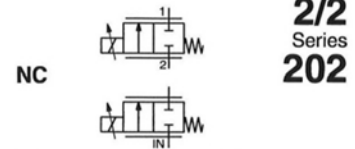


PROPORTIONAL SOLENOID VALVES

POSIFLOW

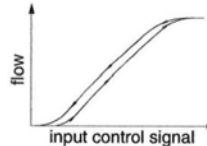
direct operated

1/4 - 3/8


2/2
 Series
202

FEATURES

- Variable flow, proportional to the input control signal
- Valve do not require a minimum operating pressure
- Valves can be mounted in any position
- ASCO solenoid valves satisfy all relevant EC directives



GENERAL

Differential pressure

See "SPECIFICATIONS" [1 bar = 100 kPa]

Maximum viscosity

 21 cSt (mm²/s)

| fluids (*) | temperature range (TS) (2) | seal materials (*) |
|----------------------------|----------------------------|-----------------------|
| air, inert gas, water, oil | - 10°C to + 90°C | FPM (fluoroelastomer) |

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

| | Brass body | Stainless steel body |
|------------------|-----------------|----------------------|
| Body | Brass | AISI 303 SS |
| Core tube | Stainless steel | Stainless steel |
| Core and plugnut | Stainless steel | Stainless steel |
| Springs | Stainless steel | Stainless steel |
| Riderring | PTFE | PTFE |
| Seat | Brass | Stainless steel |
| Seal, disc | FPM | FPM |
| Breaker piece | Stainless steel | Stainless steel |

ELECTRICAL CHARACTERISTICS

Coil insulation class

F

Connector

Spade plug (cable Ø 6-10 mm)

Connector specification

ISO 4400 / EN 175301-803, form A

Electrical safety

IEC 335

Electrical enclosure protection

Moulded IP65 (EN 60529)

Standard voltages

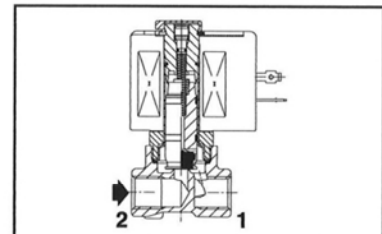
DC (=) : 24V (other voltages on request)

| prefix option | operating current (mA) | power ratings | | | operator ambient temperature ranges (TS) (3) (C°) | replacement coil (=) 24 V DC | type (1) |
|---------------|------------------------|---------------|--------------|--------------|---|------------------------------|----------|
| | | inrush (VA) | holding (VA) | hot/cold (W) | | | |
| SC | 100 - 500 | - | - | 11 / 8 | -10 to + 75 | 400429-040 | 01 |

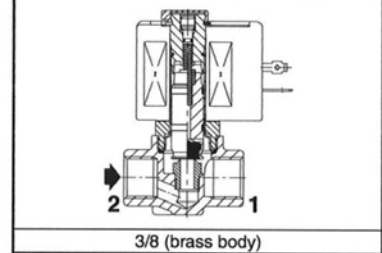
Voltage regulation

0 - 24 V DC

Flow regulation characteristics (3)

 24 V DC pulse width modulated (300 Hz)
 Hysteresis < 5 % ; Repeatability < 3 % ;
 Sensitivity < 2 %


1/4 (brass body)



3/8 (brass body)

SPECIFICATIONS

| pipe size | orifice size (mm) | flow coefficient kv (m ³ /h) (l/min) | operating pressure differential (bar) | | | | power coil (W) | catalogue number | | | | options | | | |
|-----------------------------|-------------------|---|---------------------------------------|-----------|---------------------|---|----------------|------------------|---------|---------------------|---------|---------|----|------|---|
| | | | min. | max. (PS) | | = | | brass (=) | | stainless steel (=) | | EPDM | CR | PTFE | |
| | | | | vacuum | air, water, oil (*) | | | air / inert gas | liquids | air / inert gas | liquids | | | | |
| NC - Normally closed | | | | | | | | | | | | | | | |
| 1/4 | G | 1,2 | 0,05 | 0,8 | 0 | 1 | 16 | 8 | | | | | E | J | T |
| | NPT | 2,4 | 0,12 | 2 | 0 | 1 | 8 | 8 | PV 2013 | PV 2023 | | | E | J | T |
| | G | 3,2 | 0,24 | 4,0 | 0 | 1 | 4 | 8 | PV 2014 | PV 2024 | | | E | J | T |
| | NPT | 4,0 | 0,42 | 7,0 | 0 | 1 | 2,5 | 8 | | | | | E | J | T |
| | G | 5,6 | 0,72 | 12,0 | 0 | 1 | 1,4 | 8 | | | | | E | J | T |
| | NPT | 7,1 | 0,90 | 15,0 | 0 | 1 | 1 | 8 | | | | | E | J | T |
| 3/8 | Rd | 3,2 | 0,24 | 4,0 | 0 | 1 | 4 | 8 | | | | | E | J | T |
| | NPT | 4,0 | 0,42 | 7,0 | 0 | 1 | 2,5 | 8 | | | | | E | J | T |
| | Rd | 5,6 | 0,72 | 12,0 | 0 | 1 | 1,4 | 8 | PV 2015 | PV 2025 | | | E | J | T |
| | NPT | 7,1 | 0,90 | 15,0 | 0 | 1 | 1 | 8 | PV 2016 | PV 2026 | | | E | J | T |
| | Rd | | | | | | | | | | | | E | J | T |
| | NPT | | | | | | | | | | | | E | J | T |

