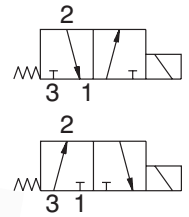


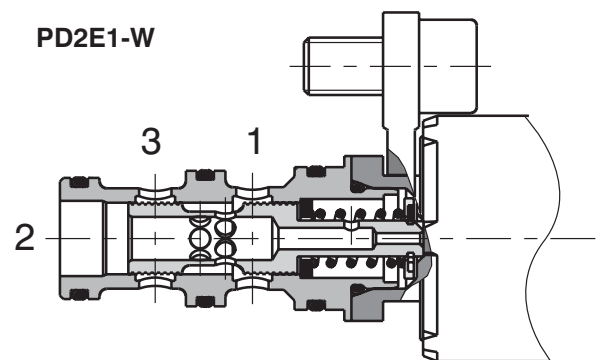
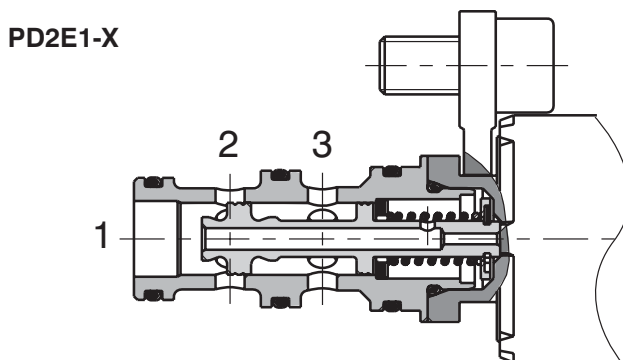
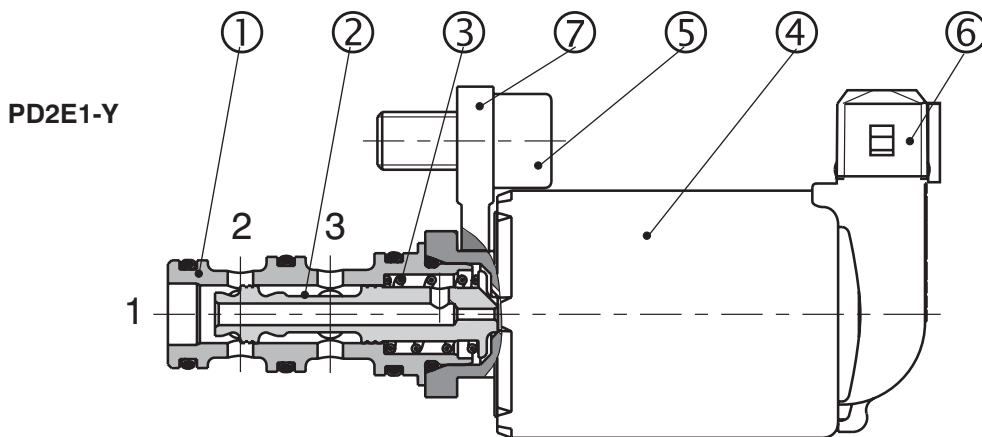
- 3/2 way valves construction
- Reducing valves suitable for mobile applications
- Compact design
- Economical Slip-In
- Two cavities sizes



### Functional Description

This directly-controlled electromagnetic distributor, in the 3/2 arrangement, is used mostly for opening, blocking and direction controlling of the flow of liquids. The distributor consists of the housing (1), control gate valve (2), counter-spring (3) and magnet coil (4). The electromagnet coil is pressed on (and thus fixed to) the valve control system. The direct current electromagnet coils are supplied for 12 V and 24 V voltage levels.

Once the fixing screw is released, it is possible to turn the distributor around its axis by 360° and change thus the connector socket position (6). The fixing screw (5) and fork (fastening member) (7) form also a part of the supply. In basic variant a part of the valve is exhibited to influence of the environmental atmosphere and the coil zinc plated.



# Ordering Code

<p><b>3/2 Way cartridge Directional Valve Solenoid Operated Slip-In</b></p> <p><b>Type of construction</b> 1</p> <p><b>Valve cavity</b>                  D17 (mm) Y                  D20 (mm) W                  D20 (mm) X</p> <p><b>Number of connections</b> 3</p> <p><b>Number of operating positions</b> 2</p>	<p><b>PD2E</b> <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span> - <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span> / <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span> - <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span></p>	<p><b>Seals</b>                  no designation V                  NBR                  FPM (Viton)</p> <p><b>Electronics</b>                  E3 with AMP-Junior-Timer-connector                  E4 with integrated quenching diode and terminal for AMP-Junior-Timer                  E12A connector with DEUTSCH DT 04-2P                  E13A with integrated quenching diode and terminal for DEUTSCH DT 04-2P</p> <p><b>Nominal supply voltage</b>                  12 V DC / 1,67 A                  24 V DC / 0,84 A</p> <p><b>Functional Symbols</b>                  D21                  D26</p>
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## Functional Symbols

