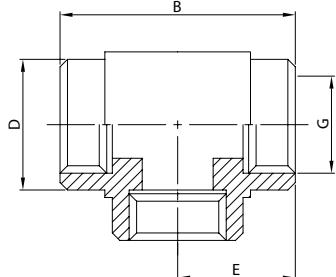
**TEE SR.**  
**WG. TEE**  
**TE SR.**  
**TE SR.**

**028 G**



**TEE F. FE.**  
**TEE T. FE.**  
**TE F. FE.**  
**TE R. H.**

**029 G**



DN	B	C	G	H	gr
14	45,0	9,0	1/4"	13,0	115
38	51,0	11,0	3/8"	17,0	155
12	59,0	15,0	1/2"	21,0	275
34	67,0	20,0	3/4"	27,0	330
100	75,0	25,0	1"	33,0	400
114	82,0	32,0	1 1/4"	42,0	740
112	90,0	40,0	1 1/2"	48,0	870
200	103,0	50,0	2"	60,0	950

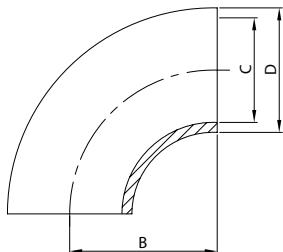
DN	A	B	G	G	gr
14	19,0	19,0	1/4"	1/8"	10
38	22,0	21,0	3/8"	1/4"	20
12	27,0	24,0	1/2"	3/8"	40
34	32,0	27,0	3/4"	1/2"	80
100	41,0	29,0	1"	3/4"	130
114	50,0	33,0	1 1/4"	1"	220
112	55,0	35,0	1 1/2"	1 1/4"	290
200	70,0	38,0	2"	1 1/2"	350

DN	B	C	D	E	gr
14	40,0	9,7	13,7	20,0	60
38	44,0	13,2	17,2	22,0	80
12	50,8	17,3	21,3	25,4	100
34	57,0	22,9	26,9	28,5	120
100	76,2	29,7	33,7	38,1	145
114	95,2	38,4	42,4	47,6	220
112	114,2	44,3	48,3	57,1	305
200	127,0	56,3	60,3	63,5	400
212	152,2	72,1	76,1	76,1	600
300	171,4	84,9	88,9	85,7	840
400	209,4	110,3	114,3	104,7	1.100

DN	B	D	E	G	gr
14	40,0	19,0	20,0	1/4"	80
38	47,0	23,0	23,5	3/8"	140
12	52,0	28,0	26,0	1/2"	200
34	64,0	34,0	32,0	3/4"	360
100	76,0	39,0	38,0	1"	520
114	88,0	48,0	44,0	1 1/4"	860
112	98,0	58,0	49,0	1 1/2"	1.260
200	114,0	68,0	57,0	2"	1.600

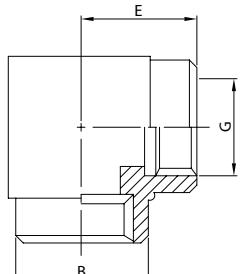
**CURVA 90° SR.**  
**WG. BEND 90°**  
**COUDE 90° SR.**  
**CODO 90° SR.**

**030 G**



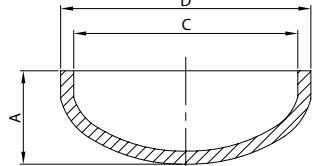
**GOMITO F. FE.**  
**ELBOW T. FE.**  
**COUDE F. FE.**  
**CODO R. H.**

**031 G**



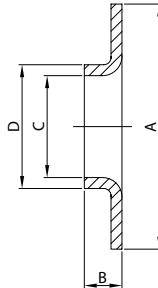
**FONDO BOMBATO**  
**DOME END**  
**FOND BOMBÉ**  
**CAP**

**018 G**



**BORDO DI APPOGGIO**  
**SUPPORT LIP**  
**COLLET**  
**VALONA**

**019 G**



DN	B	C	D	gr
14	20,2	9,7	13,5	35
38	28,5	13,2	17,2	40
12	31,8	17,3	21,3	45
34	28,5	22,9	26,9	50
100	38,0	29,7	33,7	90
114	47,6	38,4	42,4	155
112	57,1	44,3	48,3	200
200	76,2	56,3	60,3	295
212	96,0	72,1	76,1	520
300	114,5	84,9	88,9	600
400	152,5	110,3	114,3	800

DN	B	E	G	gr
14	19,0	20,0	1/4"	80
38	23,0	23,5	3/8"	120
12	28,0	26,0	1/2"	200
34	34,0	32,0	3/4"	320
100	39,0	38,0	1"	500
114	48,0	44,0	1 1/4"	880
112	58,0	49,0	1 1/2"	1.080
200	68,0	57,0	2"	2.060

DN	A	C	D	gr
38	11,0	13,2	17,2	500
12	11,0	17,3	21,3	550
34	11,0	22,9	26,9	720
100	13,0	29,7	33,7	750
114	13,0	38,4	42,4	900
112	13,0	44,3	48,3	1000
200	20,0	56,3	60,3	1400
212	22,0	72,1	76,1	1700
300	25,0	84,9	88,9	2800

DN	A	B	C	D	gr
12	45,0	6,0	17,3	21,3	40
34	58,0	6,0	22,9	26,9	60
100	68,0	8,0	29,7	33,7	80
114	78,0	10,0	38,4	42,4	110
112	88,0	10,0	44,3	48,3	150
200	102,0	12,0	56,3	60,3	190
212	122,0	12,0	72,1	76,1	260
300	139,0	12,0	84,9	88,9	340



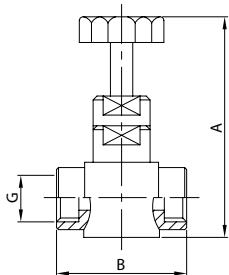
VALVOLE  
VALVES  
VANNES  
VÁLVULAS



**GAS**

**RUBINETTO A SPILLO  
PIN COCK  
ROBINET À AIGUILLE  
GRIFO DE AGUJA**

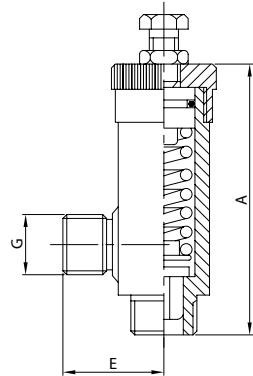
**044 G**



DN	A	B	G	gr
14	84,0	45,0	1/4"	500
38	105,0	52,0	3/8"	530
12	121,0	61,0	1/2"	570
34	132,0	68,0	3/4"	600
100	150,0	86,0	1"	630

**V. SICUREZZA MA.  
MA. RELIEF VALVE  
SOUPAPE DÉCHARGE MA.  
V. SEGURIDAD M.**

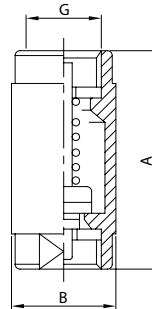
**036 G**



DN	A	E	G	gr
14	105,0	34,0	1/4"	450
38	115,0	43,0	3/8"	470
12	133,0	52,0	1/2"	500
34	145,0	63,0	3/4"	530
100	165,0	70,0	1"	600

**V. RITEGNO FE.  
FE. CHECK VALVE  
C. RETENUE FE.  
V. RETENCIÓN H.**

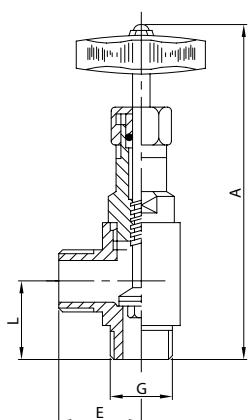
**034 G**



DN	A	B	G	gr
14	60,0	22,0	1/4"	100
38	65,0	25,0	3/8"	140
12	75,0	30,0	1/2"	220
34	80,0	38,0	3/4"	280
100	85,0	48,0	1"	600
114	90,0	60,0	1 1/4"	800
112	95,0	65,0	1 1/2"	1.240
200	105,0	75,0	2"	1.530

**VALVOLA SQUADRA  
SQUARE VALVE  
VANNE EQUERRE  
VÁLVULA ESCUADRA**

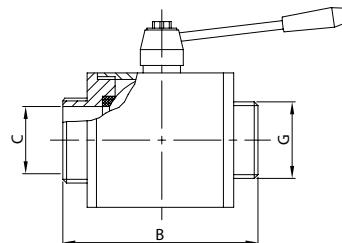
**035 G**



DN	A	E	G	L	gr
14	96,0	23,0	1/4"	23,0	200
38	154,0	27,5	3/8"	27,5	350
12	178,0	35,0	1/2"	35,0	650
34	195,0	40,5	3/4"	40,5	950
100	225,0	48,0	1"	48,0	1.300

**VALVOLA SFERA F. MA.  
BALL VALVE T. MA.  
VANNE BOULE F. MA.  
VÁLVULA BOLA R. M.**

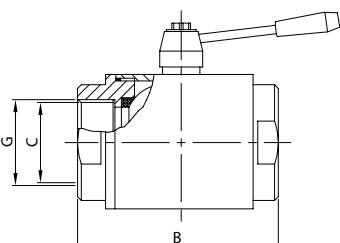
**040 G**



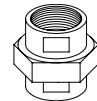
DN	B	C	G	gr
38	75,0	15,0	3/8"	320
12	75,0	15,0	1/2"	380
34	85,0	20,0	3/4"	550
100	89,0	25,0	1"	720
114	106,0	32,0	1 1/4"	1.180
112	128,0	40,0	1 1/2"	2.190
200	136,0	50,0	2"	2.900
212	164,0	65,0	2 1/2"	6.000
300	160,0	78,0	3"	8.000
400	192,0	98,0	4"	15.500

**VALVOLA SFERA F. FE.  
BALL VALVE T. FE.  
VANNE BOULE F. FE.  
VÁLVULA BOLA R. H.**

**041 G**

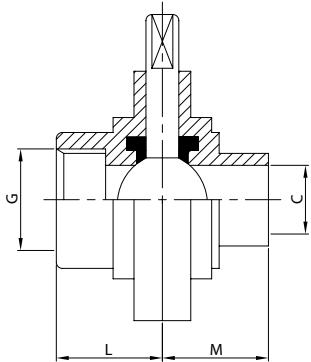


DN	B	C	G	gr
38	63,0	15,0	3/8"	380
12	63,0	15,0	1/2"	380
34	69,0	20,0	3/4"	530
100	73,0	25,0	1"	680
114	95,0	32,0	1 1/4"	1.150
112	98,0	40,0	1 1/2"	2.120
200	116,0	50,0	2"	2.950
212	143,0	65,0	2 1/2"	6.500
300	160,0	78,0	3"	9.000
400	190,0	98,0	4"	16.000



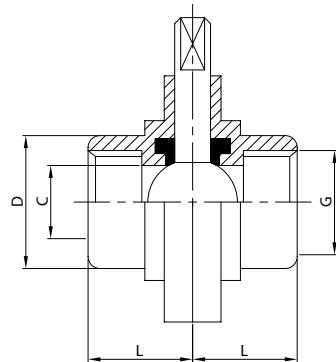
V. FARFALLA F. FE./EL.  
BUTTERFLY V. T. FE./PE.  
V. PAPILLON F. FE./BL.  
V. MARIPOSA R. H./EL.

781 G



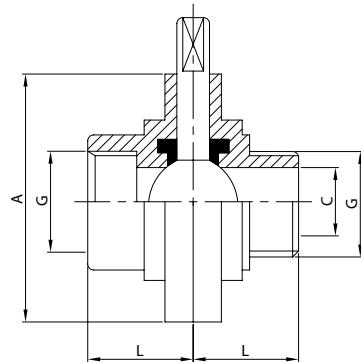
V. FARFALLA F. FE./FE.  
BUTTERFLY V. T. FE./FE.  
V. PAPILLON F. FE./FE.  
V. MARIPOSA R. H./H.

788 G



V. FARFALLA F. FE./MA.  
BUTTERFLY V. T. FE./MA.  
V. PAPILLON F. FE./MA.  
V. MARIPOSA R. H./M.

789 G



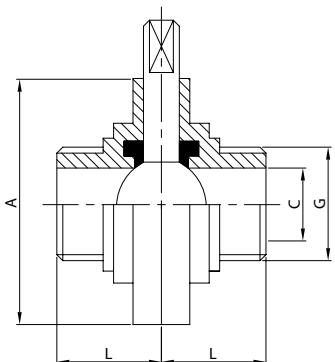
DN	C	G	L	M	gr
34	20,0	3/4"	34,0	34,0	1.650
100	25,5	1"	34,0	34,0	1.900
114	34,0	1 1/4"	38,0	38,0	1.970
112	39,0	1 1/2"	38,0	38,0	2.440
200	50,0	2"	40,0	40,0	2.900
212	66,0	2 1/2"	40,0	41,0	3.280
300	77,5	3"	41,0	41,0	5.500
400	101,0	4"	44,0	44,0	5.740

DN	C	D	G	L	gr
34	20,0	37,0	3/4"	34,0	1.810
100	25,5	40,0	1"	34,0	2.090
114	34,0	50,0	1 1/4"	38,0	2.170
112	39,0	58,0	1 1/2"	38,0	2.680
200	50,0	70,0	2"	40,0	3.190
212	66,0	86,0	2 1/2"	40,0	3.610
300	77,5	100,0	3"	41,0	6.050
400	101,0	124,0	4"	44,0	6.310

DN	A	C	G	L	gr
34	79,0	20,0	3/4"	34,0	1.700
100	79,0	25,5	1"	34,0	1.950
114	85,0	34,0	1 1/4"	38,0	2.050
112	92,0	39,0	1 1/2"	38,0	2.520
200	105,0	50,0	2"	40,0	3.000
212	125,0	66,0	2 1/2"	40,0	3.380
300	137,0	77,5	3"	41,0	5.600
400	157,0	101,0	4"	44,0	5.850

V. FARFALLA F. MA./MA.  
BUTTERFLY V. T. MA./MA.  
V. PAPILLON F. MA./MA.  
V. MARIPOSA R. M./M.

799 G



DN	A	C	G	L	gr
34	79,0	20,0	3/4"	34,0	1.750
100	79,0	25,5	1"	34,0	2.040
114	85,0	34,0	1 1/4"	38,0	2.110
112	92,0	39,0	1 1/2"	38,0	2.600
200	105,0	50,0	2"	40,0	3.110
212	125,0	66,0	2 1/2"	40,0	3.500
300	137,0	77,5	3"	41,0	5.940
400	157,0	101,0	4"	44,0	6.200





## RACCORDI ENO

- Ricavati da particolari stampati a freddo e lavorati meccanicamente alle estremità.
- Finitura standard: lucidatura esterna e satinatura interna grana 120.
- Per le valvole a farfalla a norme Eno valgono le informazioni tecniche fornite nel relativo capitolo.

## ENO UNIONS

- Made from cold-pressed components mechanically worked at the ends.
- Standard finish: 120 grain external polishing and internal glazing.
- For the Eno butterfly valves the technical details supplied in the respective chapter apply.

## RACCORDES ENO

- Obtenus à partir de pièces imprimées à froid et travaillées mécaniquement aux embouts.
- Finissage standard: polissage extérieur et satinage intérieur grain 120.
- Pour les vannes papillon conformes aux normes Eno, voir les informations techniques fournies dans le chapitre correspondant.

## RACORES ENO

- Obtenidos a partir de piezas estampadas en frío y con acabado mecanizado en su extremidad.
- Acabado estándar: pulido exterior y satinado interior grano 120.
- Para las válvulas de mariposa fabricadas según las normas Eno son válidos los datos técnicos proporcionados en el capítulo correspondiente.



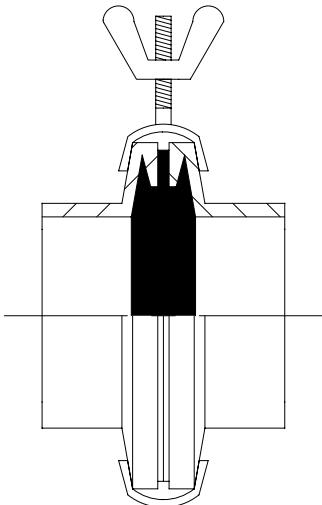
RACCORDI  
UNIONS  
RACCORDES  
RACORES



ENO

RACCORDO ENO  
ENO UNION

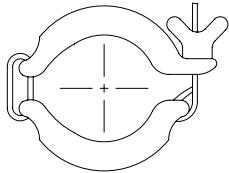
RACCORD ENO  
RACOR ENO





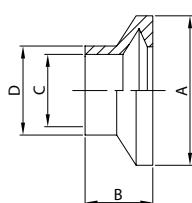
MORSETTO ENO  
ENO CLAMP  
COLLIER ENO  
ABRAZADERA ENO

**121 E**



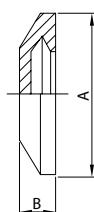
BOCCHETTONE ENO  
ENO PART  
FERRULE ENO  
ENLACE ENO

**102 E**



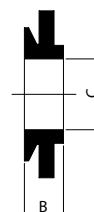
TAPPO ENO  
ENO BLANK  
BOUCHON ENO  
TAPÓN ENO

**104 E**



GUARNIZIONE PER BOCC.  
SEAL RING FOR PART  
JOINT POUR FERRULE  
JUNTA ENLACE

**131 E**



DN	gr
40	200
50	250
60	300
70	350
80	400
100	450

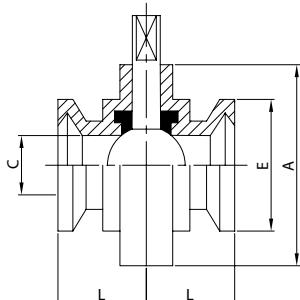
DN	A	B	C	D	gr
40	65,0	25,0	37,0	40,0	130
50	75,0	30,0	49,0	52,0	160
60	86,0	32,0	57,0	60,0	210
70	98,0	38,0	66,0	70,0	260
80	109,0	38,0	81,0	85,0	300
100	128,0	38,0	97,4	101,6	350

DN	A	B	gr
40	65,0	15,0	100
50	75,0	17,0	150
60	86,0	17,0	250
70	98,0	17,0	300
80	109,0	17,0	325
100	128,0	17,0	350

DN	B	C
40	13,0	40,0
50	13,0	50,0
60	13,0	60,0
70	14,0	70,0
80	14,0	80,0
100	14,0	100,0

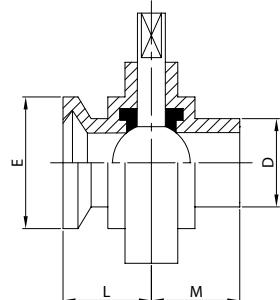
V. FARFALLA ENO/ENO  
BUTTERFLY V. ENO/ENO  
V. PAPILLON ENO/ENO  
V. MARIPOSA ENO/ENO

**722 E**



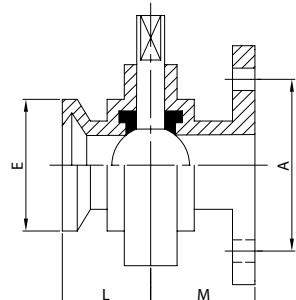
V. FARFALLA ENO/EL.  
BUTTERFLY V. ENO/PE.  
V. PAPILLON ENO/BL.  
V. MARIPOSA ENO/EL.

**721 E**



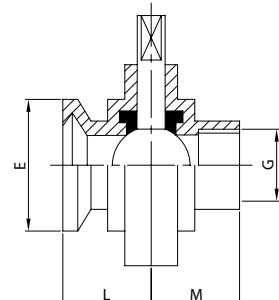
V. FARFALLA ENO/FL.  
BUTTERFLY V. ENO/FL.  
V. PAPILLON ENO/BR.  
V. MARIPOSA ENO/BR.

