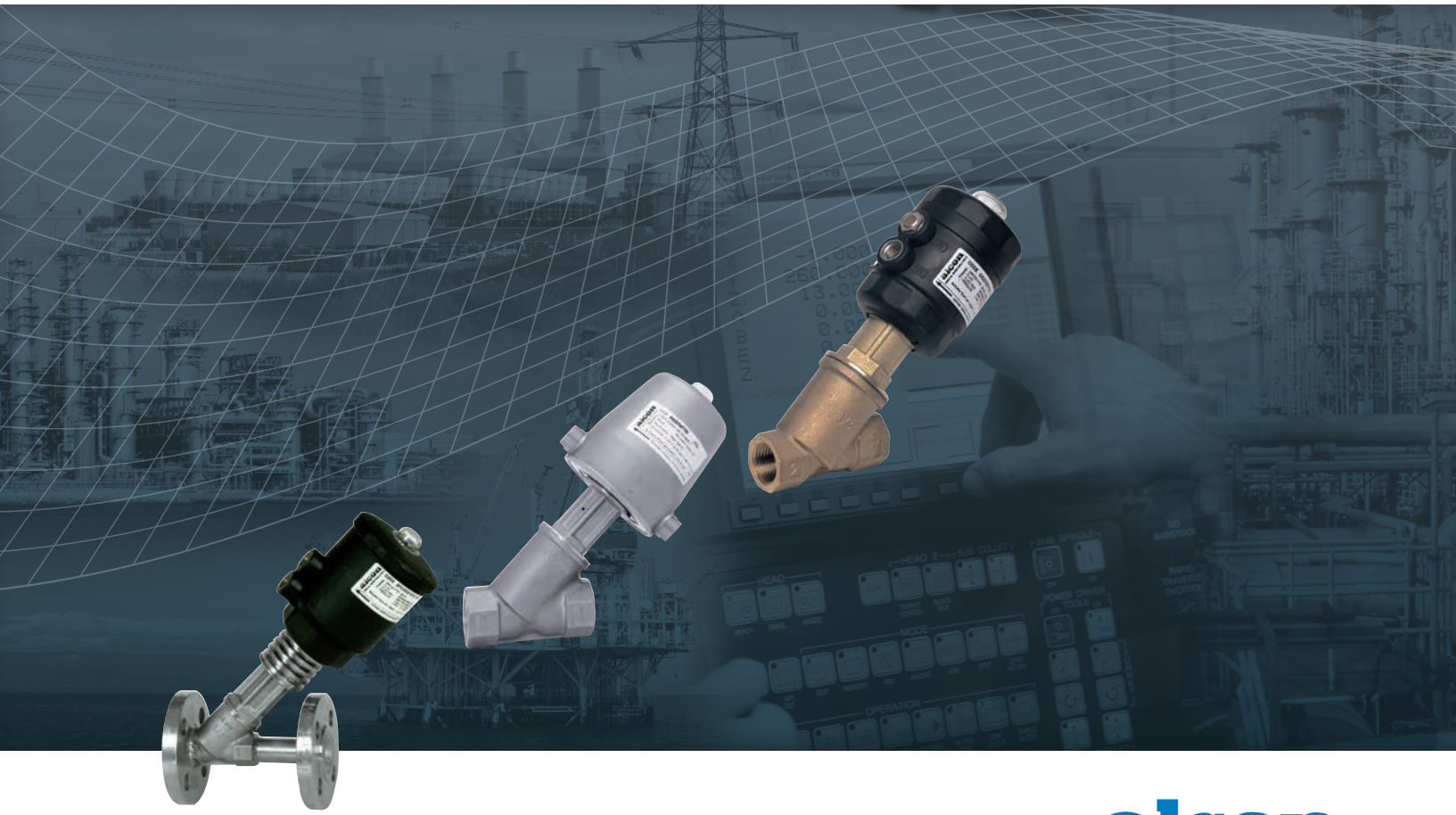
rotork®
Instruments

# Piston Actuated Valves



alcon
SOLENOID VALVES
A rotork Brand

Keeping the World Flowing

# Contents




**Rotork is the global market leader in valve automation and flow control. Our products and services are helping organisations around the world to improve efficiency, assure safety and protect the environment.**

We strive always for technical excellence, innovation and the highest quality standards in everything we do. As a result, our people and products remain at the forefront of flow control technology.

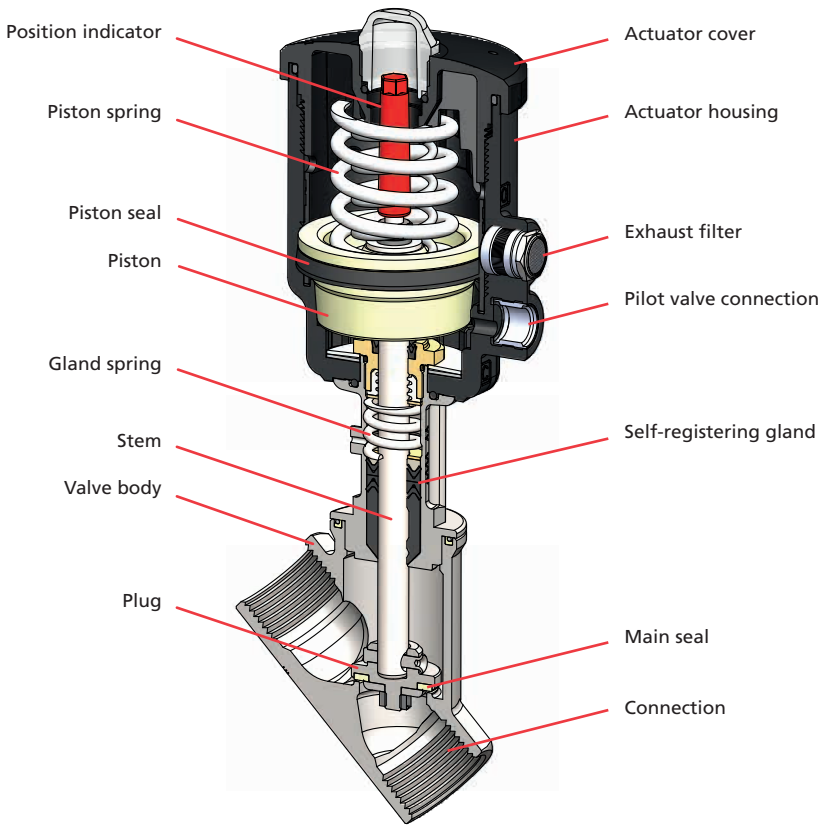
Uncompromising reliability is a feature of our entire product range, from our flagship electric actuator range through to our pneumatic, hydraulic and electro-hydraulic actuators, as well as instruments, gearboxes and valve accessories.

Rotork is committed to providing first class support to each client throughout the whole life of their plant, from initial site surveys to installation, maintenance, audits and repair. From our network of national and international offices, our engineers work around the clock to maintain our position of trust.

**Rotork. Keeping the world flowing.**

# Alcon Piston Valves: Features and Benefits

## Scheme of Components of Alcon Piston Actuated Valves




## Benefits of Alcon Piston Actuated Valves

- **Standard versions with high performing component**
  Covering a wide range of industrial applications with reduced stock
- **Standard seal materials as FKM and PTFE**
  Max compatibility with fluids. Resistance at high temperatures
- **Bi-Directional version**
  Waterhammer-free installation
- **Wide choice of connections**
  Screw, weld, flange, clamp connections
- **Actuator housing rotation 360°**
  Easy and quick installation
- **Position indicator**
  Instantly visible valve position
- **Self-registering gland and chevron packing**
  Longer life
- **Housing with angle seat design**
  High flow rate, low pressure drop
- **Stainless steel valves with universal design**
  Suitable for vacuum applications
- **Universal mounting Alcon solenoid pilot valves**
  Max flexibility during installation
- **Actuator with built-in exhaust filter**
  Reduced maintenance, noiseless

# Product Index

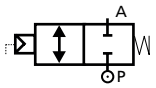
| Valve | Code | Type of Connection | Actuator | Page |
|---|---|---|---|---|
|  | **BMG** - (Bi-Directional) | ISO 228/G / NPT | Ø 32 | 6 |
|  | **NG**- (Normally Closed)<br>**RNG**- (Normally Open)<br>**BNG**- (Bi-Directional)<br>**DNG**- (Double Acting) | ISO 228/G / NPT | Ø 45 | 7 |
|  | **NG**- (Normally Closed)<br>**RNG**- (Normally Open)<br>**BNG**- (Bi-Directional)<br>**DNG**- (Double Acting) | ISO 228/G / NPT | Ø 63<br>Ø 90 | 8 - 9 |
|  | **Manual Operation**<br>**NG**- | ISO 228/G / NPT | - | 10 |
|  | **Manual Operation**<br>**IG**- | ISO 228/G / NPT | - | 10 |
|  | **IG**- (Normally Closed)<br>**RIG**- (Normally Open)<br>**BIG**- (Bi-Directional)<br>**DIG**- (Double Acting) | ISO 228/G / NPT | Ø 45 | 11 |
|  | **IG**- (Normally Closed)<br>**RIG**- (Normally Open)<br>**BIG**- (Bi-Directional)<br>**DIG**- (Double Acting) | ISO 228/G / NPT | Ø 63<br>Ø 90 | 12 - 13 |
|  | **IW- / IB-** (Normally Closed)<br>**RIW- / RIB-** (Normally Open)<br>**BIW- / BIB-** (Bi-Directional) | BUTT WELD:<br>DIN 11850-2 pipe<br>ISO 65/ANSI B.36.10 pipe | Ø 45<br>Ø 63<br>Ø 90 | 14 - 15 |
|  | **ID- / IA**- (Normally Closed)<br>**RID- / RIA-** (Normally Open)<br>**BID- / BIA-** (Bi-Directional) | FLANGED:<br>BS 4504 EN1092 shape B<br>ANSI B16.5 class 150 | Ø 63<br>Ø 90 | 16 - 17 |
|  | **IC- / IP-** (Normally Closed)<br>**RIC- / RIP-** (Normally Open)<br>**BIC- / BIP-** (Bi-Directional) | CLAMP:<br>ISO 2852<br>ASME BPE | Ø 45<br>Ø 63<br>Ø 90 | 18 - 19 |
|  | **High Temperature Version**<br>**IG**- (Normally Closed)<br>**RIG**- (Normally Open)<br>**BIG**- (Bi-Directional) | ISO 228/G / NPT / BUTT WELD<br>FLANGED / CLAMP | Ø 63<br>Ø 90 | 20 - 21 |

# Product Index

| Valve | Code | Type of Connection | Actuator | Page |
|---|---|---|---|---|
|  | **IR**- (Normally Closed)<br>**RIR**- (Normally Open)<br>**BIR**- (Bi-Directional) | THREADED SPIGOTS | Ø 45<br>Ø 63<br>Ø 90 | 22 - 23 |
|  | **Atex Piston Actuated Valve**<br>**IG**- (Normally Closed)<br>**RIG**- (Normally Open)<br>**BIG**- (Bi-Directional) | ISO 228/G / NPT | Ø 63<br>Ø 90 | 24 - 25 |
|  | **Control Piston Actuated Valve**<br>**ZIG**- (flow always under seat) | ISO 228/G / NPT | Ø 63<br>Ø 90 | 26 - 28 |

| Options/Accessories | Code | Description | Page |
|---|---|---|---|
|  | E.g. code IG205SXWI0<br>(assembled ex-factory) | Travel Switch Option | 29 |
|  | E.g. code IG205SXWR0<br>(assembled ex-factory) | Stroke Regulator Option | 29 |
|  | 85706000-/85706100-/85707000-<br>/85707100- | Position Module<br>for Piston Actuated Valve | 30 |
|  | 857018A0- | Travel Switch Conversion Kit<br>for Piston Actuated Valve | 31 |
|  | 68000100- / 68000200- | Magnetic Switch For Conversion Kit | 31 |
|  | B356CVC5/B326CVC5/ D326CVE5 | Pilot Solenoid Valves | 32 |
|  | N326CVEK | Atex Pilot Solenoid Valves | 33 |
| - | Various Part Numbers | Seal Kits | 34 - 37 |

# 2/2 Way Compact Piston Actuated Valve G 3/8" to 1/2" – Brass

| Specifications | |
|---|---|
| Type: BMG<br>NC Bi-directional<br>flow over/under seat<br>1 → 2 / 2 → 1 |  |
| Media | Water, air, inert fluids, inert gases |
| Media Temperature | -10 °C to +90 °C |
| Ambient Temperature | -10 °C to +80 °C |
| Pilot Media | Filtered air |
| Actuator Body Material | Brass (CW617N EN12165) |
| Body Material | Brass (CW617N EN12165) |
| Piston Material | Aluminium |
| Stem Material | AISI 316l |
| Seal Material | NBR |
| Frequency | 6 Cycles per minute |

Piston valve with external pneumatic actuation, compact and solid construction.

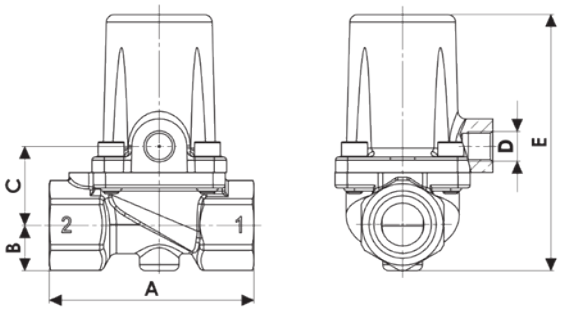
Suitable for neutral media with particles in suspension, on applications where a standard pilot operated solenoid valve may become clogged.

## Features and Benefits

- Waterhammer-free design (with flow direction 2→1)
- Swift installation with banjo bolt pilot solenoid valve B356CVC5 (see page 32)
- Design suitable for vacuum applications up to $10^{-2}$ mbar

| Options Available |
|---|
| NPT Connection, minimum batch may be required (e.g code BMN205DBW00) |
| Electroless nickel plating treatment (e.g. code BMG205DBW0K) |

| Dimensions & Weights | | DN13.5 | DN13.5 |
|---|---|---|---|
| G connection | [ISO 228G] | 3/8" | 1/2" |
| A | [mm] | 67 | 67 |
| B | [mm] | 15 | 15 |
| C | [mm] | 25.5 | 25.5 |
| D | [mm] | 1/8" | 1/8" |
| E | [mm] | 84 | 84 |
| Weight | [kg] | 0.55 | 0.52 |

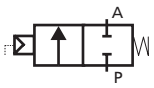
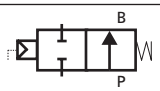
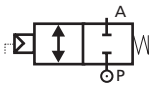
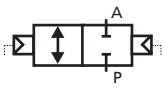



| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure Min. | Working Pressure Max. | Flow Direction | Pilot Pressure Min. | Pilot Pressure Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | [ISO 228G] | [mm] | [l/min] | [barg] | [barg] | — | [barg] | [barg] | [mm] | — |
| BMG204DBW00[1] | 3/8" | 13.5 | 56 / 45 | 0 | 10 | 1 → 2 / 2 → 1 | 4.5 | 10 | 32 | NC bidirectional |
| BMG205DBW00 | 1/2" | 13.5 | 70 / 55 | 0 | 10 | 1 → 2 / 2 → 1 | 4.5 | 10 | | |

## Note

1. Minimum batch may be required

# 2/2 Way Piston Actuated Valve G 1/2" to 1" to Compact Version – Bronze

| Specifications | |
|---|---|
| **Type: NG<br>NC flow over seat<br>1 → 2** |  |
| **Type: RNG<br>NO flow under seat<br>2 → 1** |  |
| **Type: BNG<br>NC Bi-directional flow<br>over/under seat<br>1 → 2 / 2 → 1** |  |
| **Type: DNG<br>DA flow over/under seat<br>1 ⇔ 2** |  |
| **Media** | Water, oil, air, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Actuator Body Material** | Polyamide PA6 (reinforced fibreglass 30%) |
| **Body Material** | Bronze (CB491K EN1982) |
| **Bonnet Material** | Brass (CW617N EN12165) |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |

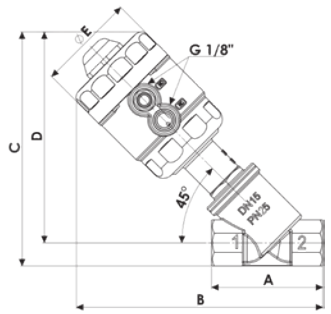
## Features and Benefits

- Waterhammer-free design for BNG - DNG (with flow direction 2→1)
- Actuator housing rotation 360°
- Design suitable for vacuum applications up to $10^{-2}$ mbar

| Options Available |
|---|
| NPT Connection (e.g code NN205CXW00) |

| Accessories |
|---|
| Position module, travel switch kit, pilot solenoid valves see pages 30/31/32 |

| Dimensions & Weights | | DN15 | DN20 | DN25 |
|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 45** | | |
| **A** | [mm] | 65 | 75 | 90 |
| **B** | [mm] | 144 | 149 | 168 |
| **C** | [mm] | 136 | 142 | 161 |
| **D** | [mm] | 123 | 126 | 141 |
| **E** | [mm] | 57 | 57 | 57 |
| **Weight** | [kg] | 0.8 | 0.9 | 1.1 |




The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|
| DN15 to DN25 (PN25) | SEP | SEP |

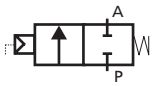
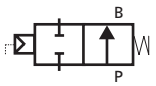
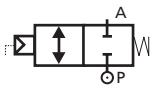
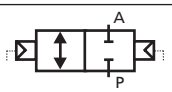
**⚠ WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| **Code** | **[ISO 228G]** | **[mm]** | **[l/min]** | **[barg]** | **[barg]** | **—** | **[barg]** | **[barg]** | **[mm]** | **—** |
| **NG205CXW00** | 1/2" | 15 | 75 | 0 | 16 | 1 → 2 | 3.8 | 10 | 45 | NC |
| **NG206CXX00** | 3/4" | 20 | 133 | 0 | 16 | 1 → 2 | 5.8 | 10 | | |
| **NG207CXY00** | 1" | 25 | 208 | 0 | 16 | 1 → 2 | 6.5 | 10 | | |
| **RNG205CXW00** | 1/2" | 15 | 75 | 0 | 16 | 2 → 1 | 4 | 10 | 45 | NO |
| **RNG206CXX00** | 3/4" | 20 | 133 | 0 | 16 | 2 → 1 | 6.2 | 10 | | |
| **RNG207CXY00** | 1" | 25 | 208 | 0 | 16 | 2 → 1 | 8.8 | 10 | | |
| **BNG205CXW00** | 1/2" | 15 | 75 | 0 | 16 / 16 | 1 → 2 / 2 → 1 | 6.2 / 5 | 10 | 45 | NC bidirectional |
| **BNG206CXX00** | 3/4" | 20 | 133 | 0 | 16 / 7 | 1 → 2 / 2 → 1 | 8.7 / 5 | 10 | | |
| **BNG207CXY00** | 1" | 25 | 208 | 0 | 16 / 5 | 1 → 2 / 2 → 1 | 9.5 / 5 | 10 | | |
| **DNG205CXW00** | 1/2" | 15 | 75 | 0 | 16 / 16 | 1 ⇔ 2 | 3 | 10 | 45 | DA |
| **DNG206CXX00** | 3/4" | 20 | 133 | 0 | 16 / 16 | 1 ⇔ 2 | 5 | 10 | | |
| **DNG207CXY00** | 1" | 25 | 208 | 0 | 16 / 16 | 1 ⇔ 2 | 8.5 | 10 | | |

## Notes

1. Steam max. working pressure 10 bar (9 barg)
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts

# 2/2 Way Piston Actuated Valve G 1/2" to 2", Regular Version – Bronze

| Specifications | |
|---|---|
| **Type: NG<br>NC flow over seat<br>1 → 2** |  |
| **Type: RNG<br>NO Flow Under Seat<br>2 → 1** |  |
| **Type: BNG<br>NC Bi-Directional Flow<br>Over/Under Seat<br>1 → 2 / 2 → 1** |  |
| **Type: DNG<br>DA Flow Over/Under<br>Seat<br>1 ↔ 2** |  |
| **Media** | Water, oil, air, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Actuator Body Material** | Polyamide PA6 (reinforced fibreglass 30%) |
| **Body Material** | Bronze (CB491K EN1982) |
| **Bonnet Material** | Brass (CW617N EN12165) |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |

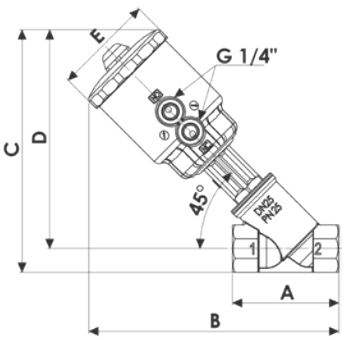
## Features and Benefits

- Waterhammer-free design for BNG - DNG (with flow direction 2→1)
- Actuator housing rotation 360°

| Options Available |
|---|
| Stroke regulator assembled ex-factory, see page 29 (e.g. code NG205SXWR0) |
| Travel switch assembled ex-factory, see page 29 (e.g. code RNG209SXKI0) |
| NPT connection (e.g. code BNN207LXY00) |
| Design for vacuum applications up to $10^{-2}$ mbar (e.g. code DNG210SXJ0V) |

| Accessories |
|---|
| Position module, travel switch kit, pilot solenoid valves see pages 30/31/32 |

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | | | | | **Ø 90** | | | |
| **A** | [mm] | 65 | 75 | 90 | 110 | 120 | 150 | 90 | 110 | 120 | 150 |
| **B** | [mm] | 192 | 198 | 212 | 225 | 230 | 248 | 223 | 234 | 239 | 257 |
| **C** | [mm] | 184 | 192 | 205 | 217 | 225 | 241 | 216 | 227 | 235 | 250 |
| **D** | [mm] | 171 | 176 | 185 | 193 | 198 | 207 | 196 | 202 | 207 | 216 |
| **E** | [mm] | 85 | 85 | 85 | 85 | 85 | 85 | 112 | 112 | 112 | 112 |
| **Weight** | [kg] | 1.2 | 1.3 | 1.5 | 1.9 | 2.1 | 2.9 | 2.0 | 2.4 | 2.6 | 3.3 |




The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Valve Type | Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|---|
| **NG - RNG - BNG - DNG** | DN15 to DN25 (PN25) | SEP | SEP |
| | DN32 to DN40 (PN25) | Not suitable | SEP |
| | DN50 (PN16) | Not suitable | SEP |

**⚠ WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

# 2/2 Way Piston Actuated Valve G 1/2" to 2", Regular Version – Bronze

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | [ISO 228G] | [mm] | [l/min] | [barg] | [barg] | — | [barg] | [barg] | [mm] | — |
| NG205SXW00 | 1/2" | 15 | 87 | 0 | 20 | 1 → 2 | 3.7 | 10 | 63 | NC |
| NG206SXX00 | 3/4" | 20 | 164 | 0 | 20 | 1 → 2 | 4.4 | 10 | | |
| NG207SXY00 | 1" | 25 | 260 | 0 | 20 | 1 → 2 | 5 | 10 | | |
| NG208SXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 1 → 2 | 5.9 | 10 | | |
| NG209SXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 1 → 2 | 9 | 10 | | |
| NG210SXJ00 | 2" | 50 | 950 | 0 | 11 | 1 → 2 | 8 | 10 | | |
| NG207LXY00 | 1" | 25 | 260 | 0 | 20 | 1 → 2 | 2 | 8 | 90 | |
| NG208LXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 1 → 2 | 3.5 | 8 | | |
| NG209LXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 1 → 2 | 4 | 8 | | |
| NG210LXJ00 | 2" | 50 | 950 | 0 | 15 | 1 → 2 | 6.5 | 8 | | |
| RNG205SXW00 | 1/2" | 15 | 87 | 0 | 16 | 2 → 1 | 2.5 | 10 | 63 | NO |
| RNG206SXX00 | 3/4" | 20 | 164 | 0 | 16 | 2 → 1 | 4.3 | 10 | | |
| RNG207SXY00 | 1" | 25 | 260 | 0 | 16 | 2 → 1 | 5.5 | 10 | | |
| RNG208SXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 2 → 1 | 6.5 | 10 | | |
| RNG209SXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 2 → 1 | 9 | 10 | | |
| RNG210SXJ00 | 2" | 50 | 950 | 0 | 12 | 2 → 1 | 9.4 | 10 | | |
| RNG207LXY00 | 1" | 25 | 260 | 0 | 16 | 2 → 1 | 2 | 8 | 90 | |
| RNG208LXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 2 → 1 | 4 | 8 | | |
| RNG209LXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 2 → 1 | 5 | 8 | | |
| RNG210LXJ00 | 2" | 50 | 950 | 0 | 16 | 2 → 1 | 7 | 8 | | |
| BNG205SXW00 | 1/2" | 15 | 87 | 0 | 16 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | NC bidirectional |
| BNG206SXX00 | 3/4" | 20 | 164 | 0 | 16 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BNG207SXY00 | 1" | 25 | 260 | 0 | 16 / 11 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BNG208SXZ00 | 1 1/4" | 32 | 410 | 0 | 16 / 6 | 1 → 2 / 2 → 1 | 6.8 / 3.8 | 10 | | |
| BNG209SXK00 | 1 1/2" | 40 | 700 | 0 | 12 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BNG210SXJ00 | 2" | 50 | 950 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BNG207LXY00 | 1" | 25 | 260 | 0 | 16 / 14 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| BNG208LXZ00 | 1 1/4" | 32 | 410 | 0 | 16 / 12 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | | |
| BNG209LXK00 | 1 1/2" | 40 | 700 | 0 | 16 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BNG210LXJ00 | 2" | 50 | 950 | 0 | 14 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |
| DNG205SXW00 | 1/2" | 15 | 87 | 0 | 16 | 1 ↔ 2 | 1.8 | 2 | 63 | DA |
| DNG206SXX00 | 3/4" | 20 | 164 | 0 | 16 | 1 ↔ 2 | 2 | 3.8 | | |
| DNG207SXY00 | 1" | 25 | 260 | 0 | 16 | 1 ↔ 2 | 3 | 5 | | |
| DNG208SXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 1 ↔ 2 | 4.5 | 6 | | |
| DNG209SXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 1 ↔ 2 | 6.5 | 7 | | |
| DNG210SXJ00 | 2" | 50 | 950 | 0 | 12 | 1 ↔ 2 | 9 | 10 | | |

