

G 3/8, G 1/2, G 3/4, G 1



Advantages/Benefits

- ▶ Normally closed or open
- ▶ Body materials: Brass, stainless steel
- ▶ Double spindle seal
- ▶ Compact Design

Design/Function

This externally piloted 2/2 valve is available in normally-open and normally-closed functions.

In circuit function A, it is closed by spring action when depressurised. It opens if a control pressure is applied. In circuit function B, normally open, the functioning principle is reversed.

Applications

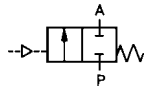
- Neutral gases and liquids
- Also suitable for fluids at higher temperatures
- Food processing
- Process technology
- Medical technology
- Chemical cleaning and washing systems
- Hazardous environments

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Easy Fluid Control Systems

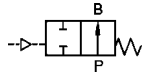
Technical Data

Circuit Functions

A 2/2-way valve,
normally closed by spring action.



B 2/2-way valve,
normally open by spring action.



Body Material

Body: Brass or stainless steel
Valve internals: 1.4021 and 1.4104
Actuator: epoxy resin

Specifications

| Orifice DN | Kv-Value Water | Pressure Range | | | Weight ¹⁾ |
|---|---------------------|----------------|------------------------------|--------|----------------------|
| | | WW A | WW A Reinforced Spring | WW B | |
| [mm] | [m ³ /h] | [bar] | [bar] | [bar] | [kg] |
| 10 | 1,0 | 0- 5 | 0-10 | 0-10 | 0,5 |
| 12 | 2,1 | 0- 3,5 | 0- 6 | 0-10 | 0,6 |
| 20 | 6,5 | - | 0- 1,5 | 0- 1,5 | 1,0 |
| 25 | 10,0 | - | 0- 1 | 0- 1 | 1,4 |
| Steam version (seal materials PTFE/EPDM and PTFE/FPM) | | | | | |
| 10 | 1.0 | - | 0-10 | - | 0.5 |
| 12 | 2.1 | - | 0- 6 | - | 0.6 |

¹⁾ iWith integrally mounted pilot valve Type 301 the weight is increased per 175 g., ²⁾ Also suitable for vacuum.

The required control pressures can be found in the diagrams.
All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure.

Operating Data (Valve)

Seal Materials/Fluids Handled/Temp.- Range

| | | |
|---------------------|---|-----------------|
| NBR | Neutral fluids, e.g. compressed air, town gas, water, hydraulic oils | -10 to +90 °C |
| EPDM | Oil- and fat-free fluids, e.g. hot water, alkaline washing and bleaching lyes | -10 to +100 °C |
| FPM | Fluids, NBR and EPDM are not suitable for, e.g. hot air, oxygen, per-solutions hot oils, freons | -10 to + 100 °C |
| PTFE/ ³⁾ | Oil- and fat-free fluids, e.g. hot | |
| EPDM | water and steam | -10 to +140 °C |
| PTFE/ ³⁾ | Hot oils, hydrocarbons, aromatics | |
| FPM | and steam | -10 to +140 °C |

³⁾ PTFE with EPDM- or FPM-O-rings.
For more detailed information see resistance chart (Leaflet-No. 1896009).

Max. ambient temperature 90 °C, with integrally mounted pilot valve 55 °C

Max. viscosity 100 mm²/s

Operating Data (Actuator)

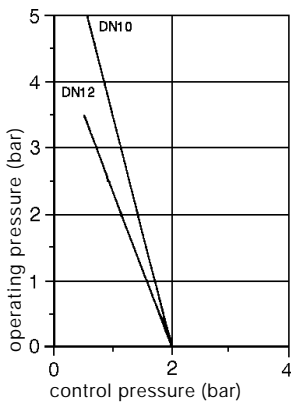
Control fluid Neutral gases and liquids, esp. air, water, hydraulic liquids, up to max. 90 °C.

