

# Solenoid operated valves pilot operated poppet type

## 2-way normally closed

### Special cavity, 019-E

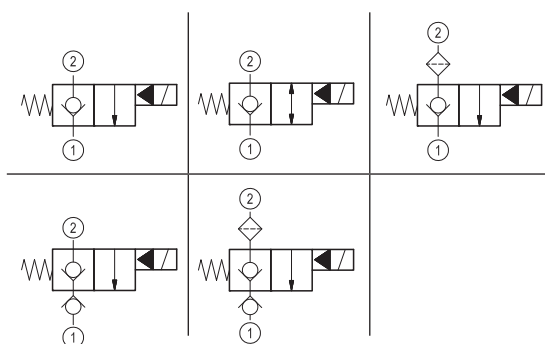
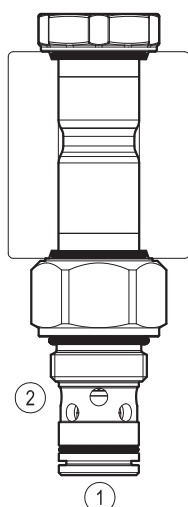
**RE 18323-27**

Edition: 04.2018

Replaces: 11.2017

VEI-16-08S-NC

OD.15 - X - 19 - Y - Z

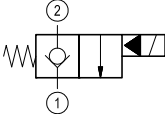
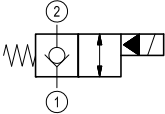
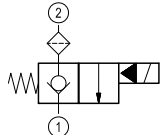
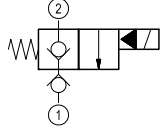
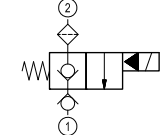
**PATENT PENDING****Technical data**

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                                                                                                  | 0.15 kg (0.33 lbs)                                      |
| Installation orientation                                                                                | Unrestricted                                            |
| Ambient temperature range                                                                               | -30 to 90 °C (-22 to 194 °F)                            |
| Hydraulic                                                                                               |                                                         |
| Max. operating pressure                                                                                 | 350 bar (5000 psi)                                      |
| Flow range                                                                                              | 0.5 - 40 l/min (0.1 - 11 gpm)                           |
| Fatigue cycle life                                                                                      | 2 million cycles at 350 bar<br>150000 cycles at 420 bar |
| Max. internal leakage                                                                                   | 5 drops/min.                                            |
| Switching time                                                                                          | Opening ≤ 50 ms<br>Closing ≤ 100 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 mm²/s (cSt) |                                                         |
| Installation torque                                                                                     | 39 - 51 Nm (29 - 38 ft-lbs)                             |
| Recommended degree of fluid contamination                                                               | Nominal value max. 10 µm (NAS 8) ISO 4406 19/17/14      |
| MTTFd                                                                                                   | 150 years see RE 18350-51                               |
| Special cavity                                                                                          | 019-E see 18325-75                                      |
| Seal kit for X=01,05,07                                                                                 | code RG19E201052010<br>material no. R934003560          |
| Seal kit for X=11,13                                                                                    | code RG19E201053010<br>material no. R934003561          |
| 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**

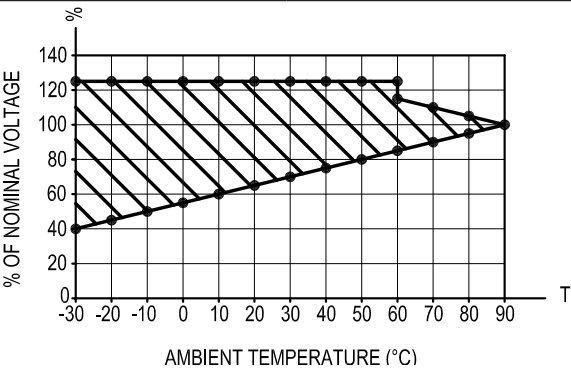
| OD.15                                                                                                                             | X  | 19 | Y | Z | 0000 | *                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------|----|----|---|---|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solenoid operated valves<br>pilot operated poppet type<br>2-way normally closed                                                   |    |    |   |   |      | Series O/A to L<br>unchanged performances and dimensions                                                                                                                                 |
| monodirectional type<br>                         | 01 |    |   |   |      | 0 = With buna seal<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> |
| bidirectional type<br>                           | 05 |    |   |   |      |                                                                                                                                                                                          |
| monodirectional type with filter<br>             | 07 |    |   |   |      |                                                                                                                                                                                          |
| monodirectional type with check<br>             | 11 |    |   |   |      |                                                                                                                                                                                          |
| monodirectional type with filter and check<br> | 13 |    |   |   |      |                                                                                                                                                                                          |
|                                                                                                                                   |    |    |   |   |      | A = Standard<br>D = Knob style manual override<br>E = Pull style manual override<br>F = Hand operated pull style manual override                                                         |
|                                                                                                                                   |    |    |   |   |      | Special cavity: 019-E                                                                                                                                                                    |