**725 E**



V. FARFALLA ENO/F. FE.  
BUTTERFLY V. ENO/T. FE.  
V. PAPILLON ENO/F. FE.  
V. MARIPOSA ENO/R. H.

**782 E**



DN	A	C	E	L	gr
40	92,0	37,0	65,0	38,0	1.450
50	105,0	49,0	75,0	40,0	1.870
60	112,0	57,0	86,0	40,0	2.300
70	125,0	66,0	98,0	40,0	2.755
80	137,0	81,0	108,0	41,0	3.200
100	157,0	97,4	129,0	44,0	3.940

DN	D	E	L	M	gr
40	40,0	65,0	38,0	38,0	1.220
50	52,0	75,0	40,0	40,0	1.570
60	60,0	86,0	40,0	40,0	1.880
70	70,0	98,0	40,0	41,0	2.255
80	85,0	108,0	41,0	42,0	2.750
100	101,6	129,0	44,0	44,0	3.390

DN	A	E	L	M	gr
40	90,0	65,0	38,0	47,5	2.470
50	110,0	75,0	40,0	49,5	2.920
60	130,0	86,0	40,0	49,5	3.480
70	130,0	98,0	40,0	50,5	3.980
80	150,0	108,0	41,0	51,5	5.400
100	170,0	129,0	44,0	53,5	6.390

DN	E	G	L	M	gr
40	65,0	1 1/4"	38,0	38,0	1.450
50	75,0	1 1/2"	40,0	38,0	1.870
60	86,0	2"	40,0	40,0	2.300
70	98,0	2 1/2"	40,0	40,0	2.755
80	108,0	3"	41,0	41,0	3.200
100	129,0	4"	44,0	44,0	3.940





## RACCORDI CLAMP

- Ricavati da particolari stampati a caldo o laminati e solubilizzati.
- Chiusura rapida conformemente alle norme 3-A.
- Finitura standard: lucidatura esterna e satinatura interna grana 150 (finitura LS); a richiesta, lucidatura esterna e interna grana 240 (finitura LL), lucidatura elettrolitica grana 400 (finitura LE).
- Guarnizioni: EPDM, silicone, PTFE, FTM, EPDM rivestito PTFE. Modelli: guarnizione Clamp standard, guarnizione a labbro, guarnizione a busta.
- Certificazioni di materiale e test di rugosità disponibili su richiesta.
- Per gli altri articoli a norme Clamp valgono le informazioni tecniche fornite nei relativi capitoli.

## CLAMP UNIONS

- Made from hot-rolled or press-forged material and solution heat-treated.
- Quick closure in conformity with 3-A standards.
- Standard finish: 150 grain external polishing and internal glazing (LS finish); on request 240 grain external and internal polishing (LL finish), 400 grain electrolytic polishing (LE finish).
- Gaskets: EPDM, silicone, PTFE, FTM, PTFE-coated EPDM. Models: standard Clamp gasket, lip gasket, envelope gasket.
- Material certification and roughness tests available on request.
- For the other Clamp standards articles the technical details supplied in the respective chapters apply.

## RACCORDS CLAMP

- Obtenus à partir de pièces moulées à chaud ou laminées et solubilisées.
- Fermeture rapide conforme aux normes 3-A.
- Finissage standard: polissage extérieur et satinage intérieur grain 150 (finissage LS); sur demande, polissage extérieur et intérieur grain 240 (finissage LL), polissage électrolytique grain 400 (finissage LE).
- Joints EPDM, silicone, PTFE, FTM, EPDM revêtu PTFE. Modèles: joint Clamp standard, joint à lèvre, joint à enveloppe.
- Certifications des matériaux et tests de rugosité disponibles sur demande.
- Pour les autres articles conformes aux normes Clamp, voir les informations techniques fournies dans les chapitres correspondants.

## RACORES CLAMP

- Obtenidos a partir de piezas estampadas en caliente o laminadas y solubilizadas.
- Cierre rápido en conformidad con las normas 3-A.
- Acabado estándar: pulido exterior y satinado interior grano 150 (acabado LS); a pedido, pulido exterior e interior grano 240 (acabado LL), pulido electrolítico grano 400 (acabado LE).
- Juntas: EPDM, silicone, PTFE, FTM, EPDM revestido PTFE. Modelos: junta Clamp estándar, junta de reborde, junta de sobre.
- Certificaciones de materiales y tests de rugosidad disponibles a pedido.
- Para los otros artículos fabricados según las normas Clamp son válidos los datos técnicos proporcionados en los capítulos correspondientes.



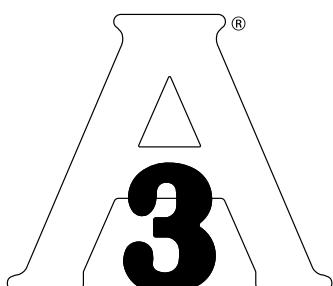
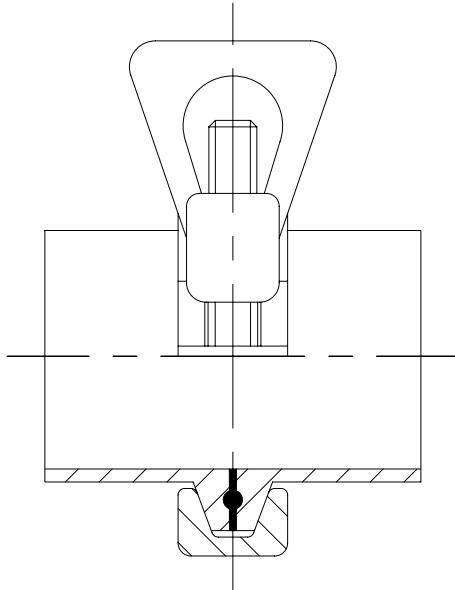
RACCORDI  
UNIONS  
RACCORDES  
RACORES



CLAMP

RACCORDO CLAMP  
CLAMP UNION

RACCORD CLAMP  
RACOR CLAMP



### 3-A SANITARY STANDARDS AUTHORIZATIONS NO. 1500, 1501, 1502, 1503, 1504

Tutti i raccordi Clamp, i rubinetti, le valvole a sfera modello 90, le valvole pneumatiche serie 900 e le valvole a membrana sono realizzati seguendo rigorosamente i criteri e i test imposti dalle norme 3-A.

All Clamp fittings, plug cocks, ball valves model 90, pneumatic valves series 900 and diaphragm valves are produced in strict conformity with criteria and tests required by 3-A standards.

Tous les raccords Clamp, les robinets, les vannes à boule modèle 90, les vannes pneumatiques série 900, et les vannes à membrane sont réalisés en respectant scrupuleusement les critères et les tests imposés par les normes 3-A.

Todos los racores Clamp, los grifos, las válvulas de bola modelo 90, las válvulas neumáticas serie 900 y las válvulas de membrana son realizados respectando rigurosamente los criterios y los tests establecidos por las normas 3-A.



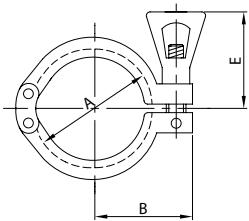
RACCORDI  
UNIONS  
RACCORDS  
RACORES



**CLAMP**

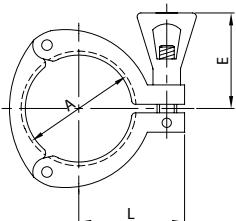
**MORSETTO DOPPIO  
HEAVY DUTY CLAMP  
COLLIER CLAMP  
ABRAZADERA**

**K12**



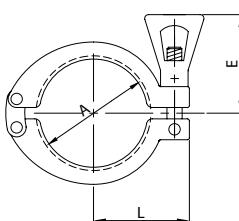
**MORSETTO 3 GANASCE  
HEAVY DUTY CLAMP 3 PCS.  
COLLIER CLAMP 3 PIECES  
ABRAZ. 3 MORDAZAS**

**K13**



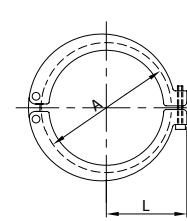
**MORSETTO DOPPIO  
HEAVY DUTY CLAMP  
COLLIER CLAMP  
ABRAZADERA**

**K15**



**MORSETTO DOPPIO  
HEAVY DUTY CLAMP  
COLLIER CLAMP  
ABRAZADERA**

**K12 HP**



DN	A	E	L	gr
1/2" 12	27,0	35,0	27,0	120
3/4" 19	27,0	35,0	27,0	120
1" 25	53,4	53,0	43,0	220
1 1/2" 38	53,4	53,0	43,0	220
2" 51	67,0	53,0	51,5	330
2 1/2" 63	80,4	53,0	58,2	395
3" 76	94,0	53,0	65,0	425
4" 101	122,0	53,0	81,0	540
<b>4" 101</b>	<b>122,0</b>	<b>53,0</b>	<b>85,0</b>	<b>500</b>

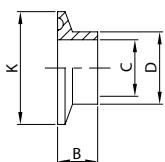
DN	A	E	L	gr
1" 25	53,4	53,0	45,0	270
1 1/2" 38	53,4	53,0	45,0	270
2" 51	67,0	53,0	51,5	330
2 1/2" 63	80,4	53,0	58,2	395
3" 76	94,0	53,0	65,0	425
4" 101	122,0	53,0	81,0	540
<b>4" 101</b>	<b>122,0</b>	<b>53,0</b>	<b>78,0</b>	<b>500</b>

DN	A	E	L	gr
1" 25	54,5	53,0	43,7	220
1 1/2" 38	54,5	53,0	43,7	220
2" 51	68,0	53,0	50,5	260
2 1/2" 63	81,5	53,0	57,2	330
3" 76	95,0	53,0	64,0	400
4" 101	123,0	53,0	78,0	500

DN	A	L	gr
5" 127	148,0	95,0	750
6" 152	170,0	111,0	1.450
8" 203	222,0	137,0	1.750

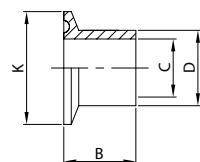
**SEMIRACCORDO CORTO SR.  
SHORT WG. FERRULE  
FERRULE SR. COURTE  
ENLACE CORTO SR.**

**K14 S**



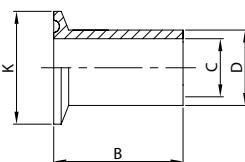
**SEMIRACCORDO SR.  
WG. FERRULE  
FERRULE SR.  
ENLACE SR.**

**K14 W**



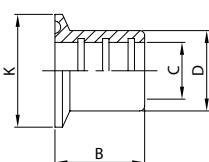
**SEMIRACCORDO LUNGO SR.  
LONG WG. FERRULE  
FERRULE SR. LONGUE  
ENLACE SR.**

**K14 WL**



**SEMIRACCORDO MR.  
ROLL-ON FERRULE  
FERRULE DR.  
ENLACE MR.**

**K14 R**



DN	B	C	D	K	gr
1/2" 12	12,7	9,4	12,7	25,0	16
3/4" 19	12,7	15,7	19,0	25,0	14
1" 25	12,7	22,1	25,4	50,5	60
1 1/2" 38	12,7	34,8	38,1	50,5	40
2" 51	12,7	47,5	50,8	64,0	60
2 1/2" 63	12,7	60,2	63,5	77,5	75
3" 76	12,7	72,9	76,2	91,0	95
4" 101	15,8	97,4	101,6	119,0	180
4" 104	15,8	100,0	104,0	119,0	180

DN	B	C	D	K	gr
1/2" 12	21,0	9,4	12,7	25,0	19
3/4" 19	21,0	15,7	19,0	25,0	20
1" 25	28,6	22,1	25,4	50,5	80
1 1/2" 38	28,6	34,8	38,1	50,5	60
2" 51	28,6	47,5	50,8	64,0	95
2 1/2" 63	28,6	60,2	63,5	77,5	115
3" 76	28,6	72,9	76,2	91,0	150
4" 101	28,6	97,4	101,6	119,0	250
4" 104	28,6	100,0	104,0	119,0	250
5" 127	28,6	122,0	127,0	144,4	320
6" 152	28,6	147,4	152,4	166,0	400
8" 203	28,6	198,2	203,2	217,0	500

DN	B	C	D	K	gr
1" 25	76,2	22,1	25,4	50,5	120
1 1/2" 38	76,2	34,8	38,1	50,5	130
2" 51	76,2	47,5	50,8	64,0	180
2 1/2" 63	76,2	60,2	63,5	77,5	280
3" 76	101,6	72,9	76,2	91,0	380
4" 101	101,6	97,4	101,6	119,0	560
4" 104	101,6	100,0	104,0	119,0	560

DN	B	C	D	K	gr
1" 25	19,0	25,4	29,6	50,5	60
1 1/2" 38	28,6	38,1	42,6	50,5	65
2" 51	33,4	50,8	55,8	64,0	105
2 1/2" 63	35,0	63,5	68,8	77,5	145
3" 76	36,5	76,2	82,0	91,0	190
4" 101	38,0	101,6	110,0	119,0	300



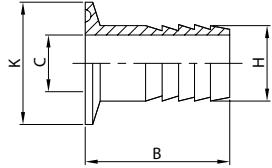
RACCORDI  
UNIONS  
RACCORDS  
RACORES



**CLAMP**

PORTAGOMMA E. SM.  
HOSE ADAPTOR E. FR.  
PORTE CAOUTCH. B. FR.  
M. MANGUERA E. SM.

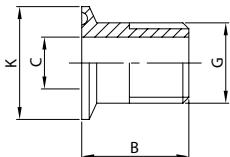
## K14 RHA



DN	B	C	H	K	gr
1/2"	12	38,1	9,5	13,7	25,0
3/4"	19	38,1	15,7	21,3	40
1"	25	42,9	20,6	25,4	50,5
1 1/2"	38	42,9	33,3	38,1	140
2"	51	58,7	46,0	50,8	64,0
2 1/2"	63	59,5	58,7	63,5	370
3"	76	78,6	72,0	76,2	91,0
4"	101	86,5	97,4	101,6	505
					685

SEMIRACCORDO EF. GAS  
BSP ADAPTOR  
FERRULE BF. GAZ  
ENLACE ROSCA GAS

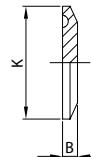
## K14 BSPM



DN	B	C	G	K	gr
1"	25	30,0	21,7	1"	50,5
1 1/2"	38	32,0	34,4	1 1/2"	140
2"	51	36,0	47,1	2"	250
2 1/2"	63	39,0	59,8	2 1/2"	370
3"	76	46,0	72,5	3"	505
4"	101	56,0	96,7	4"	685

TAPPO  
SOLID END CAP  
BOUCHON  
TAPÓN

## K16



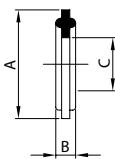
DN	B	K	gr
1/2"	12	4,7	25,0
3/4"	19	4,7	25,0
1"	25	6,4	50,5
1 1/2"	38	6,4	50,5
2"	51	6,4	64,0
2 1/2"	63	6,4	77,5
3"	76	6,4	91,0
4"	101	7,9	119,0
5"	127	11,0	144,4
6"	152	13,0	166,0
8"	203	13,0	217,0
			3.700

GUARNIZIONE  
GASKET  
JOINT  
JUNTA

GUARNIZIONE A BUSTA  
ENVELOPE GASKET  
JOINT À ENVELOPPE  
JUNTA DE SOBRE

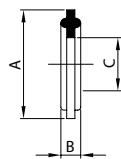
GUARNIZIONE A LABBRO  
LIP GASKET  
JOINT À LÈVRE  
JUNTA DE REBORDE

## K40



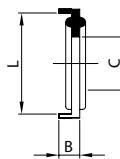
DN	A	B	C
1/2"	12	21,8	4,5
3/4"	19	21,8	4,5
1"	25	50,5	5,3
1 1/2"	38	50,5	5,3
2"	51	64,0	5,3
2 1/2"	63	77,5	5,3
3"	76	91,0	5,3
4"	101	119,0	5,3
4"	104	119,0	5,3
5"	127	144,4	5,3
6"	152	166,0	5,3
8"	203	217,0	5,3
			194,2

## K40 TE



DN	A	B	C
1"	25	50,5	5,3
1 1/2"	38	50,5	5,3
2"	51	64,0	5,3
2 1/2"	63	77,5	5,3
3"	76	91,0	5,3
4"	101	119,0	5,3
4"	104	119,0	5,3

## K39

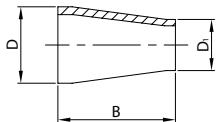


DN	B	C	L
1"	25	4,5	23,2
1 1/2"	38	4,5	36,2
2"	51	4,5	49,2
2 1/2"	63	4,5	60,5
3"	76	4,5	73,1
4"	101	4,5	97,6
4"	104	4,5	100,0
5"	127	4,5	124,2
6"	152	4,5	147,5
8"	203	4,5	198,2
			218,0



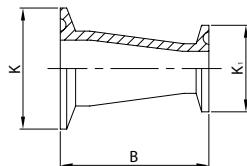
RIDUZIONE CONC. EL.  
CONC. REDUCER PE.  
RÉDUCTION CONC. BL.  
REDUCCIÓN CONC. EL.

**W31**



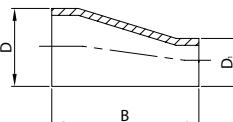
RIDUZIONE CONC. E. SM.  
CONC. REDUCER E. FR.  
RÉDUCTION CONC. B. FR.  
REDUCCIÓN CONC. E. SM.

**K31**



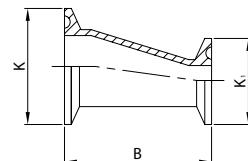
RIDUZIONE ECC. EL.  
ECC. REDUCER PE.  
RÉDUCTION EXC. BL.  
REDUCCIÓN EXC. EL.

**W32**



RIDUZIONE ECC. E. SM.  
ECC. REDUCER E. FR.  
RÉDUCTION EXC. B. FR.  
REDUCCIÓN EXC. E. SM.

**K32**



DN	B	D	D <sub>1</sub>	gr
3/4"-1/2"	19/12	25,4	19,0	12,7 50
1"-1/2"	25/12	25,4	25,4	12,7 70
1"-3/4"	25/19	25,4	25,4	19,0 80
1 1/2"-1/2"	38/12	50,8	38,1	12,7 90
1 1/2"-3/4"	38/19	50,8	38,1	19,0 90
1 1/2"-1"	38/25	67,0	38,1	25,4 100
2"-1 1/2"	51/38	67,0	50,8	38,1 140
2 1/2"-2"	63/51	67,0	63,5	50,8 160
3"-2"	76/51	67,0	76,2	50,8 180
3"-2 1/2"	76/63	67,0	76,2	63,5 220
4"-3"	101/76	67,0	101,6	76,2 280

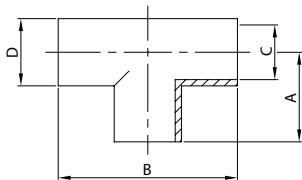
DN	B	K	K <sub>1</sub>	gr
3/4"-1/2"	19/12	50,8	25,0	25,0 80
1"-1/2"	25/12	50,8	50,5	25,0 140
1"-3/4"	25/19	50,8	50,5	25,0 160
1 1/2"-1/2"	38/12	76,2	50,5	25,0 200
1 1/2"-3/4"	38/19	76,2	50,5	25,0 200
1 1/2"-1"	38/25	92,4	50,5	50,5 240
2"-1 1/2"	51/38	92,4	64,0	50,5 250
2 1/2"-2"	63/51	92,4	77,5	64,0 300
3"-2"	76/51	92,4	91,0	64,0 400
3"-2 1/2"	76/63	92,4	91,0	77,5 390
4"-3"	101/76	92,4	119,0	91,0 775

DN	B	D	D <sub>1</sub>	gr
3/4"-1/2"	19/12	50,8	25,0	25,0 80
1"-1/2"	25/12	50,8	50,5	25,0 160
1"-3/4"	25/19	50,8	50,5	25,0 160
1 1/2"-1"	38/25	67,0	38,1	25,4 110
2"-1 1/2"	51/38	67,0	50,8	38,1 150
2 1/2"-2"	63/51	67,0	63,5	50,8 170
3"-2 1/2"	76/51	67,0	76,2	50,8 250
3"-2"	76/63	67,0	76,2	63,5 230
4"-3"	101/76	67,0	101,6	76,2 510

DN	B	K	K <sub>1</sub>	gr
3/4"-1/2"	19/12	50,8	25,0	25,0 80
1"-1/2"	25/12	50,8	50,5	25,0 160
1"-3/4"	25/19	50,8	50,5	25,0 160
1 1/2"-1"	38/25	92,4	50,5	50,5 250
2"-1 1/2"	51/38	92,4	64,0	50,5 260
2 1/2"-2"	63/51	92,4	77,5	64,0 300
3"-2"	76/51	92,4	91,0	64,0 400
3"-2 1/2"	76/63	92,4	91,0	77,5 400
4"-3"	101/76	92,4	119,0	91,0 790

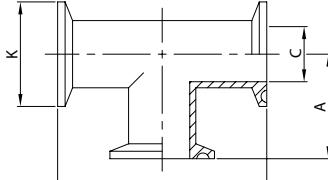
TEE EL.  
TEE PE.  
TE BL.  
TE EL.