(1) Refer to the dimensional drawings on the following page.

(2) Damage may occur when liquids solidify above the specified minimum temperature.

(3) Percentage of max. value with 24 V DC, P.W.M. 300 Hz, supply at constant ΔP.

PROPORTIONAL SOLENOID VALVES SERIES 202

OPTIONS

- Valves can also be supplied with NBR (nitrile), EPDM (ethylene-propylene), CR (chloroprene / neoprene) and PTFE seals and discs
- Waterproof enclosure with embedded screw terminal coil according to protection class IP67, CEE-10
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 94/9/EC, on request
- Electrical enclosures according to "NEMA" standards are available
- Mounting brackets
- Electronic proportional control unit
 - Features:
 - input control signals, analog: 0 - 10 V DC, 0 - 20 mA or 4 - 20 mA
 - adjustable coil current
 - switch-off function at less than 2% of the maximum control function
 - adjustable ramp control
 - Adjustable frequency
 - output current independent of coil resistance and supply voltage variations
 - housed in: a box with spade plug connector according to ISO 4400 / IP65
- Other pipe connections are available on request

INSTALLATION

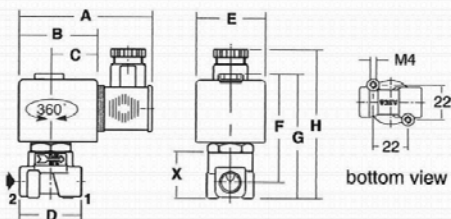
- The solenoid valves can be mounted in any position without affecting operation
- Brass and NPT 3/8 stainless steel solenoid valves have 2 mounting holes in body
- NPT 1/4 stainless steel valves are standard supplied with mounting brackets
- Threaded pipe connection is standard: E = Rp (ISO 7/1) ; G = G (ISO 228/1) ; B = NPT (ANSI 1.20.3)
- Installation/maintenance instructions are included with each valve

DIMENSIONS (mm), WEIGHT (kg)

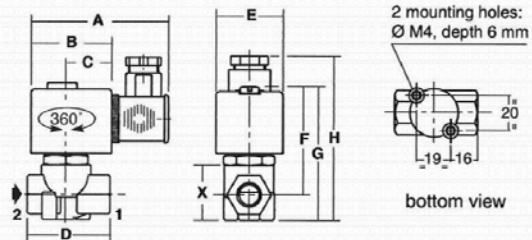


TYPE 01
 Prefix "SC" solenoid
 Epoxy moulded
 IEC 335 / ISO 4400
 IP65

PV 2013 / PV 2014 / PV 2023 / PV 2024



PV 2015 / PV 2016 / PV 2025 / PV 2026



| Art. No. | Ident No. | Art. No. | Ident No. |
|----------|-----------|----------|-----------|
| PV 2013 | 101641 | PV 2023 | 101645 |
| PV 2014 | 101642 | PV 2024 | 101646 |
| PV 2015 | 101643 | PV 2025 | 101647 |
| PV 2016 | 101644 | PV 2026 | 101648 |

| type | prefix option | catalogue number | A | B | C | D | E | F | G | H | X | weight ⁽¹⁾ |
|------|---------------|------------------------------------|----|----|----|----|----|----|----|----|----|-----------------------|
| 01 | SC | PV 2013, PV 2014, PV 2023, PV 2024 | 85 | 50 | 30 | 40 | 45 | 68 | 79 | 95 | 30 | 0,50 |
| | | PV 2015, PV 2016, PV 2025, PV 2026 | 85 | 50 | 30 | 48 | 45 | 68 | 82 | 97 | 32 | 0,50 |

⁽¹⁾ Including coil and connector.