| Type            | Material number |
|-----------------|-----------------|
| OD150519A000000 | R930058433      |
| OD150519DP00000 | R930058531      |
| OD150719A000000 | R930058431      |
| OD150719DP00000 | R930058530      |
| OD151119A000000 | R930060459      |
| OD151319A000000 | R930058333      |

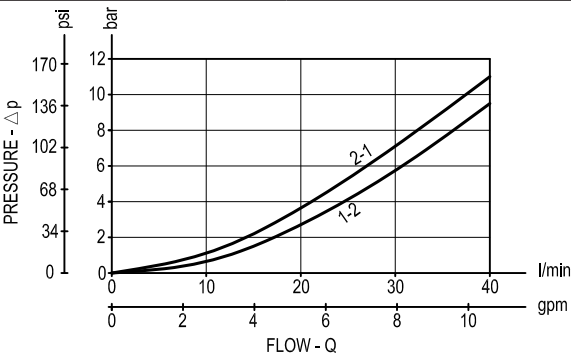
| Type            | Material number |
|-----------------|-----------------|
| OD151319D000000 | R930058343      |
| OD150119E000000 | R930060857      |
| OD150519E000000 | R930060865      |
| OD150719E000000 | R930060872      |
| OD151119E000000 | R930060882      |
| OD151319E000000 | R930060890      |

Characteristic curves

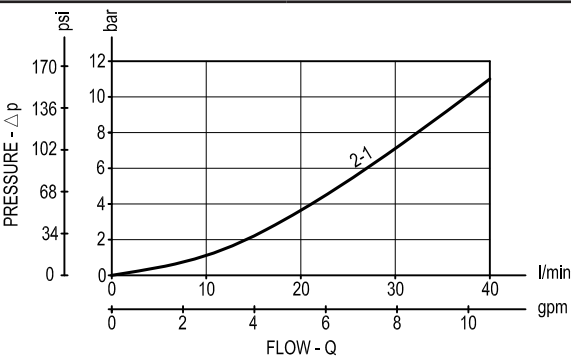
All Versions - Admissible supply voltage Vs. Ambient temperature at 100% duty cycle