**W7**



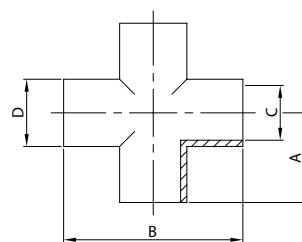
TEE E. SM.  
TEE E. FR.  
TE B. FR.  
TE E. SM.

**K7**



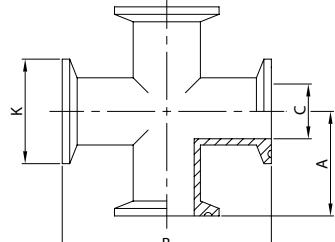
CROCE EL.  
CROSS PE.  
CROIX BL.  
CRUZ EL.

**W9**



CROCE E. SM.  
CROSS E. FR.  
CROIX B. FR.  
CRUZ E. SM.

**K9**



DN	A	B	C	D	gr
1/2"	12	53,9	107,8	9,4	12,7 56
3/4"	19	53,9	107,8	15,7	19,0 98
1"	25	28,6	57,2	22,1	25,4 80
1 1/2"	38	42,1	84,2	34,8	38,1 160
2"	51	52,4	104,8	47,5	50,8 235
2 1/2"	63	59,5	119,0	60,2	63,5 340
3"	76	65,9	131,8	72,9	76,2 500
4"	101	87,3	174,6	97,4	101,6 900

DN	A	B	C	K	gr
1/2"	12	66,6	133,2	9,4	25,0 104
3/4"	19	66,6	133,2	15,7	25,0 150
1"	25	60,3	120,6	22,1	50,5 175
1 1/2"	38	69,9	139,8	34,8	50,5 315
2"	51	88,9	177,8	47,5	64,0 628
2 1/2"	63	88,9	177,8	60,2	77,5 780
3"	76	95,3	190,6	72,9	91,0 1.135
4"	101	115,8	231,6	97,4	119,0 2.390

DN	A	B	C	D	gr
1/2"	12	66,6	133,2	9,4	25,0 138
3/4"	19	66,6	133,2	15,7	25,0 200
1"	25	60,3	120,6	22,1	50,5 260
1 1/2"	38	69,9	139,8	34,8	50,5 400
2"	51	88,9	177,8	47,5	64,0 715
2 1/2"	63	88,9	177,8	60,2	77,5 810
3"	76	95,3	190,6	72,9	91,0 1.265
4"	101	114,3	228,6	97,4	119,0 1.880



CURVE  
BENDS  
COUDES  
CODOS



**CLAMP**

CURVA 45° EL.  
BEND 45° PE.  
COUDE 45° BL.  
CODO 45° EL.

CURVA 45° E. SM.  
BEND 45° E. FR.  
COUDE 45° B. FR.  
CODO 45° E. SM.

CURVA 90° ES.  
BEND 90° WE.  
COUDE 90° BS.  
CODO 90° ES.

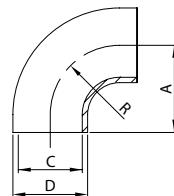
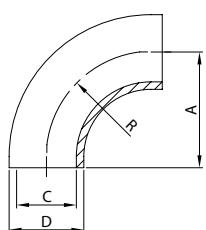
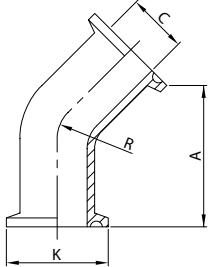
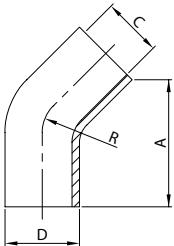
CURVA 90° ES.  
BEND 90° WE.  
COUDE 90° BS.  
CODO 90° ES.

**W2K**

**K2K**

**310 LA**

**320 LA**



DN	A	C	D	R	gr
1/2"	12	97,5	9,4	12,7	44,4 40
3/4"	19	97,5	15,7	19,0	66,5 75
1"	25	77,0	22,1	25,4	38,1 50
1 1/2"	38	85,0	34,8	38,1	57,2 100
2"	51	109,0	47,5	50,8	76,2 180
2 1/2"	63	111,5	60,2	63,5	95,3 200
3"	76	120,0	72,9	76,2	114,3 500
4"	101	151,0	97,4	101,6	113,1 800

DN	A	C	K	R	gr
1/2"	12	119,2	9,4	25,0	44,4 70
3/4"	19	119,2	15,7	25,0	66,5 100
1"	25	98,7	22,1	50,5	38,1 120
1 1/2"	38	107,2	34,8	50,5	57,2 141
2"	51	130,7	47,5	64,0	76,2 227
2 1/2"	63	133,2	60,2	77,5	95,3 259
3"	76	141,7	72,9	91,0	114,3 540
4"	101	178,0	97,4	119,0	113,1 1.160

DN	A	C	D	R	gr
1"	25	38,0	22,1	25,4	38,0 50
1 1/2"	38	57,0	34,8	38,1	57,0 120
2"	51	76,0	47,5	50,8	76,0 205
2 1/2"	63	95,0	60,2	63,5	95,0 325
3"	76	114,0	72,9	76,2	114,0 515
4"	101	152,0	97,4	101,6	152,0 815

DN	A	C	D	R	gr
1"	25	25,0	22,1	25,4	25,0 40
1 1/2"	38	38,0	34,8	38,1	38,0 100
2"	51	51,0	47,5	50,8	51,0 180
2 1/2"	63	64,0	60,2	63,5	64,0 295
3"	76	76,0	72,9	76,2	76,0 480
4"	101	101,0	97,4	101,6	101,0 770

CURVA 90° EM.  
BEND 90° EE.  
COUDE 90° BD.  
CODO 90° EM.

CURVA 90° E. SM.  
BEND 90° E. FR.  
COUDE 90° B. FR.  
CODO 90° E. SM.

CURVA 180° EL.  
BEND 180° PE.  
COUDE 180° BL.  
CODO 180° EL.

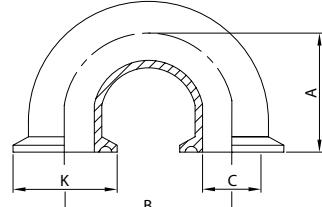
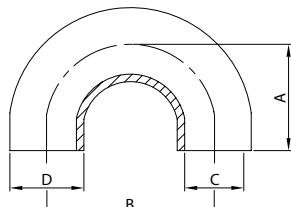
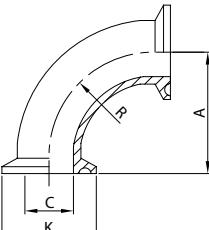
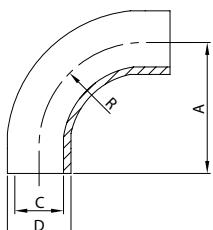
CURVA 180° E. SM.  
BEND 180° E. FR.  
COUDE 180° B. FR.  
CODO 180° E. SM.

**W2C**

**K2C**

**W3C**

**K3C**



DN	A	C	D	R	gr
1/2"	12	76,2	9,4	12,7	44,4 56
3/4"	19	76,2	15,7	19,0	66,5 95
1"	25	52,4	22,1	25,4	38,1 160
1 1/2"	38	74,6	34,8	38,1	57,2 180
2"	51	103,2	47,5	50,8	76,2 340
2 1/2"	63	131,8	60,2	63,5	95,3 460
3"	76	160,3	72,9	76,2	114,3 700
4"	101	192,5	97,4	101,6	152,5 1.490

DN	A	C	K	R	gr
1/2"	12	88,8	9,4	25,0	44,4 90
3/4"	19	88,8	15,7	25,0	66,5 120
1"	25	50,8	22,1	50,5	38,1 170
1 1/2"	38	69,9	34,8	50,5	57,2 200
2"	51	88,9	47,5	64,0	76,2 370
2 1/2"	63	108,0	60,2	77,5	95,3 500
3"	76	127,0	72,9	91,0	114,3 910
4"	101	120,3	97,4	119,0	152,4 1.850

DN	A	B	C	D	gr
1"	25	86,5	73,0	22,1	25,4 170
1 1/2"	38	102,0	104,0	34,8	38,1 320
2"	51	125,5	151,0	47,5	50,8 500
2 1/2"	63	140,0	180,0	60,2	63,5 740
3"	76	147,0	194,0	72,9	76,2 1.180
4"	101	150,0	220,0	97,4	101,6 1.980

DN	A	B	C	K	gr
1"	25	99,2	73,0	22,1	50,5 340
1 1/2"	38	114,7	104,0	34,8	50,5 400
2"	51	138,2	151,0	47,5	64,0 740
2 1/2"	63	152,7	180,0	60,2	77,5 1.000
3"	76	159,7	194,0	72,9	91,0 1.820
4"	101	165,8	220,0	97,4	119,0 3.320



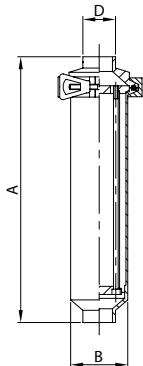
FILTRI - SPECOLE  
FILTERS - SIGHT GLASSES  
FILTRES - REGARDS  
FILTROS - MIRILLAS



**CLAMP**

FILTRO LINEA EL.  
LINE FILTER PE.  
FILTRE DROIT BL.  
FILTRO LÍNEA EL.

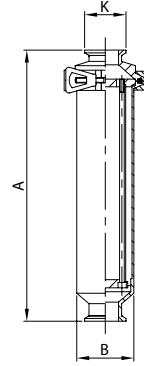
**W42**



DN	A	B	D	gr
1" 25	326,0	70,0	25,4	3.000
1 1/2" 38	326,0	70,0	38,1	3.000
2" 51	426,0	70,0	50,8	3.300
2 1/2" 63	524,5	85,0	63,5	4.650
3" 76	568,0	101,0	76,2	5.700

FILTRO LINEA E. SM.  
LINE FILTER E. FR.  
FILTRE DROIT B. FR.  
FILTRO LÍNEA E. SM.

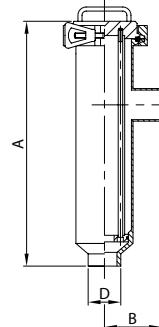
**K42**



DN	A	B	K	gr
1" 25	326,0	70,0	50,5	3.170
1 1/2" 38	326,0	70,0	50,5	3.300
2" 51	426,0	70,0	64,0	3.620
2 1/2" 63	524,5	85,0	77,5	5.190
3" 76	568,0	101,0	91,0	6.400

FILTRO 90° EL.  
90° FILTER PE.  
FILTRE 90° BL.  
FILTRO 90° EL.

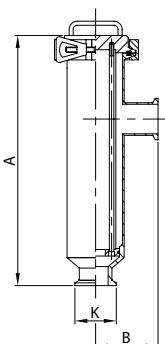
**W43**



DN	A	B	D	gr
1" 25	304,0	70,0	25,4	3.100
1 1/2" 38	304,0	70,0	38,1	3.100
2" 51	404,0	72,0	50,8	3.400
2 1/2" 63	497,0	85,0	63,5	4.800
3" 76	548,0	96,0	76,2	5.900

FILTRO 90° E. SM.  
90° FILTER E. FR.  
FILTRE 90° B. FR.  
FILTRO 90° E. SM.

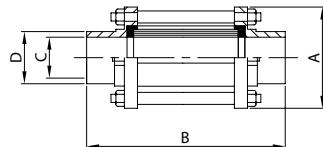
**K43**



DN	A	B	K	gr
1" 25	304,0	82,7	50,5	3.240
1 1/2" 38	304,0	82,7	50,5	3.500
2" 51	404,0	84,7	64,0	3.850
2 1/2" 63	497,0	97,7	77,5	5.590
3" 76	548,0	108,7	91,0	6.900

SPECOLA EL.  
SIGHT GLASS PE.  
REGARD BL.  
MIRILLA EL.

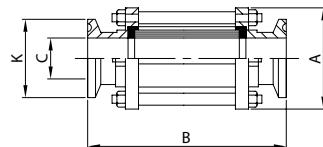
**W45**



DN	A	B	C	D	gr
1" 25	55,0	147,0	22,1	25,4	400
1 1/2" 38	70,0	153,0	34,8	38,1	620
2" 51	85,0	153,0	47,5	50,8	860
2 1/2" 63	95,0	163,0	60,2	63,5	950
3" 76	105,0	173,0	72,9	76,2	1.100
4" 101	140,0	173,0	97,4	101,6	2.760

SPECOLA E. SM.  
SIGHT GLASS E. FR.  
REGARD B. FR.  
MIRILLA E. SM.

**K45**

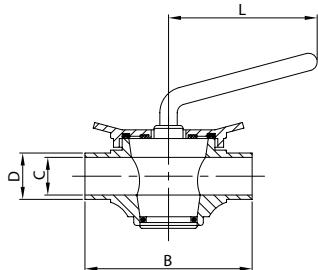


DN	A	B	C	K	gr
1" 25	55,0	165,0	22,1	50,5	560
1 1/2" 38	70,0	165,0	34,8	50,5	760
2" 51	85,0	165,0	47,5	64,0	1.050
2 1/2" 63	95,0	165,0	60,2	77,5	1.180
3" 76	105,0	165,0	72,9	91,0	1.400
4" 101	140,0	165,0	97,4	119,0	3.260



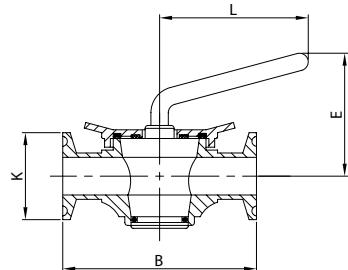
RUBINETTO 2 VIE EL.  
2-WAY PLUG COCK PE.  
ROBINET 2 VOIES BL.  
GRIFO 2 VÍAS EL.

**W10**



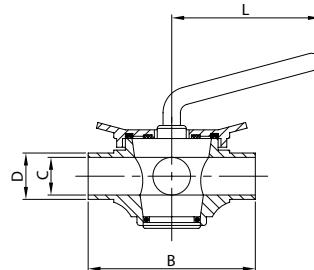
RUBINETTO 2 VIE E. SM.  
2-WAY PLUG COCK E. FR.  
ROBINET 2 VOIES B. FR.  
GRIFO 2 VÍAS E. SM.

**K10**



RUBINETTO 3 VIE EL.  
3-WAY PLUG COCK PE.  
ROBINET 3 VOIES BL.  
GRIFO 3 VÍAS EL.

**W11**



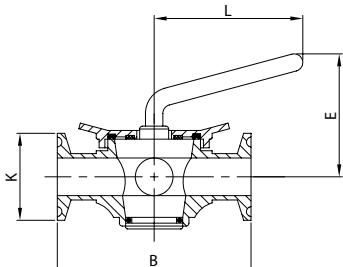
DN	B	C	D	L	gr
1" 25	125,0	22,1	25,4	100,0	1.950
1 1/2" 38	160,0	34,8	38,1	115,0	4.250
2" 51	170,0	47,5	50,8	140,0	6.050
2 1/2" 63	200,0	60,2	63,5	160,0	12.600
3" 76	230,0	72,9	76,2	160,0	16.150

DN	B	E	K	L	gr
1" 25	125,0	90,0	50,5	100,0	1.930
1 1/2" 38	160,0	117,0	50,5	115,0	4.270
2" 51	170,0	122,0	64,0	140,0	6.450
2 1/2" 63	200,0	142,0	77,5	160,0	14.300
3" 76	230,0	154,0	91,0	160,0	18.400

DN	B	C	D	L	gr
1" 25	125,0	22,1	25,4	100,0	2.050
1 1/2" 38	160,0	34,8	38,1	115,0	4.450
2" 51	170,0	47,5	50,8	140,0	6.100
2 1/2" 63	200,0	60,2	63,5	160,0	12.350
3" 76	230,0	72,9	76,2	160,0	17.000

RUBINETTO 3 VIE E. SM.  
3-WAY PLUG COCK E. FR.  
ROBINET 3 VOIES B. FR.  
GRIFO 3 VÍAS E. SM.

**K11**

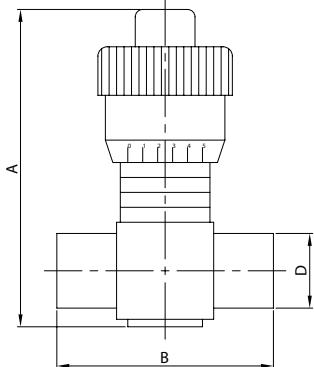


DN	B	E	K	L	gr
1" 25	125,0	90,0	50,5	100,0	2.370
1 1/2" 38	160,0	117,0	50,5	115,0	4.880
2" 51	170,0	122,0	64,0	140,0	6.940
2 1/2" 63	200,0	142,0	77,5	160,0	13.250
3" 76	230,0	154,0	91,0	160,0	16.530



V. REGOLAZ. FLUSSO EL.  
 FLOW CONTROL VALVE PE.  
 VANNE RÉGLAGE FLUX BL.  
 VÁLVULA REGULACIÓN EL.

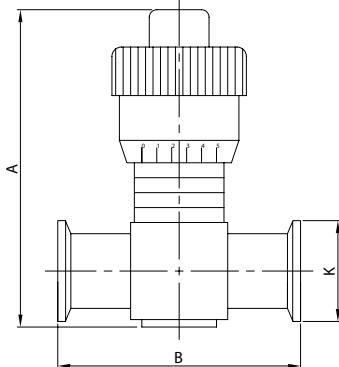
W62



DN	A	B	D	gr
1" 25	127,0	83,0	25,4	1.220
1 1/2" 38	140,0	100,0	38,1	2.200
2" 51	165,0	124,0	50,8	2.820
2 1/2" 63	200,0	133,0	63,5	3.760
3" 76	253,0	145,0	76,2	7.420

V. REG. FLUSSO E. SM.  
 FLOW CONTROL V. E. FR.  
 V. RÉGLAGE FLUX B. FR.  
 V. REGULACIÓN E. SM.

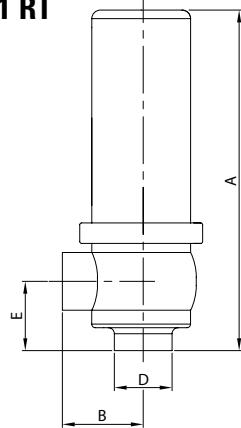
K62



DN	A	B	K	gr
1" 25	127,0	100,0	50,5	1.440
1 1/2" 38	140,0	117,0	50,5	2.560
2" 51	165,0	127,0	64,0	3.150
2 1/2" 63	200,0	140,0	77,0	4.200
3" 76	253,0	152,0	91,0	8.300

VALVOLA SICUREZZA EL.  
 RELIEF VALVE PE.  
 SOUPAPE SÛRETÉ BL.  
 VÁLVULA SEGURIDAD EL.

