

# Solenoid operated valves pilot operated poppet type

## 2-way normally closed

## Common cavity, Size 12

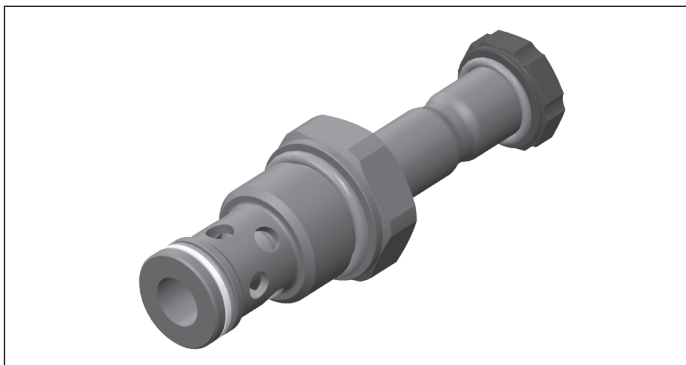
VEI-16-NC

OD.15 - X - 89 - Y - Z

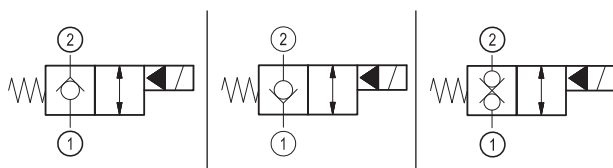
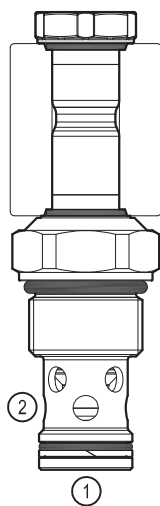
**RE 18323-39**

Edition: 06.2019

Replaces: 02.2019



**PATENT PENDING**



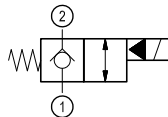
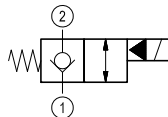
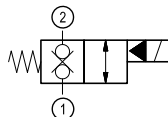
### Technical data

New VEI-16 family incorporates a new solenoid concept providing excellent performance and enables cartridges to work in severe environment. Cartridges also incorporates advanced design of hydraulic parts providing excellent hydraulic performance.

### Technical data

| General  |  |
|--|--|
| Weight   | 0.25 kg (0.55 lbs)                                 |
| Installation orientation   | Unrestricted                                       |
| Storage ambient temperature range  | -40 to 100 °C (-40 to 212 °F)                      |
| Operating ambient temperature range  | -30 to 90 °C (-22 to 194 °F)                       |
| Hydraulic  |  |
| Max. operating pressure  | 350 bar (5000 psi)                                 |
| Flow range   | 5 - 150 l/min (1 - 40 gpm)                         |
| Max. internal leakage:   | 20 drops/min.                                      |
| Switching time   | Closing ≤ 100 ms<br>Opening ≤ 50 ms                |
| Fluid temperature range  | -20 to 80 °C (-4 to 176 °F)                        |
| Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 20 to 380 mm <sup>2</sup> /s (cSt) |  |
| Installation torque  | 54 - 66 Nm (40 - 49 ft-lbs)                        |
| Recommended degree of fluid contamination  | Nominal value max. 10 µm (NAS 8) ISO 4406 19/17/14 |
| MTTFD  | 150 years see 18350-51                             |
| Common cavity  | CA-12A-2N see 18325-70                             |
| Seal kit for X=03,05   | code RG12A2010520100<br>material no. R901111377    |
| Seal kit for X=31  | code RG12A2010530100<br>material no. R930003374    |
| Seal kit coil and standard cap   | code RG02Z0010000100<br>material no. R930067869    |
| Seal kit coil and protective cap only for Y=D  | code RG03Z0010000100<br>material no. R930067870    |
| Other technical data   | See data sheet 18350-50                            |
| Electrical   |  |
| Type of voltage  | DC voltage   |
| Coil type  | D36  |
| Supply voltage   | See data sheet 18325-90                            |
| Voltage tolerance against ambient temperature  | See characteristic curve                           |
| Power consumption  | 20 W   |
| Type of protection   | See data sheet 18325-90                            |
| Note: Coils must be ordered separately   |  |

