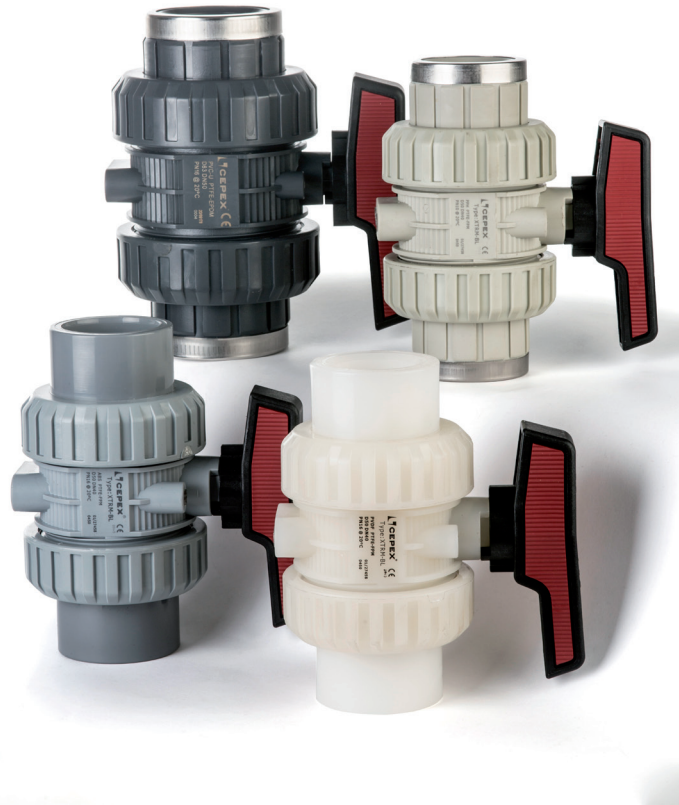




CEPEX EXTREME SERIES
INDUSTRIAL SOLUTIONS

BALL VALVES - EXTREME SERIES

VÁLVULAS DE BOLA - SERIE EXTREME



| | | |
|------------------------------|--|--|
| Sizes | Solvent cement D16 - D90 (DN10-DN80) Threaded 3/8" - 3" | |
| Standard end connections | Solvent socket - Metric, ASTM, British standard Threaded - BSP, NPT Butt welding - SDR11 | EN ISO 1452, EN ISO 15493, BS 4346-1, ASTM D 2467 ISO 228-1, ASTM D 2464 |
| Working pressure | @ 20°C (73°F) D16 - D63 (3/8" - 2"): PN 16 (240 psi) D75 - D90 (2 1/2" - 3"): PN 10 (150 psi) | |
| Materials | Body: PVC-U / PVC-C / PP-H / PVDF / ABS | Ball seats: PTFE O-rings: EPDM / FPM |
| Characteristics | <ul style="list-style-type: none"> • Threaded seal-carrier for upstream maintenance without emptying the system. • Handle built-in tool for easy adjustment of the threaded seal-carrier (and ball torque). • "Antiblock" system that avoids ball blockage. • 100% factory tested (with air and water). • Minimal pressure drop. • Low operating torque. • Resistance to many inorganic chemicals. • Excellent flow characteristics. | <ul style="list-style-type: none"> • Portajuntas roscado para el mantenimiento de la válvula sin necesidad de vaciar el sistema. • Llave incorporada en la maneta para ajuste del portajuntas roscado (ajuste del par). • Sistema "Antiblock" que evita el bloqueo de la bola. • Probadas al 100% en fábrica (con aire y agua). • Mínima pérdida de carga. • Bajo par de maniobra de apertura y cierre. • Resistencia a múltiples sustancias químicas inorgánicas. • Excelentes características de conducción. |
| Certifications / Regulations | Ball valve design regulation - EN ISO 16135 | |

DEFINITION / DEFINICIÓN

Ball valve for isolating flow in liquid handling systems.

The valve is available with a PVC-U, CPVC, PP-H or PVDF body and with EPDM or FPM (FKM) o-rings. The choice of materials will depend on the type of liquid handled by the system and the operating temperature. See the chemical resistance chart available at our website and the pressure/temperature diagram for further information.

The colour of the indicator at the top of the stem indicates the membrane material: black = EPDM, green = FPM.

Válvula de bola para la interrupción del caudal en los sistemas de conducción de fluidos.

La válvula está disponible con cuerpos fabricados en PVC-U, CPVC, PP-H y PVDF y con juntas tóricas de EPDM y FPM (FKM). La elección del material depende del tipo de fluido a transportar y de la temperatura de trabajo, de acuerdo con las tablas de resistencia química disponible en nuestra web y el diagrama de presión / temperatura.

El color del indicador del extremo del eje señala el material de la membrana: negro indica EPDM, verde indica FPM.

COMPONENTS / COMPONENTES

| N | PART - DESCRIPTION | MATERIAL |
|----|---------------------------------------|----------------------------------|
| 1 | Shaft - Eje | PVC-U / CPVC / PP-H / PVDF / ABS |
| 2 | Ball - Bola | PVC-U / CPVC / PP-H / PVDF / ABS |
| 3 | Union nut - Tuerca | PVC-U / CPVC / PP-H / PVDF / ABS |
| 4 | Handle - Maneta | PP + GR |
| 5 | End connector - Manguito enlace | PVC-U / CPVC / PP-H / PVDF / ABS |
| 6 | Dampener seal - Junta amortiguación | Food grade EPDM / FPM |
| 7 | Shaft o-ring - Junta cuerpo | Food grade EPDM / FPM |
| 8 | Body o-ring - Junta cuerpo | Food grade EPDM / FPM |
| 9 | Ball seat - Asiento bola | PTFE |
| 10 | Rnd connector o-ring - Junta manguito | Food grade EPDM / FPM |
| 11 | Body - Cuerpo | PVC-U / CPVC / PP-H / PVDF / ABS |
| 12 | Seal-carrier - Porta-juntas | PVC-U / CPVC / PP-H / PVDF / ABS |
| 13 | Fixing inserts - Insertos fijación | Stainless steel |

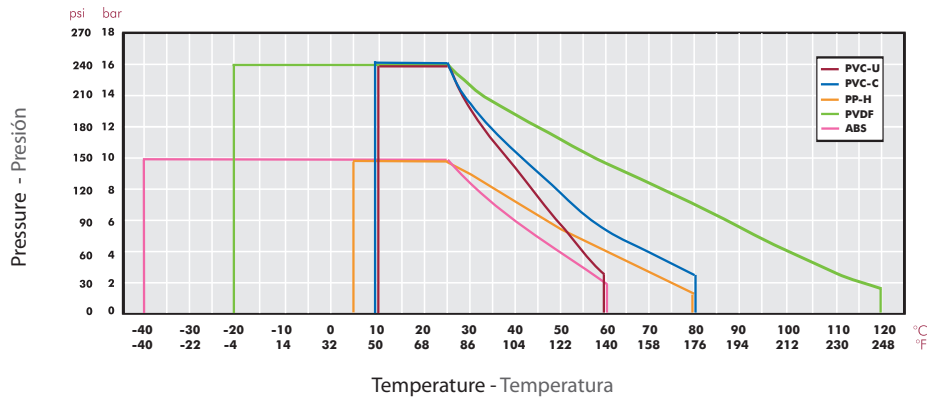
* Todos los manguitos roscados son reforzados con un anillo de refuerzo en acero inoxidable

* All the threaded connections are reinforced with stainless steel rings

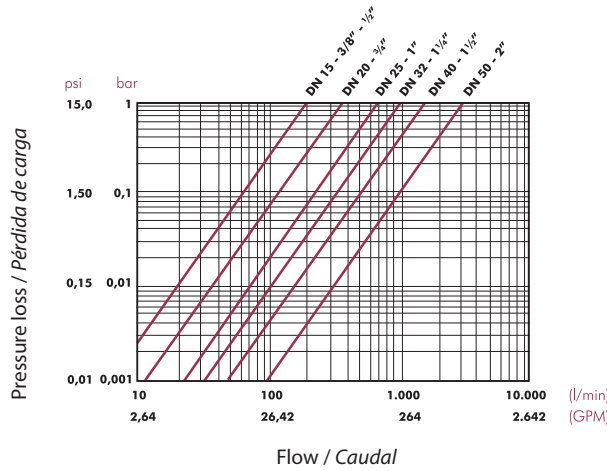


TECHNICAL SPECIFICATIONS / CARACTERÍSTICAS TÉCNICAS

PRESSURE-TEMPERATURE DIAGRAM
DIAGRAMA DE PRESIÓN-TEMPERATURA



PRESSURE LOSS DIAGRAM
DIAGRAMA DE PÉRDIDAS DE CARGA



RELATIVE FLOW
FLUJO RELATIVO

| D | 16-3/8" | 20-1/2" | 25-3/4" | 32-1" | 40-1 1/4" | 50-1 1/2" | 63-2" |
|-------------------|---------|---------|---------|-------|-----------|-----------|-------|
| DN | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
| Kv ₁₀₀ | 75 | 190 | 380 | 690 | 980 | 1.600 | 3.000 |
| Cv | 5,3 | 13,3 | 26,6 | 48,3 | 68,6 | 112 | 210,1 |

$Cv = Kv_{100} / 14,28$
 Kv_{100} (l/min, $\Delta p = 1$ bar)
 Cv (GPM, $\Delta p = 1$ psi)