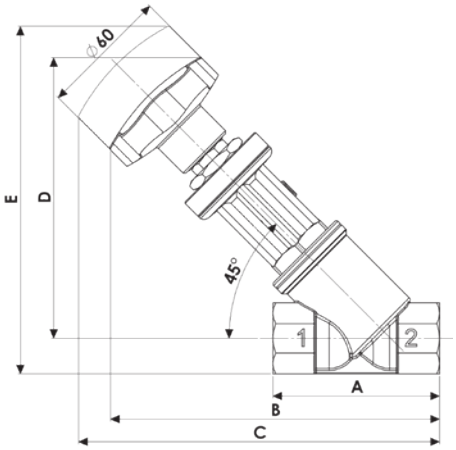
## Notes

1. Steam max. working pressure 10 bar (9 barg)
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts

# Manual Angle Seat Valve G 1/2" to 2" – Bronze (NG) & Stainless Steel (IG)

| Specifications | |
|---|---|
| **Function**<br>**Flow over / under seat** | Type NG / IG |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Body Material (NG)** | Bronze (CB491K EN1982) |
| **Bonnet Material (NG)** | Brass (CW617N EN12165) |
| **Body Material (IG)** | Cast AISI 316L (CF3M), see page 39 |
| **Bonnet Material (IG)** | Cast AISI 316L (CF3M), see page 39 |
| **Seal Material** | PTFE |

| Options Available |
|---|
| NPT connection (e.g. code IN2070XY00) |



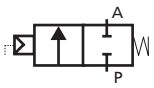
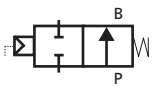
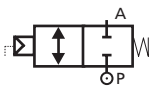
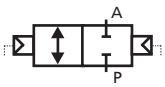

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|
| **G connection** | **[ISO 228G]** | **1/2"** | **3/4"** | **1"** | **1 1/4"** | **1 1/2"** | **2"** |
| **A** | [mm] | 65 | 75 | 90 | 110 | 120 | 150 |
| **B** | [mm] | 142 | 148 | 163 | 175 | 180 | 198 |
| **C** | [mm] | 150 | 155 | 172 | 188 | 193 | 212 |
| **D** | [mm] | 121 | 126 | 135 | 143 | 148 | 157 |
| **E** | [mm] | 141 | 150 | 165 | 181 | 189 | 205 |
| **Weight** | [kg] | 0.75 | 0.80 | 1.20 | 1.80 | 2.10 | 3.10 |

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction |
|---|---|---|---|---|---|---|
| **Code** | **[ISO 228G]** | **[mm]** | **[l/min]** | **[barg]** | **[barg]** | — |
| **NG2050XW00** | 1/2" | 15 | 87 | 0 | 25 | 1 ⇔ 2 |
| **NG2060XX00** | 3/4" | 20 | 164 | 0 | 25 | 1 ⇔ 2 |
| **NG2070XY00** | 1" | 25 | 260 | 0 | 25 | 1 ⇔ 2 |
| **NG2080XZ00** | 1 1/4" | 32 | 410 | 0 | 25 | 1 ⇔ 2 |
| **NG2090XK00** | 1 1/2" | 40 | 700 | 0 | 25 | 1 ⇔ 2 |
| **NG2100XJ00** | 2" | 50 | 916 | 0 | 16 | 1 ⇔ 2 |
| **IG2050XW00** | 1/2" | 15 | 87 | 0 | 40 | 1 ⇔ 2 |
| **IG2060XX00** | 3/4" | 20 | 164 | 0 | 40 | 1 ⇔ 2 |
| **IG2070XY00** | 1" | 25 | 260 | 0 | 40 | 1 ⇔ 2 |
| **IG2080XZ00** | 1 1/4" | 32 | 410 | 0 | 25 | 1 ⇔ 2 |
| **IG2090XK00** | 1 1/2" | 40 | 700 | 0 | 25 | 1 ⇔ 2 |
| **IG2100XJ00** | 2" | 50 | 916 | 0 | 16 | 1 ⇔ 2 |

### Note

1. Steam max. working pressure 10 bar (9 barg)

# 2/2 Way Piston Actuated Valve G 1/2" to 3/4", Compact Version – Stainless Steel

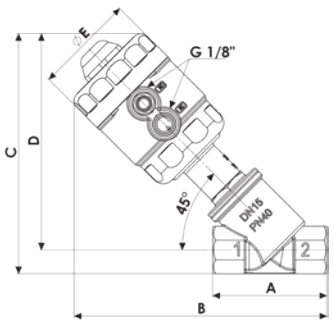
| Specifications | |
|---|---|
| **Type: IG<br>NC flow over seat<br>1 →2** |  |
| **Type RIG:<br>NO flow under seat<br>2 → 1** |  |
| **Type: BIG<br>NC bi-directional flow<br>over/under seat<br>1 →2 / 2 → 1** |  |
| **Type: DIG<br>DA flow over/under seat<br>1 ⇔ 2** |  |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Body Material** | Cast AISI 316L (CF3M), see page 39 |
| **Bonnet Material** | Cast AISI 316L (CF3M), see page 39 |
| **Actuator Body Material** | Polyamide PA6 (reinforced fibreglass 30%) |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |

## Features and Benefits

- Waterhammer-free design for BIG - DIG (with flow direction 2→1)
- Actuator housing rotation 360°
- Design suitable for vacuum applications up to $10^{-2}$ mbar

| Options Available | Accessories |
|---|---|
| NPT connection (e.g. code IN205CXW00) | Position module, travel switch kit, pilot solenoid valves see pages 30/31/32/33 |

| Dimensions & Weights | | DN15 | DN20 |
|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 45** | |
| **A** | [mm] | 65 | 75 |
| **B** | [mm] | 144 | 149 |
| **C** | [mm] | 136 | 142 |
| **D** | [mm] | 123 | 126 |
| **E** | [mm] | 57 | 57 |
| **Weight** | [kg] | 0.8 | 0.9 |




The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|
| DN15 to DN20 (PN40) | SEP | SEP |

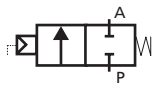
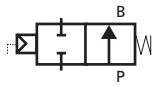
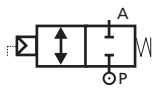
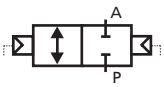
**⚠ WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| **Code** | **[ISO 228G]** | **[mm]** | **[l/min]** | **[barg]** | **[barg]** | **—** | **[barg]** | **[barg]** | **[mm]** | **—** |
| **IG205CXW00** | 1/2" | 15 | 75 | 0 | 16 | 1 → 2 | 3.8 | 10 | 45 | NC |
| **IG206CXX00** | 3/4" | 20 | 133 | 0 | 16 | 1 → 2 | 5.8 | 10 | | |
| **RIG205CXW00** | 1/2" | 15 | 75 | 0 | 16 | 2 → 1 | 4 | 10 | 45 | NO |
| **RIG206CXX00** | 3/4" | 20 | 133 | 0 | 16 | 2 → 1 | 6.2 | 10 | | |
| **BIG205CXW00** | 1/2" | 15 | 75 | 0 | 16 / 16 | 1 → 2 / 2 → 1 | 6.2 / 5 | 10 | 45 | NC bidirectional |
| **BIG206CXX00** | 3/4" | 20 | 133 | 0 | 16 / 7 | 1 → 2 / 2 → 1 | 8.7 / 5 | 10 | | |
| **DIG205CXW00** | 1/2" | 15 | 75 | 0 | 16 / 16 | 1 ⇔ 2 | 3 | 10 | 45 | DA |
| **DIG206CXX00** | 3/4" | 20 | 133 | 0 | 16 / 16 | 1 ⇔ 2 | 5 | 10 | | |

## Notes

1. Steam max. working pressure 10 bar (9 barg)
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts

# 2/2 Way Piston Actuated Valve G 1/2" to 2", Regular Version - Stainless Steel

| Specifications | |
|---|---|
| **Type: IG<br>NC flow over seat<br>1 → 2** |  |
| **Type: RIG<br>NO flow under seat<br>2 → 1** |  |
| **Type: BIG<br>NC bi-directional flow<br>over/under seat<br>1 → 2 / 2 → 1** |  |
| **Type: DIG<br>DA flow over/under seat<br>1 ↔ 2** |  |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Body Material** | Cast AISI 316L (CF3M), see page 39 |
| **Bonnet Material** | Cast AISI 316L (CF3M), see page 39 |
| **Actuator Body Material** | Polyamide PA6 (reinforced fiberglass 30%) |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |

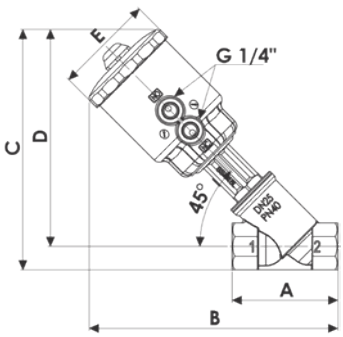
## Features and Benefits

- Waterhammer-free design for BIG - DIG (with flow direction 2→1)
- Actuator housing rotation 360°
- Design suitable for vacuum applications up to $10^{-2}$ mbar

| Options Available |
|---|
| Stroke regulator assembled ex-factory, see page 29 (e.g. code RIG210SXJR0) |
| Travel switch assembled ex-factory, see page 29 (e.g. code IG208SXZI0) |
| NPT connection (e.g. code BIN207LXY00) |
| High temperature version, see pages 20/21 (e.g. code IG205SXW0H) |

| Accessories |
|---|
| Position module, travel switch kit, pilot solenoid valves see pages 30/31/32/33 |

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | | | | | **Ø 90** | | | |
| **A** | [mm] | 65 | 75 | 90 | 110 | 120 | 150 | 90 | 110 | 120 | 150 |
| **B** | [mm] | 192 | 198 | 212 | 225 | 230 | 248 | 223 | 234 | 239 | 257 |
| **C** | [mm] | 184 | 192 | 205 | 217 | 225 | 241 | 216 | 227 | 235 | 250 |
| **D** | [mm] | 171 | 176 | 185 | 193 | 198 | 207 | 196 | 202 | 207 | 216 |
| **E** | [mm] | 85 | 85 | 85 | 85 | 85 | 85 | 112 | 112 | 112 | 112 |
| **Weight** | [kg] | 1.2 | 1.3 | 1.5 | 1.9 | 2.1 | 2.9 | 2.0 | 2.4 | 2.6 | 3.3 |




The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Valve Type | Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|---|
| **IG - RIG - BIG - DIG** | DN15 to DN25 (PN40) | SEP | SEP |
| | DN32 to DN40 (PN25) | Category I | SEP |
| | DN50 (PN16) | Category I | SEP |

⚠ **WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

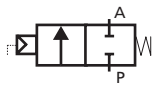
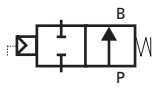
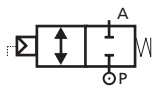
# 2/2 Way Piston Actuated Valve G 1/2" to 2", Regular Version – Stainless Steel

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | [ISO 228G] | [mm] | [l/min] | [barg] | [barg] | — | [barg] | [barg] | [mm] | — |
| IG205SXW00 | 1/2" | 15 | 87 | 0 | 20 | 1 → 2 | 3.7 | 10 | 63 | NC |
| IG206SXX00 | 3/4" | 20 | 164 | 0 | 20 | 1 → 2 | 4.4 | 10 | | |
| IG207SXY00 | 1" | 25 | 260 | 0 | 20 | 1 → 2 | 5 | 10 | | |
| IG208SXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 1 → 2 | 5.9 | 10 | | |
| IG209SXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 1 → 2 | 9 | 10 | | |
| IG210SXJ00 | 2" | 50 | 950 | 0 | 11 | 1 → 2 | 8 | 10 | | |
| IG207LXY00 | 1" | 25 | 260 | 0 | 20 | 1 → 2 | 2 | 8 | 90 | |
| IG208LXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 1 → 2 | 3.5 | 8 | | |
| IG209LXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 1 → 2 | 4 | 8 | | |
| IG210LXJ00 | 2" | 50 | 950 | 0 | 15 | 1 → 2 | 6.5 | 8 | | |
| RIG205SXW00 | 1/2" | 15 | 87 | 0 | 16 | 2 → 1 | 2.5 | 10 | 63 | NO |
| RIG206SXX00 | 3/4" | 20 | 164 | 0 | 16 | 2 → 1 | 4.3 | 10 | | |
| RIG207SXY00 | 1" | 25 | 260 | 0 | 16 | 2 → 1 | 5.5 | 10 | | |
| RIG208SXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 2 → 1 | 6.5 | 10 | | |
| RIG209SXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 2 → 1 | 9 | 10 | | |
| RIG210SXJ00 | 2" | 50 | 950 | 0 | 12 | 2 → 1 | 9.4 | 10 | | |
| RIG207LXY00 | 1" | 25 | 260 | 0 | 16 | 2 → 1 | 2 | 8 | 90 | |
| RIG208LXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 2 → 1 | 4 | 8 | | |
| RPIG209LXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 2 → 1 | 5 | 8 | | |
| RIG210LXJ00 | 2" | 50 | 950 | 0 | 16 | 2 → 1 | 7 | 8 | | |
| BIG205SXW00 | 1/2" | 15 | 87 | 0 | 16 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | NC bidirectional |
| BIG206SXX00 | 3/4" | 20 | 164 | 0 | 16 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BIG207SXY00 | 1" | 25 | 260 | 0 | 16 / 11 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BIG208SXZ00 | 1 1/4" | 32 | 410 | 0 | 16 / 6 | 1 → 2 / 2 → 1 | 6.8 / 3.8 | 10 | | |
| BIG209SXK00 | 1 1/2" | 40 | 700 | 0 | 12 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIG210SXJ00 | 2" | 50 | 950 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIG207LXY00 | 1" | 25 | 260 | 0 | 16 / 14 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| BIG208LXZ00 | 1 1/4" | 32 | 410 | 0 | 16 / 12 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | | |
| BIG209LXK00 | 1 1/2" | 40 | 700 | 0 | 16 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BIG210LXJ00 | 2" | 50 | 950 | 0 | 14 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |
| DIG205SXW00 | 1/2" | 15 | 87 | 0 | 16 | 1 ↔ 2 | 1.8 | 2 | 63 | DA |
| DIG206SXX00 | 3/4" | 20 | 164 | 0 | 16 | 1 ↔ 2 | 2 | 3.8 | | |
| DIG207SXY00 | 1" | 25 | 260 | 0 | 16 | 1 ↔ 2 | 3 | 5 | | |
| DIG208SXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 1 ↔ 2 | 4.5 | 6 | | |
| DIG209SXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 1 ↔ 2 | 6.5 | 7 | | |
| DIG210SXJ00 | 2" | 50 | 950 | 0 | 12 | 1 ↔ 2 | 9 | 10 | | |

## Notes

1. Steam max. working pressure 10 bar (9 barg)
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts

# 2/2 Way Piston Actuated Valve Butt Weld Connection – Stainless Steel

| Specifications | |
|---|---|
| **Type: IW/IB<br>NC flow over seat<br>1 → 2** |  |
| **Type: RIW/RIB<br>NO flow under seat<br>2 → 1** |  |
| **Type: BIW/BIB<br>NC bi-directional flow<br>over/under seat<br>1 → 2 / 2 → 1** |  |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Body Material** | Cast AISI 316L (CF3M), see page 39 |
| **Bonnet Material** | Cast AISI 316L (CF3M), see page 39 |
| **Butt Weld Connection** | DIN 11850-2 pipe or ISO 65/ANSI B 36.10 pipe |
| **Actuator Body Material** | Polyamide PA6 (reinforced fiberglass 30%) |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |

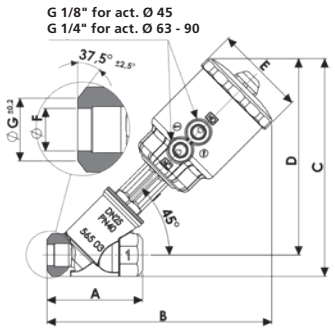
## Features and Benefits

- Waterhammer-free design for BIW - BIB (with flow direction 2→1)
- Actuator housing rotation 360°
- Design suitable for vacuum applications up to $10^{-2}$ mbar

| Options Available |
|---|
| Stroke regulator assembled ex-factory, see page 29 (e.g. code RIW210SXJR0) |
| Travel switch assembled ex-factory, see page 29 (e.g. code IB208SXZI0) |
| High temperature version, see pages 20/21 (e.g. code BIW207LXY0H) |

| Accessories |
|---|
| Position module, travel switch kit, pilot solenoid valves see pages 30/31/32/33 |

| Dimensions & Weights | | DN15 | DN20 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 45** | | **Ø 63** | | | | | | **Ø 90** | | | |
| **A** | [mm] | 65 | 75 | 65 | 75 | 90 | 110 | 120 | 150 | 90 | 110 | 120 | 150 |
| **B** | [mm] | 144 | 149 | 192 | 198 | 212 | 225 | 230 | 248 | 223 | 234 | 239 | 257 |
| **C** | [mm] | 136 | 142 | 184 | 192 | 205 | 217 | 225 | 241 | 216 | 227 | 235 | 250 |
| **D** | [mm] | 123 | 126 | 171 | 176 | 185 | 193 | 198 | 207 | 196 | 202 | 207 | 216 |
| **E** | [mm] | 57 | 57 | 85 | 85 | 85 | 85 | 85 | 85 | 112 | 112 | 112 | 112 |
| **F** DIN 11850 | [mm] | 16 | 20 | 16 | 20 | 26 | 32 | 38 | 50 | 26 | 32 | 38 | 50 |
| **F** ISO 65/ANSI B 36.10 | [mm] | 17.4 | 22.8 | 17.4 | 22.8 | 28.3 | 37.1 | 42.7 | 54.8 | 28.3 | 37.1 | 42.7 | 54.8 |
| **G** DIN 11850 | [mm] | 19.2 | 23.2 | 19.2 | 23.2 | 29.2 | 36 | 42 | 54 | 29.2 | 36 | 42 | 54 |
| **G** ISO 65/ANSI B 36.10 | [mm] | 20.6 | 26 | 20.6 | 26 | 31.5 | 41.1 | 46.7 | 58.8 | 31.5 | 41.1 | 46.7 | 58.8 |
| **Weight** | [kg] | 0.8 | 0.9 | 1.2 | 1.3 | 1.5 | 1.9 | 2.1 | 2.9 | 2.0 | 2.4 | 2.6 | 3.3 |




**Welded ends complying with ISO 6761**

The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Valve Type | Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|---|
| **IW - RIW - BIW<br>IB - RIB - BIB** | DN15 to DN25 (PN40) | SEP | SEP |
| | DN32 to DN40 (PN25) | Category I | SEP |
| | DN50 (PN16) | Category I | SEP |

⚠ **WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

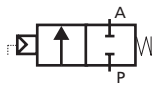
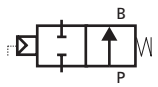
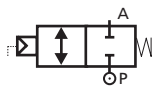
## Notes

1. Steam max. working pressure 10 bar (9 barg)
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts (for different part numbers: e.g. IW205SXW00 please refer to the equivalent part number IG205SXW00 for threaded connection)