Installation / Accessories

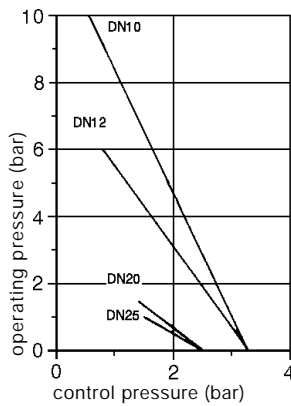
Installation as required
Port connection G 3/8, 1/2, 3/4, 1

Diagrams: Operating Pressure - Control Pressure

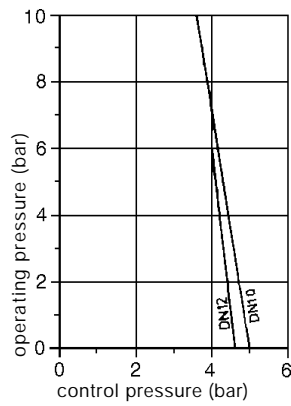
Circuit Function A



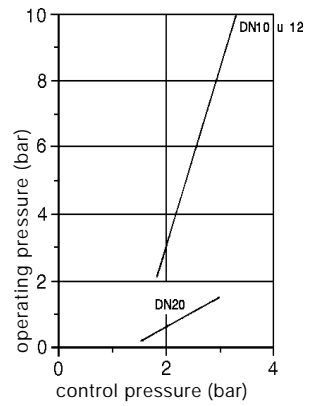
Circuit Function A, Reinforced Spring



Circuit Function A, with PTFE/... Seal Material

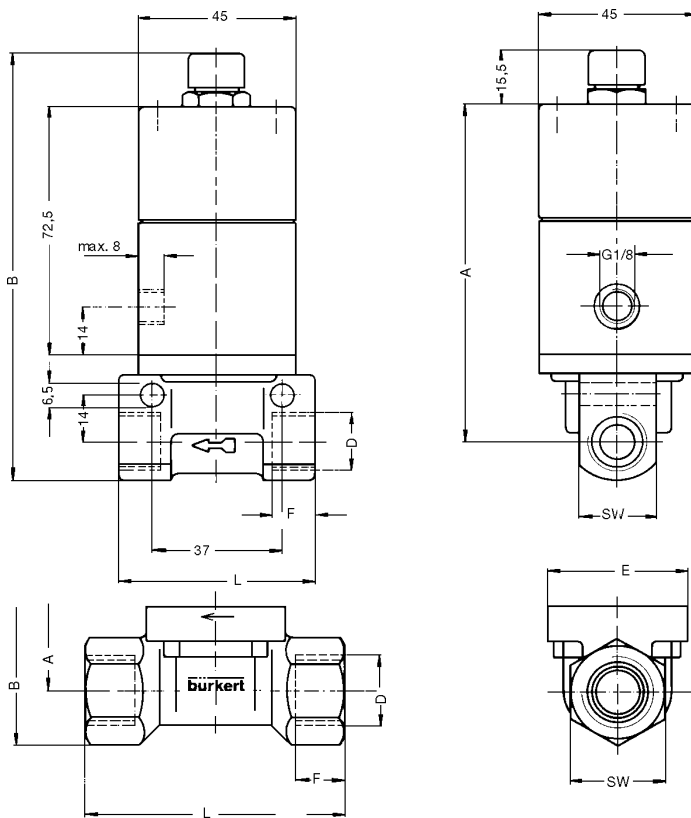


Circuit Function B



Dimensions in mm

Circuit Function A



Circuit function B:
 Replace exhaust muffler with blanking plug.
 Threaded connection for control pressure located in the upper part of the actuator.

Body DN 10

Body DN 12

| Orifice [mm] | D | A | B | E | F | L | SW |
|--------------|-------|-------|-------|----|----|------|----|
| 10 | G 3/8 | 97,5 | 124 | 45 | 12 | 56 | 22 |
| 12 | G 1/2 | 96,5 | 127,5 | 40 | 14 | 74,5 | 27 |
| 20 | G 3/4 | 109,5 | 141 | 60 | 16 | 100 | 32 |
| 25 | G 1 | 114 | 150 | 70 | 18 | 115 | 41 |