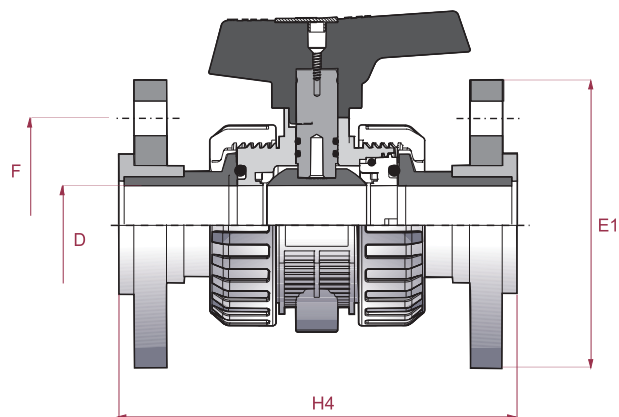
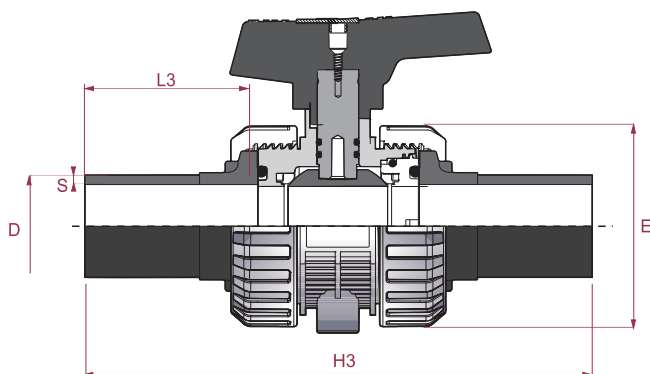
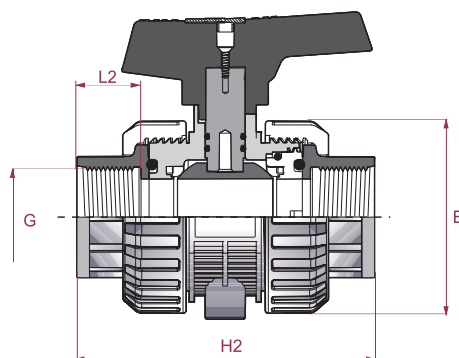
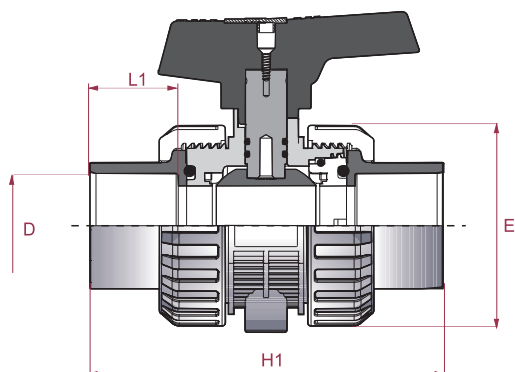
OPERATING TORQUE CHART
TABLA DE PAR DE MANIOBRA

| D | 16-3/8" | 20-1/2" | 25-3/4" | 32-1" | 40-1 1/4" | 50-1 1/2" | 63-2" |
|--------|---------|---------|---------|-------|-----------|-----------|-------|
| DN | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
| Nm | 1 | 1 | 2 | 3,5 | 3,5 | 5 | 15 |
| in-lbf | 8,9 | 8,9 | 17,7 | 31 | 31 | 44,3 | 132,8 |

Operating torque values at rated pressure (PN) and 20 °C in as new direct from the factory condition. Installation and operating conditions (pressure and temperature) will affect these values.

Los valores de par de giro se determinan a presión nominal (PN) y a 20 °C, en condiciones de salida de fábrica. Las condiciones de instalación y operación (presión y temperatura) afectarán a estos valores.

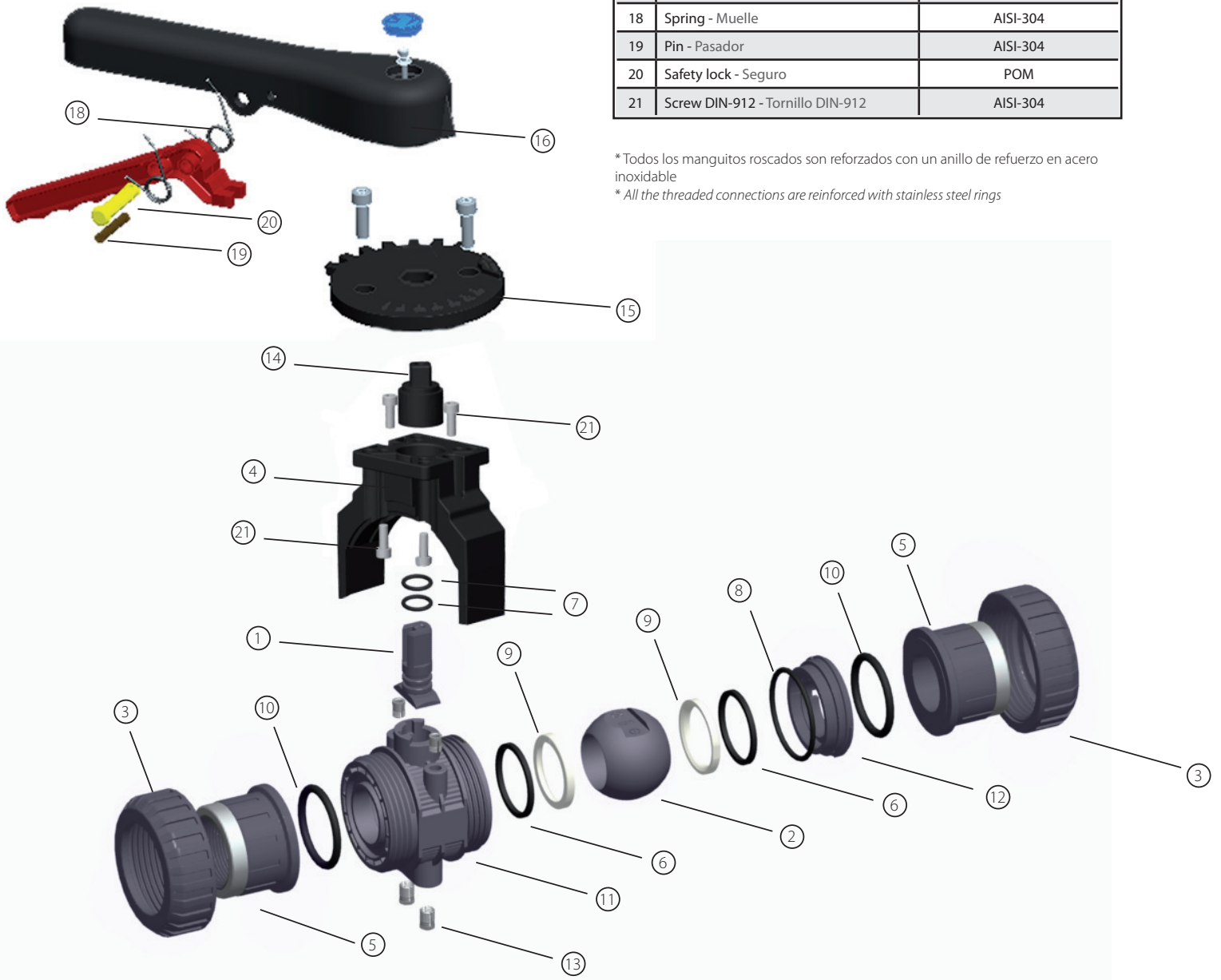
DIMENSIONS / DIMENSIONES



| DN | D - G | L1 solvent | L1 theraded | L1 fusion | L2 | L3 | H1 PVC-U / CPVC/ABS | H1 PP-H / PVDF | H2 | H3 | H4 | E | E1 | F | S |
|------|-------------|---------------|----------------|--------------|----|----|---------------------------|-------------------|-----|-----|-----|-----|-----|-----|-----|
| DN10 | 16 - 3/8" | 15,5 | 8,5 | 14,5 | 13 | - | 102 | 101 | 87 | - | - | 50 | - | - | - |
| DN15 | 20 - 1/2" | 17 | 13,5 | 15,5 | 16 | 45 | 102 | 101 | 87 | 170 | 130 | 50 | 95 | 65 | 2,3 |
| DN20 | 25 - 3/4" | 20 | 15,5 | 17 | 19 | 57 | 120 | 118 | 101 | 190 | 150 | 61 | 105 | 75 | 2,3 |
| DN25 | 32 - 1" | 23 | 18,5 | 19 | 22 | 50 | 139 | 136 | 122 | 205 | 160 | 70 | 115 | 85 | 3,0 |
| DN32 | 40 - 1 1/4" | 27,5 | 20 | 21,5 | 26 | 51 | 156 | 151 | 135 | 226 | 180 | 81 | 140 | 100 | 3,7 |
| DN40 | 50 - 1 1/2" | 32 | 20 | 24,5 | 31 | 61 | 170 | 165 | 149 | 250 | 195 | 96 | 150 | 110 | 4,6 |
| DN50 | 63 - 2" | 39,5 | 24 | 28,5 | 38 | 69 | 197 | 190 | 174 | 296 | 223 | 118 | 165 | 125 | 5,8 |

COMPONENTS / COMPONENTES

| N | PART - DESCRIPTION | MATERIAL |
|----|---------------------------------------|-----------------------|
| 1 | Shaft - Eje | PVC-U / CPVC |
| 2 | Ball - Bola | PVC-U / CPVC |
| 3 | Union nut - Tuerca | PVC-U / CPVC |
| 4 | Coupling clamp - Brida acople | PVC-U |
| 5 | End connector - Manguito enlace | PVC-U / CPVC |
| 6 | Dampener seal - Junta amortiguación | Food grade EPDM / FPM |
| 7 | Shaft o-ring - Junta cuerpo | Food grade EPDM / FPM |
| 8 | Body o-ring - Junta cuerpo | Food grade EPDM / FPM |
| 9 | Ball seat - Asiento bola | PTFE |
| 10 | Rnd connector o-ring - Junta manguito | Food grade EPDM / FPM |
| 11 | Body - Cuerpo | PVC-U / CPVC |
| 12 | Seal-carrier - Porta-juntas | PVC-U / CPVC |
| 13 | Fixing inserts - Insertos fijación | Stainless steel |
| 14 | Shaft extension - Extensión eje | Aluminium |
| 15 | Throttle plate - Conjunto divisor | PP-GR |
| 16 | Handle - Maneta | PP-GR |
| 17 | Lever - Gatillo | PP-GR |
| 18 | Spring - Muelle | AISI-304 |
| 19 | Pin - Pasador | AISI-304 |
| 20 | Safety lock - Seguro | POM |
| 21 | Screw DIN-912 - Tornillo DIN-912 | AISI-304 |

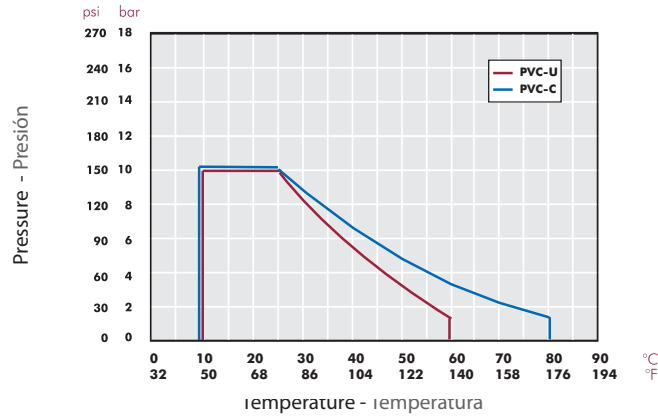


* Todos los manguitos roscados son reforzados con un anillo de refuerzo en acero inoxidable

