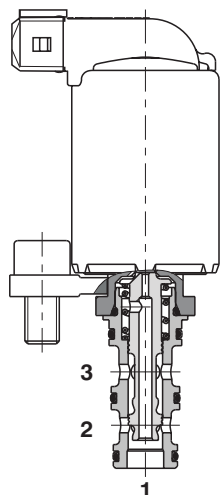


3/2 Directional Valve, Solenoid Operated, Spool Type, Direct Acting, Slip-In Style

PD2E1

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

PD2E1-Y3



Technical Features

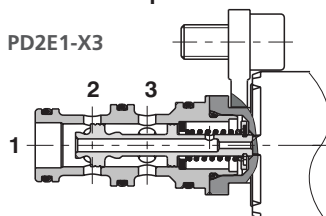
- › 3/2 directional valve in an economical design
- › Hardened precision parts
- › High flow capacity
- › Variety of optional spools available
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227. Enhanced surface protection for mobile sector available for the steel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

Functional Description

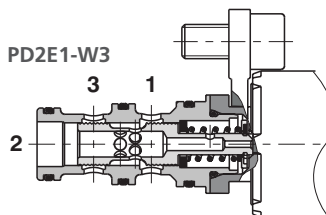
3-way, 2-position spool valve in the form of an economically designed slip-in cartridge. The valve is designed for use in the low-pressure systems of mobile applications, e.g. for functional control of transmissions.

Model Code	2D21	2D26
Symbol		

PD2E1-X3



PD2E1-W3



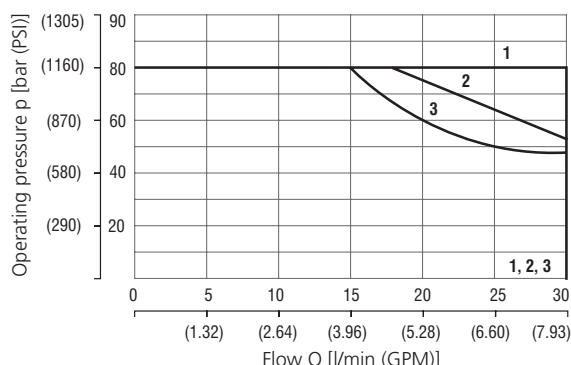
Technical Data

Valve size / Cartridge cavity		D17 / Y3		D20 / X3, W3
Max. flow		l/min (GPM)		30 (8)
Max. operating pressure version Y, X (2, 3), W (3,1)		bar (PSI)		80 (1200)
Max. operating pressure version Y, X (1), W (2)		bar (PSI)		30 (440)
Max. internal leakage in the direction 3→1 (v=32 mm²/s)		cm³/min		≤ 35 at 80 bar
Fluid temperature range		°C (°F)		-30...90 (-22...194), +100 (212) short-time
Ambient temperature range				
Fluid viscosity range		mm²s⁻¹		10 ... 500
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)

Characteristics measured at $v = 32$ mm²/s (156 SUS)