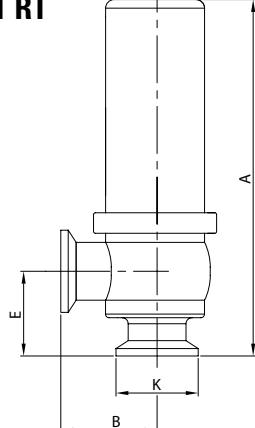
W61 RT



DN	A	B	D	E	gr
1" 25	190,0	45,0	25,4	30,0	2.185
1 1/2" 38	233,0	56,0	38,1	38,0	2.270
2" 51	245,0	65,0	50,8	45,0	2.910
2 1/2" 63	261,0	70,0	63,5	52,0	4.550
3" 76	276,0	85,0	76,2	60,0	6.100

VALVOLA SICUREZZA E. SM.  
 RELIEF VALVE E. FR.  
 SOUPAPE SÛRETÉ B. FR.  
 V. SEGURIDAD E. SM.

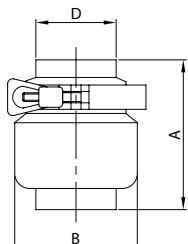
K61 RT



DN	A	B	E	K	gr
1" 25	203,0	58,0	43,0	50,5	2.300
1 1/2" 38	246,0	59,0	51,0	50,5	2.350
2" 51	258,0	78,0	58,0	64,0	3.030
2 1/2" 63	274,0	83,0	65,0	77,5	4.710
3" 76	289,0	93,0	73,0	91,0	6.280

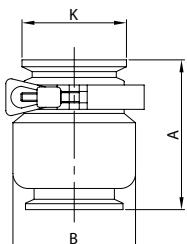
VALVOLA RITEGNO EL.  
 CHECK VALVE PE.  
 CLAPET ANTIRETOUR BL.  
 VÁLVULA RETENCIÓN EL.

W64 V



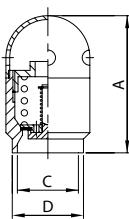
VALVOLA RITEGNO E. SM.  
 CHECK VALVE E. FR.  
 CLAPET ANTIRETOUR B. FR.  
 V. RETENCIÓN E. SM.

K64 V



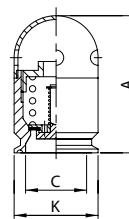
V. PRESS. DEPR. EL.  
 VACUUM PRESS. V. PE.  
 S. PRESS. DÉPR. BL.  
 V. PRESIÓN VACÍO EL.

W64 VP



V. PRESS. DEPR. E. SM.  
 VACUUM PRESS. V. E. FR.  
 S. PRESS. DÉPR. B. FR.  
 V. PRESIÓN VACÍO E. SM.

K64 VP



DN	A	B	D	gr
1/2" 12	74,0	25,0	12,7	240
3/4" 19	75,0	25,0	19,0	520
1" 25	94,0	50,5	25,4	880
1 1/2" 38	95,0	64,0	38,1	1.070
2" 51	102,0	77,5	50,8	1.750
2 1/2" 63	111,0	91,0	63,5	2.140
3" 76	125,0	119,0	76,2	3.950
4" 101	136,0	131,0	101,6	4.900

DN	A	B	K	gr
1/2" 12	74,0	25,0	25,0	260
3/4" 19	75,0	40,0	25,0	540
1" 25	94,0	50,5	50,5	900
1 1/2" 38	95,0	64,0	50,5	1.100
2" 51	102,0	77,5	64,0	1.800
2 1/2" 63	111,0	91,0	77,5	2.200
3" 76	125,0	119,0	91,0	4.020
4" 101	136,0	131,0	119,0	5.000

DN	A	C	D	gr
1 1/2" 38	80,0	34,8	38,1	440
2" 51	102,0	47,5	50,8	890
2 1/2" 63	113,0	60,2	63,5	1.500

DN	A	C	K	gr
1 1/2" 38	80,0	34,8	50,5	450
2" 51	102,0	47,5	64,0	900
2 1/2" 63	113,0	60,2	77,5	1.650



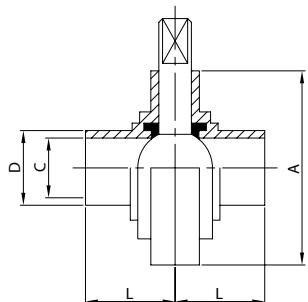
VALVOLE A FARFALLA  
BUTTERFLY VALVES  
VANNE PAPILLON  
VÁLVULAS DE MARIPOSA



**CLAMP**

VALVOLA FARFALLA EL.  
BUTTERFLY VALVE PE.  
VANNE PAPILLON BL.  
VÁLVULA MARIPOSA EL.

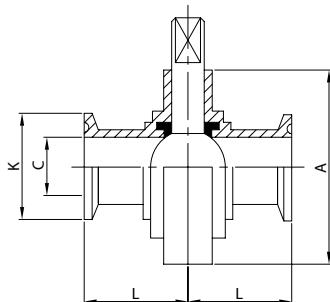
### W100 BV



DN	A	C	D	L	gr
1"	25	79,0	22,1	25,4	34,0 725
1 1/2"	38	85,0	34,8	38,1	38,0 805
2"	51	105,0	47,5	50,8	40,0 1.270
2 1/2"	63	112,0	60,2	63,5	40,0 1.460
3"	76	125,0	72,9	76,2	41,0 1.755
4"	101	157,0	97,4	101,6	44,0 2.480
5"	127	180,0	122,0	127,0	40,0 4.100
6"	152	212,0	147,4	152,4	40,0 6.000
8"	203	256,5	198,2	203,2	45,0 7.800
10"	254	306,5	249,0	254,0	45,0 17.000

VALVOLA FARFALLA E. SM.  
BUTTERFLY VALVE E. FR.  
VANNE PAPILLON B. FR.  
VÁLVULA MARIPOSA E. SM.

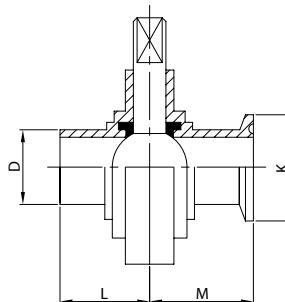
### K100 BV



DN	A	C	K	L	gr
1"	25	79,0	22,1	50,5	35,0 950
1 1/2"	38	85,0	34,8	50,5	36,0 995
2"	51	105,0	47,5	64,0	40,0 1.200
2 1/2"	63	112,0	60,2	77,5	40,0 1.600
3"	76	125,0	72,9	91,0	40,0 1.950
4"	101	157,0	97,4	119,0	45,0 3.450
5"	127	180,0	122,0	144,5	41,0 4.300
6"	152	212,0	147,4	166,0	41,0 6.200
8"	203	256,5	198,2	217,0	45,0 8.100
10"	254	306,5	249,0	268,0	45,0 17.400

VALVOLA FARFALLA EL./E. SM.  
BUTTERFLY VALVE PE./E. FR.  
VANNE PAPILLON BL./B. FR.  
VÁLVULA MARIPOSA EL./E. SM.

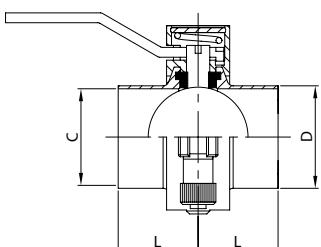
### WK100 BV



DN	D	K	L	M	gr
1"	25	25,4	50,5	34,0	35,0 835
1 1/2"	38	38,1	50,5	38,0	36,0 900
2"	51	50,8	64,0	40,0	40,0 1.235
2 1/2"	63	63,5	77,5	40,0	40,0 1.530
3"	76	76,2	91,0	41,0	40,0 1.850
4"	101	101,6	119,0	44,0	45,0 3.145
5"	127	127,0	144,5	40,0	41,0 4.200
6"	152	152,4	166,0	40,0	41,0 6.100
8"	203	203,2	217,0	45,0	45,0 7.950
10"	254	254,0	268,0	45,0	45,0 17.200

V. FARFALLA CERNIERA EL.  
HINGED BUTTERFLY V. PE.  
V. PAPILLON CHARNIÈRE BL.  
V. MARIP. CREMALLERA EL.

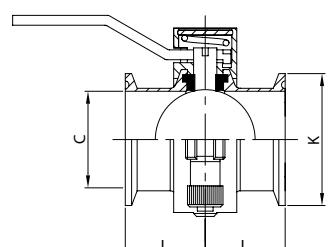
### W110 BV



DN	C	D	L	gr
2"	51	47,5	50,8	40,0 850

V. FARFALLA CERNIERA E. SM.  
HINGED BUTTERFLY V. E. FR.  
V. PAPILLON CHARNIÈRE B. FR.  
V. MARIP. CREMALLERA E. SM.

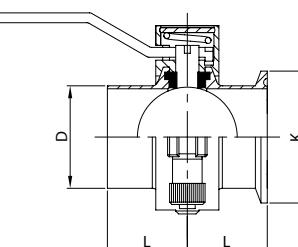
### K110 BV



DN	C	K	L	gr
2"	51	47,5	64,0	40,0 880

V. FARF. CERNIERA EL./E. SM.  
HINGED BUTTERFLY V. PE./E. FR.  
V. PAP. CHARNIÈRE BL./B. FR.  
V. MAR. CREMALL. EL./E. SM.

### WK110 BV



DN	D	K	L	gr
2"	51	50,8	64,0	40,0 865



VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



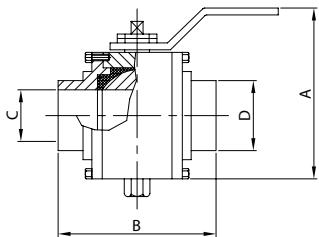
**CLAMP**

V. SFERA SAN. DRENAGGIO EL.  
SAN. DRAINAGE BALL V. PE.  
V. BOULE SAN. DRAINAGE BL.  
V. BOLA SAN. DRENAJE EL.

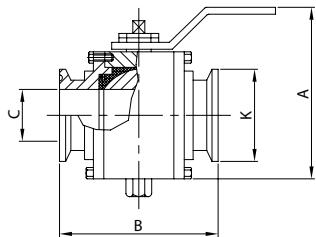
V. SFERA SAN. DR. E. SM.  
SAN. DR. BALL V. E. FR.  
V. BOULE SAN. DR. B. FR.  
V. BOLA SAN. DR. E. SM.

V. SFERA SAN. DR. EL./E. SM.  
SAN. DR. BALL V. PE./E. FR.  
V. BOULE SAN. DR. BL./B. FR.  
V. BOLA SAN. DR. EL./E. SM.

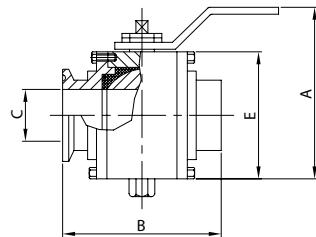
**W50**



**K50**



**WK50**



DN	A	B	C	D	gr
1"	25	90,0	95,0	22,1	25,4 1.100
1 1/2"	38	110,0	107,0	34,8	38,1 2.090
2"	51	126,0	118,0	47,5	50,8 3.140
2 1/2"	63	143,0	135,0	60,2	63,5 4.730
3"	76	163,0	158,0	72,0	76,2 6.940
4"	101	202,0	170,0	97,4	101,6 13.570

DN	A	B	C	K	gr
1"	25	90,0	95,0	22,1	50,5 1.120
1 1/2"	38	110,0	107,0	34,8	50,5 2.120
2"	51	126,0	118,0	47,5	64,0 3.190
2 1/2"	63	143,0	135,0	60,2	77,5 4.790
3"	76	163,0	158,0	72,0	91,0 7.010
4"	101	202,0	170,0	97,4	119,0 13.670

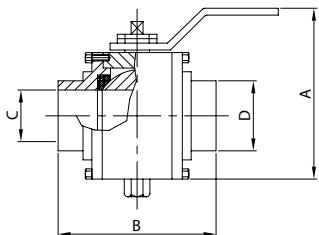
DN	A	B	C	E	gr
1"	25	90,0	95,0	22,1	58,0 1.110
1 1/2"	38	110,0	107,0	34,8	77,0 2.105
2"	51	126,0	118,0	47,5	93,0 3.165
2 1/2"	63	143,0	135,0	60,2	113,0 4.760
3"	76	163,0	158,0	72,0	129,0 6.975
4"	101	202,0	170,0	97,4	169,0 13.620

VALVOLA SFERA DRENAGGIO EL.  
DRAINAGE BALL VALVE PE.  
VANNE BOULE DRAINAGE BL.  
VÁLVULA BOLA DRENAJE EL.

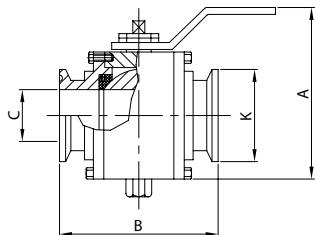
V. SFERA DRENAGGIO E. SM.  
DRAINAGE BALL V. E. FR.  
V. BOULE DRAINAGE B. FR.  
V. BOLA DRENAJE E. SM.

V. SFERA DRENAGGIO EL./E. SM.  
DRAINAGE BALL V. PE./E. FR.  
V. BOULE DRAINAGE BL./B. FR.  
V. BOLA DRENAJE EL./E. SM.

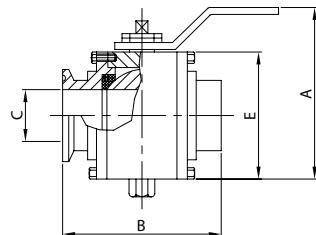
**W51**



**K51**



**WK51**



DN	A	B	C	D	gr
1"	25	90,0	95,0	22,1	25,4 1.090
1 1/2"	38	110,0	107,0	34,8	38,1 2.080
2"	51	126,0	118,0	47,5	50,8 3.120
2 1/2"	63	143,0	135,0	60,0	63,5 4.710
3"	76	163,0	158,0	72,0	76,2 6.910
4"	101	202,0	170,0	97,0	101,6 13.530

DN	A	B	C	K	gr
1"	25	90,0	95,0	22,1	50,5 1.110
1 1/2"	38	110,0	107,0	34,8	50,5 2.110
2"	51	126,0	118,0	47,5	64,0 3.170
2 1/2"	63	143,0	135,0	60,0	77,5 4.770
3"	76	163,0	158,0	72,0	91,0 6.980
4"	101	202,0	170,0	97,0	119,0 13.630

DN	A	B	C	E	gr
1"	25	90,0	95,0	22,1	58,0 1.110
1 1/2"	38	110,0	107,0	34,8	77,0 2.095
2"	51	126,0	118,0	47,5	93,0 3.145
2 1/2"	63	143,0	135,0	60,0	113,0 4.740
3"	76	163,0	158,0	72,0	129,0 6.945
4"	101	202,0	170,0	97,0	169,0 13.580



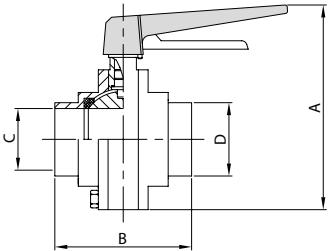
VALVOLE A SFERA  
BALL VALVES  
VANNES À BOULE  
VÁLVULAS DE BOLA



**CLAMP**

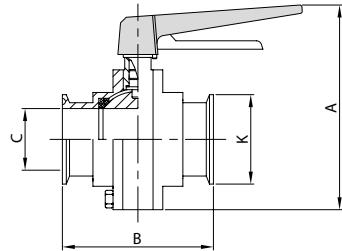
VALVOLA SFERA EL.  
BALL VALVE PE.  
VANNE BOULE BL.  
VÁLVULA BOLA EL.

**W81**



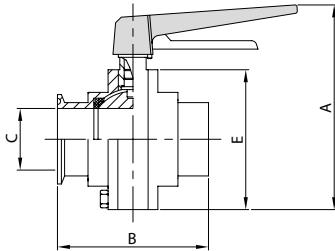
VALVOLA SFERA E. SM.  
BALL VALVE E. FR.  
VANNE BOULE B. FR.  
VÁLVULA BOLA E. SM.

**K81**



VALVOLA SFERA EL./E. SM.  
BALL VALVE PE./E. FR.  
VANNE BOULE BL./B. FR.  
VÁLVULA BOLA EL./E. SM.

**WK81**



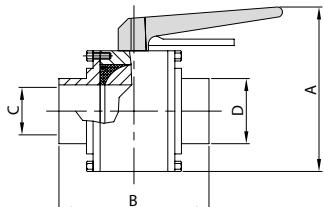
DN	A	B	C	D	gr
1 1/2"	38	138,0	73,0	35,1	38,1 1.600
2"	51	155,0	80,0	47,8	50,8 2.600
2 1/2"	63	176,0	97,0	60,5	63,5 4.000
3"	76	190,0	109,0	72,9	76,2 5.000

DN	A	B	C	K	gr
1 1/2"	38	138,0	87,0	35,1	50,5 1.630
2"	51	155,0	90,0	47,8	64,0 2.630
2 1/2"	63	176,0	105,0	60,5	77,5 4.040
3"	76	190,0	121,0	72,9	91,0 5.040

DN	A	B	C	E	gr
1 1/2"	38	138,0	80,0	35,1	81,0 1.615
2"	51	155,0	85,0	47,8	98,0 2.615
2 1/2"	63	176,0	101,0	60,5	119,0 4.020
3"	76	190,0	115,0	72,9	133,0 5.020

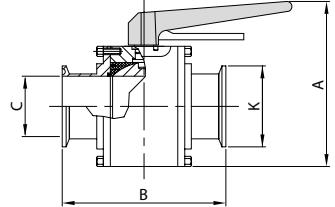
V. SFERA ESTRAIBILE SANIT. EL.  
SANIT. EXTRACTABLE BALL V. PE.  
V. BOULE EXTRACT. SANIT. BL.  
V. BOLA EXTRAIBLE SANIT. EL.

**W90**



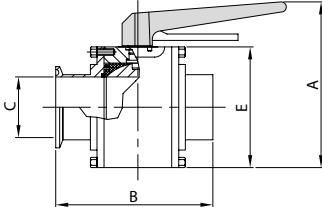
V. SFERA ESTR. SAN. E. SM.  
SANIT. EXTRACT. BALL V. E. FR.  
V. BOULE EXTRACT. SANIT. B. FR.  
V. BOLA EXTRAIBLE SANIT. E. SM.

**K90**



V. SFERA ESTR. SANIT. EL./E. SM.  
SANIT. EXTR. BALL V. PE./E. FR.  
V. BOULE EXTR. SANIT. BL./B. FR.  
V. BOLA EXTR. SANIT. EL./E. SM.