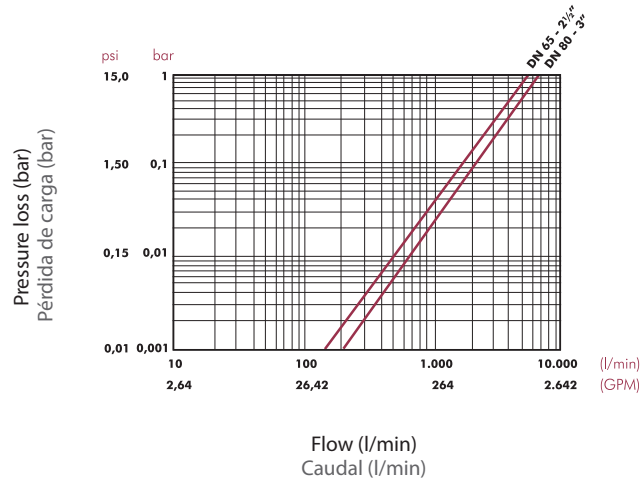
* All the threaded connections are reinforced with stainless steel rings

TECHNICAL SPECIFICATIONS / CARACTERÍSTICAS TÉCNICAS

PRESSURE-TEMPERATURE DIAGRAM
DIAGRAMA DE PRESIÓN-TEMPERATURA



PRESSURE LOSS DIAGRAM
DIAGRAMA DE PÉRDIDAS DE CARGA



RELATIVE FLOW
FLUJO RELATIVO

| | | |
|-------------------------|--------|-------|
| D | 75-2½" | 90-3" |
| DN | 65 | 80 |
| Kv₁₀₀ | 5.500 | 6.800 |
| Cv | 385,2 | 476,2 |

$Cv = Kv_{100} / 14,28$
 Kv_{100} (l/min, Δp = 1 bar)
 Cv (GPM, Δp = 1 psi)

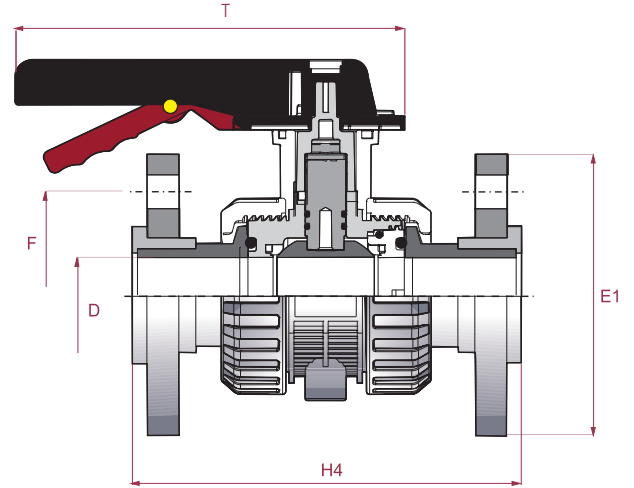
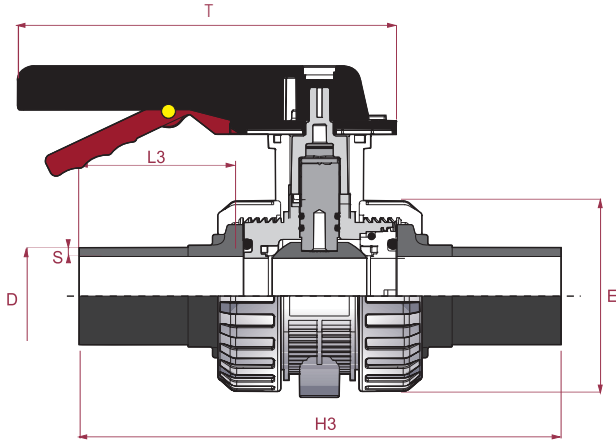
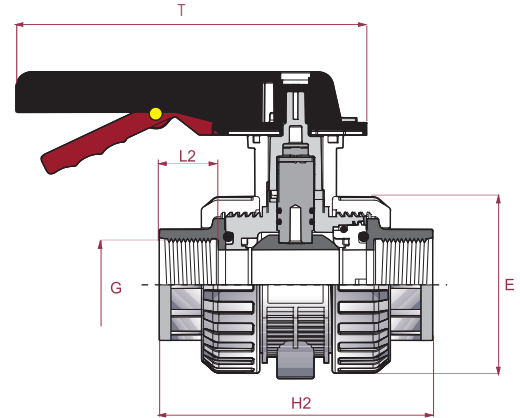
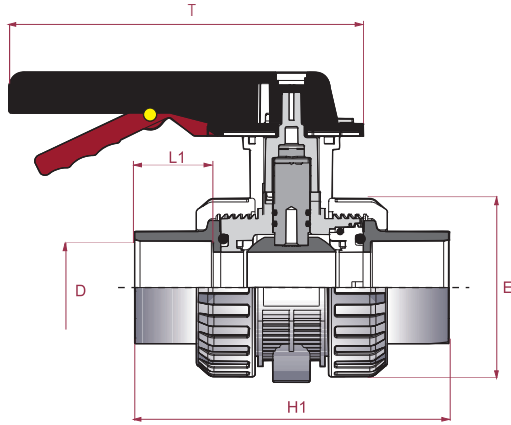
OPERATING TORQUE CHART
TABLA DE PAR DE MANIOBRA

| | | |
|---------------|--------|-------|
| D | 75-2½" | 90-3" |
| DN | 65 | 80 |
| Nm | 25 | 45 |
| in·lbf | 221,3 | 398,3 |

Operating torque values at rated pressure (PN) and 20 °C in as new direct from the factory condition. Installation and operating conditions (pressure and temperature) will affect these values.

Los valores de par de giro se determinan a presión nominal (PN) y a 20 °C, en condiciones de salida de fábrica. Las condiciones de instalación y operación (presión y temperatura) afectarán a estos valores.

DIMENSIONS / DIMENSIONES



| DN | D - G | L1 solvent | L1 theraded | L2 | L3 | H1 | H2 | H3 | H4 | E | E1 | F | S |
|------|----------|---------------|----------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| DN65 | 75 - 2½" | 45 | 27 | 44 | 76 | 238 | 216 | 324 | 190 | 146 | 185 | 145 | 6,8 |
| DN80 | 90 - 3" | 53 | 30 | 51 | 85 | 278 | 256 | 366 | 310 | 176 | 200 | 160 | 8,2 |

STANDARDS - STANDARDS

DIN (metric / BSP)
ANSI (ASTM / NPT)
SDR11 > PE100

CE CERTIFICATE
EN ISO 16135

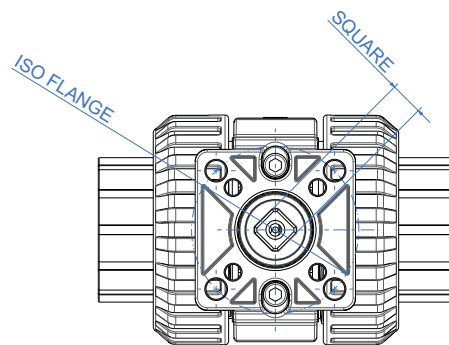
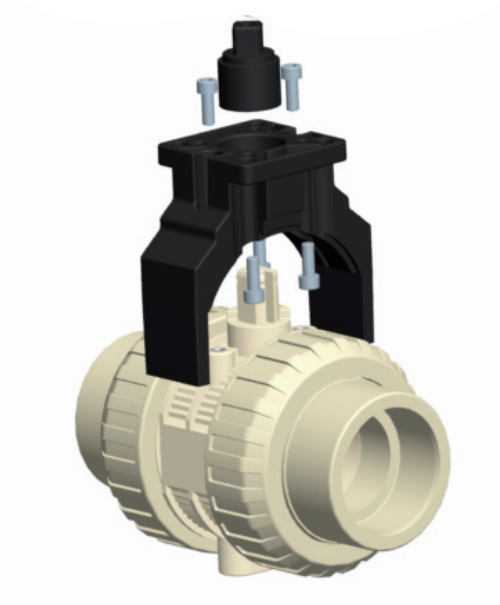
ACTUATION KIT
KIT DE ACTUACIÓN

The kit includes all the necessary elements to connect the ball valve with the actuator and it is ready for all the brands of actuators following the ISO 5211 regulation.

Components: coupling bush, supports, bolts, mounting clamp and connectors.

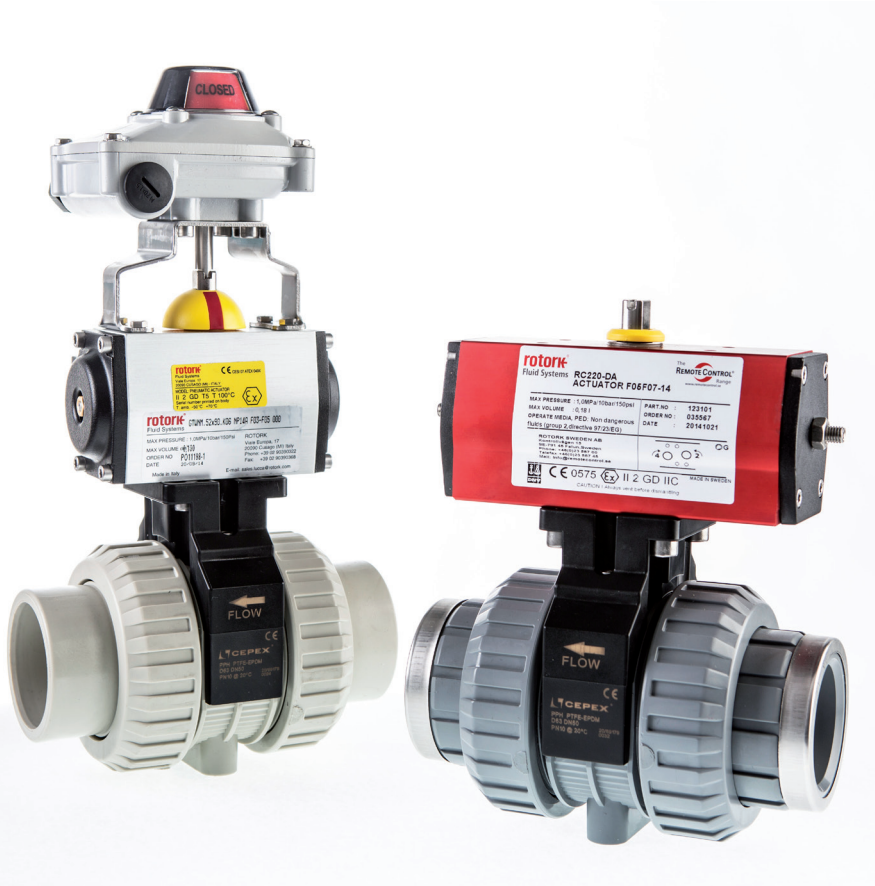
El kit incluye todos los elementos necesarios para conectar la válvula de bola con el actuador y es compatible con todas las marcas de actuadores que siguen la norma ISO 5211.