**Ordering code**

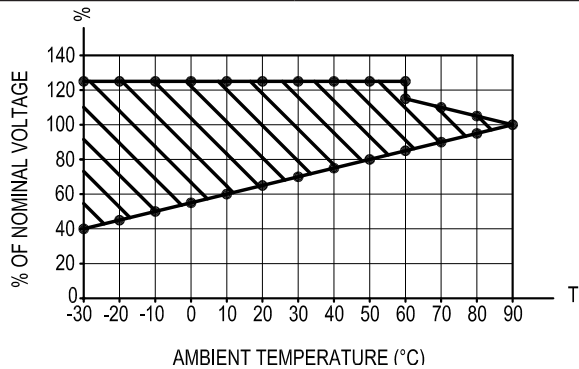
| Ordering code   |  | OD.15  | X  | 89 | Y | Z | 0000 | * |
|---|--|--|--|----|---|---|------|---|
| Solenoid operated valves<br>pilot operated poppet type<br>2-way normally closed                         |  | Series 0/A to L<br>unchanged performances and dimensions |  |    |   |   |      |   |
| bidirectional type<br> |  | 03   | 0 = With buna seal<br>8 = With buna seal and extra spring only for <b>05</b><br>V = With Viton seal<br>P = With buna seal and protective cap for override version <b>D</b><br>T = With Viton seal and protective cap for override version <b>D</b><br><br>A = Standard<br>D = Knob style manual override<br>E = Pull style manual override<br>F = Hand operated pull style manual override |    |   |   |      |   |
| bidirectional type<br> |  | 05   |  |    |   |   |      |   |
| bidirectional type<br> |  | 31   |  |    |   |   |      |   |
| Common cavity: CA-12A-2N  |  |  |  |    |   |   |      |   |

**Preferred types**

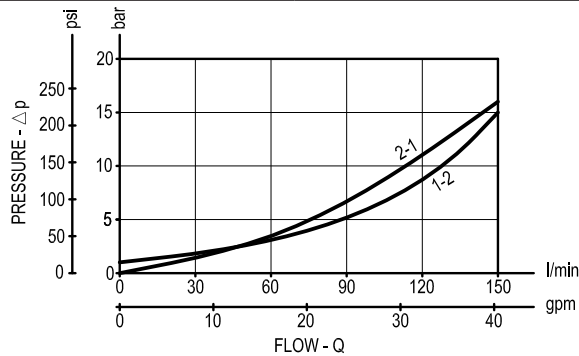
| Type            | Material number | Type | Material number |
|-----------------|-----------------|------|-----------------|
| OD150589A000000 | R930061347      |      |                 |
| OD150589D000000 | R930065473      |      |                 |
| OD150589F000000 | R930067898      |      |                 |
| OD150589A800000 | R930069502      |      |                 |
| OD150589E000000 | R930068530      |      |                 |
| OD150389A000000 | R930066083      |      |                 |
| OD150389D000000 | R930069501      |      |                 |
| OD153189A000000 | R930067154      |      |                 |
| OD153189A800000 | R930069494      |      |                 |
| OD153189AV00000 | R930069493      |      |                 |
| OD153189D000000 | R930069498      |      |                 |

Characteristic curves

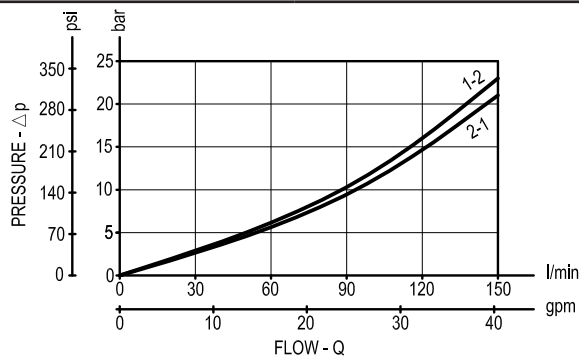
All Versions - Admissible supply voltage Vs. Ambient temperature at 100% duty cycle



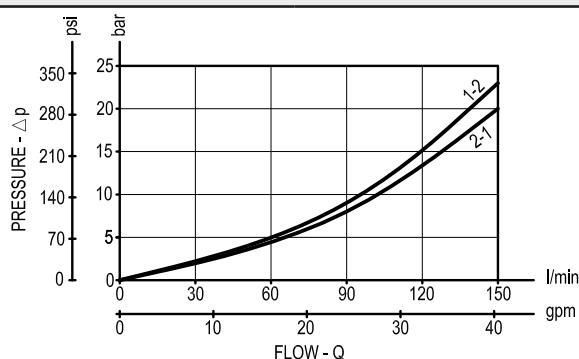
Versions 05



Versions 31



Versions 03



**Dimensions**  
**Solenoid operated valves, poppet 2-way**  
**normally closed**

