

Series 8 pneumatic operated cartridge valves

New 

2/2-way - 3/2-way, Normally Closed (NC)



Series 8 pneumatic operated valves are particularly suitable for applications requiring high flow combined with compact design.

The valve is pneumatic operated by electro-pilots which are dimensioned according to the size.

The cartridge design, which is ideal for manifold assembly, allows to reduce both dimensions and the number of pneumatic connections.

The valve design allows it to work 2/2-way or 3/2-way.

The function depends on the type of seat on which the valve is mounted.

- » Compact design
- » High flow
- » Manifold assembly
- » Long life

GENERAL DATA

TECHNICAL FEATURES

| | |
|---------------------------|---|
| Function | 2/2 NC - 3/2 NC |
| Operation | pneumatic operated poppet type |
| Pneumatic connections | manifold cartridge |
| Nominal diameter | 5 ... 9 mm |
| Nominal flow | see Kv |
| Kv (l/min) | 10 ... 38 |
| Operating pressure | -0.9 ÷ 5 ... 7 bar |
| Operating temperature | 0 ÷ +50°C |
| Media | filtered air, class 5.4.4 according to ISO 8573-1 (max oil viscosity 32 cSt), inert gas |
| Response time (ISO 12238) | ON <15 msec – OFF <15 msec |
| Installation | in any position |

MATERIALS IN CONTACT WITH THE MEDIUM

| | |
|----------------|-----------|
| Body | brass |
| Internal parts | aluminium |
| Seals | FKM |

CODING EXAMPLE

| | | | | | | | | |
|----------|-----------|-----------|----------|-----------|----------|-----------|----------|----------|
| 8 | 10 | C5 | 1 | 00 | - | F1 | 3 | 2 |
|----------|-----------|-----------|----------|-----------|----------|-----------|----------|----------|

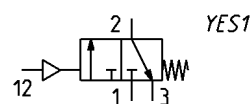
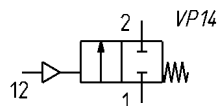
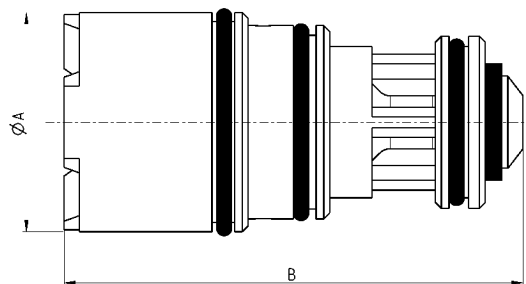
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|-----------|--|
| 8 | SERIES |
| 10 | SIZE: 10 = Size 1 20 = Size 2 30 = Size 3 |
| C5 | BODY DESIGN: C5 = cartridge |
| 1 | NUMBER OF WAYS - FUNCTIONS: 1 = 2/2-way NC or 3/2-way NC NOTE: The function depends on the seat used (for further details see the following pages) |
| 00 | PNEUMATIC CONNECTIONS: 00 = cartridge |
| F1 | NOMINAL DIAMETER: F1 = Ø 5.0 mm (size 1 only) G7 = Ø 6.6 mm (size 2 only) K1 = Ø 9.0 mm (size 3 only) |
| 3 | SEAL MATERIAL: 3 = FKM |
| 2 | BODY MATERIAL: 2 = brass |

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CONTROL

Pneumatic cartridge valve 2/2-way and 3/2-way NC

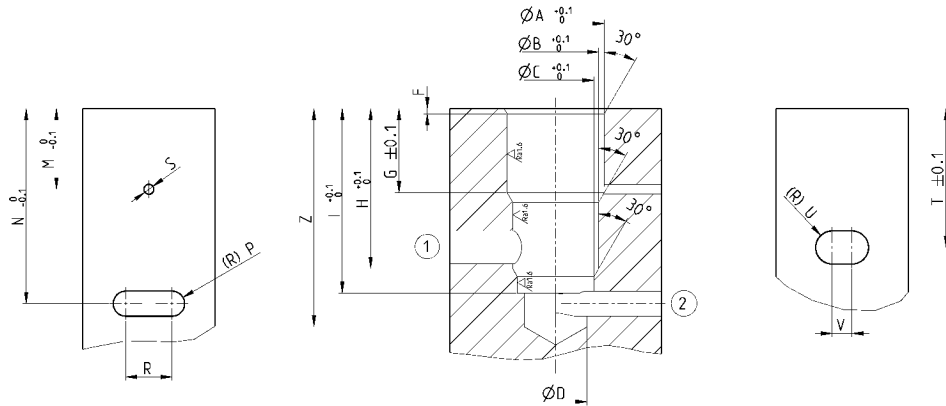
For 2/2-way (pneumatic symbol VP14) or 3/2-way (pneumatic symbol YES1) function, see the seat dimensioning in the next pages.