Componentes: pieza de conexión, medio soportes, tornillería, brida separadora y acoples.



| D | DN | ISO FLANGE F03 | | | ISO FLANGE F04 | | | ISO FLANGE F05 | | | | ISO FLANGE F07 | | | | |
|----|----|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|-------|----------------|-------|-------|-------|--|
| | | Q9 | Q11 | Q14 | Q9 | Q11 | Q14 | Q9 | Q11 | Q14 | Q17 | Q11 | Q14 | Q17 | Q22 | |
| 20 | 15 | 65396 | 65397 | 65398 | 65881 | 65882 | 65883 | 65399 | 65400 | 65401 | | | | | | |
| 25 | 20 | 65884 | 65885 | 65886 | 65887 | 65888 | 65889 | 65402 | 65403 | 65404 | | | | | | |
| 32 | 25 | | | | | | | | 65405 | 65406 | | | | | | |
| 40 | 32 | | | | | | | | 65407 | 65408 | | | | | | |
| 50 | 40 | | | | | | | | 65409 | 65410 | 65411 | 65412 | 65413 | 65414 | | |
| 63 | 50 | | | | | | | | 65415 | 65416 | 65417 | 65418 | 65419 | 65420 | | |
| 75 | 65 | | | | | | | | | | | | | 65421 | | |
| 90 | 80 | | | | | | | | | | | | | 65422 | 65423 | |

PNEUMATIC ACTUATION
ACTUACIÓN NEUMÁTICA



Actuator characteristics - Rotork GT:

- Piston drive
- Compact design and lightweight
- Housed in anodised aluminium
- Long and efficient service with a minimum maintenance

Características del actuador Rotork GT:

- Actuación tipo pistón
- Diseño compacto y ligero
- Encajado en aluminio anodizado
- Vida de servicio duradera y eficiente con un mantenimiento mínimo

Pneumatic actuation possibility in all versions of the butterfly valve Extreme Series.

Default actuator - Rotork model GT

Possibility of actuation using other brands or models, or preparing the valve for customer own actuation.

Actuation options

- Spring return with normally closed valve
- Spring return with normally open valve
- Doble acting

Optional accessories

- Limit switch box
- Solenoid valve (different configurations)
- Relief regulators

Posibilidad de actuación neumática en todas las versiones de válvula de bola Serie Extreme.

Actuador por defecto - Rotork modelo GT

Posibilidad de actuación con otras marcas o modelos o de preparación de la válvula para actuación por parte del cliente.

Opciones de actuación

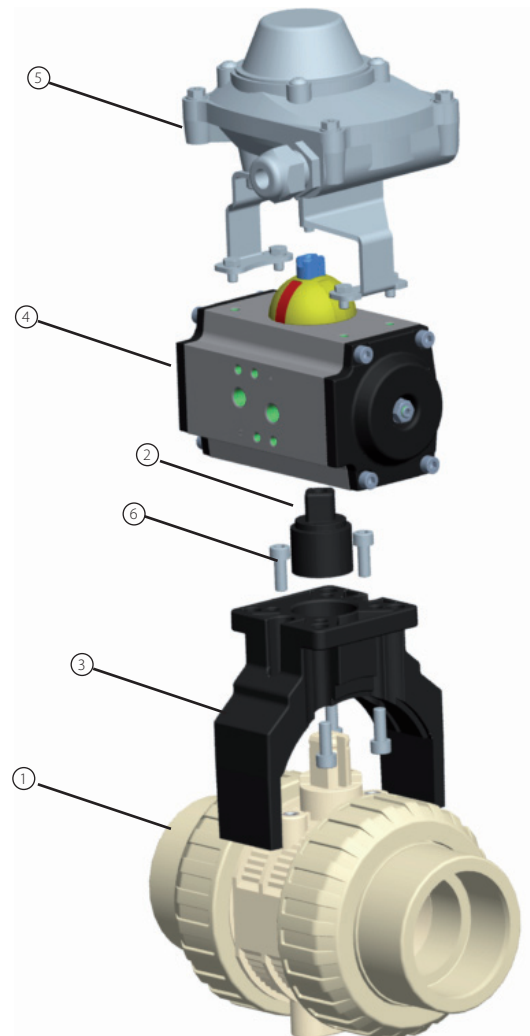
- Simple efecto con válvula normalmente cerrada
- Simple efecto con válvula normalmente abierta
- Doble efecto

Accesorios opcionales

- Caja de final de carrera
- Válvula solenoide (diferentes configuraciones)
- Reguladores de escape

EXPLODED | DESPIECE

| Description | Material |
|--|--------------------------|
| 1 Body / Cuerpo | - |
| 2 Coupling bush / Casquillo unión | Aluminium |
| 3 Mounting clamp / Soporte actuador | PVC-U |
| 4 Actuator / Actuador | - |
| 5 Limit switch box / Caja final de carrera | (optional) |
| 6 Screws DIN-912 / Tornillos DIN-912 | Stainless steel AISI-304 |



DIAPHRAGM VALVES - EXTREME SERIES

VÁLVULAS DE DIAFRAGMA - SERIE EXTREME



| | | |
|------------------------------|---|---|
| Sizes | Solvent cement D16 - D63 (DN10-DN50) Threaded 3/8" - 2" | |
| Standard end connections | Solvent socket - Metric, ASTM, British standard Threaded - BSP, NPT Butt welding - SDR11 | EN ISO 1452, EN ISO 15493, BS 4346-1, ASTM D 2467 ISO 228-1, ASTM D 2464 |
| Working pressure | @ 20°C (73°F) D16 - D63 (3/8" - 2"): PN 10 (150 psi) | |
| Materials | Body: PVC-U / PVC-C / PP-H | O-rings / diaphragm: EPDM / FPM |
| Characteristics | <ul style="list-style-type: none"> • Excellent flow characteristics and minimal pressure drop. • Safety device in handle. • Visual position indicator. • 100% factory tested (with air and water). • Protection in the closing bolts. • Low operating torque. • Resistance to many inorganic chemicals. • Excellent flow characteristics. | <ul style="list-style-type: none"> • Excelente características de conducción y mínimas pérdidas de carga. • Seguro de apertura incorporado en el volante. • Indicador visual de posición. • Probadas al 100% en fábrica (con aire y agua). • Protección en los tornillos de cierre. • Bajo par de maniobra de apertura y cierre. • Resistencia a múltiples sustancias químicas inorgánicas. • Excelentes características de conducción. |
| Certifications / Regulations | Ball valve design regulation - EN ISO 16138 | |



DEFINITION / DEFINICIÓN

Diaphragm valve for regulating flow in liquid handling systems.

The valve is available with a PVC-U, CPVC or PP-H body and with EPDM or FPM (FKM) membranes. The choice of materials will depend on the type of liquid handled by the system and the operating temperature. See the chemical resistance chart available at our website and the pressure/temperature diagram for further information.

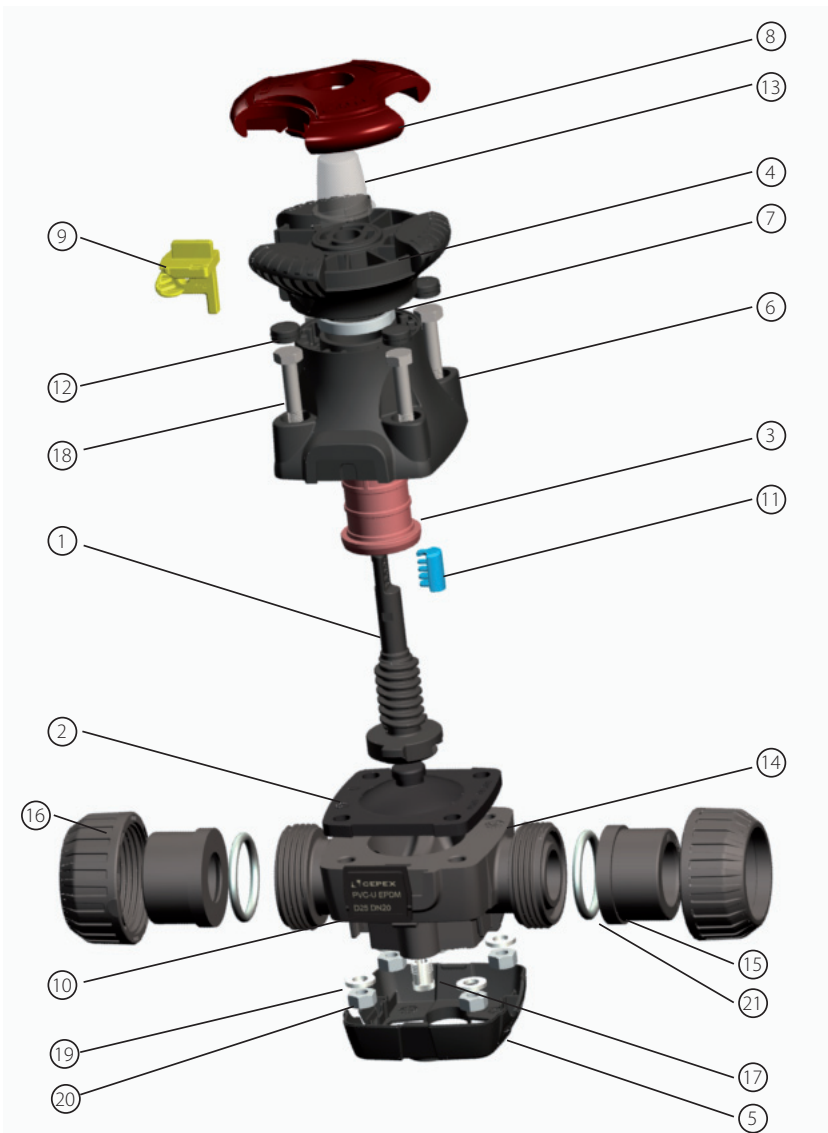
The colour of the indicator at the end of the stem indicates the membrane material: blue = EPDM, green = FPM.

Válvula de diafragma para la regulación del caudal en los sistemas de conducción de fluidos.

La válvula está disponible con cuerpos fabricados en PVC-U, CPVC y PP-H y con membranas de EPDM y FPM (FKM). La elección del material depende del tipo de fluido a transportar y de la temperatura de trabajo, de acuerdo con las tablas de resistencia química disponible en nuestra web y el diagrama de presión / temperatura.

El color del indicador del extremo del eje señala el material de la membrana: azul indica EPDM, verde indica FPM.