**WK90**



DN	A	B	C	D	gr
1/2"	12	100,0	74,5	9,4	12,7 760
3/4"	19	100,0	74,5	15,7	19,0 760
1"	25	110,0	95,0	22,1	25,4 1.130
1 1/2"	38	130,0	109,0	34,8	38,1 2.070
2"	51	145,0	124,0	47,5	50,8 2.800
2 1/2"	63	168,0	135,0	60,2	63,5 4.840
3"	76	182,0	158,0	72,0	76,2 7.480

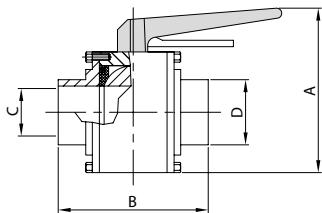
DN	A	B	C	K	gr
1/2"	12	100,0	80,5	9,4	25,0 780
3/4"	19	100,0	80,5	15,7	25,0 780
1"	25	110,0	95,0	22,1	50,5 1.150
1 1/2"	38	130,0	109,0	34,8	50,5 2.100
2"	51	145,0	124,0	47,5	64,0 2.850
2 1/2"	63	168,0	135,0	50,2	77,5 4.900
3"	76	182,0	158,0	72,0	91,0 7.550

DN	A	B	C	E	gr
1/2"	12	100,0	77,5	9,4	55,0 770
3/4"	19	100,0	77,5	15,7	55,0 770
1"	25	110,0	95,0	22,1	60,0 1.140
1 1/2"	38	130,0	109,0	34,8	80,0 2.085
2"	51	145,0	124,0	47,5	95,0 2.825
2 1/2"	63	168,0	135,0	60,2	118,0 4.870
3"	76	182,0	158,0	72,0	132,0 7.515



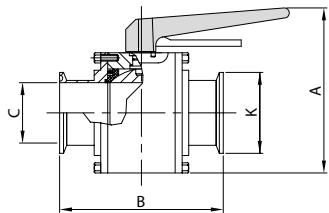
**VALVOLA SFERA ESTRAIBILE EL.**  
**EXTRACTABLE BALL VALVE PE.**  
**VANNE BOULE EXTRACTIBLE BL.**  
**VÁLVULA BOLA EXTRAIBLE EL.**

**W91**



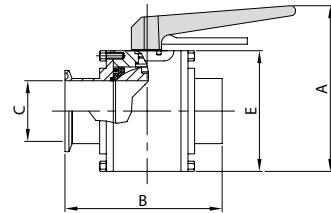
**V. SFERA ESTRAIBILE E. SM.**  
**EXTRACTABLE BALL VALVE E. FR.**  
**V. BOULE EXTRACTIBLE B. FR.**  
**VÁLVULA BOLA EXTRAIBLE E. SM.**

**K91**



**V. SFERA ESTRAIBILE EL./E. SM.**  
**EXTRACTABLE BALL V. PE./E. FR.**  
**V. BOULE EXTRACT. BL./B. FR.**  
**V. BOLA EXTRAIBLE EL./E. SM.**

**WK91**



DN	A	B	C	D	gr
1/2"	12	100,0	74,5	9,4	12,7
3/4"	19	100,0	74,5	15,7	19,0
1"	25	110,0	95,0	22,1	25,4
1 1/2"	38	130,0	109,0	34,8	38,1
2"	51	145,0	124,0	47,5	50,8
2 1/2"	63	168,0	135,0	60,2	63,5
3"	76	182,0	158,0	72,0	76,2
					7.450

DN	A	B	C	K	gr
1/2"	12	100,0	80,5	9,4	25,0
3/4"	19	100,0	80,5	15,7	25,0
1"	25	110,0	95,0	22,1	50,5
1 1/2"	38	130,0	109,0	34,8	50,5
2"	51	145,0	124,0	47,5	64,0
2 1/2"	63	168,0	135,0	60,2	77,5
3"	76	182,0	158,0	72,0	91,0
					7.520

DN	A	B	C	E	gr
1/2"	12	100,0	77,5	9,4	55,0
3/4"	19	100,0	77,5	15,7	55,0
1"	25	110,0	95,0	22,1	60,0
1 1/2"	38	130,0	109,0	34,8	80,0
2"	51	145,0	124,0	47,5	95,0
2 1/2"	63	168,0	135,0	60,2	118,0
3"	76	182,0	158,0	72,0	132,0
					7.480



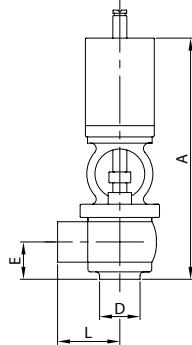
V. PNEUM. 2 V. L EL.  
PNEUM. V. 2 W. L PE.  
V. PNEUM. 2 V. L BL.  
V. NEUM. 2 V. L EL.

V. PNEUM. 2 V. L E. SM.  
PNEUM. V. 2 W. L E. FR.  
V. PNEUM. 2 V. L B. FR.  
V. NEUM. 2 V. L E. SM.

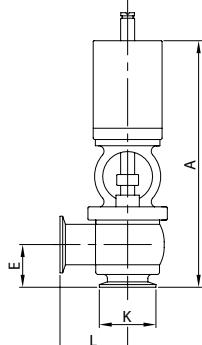
V. PNEUM. 3 V. T EL.  
PNEUM. V. 3 W. T PE.  
V. PNEUM. 3 V. T BL.  
V. NEUM. 3 V. T EL.

V. PNEUM. 3 V. T E. SM.  
PNEUM. V. 3 W. T E. FR.  
V. PNEUM. 3 V. T B. FR.  
V. NEUM. 3 V. T E. SM.

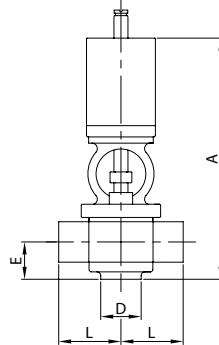
900 L



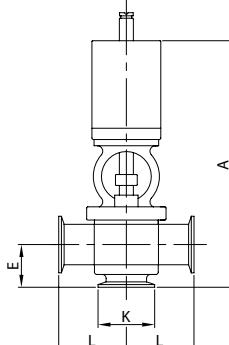
901 K



905 L



906 K



DN	A	D	E	L	gr
1" 25	241,0	25,4	38,0	45,0	3.510
1 1/2" 38	253,0	38,1	43,5	56,0	3.720
2" 51	315,0	50,8	53,0	70,0	6.500
2 1/2" 63	329,0	63,5	57,0	78,0	8.250
3" 76	366,0	76,2	65,5	85,0	10.850
4" 101	453,0	101,6	90,5	135,0	19.200

DN	A	E	K	L	gr
1" 25	253,7	50,7	50,5	56,5	3.530
1 1/2" 38	265,7	56,2	50,5	56,5	3.750
2" 51	327,7	65,7	64,0	66,5	6.550
2 1/2" 63	341,7	69,7	77,0	70,0	8.320
3" 76	378,7	78,2	91,0	72,5	10.920
4" 101	468,8	106,3	119,0	150,8	19.320

DN	A	D	E	L	gr
1" 25	241,0	25,4	38,0	45,0	3.510
1 1/2" 38	253,0	38,1	43,5	56,0	3.720
2" 51	315,0	50,8	53,0	70,0	6.500
2 1/2" 63	329,0	63,5	57,0	78,0	8.250
3" 76	366,0	76,2	65,5	85,0	10.850
4" 101	453,0	101,6	90,5	135,0	19.200

DN	A	E	K	L	gr
1" 25	253,7	50,7	50,5	56,5	3.540
1 1/2" 38	265,7	56,2	50,5	56,5	3.780
2" 51	327,7	65,7	64,0	66,5	6.570
2 1/2" 63	341,7	69,7	77,0	70,0	8.340
3" 76	378,7	78,2	91,0	72,5	10.960
4" 101	468,8	106,3	119,0	150,8	19.400

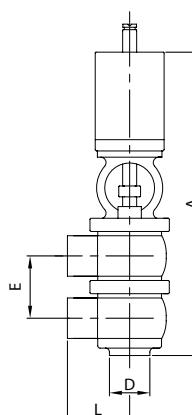
V. PNEUM. 3 V. LL EL.  
PNEUM. V. 3 W. LL PE.  
V. PNEUM. 3 V. LL BL.  
V. NEUM. 3 V. LL EL.

V. PNEUM. 3 V. LL E. SM.  
PNEUM. V. 3 W. LL E. FR.  
V. PNEUM. 3 V. LL B. FR.  
V. NEUM. 3 V. LL E. SM.

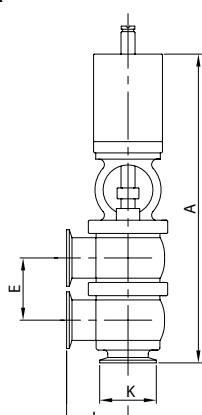
V. PNEUM. 4 V. TL EL.  
PNEUM. V. 4 W. TL PE.  
V. PNEUM. 4 V. TL BL.  
V. NEUM. 4 V. TL EL.

V. PNEUM. 4 V. TL E. SM.  
PNEUM. V. 4 W. TL E. FR.  
V. PNEUM. 4 V. TL B. FR.  
V. NEUM. 4 V. TL E. SM.

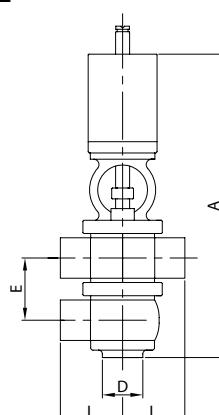
910 L



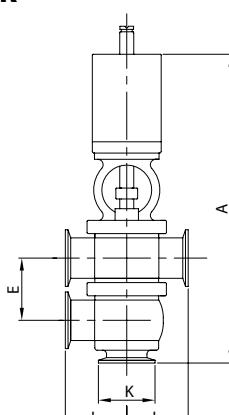
911 K



920 L



921 K



DN	A	D	E	L	gr
1" 25	295,0	25,4	54,0	45,0	4.670
1 1/2" 38	320,0	38,1	67,0	56,0	5.100
2" 51	395,0	50,8	80,0	70,0	9.100
2 1/2" 63	425,0	63,5	96,0	78,0	11.000
3" 76	469,0	76,2	103,0	85,0	15.100
4" 101	624,0	101,6	171,0	135,0	23.000

DN	A	E	K	L	gr
1" 25	307,7	54,0	50,5	56,5	4.700
1 1/2" 38	332,7	67,0	50,5	56,5	5.160
2" 51	407,7	80,0	64,0	66,5	9.170
2 1/2" 63	437,7	96,0	77,0	70,0	11.090
3" 76	481,7	103,0	91,0	72,5	15.210
4" 101	639,8	171,0	119,0	150,8	23.000

DN	A	D	E	L	gr
1" 25	295,0	25,4	54,0	45,0	4.670
1 1/2" 38	320,0	38,1	67,0	56,0	5.100
2" 51	395,0	50,8	80,0	70,0	9.100
2 1/2" 63	425,0	63,5	96,0	78,0	11.000
3" 76	469,0	76,2	103,0	85,0	15.100
4" 101	624,0	101,6	171,0	135,0	23.000

DN	A	E	K	L	gr
1" 25	307,7	54,0	50,5	56,5	4.710
1 1/2" 38	332,7	67,0	50,5	56,5	5.160
2" 51	407,7	80,0	64,0	66,5	9.200
2 1/2" 63	437,7	96,0	77,0	70,0	11.120
3" 76	481,7	103,0	91,0	72,5	15.240
4" 101	639,8	171,0	119,0	150,8	23.260



VALVOLE PNEUMATICHE  
PNEUMATIC VALVES  
VANNES PNEUMATIQUES  
VÁLVULAS NEUMÁTICAS



**CLAMP**

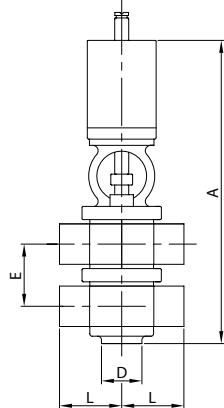
V. PNEUM. 5 V. TT EL.  
PNEUM. V. 5 W. TT PE.  
V. PNEUM. 5 V. TT BL.  
V. NEUM. 5 V. TT EL.

V. PNEUM. 5 V. TT E. SM.  
PNEUM. V. 5 W. TT E. FR.  
V. PNEUM. 5 V. TT B. FR.  
V. NEUM. 5 V. TT E. SM.

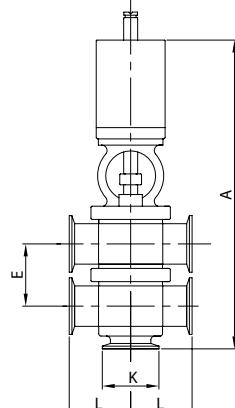
ELETTROVALVOLA  
SOLENOID VALVE  
ÉLECTROVANNE  
ELECTROVÁLVULA

MICROINTERRUTTORE  
MICROSWITCH  
MINIRUPTEUR  
MICRORRUPTOR

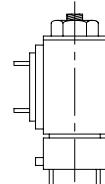
**925 L**



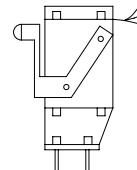
**926 K**



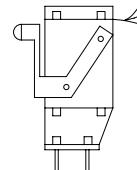
**015 NC**



**015 NA**



**014 1**



**014 2**

DN	A	D	E	L	gr
1" 25	295,0	25,4	54,0	45,0	4.670
1 1/2" 38	320,0	38,1	67,0	56,0	5.100
2" 51	395,0	50,8	80,0	70,0	9.100
2 1/2" 63	425,0	63,5	96,0	78,0	11.000
3" 76	469,0	76,2	103,0	85,0	15.100
4" 101	624,0	101,6	171,0	135,0	23.000

DN	A	E	K	L	gr
1" 25	307,7	54,0	50,5	56,5	1.720
1 1/2" 38	332,7	67,0	50,5	56,5	5.170
2" 51	407,7	80,0	64,0	66,5	9.220
2 1/2" 63	437,7	96,0	77,0	70,0	11.150
3" 76	481,7	103,0	91,0	72,5	15.270
4" 101	639,8	171,0	119,0	150,8	23.330

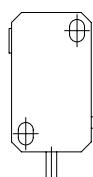
CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

**013 S**



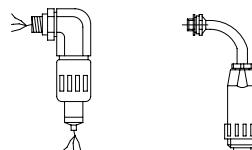
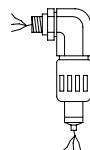
CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

**013 A**  
**013 A/N**  
**013 A/N/EX**



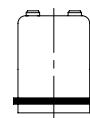
CONNETTORE  
CONNECTOR  
CONNECTEUR  
CONECTOR

**030 H**      **030 S**



UNITÀ DI CONTROLLO  
CONTROL UNIT  
UNITÈ DE CONTRÔLE  
UNIDAD DE CONTROL

**900 UC 4**





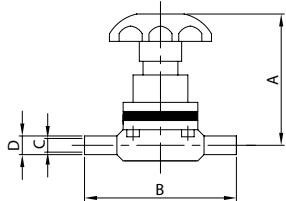
MICROVALVOLA M. EL.  
D. MICROVALVE PE.  
MINIVANNE MEMBR. EL.  
MICROVALVULA M. EL.

MICROVALVOLA M. E. SM.  
D. MICROVALVE E. FR.  
MINIVANNE MEMBR. B. FR.  
MICROVALVULA M. E. SM.

V. MEMBRANA EL.  
DIAPHRAGM V. PE.  
V. MEMBRANA BL.  
V. MEMBRANA EL.

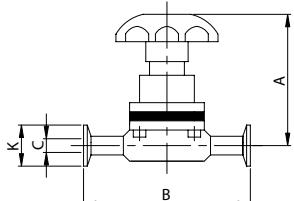
V. MEMBRANA E. SM.  
DIAPHRAGM V. E. FR.  
V. MEMBRANA B. FR.  
V. MEMBRANA E. SM.

S57W



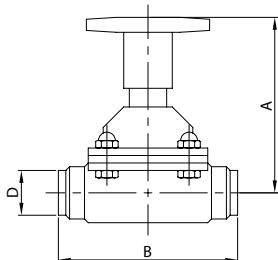
DN	A	B	C	D	gr
1/4"	6	66,5	67,0	3,9	190
3/8"	9	66,5	67,0	7,1	190
1/2"	12	66,5	67,0	9,4	190

S57K



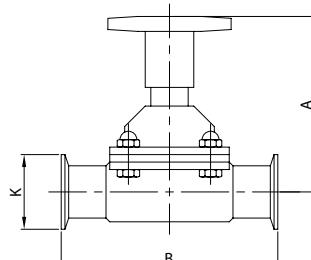
DN	A	B	C	K	gr
1/2"	12	66,5	67,0	9,4	250

57W



DN	A	B	C	D	gr
1/2"	12	78,0	89,0	12,7	840
3/4"	19	79,0	102,0	19,0	1.200
1"	25	92,0	114,0	25,4	1.680
1 1/2"	38	112,0	140,0	38,1	3.140
2"	51	135,0	159,0	50,8	5.040

57K



DN	A	B	K	gr
1/2"	12	78,0	89,0	25,0
3/4"	19	79,0	102,0	25,0
1"	25	92,0	114,0	50,5
1 1/2"	38	112,0	140,0	50,5
2"	51	135,0	159,0	64,0

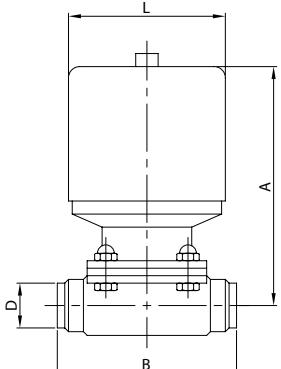
V. M. PNEUMATICA EL.  
PNEUMATIC D. V. PE.  
V. M. PNEUMATIQUE BL.  
V. M. NEUMÁTICA EL.

V. M. PNEUMATICA E. SM.  
PNEUMATIC D. V. E. FR.  
V. M. PNEUMATIQUE B. FR.  
V. M. NEUMÁTICA E. SM.

V. M. UN. CONTROLLO EL.  
D. V. CONTROL UNIT PE.  
V. M. UN. CONTRÔLE BL.  
V. M. UN. CONTROL EL.

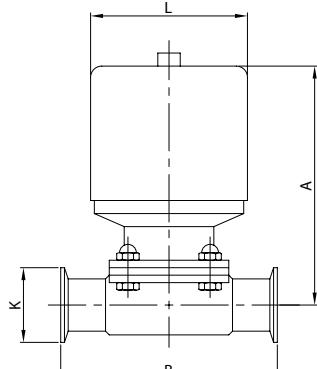
V. M. UN. CONTROLLO E. SM.  
D. V. CONTROL UNIT E. FR.  
V. M. UN. CONTRÔLE B. FR.  
V. M. UN. CONTROL E. SM.

58W



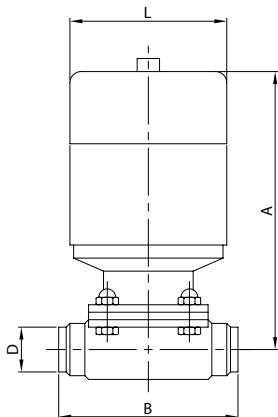
DN	A	B	D	L	gr
1/2"	12	107,0	89,0	12,7	60,0
3/4"	19	120,0	102,0	19,0	90,0
1"	25	124,0	114,0	25,4	90,0
1 1/2"	38	186,0	140,0	38,1	127,0
2"	51	200,0	159,0	50,8	127,0

58K



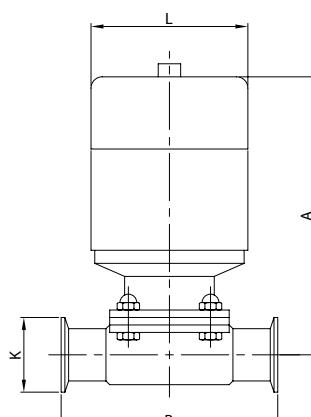
DN	A	B	K	L	gr
1/2"	12	107,0	89,0	25,0	60,0
3/4"	19	120,0	102,0	25,0	90,0
1"	25	124,0	114,0	50,5	90,0
1 1/2"	38	186,0	140,0	50,5	127,0
2"	51	200,0	159,0	64,0	127,0

60W



DN	A	B	D	L	gr
1/2"	12	183,0	89,0	12,7	60,0
3/4"	19	197,0	102,0	19,0	90,0
1"	25	201,0	114,0	25,4	90,0
1 1/2"	38	263,0	140,0	38,1	127,0
2"	51	277,0	159,0	50,8	127,0

60K



DN	A	B	K	L	gr
1/2"	12	183,0	89,0	25,0	60,0
3/4"	19	197,0	102,0	25,0	90,0
1"	25	201,0	114,0	50,5	90,0
1 1/2"	38	263,0	140,0	50,5	127,0
2"	51	277,0	159,0	64,0	127,0



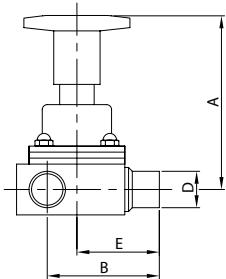
V. MEMBRANA 3 V. T EL.  
DIAPHRAGM V. 3 W. T PE.  
V. MEMBRANE 3 V. T BL.  
V. MEMBRANA 3 V. T EL.