# 2/2 Way Piston Actuated Valve Butt Weld Connection – Stainless Steel

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | — | [mm] | [l/min] | [barg] | [barg] | — | [barg] | [barg] | [mm] | — |
| IW205CXW00 | butt weld to **DIN 11850-2** pipe | 15 | 75 | 0 | 16 | 1 → 2 | 3.8 | 10 | 45 | NC |
| IW206CXX00 | | 20 | 133 | 0 | 16 | 1 → 2 | 5.8 | 10 | | |
| IW205SXW00 | | 15 | 87 | 0 | 20 | 1 → 2 | 3.7 | 10 | 63 | |
| IW206SXX00 | | 20 | 164 | 0 | 20 | 1 → 2 | 4.4 | 10 | | |
| IW207SXY00 | | 25 | 260 | 0 | 20 | 1 → 2 | 5 | 10 | | |
| IW208SXZ00 | | 32 | 410 | 0 | 16 | 1 → 2 | 5.9 | 10 | | |
| IW209SXK00 | | 40 | 700 | 0 | 16 | 1 → 2 | 9 | 10 | | |
| IW210SXJ00 | | 50 | 950 | 0 | 11 | 1 → 2 | 8 | 10 | | |
| IW207LXY00 | | 25 | 260 | 0 | 20 | 1 → 2 | 2 | 8 | 90 | |
| IW208LXZ00 | | 32 | 410 | 0 | 16 | 1 → 2 | 3.5 | 8 | | |
| IW209LXK00 | | 40 | 700 | 0 | 16 | 1 → 2 | 4 | 8 | | |
| IW210LXJ00 | | 50 | 950 | 0 | 15 | 1 → 2 | 6.5 | 8 | | |
| RIW205CXW00 | butt weld to **DIN 11850-2** pipe | 15 | 75 | 0 | 16 | 2 → 1 | 4 | 10 | 45 | NO |
| RIW206CXX00 | | 20 | 133 | 0 | 16 | 2 → 1 | 6.2 | 10 | | |
| RIW205SXW00 | | 15 | 87 | 0 | 16 | 2 → 1 | 2.5 | 10 | 63 | |
| RIW206SXX00 | | 20 | 164 | 0 | 16 | 2 → 1 | 4.3 | 10 | | |
| RIW207SXY00 | | 25 | 260 | 0 | 16 | 2 → 1 | 5.5 | 10 | | |
| RIW208SXZ00 | | 32 | 410 | 0 | 16 | 2 → 1 | 6.5 | 10 | | |
| RIW209SXK00 | | 40 | 700 | 0 | 16 | 2 → 1 | 9 | 10 | | |
| RIW210SXJ00 | | 50 | 950 | 0 | 12 | 2 → 1 | 9.4 | 10 | | |
| RIW207LXY00 | | 25 | 260 | 0 | 16 | 2 → 1 | 2 | 8 | 90 | |
| RIW208LXZ00 | | 32 | 410 | 0 | 16 | 2 → 1 | 4 | 8 | | |
| RIW209LXK00 | | 40 | 700 | 0 | 16 | 2 → 1 | 5 | 8 | | |
| RIW210LXJ00 | | 50 | 950 | 0 | 16 | 2 → 1 | 7 | 8 | | |
| BIW205CXW00 | butt weld to **DIN 11850-2** pipe | 15 | 75 | 0 | 16 / 16 | 1 → 2 / 2 → 1 | 6.2 / 5 | 10 | 45 | NC bidirectional |
| BIW206CXX00 | | 20 | 133 | 0 | 16 / 7 | 1 → 2 / 2 → 1 | 8.7 / 5 | 10 | | |
| BIW205SXW00 | | 15 | 87 | 0 | 16 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | |
| BIW206SXX00 | | 20 | 164 | 0 | 16 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BIW207SXY00 | | 25 | 260 | 0 | 16 / 11 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BIW208SXZ00 | | 32 | 410 | 0 | 16 / 6 | 1 → 2 / 2 → 1 | 6.8 / 3.8 | 10 | | |
| BIW209SXK00 | | 40 | 700 | 0 | 12 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIW210SXJ00 | | 50 | 950 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIW207LXY00 | | 25 | 260 | 0 | 16 / 14 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| BIW208LXZ00 | | 32 | 410 | 0 | 16 / 12 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | | |
| BIW209LXK00 | | 40 | 700 | 0 | 16 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BIW210LXJ00 | | 50 | 950 | 0 | 14 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |
| IB205CXW00 | butt weld to **ISO 65/ ANSI B 36.10** pipe | 15 | 75 | 0 | 16 | 1 → 2 | 3.8 | 10 | 45 | NC |
| IB206CXX00 | | 20 | 133 | 0 | 16 | 1 → 2 | 5.8 | 10 | | |
| IB205SXW00 | | 15 | 87 | 0 | 20 | 1 → 2 | 3.7 | 10 | 63 | |
| IB206SXX00 | | 20 | 164 | 0 | 20 | 1 → 2 | 4.4 | 10 | | |
| IB207SXY00 | | 25 | 260 | 0 | 20 | 1 → 2 | 5 | 10 | | |
| IB208SXZ00 | | 32 | 410 | 0 | 16 | 1 → 2 | 5.9 | 10 | | |
| IB209SXK00 | | 40 | 700 | 0 | 16 | 1 → 2 | 9 | 10 | | |
| IB210SXJ00 | | 50 | 950 | 0 | 11 | 1 → 2 | 8 | 10 | | |
| IB207LXY00 | | 25 | 260 | 0 | 20 | 1 → 2 | 2 | 8 | 90 | |
| IB208LXZ00 | | 32 | 410 | 0 | 16 | 1 → 2 | 3.5 | 8 | | |
| IB209LXK00 | | 40 | 700 | 0 | 16 | 1 → 2 | 4 | 8 | | |
| IB210LXJ00 | | 50 | 950 | 0 | 15 | 1 → 2 | 6.5 | 8 | | |
| RIB205CXW00 | butt weld to **ISO 65/ ANSI B 36.10** pipe | 15 | 75 | 0 | 16 | 2 → 1 | 4 | 10 | 45 | NO |
| RIB206CXX00 | | 20 | 133 | 0 | 16 | 2 → 1 | 6.2 | 10 | | |
| RIB205SXW00 | | 15 | 87 | 0 | 16 | 2 → 1 | 2.5 | 10 | 63 | |
| RIB206SXX00 | | 20 | 164 | 0 | 16 | 2 → 1 | 4.3 | 10 | | |
| RIB207SXY00 | | 25 | 260 | 0 | 16 | 2 → 1 | 5.5 | 10 | | |
| RIB208SXZ00 | | 32 | 410 | 0 | 16 | 2 → 1 | 6.5 | 10 | | |
| RIB209SXK00 | | 40 | 700 | 0 | 16 | 2 → 1 | 9 | 10 | | |
| RIB210SXJ00 | | 50 | 950 | 0 | 12 | 2 → 1 | 9.4 | 10 | | |
| RIB207LXY00 | | 25 | 260 | 0 | 16 | 2 → 1 | 2 | 8 | 90 | |
| RIB208LXZ00 | | 32 | 410 | 0 | 16 | 2 → 1 | 4 | 8 | | |
| RIB209LXK00 | | 40 | 700 | 0 | 16 | 2 → 1 | 5 | 8 | | |
| RIB210LXJ00 | | 50 | 950 | 0 | 16 | 2 → 1 | 7 | 8 | | |
| BIB205CXW00 | butt weld to **ISO 65/ ANSI B 36.10** pipe | 15 | 75 | 0 | 16 / 16 | 1 → 2 / 2 → 1 | 6.2 / 5 | 10 | 45 | NC bidirectional |
| BIB206CXX00 | | 20 | 133 | 0 | 16 / 7 | 1 → 2 / 2 → 1 | 8.7 / 5 | 10 | | |
| BIB205SXW00 | | 15 | 87 | 0 | 16 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | |
| BIB206SXX00 | | 20 | 164 | 0 | 16 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BIB207SXY00 | | 25 | 260 | 0 | 16 / 11 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BIB208SXZ00 | | 32 | 410 | 0 | 16 / 6 | 1 → 2 / 2 → 1 | 6.8 / 3.8 | 10 | | |
| BIB209SXK00 | | 40 | 700 | 0 | 12 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIB210SXJ00 | | 50 | 950 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIB207LXY00 | | 25 | 260 | 0 | 16 / 14 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| BIB208LXZ00 | | 32 | 410 | 0 | 16 / 12 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | | |
| BIB209LXK00 | | 40 | 700 | 0 | 16 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BIB210LXJ00 | | 50 | 950 | 0 | 14 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |

# 2/2 Way Piston Actuated Valve Flanged – Stainless Steel

| Specifications | |
|---|---|
| **Type: ID/IA<br>NC flow over seat<br>1 → 2** |  |
| **Type: RID/RIA<br>NO flow under seat<br>2 → 1** |  |
| **Type: BID/BIA<br>NC bi-directional flow<br>over/under seat<br>1 → 2 / 2 → 1** |  |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Body Material** | Cast AISI 316L (CF3M), see page 39 |
| **Flange Material** | cast AISI 316L |
| **Connection** | BS 4504 (EN1092, shape B) or ANSI B16.5 class 150 |
| **Bonnet Material** | Cast AISI 316L (CF3M), see page 39 |
| **Actuator Body Material** | Polyamide PA6 (reinforced fiberglass 30%) |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |

## Features and Benefits

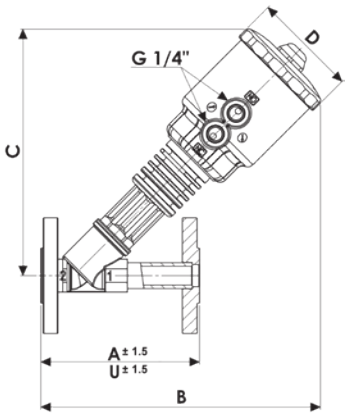
- Waterhammer-free design for BID - BIA (with flow direction 2→1)
- Actuator housing rotation 360°
- Design for vacuum applications up to $10^{-2}$ mbar

| Options Available |
|---|
| Stroke regulator assembled ex-factory, see page 29 (e.g. code ID210SXJR0) |
| Travel switch assembled ex-factory, see page 29 (e.g. code RIA208LXZI0) |
| High temperature version, see pages 20/21 (e.g. code ID205SXW0H) |

| Accessories |
|---|
| Position module, travel switch kit, pilot solenoid valves see pages 30/31/32/331 |

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | | | | | **Ø 90** | | | |
| **A (ANSI)** | [mm] | 139.7 | 152.4 | 165.1 | 184.2 | 203.2 | 228.6 | 165.1 | 184.2 | 203.2 | 228.6 |
| **U (BS/UNI/EN)** | [mm] | 130 | 150 | 160 | 180 | 200 | 230 | 160 | 180 | 200 | 230 |
| **B** | [mm] | 218 | 236 | 239 | 252 | 257 | 275 | 250 | 263 | 268 | 286 |
| **C** | [mm] | 194 | 210 | 208 | 216 | 220 | 230 | 219 | 227 | 232 | 240 |
| **D** | [mm] | 85 | 85 | 85 | 85 | 85 | 85 | 112 | 112 | 112 | 112 |
| **Weight** | [kg] | 2.6 | 3.0 | 3.8 | 5.6 | 6.5 | 8.7 | 4.4 | 6.0 | 6.9 | 9.1 |

**A =** face to face to **ANSI B 16.10**
**U** = face to face to **EN 558-1**




The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Valve Type | Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|---|
| **ID - RID - BID<br>IA - RIA - BIA** | DN15 to DN25 (PN40) | SEP | SEP |
| | DN32 to DN40 (PN25) | Category I | SEP |
| | DN50 (PN16) | Category I | SEP |

⚠ **WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

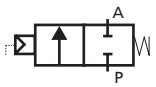
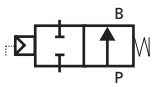
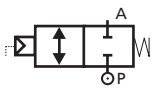
## Notes

1. Steam max. working pressure 10 bar (9 barg)
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts (for different part numbers: e.g. ID205SXW00 please refer to the equivalent part number IG205SXW00 for threaded connection)

# 2/2 Way Piston Actuated Valve Flanged – Stainless Steel

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | — | [mm] | [l/min] | [barg] | [barg] | — | [barg] | [barg] | [mm] | — |
| ID205SXW00 | flanges to **BS 4504 EN1092 shape B** | 15 | 87 | 0 | 20 | 1 → 2 | 3.7 | 10 | 63 | NC |
| ID206SXX00 | | 20 | 164 | 0 | 20 | 1 → 2 | 4.4 | 10 | | |
| ID207SXY00 | | 25 | 260 | 0 | 20 | 1 → 2 | 5 | 10 | | |
| ID208SXZ00 | | 32 | 410 | 0 | 16 | 1 → 2 | 5.9 | 10 | | |
| ID209SXK00 | | 40 | 700 | 0 | 16 | 1 → 2 | 9 | 10 | | |
| ID210SXJ00 | | 50 | 950 | 0 | 11 | 1 → 2 | 8 | 10 | | |
| ID207LXY00 | | 25 | 260 | 0 | 20 | 1 → 2 | 2 | 8 | 90 | |
| ID208LXZ00 | | 32 | 410 | 0 | 16 | 1 → 2 | 3.5 | 8 | | |
| ID209LXK00 | | 40 | 700 | 0 | 16 | 1 → 2 | 4 | 8 | | |
| ID210LXJ00 | | 50 | 950 | 0 | 15 | 1 → 2 | 6.5 | 8 | | |
| RID205SXW00 | flanges to **BS 4504 EN1092 shape B** | 15 | 87 | 0 | 16 | 2 → 1 | 2.5 | 10 | 63 | NO |
| RID206SXX00 | | 20 | 164 | 0 | 16 | 2 → 1 | 4.3 | 10 | | |
| RID207SXY00 | | 25 | 260 | 0 | 16 | 2 → 1 | 5.5 | 10 | | |
| RID208SXZ00 | | 32 | 410 | 0 | 16 | 2 → 1 | 6.5 | 10 | | |
| RID209SXK00 | | 40 | 700 | 0 | 16 | 2 → 1 | 9 | 10 | | |
| RID210SXJ00 | | 50 | 950 | 0 | 12 | 2 → 1 | 9.4 | 10 | | |
| RID207LXY00 | | 25 | 260 | 0 | 16 | 2 → 1 | 2 | 8 | 90 | |
| RID208LXZ00 | | 32 | 410 | 0 | 16 | 2 → 1 | 4 | 8 | | |
| RID209LXK00 | | 40 | 700 | 0 | 16 | 2 → 1 | 5 | 8 | | |
| RID210LXJ00 | | 50 | 950 | 0 | 16 | 2 → 1 | 7 | 8 | | |
| BID205SXW00 | flanges to **BS 4504 EN1092 shape B** | 15 | 87 | 0 | 16 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | NC bidirectional |
| BID206SXX00 | | 20 | 164 | 0 | 16 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BID207SXY00 | | 25 | 260 | 0 | 16 / 11 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BID208SXZ00 | | 32 | 410 | 0 | 16 / 6 | 1 → 2 / 2 → 1 | 6.8 / 3.8 | 10 | | |
| BID209SXK00 | | 40 | 700 | 0 | 12 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BID210SXJ00 | | 50 | 950 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BID207LXY00 | | 25 | 260 | 0 | 16 / 14 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| BID208LXZ00 | | 32 | 410 | 0 | 16 / 12 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | | |
| BID209LXK00 | | 40 | 700 | 0 | 16 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BID210LXJ00 | | 50 | 950 | 0 | 14 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |
| IA205SXW00 | flanges to **ANSI B16.5** class 150 | 15 | 87 | 0 | 20 | 1 → 2 | 3.7 | 10 | 63 | NC |
| IA206SXX00 | | 20 | 164 | 0 | 20 | 1 → 2 | 4.4 | 10 | | |
| IA207SXY00 | | 25 | 260 | 0 | 20 | 1 → 2 | 5 | 10 | | |
| IA208SXZ00 | | 32 | 410 | 0 | 16 | 1 → 2 | 5.9 | 10 | | |
| IA209SXK00 | | 40 | 700 | 0 | 16 | 1 → 2 | 9 | 10 | | |
| IA210SXJ00 | | 50 | 950 | 0 | 11 | 1 → 2 | 8 | 10 | | |
| IA207LXY00 | | 25 | 260 | 0 | 20 | 1 → 2 | 2 | 8 | 90 | |
| IA208LXZ00 | | 32 | 410 | 0 | 16 | 1 → 2 | 3.5 | 8 | | |
| IA209LXK00 | | 40 | 700 | 0 | 16 | 1 → 2 | 4 | 8 | | |
| IA210LXJ00 | | 50 | 950 | 0 | 15 | 1 → 2 | 6.5 | 8 | | |
| RIA205SXW00 | flanges to **ANSI B16.5** class 150 | 15 | 87 | 0 | 16 | 2 → 1 | 2.5 | 10 | 63 | NO |
| RIA206SXX00 | | 20 | 164 | 0 | 16 | 2 → 1 | 4.3 | 10 | | |
| RIA207SXY00 | | 25 | 260 | 0 | 16 | 2 → 1 | 5.5 | 10 | | |
| RIA208SXZ00 | | 32 | 410 | 0 | 16 | 2 → 1 | 6.5 | 10 | | |
| RIA209SXK00 | | 40 | 700 | 0 | 16 | 2 → 1 | 9 | 10 | | |
| RIA210SXJ00 | | 50 | 950 | 0 | 12 | 2 → 1 | 9.4 | 10 | | |
| RIA207LXY00 | | 25 | 260 | 0 | 16 | 2 → 1 | 2 | 8 | 90 | |
| RIA208LXZ00 | | 32 | 410 | 0 | 16 | 2 → 1 | 4 | 8 | | |
| RIA209LXK00 | | 40 | 700 | 0 | 16 | 2 → 1 | 5 | 8 | | |
| RIA210LXJ00 | | 50 | 950 | 0 | 16 | 2 → 1 | 7 | 8 | | |
| BIA205SXW00 | flanges to **ANSI B16.5** class 150 | 15 | 87 | 0 | 16 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | NC bidirectional |
| BIA206SXX00 | | 20 | 164 | 0 | 16 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BIA207SXY00 | | 25 | 260 | 0 | 16 / 11 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BIA208SXZ00 | | 32 | 410 | 0 | 16 / 6 | 1 → 2 / 2 → 1 | 6.8 / 3.8 | 10 | | |
| BIA209SXK00 | | 40 | 700 | 0 | 12 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIA210SXJ00 | | 50 | 950 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIA207LXY00 | | 25 | 260 | 0 | 16 / 14 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| BIA208LXZ00 | | 32 | 410 | 0 | 16 / 12 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | | |
| BIA209LXK00 | | 40 | 700 | 0 | 16 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BIA210LXJ00 | | 50 | 950 | 0 | 14 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |

# 2/2 Way Piston Actuated Valve Clamp – Stainless Steel

| Specifications | |
|---|---|
| **Type: IC/IP<br>NC flow over seat<br>1 → 2** |  |
| **Type: RIC/RIP<br>NO flow under seat<br>2 → 1** |  |
| **Type: BIC/BIP<br>NC bi-directional flow<br>over/under seat<br>1 → 2 / 2 → 1** |  |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Body Material** | Cast AISI 316L (CF3M), see page 39 |
| **Clamp End Material** | AISI 316L |
| **Clamp Connection** | ISO 2852 or ASME BPE |
| **Bonnet Material** | Cast AISI 316L (CF3M), see page 39 |
| **Actuator Body Material** | Polyamide PA6 (reinforced fiberglass 30%) |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |
| **Gasket and Clamp** | Not included |

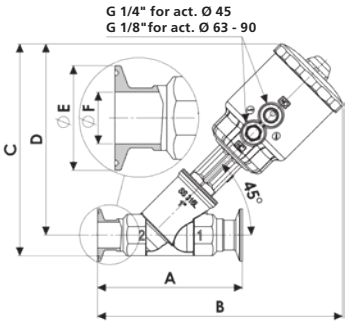
## Features and Benefits

- Waterhammer-free design for BIC - BIP (with flow direction 2→1)
- Actuator housing rotation 360°
- Design suitable for vacuum applications up to $10^{-2}$ mbar

| Options Available |
|---|
| Stroke regulator assembled ex-factory, see page 29 (e.g. code IC210SXJR0) |
| Travel switch assembled ex-factory, see page 29 (e.g. code RIC208LXZI0) |

| Accessories |
|---|
| Position module, travel switch kit, pilot solenoid valves see pages 30/31/32/33 |

| Dimensions & Weights | | DN15 | DN20 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 45** | | **Ø 63** | | | | | | **Ø 90** | | | |
| **A - ISO** | [mm] | 102 | 114 | 102 | 114 | 140 | 159 | 159 | 190 | 140 | 159 | 159 | 190 |
| **A - ASME** | [mm] | 102 | 114 | 102 | 114 | 140 | - | 159 | 190 | 140 | - | 159 | 190 |
| **B - ISO** | [mm] | 162 | 167 | 210 | 217 | 231 | 240 | 249 | 267 | 243 | 251 | 260 | 279 |
| **B - ASME** | [mm] | 162 | 167 | 210 | 217 | 231 | - | 249 | 267 | 243 | - | 260 | 279 |
| **C - ISO** | [mm] | 140 | 142 | 187 | 193 | 211 | 218 | 229 | 240 | 222 | 230 | 241 | 251 |
| **C - ASME** | [mm] | 136 | 138 | 183 | 189 | 211 | - | 223 | 240 | 222 | - | 235 | 251 |
| **D** | [mm] | 123 | 125 | 170 | 176 | 185 | 192 | 197 | 206 | 196 | 204 | 209 | 217 |
| **E - ISO** | [mm] | 34 | 34 | 34 | 34 | 50.5 | 50.5 | 64 | 64 | 50.5 | 50.5 | 64 | 64 |
| **E - ASME** | [mm] | 25 | 25 | 25 | 25 | 50.5 | - | 50.5 | 64 | 50.5 | - | 50.5 | 64 |
| **F - ISO** | [mm] | 17.2 | 21.3 | 17.2 | 21.3 | 25 | 33.7 | 40 | 51 | 25 | 33.7 | 40 | 51 |
| **F - ASME** | [mm] | 9.4 | 15.75 | 9.4 | 15.75 | 22.1 | - | 34.8 | 47.5 | 22.1 | - | 34.8 | 47.5 |
| **Weight - ISO** | [kg] | 0.9 | 1.1 | 1.3 | 1.5 | 1.8 | 2.4 | 2.8 | 3.6 | 2.4 | 2.8 | 3.2 | 4.0 |
| **Weight - ASME** | [kg] | 0.9 | 1.1 | 1.3 | 1.5 | 1.8 | - | 2.8 | 3.6 | 2.4 | - | 3.2 | 4.0 |




The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Valve Type | Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|---|
| **IC - RIC - BIC<br>IP - RIP - BIP** | DN15 to DN50 (PN10) | SEP | SEP |

**⚠ WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

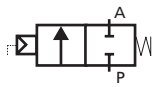
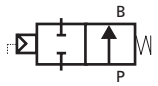
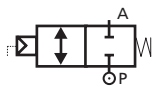
## Notes

1. Steam max. working pressure 10 bar (9 barg)
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts (for different part numbers: e.g. IP205SXW00 please refer to the equivalent part number IG205SXW00 for threaded connection)

# 2/2 Way Piston Actuated Valve Clamp – Stainless Steel

| VALVE | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | — | [mm] | [l/min] | [barg] | [barg] | — | [barg] | [barg] | [mm] | — |
| IC205CXW00 | clamp to **ISO 2852** | 15 | 65 | 0 | 10 | 1 → 2 | 3.8 | 10 | 45 | NC |
| IC206CXX00 | | 20 | 120 | 0 | 10 | 1 → 2 | 5.8 | 10 | | |
| IC205SXW00 | | 15 | 85 | 0 | 10 | 1 → 2 | 3.7 | 10 | 63 | |
| IC206SXX00 | | 20 | 160 | 0 | 10 | 1 → 2 | 4.4 | 10 | | |
| IC207SXY00 | | 25 | 260 | 0 | 10 | 1 → 2 | 5.9 | 10 | | |
| IC208SXZ00 | | 32 | 420 | 0 | 10 | 1 → 2 | 9 | 10 | | |
| IC209SXK00 | | 40 | 700 | 0 | 10 | 1 → 2 | 9 | 10 | | |
| IC210SXJ00 | | 50 | 810 | 0 | 10 | 1 → 2 | 8 | 10 | | |
| IC207LXY00 | | 25 | 260 | 0 | 10 | 1 → 2 | 2 | 8 | 90 | |
| IC208LXZ00 | | 32 | 420 | 0 | 10 | 1 → 2 | 3.5 | 8 | | |
| IC209LXK00 | | 40 | 700 | 0 | 10 | 1 → 2 | 4 | 8 | | |
| IC210LXJ00 | | 50 | 810 | 0 | 10 | 1 → 2 | 6.5 | 8 | | |
| RIC205CXW00 | clamp to **ISO 2852** | 15 | 65 | 0 | 10 | 2 → 1 | 4 | 10 | 45 | NO |
| RIC206CXX00 | | 20 | 120 | 0 | 10 | 2 → 1 | 6.2 | 10 | | |
| RIC205SXW00 | | 15 | 85 | 0 | 10 | 2 → 1 | 2.5 | 10 | 63 | |
| RIC206SXX00 | | 20 | 160 | 0 | 10 | 2 → 1 | 4.3 | 10 | | |
| RIC207SXY00 | | 25 | 260 | 0 | 10 | 2 → 1 | 5.5 | 10 | | |
| RIC208SXZ00 | | 32 | 420 | 0 | 10 | 2 → 1 | 6.5 | 10 | | |
| RIC209SXK00 | | 40 | 700 | 0 | 10 | 2 → 1 | 9 | 10 | | |
| RIC210SXJ00 | | 50 | 810 | 0 | 10 | 2 → 1 | 9.4 | 10 | | |
| RIC207LXY00 | | 25 | 260 | 0 | 10 | 2 → 1 | 2 | 8 | 90 | |
| RIC208LXZ00 | | 32 | 420 | 0 | 10 | 2 → 1 | 4 | 8 | | |
| RIC209LXK00 | | 40 | 700 | 0 | 10 | 2 → 1 | 5 | 8 | | |
| RIC210LXJ00 | | 50 | 810 | 0 | 10 | 2 → 1 | 7 | 8 | | |
| BIC205CXW00 | clamp to **ISO 2852** | 15 | 65 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 6.2 / 5 | 10 | 45 | NC bidirectional |
| BIC206CXX00 | | 20 | 120 | 0 | 10 / 7 | 1 → 2 / 2 → 1 | 8.7 / 5 | 10 | | |
| BIC205SXW00 | | 15 | 85 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | |
| BIC206SXX00 | | 20 | 160 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BIC207SXY00 | | 25 | 260 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BIC208SXZ00 | | 32 | 420 | 0 | 10 / 6 | 1 → 2 / 2 → 1 | 6.8 / 3.8 | 10 | | |
| BIC209SXK00 | | 40 | 700 | 0 | 10 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIC210SXJ00 | | 50 | 810 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIC207LXY00 | | 25 | 260 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| BIC208LXZ00 | | 32 | 420 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | | |
| BIC209LXK00 | | 40 | 700 | 0 | 10 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BIC210LXJ00 | | 50 | 810 | 0 | 10 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |
| IP205CXW00 | clamp to **ASME BPE** | 15 | 50 | 0 | 10 | 1 → 2 | 3.8 | 10 | 45 | NC |
| IP206CXX00 | | 20 | 120 | 0 | 10 | 1 → 2 | 5.8 | 10 | | |
| IP205SXW00 | | 15 | 50 | 0 | 10 | 1 → 2 | 3.7 | 10 | 63 | |
| IP206SXX00 | | 20 | 135 | 0 | 10 | 1 → 2 | 4.4 | 10 | | |
| IP207SXY00 | | 25 | 250 | 0 | 10 | 1 → 2 | 5 | 10 | | |
| IP209SXK00 | | 40 | 640 | 0 | 10 | 1 → 2 | 9 | 10 | | |
| IP210SXJ00 | | 50 | 730 | 0 | 10 | 1 → 2 | 8 | 10 | | |
| IP207LXY00 | | 25 | 250 | 0 | 10 | 1 → 2 | 2 | 8 | 90 | |
| IP209LXK00 | | 40 | 640 | 0 | 10 | 1 → 2 | 4 | 8 | | |
| IP210LXJ00 | | 50 | 730 | 0 | 10 | 1 → 2 | 6.5 | 8 | | |
| RIP205CXW00 | clamp to **ASME BPE** | 15 | 50 | 0 | 10 | 2 → 1 | 4 | 10 | 45 | NO |
| RIP206CXX00 | | 20 | 120 | 0 | 10 | 2 → 1 | 6.2 | 10 | | |
| RIP205SXW00 | | 15 | 50 | 0 | 10 | 2 → 1 | 2.5 | 10 | 63 | |
| RIP206SXX00 | | 20 | 135 | 0 | 10 | 2 → 1 | 4.3 | 10 | | |
| RIP207SXY00 | | 25 | 250 | 0 | 10 | 2 → 1 | 5.5 | 10 | | |
| RIP209SXK00 | | 40 | 640 | 0 | 10 | 2 → 1 | 9 | 10 | | |
| RIP210SXJ00 | | 50 | 730 | 0 | 10 | 2 → 1 | 9.4 | 10 | | |
| RIP207LXY00 | | 25 | 250 | 0 | 10 | 2 → 1 | 2 | 8 | 90 | |
| RIP209LXK00 | | 40 | 640 | 0 | 10 | 2 → 1 | 5 | 8 | | |
| RIP210LXJ00 | | 50 | 730 | 0 | 10 | 2 → 1 | 7 | 8 | | |
| BIP205CXW00 | clamp to **ASME BPE** | 15 | 50 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 6.2 / 5 | 10 | 45 | NC bidirectional |
| BIP206CXX00 | | 20 | 120 | 0 | 10 / 7 | 1 → 2 / 2 → 1 | 8.7 / 5 | 10 | | |
| BIP205SXW00 | | 15 | 50 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | |
| BIP206SXX00 | | 20 | 135 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BIP207SXY00 | | 25 | 250 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BIP209SXK00 | | 40 | 640 | 0 | 10 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIP210SXJ00 | | 50 | 730 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIP207LXY00 | | 25 | 250 | 0 | 10 / 10 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| BIP209LXK00 | | 40 | 640 | 0 | 10 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BIP210LXJ00 | | 50 | 730 | 0 | 10 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |

# 2/2 Way Piston Actuated Valve G 1/2" to 2", High Temperature Version – Stainless Steel

| Specifications | |
|---|---|
| **Type: IG<br>NC flow over seat<br>1 → 2** |  |
| **Type: RIG<br>NO flow under seat<br>2 → 1** |  |
| **Type: BIG<br>NC bi-directional flow<br>over/under seat<br>1 → 2 / 2 → 1** |  |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +200 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Body Material** | Cast AISI 316L (CF3M), see page 39 |
| **Bonnet Material** | Cast AISI 316L (CF3M), see page 39 |
| **Actuator Body Material** | Polyamide PA6 (reinforced fiberglass 30%) |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |

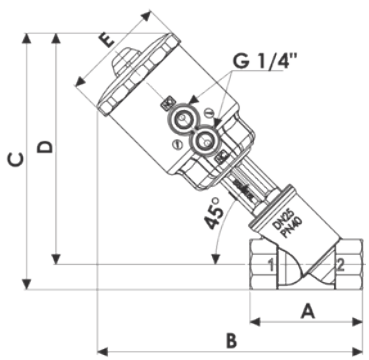
## Features and Benefits

- Waterhammer-free design for BIG - DIG (with flow direction 2→1)
- Actuator housing rotation 360°

| Options Available |
|---|
| Stroke regulator assembled ex-factory, see page 29 (e.g. code RIG210SXJRH) |
| Travel switch assembled ex-factory, see page 29 (e.g. code IG208SXZJH) |
| NPT connection (e.g. code BIN207LXY0H) |
| Butt weld connection (e.g. code BIW209LXK0H) |
| Flanged connection (e.g. code ID205SXW0H) |

| Accessories |
|---|
| Position module, travel switch kit, pilot solenoid valves see pages 30/31/32/33 |

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | | **Ø 90** | | |
| **A** | [mm] | 65 | 75 | 90 | 110 | 120 | 150 |
| **B** | [mm] | 192 | 198 | 212 | 234 | 239 | 257 |
| **C** | [mm] | 184 | 192 | 205 | 227 | 235 | 250 |
| **D** | [mm] | 171 | 176 | 185 | 202 | 207 | 216 |
| **E** | [mm] | 85 | 85 | 85 | 112 | 112 | 112 |
| **Weight** | [kg] | 1.2 | 1.3 | 1.5 | 2.4 | 2.6 | 3.3 |




The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Valve Type | Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|---|
| **IG - RIG - BIG** | DN15 to DN25 (PN40) | SEP | SEP |
| | DN32 to DN40 (PN25) | Category I | SEP |
| | DN50 (PN16) | Category I | SEP |

⚠ **WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

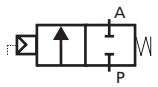
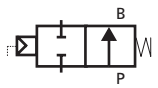
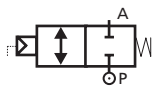
# 2/2 Way Piston Actuated Valve G 1/2" to 2", High Temperature Version – Stainless Steel

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | [ISO 228G] | [mm] | [l/min] | [barg] | [barg] | — | [barg] | [barg] | [mm] | — |
| IG205SXW0H | 1/2" | 15 | 87 | 0 | 20 | 1 → 2 | 3.7 | 10 | 63 | NC |
| IG206SXX0H | 3/4" | 20 | 164 | 0 | 20 | 1 → 2 | 4.4 | 10 | | |
| IG207SXY0H | 1" | 25 | 260 | 0 | 20 | 1 → 2 | 5 | 10 | | |
| IG208LXZ0H | 1 1/4" | 32 | 410 | 0 | 16 | 1 → 2 | 3.5 | 8 | 90 | |
| IG209LXK0H | 1 1/2" | 40 | 700 | 0 | 16 | 1 → 2 | 4 | 8 | | |
| IG210LXJ0H | 2" | 50 | 950 | 0 | 15 | 1 → 2 | 6.5 | 8 | | |
| RIG205SXW0H | 1/2" | 15 | 87 | 0 | 16 | 2 → 1 | 2.5 | 10 | 63 | NO |
| RIG206SXX0H | 3/4" | 20 | 164 | 0 | 16 | 2 → 1 | 4.3 | 10 | | |
| RIG207SXY0H | 1" | 25 | 260 | 0 | 16 | 2 → 1 | 5.5 | 10 | | |
| RIG208LXZ0H | 1 1/4" | 32 | 410 | 0 | 16 | 2 → 1 | 4 | 8 | 90 | |
| RIG209LXK0H | 1 1/2" | 40 | 700 | 0 | 16 | 2 → 1 | 5 | 8 | | |
| RIG210LXJ0H | 2" | 50 | 950 | 0 | 16 | 2 → 1 | 7 | 8 | | |
| BIG205SXW0H | 1/2" | 15 | 87 | 0 | 16 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | NC bidirectional |
| BIG206SXX0H | 3/4" | 20 | 164 | 0 | 16 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BIG207SXY0H | 1" | 25 | 260 | 0 | 16 / 11 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BIG208LXZ0H | 1 1/4" | 32 | 410 | 0 | 16 / 12 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | 90 | |
| BIG209LXK0H | 1 1/2" | 40 | 700 | 0 | 16 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BIG210LXJ0H | 2" | 50 | 950 | 0 | 14 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |

## Notes

1. Steam max. working pressure 14,5 barg
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts

# 2/2 Way Piston Actuated Valve G 3/4" to 2 3/8", Threaded Spigots – Stainless Steel

| Specifications | |
|---|---|
| **Type: IR<br>NC flow over seat<br>1 → 2** |  |
| **Type: RIR<br>NO flow under seat<br>2 → 1** |  |
| **Type: BIR<br>NC bi-directional flow<br>over/under seat<br>1 → 2 / 2 → 1** |  |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Body Material** | Cast AISI 316L (CF3M), see page 39 |
| **Bonnet Material** | Cast AISI 316L (CF3M), see page 39 |
| **Actuator Body Material** | Polyamide PA6 (reinforced fiberglass 30%) |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |

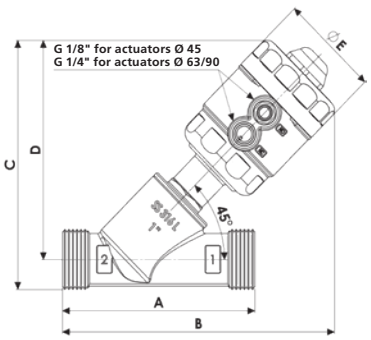
## Features and Benefits

- Waterhammer-free design for BIR (with flow direction 2→1)
- Actuator housing rotation 360°
- Design suitable for vacuum applications up to $10^{-2}$ mbar

| Options Available |
|---|
| Stroke regulator assembled ex-factory, see page 29 (e.g. code BIR211SXKR0) |
| Travel switch assembled ex-factory, see page 29 (e.g. code BIR206SXWI0) |
| High temperature version, see pages 20/21 (e.g. code RIR208SXY0H) |

| Accessories |
|---|
| Position module, travel switch kit, pilot solenoid valves see pages 30/31/32/33 |

| Dimensions & Weights | | DN15 | DN20 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 45** | | **Ø 63** | | | | | | **Ø 90** | | | |
| **A** | [mm] | 90 | 110 | 90 | 110 | 118 | 130 | 140 | 175 | 118 | 130 | 140 | 175 |
| **B** | [mm] | 148 | 156 | 196 | 206 | 217 | 226 | 224 | 246 | 228 | 237 | 235 | 257 |
| **C** | [mm] | 134 | 137 | 181 | 187 | 204 | 212 | 216 | 229 | 215 | 222 | 227 | 240 |
| **D** | [mm] | 121 | 121 | 168 | 171 | 183 | 188 | 189 | 196 | 194 | 199 | 200 | 207 |
| **E** | [mm] | 57 | 57 | 85 | 85 | 85 | 85 | 85 | 85 | 112 | 112 | 112 | 112 |
| **Weight** | [kg] | 0.9 | 1.0 | 1.3 | 1.4 | 1.65 | 2.0 | 2.2 | 3.1 | 2.15 | 2.5 | 2.7 | 3.5 |




The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Valve Type | Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|---|
| **IR - RIR - BIR** | DN15 to DN25 (PN40) | SEP | SEP |
| | DN32 to DN40 (PN25) | Category I | SEP |
| | DN50 (PN16) | Category I | SEP |

⚠ **WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

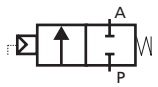
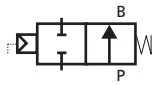
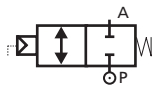
# 2/2 Way Piston Actuated Valve G 3/4" to 2 3/8", Threaded Spigots – Stainless Steel

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | [ISO 228G] | [mm] | [l/min] | [barg] | [barg] | — | [barg] | [barg] | [mm] | — |
| **IR206CXW00** | 3/4" | 15 | 75 | 0 | 16 | 1 → 2 | 3.8 | 10 | 45 | NC |
| **IR207CXX00** | 1" | 20 | 133 | 0 | 16 | 1 → 2 | 5.8 | 10 | | |
| **IR206SXW00** | 3/4" | 15 | 87 | 0 | 20 | 1 → 2 | 3.7 | 10 | 63 | |
| **IR207SXX00** | 1" | 20 | 164 | 0 | 20 | 1 → 2 | 4.4 | 10 | | |
| **IR208SXY00** | 1 1/4" | 25 | 260 | 0 | 20 | 1 → 2 | 5 | 10 | | |
| **IR209SXZ00** | 1 1/2" | 32 | 410 | 0 | 16 | 1 → 2 | 5.9 | 10 | | |
| **IR211SXK00** | 1 3/4" | 40 | 700 | 0 | 16 | 1 → 2 | 9 | 10 | | |
| **IR212SXJ00** | 2 3/8" [4] | 50 | 950 | 0 | 11 | 1 → 2 | 8 | 10 | | |
| **IR208LXY00** | 1 1/4" | 25 | 260 | 0 | 20 | 1 → 2 | 2 | 8 | 90 | |
| **IR209LXZ00** | 1 1/2" | 32 | 410 | 0 | 16 | 1 → 2 | 3.5 | 8 | | |
| **IR211LXK00** | 1 3/4" | 40 | 700 | 0 | 16 | 1 → 2 | 4 | 8 | | |
| **IR212LXJ00** | 2 3/8" [4] | 50 | 950 | 0 | 15 | 1 → 2 | 6.5 | 8 | | |
| **RIR206CXW00** | 3/4" | 15 | 75 | 0 | 16 | 2 → 1 | 4 | 10 | 45 | NO |
| **RIR207CXX00** | 1" | 20 | 133 | 0 | 16 | 2 → 1 | 6.2 | 10 | | |
| **RIR206SXW00** | 3/4" | 15 | 87 | 0 | 16 | 2 → 1 | 2.5 | 10 | 63 | |
| **RIR207SXX00** | 1" | 20 | 164 | 0 | 16 | 2 → 1 | 4.3 | 10 | | |
| **RIR208SXY00** | 1 1/4" | 25 | 260 | 0 | 16 | 2 → 1 | 5.5 | 10 | | |
| **RIR209SXZ00** | 1 1/2" | 32 | 410 | 0 | 16 | 2 → 1 | 6.5 | 10 | | |
| **RIR211SXK00** | 1 3/4" | 40 | 700 | 0 | 16 | 2 → 1 | 9 | 10 | | |
| **RIR212SXJ00** | 2 3/8" [4] | 50 | 950 | 0 | 12 | 2 → 1 | 9.4 | 10 | | |
| **RIR208LXY00** | 1 1/4" | 25 | 260 | 0 | 16 | 2 → 1 | 2 | 8 | 90 | |
| **RIR209LXZ00** | 1 1/2" | 32 | 410 | 0 | 16 | 2 → 1 | 4 | 8 | | |
| **RIR211LXK00** | 1 3/4" | 40 | 700 | 0 | 16 | 2 → 1 | 5 | 8 | | |
| **RIR212LXJ00** | 2 3/8" [4] | 50 | 950 | 0 | 16 | 2 → 1 | 7 | 8 | | |
| **BIR206CXW00** | 3/4" | 15 | 75 | 0 | 16 / 16 | 1 → 2 / 2 → 1 | 6.2 / 5 | 10 | 45 | NC bidirectional |
| **BIR207CXX00** | 1" | 20 | 133 | 0 | 16 / 7 | 1 → 2 / 2 → 1 | 8.7 / 5 | 10 | | |
| **BIR206SXW00** | 3/4" | 15 | 87 | 0 | 16 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | |
| **BIR207SXX00** | 1" | 20 | 164 | 0 | 16 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| **BIR208SXY00** | 1 1/4" | 25 | 260 | 0 | 16 / 11 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| **BIR209SXZ00** | 1 1/2" | 32 | 410 | 0 | 16 / 6 | 1 → 2 / 2 → 1 | 6.8 / 3.8 | 10 | | |
| **BIR211SXK00** | 1 3/4" | 40 | 700 | 0 | 12 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| **BIR212SXJ00** | 2 3/8" [4] | 50 | 950 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| **BIR208LXY00** | 1 1/4" | 25 | 260 | 0 | 16 / 14 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| **BIR209LXZ00** | 1 1/2" | 32 | 410 | 0 | 16 / 12 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | | |
| **BIR211LXK00** | 1 3/4" | 40 | 700 | 0 | 16 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| **BIR212LXJ00** | 2 3/8" [4] | 50 | 950 | 0 | 14 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |

## Notes

1. Steam max. working pressure 10 bar (9 barg)
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts (for different part numbers: e.g. BPR207SXX00 please refer to the equivalent part number BIG207SXY00 for threaded connection)
4. According to ISO 338

# Piston Actuated Valve Series M and G EXD II 2 GD c TX CLASS

| Specifications | |
|---|---|
| **Type: IG<br>NC flow over seat<br>1 → 2** |  |
| **Type: RIG<br>NO flow under seat<br>2 → 1** |  |
| **Type: BIG<br>NC bi-directional flow<br>over/under seat<br>1 → 2 / 2 → 1** |  |
| **Protection Class** | II 2 GD c TX |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +200 °C |
| **Ambient Temperature** | -10 °C to +80 °C |
| **Pilot Media[2]** | Instrument air, inert gases |
| **Body Material** | Cast AISI 316L (CF3M), see page 39 |
| **Bonnet Material** | Cast AISI 316L (CF3M), see page 39 |
| **Actuator Body Material** | ASTM A 351 CF8 (AISI 304) |
| **Actuator Cover Material** | ASTM A 351 CF8 (AISI 304) |
| **Actuator Housing Material** | ASTM A 351 CF8 (AISI 304) |
| **Piston Material** | Aluminium |
| **Seal Material** | PTFE |
| **Position Indicator** | As standard |

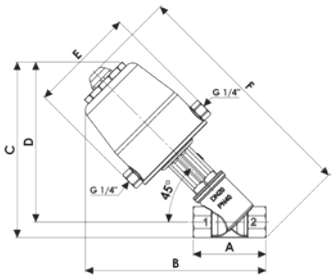
## Features and Benefits

- Waterhammer-free design for BIG (with flow direction 2→1)
- Actuator housing rotation 360°
- High resistance to external agents, shocks

| Options Available |
|---|
| Atex inductive switch assembled ex-factory (e.g. code IG207MXYX0), with ambient temperature -10 °C to +60 °C |

| Accessories |
|---|
| Atex pilot solenoid valves type N326CVEK see page 33 |

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | | | | | **Ø 90** | | | |
| **A** | [mm] | 65 | 75 | 90 | 110 | 120 | 150 | 90 | 110 | 120 | 150 |
| **B** | [mm] | 178 | 184 | 200 | 211 | 216 | 234 | 208 | 221 | 226 | 244 |
| **C** | [mm] | 171 | 178 | 200 | 204 | 212 | 227 | 201 | 213 | 221 | 236 |
| **D** | [mm] | 157 | 162 | 172 | 180 | 184 | 193 | 181 | 189 | 194 | 202 |
| **E** | [mm] | 108 | 108 | 108 | 108 | 108 | 108 | 135 | 135 | 135 | 135 |
| **F** | [mm] | 228 | 239 | 258 | 275 | 284 | 307 | 260 | 278 | 286 | 310 |
| **Weight** | [kg] | 2.3 | 2.4 | 2.6 | 3.1 | 3.4 | 4.1 | 3.6 | 4.1 | 4.3 | 5.1 |




The pilot solenoid valves ports have a G 1/4" thread and are marked with NO/NC (Normally Open/Normally Closed)

The products listed below comply with the requirements of the European Pressure Equipment Directive 2014/68/UE and carry the CE mark when required. The products fall within the following Pressure Equipment Directive categories:

| Valve Type | Bodies | Group 1 gases | Group 1 liquids and Group 2 other fluids |
|---|---|---|---|
| **IG - RIG - BIG** | DN15 to DN25 (PN40) | SEP | SEP |
| | DN32 to DN40 (PN25) | Category I | SEP |
| | DN50 (PN16) | Category I | SEP |

⚠ **WARNING!**
According to the European Pressure Equipment Directive 2014/68/UE, liquids whose saturated vapour pressure at the maximum allowable temperature is more than 0,5 barg shall be considered as gases.

# Piston Actuated Valve Series M and G EXD II 2 GD c TX CLASS

| Valve | Body Connection | DN | Flow Rate Kvs | Working Pressure[1] Min. | Working Pressure[1] Max. | Flow Direction | Pilot Pressure[3] Min. | Pilot Pressure[3] Max. | Actuator Ø | Function |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | [ISO 228G] | [mm] | [l/min] | [barg] | [barg] | — | [barg] | [barg] | [mm] | — |
| IG205MXW00 | 1/2" | 15 | 87 | 0 | 20 | 1 → 2 | 3.7 | 10 | 63 | NC |
| IG206MXX00 | 3/4" | 20 | 164 | 0 | 20 | 1 → 2 | 4.4 | 10 | | |
| IG207MXY00 | 1" | 25 | 260 | 0 | 20 | 1 → 2 | 5 | 10 | | |
| IG208MXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 1 → 2 | 5.9 | 10 | | |
| IG209MXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 1 → 2 | 9 | 10 | | |
| IG210MXJ00 | 2" | 50 | 950 | 0 | 11 | 1 → 2 | 8 | 10 | | |
| IG207GXY00 | 1" | 25 | 260 | 0 | 20 | 1 → 2 | 2 | 8 | 90 | |
| IG208GXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 1 → 2 | 3.5 | 8 | | |
| IG209GXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 1 → 2 | 4 | 8 | | |
| IG210GXJ00 | 2" | 50 | 950 | 0 | 15 | 1 → 2 | 6.5 | 8 | | |
| RIG205MXW00 | 1/2" | 15 | 87 | 0 | 16 | 2 → 1 | 2.5 | 10 | 63 | NO |
| RIG206MXX00 | 3/4" | 20 | 164 | 0 | 16 | 2 → 1 | 4.3 | 10 | | |
| RIG207MXY00 | 1" | 25 | 260 | 0 | 16 | 2 → 1 | 5.5 | 10 | | |
| RIG208MXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 2 → 1 | 6.5 | 10 | | |
| RIG209MXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 2 → 1 | 9 | 10 | | |
| RIG210MXJ00 | 2" | 50 | 950 | 0 | 12 | 2 → 1 | 9.4 | 10 | | |
| RIG207GXY00 | 1" | 25 | 260 | 0 | 16 | 2 → 1 | 2 | 8 | 90 | |
| RIG208GXZ00 | 1 1/4" | 32 | 410 | 0 | 16 | 2 → 1 | 4 | 8 | | |
| RIG209GXK00 | 1 1/2" | 40 | 700 | 0 | 16 | 2 → 1 | 5 | 8 | | |
| RIG210GXJ00 | 2" | 50 | 950 | 0 | 16 | 2 → 1 | 7 | 8 | | |
| BIG205MXW00 | 1/2" | 15 | 87 | 0 | 16 | 1 → 2 / 2 → 1 | 5.5 / 3.8 | 10 | 63 | NC bidirectional |
| BIG206MXX00 | 3/4" | 20 | 164 | 0 | 16 | 1 → 2 / 2 → 1 | 6 / 3.8 | 10 | | |
| BIG207MXY00 | 1" | 25 | 260 | 0 | 16 / 11 | 1 → 2 / 2 → 1 | 6.5 / 3.8 | 10 | | |
| BIG208MXZ00 | 1 1/4" | 32 | 410 | 0 | 16 / 6 | 1 → 2 / 2 → 1 | 6.8 / 3.8 | 10 | | |
| BIG209MXK00 | 1 1/2" | 40 | 700 | 0 | 12 / 4 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIG210MXJ00 | 2" | 50 | 950 | 0 | 8 / 2.5 | 1 → 2 / 2 → 1 | 9 / 3.8 | 10 | | |
| BIG207GXY00 | 1" | 25 | 260 | 0 | 16 / 14 | 1 → 2 / 2 → 1 | 4 / 3.3 | 8 | 90 | |
| BIG208GXZ00 | 1 1/4" | 32 | 410 | 0 | 16 / 12 | 1 → 2 / 2 → 1 | 5 / 3.3 | 8 | | |
| BIG209GXK00 | 1 1/2" | 40 | 700 | 0 | 16 / 8 | 1 → 2 / 2 → 1 | 6 / 3.3 | 8 | | |
| BIG210GXJ00 | 2" | 50 | 950 | 0 | 14 / 6 | 1 → 2 / 2 → 1 | 8 / 3.3 | 8 | | |

## Notes

1. Steam max. working pressure 10 bar (9 barg)
2. Please contact Rotork Midland sales Department for other pilot media
3. Minimum pilot pressure at the max. working pressure: for lower working pressures please refer to the comparative charts

## Specifications of Inductive Switch

| | |
|---|---|
| Type of sensor: | in accordance with Namur standards EN 60947-5-6 |
| Switching distance (Sn): | 4 mm |
| Continuous voltage (residual ripple ≤10%): | 8,2V |
| Current absorption at 8,2V in presence of metal: | ≤ 1mA |
| Current absorption at 8,2V in absence of metal: | ≥ 3mA |
| Switching frequency: | 2000 Hz |
| Repeatability (% of Sn): | ≤ 3 |
| Housing material: | brass with electroless nickel plating treatment |
| Cable: | PVC 2x0,25 mm2 |
| Cable length: | 3 m |
| Safety rating: | UI=17V - Ii=17mA - Pi=73mW - Ci=0,25uF - Li=175uH |