Ordering Chart (Other Versions on Request)

| Circuit Function | Orifice DN [mm] | Flow Rate Water Kv-Value [m ³ /h] | Port Connection (ISO 228) | Pressure Range [bar] | Body Material | Seal Material | Weight [kg] | Order-No. | | |
|------------------|-----------------------|---|---------------------------------|----------------------------|------------------|-------------------------|-------------------------|-------------------------|------|-------------------------|
| A | 10,0 | 1,0 | G 3/8 | 0- 5 | Brass | EPDM | 0,5 | 026 059 V | | |
| | | | | 0-10 | Brass | EPDM | 0,5 | 027 400 W ¹⁾ | | |
| | | | | 0- 5 | Brass | NBR | 0,5 | 026 287 P | | |
| | | | | 0-10 | Brass | NBR | 0,5 | 027 643 U ¹⁾ | | |
| | | | | 0- 5 | Brass | FPM | 0,5 | 026 257 Y | | |
| | | | | 0-10 | Brass | FPM | 0,5 | 026 459 T ¹⁾ | | |
| | | | | 0-10 | Brass | PTFE/FPM ²⁾ | 0,5 | 026 457 R ¹⁾ | | |
| | 12,0 | 2,1 | G 1/2 | 0- 3,5 | Brass | EPDM | 0,6 | 027 545 J | | |
| | | | | 0- 6 | Brass | EPDM | 0,6 | 026 079 Z ¹⁾ | | |
| | | | | 0- 3,5 | Brass | NBR | 0,6 | 027 734 P | | |
| | | | | 0- 6 | Brass | NBR | 0,6 | 027 991 A ¹⁾ | | |
| | | | | 0- 3,5 | Brass | FPM | 0,6 | 026 088 K | | |
| | | | | 0- 6 | Brass | FPM | 0,6 | 027 926 G ¹⁾ | | |
| | | | | 0- 6 | Brass | PTFE/EPDM ²⁾ | 0,6 | 026 200 C ¹⁾ | | |
| | | | | 0- 6 | Brass | PTFE/FPM ²⁾ | 0,6 | 028 004 Z ¹⁾ | | |
| | | | | 0- 6 | Stainless | EPDM | 0,6 | 028 080 Z ¹⁾ | | |
| | | | | 0- 6 | Stainless | PTFE/FPM ²⁾ | 0,6 | 027 557 N ¹⁾ | | |
| | | | | 20,0 | 6,5 | G 3/4 | 0- 1,5 | Brass | EPDM | 1,0 |
| 0- 1,5 | | | | | | | Brass | NBR | 1,0 | 028 072 U ¹⁾ |
| 0- 1,5 | Brass | FPM | 1,0 | | | | 028 046 S ¹⁾ | | | |
| 25,0 | 10,0 | G 1 | 0- 1 | Brass | EPDM | 1,4 | 029 106 V ¹⁾ | | | |
| | | | 0- 1 | Brass | NBR | 1,4 | 028 071 T ¹⁾ | | | |
| | | | 0- 1 | Brass | FPM | 1,4 | 028 410 Y ¹⁾ | | | |
| B | 10,0 | 1,0 | G 3/8 | 0-10 | Brass | EPDM | 0,5 | 026 812 D | | |
| | | | | 0-10 | Brass | NBR | 0,5 | 026 290 W | | |
| | | | | 0-10 | Brass | FPM | 0,5 | 027 891 E | | |
| | 12,0 | 2,1 | G 1/2 | 0-10 | Brass | EPDM | 0,6 | 027 988 P | | |
| | | | | 0-10 | Brass | NBR | 0,6 | 026 298 S | | |
| | | | | 0-10 | Brass | FPM | 0,6 | 026 715 K | | |
| | 20,0 | 6,5 | G 3/4 | 0- 1,5 | Brass | EPDM | 1,0 | 028 557 X | | |
| | | | | 0- 1,5 | Brass | NBR | 1,0 | 027 639 Y | | |
| | | | | 0- 1,5 | Brass | FPM | 1,0 | 027 773 W | | |

¹⁾ With reinforced spring²⁾ PTFE/... with EPDM- or FPM-O-ring