V. MEMBR. 3 V. T E. SM.  
DIAPHR. V. 3 W. T FR.  
V. MEMBR. 3 V. T B. FR.  
V. MEMBR. 3 V. T E. SM.

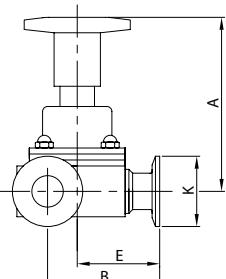
V. M. PNEUM. 3 V. T EL.  
PNEUM. D. V. 3 W. T PE.  
V. M. PNEUM. 3 V. T BL.  
V. M. NEUM. 3 V. T EL.

V. M. PN. 3 V. T E. SM.  
PN. D. V. 3 W. T E. FR.  
V. M. PN. 3 V. T B. FR.  
V. M. NEUM. 3 V. T E. SM.

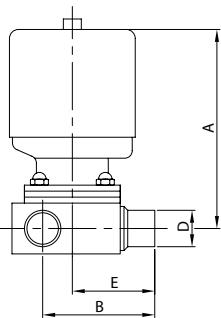
**ZDT 57W**



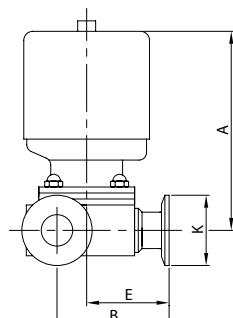
**ZDT 57K**



**ZDT 58W**



**ZDT 58K**



DN	A	B	D	E	gr
1/2" 12	97,5	56,5	12,7	44,5	840
3/4" 19	99,0	66,5	19,0	51,0	1.200
1" 25	120,0	80,0	25,4	57,0	1.680
1 1/2" 38	156,0	101,5	38,1	70,0	3.140
2" 51	182,0	118,5	50,8	79,5	5.040

DN	A	B	E	K	gr
1/2" 12	97,5	56,5	44,5	25,0	840
3/4" 19	99,0	66,5	51,0	25,0	1.200
1" 25	120,0	80,0	57,0	50,5	1.680
1 1/2" 38	156,0	101,5	70,0	50,5	3.140
2" 51	182,0	118,5	79,5	64,0	5.040

DN	A	B	D	E	gr
1/2" 12	107,0	56,5	12,7	44,5	1.360
3/4" 19	120,0	66,5	19,0	51,0	2.460
1" 25	124,0	80,0	25,4	57,0	2.780
1 1/2" 38	186,0	101,5	38,1	70,0	6.880
2" 51	200,0	118,5	50,8	79,5	8.160

DN	A	B	E	K	gr
1/2" 12	107,0	56,5	44,5	25,0	1.360
3/4" 19	120,0	66,5	51,0	25,0	2.460
1" 25	124,0	80,0	57,0	50,5	2.780
1 1/2" 38	186,0	101,5	70,0	50,5	6.880
2" 51	200,0	118,5	79,5	64,0	8.160

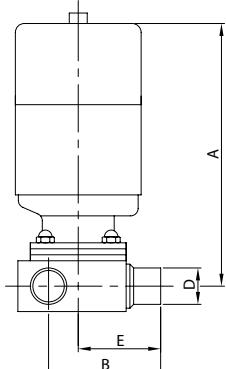
V. M. UN. C. 3 V. T EL.  
D. V. C. UNIT 3 W. T PE.  
V. M. UN. CONTR. 3 V. T BL.  
V. M. UN. CONTR. 3 V. T EL.

V. M. UN. C. 3 V T E. SM.  
D. V. C. UN. 3 W. T E. FR.  
V. M. UN. C. 3 V. T B. FR.  
V. M. UN. C. 3 V. T E. SM.

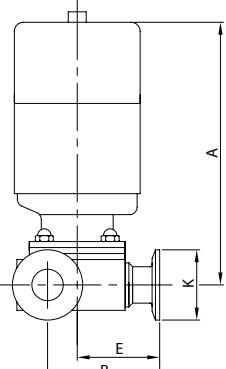
V. M. PRELIEVO EL.  
SAMPLING D. V. PE.  
V. M. PRISE ECHANT. EL.  
V. M. TOMAMUESTRAS EL.

V. M. PRELIEVO E. SM.  
SAMPLING D. V. E. FR.  
V. M. PRISE ECHANT. B. FR.  
V. M. TOMAM. E. SM.

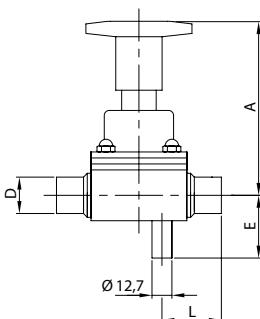
**ZDT 60W**



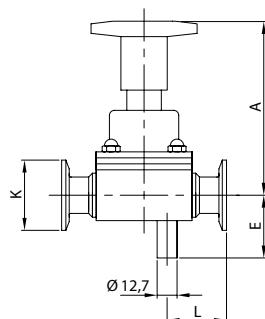
**ZDT 60K**



**ZDL 57W**



**ZDL 57K**



DN	A	B	D	E	gr
1/2" 12	183,0	56,5	12,7	44,5	1.660
3/4" 19	197,0	66,5	19,0	51,0	3.010
1" 25	201,0	80,0	25,4	57,0	3.330
1 1/2" 38	263,0	101,5	38,1	70,0	7.880
2" 51	277,0	118,5	50,8	79,5	9.160

DN	A	B	E	K	gr
1/2" 12	183,0	56,5	44,5	25,0	1.660
3/4" 19	197,0	66,5	51,0	25,0	3.010
1" 25	201,0	80,0	57,0	50,5	3.330
1 1/2" 38	263,0	101,5	70,0	50,5	7.880
2" 51	277,0	118,5	79,5	64,0	9.160

DN	A	D	E	L	gr
1/2" 12	94,5	12,7	34,5	27,0	840
3/4" 19	96,0	19,0	39,0	32,0	1.200
1" 25	116,0	25,4	42,0	37,0	1.680
1 1/2" 38	155,0	38,1	59,0	42,0	3.140
2" 51	182,0	50,8	66,0	46,0	5.040

DN	A	E	K	L	gr
1/2" 12	94,5	34,5	25,0	27,0	840
3/4" 19	96,0	39,0	25,0	32,0	1.200
1" 25	116,0	42,0	50,5	37,0	1.680
1 1/2" 38	155,0	59,0	50,5	42,0	3.140
2" 51	182,0	66,0	64,0	46,0	5.040



VALVOLE A MEMBRANA  
DIAPHRAGM VALVES  
VANNES À MEMBRANE  
VÁLVULAS DE MEMBRANA



**CLAMP**

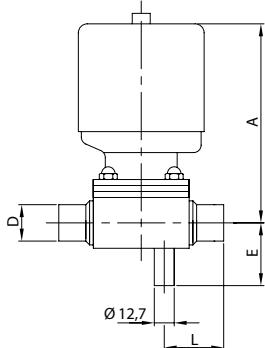
V. M. PNEUM. PRELIEVO EL.  
SAMPLING PN. D. V. PE.  
V. M. PN. PRISE ECH. EL.  
V. M. NEUM. TOMAM. EL.

V. M. PNEUM. PREL. E. SM.  
SAMPL. PN. D. V. E. FR.  
V. M. PN. PRISE ECH. B. FR.  
V. M. NEUM. TOMAM. E. SM.

V. M. U. C. PRELIEVO EL.  
SAMPLING D. V. C. UN. PE.  
V. M. U. C. PRISE ECH. BL.  
V. M. U. C. TOMAM. EL.

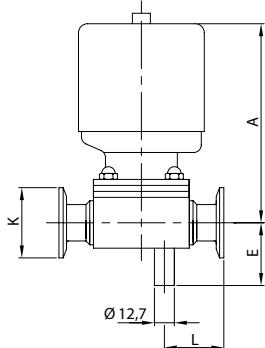
V. M. U. C. PREL. E. SM.  
SAMPL. D. V. C. UN. E. FR.  
V. M. U. C. PRISE ECH. B. FR.  
V. M. U. C. TOMAM. E. SM.

### ZDL 58W



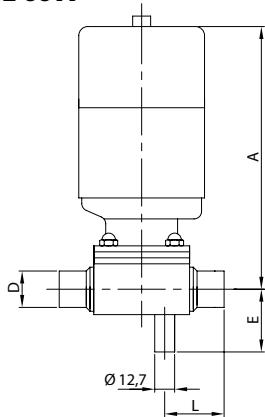
DN	A	D	E	L	gr
1/2" 12	107,0	12,7	34,5	27,0	1.360
3/4" 19	120,0	19,0	39,0	32,0	2.460
1" 25	124,0	25,4	42,0	37,0	2.780
1 1/2" 38	186,0	38,1	59,0	42,0	6.880
2" 51	200,0	50,8	66,0	46,0	8.160

### ZDL 58K



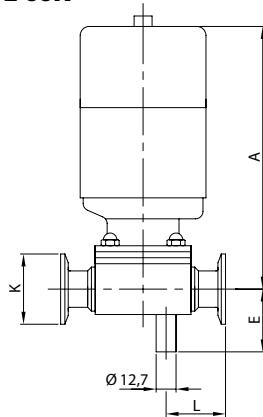
DN	A	E	K	L	gr
1/2" 12	107,0	34,5	25,0	27,0	1.360
3/4" 19	120,0	39,0	25,0	32,0	2.460
1" 25	124,0	42,0	50,5	37,0	2.780
1 1/2" 38	186,0	59,0	50,5	42,0	6.880
2" 51	200,0	66,0	64,0	46,0	8.160

### ZDL 60W



DN	A	D	E	L	gr
1/2" 12	183,0	12,7	34,5	27,0	1.660
3/4" 19	197,0	19,0	39,0	32,0	3.010
1" 25	201,0	25,4	42,0	37,0	3.330
1 1/2" 38	263,0	38,1	59,0	42,0	7.880
2" 51	277,0	50,8	66,0	46,0	9.160

### ZDL 60K



DN	A	E	K	L	gr
1/2" 12	183,0	34,5	25,0	27,0	1.660
3/4" 19	197,0	39,0	25,0	32,0	3.010
1" 25	201,0	42,0	50,5	37,0	3.330
1 1/2" 38	263,0	59,0	50,5	42,0	7.880
2" 51	277,0	66,0	64,0	46,0	9.160

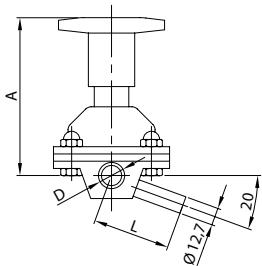
V. M. PRELIEVO 20° EL.  
20° SAMPLING D. V. PE.  
V. M. PRISE ECH. 20° EL.  
V. M. TOMAM. 20° EL.

V. M. PRELIEVO 20° E. SM.  
20° SAMPLING D. V. E. FR.  
V. M. PRISE ECH. 20° B. FR.  
V. M. TOMAM. 20° E. SM.

V. M. PNEUM. PREL. 20° EL.  
20° SAMPL. PN. D. V. PE.  
V. M. PN. PR. ECH. 20° BL.  
V. M. NEUM. TOMAM. 20° EL.

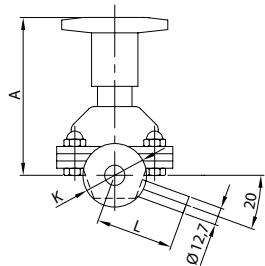
V. M. PN. PREL. 20° E. SM.  
20° SAMPL. PN. D. V. E. FR.  
V. M. PN. PR. ECH. 20° B. FR.  
V. M. N. TOMAM. 20° E. SM.

### D2L 57W



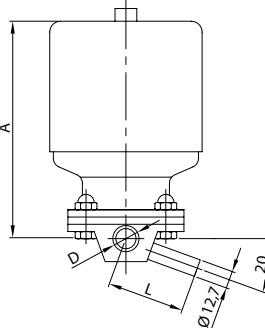
DN	A	D	L	gr
1/2" 12	94,5	12,7	46,0	840
3/4" 19	96,0	19,0	50,0	1.200
1" 25	116,0	25,4	55,0	1.680
1 1/2" 38	155,0	38,1	71,0	3.140
2" 51	182,0	50,8	84,0	5.040

### D2L 57K



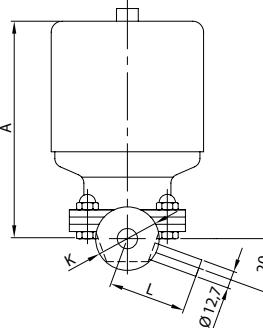
DN	A	K	L	gr
1/2" 12	94,5	25,0	46,0	840
3/4" 19	96,0	25,0	50,0	1.200
1" 25	116,0	50,5	55,0	1.680
1 1/2" 38	155,0	50,5	71,0	3.140
2" 51	182,0	64,0	84,0	5.040

### D2L 58W



DN	A	D	L	gr
1/2" 12	107,0	12,7	46,0	1.360
3/4" 19	120,0	19,0	50,0	2.460
1" 25	124,0	25,4	55,0	2.780
1 1/2" 38	186,0	38,1	71,0	6.880
2" 51	200,0	50,8	84,0	8.160

### D2L 58K



DN	A	K	L	gr
1/2" 12	107,0	25,0	46,0	1.360
3/4" 19	120,0	25,0	50,0	2.460
1" 25	124,0	50,5	55,0	2.780
1 1/2" 38	186,0	50,5	71,0	6.880
2" 51	200,0	64,0	84,0	8.160



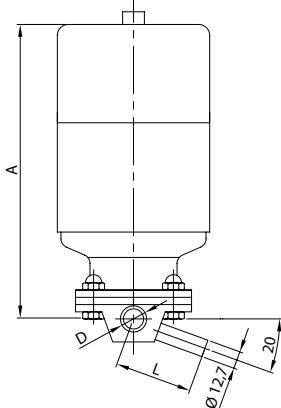
V. M. U. C. PREL. 20° EL.  
20° SAMPL. D. V. C. UN. PE.  
V. M. U. C. PR. ECH. 20° EL.  
V. M. U. C. TOMAM. 20° EL.

V. M. U. C. PREL. 20° E. SM.  
20° SAMPL. D. V. C. UN. E. FR.  
V. M. U. C. PR. ECH. 20° B. FR.  
V. M. U. C. TOMAM. 20° E. SM.

V. M. FONDO SERBATOIO EL.  
TANK BOTTOM D. V. PE.  
V. M. FOND CUVE BL.  
V. M. FONDO TANQUE EL.

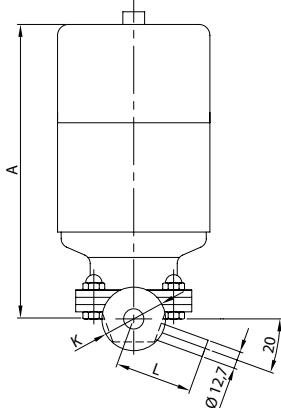
V. M. FONDO SERB. E. SM.  
TANK BOTTOM D. V. E. FR.  
V. M. FOND CUVE B. FR.  
V. M. FONDO TANQUE E. SM.

### D2L 60W



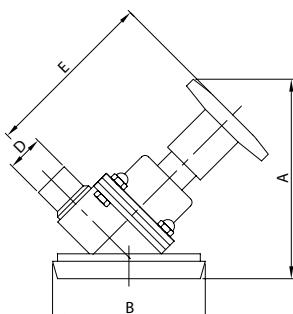
DN	A	D	L	gr
1/2" 12	183,0	12,7	46,0	1.660
3/4" 19	197,0	19,0	50,0	3.010
1" 25	201,0	25,4	55,0	3.330
1 1/2" 38	263,0	38,1	71,0	7.880
2" 51	277,0	50,8	84,0	9.160

### D2L 60K



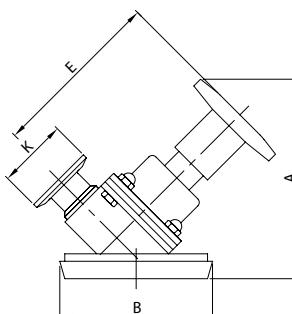
DN	A	K	L	gr
1/2" 12	183,0	25,0	46,0	1.660
3/4" 19	197,0	25,0	50,0	3.010
1" 25	201,0	50,5	55,0	3.330
1 1/2" 38	263,0	50,5	71,0	7.880
2" 51	277,0	64,0	84,0	9.160

### KTB 57W



DN	A	B	D	E	gr
1/2" 12	117,0	68,0	12,7	94,5	1.040
3/4" 19	123,0	86,0	19,0	96,0	1.550
1" 25	142,0	100,0	25,4	116,0	2.030
1 1/2" 38	181,0	121,0	38,1	155,0	4.090
2" 51	206,0	150,0	50,8	182,0	7.090

### KTB 57K



DN	A	B	E	K	gr
1/2" 12	117,0	68,0	94,5	25,0	1.040
3/4" 19	123,0	86,0	96,0	25,0	1.550
1" 25	142,0	100,0	116,0	50,5	2.030
1 1/2" 38	181,0	121,0	155,0	50,5	4.090
2" 51	206,0	150,0	182,0	64,0	7.090

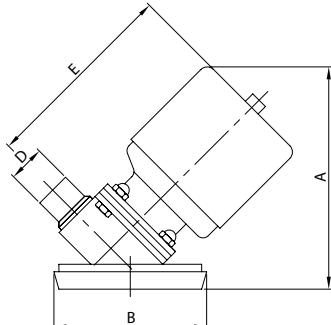
V. M. PNEUM. F. SERB. EL.  
TANK B. PNEUM. D. V. PE.  
V. M. PN. FOND CUVE BL.  
V. M. NEUM. F. TANQUE EL.

V. M. PN. F. SERB. E. SM.  
TANK B. PNEUM. D. V. E. FR.  
V. M. PN. FOND CUVE B. FR.  
V. M. N. F. TANQUE E. SM.

V. M. U. C. F. SERB. EL.  
TANK B. D. V. C. UN. PE.  
V. M. U. C. F. CUVE BL.  
V. M. U. C. F. TANQUE EL.

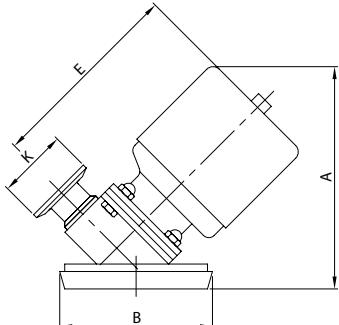
V. M. U. C. F. SERB. E. SM.  
TANK B. D. V. C. UN. E. FR.  
V. M. U. C. F. CUVE B. FR.  
V. M. U. C. F. TANQUE E. SM.

### KTB 58W



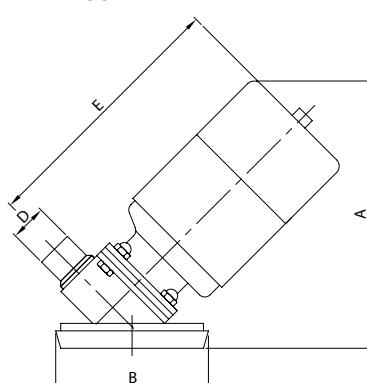
DN	A	B	D	E	gr
1/2" 12	125,0	68,0	12,7	107,0	1.560
3/4" 19	147,0	86,0	19,0	120,0	2.810
1" 25	151,0	100,0	25,4	124,0	3.130
1 1/2" 38	209,0	121,0	38,1	186,0	7.830
2" 51	226,0	150,0	50,8	200,0	10.210

### KTB 58K



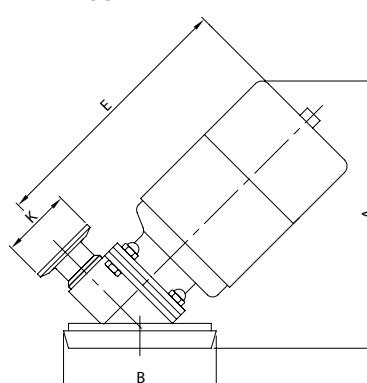
DN	A	B	E	K	gr
1/2" 12	125,0	68,0	107,0	25,0	1.560
3/4" 19	147,0	86,0	120,0	25,0	2.810
1" 25	151,0	100,0	124,0	50,5	3.130
1 1/2" 38	209,0	121,0	186,0	50,5	7.830
2" 51	226,0	150,0	200,0	64,0	10.210

### KTB 60W



DN	A	B	D	E	gr
1/2" 12	180,0	68,0	12,7	183,0	1.860
3/4" 19	202,0	86,0	19,0	197,0	3.360
1" 25	207,0	100,0	25,4	201,0	3.680
1 1/2" 38	264,0	121,0	38,1	263,0	8.830
2" 51	282,0	150,0	50,8	277,0	11.210

### KTB 60K



DN	A	B	E	K	gr
1/2" 12	180,0	68,0	183,0	25,0	1.860
3/4" 19	202,0	86,0	197,0	25,0	3.360
1" 25	207,0	100,0	201,0	50,5	3.680
1 1/2" 38	264,0	121,0	263,0	50,5	8.830
2" 51	282,0	150,0	277,0	64,0	11.210



VALVOLE A MEMBRANA  
DIAPHRAGM VALVES  
VANNES À MEMBRANE  
VÁLVULAS DE MEMBRANA



**CLAMP**

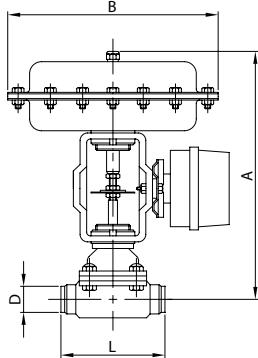
V. M. MODULANTE EL.  
MODULATING D. V. PE.  
V. M. MODULANTE BL.  
V. M. MODULANTE EL.