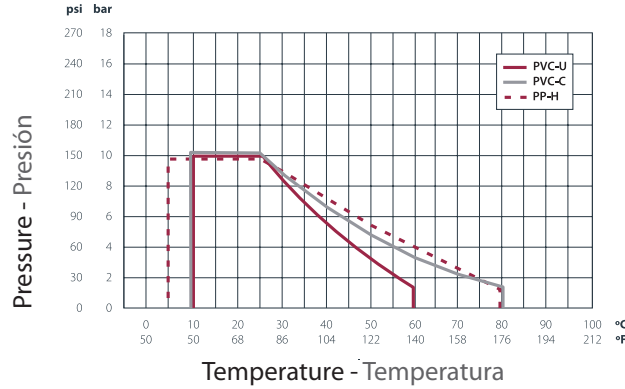
COMPONENTS / COMPONENTES



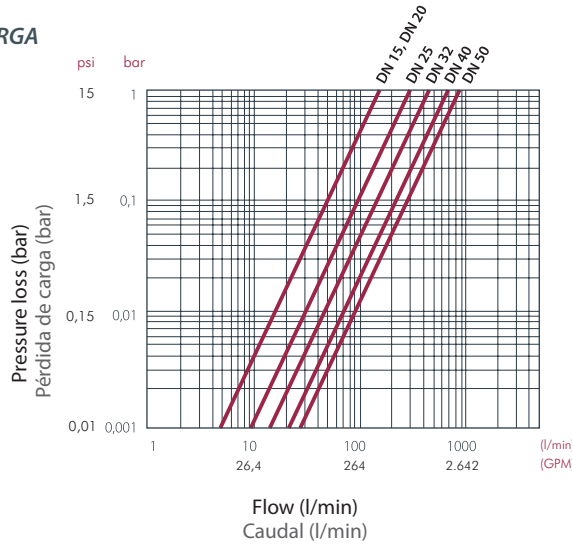
| N | PART - DESCRIPCIÓN | MATERIAL | Q |
|----|---|------------------------------------|---|
| 1 | Stem - Eje | PPO+GF | 1 |
| 2 | Diaphragm - Diafragma | EPDM/FPM | 1 |
| 3 | Guide - Guía | POM | 1 |
| 4 | Handwheel - Volante | PP+GR | 1 |
| 5 | Lower cover - Tapa inferior | PP | 2 |
| 6 | Cover - Tapa | PP+GR | 1 |
| 7 | Washer - Aarandela | POM | 1 |
| 8 | Top cover - Tapón superior | PP | 1 |
| 9 | Safety lock - Seguro | PP+GR | 1 |
| 10 | Label-holder - Porta etiqueta | ABS | 1 |
| 11 | Indicator - Indicador | PP | 1 |
| 12 | Screw cap - Tapón tornillo | PP | 4 |
| 13 | Indicator cap - Tapón indicador | PC | 1 |
| 14 | Body - Cuerpo | PVC-U/CPVC/PP-H | 1 |
| 15 | End connector - Manguito | PVC-U/CPVC/PP-H | 2 |
| 16 | Union nut - Tuerca | PVC-U/CPVC/PP-H | 2 |
| 17 | Insert - Inserto | Stainless steel - Acero inoxidable | 2 |
| 18 | DIN 931 screw - Tornillo DIN 931 | Stainless steel - Acero inoxidable | 4 |
| 19 | DIN 127 grower washer - Arandela grower DIN 127 | Stainless steel - Acero inoxidable | 4 |
| 20 | DIN 934 nut - Tuerca DIN 934 | Stainless steel - Acero inoxidable | 4 |
| 21 | O-ring - Junta tórica | EPDM/FPM | 2 |

TECHNICAL SPECIFICATIONS / CARACTERÍSTICAS TÉCNICAS

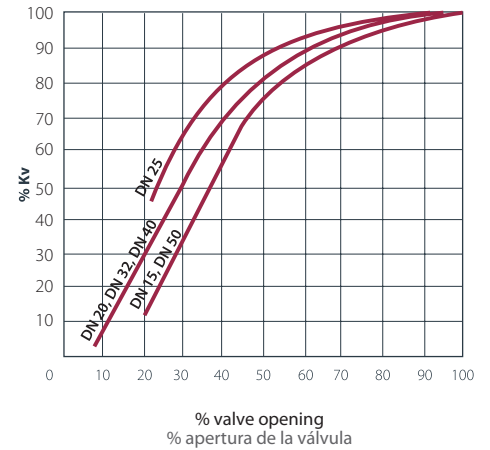
PRESSURE-TEMPERATURE DIAGRAM
DIAGRAMA DE PRESIÓN-TEMPERATURA



PRESSURE LOSS DIAGRAM
DIAGRAMA DE PÉRDIDAS DE CARGA



Kv according to valve opening
Kv en función a la apertura de la válvula



RELATIVE FLOW
FLUJO RELATIVO

| DN | 15 | 20 | 25 | 32 | 40 | 50 |
|---------------------------|-------|-------|-------|-------|-------|-----|
| Kv ₁₀₀ (l/min) | 155 | 158 | 292 | 454 | 648 | 871 |
| Cv (GPM) | 10,85 | 11,06 | 20,45 | 31,76 | 45,41 | 61 |

$Cv = Kv_{100} / 14,28$
 Kv_{100} (l/min, $\Delta p = 1$ bar)
 Cv (GPM, $\Delta p = 1$ psi)

OPERATING TORQUE CHART
TABLA DE PAR DE MANIOBRA

| Nm | D20 | | D25 | | D32 | | D40 | | D50 | | D63 | |
|----|------|-----|------|-----|------|-----|------|-----|-------|-------|-------|-------|
| | DN15 | | DN20 | | DN25 | | DN32 | | DN40 | | DN50 | |
| | EPDM | FPM | EPDM | FPM | EPDM | FPM | EPDM | FPM | EPDM | FPM | EPDM | FPM |
| | 3,5 | 4,5 | 3,5 | 4,5 | 6,5 | 6,5 | 6,5 | 6,5 | 12-13 | 12-13 | 12-13 | 12-13 |

Operating torque values at rated pressure (PN) and 20 °C in as new direct from the factory condition. Installation and operating conditions (pressure and temperature) will affect these values.

Los valores de par de giro se determinan a presión nominal (PN) y a 20 °C, en condiciones de salida de fábrica. Las condiciones de instalación y operación (presión y temperatura) afectarán a estos valores.

DIMENSIONS. CONNECTION TYPES - DIMENSIONES. VERSIONES DE CONEXIÓN

Table of dimensions for all sizes. Connection types:

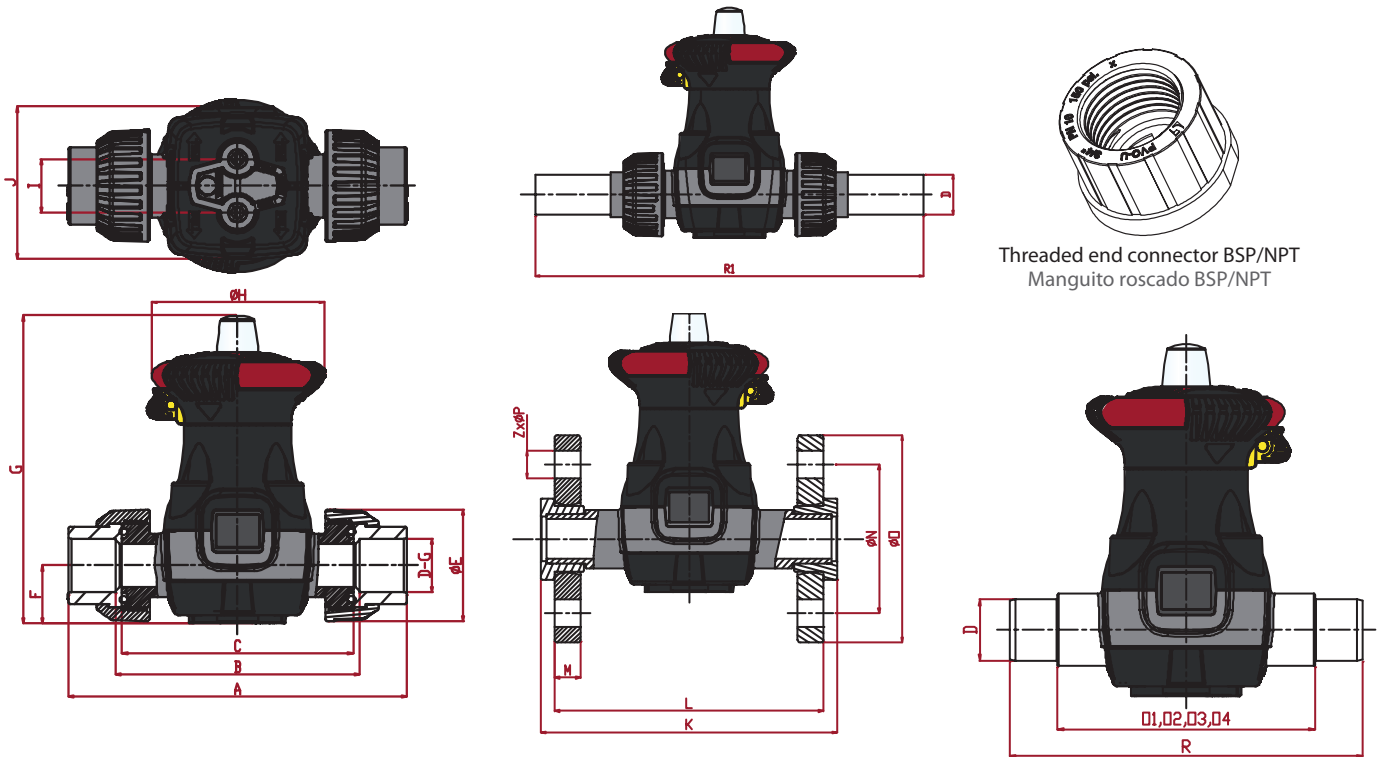
PVC-U and CPVC: metric male for solvent socket, US size male for solvent socket, flanges and 3-pieces connector with seal and thread (BSP and NPT) connection coupling.

PP-H: metric male thermofusion, US size male thermofusion, 3-pieces connector with thermofusion, threaded (BSP and NPT) and PE-100 and PP-H butt welded connection coupling.

Tabla de dimensiones para todas las medidas. Versiones de conexión:

PVC-U y CPVC: macho métrico encolar, macho medida americana (MA) encolar, bridas y 3 piezas con manguito para encolar y roscar (BSP y NPT).

PP-H: macho métrico termofusión, macho medida americana termofusión, 3 piezas con manguito para termofusión, roscar (BSP y NPT) y soldadura a tope PE-100 y PP-H.