# Control Piston Actuated Valve with Integrated Positioner

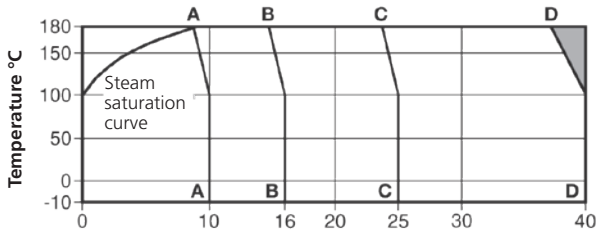
## DN15 to DN50 – Stainless Steel

| Specifications | |
|---|---|
| **Type: ZI flow always under seat 2 → 1** | NC (Direct) / NO (Reverse) |
| **Media** | Water, oil, air, aggressive media, steam[1] |
| **Media Temperature** | -10 °C to +180 °C |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Viscosity** | max. 600 cSt (80° E) |
| **Pilot Media** | Dry and filtered air (mesh 25 µm) |
| **Actuator Diameter** | 63 or 90 |
| **Body Material** | Cast AISI 316L (CF3M), see page 39 |
| **Bonnet Material** | Cast AISI 316L (CF3M), see page 39 |
| **Actuator Body Material** | Polyamide PA6 (reinforced fiberglass 30%) |
| **Seal Material** | PTFE |
| **Flow Characteristic** | Linear or equal percentage |
| **Electrical Characteristics** | |
| **Positioner Enclosure** | Anodized aluminium (black) |
| **Set Point Signal** | 0 to 10V; 4 to 20mA |
| **Electrical Supply** | 24V DC |
| **Maximum Power Consumption** | 6W (0,24A) |
| **Set-up Point** | Self-adjusting valve |
| **Fail Safe Position** | 'Closed' or 'maintained' |
| **Electrical Connections** | M23 connector, 12 poles |
| **Protection Class** | IP65 |
| **Hysteresis** | < 1% FS |
| **Repeatability** | < 0,5% FS |
| **Minimum Set-point** | < 2% FS |

### Features and Benefits

- Actuator housing rotation 360°
- Connector rotation 360° (90° steps)

| Options Available |
|---|
| Seal material in PEEK |
| Body and shaped plug with hardening treatment |
| Body connection options: threaded, flanged, butt weld and clamp |




**A – A** PN10
**B – B** PN16 - ANSI 150
**C – C** PN25
**D – D** PN40

**The product must not be used in this region or beyond the body design conditions (PN) quoted in the selection chart as damage to the internals will occur!**

| DN | Flow Rate Kvs EQUI% TRIM 1:25 | Flow Rate Kvs LINEAR TRIM 1:25 | Working Pressure[1] Max. | Flow Direction | Pilot Pressure Min. | Pilot Pressure Max. | Actuator Ø | PN[2] |
|---|---|---|---|---|---|---|---|---|
| [mm] | [m³/h] | [m³/h] | [barg] | — | [barg] | [barg] | [mm] | — |
| 15 | 4.5 | 4.9 | 16 | 2 → 1 only under seat | 4.5 | 8 | 63 | 40 |
| 20 | 8.7 | 8.7 | 16 | | | | | 40 |
| 25 | 12.7 | 14.4 | 14 | 2 → 1 only under seat | 4.5 | 8 | 90 | 40 |
| 32 | 20.4 | 22.8 | 12 | | | | | 25 |
| 40 | 29.7 | 34.2 | 8 | | | | | 25 |
| 50 | 36.3 | 39 | 6 | | | | | 16 |

### Notes

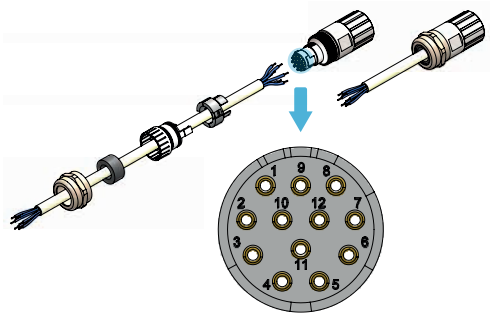
1. Steam max. working pressure 10 bar (9 barg)
2. PN10 for all sizes for clamp

# Control Piston Actuated Valve with Integrated Positioner

## DN15 to DN50 – Stainless Steel

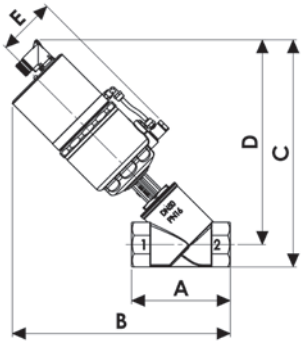
### Electrical Connection Pin Connector

| PIN No | Function |
|---|---|
| 1 | + 24VDC (supply power) |
| 2 | 0-10V (+) set-point |
| 3 | 4-20mA (+) set-point |
| 4 | 0 (common set-point) |
| 5 | Alarm signal: 0V the valve works properly / +24V valve on alarm |
| 6 | Test point |
| 7 | Auto set-up/remote reset |
| 8 | 0 (supply power) |
| 9 | Earth |
| 10 | Pre-set configuration |
| 11 | NC |
| 12 | Pre-set configuration |




GAS - NPT - WELDED ENDS

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | **Ø 90** | | | |
| **A** | [mm] | 64 | 75 | 90 | 110 | 120 | 150 |
| **B** | [mm] | 294 | 301 | 316 | 329 | 334 | 352 |
| **C** | [mm] | 282.5 | 290 | 305 | 317 | 325 | 340 |
| **D** | [mm] | 269 | 274 | 285 | 292.5 | 297.5 | 306.5 |
| **E** | [mm] | 75 | 75 | 88 | 88 | 88 | 88 |
| **Weight** | [kg] | 2.4 | 2.5 | 3.3 | 3.7 | 3.9 | 4.6 |




FLANGED EN1092-1

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | **Ø 90** | | | |
| **A** | [mm] | 130 | 150 | 160 | 180 | 200 | 230 |
| **B** | [mm] | 323 | 330 | 344 | 359 | 361 | 384 |
| **C** | [mm] | 339.5 | 349.5 | 364.5 | 386 | 394 | 412.5 |
| **D** | [mm] | 292 | 297 | 307 | 316 | 319 | 330 |
| **E** | [mm] | 75 | 75 | 88 | 88 | 88 | 88 |
| **Weight** | [kg] | 3.8 | 4.2 | 5.7 | 7.3 | 8.2 | 10.4 |

FLANGED ANSI B16.5

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | **Ø 90** | | | |
| **A** | [mm] | 139.7 | 152.4 | 165.1 | 184.2 | 203.2 | 228.6 |
| **B** | [mm] | 321 | 327 | 343 | 357 | 361 | 384 |
| **C** | [mm] | 336.5 | 346 | 361 | 375 | 382.5 | 406 |
| **D** | [mm] | 292 | 297 | 307 | 316 | 319 | 330 |
| **E** | [mm] | 75 | 75 | 88 | 88 | 88 | 88 |
| **Weight** | [kg] | 3.8 | 4.2 | 5.7 | 7.3 | 8.2 | 10.4 |

CLAMP ISO 2852

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | **Ø 90** | | | |
| **A** | [mm] | 102 | 114 | 140 | 159 | 159 | 190 |
| **B** | [mm] | 313 | 320.5 | 341 | 353.5 | 353.5 | 372 |
| **C** | [mm] | 286 | 291 | 310 | 318 | 329.5 | 340 |
| **D** | [mm] | 269 | 274 | 285 | 292.5 | 297.5 | 306.5 |
| **E** | [mm] | 75 | 75 | 88 | 88 | 88 | 88 |
| **Weight** | [kg] | 2.5 | 2.7 | 3.7 | 4.1 | 4.5 | 5.3 |

CLAMP ASME BPE

| Dimensions & Weights | | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|---|
| **Actuator** | **[mm]** | **Ø 63** | | **Ø 90** | | | |
| **A** | [mm] | 102 | 114 | 140 | / | 159 | 190 |
| **B** | [mm] | 313 | 320.5 | 341 | / | 353.5 | 372 |
| **C** | [mm] | 282.5 | 290 | 310 | / | 325 | 340 |
| **D** | [mm] | 269 | 274 | 285 | / | 297.5 | 306.5 |
| **E** | [mm] | 75 | 75 | 88 | / | 88 | 88 |
| **Weight** | [kg] | 2.5 | 2.7 | 3.7 | / | 4.5 | 5.3 |

/ = not available

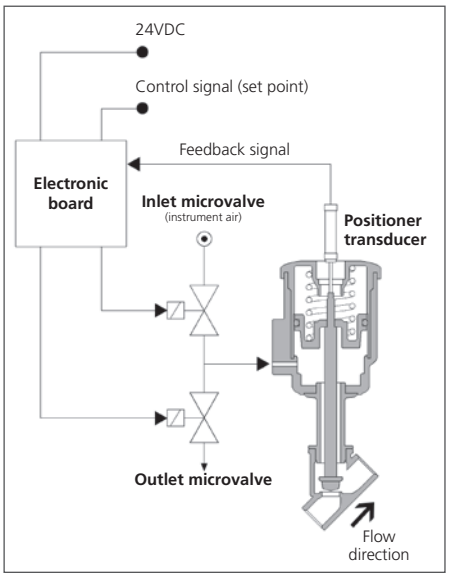
# Control Piston Actuated Valve With Integrated Positioner

**DN15 to DN50 – Stainless Steel**

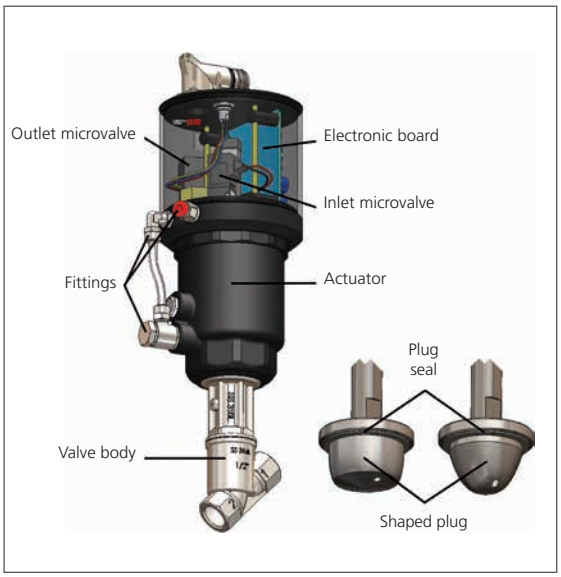
## Operating Principles and Description

Alcon control piston actuated valves are operated by a compact pneumatic integrated positioner working in a closed loop. Picture A shows the operating layout: the set-point signal (coming from the control panel of the plant) is compared with the internal signal (feed-back) of the position sensor. When the two values don't match, the electronic system inside the valve operates two microvalves (which open or close the pilot air feeding) to change the stroke until both signals match.

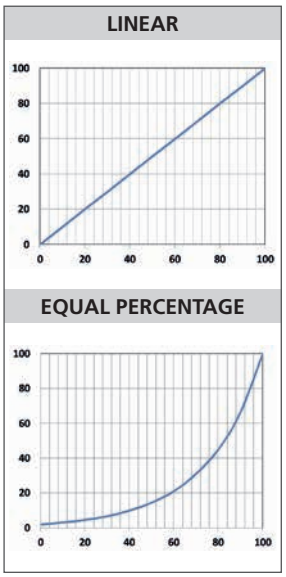
The proportionality between the stroke of the valve and the instantaneous flow is guaranteed by the special plug design: linear plug and equal percentage plug (Picture C) the graphs show an ideal curve, which cannot be reproduced exactly but varies according to the DN of the valve and the specific installation parameters. When fully closed the valve is leakage tight thanks to the soft seal, as in Alcon standard on/off piston actuated valves (see Picture B).




*Picture A*




*Picture B*




*Picture C*

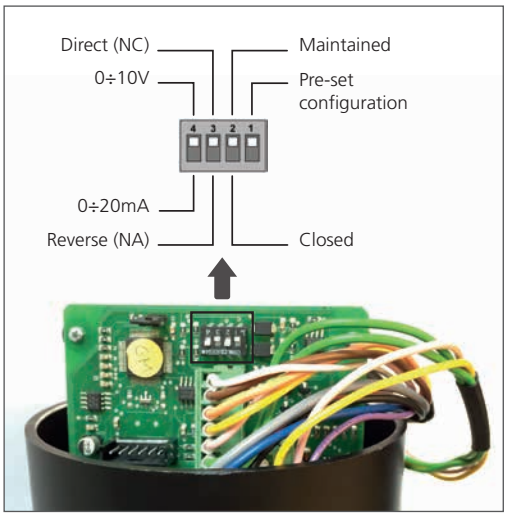
The pneumatic positioner is electronic and not programmable. It accepts the most common set-point signals (4 to 20 mA; 0 to 10 V).

All calibration operations are automatically implemented by pushing a LED button on top of the control box (integrated self-starter).

The pneumatic positioner can be fitted both to Alcon Ø 63 and Ø 90 pneumatic actuators (this version must be expressely requested upon order).

**Fluid direction always under seat!**

Control Piston Actuated Valves with integrated positioner are set up, adjusted and tested by the manufacturer according to Customer's specifications and requests. The relevant parameters are set up by 4 dip-switches (see Picture D).




*Picture D*

**Electronic board:**

**Contact No. 1 – Pre-set configuration -**

**Contact No. 2 – Fail Safe Position -**

**Contact No. 3 – Function Set-up -**

**Contact No. 4 – Set Point -**

| Function set-up (contact No. 3) | Set Point | Valve status |
|---|---|---|
| Direct (NC) | 0V or 4mA | Closed |
| | 10V or 20mA | Open 100% |
| Reverse (NO) | 0V or 4mA | Open 100% |
| | 10V or 20mA | Closed |

# Travel Switch

### Technical Specifications

The travel switch detects the open position of the valve relaying back an electrical signal. The signal is provided by a magnetic sensor with a non contact switch (free NC, NO switch)

| Specifications | |
|---|---|
| **Max. Switching Voltage** | 500V |
| **Max. Switching Current** | 0,5 A |
| **Max. Switching Power** | 30 W/VA |
| **Max. Switching Frequency** | 150 Hz |
| **Contact Actuation Time** | 4,5 ms |
| **Repeatability** | ± 0,3 mm |
| **Temperature Limits** | -25 °C to + 100 °C |
| **Protection Class** | IP67 |
| **Housing Material** | Brass with electroless nickel plating treatment |
| **Plug For Cable** | 3x0,5 $mm^2$; Ø 4-6 mm (DIN EN 60947/5/2) |

### Notes

The option must be expressly requested upon order
It is available for actuators sizes ø63 & ø90 only (e.g. code RIG205XWI0)
It is available only assembled ex-factory

# Stroke Regulator

### Features and Benefits

With the stroke regulator the flow be can manually adjusted from 0% to 100% integrated position indicator. In normally open valves it can also be used as manual override.

### Notes

This option must be expressly requested upon order
It is available for actuators sizes Ø63 & Ø90 only (e.g. code NG205SXWR0)
It is available only assembled ex-factory

# Position Module for Piston Actuated Valve

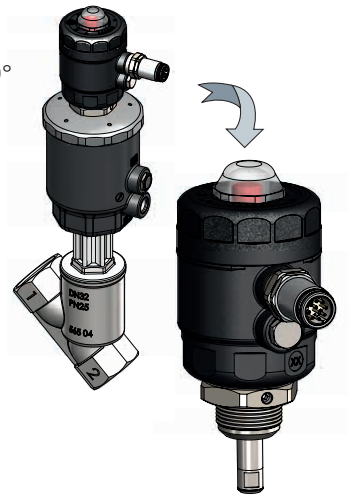
| Specifications | |
|---|---|
| **Electrical Position Feedback** | Mechanical limit switches or inductive limit switches |
| **Body/Cover Material** | Polyamide PA6 (reinforced fiberglass 30%) |
| **Connector Material** | Copper-zinc alloy / aluminium alloy / cast zinc – nickel plating treatment |
| **Electrical Connection** | Connector M16 – 10 poles / wire Ø 5 - 9 mm |
| **Ambient Temperature** | -10 °C to +60 °C |
| **Protection Class** | IP65 |
| **Specifications: Mechancial Switches** | |
| **Number of Switches** | 2 |
| **Type of Switch** | Change over contacts (NC and / or NO) |
| **Contacts Material** | Silver |
| **Maximum Tension** | Connector 230VAC with dirt level 2 / 160VAC with dirt level 3 |
| **Maximum Current** | 6A with resistive load - 2A with inductive load |
| **Specifications : Inductive Switches** | |
| **Number of Switches** | 2 |
| **Output Version** | Normally open contact (PNP) |
| **Power Supply** | 12 to 24V DC |
| **Maximum Load Current** | 50mA per output |
| **Power Consumption** | 13mA max. at 24VDC without load |

Alcon position modules offer an electrical position feedback for reading the valve position of piston actuated valves open or closed.

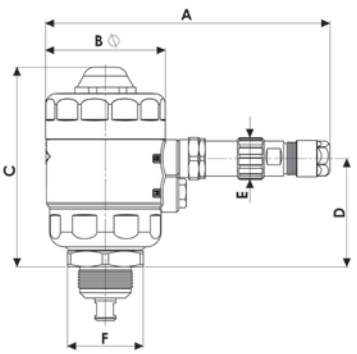
The position detection is carried out through a mechanical or inductive switch that can be fitted to all Alcon standard Piston Valves.

### Features and Benefits

- Actuator housing rotation 360°

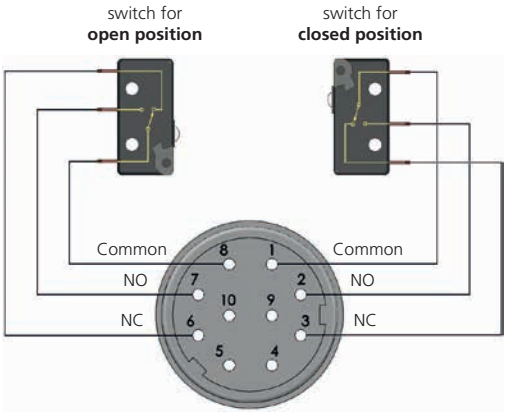


| Dimensions & Weights | | Position Module |
|---|---|---|
| **Actuator** | **[mm]** | **45/63/90** |
| **A** | [mm] | 134 |
| **B** | [mm] | 57 |
| **C** | [mm] | 95 |
| **D** | [mm] | 51.5 |
| **E** | [mm] | 20 |
| **F** | [mm] | Hex 36 |
| **Weight** | [kg] | 0.43 |



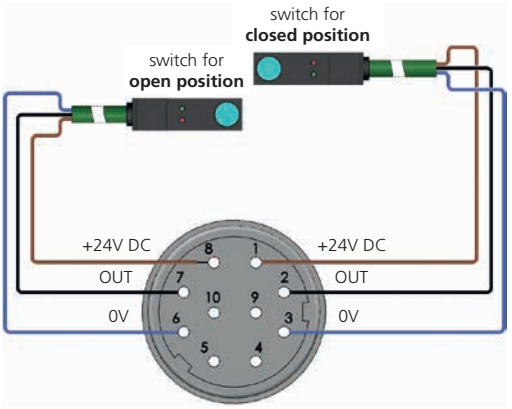

### ELECTRICAL CONNECTION SCHEME FOR MECHANICAL SWITCHES

**Connector frontal view:**




### ELECTRICAL CONNECTION SCHEME FOR INDUCTIVE SWITCHES

**Connector frontal view:**




| Position Module | Actuator Ø | Electrical Position Feedback |
|---|---|---|
| **Code** | **[mm]** | — |
| **857 060-** | 63/90 | Mechanical |
| **857 070-** | 45 | |
| **857 061-** | 63/90 | Inductive |
| **857 071-** | 45 | |

# Travel Switch Conversion Kit for Piston Actuated Valve

### Features and Benefits

Kit suitable for all Alcon pneumatic valves.

It allows the installation of a position sensor on top of the actuator. The sensor can be magnetic or inductive and provides an electrical signal indicating the open position of the valve (this is a function different from the position module, which detects the actual valve position: open or closed).

The sensor is not included.

The kit is recommendable for magnetic or inductive sensors with threaded body having an external diameter size up to 12mm max.

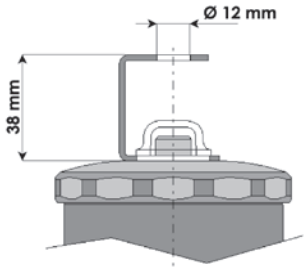
You can install a sensor having a larger diameter (up to 18 mm max.) in this case you shall re-drill the upper hole on the sensor support bracket.

The valve position is visible through the transparent sight dome.

- Simple to retrofit
- Suitable for magnetic or inductive commercial switches with M12 or M8 thread

Code **857 018 A00-** includes: support bracket, transparent dome, red position indicator with built-in magnet (switch and plug not included, see below).

**CONVERSION KIT code 857 018 A00-:**




# Magnetic Switch for Conversion Kit

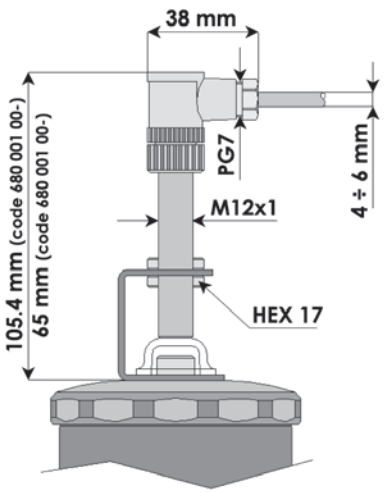
Alcon offers 2 types (type **A** or type **B** see below) of standard magnetic switches to be purchased in addition to the conversion kit. Other types of switches can be outsourced directly by the customer, provided that they comply with Alcon kit mounting specifications.

### Notes: 2 conversion kits complete with sensors are available:

Code **857 019 A00-** includes: support bracket, transparent dome, red position indicator, magnet, connector code 600 012 00- and sensor code 680 001 00-.

