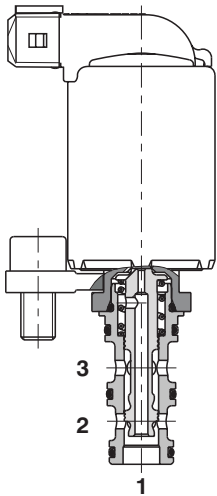


3/2 Directional Valve, Solenoid Operated, Spool Type, Direct Acting, Slip-In Style

PD2E1

Size D17/D20 • Q_{max} 30 l/min (8 GPM) • p_{max} 80 bar (1200 PSI)

PD2E1-Y3



Technical Features

- › 3/2 directional valve in an economical design
- › Hardened precision parts
- › High flow capacity
- › Variety of optional spools available
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227. Enhanced surface protection for mobile sector available for the steel parts (ISO 9227, 520 h salt spray)

Functional Description

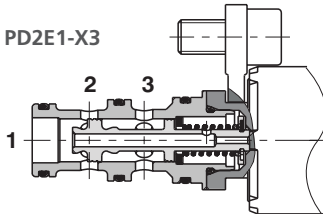
3-way, 2-position spool valve in the form of an economically designed slip-in cartridge. The valve is designed for use in the low-pressure systems of mobile applications, e.g. for functional control of transmissions.

| Model Code | 2D21 | 2D26 |
|------------|------|------|
| Symbol | | |

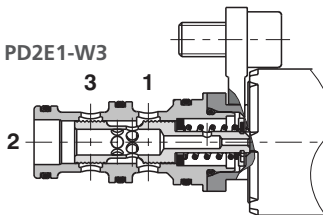
Technical Data

| Valve size / Cartridge cavity | | D17 / Y3 | D20 / X3, W3 |
|--|-------------|---|--------------|
| Max. flow | l/min (GPM) | 30 (7.9) | |
| Max. operating pressure version Y, X (2, 3), W (3,1) | bar (PSI) | 80 (1160) | |
| Max. operating pressure version Y, X (1), W (2) | bar (PSI) | 30 (440) | |
| Fluid temperature range | °C (°F) | -30...90 (-22...194), +100 (212) short-time | |
| Ambient temperature range | °C (°F) | -30...90 (-22...194), +100 (212) short-time | |
| Supply voltage tolerance | % | ± 10 | |
| Supply voltage | V | 12 DC | 24 DC |
| Quenching diode | | BZW06-19B | BZW06-33B |
| Enclosure type acc. to EN 60529 | | IP67 / IP 69K | |
| Weight | kg (lbs) | 0.2 (0.44) | |

PD2E1-X3



PD2E1-W3

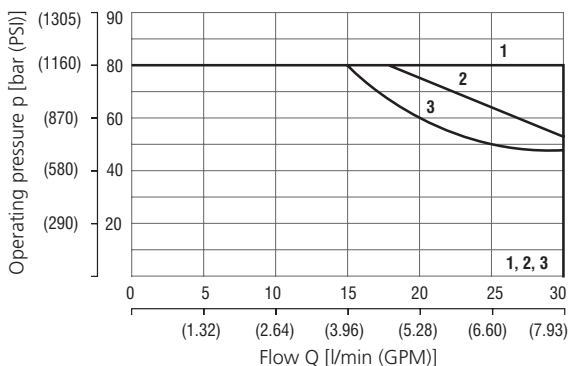


| | | Datasheet | Type | |
|---------------------|-----------------|-----------|-----------------------------------|----------|
| Valve | | | PD2E1-Y3 | PD2E1-X3 |
| General information | | GI_0060 | Products and operating conditions | |
| Valve bodies | In-line mounted | SB_0018 | SB-Y3-* | SB-W3-* |
| Cavity details | | SMT_0019 | SMT-Y3* | SMT-W3* |
| Spare parts | | SP_8010 | | |

Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

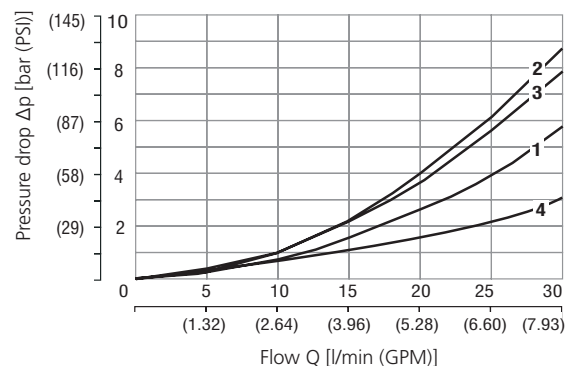
Operating limits

Oil 90 °C (194 °F) / Ambient temperature 90 °C (194 °F) / Voltage $U_n \pm 15\%$ (21.6 VDC)



| | Model | Connection |
|----|-------|------------|
| Y3 | 2D21 | 2→1 |
| | | 3→2 |
| | 2D26 | 3→2 |
| X3 | 2D21 | 2→1 |
| | | 3→2 |
| W3 | 2D21 | 2→1 |
| | | 3→2 |