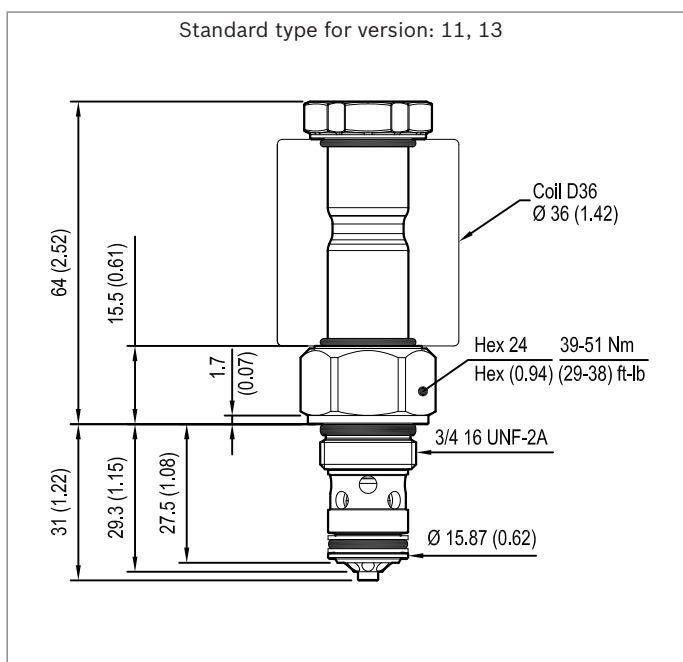
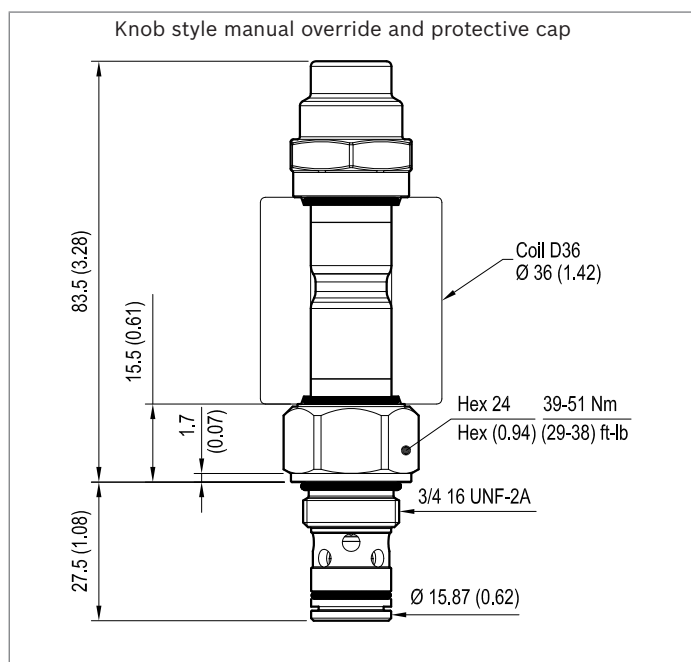
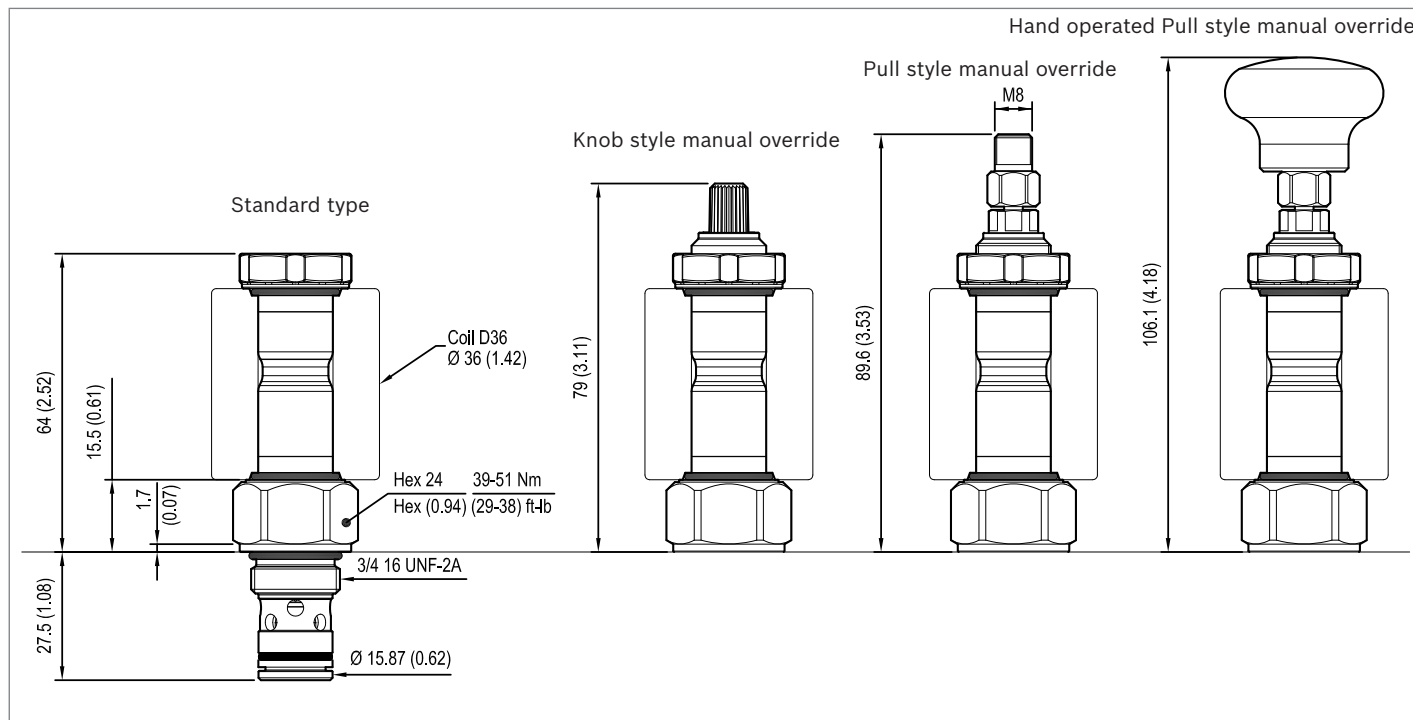


Version 01-05-07



Version 11-13



**Dimensions****Solenoid operated valves, poppet 2-way  
normally closed****Bosch Rexroth Oil Control S.p.A.**

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