Code **857 020 A00-** includes: support bracket, transparent dome, red position indicator, magnet, sensor with cable code 680 002 00-.

| Technical Specifications | | |
|---|---|---|
| **Magnetic Switches** | **• Type A code 680 001 00-** | **• Type B code 680 002 00- [1]** |
| **Contact** | Free NC, NO switch | Free NC, NO switch |
| **Repeatability** | ± 0,3 mm | ± 0,3 mm |
| **Temperature Limits** | - 25° C to + 100° C | - 25° C to + 100° C |
| **Protection Class** | IP 67[2] | IP 67 |
| **Max. Switching Voltage** | 500 V | 150 V |
| **Max. Switching Current** | 0,5 A | 1 A |
| **Max. Switching Power** | 30 W/VA | 20 W/VA |
| **Contact Actuation Time** | 4,5 ms | 2 ms |
| **Connection** | Plug to screw clamp connection DIN IEC 60947/5/2 | With moulded cable (5 m) |
| **Cable** | 3 x 0,25 mm² | 3 x 0,25 mm² |

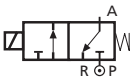



1. Minimum batch may be required
2. If matched with a connector rated IP67 or higher

**• Type A**
**CONNECTOR code 600 012 00-**
**+ SWITCH code 680 001 00-**

**• Type B**
**SWITCH AND CABLE (5m)**
**code 680 002 00-[1]**

# 3/2 Way Direct Acting Pilot Solenoid Valve with Manual Override

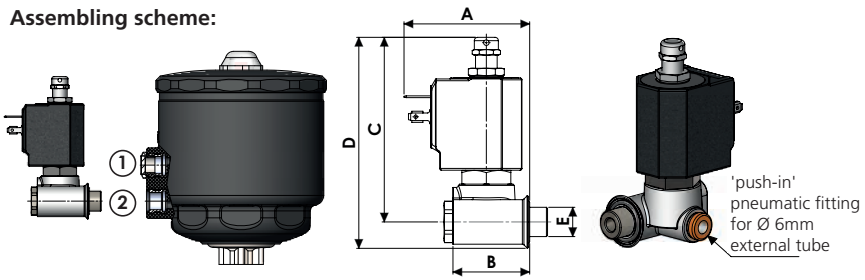
| Specifications | |
|---|---|
| Type: B356/B326/D326 Normally Closed |   |
| Media | Water, inert gases, air |
| Media Temperature | -10 °C to +60 °C |
| Ambient Temperature | -10 °C to +60 °C |
| Body Material | Brass (CW617N EN 12165) with electroless nickel plating treatment |
| Operator Material | Stainless steel |
| Seal Material | Foodgrade FKM |
| Protection Class | IP65 (with connector and gasket) |

## Features and Benefits

- Expressly designed to pilot Alcon Piston Actuated Valves
- Valve rotation 360° around port

| Dimensions & Weights | | B356 | B326 | D326 |
|---|---|---|---|---|
| Connection | | 'Push-in' | | |
| A | [mm] | 48 | 51 | 56.5 |
| B | [mm] | 31 | 34 | 34 |
| C | [mm] | 67 | 67 | 83 |
| D | [mm] | 77 | 79 | 95 |
| E | [mm] | 1/8" G | 1/4" G | 1/4" G |
| Weight | [kg] | 0.25 | 0.25 | 0.30 |

**Assembling scheme:**




Screw the pilot valve bolt into the inlet port of the piston valve actuator using a maximum torque level of 5 Nm:

- into hole ① for **NORMALLY OPEN VALVES** (RIG/RNG)
- into hole ② for **NORMALLY CLOSED VALVES** (IG-BIG/NG-BNG)

| Valve | DN | Flow rate Kvs | OPD min. | OPD max. AC | OPD max. DC |
|---|---|---|---|---|---|
| Code | [mm] | [l/min] | [barg] | [barg] | [barg] |
| **B356CVC5** | 1.5 | 0.7 | 0 | 10 | 10 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Coils | |
|---|---|
| Code | [Volts/Hz] |
| 2250A | 24v DC |
| 2200A | 24v 50/60Hz |
| 2400A | 110v 50Hz - 120v 60Hz |
| 2600A | 200v 50Hz - 220v 60Hz |
| 2700A | 230v 50Hz - 240v 60Hz |

**B356 - FKM seal, for actuator size Ø 45**

Connection: to DIN 46244
Coil power: AC 10va (holding)
AC 16va (inrush)
DC 7w

**OPTIONS**

**UL** approved coils (e.g. code 225R)
**DIN** connector code 600 001 00-

| Valve | DN | Flow rate Kvs | OPD min. | OPD max. AC | OPD max. DC |
|---|---|---|---|---|---|
| Code | [mm] | [l/min] | [barg] | [barg] | [barg] |
| **B326CVC5** | 1.5 | 0.7 | 0 | 10 | 10 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Coils | |
|---|---|
| Code | [Volts/Hz] |
| 2250A | 24v DC |
| 2200A | 24v 50/60Hz |
| 2400A | 110v 50Hz - 120v 60Hz |
| 2600A | 200v 50Hz - 220v 60Hz |
| 2700A | 230v 50Hz - 240v 60Hz |

**B326 - FKM seal, for actuator size Ø 63**

Connection: to DIN 46244
Coil power: AC 10va (holding)
AC 16va (inrush)
DC 7w

**OPTIONS**

**UL** approved coils (e.g. code 240R)
**DIN** connector code 600 001 00-

| Valve | DN | Flow rate Kvs | OPD min. | OPD max. AC | OPD max. DC |
|---|---|---|---|---|---|
| Code | [mm] | [l/min] | [barg] | [barg] | [barg] |
| **D326CVE5** | 2.0 | 1.3 | 0 | 10 | 10 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Coils | |
|---|---|
| Code | [Volts/Hz] |
| 7250A | 24v DC |
| 7200A | 24v 50/60Hz |
| 7400A | 110v 50Hz - 120v 60Hz |
| 7600A | 200v 50Hz - 220v 60Hz |
| 7700A | 230v 50Hz - 240v 60Hz |

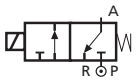
**D326 - FKM seal, for actuator size Ø 90**

Connection: to DIN EN 175301-803 form A (ex din 43650-a)
Coil power: AC 18va (holding)
AC 36va (inrush)
DC 14w

**OPTIONS**

**UL** approved coils (e.g. code 725R)
**DIN** connector code 600 011 00-

# 3/2 Way Direct Acting Pilot Solenoid Valve EXD - ATEX II 2 GD

| Specifications | |
|---|---|
| Type: N326<br>Normally Closed |  |
| Media | Water, inert gases, air |
| Media Temperature | -10 °C to +60 °C |
| Ambient Temperature | -20 °C to +50 °C |
| Body Material | Brass (CW617N EN 12165) with electroless nickel plating treatment |
| Operator Material | Stainless steel |
| Seal Material | FKM |
| Coil Protection Class | EEx m II 2GD T4 |
| Cable Type | H05V2V2-F 3G1 |
| Cable Length | 3m |

## Features and Benefits

- Expressly designed to pilot Alcon Piston Actuated Valves
- Valve rotation 360° around port

## Notes

The valve is supplied inclusive of coil with a power cable, wired on a non-removable plug
Manual override not available
Spare parts not available

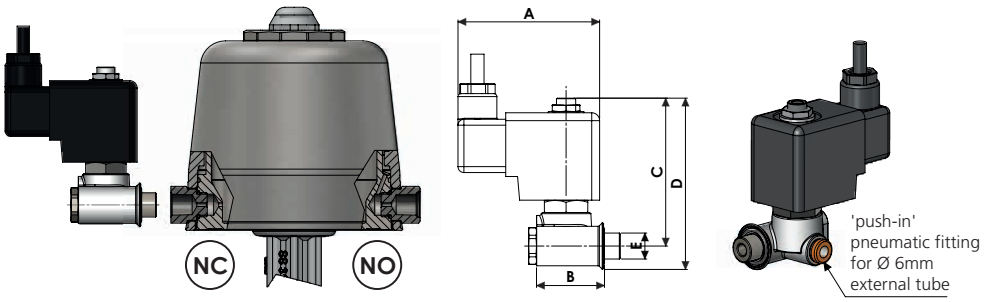
**⚠ WARNING!**

Valves for potentially explosive atmosphere are available from factory only.

**REPLACING THE SOLENOID DOESN'T MAKE A VALVE EXPLOSION-PROOF!**

| Dimensions & Weights | | N326 |
|---|---|---|
| Connection | 'Push-in' | |
| A | [mm] | 72 |
| B | [mm] | 34.5 |
| C | [mm] | 74 |
| D | [mm] | 86 |
| E | [mm] | 1/4" G |
| Weight | [kg] | 0.88 |

**Assembling scheme:**




Screw the pilot valve bolt into the inlet port of the piston valve actuator using a maximum torque level of 5 Nm:

- into hole marked NO for normally open valves (RIG)
- into hole marked NC for normally closed valves (IG-BIG)

| Valve | DN | Flow rate Kvs | OPD Min. | OPD Max. AC | OPD max. DC | Coils | | Power | Fuses[1] |
|---|---|---|---|---|---|---|---|---|---|
| Code | [mm] | [l/min] | [barg] | [barg] | [barg] | Code | [Volts/Hz] | Holding | [m/A] |
| **N326CVEK** | 2.0 | 1.3 | 0 | 10 | 10 | N253 | 24V DC | 10.1W | 800 |
| | | | | | | N203 | 24V 50/60Hz | 7.2VA | 800 |
| | | | | | | N403 | 110V 50Hz | 9.1VA | 200 |
| | | | | | | NK03 | 120V 60Hz | 8.6VA | 200 |
| | | | | | | N703 | 230V 50Hz | 8.5VA | 100 |

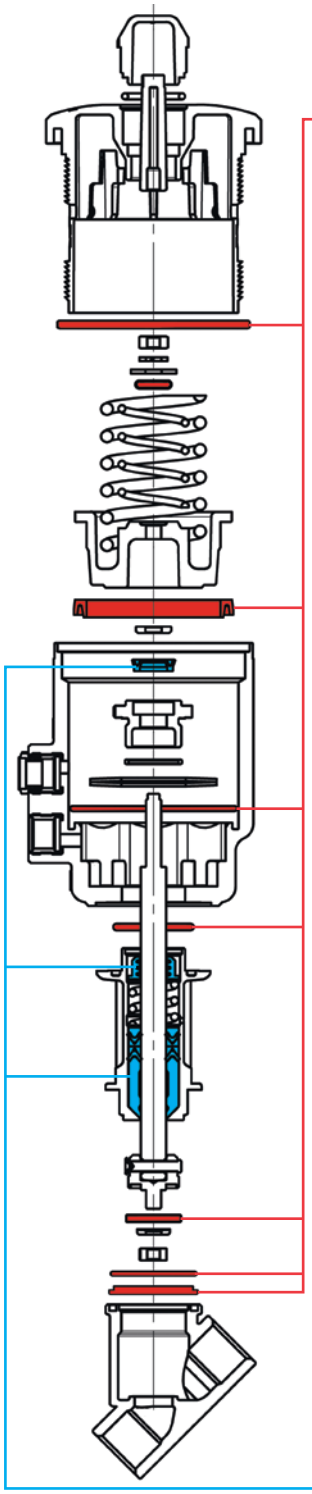
**⚠ WARNING**

1. A mains fuse or an equivalent means of protection (breaking value shown on table for each coil) shall be installed on the mains supply line. **Absence of mains protection does not conform to safety standards (EC Directives 94/9/EC and 1999/92/EC) and could be a potential risk of explosion.**

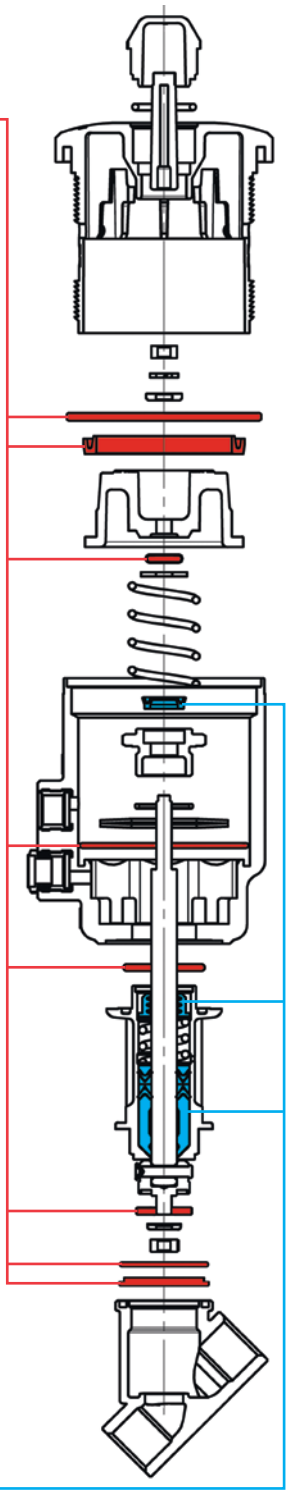
# Seal Kit for Stainless Steel Valves Actuator Ø 63/90

Maintenance operations must be carried out by qualified personnel according to manufacturer's instructions.
To replace seals, please refer to the instruction manual provided with the valve.

**Normally Closed**



**Normally Open**



| SPARE PARTS KIT: Lip seal, o-rings, main seal, body seal | | | |
|---|---|---|---|
| **Kit code** | **DN** | **Valve Type[1]** | **Actuator** |
| 856 111 A0- | 15 | IG/RIG/BIG-<br>IN/RIN/BIN-<br>IW/RIW/BIW-<br>IB/RIB/BIB-<br>ID/RID/BID-<br>IA/BIA/RIA-<br>IC/RIC/BIC-<br>IP/RIP/BIP-<br>IR/RIR/BIR-<br>High Temperature Version | Ø 63 |
| 856 122 A0- | 20 | | |
| 856 133 A0- | 25 | | |
| 856 144 A0- | 32 | | |
| 856 155 A0- | 40 | | |
| 856 166 A0- | 50 | | |
| 856 611 A0- | 15 | DIG/DIN- | |
| 856 622 A0- | 20 | | |
| 856 633 A0- | 25 | | |
| 856 644 A0- | 32 | | |
| 856 655 A0- | 40 | | |
| 856 666 A0- | 50 | | |
| 856 313 A0- | 25 | IG/RIG/BIG-<br>IN/RIN/BIN-<br>IW/RIW/BIW-<br>IB/RIB/BIB-<br>ID/RID/BID-<br>IA/BIA/RIA-<br>IC/RIC/BIC-<br>IP/RIP/BIP-<br>High Temperature Version | Ø 90 |
| 856 314 A0- | 32 | | |
| 856 315 A0- | 40 | | |
| 856 316 A0- | 50 | | |

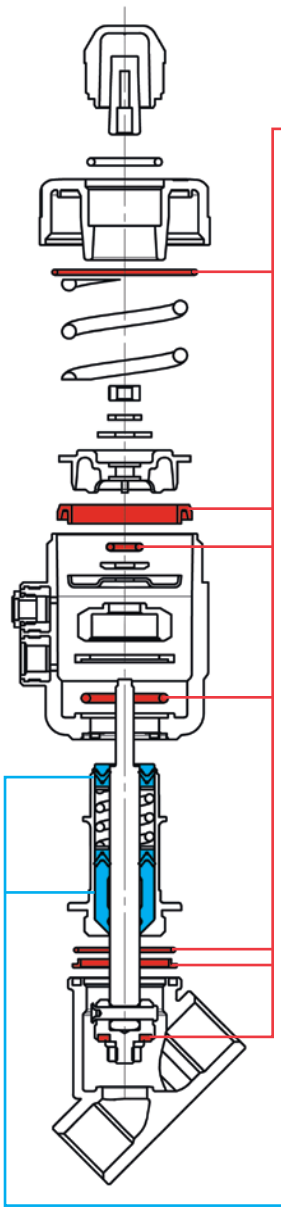
| STEM SEALS KIT | | | |
|---|---|---|---|
| **Kit Code** | **DN** | **Valve Type[1]** | **Actuator** |
| 856 802 A0- | all | IG/RIG/BIG/DIG-<br>IN/RIN/BIN/DIN-<br>IW/RIW/BIW-<br>IB/RIB/BIB-<br>ID/RID/BID-<br>IA/BIA/RIA-<br>IC/RIC/BIC-<br>IP/RIP/BIP-<br>IR/RIR/BIR- | Ø 63/90 |
| 856 900 A0- | 15 | High Temperature Version | Ø 63 |
| 856 901 A0- | 20 | | |
| 856 902 A0- | 25 | | |
| 856 903 A0- | 32 | High Temperature Version | Ø 90 |
| 856 904 A0- | 40 | | |
| 856 905 A0- | 50 | | |

1. Included versions with optional: stroke regulator (e.g. code IW208SXZR0) and travel switch version (e.g. code BIG209LXKI0)

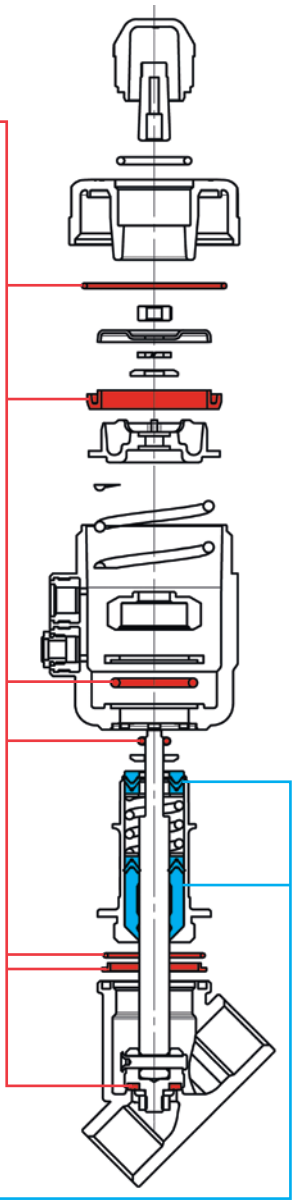
# Seal Kit For Stainless Steel Valves Actuator Ø 45

Maintenance operations must be carried out by qualified personnel according to manufacturer's instructions.
To replace seals, please refer to the instruction manual provided with the valve.

**Normally Closed**



**Normally Open**



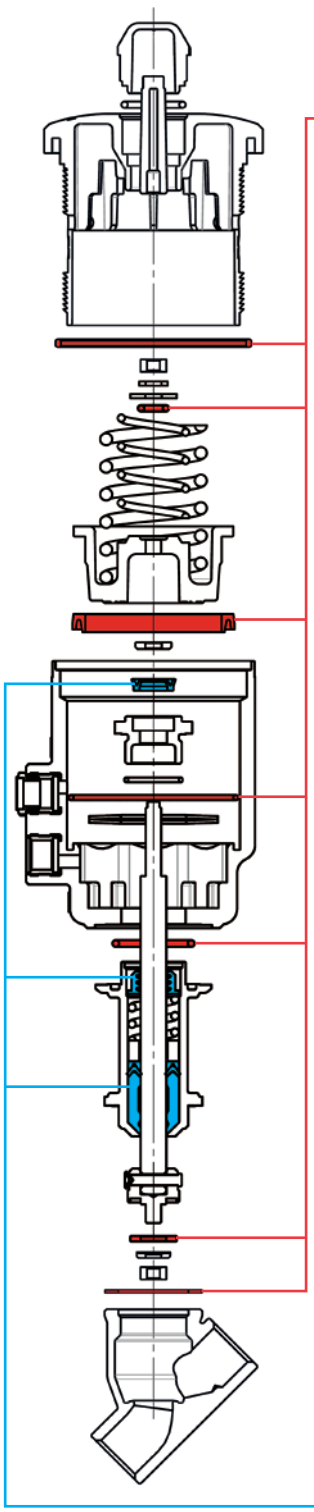
| SPARE PARTS KIT: Lip seal, o-rings, main seal, body seal | | | |
|---|---|---|---|
| **Kit Code** | **DN** | **Valve Type** | **Actuator** |
| 856 011 A0- | 15 | IG/RIG/BIG-<br>IN/RIN/BIN-<br>IW/RIW/BIW-<br>IB/RIB/BIB-<br>IC/RIC/BIC-<br>IP/RIP/BIP-<br>IR/RIR/BIR | Ø 45 |
| 856 012 A0- | 20 | | |
| 856 013 A0- | 15 | DIG/DIN- | |
| 856 014 A0- | 20 | | |

| STEM SEALS KIT | | | |
|---|---|---|---|
| **Kit code** | **DN** | **Valve Type** | **Actuator** |
| 856 801 A0- | all | all | Ø 45 |

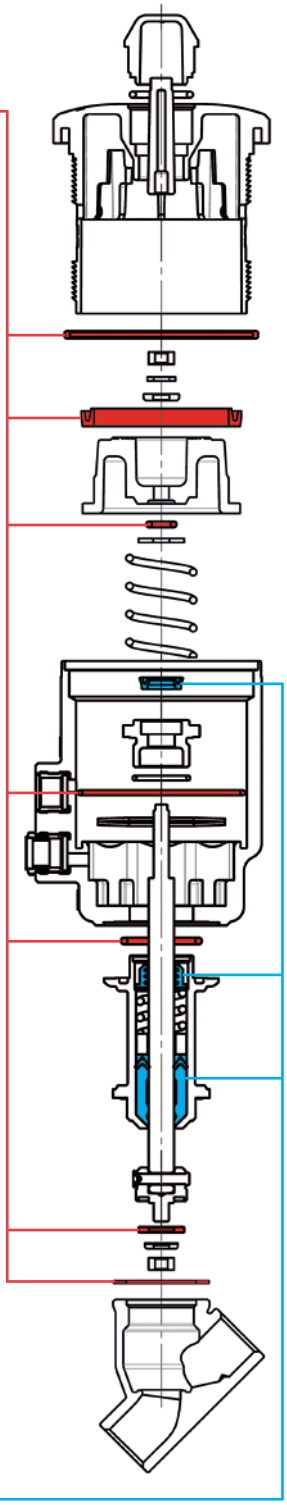
# Seal Kit For Bronze Valves Actuator Ø 63/90

Maintenance operations must be carried out by qualified personnel according to manufacturer's instructions.
To replace seals, please refer to the instruction manual provided with the valve.

**Normally Closed**



**Normally Open**



| SPARE PARTS KIT: Lip seal, o-rings, main seal, flat seal | | | |
|---|---|---|---|
| **Kit Code** | **DN** | **Valve Type[1]** | **Actuator** |
| 856 112 A0- | 15 | NG/RNG/BNG-NN/RNN/BNN- | Ø 63 |
| 856 123 A0- | 20 | | |
| 856 134 A0- | 25 | | |
| 856 145 A0- | 32 | | |
| 856 156 A0- | 40 | | |
| 856 167 A0- | 50 | | |
| 856 612 A0- | 15 | DNG/DNN- | |
| 856 623 A0- | 20 | | |
| 856 634 A0- | 25 | | |
| 856 645 A0- | 32 | | |
| 856 656 A0- | 40 | | |
| 856 667 A0- | 50 | | |
| 856 317 A0- | 25 | NG/RNG/BNG-NN/RNN/BNN- | Ø 90 |
| 856 318 A0- | 32 | | |
| 856 319 A0- | 40 | | |
| 856 320 A0- | 50 | | |

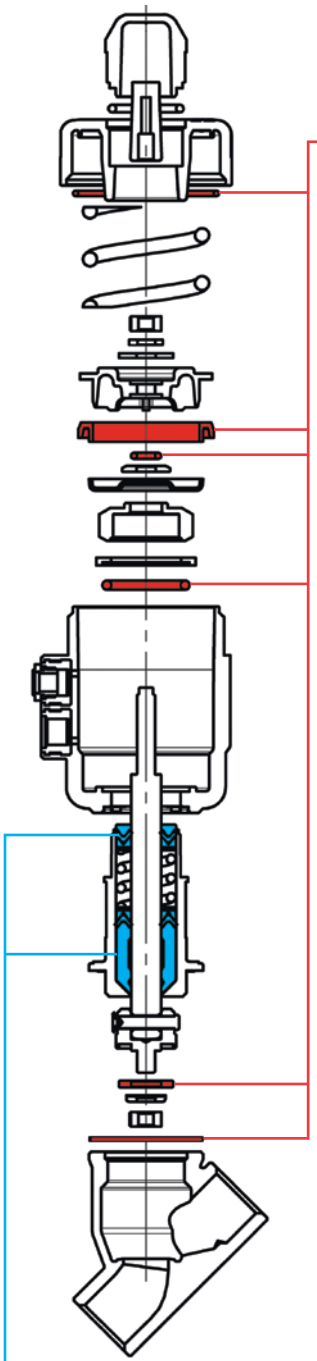
| STEM SEALS KIT | | | |
|---|---|---|---|
| **Kit Code** | **DN** | **Valve Type[1]** | **Actuator** |
| 856 802 A0- | all | NG/RNG/BNG-/DNG-NN/RNN/BNN/DNN- | Ø 63/90 |

1. Included versions with optional: stroke regulator (e.g. code NG206SXXR0) and travel switch version (e.g. code BNG210LXJI0)

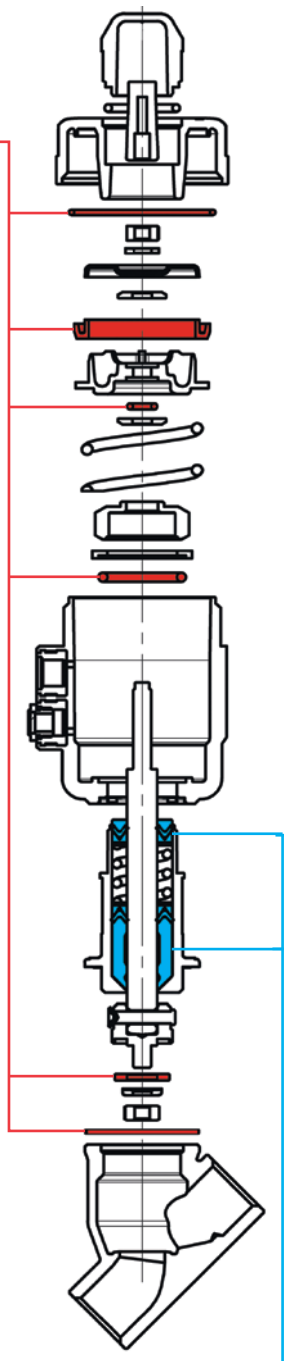
# Seal Kit For Bronze Valves Actuator Ø 45

Maintenance operations must be carried out by qualified personnel according to manufacturer's instructions.
To replace seals, please refer to the instruction manual provided with the valve.

**Normally Closed**



**Normally Open**



| SPARE PARTS KIT: Lip seal, o-rings, main seal, flat seal | | | |
|---|---|---|---|
| **Kit Code** | **DN** | **Valve Type** | **Actuator** |
| 856 015 A0- | 15 | NG/RNG/BNG-NN/RNN/BNN- | Ø 45 |
| 856 016 A0- | 20 | | |
| 856 017 A0- | 25 | | |
| 856 018 A0- | 15 | DNG/DNN- | |
| 856 019 A0- | 20 | | |
| 856 020 A0- | 25 | | |

| STEM SEALS KIT | | | |
|---|---|---|---|
| **Kit Code** | **DN** | **Valve Type** | **Actuator** |
| 856 801 A0- | all | all | Ø 45 |

## Valve Selection

Piston actuated valves use an external control medium to pilot the actuator, where a piston is directly connected to the main seal that closes onto the main orifice, thereby controlling the flow of liquids and gases.

They are highly recommended under the following conditions:

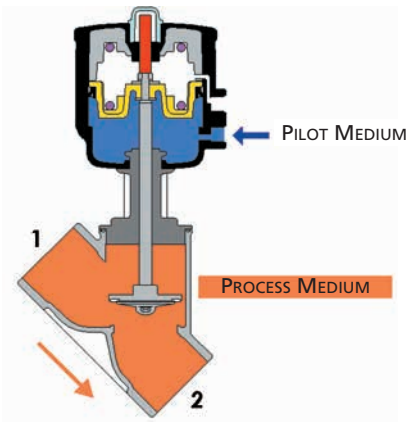
- Media containing dirt particles
- Highly viscous media (up to 600 cST (80°E) - 1 centistoke = 1 mm²/s)
- High flow volumes
- High temperatures
- Damp environments or hazardous locations

Flow values shown in the selection tables are subject to a tolerance of ± 15%.