Threaded end connector BSP/NPT
Manguito roscado BSP/NPT

| DN | A | B | C | D-G | E | F | G | H | I | J | K | L | M | N | *O1 | *O2 | *O3 | *O4 | P | Q | R | *R1 | Z |
|------|-----|-----|-----|---------|-----|----|-----|-----|---------|-----|-----|-----|----|-----|-----|-----|-----|-----|----|-----|-----|-----|------|
| DN15 | 133 | 96 | 90 | 20-1/2" | 41 | 27 | 144 | 81 | 25 (M6) | 71 | 130 | 118 | 12 | 65 | 90 | 87 | 93 | 80 | 14 | 90 | 124 | 182 | 4x14 |
| DN20 | 159 | 116 | 108 | 25-3/4" | 52 | 27 | 144 | 81 | 25 (M6) | 71 | 150 | 136 | 13 | 75 | 105 | 105 | 110 | 93 | 14 | 105 | 144 | 202 | 4x14 |
| DN25 | 166 | 122 | 116 | 32-1" | 60 | 38 | 189 | 96 | 26 (M6) | 85 | 161 | 145 | 15 | 85 | 108 | 106 | 116 | 96 | 14 | 108 | 154 | 216 | 4x14 |
| DN32 | 192 | 140 | 134 | 40-1/4" | 74 | 38 | 189 | 96 | 45 (M8) | 95 | 181 | 163 | 16 | 100 | 120 | 120 | 131 | 110 | 18 | 120 | 174 | 236 | 4x18 |
| DN40 | 222 | 160 | 154 | 50-1/2" | 80 | 51 | 252 | 130 | 45 (M8) | 115 | 200 | 184 | 17 | 110 | 130 | 136 | 144 | 123 | 18 | 130 | 194 | 282 | 4x18 |
| DN50 | 266 | 190 | 184 | 63-2" | 100 | 51 | 252 | 130 | 45 (M8) | 115 | 230 | 212 | 18 | 125 | 147 | 162 | 166 | 147 | 18 | 147 | 224 | 322 | 4x18 |

*O1: PVC-U / CPVC metric. - Métrico PVC-U / CPVC

*O2: PVC-U / CPVC US size. - Medida americana PVC-U / CPVC

*O3: PP-H metric - Métrico PP-H

*O4: PP-H US size - Medida americana PP-H

*PP-H body with PE-100 and PP-H butt welded connection coupling. -

R1: cuerpo PP-H con manguitos para soldadura a tope PE-100 y PP-H.

PNEUMATIC ACTUATION
ACTUACIÓN NEUMÁTICA



Pneumatic actuation in all versions of the diaphragm valve Extreme Series.

FESTO actuator, specially designed for CEPEX diaphragm valves

Actuation options:

- Spring return with normally closed valve
- Double acting

Optional accessories:

- Possibility of mechanical adjustment of the valve opening
- Possibility of mounting the solenoid included in the actuator
- Analogue Position transmitter
- Magnetic sensors incorporated in the cylinder
- Speed control through flow regulators

Actuación neumática en todas las versiones de válvula de diafragma Serie Extreme.

Actuador FESTO, diseñado especialmente para válvulas de diafragma CEPEX

Opciones de actuación:

- Simple efecto con válvula normalmente cerrada
- Doble efecto

Accesorios opcionales:

- Posibilidad de ajuste mecánico de la apertura de la válvula
- Posibilidad de montaje de la electroválvula incorporada al actuador
- Transmisor analógico de posición
- Detectores magnéticos incorporados al cilindro
- Ajuste de velocidad a través de reguladores de caudal

FESTO Actuator characteristics:

- Sensor slots on three sides for flush mounting of proximity sensors
- Magnet for contactless position sensing
- Integrated cushioning rings for absorbing residual energy at high speeds and machine cycles

Analogue Position transmitter:

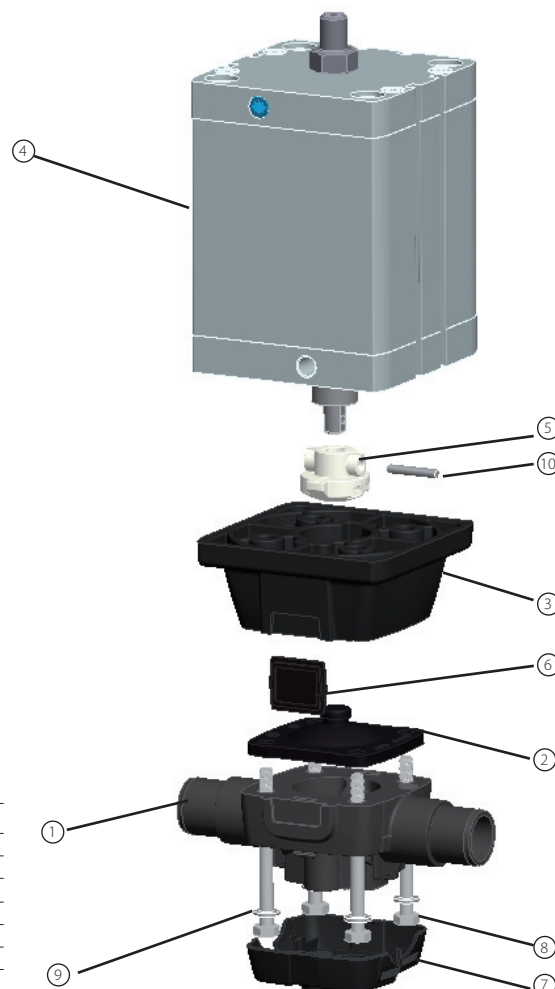
- Magnetic sensor
- Directly mounted in the slots of the actuator
- Analogue output 0-10 V / 4 - 20 mA

Características del actuador FESTO:

- Ranuras en tres lados para el montaje a ras de los detectores
- Imán para la detección de posiciones sin contacto
- Anillos elásticos para amortiguar la energía residual y conseguir altas velocidades y ciclos cortos

Transmisor analógico de posición:

- Sensor magnético
- Acoplado directamente a la ranura del actuador
- Salida 0-10 V / 4 - 20 mA



EXPLODED | DESPIECE

| Description | Material |
|---------------------------------|--------------------|
| 1 Body / Cuerpo | PVC-U / CPVC / PPH |
| 2 Diaphragm / Diafragma | EPDM / FPM |
| 3 Mounting clamp / Brida unión | PA |
| 4 Actuator / Actuador | Aluminium |
| 5 Pressing piece / Prensa | POM |
| 6 Label holder / Porta-etiqueta | ABS |
| 7 Lower cover / Tapa inferior | PP |
| 8 Screw / Tornillo | AISI-304 |
| 9 Washer / Arandela | AISI-304 |
| 10 Pin / Pasador | AISI-304 |

PVC-U BUTTERFLY VALVES - EXTREME SERIES

VÁLVULAS DE MARIPOSA PVC-U - SERIE EXTREME



| | | |
|------------------------------|--|--|
| Sizes | D63 - D315 (DN50 - DN300) 2" - 12" (DN50 - DN300) | |
| Standards | ISO/DIN, British Standard, ANSI/ASTM, JIS | EN 558-1 BS EN 1092-1 ANSI B.16.5 class 150 JIS B 2220 |
| Working pressure | @ 20°C (73°F) D63-D225 (2" - 8"): PN 10 (150 psi) D250 - D315 (10" - 12"): PN 6 (90 psi) | |
| Materials | Body: PP-H Disc: PVC-U / PVC-C / PP-H / PVDF / ABS | Gasket: EPDM perox. / FPM Shaft: Stainless steel (AISI 630) |
| Characteristics | <ul style="list-style-type: none"> • One piece PP - GR body. • Disc available in different materials (PVC-U, PVC-C, PP-H, PVDF, ABS). • Ideally suited for flow control using minimal piping space. • 100% factory tested (with air and water). • Minimal pressure drop. • Low maintenance. • Resistance to many inorganic chemicals. • Regulable opening every 15° with position holding. • Good mechanical strength. • Built in lockout feature to prevent undesired operations. • Electric and pneumatic actuators available, and with gear box. | <ul style="list-style-type: none"> • Cuerpo de una sola pieza en PP - GR. • Compuerta disponible en diversos materiales (PVC-U, PVC-C, PP-H, PVDF, ABS). • Ideal para el control del fluido usando poco espacio. • Testadas al 100% en fábrica (con aire y agua) • Mínima pérdida de carga. • Resistencia a múltiples sustancias químicas inorgánicas. • Apertura regulable cada 15° con fijación de posición. • Buena resistencia mecánica. • Seguro incorporado en la maneta para evitar operaciones no deseadas. • Motorizaciones eléctricas, neumáticas y reductor manual disponibles. |
| Certifications / regulations | Butterfly valve design regulation - ISO 16136 | |

DEFINITION / DEFINICIÓN

Butterfly valve for isolating or regulating the flow in fluid handling systems. Design based on the EN ISO 16136 Standard in accordance with the 97/23/EC Directive.

The valve is available with PVC-U, CPVC, PP-H, PVDF and ABS discs and EPDM and FPM sealing gaskets. The choice of material for the disc and gasket depends on the type of fluid to be carried and on the working temperature of the fluid, in accordance with the chemical resistance tables available on our website and the pressure/temperature chart.

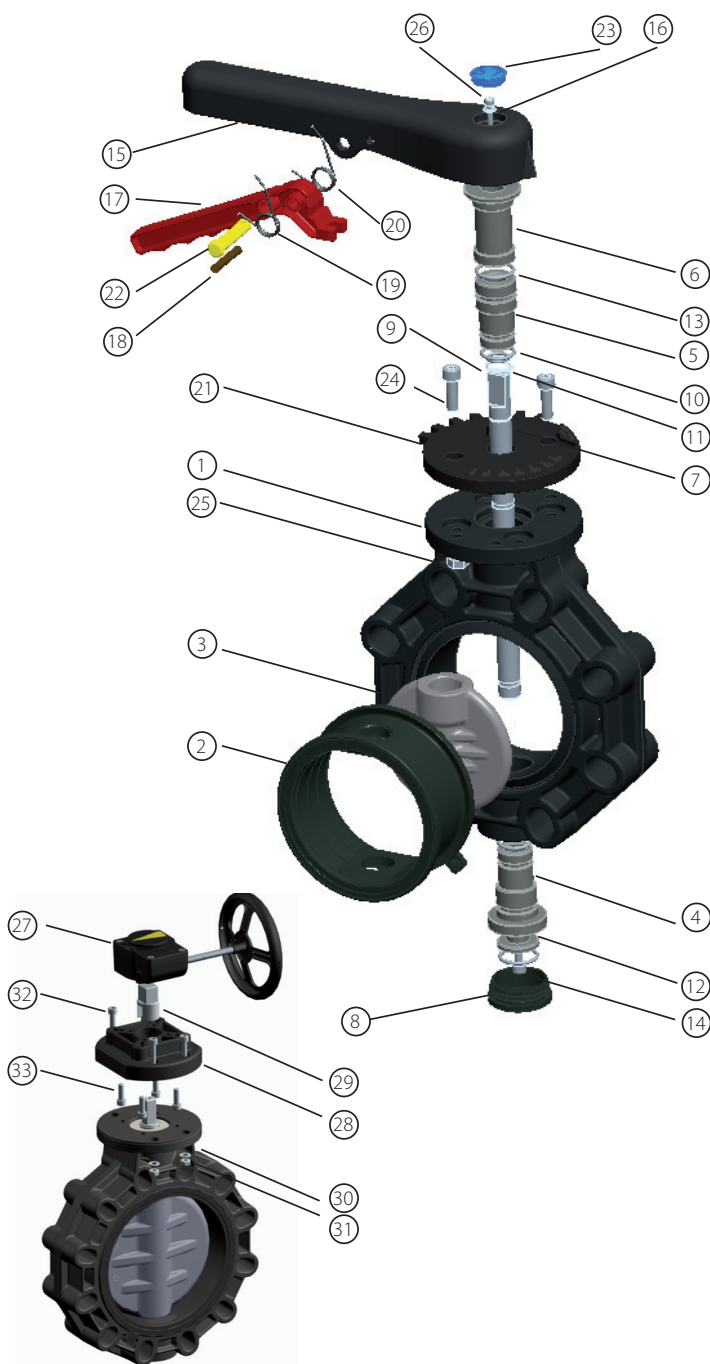
Válvula de mariposa para la interrupción o la regulación del caudal en los sistemas de conducción de fluidos.