Pressure drop related to flow rate

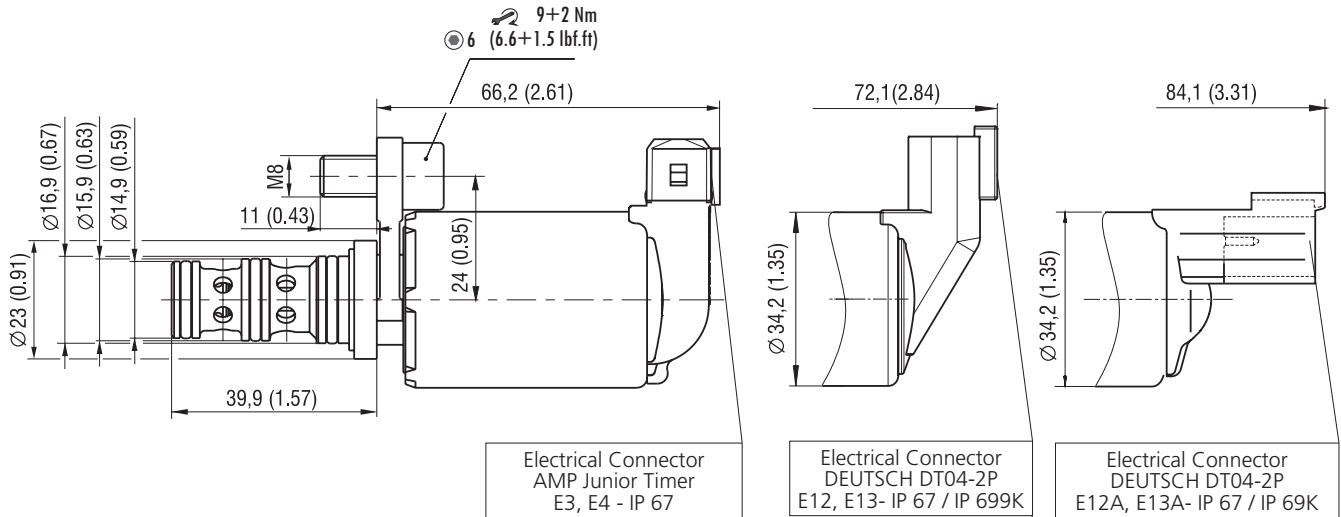


| | Model | Connection |
|----|-------|------------|
| Y3 | 2D21 | 2→1 |
| | | 3→2 |
| | 2D26 | 2→1 |
| X3 | 2D21 | 3→2 |
| | | 2→1 |
| W3 | 2D21 | 2→1 |
| | | 3→2 |

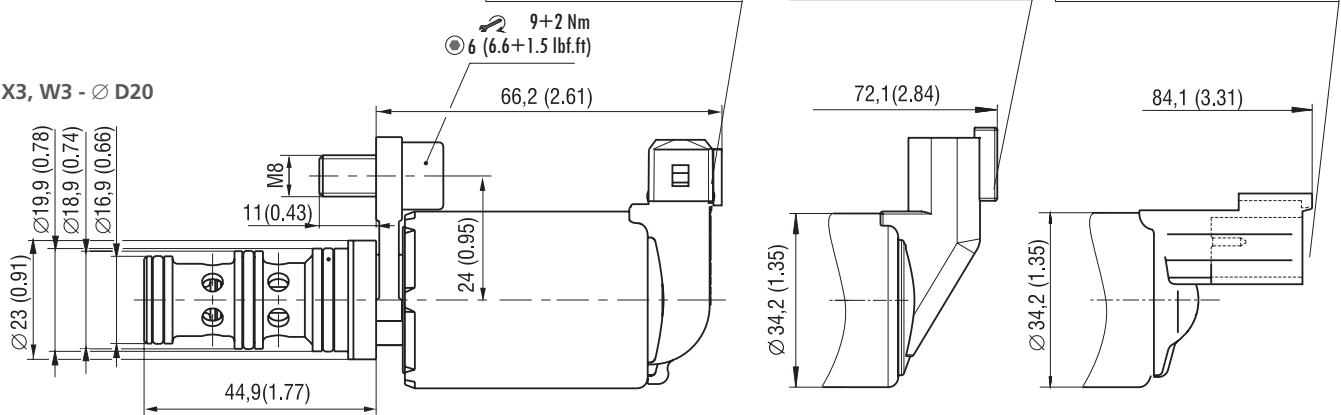
For operating limits under conditions and flow directions other than shown contact our technical support.

Dimensions in millimeters (inches)

Y3 - Ø D17



X3, W3 - Ø D20



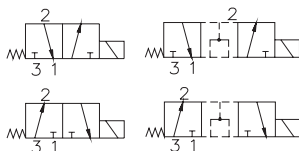
Ordering Code

PD2E1 - [] / [] - [] [] [] - []

3/2 directional valve, solenoid operated, spool type, direct acting, slip-in style

Valve cavity
D17 Y3
D20 W3
D20 X3

Functional symbol



2D21

2D26

12
24

Surface treatment
A zinc-coated (ZnCr-3), ISO 9227 (240 h)
B zinc-coated (ZnNi), ISO 9227 (520 h)

Seals
No designation V
NBR
FPM (Viton)

Connector
E3 AMP Junior Timer - radial direction (2 pins; male)
E4 E3 with quenching diode
E12 Deusch DT04-2P - radial direction (2 pins; male)
E13 E12 with quenching diode
E12A Deusch DT04-2P - axial direction (2 pins; male)
E13A E12A with quenching diode

Nominal supply voltage
12 V DC / 1.67 A
24 V DC / 0.84 A