## Alcon Piston Actuated Valve Versions

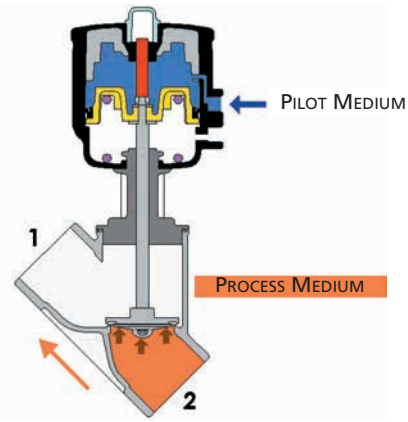
### NC Valve – Flow over seat

The pressure of the pilot medium opens the valve, the spring closes it.



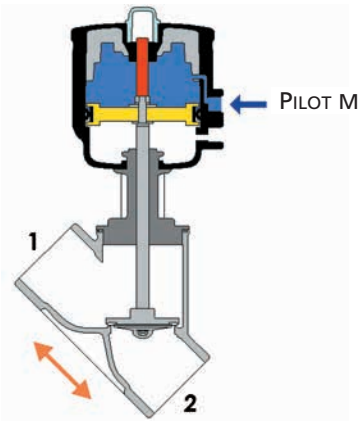

### NO Valve – Flow under seat

The pressure of the pilot medium closes the valve, the spring force opens it.



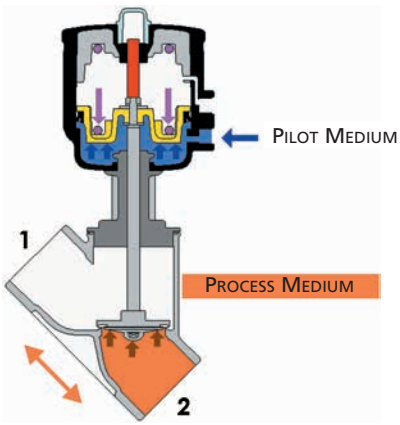

### DOUBLE ACTING Valve – Flow over seat or under seat

The pilot medium opens and closes the valve. No springs. Two 3/2 pilot valves required.




### BI-DIRECTIONAL NC Valve – Flow over seat or under seat

The pressure of the pilot medium opens the valve, the spring closes it. There are two springs and the valve can be used both over seat and under seat.



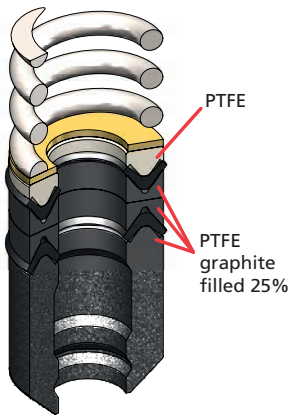
# Technical Information

Alcon piston actuated valves have been upgraded over the years both by design improvements as well as by using better performing materials. Below you will find some highlights about the outstanding features of Alcon piston actuated valves.

### Main seal material:

In 2004 standard PTFE was replaced by new modified PTFE and some design changes in the main seal were introduced. Modified PTFE has a better particle fusion, which gives the following improved features in comparison with PTFE:

- Lower porosity and permeability
- Fewer void spaces
- Higher elasticity
- Reduced deformation under load
- Better chemical resistance to controlled media
- Smoother surface and improved design flexibility




### Bonnet chevron packing:

Standard bonnet seals consist of 2 'V'-shaped FKM gaskets and a package of 25% graphite-filled PTFE gaskets.

### Stainless steel cast parts:

All our stainless steel series are fitted with bodies and bonnets cast specifically to Norm ASME SA351/351M GRADE CF3M, which is the Alloy Casting Institute designation for cast AISI 316L (normally used for wrought materials).

ACI designation is adopted by many standards issuing organizations, such as ASTM (for instance in ASME B 31.3 for stainless steel castings , appendix B and D, concerning recommended selection of materials for valves manufacturing). Our cast AISI 316L has a minimum content of 10% nickel, which gives improved ductility and strength.

This type of stainless steel can be compared to EN 1.4409 with a good approximation.

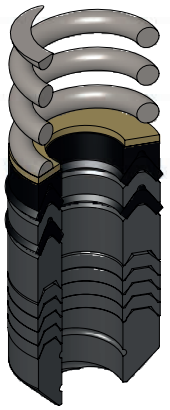
All our stainless steel cast parts bear a heat number identifying the basic material composition. Such details are stated in the casting certificate 3.1b, that can be ordered with the valves at an additional fee.

### High temperature piston actuated valves:

Alcon has developed a piston actuated valve version that can be used up to 200 ° C, provided that the valve pressure limits are respected.

The main differences as regards materials and design are the following:

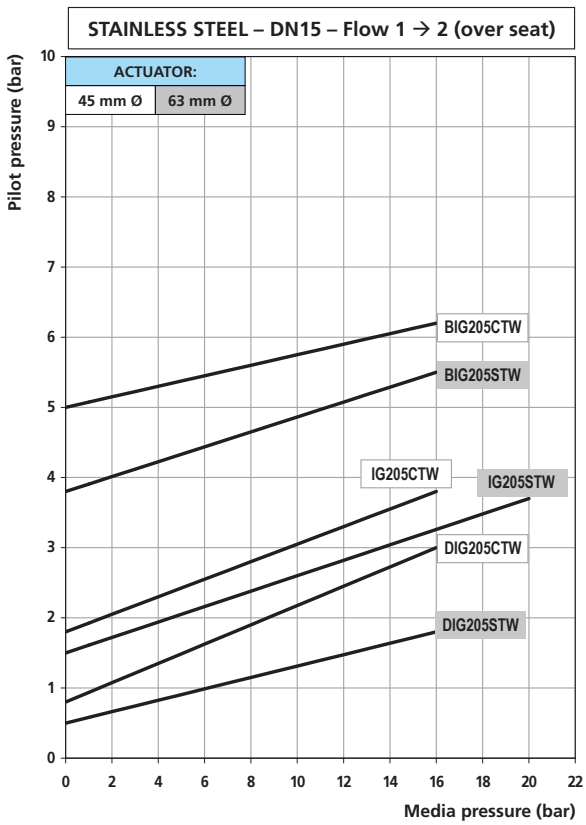
- Change of the actuator material: from standard PA6 to PA66 filled with 30% fibreglass
- All valves with DN > 25 with fixed plug design (to withstand turbulence caused by steam at high speed)
- Special design of bonnet chevrons, all are made of 25% graphite-filled PTFE

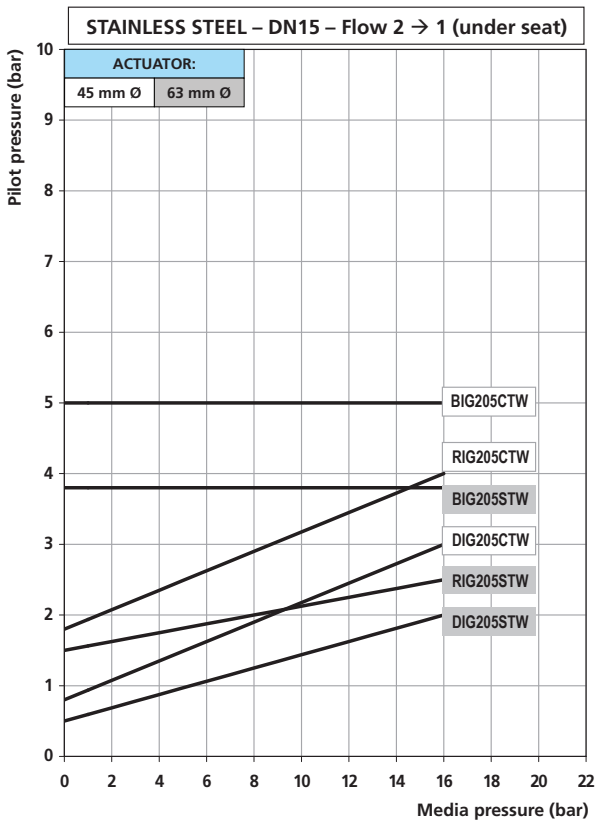


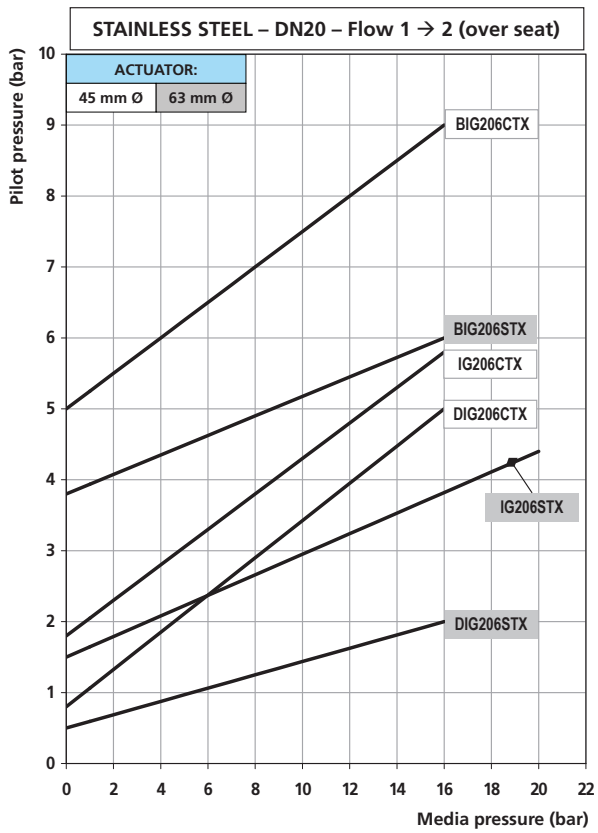
### Body Pressure (PN) chart and PED classification:

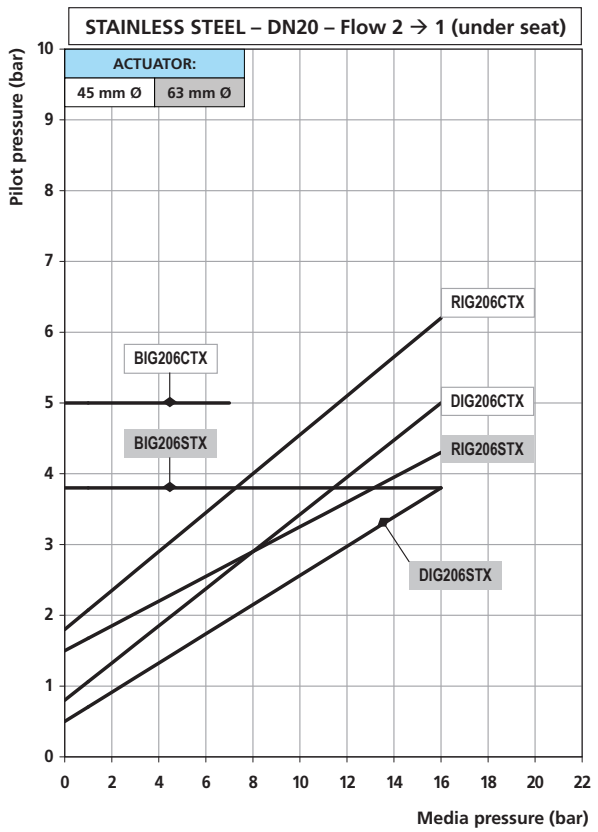
Alcon valve bodies bear a PN value which is to be intended as the body design pressure in bar. We use this value as a reference to perform burst tests on the bodies and bonnets upon quality control acceptance. This value is not related to the applicable medium pressure once the valve is in operation. The correct medium pressure is indicated on the valve label and is specific for each valve size and function.

# Stainless Steel Valves Comparative Charts DN15 to DN20



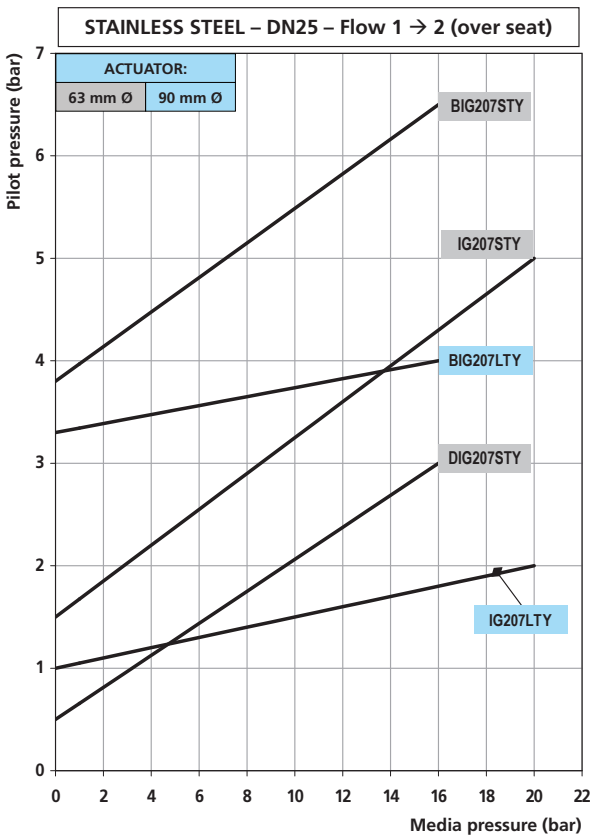



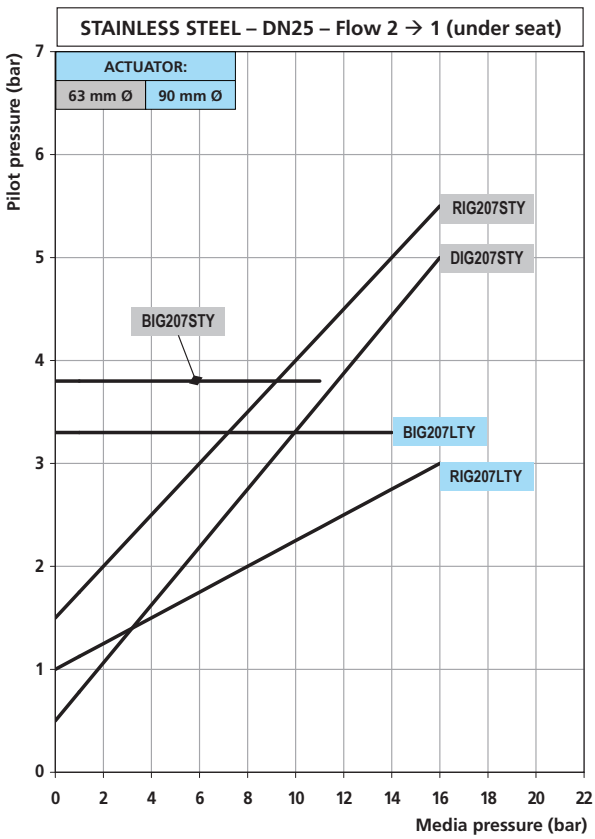



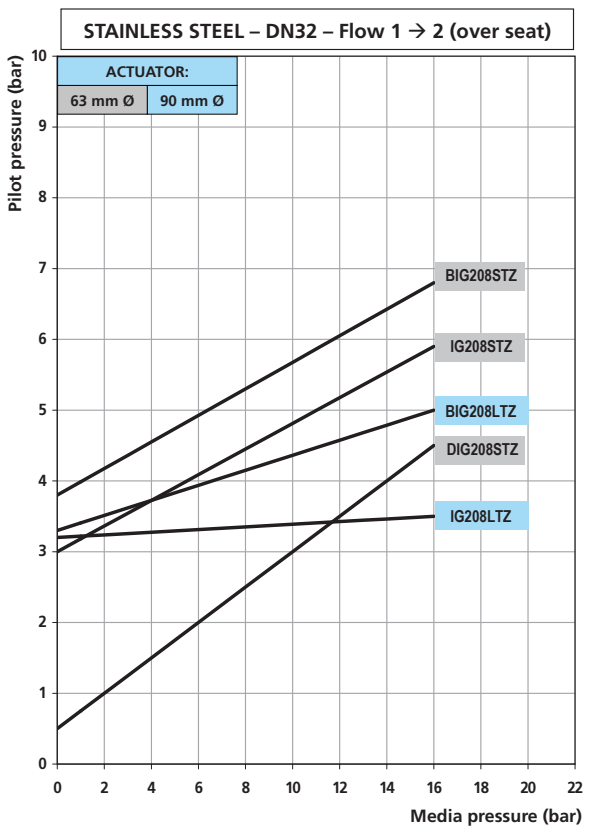



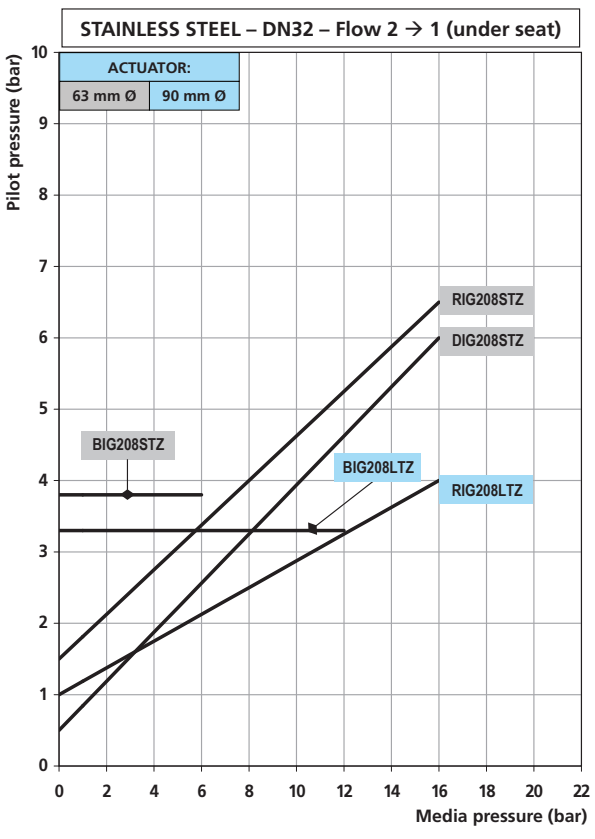

**Version: IG** = Normally Closed, **BIG** = Normally Closed (anti-waterhammer), **RIG** = Normally Open, **DIG** = Double Acting

# Stainless Steel Valves Comparative Charts DN25 to DN32



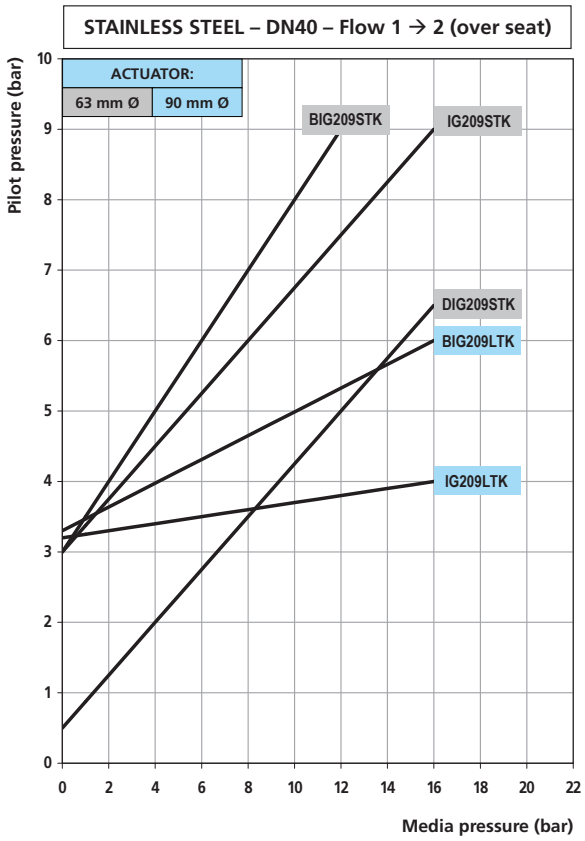



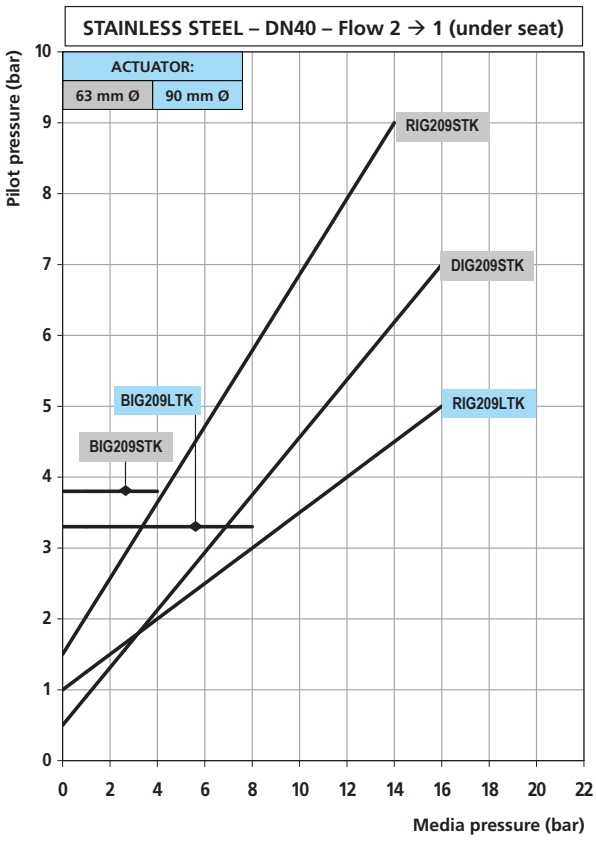



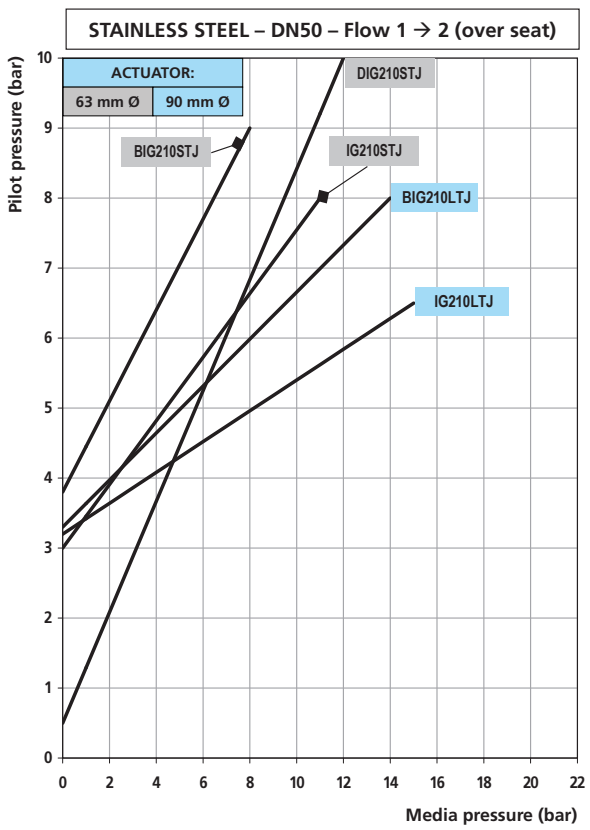



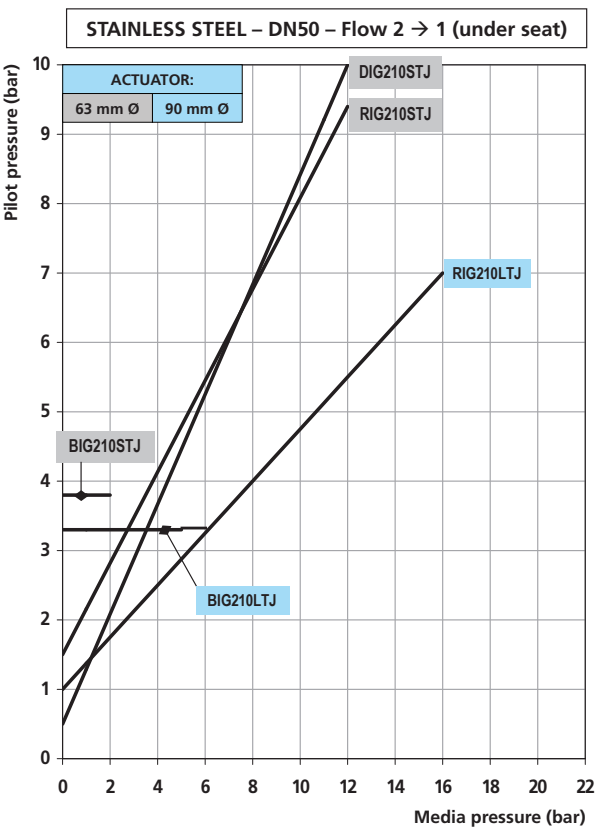

**Version: IG** = Normally Closed, **BIG** = Normally Closed (anti-waterhammer), **RIG** = Normally Open, **DIG** = Double Acting