Diseño basado en norma ISO EN 16136 según Directiva 97/23/CE.

La válvula está disponible con compuertas fabricadas en PVC-U, CPVC, PP-H, PVDF y ABS y con juntas de EPDM y FPM (FKM). La elección del material de la compuerta y de la junta depende del tipo de fluido a transportar y de la temperatura y de trabajo del fluido, de acuerdo con las tablas de resistencia química disponible en nuestra web y el diagrama de presión / temperatura.

COMPONENTS / COMPONENTES

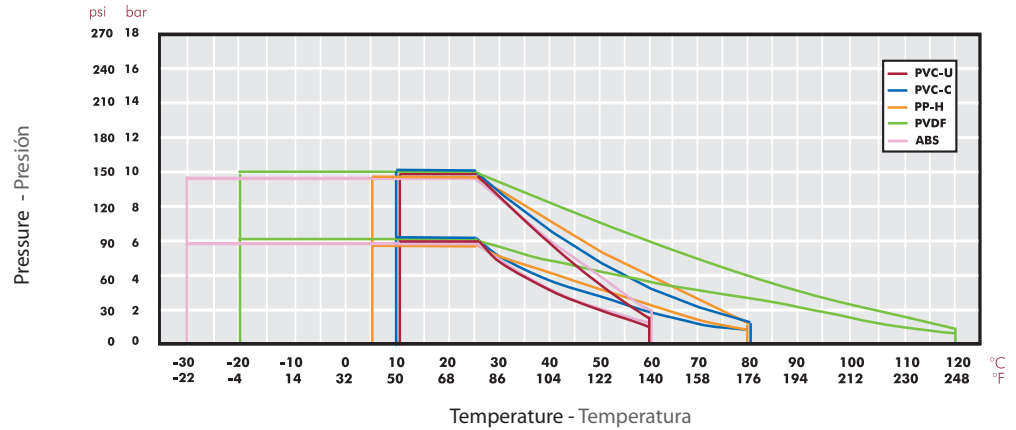
| N | PART - DESCRIPTION | MATERIAL |
|----|--|-------------------------|
| 1 | Body - Cuerpo | PP-GR |
| 2 | Sealing gasket - Junta | EPDM / FPM |
| 3 | Disc - Compuerta | PVC-U/PPH/CPVC/PVDF/ABS |
| 4 | Lower bearing - Casquillo inferior | POM |
| 5 | Upper bearing - Casquillo superior | POM |
| 6 | Auxiliary bearing - Casquillo auxiliar | POM |
| 7 | Shaft - Eje | AISI-630 |
| 8 | Cap - Tapón | PP |
| 9 | Ring DIN-471 - Anillo DIN-471 | AISI-304 |
| 10 | O-ring - Junta tórica | EPDM / FPM |
| 11 | O-ring - Junta tórica | EPDM / FPM |
| 12 | Lower washer - Arandela inferior | POM (DN65: AISI-304) |
| 13 | O-ring - Junta tórica | EPDM / FPM |
| 14 | Screw DIN-912 - Tornillo DIN-912 | AISI-304 |
| 15 | Handle - Maneta | PP-GR |
| 16 | Washer - Arandela | AISI-304 |
| 17 | Lever - Gatillo | PP-GR |
| 18 | Pin - Pasador | AISI-304 |
| 19 | Left spring - Muelle izquierda | AISI-304 |
| 20 | Right spring - Muelle derecha | AISI-304 |
| 21 | Throttle plate - Conjunto divisor | PP-GR |
| 22 | Safety lock - Seguro | POM |
| 23 | Handle cap - Tapón maneta | PP |
| 24 | Screw DIN-912 - Tornillo DIN-912 | AISI-304 |
| 25 | Nut DIN-934 - Tuerca DIN-934 | AISI-304 |
| 26 | Screw DIN-912 - Tornillo DIN-912 | AISI-304 |
| 27 | Gear box - Reductor manual | Aluminium (housing) |
| 28 | Mounting clamp - Torreta de fijación | PP-GR |
| 29 | Coupling bush - Extensión eje | AISI-303 |
| 30 | Washer DIN-125 - Arandela DIN-125 | AISI-304 |
| 31 | Nut DIN-934 - Tuerca DIN-934 | AISI-304 |
| 32 | Screw DIN-912 - Tornillo DIN-912 | AISI-304 |
| 33 | Screw DIN-912 - Tornillo DIN-912 | AISI-304 |



TECHNICAL SPECIFICATIONS / CARACTERÍSTICAS TÉCNICAS

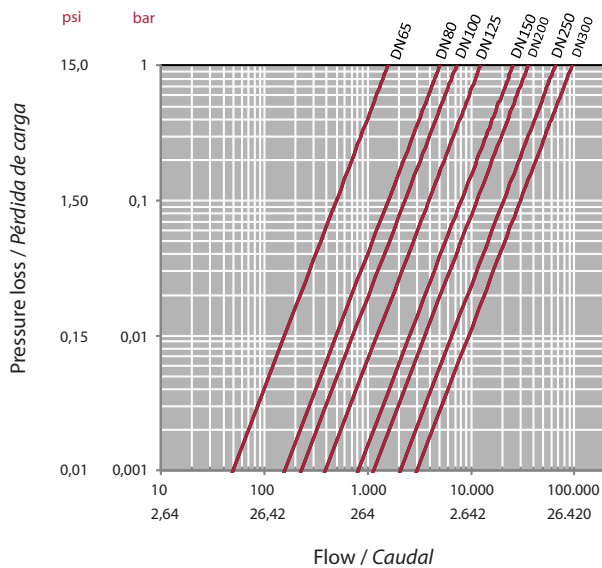
PRESSURE-TEMPERATURE DIAGRAMM

DIAGRAMA DE PRESIÓN-TEMPERATURA

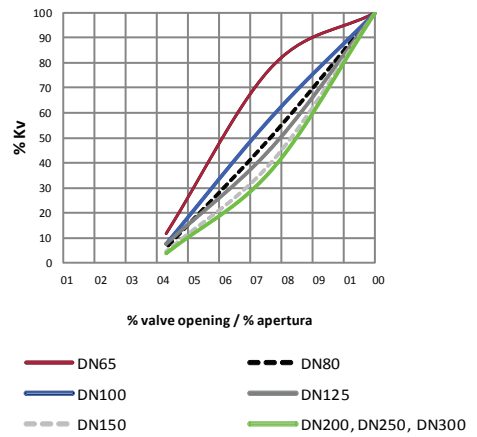


PRESSURE LOSS DIAGRAM

DIAGRAMA DE PÉRDIDAS DE CARGA



Caudal / Apertura
Flow / valve opening



FLUJO RELATIVO

RELATIVE FLOW

| D | 63-75 (2½") | 90 (3") | 110 (4") | 125-140 (5") | 160 (6") | 200-225 (8") | 250-280 (10") | 315 (12") |
|-------|-------------|---------|----------|--------------|----------|--------------|---------------|-----------|
| DN | 50 - 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
| Kv100 | 1800 | 4020 | 8280 | 11760 | 16200 | 33000 | 52200 | 78571 |
| Cv | 126 | 282 | 580 | 824 | 1134 | 2311 | 3655 | 5502 |

$Cv = Kv_{100} / 14,28$
 Kv_{100} (l/min, $\Delta p = 1$ bar)
 Cv (GPM, $\Delta p = 1$ psi)

OPERATIONAL TORQUE CHART

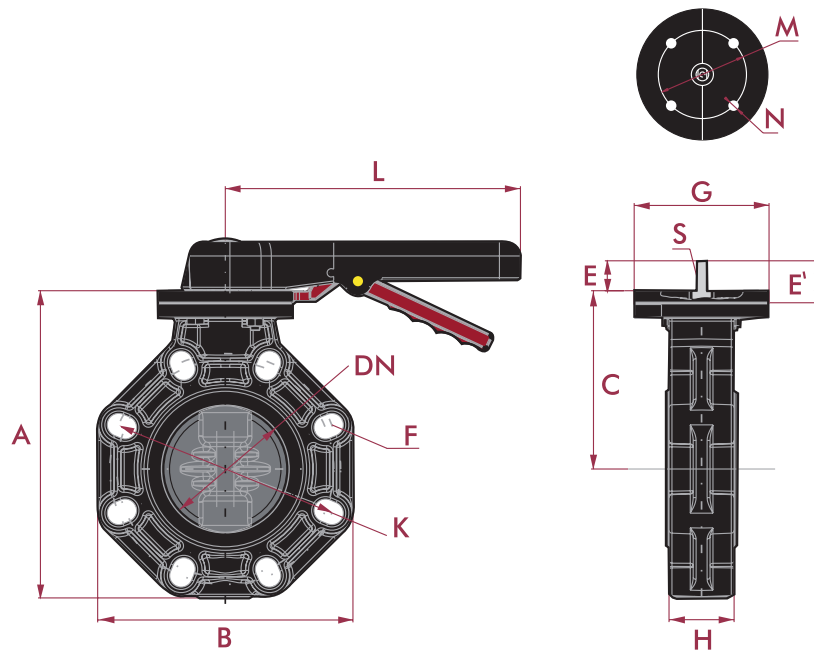
TABLA DE PAR DE MANIOBRA

| D | 63-75 (2½") | 90 (3") | 110 (4") | 125-140 (5") | 160 (6") | 200-225 (8") | 250-280 (10") | 315 (12") |
|---------|-------------|---------|----------|--------------|----------|--------------|---------------|-----------|
| DN | 50 - 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
| Nm | 25 | 28 | 35 | 85 | 110 | 110 | 180 | 250 |
| lb*inch | 221 | 248 | 310 | 752 | 974 | 974 | 1593 | 2213 |