V. M. MODULANTE E. SM.  
MODULATING D. V. E. FR.  
V. M. MODULANTE B. FR.  
V. M. MODULANTE E. SM.

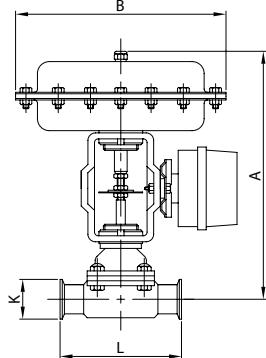
MEMBRANA EPDM  
EPDM DIAPHRAGM  
MEMBRANE EPDM  
MEMBRANA EPDM

MEMBRANA PTFE  
PTFE DIAPHRAGM  
MEMBRANE PTFE  
MEMBRANA PTFE

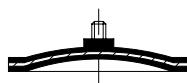
**59W**



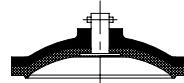
**59K**



**57 E 08**



**57 T 08**



**DN A B D L gr**

1/2"	12	305,5	290,0	12,7	89,0	11.840
3/4"	19	307,0	290,0	19,0	102,0	12.200
1"	25	311,0	290,0	25,4	114,0	12.680
1 1/2"	38	330,5	290,0	38,1	140,0	14.140
2"	51	345,5	290,0	50,8	159,0	16.040

**DN A B K L gr**

1/2"	12	305,5	290,0	25,0	89,0	11.840
3/4"	19	307,0	290,0	25,0	102,0	12.200
1"	25	311,0	290,0	50,5	114,0	12.680
1 1/2"	38	330,5	290,0	50,5	140,0	14.140
2"	51	345,5	290,0	64,0	159,0	16.040

ELETTROVALVOLA NC.  
SOLENOID VALVE NC.  
ÉLECTROVANNE NF.  
ELECTROVÁLVULA NC.

CONNETTORE  
CONNECTOR  
CONNECTEUR  
CONECTOR

MICROINTERRUTTORE  
MICROSWITCH  
MINIRUPTEUR  
MICROINTERRUPTOR

CONTATTO DI PROSSIMITÀ  
PROXIMITY CONTACT  
CONTACT DE PROXIMITÉ  
MICROSENSOR

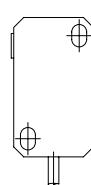
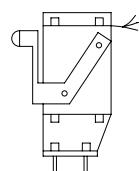
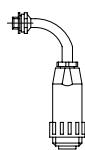
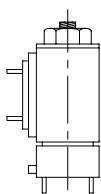
**015 NC**

**030 S**

**014 1**

**014 2**

**013 A**  
**013 A/N**  
**013 A/N/EX**





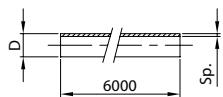
NORME DIN  
DIN STANDARDS  
NORMES DIN  
NORMAS DIN



DIN

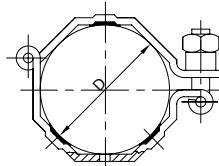
TUBO  
PIPE  
TUBE  
TUBO

TL



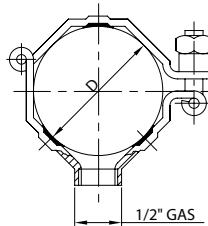
REGGIT. OTTAGONALE EL.  
OCTAGONAL P. HANGER PE.  
COLLIER OCTOGONAL BL.  
ABRAZAD. OCTAGONAL EL.

094 L



REGGIT. OTTAGONALE EF.  
OCTAGONAL P. HANGER ME.  
COLLIER OCTOGONAL BF.  
ABRAZAD. OCTAGONAL ER.

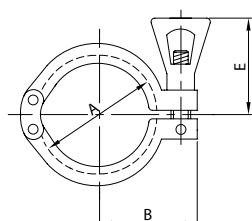
094 F



DN	D	Sp.	gr
10	12,0	1	275
15	18,0	1	426
20	22,0	1	526
25	28,0	1,5	995
32	34,0	1,5	1.221
40	40,0	1,5	1.446
50	52,0	1,5	1.897
65	70,0	2	3.405
80	85,0	2	4.157
100	101,6	2,11	5.256
104	104,0	2	5.108
125	129,0	2	6.360
150	154,0	2	7.612
200	204,0	2	10.116

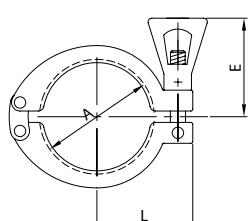
MORSETTO DOPPIO  
HEAVY DUTY CLAMP  
COLLIER CLAMP  
ABRAZADERA

K12 D



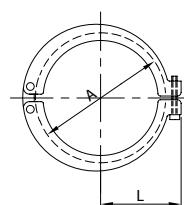
MORSETTO DOPPIO  
HEAVY DUTY CLAMP  
COLLIER CLAMP  
ABRAZADERA

K15 D



MORSETTO DOPPIO  
HEAVY DUTY CLAMP  
COLLIER CLAMP  
ABRAZADERA

K12 HPD



DN	A	E	L	gr
10	38,0	35,0	34,5	120
15	38,0	35,0	34,5	120
20	38,0	53,0	34,5	220
25	53,4	53,0	43,0	220
32	53,4	53,0	43,0	220
40	53,4	53,0	43,0	220
50	67,0	53,0	50,0	260
65	94,0	53,0	65,0	330
80	109,0	53,0	75,0	400
100	122,0	53,0	85,0	500

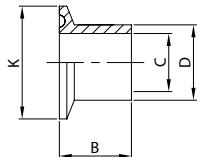
DN	A	E	L	gr
25	54,5	53,0	43,7	220
32	54,5	53,0	43,7	220
40	54,5	53,0	43,7	220
50	68,0	53,0	50,5	260
65	95,0	53,0	64,0	330
80	110,0	53,0	71,5	400
100	123,0	53,0	78,0	400

DN	A	L	gr
125	148,0	95,0	750
150	170,0	111,0	1.450
200	222,0	137,0	1.750



**SEMIRACCORDO SR.**  
**WG. FERRULE**  
**FERRULE SR.**  
**ENLACE SR.**

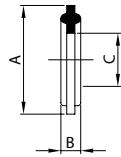
### K14 WD



DN	B	C	D	K	gr
10	21,0	9,5	12,0	34,0	19
15	21,0	15,5	18,0	34,0	20
20	21,0	19,5	22,0	34,0	30
25	28,6	25,0	28,0	50,5	70
32	28,6	31,0	34,0	50,5	65
40	28,6	37,0	40,0	50,5	60
50	28,6	49,0	52,0	64,0	95
65	28,6	66,0	70,0	91,0	150
80	28,6	81,0	85,0	106,0	195
100	28,6	100,0	104,0	119,0	235
125	28,6	124,0	129,0	144,4	805
150	28,6	149,0	154,0	166,8	1.010
200	28,6	199,0	204,0	218,0	1.410

**GUARNIZIONE**  
**GASKET**  
**JOINT**  
**JUNTA**

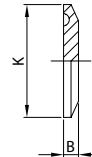
### K40 D



DN	A	B	C
10	34,0	5,5	9,5
15	34,0	5,5	15,5
20	34,0	5,5	19,5
25	50,5	5,5	25,0
32	50,5	5,5	31,0
40	50,5	5,5	37,0
50	64,0	5,5	49,0
65	91,0	5,5	66,0
80	106,0	5,5	81,0
100	119,0	5,5	100,0
104	119,0	5,5	97,6
125	144,4	5,5	124,0
150	166,8	5,5	149,0
200	218,0	5,5	199,0

**TAPPO**  
**SOLID END CAP**  
**BOUCHON**  
**TAPÓN**

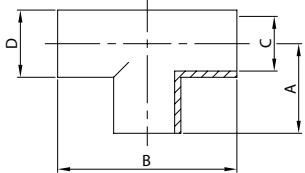
### K16 D



DN	B	K	gr
10	6,4	34,0	15
15	6,4	34,0	15
20	6,4	34,0	70
25	6,4	50,5	70
32	6,4	50,5	70
40	6,4	50,5	70
50	6,4	64,0	140
65	6,4	91,0	410
80	6,4	106,0	480
100	6,4	119,0	570
125	13,0	144,4	1.925
150	13,0	166,8	2.600
200	13,0	218,0	3.900

**TEE EL.**  
**TEE PE.**  
**TE BL.**  
**TE EL.**

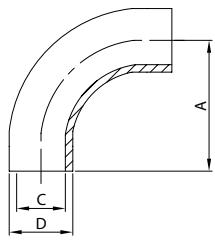
### 200 D



DN	A	B	C	D	gr
10	26,0	52,0	9,5	12,0	35
15	35,0	70,0	15,5	18,0	75
20	40,0	80,0	19,5	22,0	95
25	50,0	100,0	25,0	28,0	120
32	55,0	110,0	31,0	34,0	175
40	60,0	120,0	37,0	40,0	240
50	70,0	140,0	49,0	52,0	310
65	80,0	160,0	66,0	70,0	650
80	90,0	180,0	81,0	85,0	1.070
100	100,0	200,0	100,0	104,0	1.850
125	124,0	248,0	124,0	129,0	2.250
150	150,0	300,0	149,0	154,0	2.890
200	200,0	400,0	199,0	204,0	5.100

**CURVA 90° ES.**  
**BEND 90° WE.**  
**COUDE 90° BS.**  
**CODO 90° ES.**

### 310 D

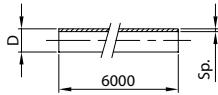


DN	A	C	D	gr
10	26,0	9,5	12,0	15
15	35,0	15,5	18,0	20
20	40,0	19,5	22,0	50
25	50,0	25,0	28,0	65
32	55,0	31,0	34,0	100
40	60,0	37,0	40,0	150
50	70,0	49,0	52,0	190
65	80,0	66,0	70,0	410
80	90,0	81,0	85,0	530
100	100,0	100,0	104,0	810
125	124,0	124,0	129,0	1.230
150	150,0	149,0	154,0	1.760
200	206,0	199,0	204,0	3.130



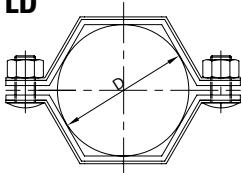
TUBO  
PIPE  
TUBE  
TUBO

TL



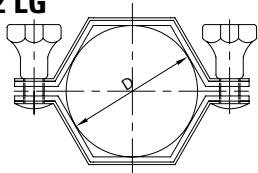
REGGITUBO EL.  
PIPE HANGER PE.  
COLLIER BL.  
ABRAZADERA EL.

092 LD



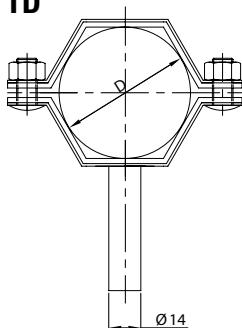
REGGITUBO EL.  
PIPE HANGER PE.  
COLLIER BL.  
ABRAZADERA EL.

092 LG



REGG. TRONCHETTO  
STUB PIPE HANGER  
COLLIER FOURREAU  
ABR. ESPARRAGO

092 TD



DN	D	Sp.	gr
1/4"	13,5	1,65	490
3/8"	17,2	1,65	640
1/2"	21,3	1,65	810
3/4"	26,9	1,65	1.040
1"	33,7	1,65	1.320
1 1/4"	42,4	1,65	1.680
1 1/2"	48,3	1,65	1.930
2"	60,3	2	2.920
2 1/2"	76,1	2	3.710
3"	88,9	2	4.350

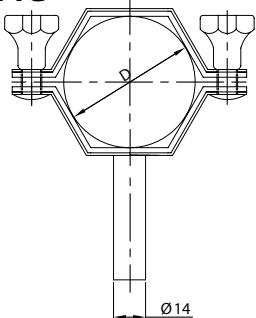
DN	D	gr
1/4"	13,5	50
3/8"	17,2	70
1/2"	21,3	100
3/4"	26,9	120
1"	33,7	130
1 1/4"	42,4	140
1 1/2"	48,3	160
2"	60,3	180
2 1/2"	76,1	220
3"	88,9	240

DN	D	gr
1/4"	13,5	50
3/8"	17,2	70
1/2"	21,3	100
3/4"	26,9	120
1"	33,7	130
1 1/4"	42,4	140
1 1/2"	48,3	160
2"	60,3	180
2 1/2"	76,1	220
3"	88,9	240

DN	D	gr
1/4"	13,5	70
3/8"	17,2	90
1/2"	21,3	120
3/4"	26,9	140
1"	33,7	150
1 1/4"	42,4	160
1 1/2"	48,3	180
2"	60,3	200
2 1/2"	76,1	240
3"	88,9	260

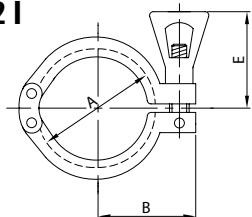
REGG. TRONCHETTO  
STUB PIPE HANGER  
COLLIER FOURREAU  
ABR. ESPARRAGO

092 TG



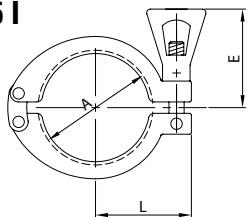
MORSETTO DOPPIO  
HEAVY DUTY CLAMP  
COLLIER CLAMP  
ABRAZADERA

K12 I



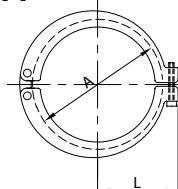
MORSETTO DOPPIO  
HEAVY DUTY CLAMP  
COLLIER CLAMP  
ABRAZADERA

K15 I



MORSETTO DOPPIO  
HEAVY DUTY CLAMP  
COLLIER CLAMP  
ABRAZADERA

K12 HPI



DN	D	gr
1/4"	13,5	70
3/8"	17,2	90
1/2"	21,3	120
3/4"	26,9	140
1"	33,7	150
1 1/4"	42,4	160
1 1/2"	48,3	180
2"	60,3	220
2 1/2"	76,1	240
3"	88,9	260

DN	A	E	L	gr
1/8"	38,0	53,0	34,5	120
1/4"	38,0	53,0	34,5	120
3/8"	38,0	53,0	34,5	120
1/2"	38,0	53,0	34,5	220
3/4"	53,4	53,0	43,0	220
1"	53,4	53,0	43,0	220
1 1/4"	53,4	53,0	43,0	220
1 1/2"	67,0	53,0	50,0	260
2"	80,4	53,0	56,5	330
2 1/2"	94,0	53,0	65,0	400
3"	110,0	53,0	73,0	500

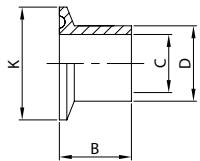
DN	A	E	L	gr
3/4"	53,4	53,0	43,7	220
1"	53,4	53,0	43,7	220
1 1/4"	53,4	53,0	43,7	220
1 1/2"	67,0	53,0	50,5	260
2"	80,4	53,0	57,2	330
2 1/2"	94,0	53,0	64,0	400
3"	110,0	53,0	71,5	500

DN	A	L	gr
4"	133,0	88,0	770
5"	159,0	105,5	1.400
6"	187,0	119,5	1.700
8"	237,0	144,5	2.100



**SEMIRACCORDO SR.**  
**WG. FERRULE**  
**FERRULE SR.**  
**ENLACE SR.**

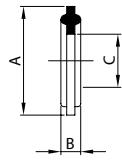
### K14 WI



DN	B	C	D	K	gr
1/8"	21,0	6,9	10,2	34,0	20
1/4"	21,0	10,2	13,7	34,0	20
3/8"	21,0	13,9	17,2	34,0	20
1/2"	21,0	18,0	21,3	34,0	40
3/4"	28,6	23,6	26,9	50,5	80
1"	28,6	30,4	33,7	50,5	75
1 1/4"	28,6	39,1	42,4	50,5	60
1 1/2"	28,6	45,0	48,3	64,0	95
2"	28,6	56,3	60,3	77,5	145
2 1/2"	28,6	72,1	76,1	91,0	150
3"	28,6	84,9	88,9	106,0	210
4"	28,6	110,3	114,3	130,0	270
5"	28,6	135,7	139,7	155,0	470
6"	28,6	163,3	168,3	183,0	555
8"	28,6	214,1	219,1	233,5	700

**GUARNIZIONE**  
**GASKET**  
**JOINT**  
**JUNTA**

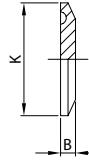
### K40 I



DN	A	B	C
1/8"	34,0	5,5	6,9
1/4"	34,0	5,5	10,2
3/8"	34,0	5,5	13,9
1/2"	34,0	5,5	18,0
3/4"	50,5	5,5	23,6
1"	50,5	5,5	30,4
1 1/4"	50,5	5,5	39,1
1 1/2"	64,0	5,5	45,0
2"	77,5	5,5	56,3
2 1/2"	91,0	5,5	72,1
3"	106,0	5,5	84,9
4"	130,0	5,5	110,3
5"	155,0	5,5	135,7
6"	183,0	5,5	163,3
8"	233,5	5,5	214,1

**TAPPO**  
**SOLID END CAP**  
**BOUCHON**  
**TAPÓN**

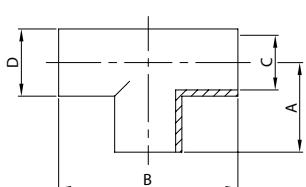
### K16 I



DN	B	K	gr
1/8"	6,4	34,0	15
3/8"	6,4	34,0	15
1/2"	6,4	34,0	70
3/4"	6,4	50,5	70
1"	6,4	50,5	70
1 1/4"	6,4	50,5	70
1 1/2"	6,4	64,0	140
2"	6,4	77,5	260
2 1/2"	6,4	91,0	350
3"	6,4	106,0	480
4"	6,4	130,0	750
5"	13,0	155,0	1.890
6"	13,0	183,0	2.600
8"	13,0	233,5	4.100

**TEE EL.**  
**TEE PE.**  
**TE BL.**  
**TE EL.**

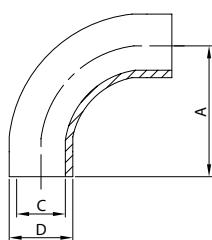
### W7 I



DN	A	B	C	D	gr
1/4"	25,5	51,0	10,2	13,7	30
3/8"	25,5	51,0	13,9	17,2	40
1/2"	25,5	51,0	18,0	21,3	50
3/4"	28,5	57,0	23,6	26,9	100
1"	38,0	76,0	30,4	33,7	150
1 1/4"	47,5	95,0	39,1	42,4	235
1 1/2"	57,0	114,0	45,0	48,3	350
2"	63,5	127,0	56,3	60,3	470
2 1/2"	76,0	152,0	72,1	76,1	750
3"	85,5	171,0	84,9	88,9	930
4"	105,0	210,0	110,3	114,3	1.460
5"	124,0	248,0	135,7	139,7	2.070
6"	150,0	300,0	163,3	168,3	3.080

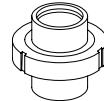
**CURVA 90° ES.**  
**BEND 90° WE.**  
**COUDE 90° BS.**  
**CODO 90° ES.**

### W2C I



DN	A	C	D	gr
1/4"	20,2	10,2	13,7	20
3/8"	28,5	13,9	17,2	25
1/2"	31,8	18,0	21,3	30
3/4"	28,6	23,6	26,9	45
1"	38,1	30,4	33,7	100
1 1/4"	47,6	39,1	42,4	150
1 1/2"	57,2	45,0	48,3	200
2"	76,2	56,3	60,3	340
2 1/2"	95,2	72,1	76,1	530
3"	114,3	84,9	88,9	820
4"	152,4	110,3	114,3	1.340
5"	190,5	135,7	139,7	2.020
6"	228,6	163,3	168,3	2.890





## RACCORDI MACON

- Ricavati da particolari stampati a caldo o laminati e solubilizzati.
- Accurata lavorazione delle parti filettate per eliminare l'ingrippaggio durante gli accoppiamenti.
- Eliminazione delle parti terminali delle filettature con operazioni meccaniche per evitare infortuni durante la manipolazione dei pezzi.
- Finitura standard: lucidatura esterna e satinatura interna grana 120.
- Per gli altri articoli a norme Macon valgono le informazioni tecniche fornite nei relativi capitoli.