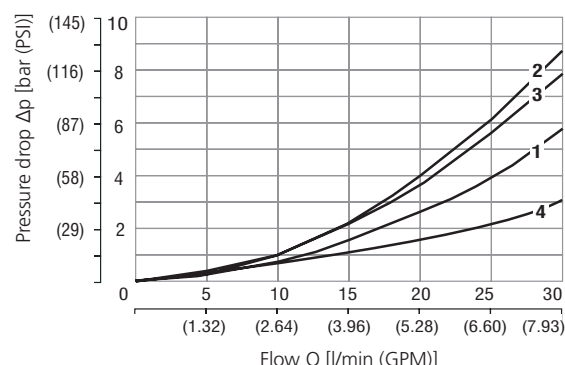
Operating limits

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



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

Pressure drop related to flow rate

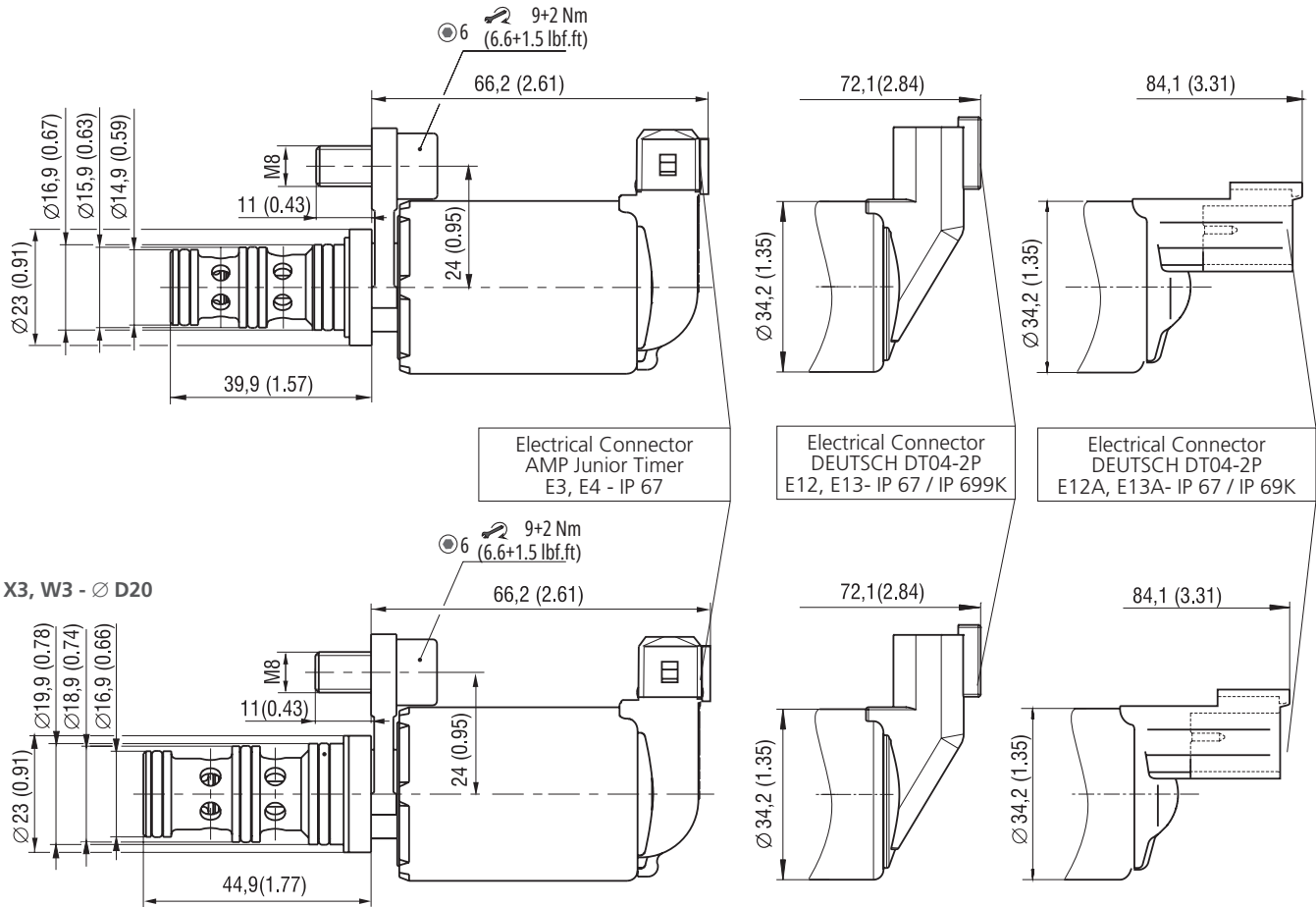


		Model	Connection
Y3	1	2D21	2→1
	2		3→2
	3	2D26	2→1
	2		3→2
X3	3	2D21	3→2
	4		2→1
W3	1		2→1
	1	2D21	3→2

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

Dimensions in millimeters (inches)

Y3 - Ø D17



Ordering Code

3/2 directional valve, solenoid operated, spool type, direct acting, slip-in style		Surface treatment	
		A	zinc-coated (ZnCr-3), ISO 9227 (240 h)
		B	zinc-coated (ZnNi), ISO 9227 (520 h)
Valve cavity		Seals	
D17	Y3	No designation	
D20	W3	V	
D20	X3	Seals	
Functional symbol		Connector	
		E3	AMP Junior Timer - radial direction (2 pins; male)
		E4	E3 with quenching diode
		E12	Deutsch DT04-2P - radial direction (2 pins; male)
		E13	E12 with quenching diode
		E12A	Deutsch 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	