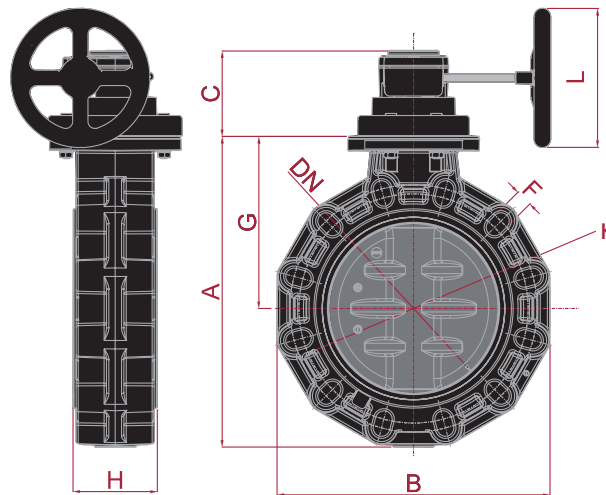
Operating torque values at rated pressure (PN) and 20 °C in as new direct from the factory condition. Installation and operating conditions (pressure and temperature) will affect these values. The actuator that is required for an automatic operation must be calculated according to some safety factors that were determined in life tests carried out in the factory.

Los valores de par de giro se determinan a presión nominal (PN) y a 20 °C, en condiciones de salida de fábrica. Las condiciones de instalación y operación (presión y temperatura) afectarán a estos valores. El actuador requerido para automatizar el giro debe ser calculado teniendo en cuenta ciertos coeficientes de seguridad que han sido determinados en pruebas de fatiga realizadas en fábrica.

DIMENSIONS - DIMENSIONES



| D | DN | A | B | C | E | F | G | H | K | L | M | N | E' | S | holes |
|---------|-----|-----|-----|-----|----|----|-----|----|---------|-----|-----|----|----|----|-------|
| 63-75 | 65 | 201 | 156 | 120 | 40 | 18 | 112 | 46 | 125-145 | 220 | 70 | 9 | 35 | 10 | 4 |
| 90 | 80 | 232 | 190 | 136 | 40 | 19 | 112 | 49 | 150-170 | 245 | 70 | 9 | 35 | 12 | 8 |
| 110 | 100 | 255 | 212 | 148 | 40 | 19 | 112 | 56 | 180-192 | 245 | 70 | 9 | 35 | 16 | 8 |
| 125-140 | 125 | 284 | 238 | 164 | 40 | 22 | 112 | 64 | 190-215 | 320 | 70 | 9 | 35 | 20 | 8 |
| 160 | 150 | 314 | 265 | 180 | 40 | 24 | 112 | 70 | 240 | 320 | 70 | 9 | 35 | 20 | 8 |
| 200-225 | 200 | 378 | 320 | 217 | 50 | 23 | 136 | 71 | 270-298 | 391 | 102 | 11 | 47 | 26 | 8 |



| D | DN | A | B | E | C | F | G | H | K | holes |
|---------|-----|-----|-----|-----|-----|----|-----|-----|---------|-------|
| 63-75 | 65 | 190 | 156 | 160 | 245 | 18 | 218 | 46 | 125-145 | 4 |
| 90 | 80 | 221 | 190 | 160 | 276 | 19 | 249 | 49 | 150-170 | 8 |
| 110 | 100 | 244 | 212 | 160 | 299 | 19 | 272 | 56 | 180-192 | 8 |
| 125-140 | 125 | 273 | 238 | 160 | 328 | 22 | 301 | 64 | 190-215 | 8 |
| 160 | 150 | 303 | 265 | 160 | 358 | 24 | 331 | 70 | 240 | 8 |
| 200-225 | 200 | 366 | 320 | 310 | 421 | 23 | 394 | 71 | 270-298 | 8 |
| 250-280 | 250 | 450 | 400 | 310 | 525 | 29 | 488 | 114 | 329-355 | 12 |
| 315 | 300 | 545 | 477 | 310 | 616 | 29 | 578 | 114 | 384-427 | 12 |

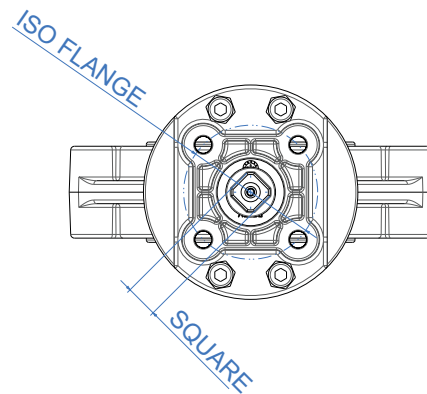
ACTUATION KIT
KIT DE ACTUACIÓN

The kit includes all the necessary elements to connect the butterfly valve with the actuator and it is ready for all the brands of actuators following the ISO 5211 regulation.

Components: coupling bush, supports, bolts, mounting clamp and connectors.

El kit incluye todos los elementos necesarios para conectar la válvula de mariposa con el actuador y es compatible con todas las marcas de actuadores que siguen la norma ISO 5211.

Componentes: pieza de conexión, medio soportes, tornillería, brida separadora y acoples.



| D | DN | ISO FLANGE F05 | | ISO FLANGE F07 | | | ISO FLANGE F10 | | | ISO FLANGE F12 | |
|---------|-----|----------------|------------|----------------|-------|-------|----------------|-------|-------|----------------|-------|
| | | Q14 | Q17 | Q14 | Q17 | Q22 | Q17 | Q22 | Q27 | Q22 | Q27 |
| 75 | 65 | On request | On request | 65424 | 65425 | | | | | | |
| 90 | 80 | On request | On request | 66065 | 65426 | | | | | | |
| 110 | 100 | On request | On request | 66066 | 65427 | 65880 | | | | | |
| 125-140 | 125 | | | | 65428 | 65429 | | | | | |
| 160 | 150 | | | | 65430 | 65431 | | | | | |
| 200-222 | 200 | | | | 65432 | 65433 | 65434 | 65435 | 66064 | | |
| 250 | 250 | | | | | | | 65438 | 65440 | 65441 | 65442 |
| 315 | 300 | | | | | | | 65445 | 65446 | 65447 | 65448 |

PNEUMATIC ACTUATION
ACTUACIÓN NEUMÁTICA



Actuator characteristics - Rotork RC:

- CE marked according to PED and ATEX
- Scotch-yoke drive (50% more torque in end positions)
- Compact design and lightweight
- Low stroke volume (save in compressed air)
- Housed in anodised aluminium
- Optional manual override
- Long (2.000.000) and efficient service with a minimum maintenance

Características del actuador Rotork RC:

- Marcado CE de según normativa PED y ATEX
- Actuación tipo yugo escocés (incremento de par en un 50% en las posiciones finales)
- Diseño compacto y ligero
- Válvula con bajo volumen de aire (ahorro en aire comprimido)
- Carcasa de aluminio anodizado
- Actuación manual opcional
- Larga vida (2.000.000) y servicio eficiente con un mantenimiento mínimo

Pneumatic actuation possibility in all versions of the butterfly valve Extreme Series.

Default actuator: Rotork RC model

Possibility of actuation using other brands or models (Rotork GT), or preparing the valve for customer own actuation.

Actuation options

- Spring return with normally closed valve
- Spring return with normally open valve
- Double acting

Optional accessories

- Limit switch box
- Solenoid valve (different configurations)
- Relief regulators
- Electropneumatic positioner

Posibilidad de actuación neumática en todas las versiones de válvula de mariposa Serie Extreme.

Actuador por defecto: Rotork modelo RC

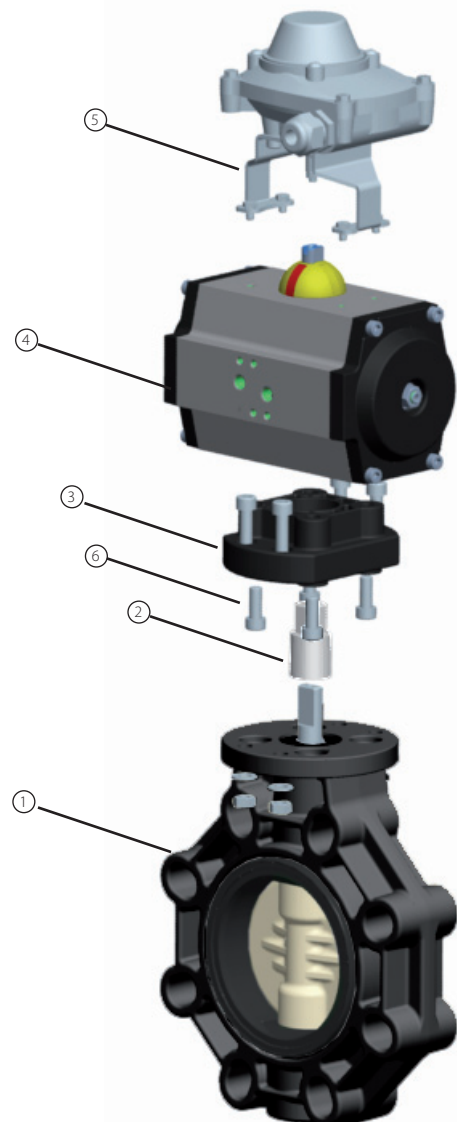
Posibilidad de actuación con otras marcas o modelos (Rotork GT) o de preparación de la válvula para actuación por parte del cliente.

Opciones de actuación

- Simple efecto con válvula normalmente cerrada
- Simple efecto con válvula normalmente abierta
- Doble efecto

Accesorios opcionales

- Caja de final de carrera
- Electroválvula (diferentes configuraciones)
- Reguladores de escape
- Posicionador electroneumático



EXPLODED | DESPIECE

| | Description | Material |
|---|--|--------------------------|
| 1 | Bare shaft valve / Válvula eje libre | - |
| 2 | Coupling bush / Conexión | Stainless steel AISI-304 |
| 3 | Mounting clamp / Soporte actuador | PP-GR |
| 4 | Actuator / Actuador | - |
| 5 | Limit switch box / Caja final de carrera | (optional) |
| 6 | Screws DIN-912 / Tornillos DIN-912 | Stainless steel AISI-304 |