## MACON UNIONS

- Made from hot-rolled or press-forged material and solution heat-treated.
- Precise machining of the threaded parts to eliminate seizure during coupling.
- Elimination of end parts of threading with mechanical operations to prevent accidents during handling of the pieces.
- Standard finish: 120 grain external polishing and internal glazing.
- For the other Macon standards articles the technical details supplied in the respective chapters apply.

## RACCORDES MACON

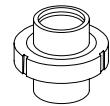
- Obtenus à partir de pièces moulées à chaud ou laminées et solubilisées.
- Usinage soigné des parties filetées pour éliminer le grippage pendant les assemblages.
- Elimination des parties finales des filetages à l'aide d'opérations mécaniques, pour éviter les accidents pendant le maniement des pièces.
- Finissage standard: polissage extérieur et satinage intérieur grain 120.
- Pour les autres articles conformes aux normes Macon, voir les informations techniques fournies dans les chapitres correspondants.

## RACORES MACON

- Obtenidos a partir de piezas estampadas en caliente o laminadas y solubilizadas.
- Cuidadosa elaboración de las piezas roscadas para eliminar el agarrotamiento durante los acoplamientos.
- Eliminación de las partes terminales de las roscas con operaciones mecánicas para evitar accidentes durante la manipulación de las piezas.
- Acabado estándar: pulido exterior y satinado interior grano 120.
- Para los otros artículos fabricados según las normas Macon son válidos los datos técnicos proporcionados en los capítulos correspondientes.



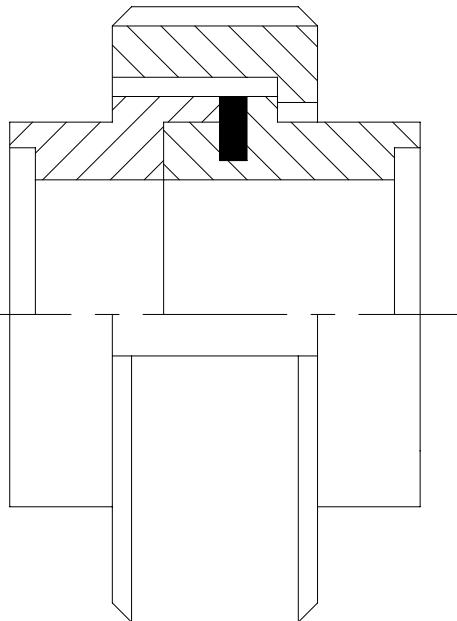
RACCORDI  
UNIONS  
RACCORDES  
RACORES



MACON

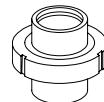
RACCORDO MACON  
MACON UNION

RACCORD MACON  
RACOR MACON





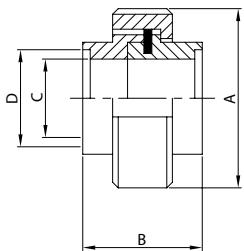
RACCORDI - FLANGE  
UNIONS - FLANGES  
RACCORDS - BRIDES  
RACORES - BRIDAS



**MACON**

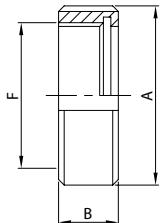
RACCORDO SR.  
WG. UNION  
RACCORD SR.  
RACORD SR.

**100 M**



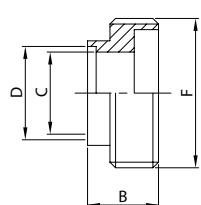
GIRELLA  
ROUND NUT  
ÉCROU  
TUEURA

**121 M**



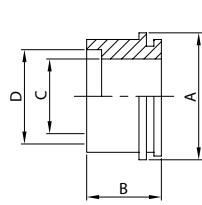
BOCC. FILETTATO SR.  
WG. MALE PART  
NEZ FILETÉE SR.  
MACHO SR.

**102 M**



BOCC. LISCIO SR.  
WG. LINER  
DOUILLE SR.  
CASQUILLO SR.

**112 M**



DN	A	B	C	D	gr
40	70,0	37,0	40,0	43,3	420
50	80,0	37,0	50,0	53,3	520
60	99,0	37,0	60,0	63,6	720
70	105,0	37,0	70,0	73,3	910
80	116,0	37,0	80,0	83,3	1.050
100	140,0	37,0	100,0	104,0	1.260

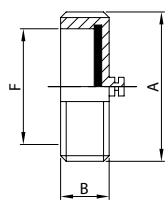
DN	A	B	F	gr
40	70,0	24,0	55x3	250
50	80,0	24,0	67x3	280
60	99,0	24,0	79x3,5	420
70	105,0	24,0	90x3,5	550
80	116,0	24,0	102x4	600
100	140,0	24,0	125x4	620

DN	B	C	D	F	gr
40	22,0	40,0	43,3	55x3	130
50	22,0	50,0	53,3	67x3	160
60	22,0	60,0	63,6	79x3,5	200
70	22,0	70,0	73,3	90x3,5	240
80	22,0	80,0	83,3	102x4	300
100	22,0	100,0	104,0	125x4	460

DN	A	B	C	D	gr
40	50,5	19,0	40,0	43,3	40
50	62,5	19,0	50,0	53,3	80
60	73,5	19,0	60,0	63,6	100
70	85,0	19,0	70,0	73,3	120
80	96,0	19,0	80,0	83,3	150
100	118,0	19,0	100,0	104,0	180

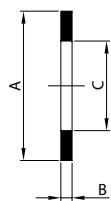
GIRELLA CIECA  
BLANK NUT  
BOUCHON PLAT  
TUERCA CIEGA

**124 M**



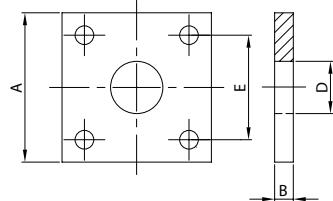
GUARNIZIONE PER RACC.  
SEAL RING FOR UNION  
JOINT DE RACCORD  
JUNTA RACORD

**131 M**



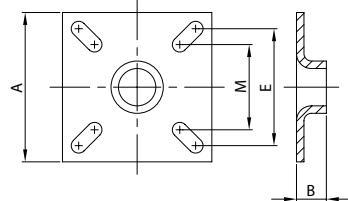
FLANGIA QUADRATA  
SQUARE FLANGE  
BRIDE CARRÉ VINICOLE  
BRIDA CUADRADA

**FP**



FL. QUADR. FORI OVALI  
SQUARE FL. OVAL HOLES  
BR. C. TROUS OVALISÉS  
BR. C. TALADR. OVALADOS

**FL**



DN	A	B	F	gr
40	70,0	24,0	55x3	330
50	80,0	24,0	67x3	370
60	99,0	24,0	79x3,5	500
70	105,0	24,0	90x3,5	580
80	116,0	24,0	102x4	700
100	140,0	24,0	125x4	800

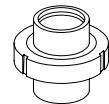
DN	A	B	C	gr
40	50,0	3,0	13,5	
50	62,0	3,0	53,5	
60	73,0	3,0	63,5	
70	80,0	3,0	73,5	
80	95,0	4,0	83,5	
100	117,0	4,0	103,5	

DN	A	B	D	E	gr
40	100,0	8,0	48,0	75,0	520
50	100,0	8,0	58,0	75,0	500
60	120,0	10,0	70,0	82,0	700
70	120,0	10,0	80,0	90,0	620
80	140,0	10,0	90,0	102,0	800
100	140,0	10,0	110,0	102,0	780

DN	A	B	E	M	gr
40	100,0	15,0	75,0	60,0	300
50	100,0	15,0	75,0	60,0	290



RACCORDI - DECANTATORI  
UNIONS - DECANTERS  
RACCORDS - DÉCANTEURS  
RACORES - DECANTADORES



**MACON**

ATT. PORTAGOMMA EL.  
HOSE CONNECTION PE.  
MANCHON À LIGATURER  
MANGUITO MANGUERA EL.

ATT. PORTAGOMMA BF. ST.  
HOSE CONNECT. MP. WD.  
NEZ FILETÉ À LIGATURER  
M. M. MACHO SD.

ATT. PORTAGOMMA BC. ST.  
HOSE CONNECT. TP. WD.  
DOUILLE À LIGATURER  
M. M. MACHO SD.

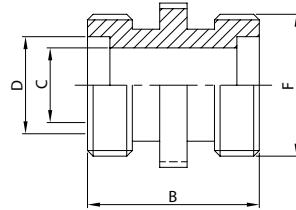
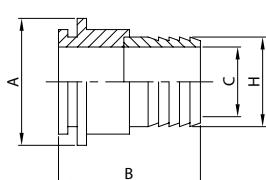
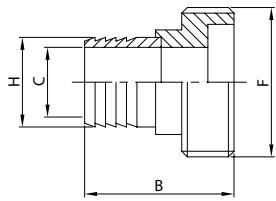
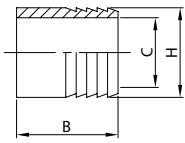
BOCC. FILETTATO DOPPIO  
DOUBLE MALE PART  
NEZ FILETÉ DOUBLE  
MACHO RACCORD DOBLE

**140 M**

**141 M**

**142 M**

**125 M**



DN	B	C	H	gr
40	57,0	40,0	43,0	80
50	62,0	50,0	53,0	100
60	72,0	60,0	63,5	120
70	77,0	70,0	73,0	180
80	90,0	80,0	83,0	240

DN	B	C	F	H	gr
40	74,0	40,0	55x3	43,0	210
50	79,0	50,0	67x3	53,0	260
60	89,0	60,0	79x3,5	63,5	320
70	94,0	70,0	90x3,5	73,0	420
80	107,0	80,0	102x4	83,0	540

DN	A	B	C	H	gr
40	50,5	71,0	40,0	43,0	120
50	62,5	76,0	50,0	53,0	180
60	73,5	86,0	60,0	63,5	220
70	85,0	91,0	70,0	73,0	300
80	96,0	104,0	80,0	83,0	390

DN	B	C	D	F	gr
40	54,0	40,0	45,0	55x3	300
50	54,0	50,0	55,0	67x3	400
60	54,0	60,0	66,0	79x3,5	500
70	54,0	70,0	76,0	90x3,5	600
80	54,0	80,0	86,0	102x4	720

DECANTATORE CURVA 90°  
DECANTER 90° BEND  
COUDE DÉCANTEUR 90°  
DECANTADOR CODO 90°

DEC. V. FARFALLA  
DEC. BUTTERFLY VALVE  
COUDE DEC. V. PAPILLON  
DEC. V. MARIPOSA

DEC. SERBATOIO CEMENTO  
DEC. CEMENT TANK  
COUDE DEC. C. CIMENT  
DEC. TANQUE CEMENTO

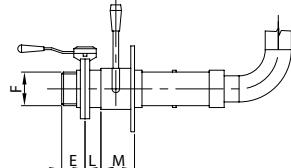
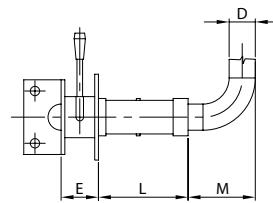
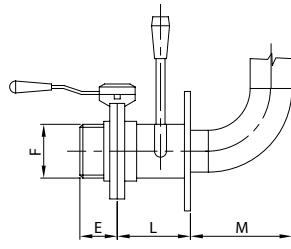
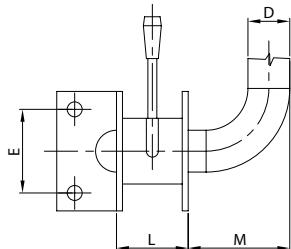
DEC. S. CEM. V. FARFALLA  
DEC. CEM. T. BUTTERFLY V.  
C. DEC. C. CIM. V. PAPILLON  
DEC. T. CEMENTO V. MAR.

**551 V**

**552 V**

**556 V**

**557 V**

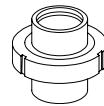


DN	D	E	L	M	gr
40	43,3	75,0	56,0	205,0	2.580
50	53,3	75,0	56,0	240,0	2.580

DN	E	F	L	M	gr
40	37,0	55x3	67,0	205,0	3.720
50	37,0	67x3	67,0	240,0	4.210

DN	D	E	L	M	gr
40	43,0	65,0	200,0	177,0	3.800
50	53,0	65,0	200,0	212,0	4.820

DN	E	F	L	M	gr
40	37,0	55x3	31,0	67,0	4.980
50	37,0	67x3	31,0	67,0	6.450



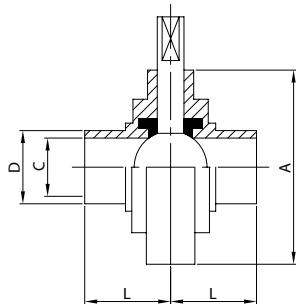
V. FARFALLA EL./EL.  
BUTTERFLY V. PE./PE.  
V. PAPILLON BL./BL.  
V. MARIPOSA EL./EL.

V. FARFALLA EF./EF.  
BUTTERFLY V. ME./ME.  
V. PAPILLON BF./BF.  
V. MARIPOSA ER./ER.

V. FARFALLA EL./EF.  
BUTTERFLY V. PE./ME.  
V. PAPILLON BL./BF.  
V. MARIPOSA EL./ER.

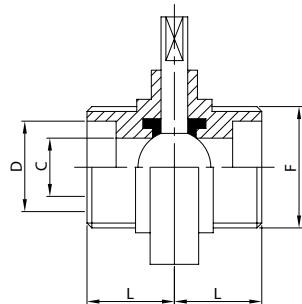
V. FARFALLA EF./FL.  
BUTTERFLY V. ME./FL.  
V. PAPILLON BF./BR.  
V. MARIPOSA ER./BR.

711 V



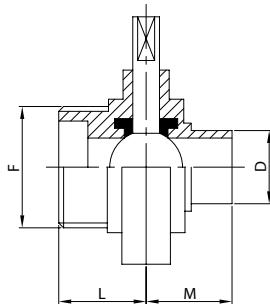
DN	A	C	D	L	gr
40	92,0	40,0	43,0	37,0	990
50	105,0	50,0	53,0	37,0	1.270
60	112,0	60,0	63,0	40,0	1.460
70	125,0	70,0	73,0	40,0	1.750
80	137,0	80,0	83,0	40,0	2.300
100	157,0	100,0	103,0	45,0	2.840

722 M



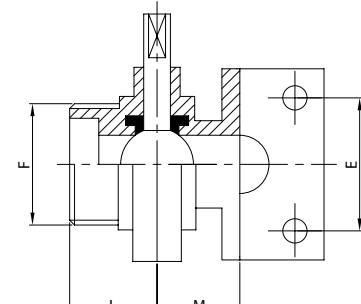
DN	C	D	F	L	gr
40	40,0	45,0	55x3	37,0	1.160
50	50,0	55,0	67x3	37,0	1.600
60	60,0	66,0	79x3,5	40,0	1.800
70	70,0	76,0	90x3,5	40,0	2.200
80	80,0	86,0	102x4	40,0	2.800
100	100,0	106,0	125x4	45,0	3.440

712 M



DN	D	F	L	M	gr
40	43,0	55x3	37,0	37,0	1.075
50	53,0	67x3	37,0	37,0	1.430
60	63,0	79x3,5	40,0	40,0	1.630
70	73,0	90x3,5	40,0	40,0	1.980
80	83,0	102x4	40,0	40,0	2.550
100	103,0	125x4	45,0	45,0	3.140

725 M



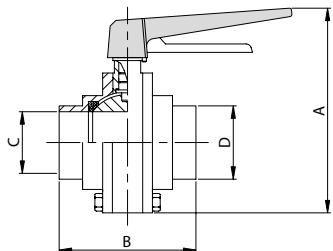
DN	E	F	L	M	gr
40	75,0	55x3	37,0	40,0	1.600
50	75,0	67x3	37,0	40,0	1.930
60	82,0	79x3,5	40,0	45,0	2.330
70	90,0	90x3,5	40,0	45,0	2.600
80	102,0	102x4	40,0	45,0	3.350
100	102,0	125x4	45,0	50,0	3.920

V. SFERA COMPATTA EL.  
COMPACT BALL VALVE PE.  
V. BOULE COMPACTE BL.  
V. BOLA COMPACTA EL.

V. SFERA COMPATTA EL./EF.  
C. BALL VALVE PE./ME.  
V. BOULE COMPACTE BL./BF.  
V. BOLA COMPACTA EL./EF.

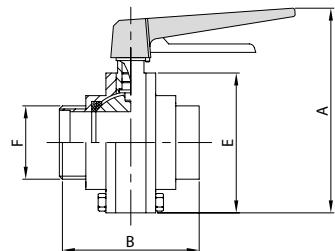
VALVOLA SFERA EL./EF.  
BALL VALVE PE./ME.  
VANNE BOULE BL./BF.  
VÁLVULA BOLA EL./ER.

W71



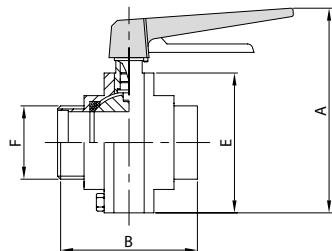
DN	A	B	C	D	gr
40	143,0	73,0	40,0	43,0	1.600
50	157,0	80,0	50,0	53,0	2.600
60	178,0	97,0	60,0	63,0	4.000
70	189,0	112,0	70,0	73,0	5.000

WM71



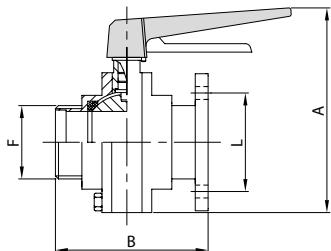
DN	A	B	E	F	gr
40	143,0	82,0	84,0	55-3	1.900
50	157,0	85,0	98,0	67-3	2.400
60	178,0	111,0	119,0	79-3,5	4.600
70	189,0	118,0	133,0	90-3,5	5.600

WM81



DN	A	B	E	F	gr
40	143,0	82,0	84,0	55-3	1.900
50	157,0	85,0	98,0	67-3	2.400
60	178,0	111,0	119,0	79-3,5	4.600
70	189,0	118,0	133,0	90-3,5	5.600

MF81



DN	A	B	F	L	gr
40	143,0	82,0	55-3	75,0	2.400
50	157,0	85,0	67-3	75,0	3.400
60	178,0	111,0	79-3,5	82,0	5.300
70	189,0	118,0	90-3,5	90,0	6.200

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