| Mod. | ØA | B | Nominal diameter Ø (mm) | Kv (l/min) | Min/max pressure (bar) | Min/max pilot pressure (bar) |
|----------------------|------|------|-------------------------|------------|------------------------|------------------------------|
| 810C5100-F132 | 10 | 26.7 | 5.0 | 10 | -0.9 + 7 | 2 + 7 |
| 820C5100-G732 | 14.5 | 30.3 | 6.6 | 19 | -0.9 + 7 | 2 + 7 |
| 830C5100-K132 | 22 | 34.8 | 9.0 | 38 | -0.9 + 7 | 2 + 7 |

Seat for Series 8 pneumatic valve with 2/2-way NC function

NOTE IN THE DRAWING:
1 = INLET
2 = OUTLET

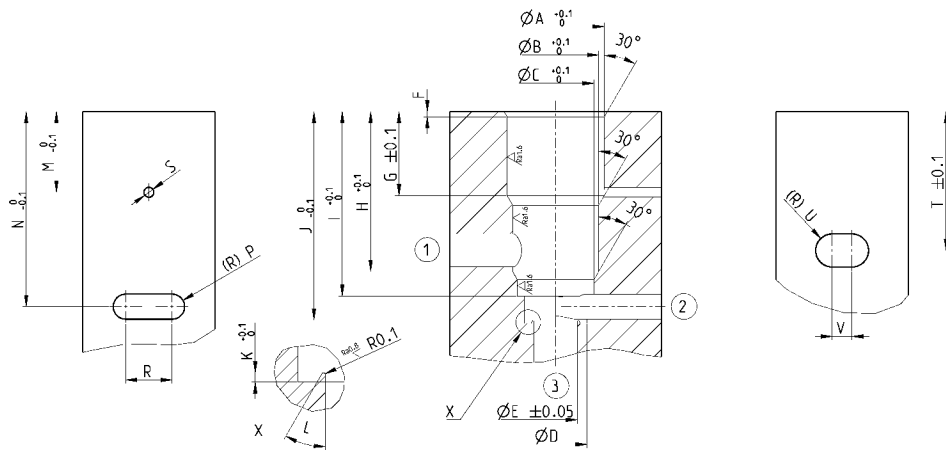


SERIES 8

| Size | A | B | C | D | F | G | H | I | M | N | P | R | S | T | U | V | Z |
|------|-------|-------|-------|------|-----|------|------|------|------|------|-----|-----|-----|------|------|---|----|
| 1 | 10.4 | 9.7 | 9 | 8.2 | 0.8 | 14.5 | 20.7 | 25 | 13.2 | 26.3 | 1.5 | 5 | 1.5 | 19.1 | 3 | 5 | 30 |
| 2 | 14.65 | 12.95 | 11.55 | 9.5 | 0.8 | 12.8 | 24.2 | 27.9 | 12.2 | 28 | 1.9 | 7 | 1.5 | 21 | 2.5 | 3 | 33 |
| 3 | 22.1 | 20.6 | 19.6 | 16.2 | 0.5 | 15 | 28.7 | 33.4 | 13.5 | 37.4 | 4 | 4.4 | 2.5 | 24.8 | 3.75 | 5 | 41 |

Seat for Series 8 pneumatic valve with 3/2-way NC function

NOTE IN THE DRAWING:
1 = INLET
2 = OUTLET
3 = EXHAUST



SERIES 8

| Size | A | B | C | D | E | F | G | H | I | J | K | L | M | N | P | R | S | T | U | V |
|------|-------|-------|-------|------|-----|-----|------|------|------|-------|-----|----|------|------|-----|-----|-----|------|------|---|
| 1 | 10.4 | 9.7 | 9 | 8.2 | 5 | 0.8 | 14.5 | 20.7 | 25 | 28 | 0.3 | 45 | 13.2 | 26.3 | 1.5 | 5 | 1.5 | 19.1 | 3 | 5 |
| 2 | 14.65 | 12.95 | 11.55 | 9.5 | 6.6 | 0.8 | 12.8 | 24.2 | 27.9 | 31.55 | 0.5 | 30 | 12.2 | 28 | 1.9 | 7 | 1.5 | 21 | 2.5 | 3 |
| 3 | 22.1 | 20.6 | 19.6 | 16.2 | 9 | 0.5 | 15 | 28.7 | 33.4 | 38.05 | 1 | 60 | 13.5 | 37.4 | 4 | 4.4 | 2.5 | 24.8 | 3.75 | 5 |