# Stainless Steel Valves Comparative Charts DN40 to DN50



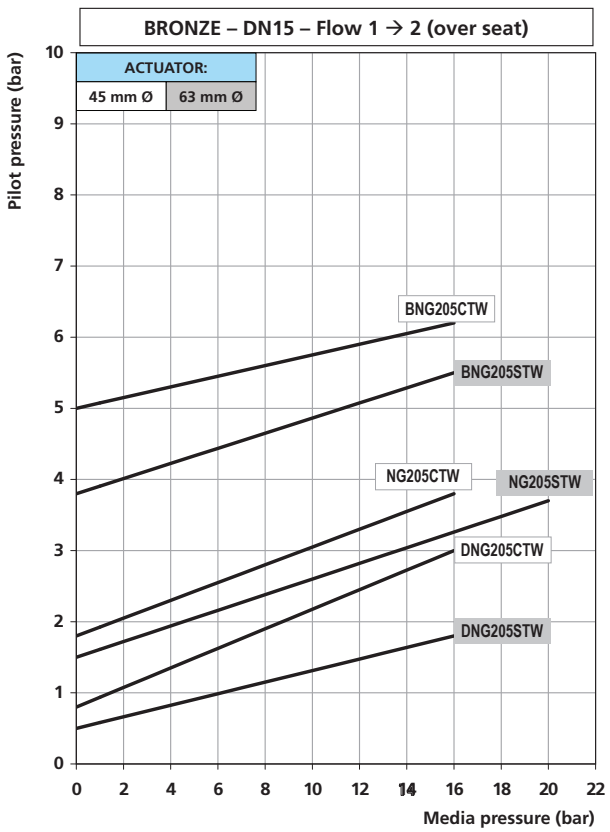



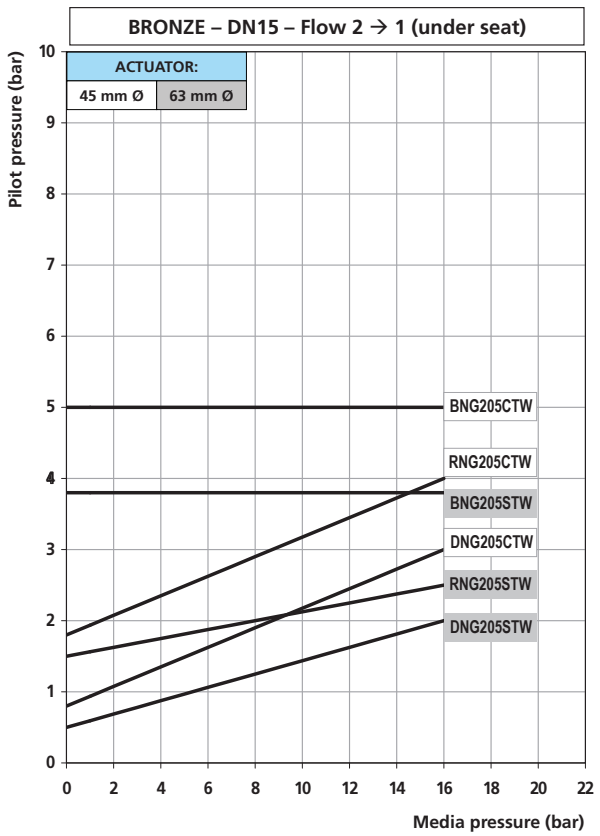



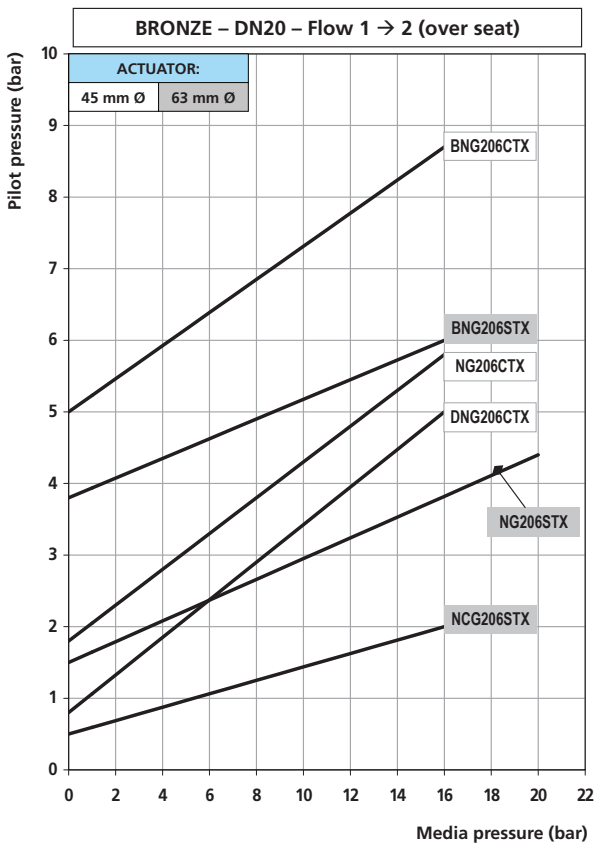



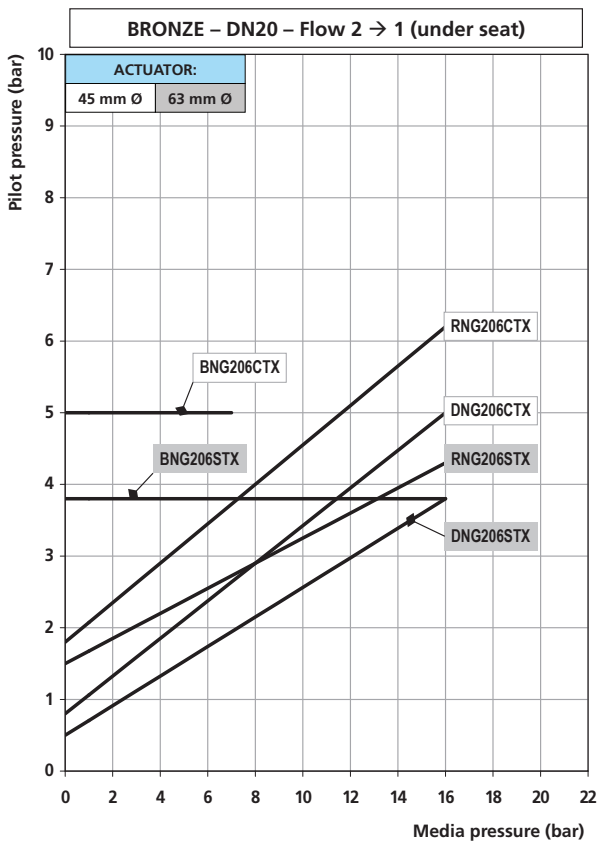

**Version: IG** = Normally Closed, **BIG** = Normally Closed (anti-waterhammer), **RIG** = Normally Open, **DIG** = Double Acting

# Bronze Valves Comparative Charts DN15 to DN20



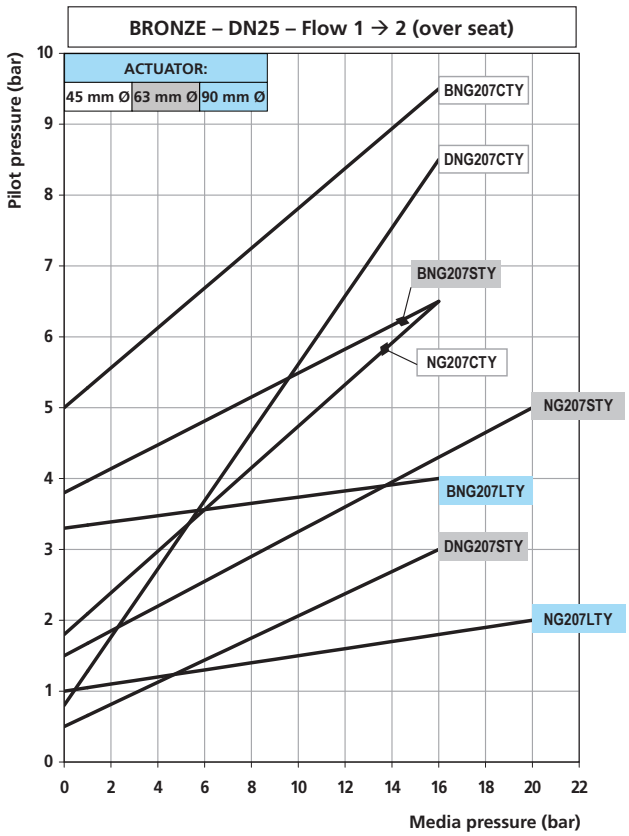



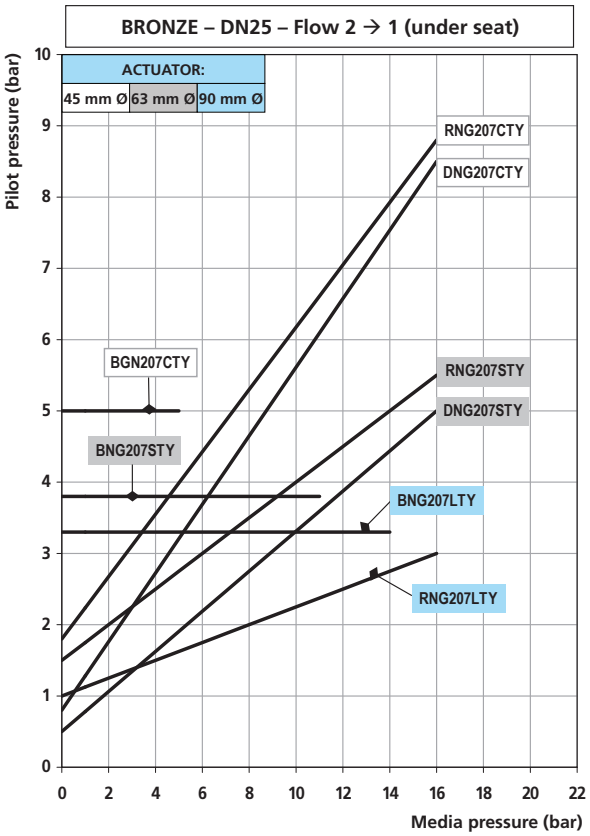



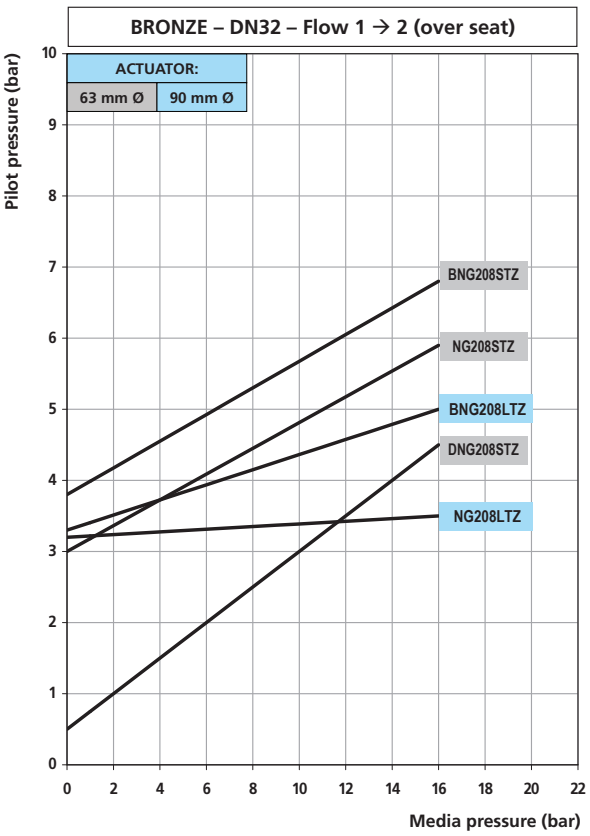



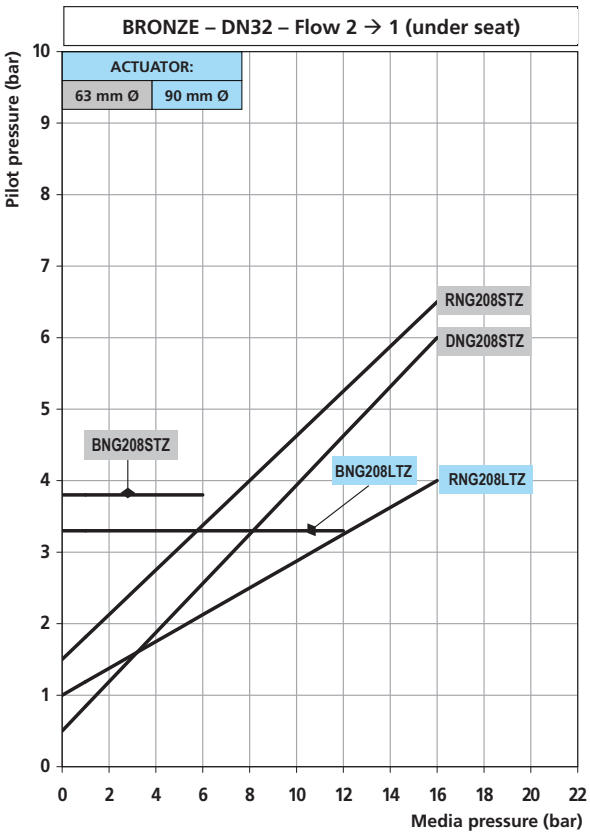

**Version: NG** = Normally Closed, **BNG** = Normally Closed (anti-waterhammer), **RNG** = Normally Open, **DNG** = Double Acting

# Bronze Valves Comparative Charts DN25 to DN32



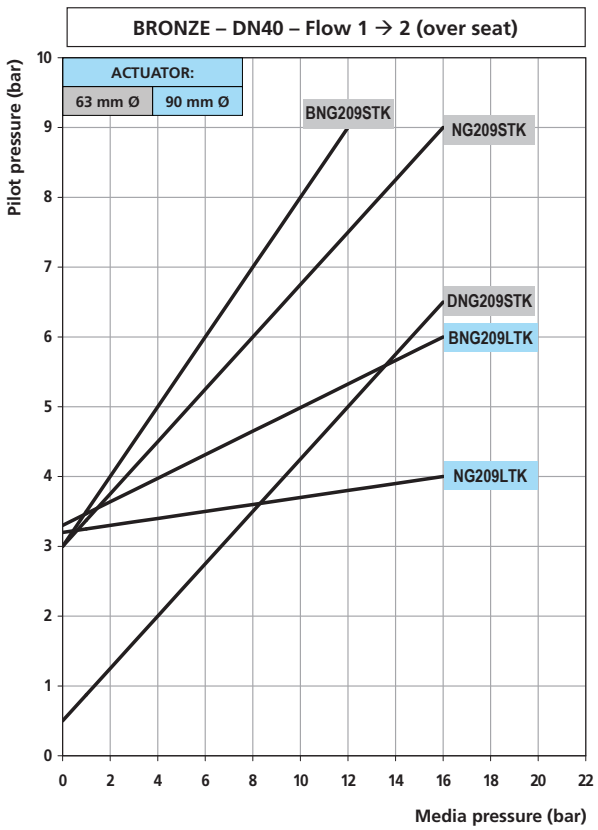



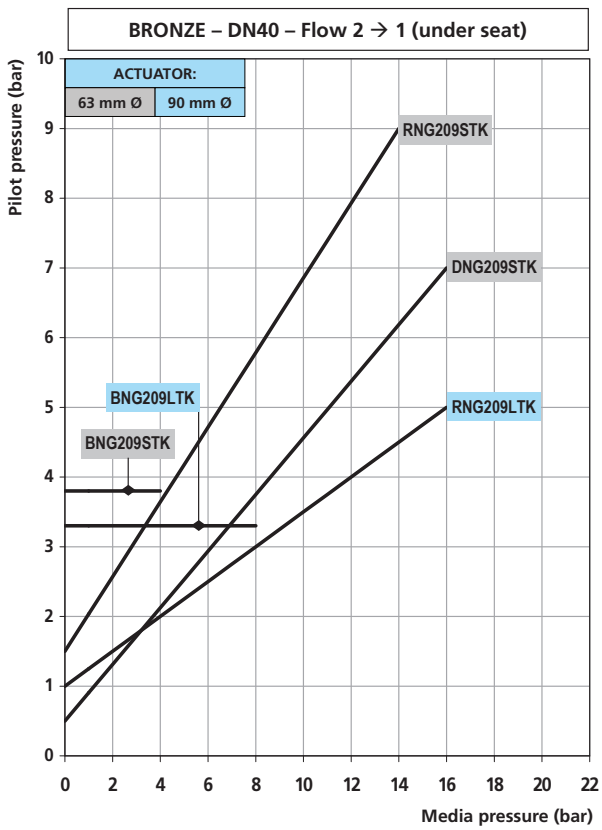



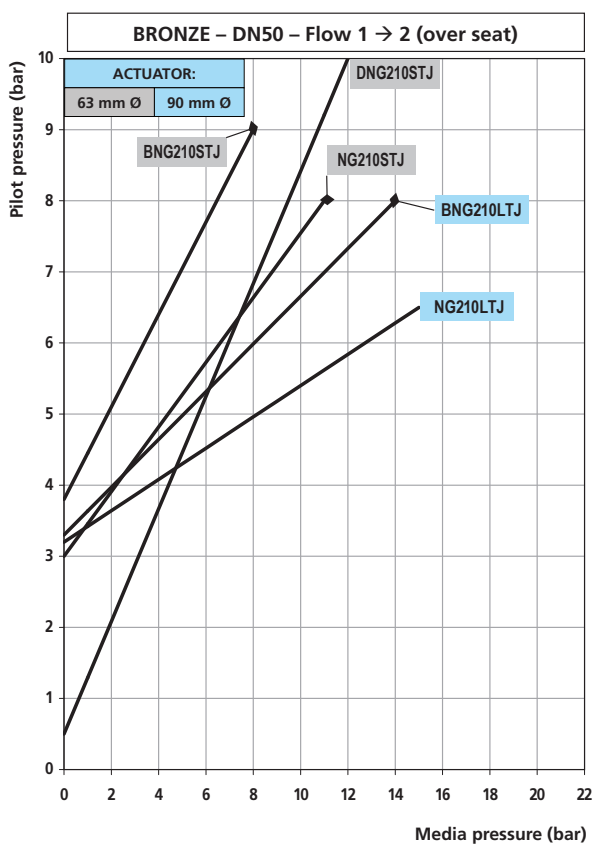



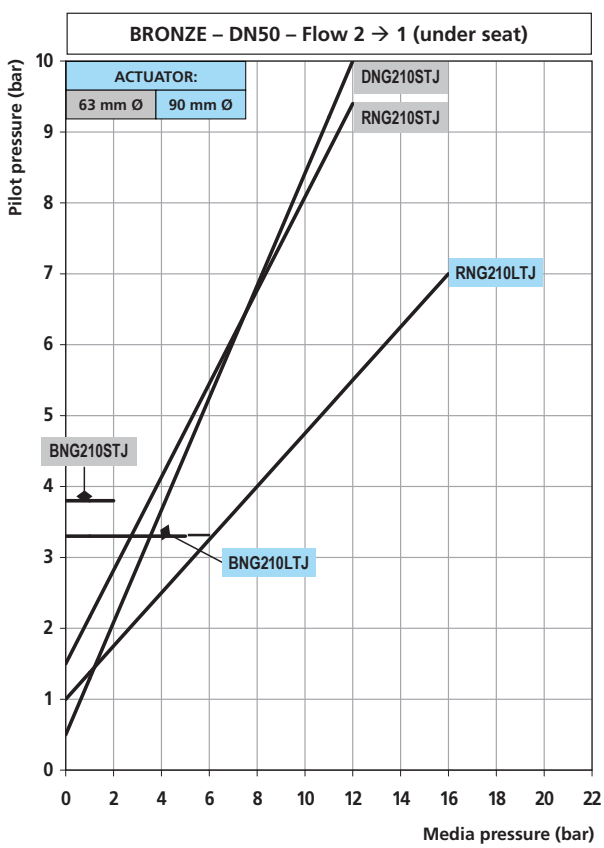

**Version: NG** = Normally Closed, **BNG** = Normally Closed (anti-waterhammer), **RNG** = Normally Open, **DNG** = Double Acting

# Bronze Valves Comparative Charts DN40 to DN50




**Version: NG** = Normally Closed, **BNG** = Normally Closed (anti-waterhammer), **RNG** = Normally Open, **DNG** = Double Acting

# Piston Valves Opening/Closing Times (sec)

### NC Version – Flow Direction 1 → 2

| DN [mm] | Actuator Ø 45 1,5 mm pilot orifice B356- | | Actuator Ø 63 1,5 mm pilot orifice B326- | | Actuator Ø 90 2,0 mm pilot orifice D326- | |
|---|---|---|---|---|---|---|
| | NC | | NC | | NC | |
| | o | c | o | c | o | c |
| **15** | 0,09 | 0,22 | 0,14 | 0,3 | - | - |
| **20** | 0,09 | 0,22 | 0,2 | 0,3 | - | - |
| **25** | - | - | 0,32 | 0,34 | 0,32 | 0,34 |
| **32** | - | - | 0,34 | 0,38 | 0,36 | 0,4 |
| **40** | - | - | 0,34 | 0,38 | 0,4 | 0,46 |
| 50 | - | - | 0,36 | 0,38 | 0,4 | 0,46 |

**Notes:**

Pilot pressure: 6 bar
Pilot media: AIR
Pressure in body: 0 bar
For Normally Open valves (NO) invert columns o and c

# Actuator Volumes

| Actuator | Air Volume |
|---|---|
| [mm] | [dm³] |
| Ø 45 mm | 0,036 |
| Ø 63 mm | 0,099 |
| Ø 90 mm | 0,212 |

# PISTON ACTUATED VALVE CODING

| CODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | – | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Function | |
|---|---|
| – = | NC Normally closed |
| B = | NC Bidirectional |
| R = | NO Normally open |
| D = | DA Double acting |
| Z = | Control / Modulating |

| Ways |
|---|
| 2 |

| Set-up DIP switch parameters (only for Control Piston Valves) |
|---|

| Special Execution | |
|---|---|
| 0 = | Standard |
| H = | High temperature (SS) |
| K = | Nickel plated + hardening treatment |
| V = | Vacuum seal (bronze) |

| Serial Letter | |
|---|---|
| I = | Stainless steel type |
| N = | Bronze / Brass type |
| M = | Compact brass type |

| Optional Features | |
|---|---|
| 0 = | NO optional features |
| A = | Mechanical position module |
| B = | Inductive position module |
| E = | Equi% Plug (only control PAV) |
| L = | Linear Plug (only control PAV) |
| I = | Travel switch |
| R = | Stoke regulator |
| X = | Atex inductive switch (only for ATEX PAV) |

| Orifice [Ø mm] | |
|---|---|
| W = | 15 |
| X = | 20 |
| Y = | 25 |
| Z = | 32 |
| K = | 40 |
| J = | 50 |

| Connection Type | |
|---|---|
| 0 = | Operator (w/o body) |
| A = | Flange (ANSI B16.10 Class 150) |
| B = | Butt weld (ISO 65 - ANSI B 36.10) |
| C = | Clamp (ISO 2852) |
| D = | Flange (EN 1092 shape B) |
| G = | GAS (ISO 228) |
| N = | NPT |
| P = | Clamp connection (ASME BPE) |
| R = | Threaded spigots |
| W = | Butt weld (DIN 11850) |

| Seal Material | |
|---|---|
| B = | NBR (only for BLG) |
| P = | PEEK |
| X = | PTFE |

| Valve Body ID. Code | |
|---|---|
| 04 = | 3/8" (only for BLG) |
| 05 = | 1/2" |
| 06 = | 3/4" |
| 07 = | 1" |
| 08 = | 1 – 1/4" |
| 09 = | 1 – 1/2" |
| 10 = | 2" |
| 11 = | 1 3/4" |
| 12 = | 2 3/8" |

| Actuator Type | |
|---|---|
| 0 = | Manual angle seat valve |
| D = | Ø 32 only for BLG |
| C = | Ø 45 Polyamide |
| S = | Ø 63 Polyamide |
| L = | Ø 90 Polyamide |
| M = | Ø 63 AISI (for ATEX PAV) |
| G = | Ø 90 AISI (for ATEX PAV) |

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A full listing of our worldwide sales and service network is available on our website.

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