Designation	Symbol	Interposition	Designation	Symbol	Interposition
2D21			2D26		

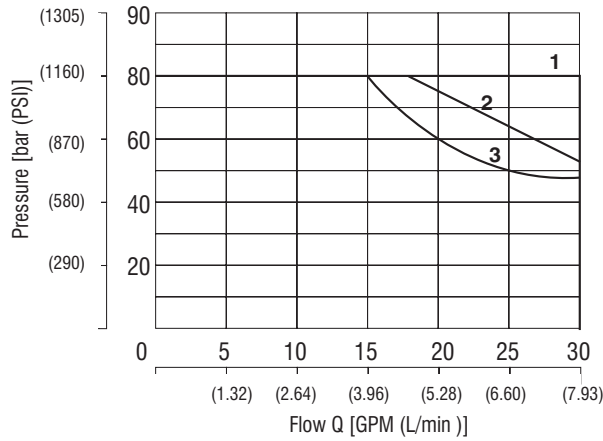
## Technical Data

		Standard	
		D17	D20
Mounting mode	mm (US)		
Maximum flow	L/min (GPM)	30	
Max.operating pressure in Canals Y, X -2, 3, W-3	bar	80	
Max.operating pressure in Canals Y, X -1, W-2	bar	30	
Pressure drop	bar	see $\Delta p$ -Q characteristic	
Hydraulic fluid		Hydraulic oils of power classes (HL, HLP) to DIN 51524	
Fluid temperature range	°C (°F)	-30 ...90 (-22 ...194), +100 °C (212 °F for a short term)	
Ambient temperature, max.	°C (°F)	-30 ...90 (-22 ...194), +100 °C (212 °F for a short term)	
Viscosity range	mm <sup>2</sup> /s (SUS)	10 ... 500	
Supply voltage	V	12 DC	24DC
Quenching (E4, E13A)		BZW06-19B	BZW06-33B
Maximum degree of fluid contamination		Class 21/18/15 according to ISO 4406 (1999)	
Supply voltage	%	± 10	
Quenching (E4, E13A)	hod <sup>-1</sup>	15 000	
Duty cycle	%	100	
Enclosure type to EN 60529		IP 67	
Service life		10 <sup>7</sup>	
Weight Directional Control Valves	kg(lbs)	0.2 (0.44)	
Maximum fixing bolt tightening torque	Nm ( lbf.ft)	9+2 ( 6.64+1.48)	
Mounting position		any	

### p-Q Characteristics

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

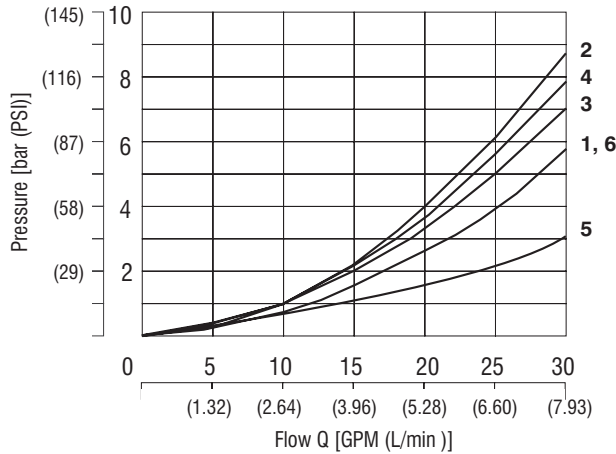
Oil 90 °C / Ambient temperature 90 °C, Voltage rating  $U_n \pm 10\%$



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

### Δp-Q Characteristics

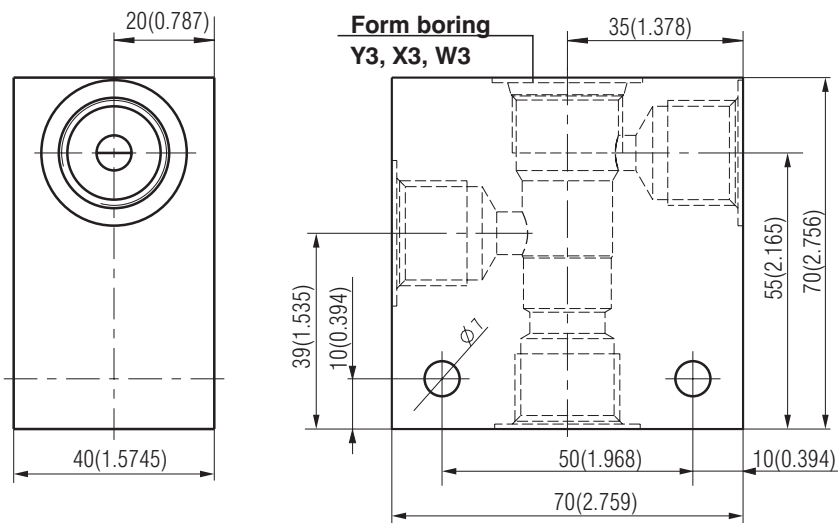
Measured at  $v = 32 \text{ mm}^2/\text{s}$  (156 SUS)



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

### Valve body

Dimensions in mm (inches)

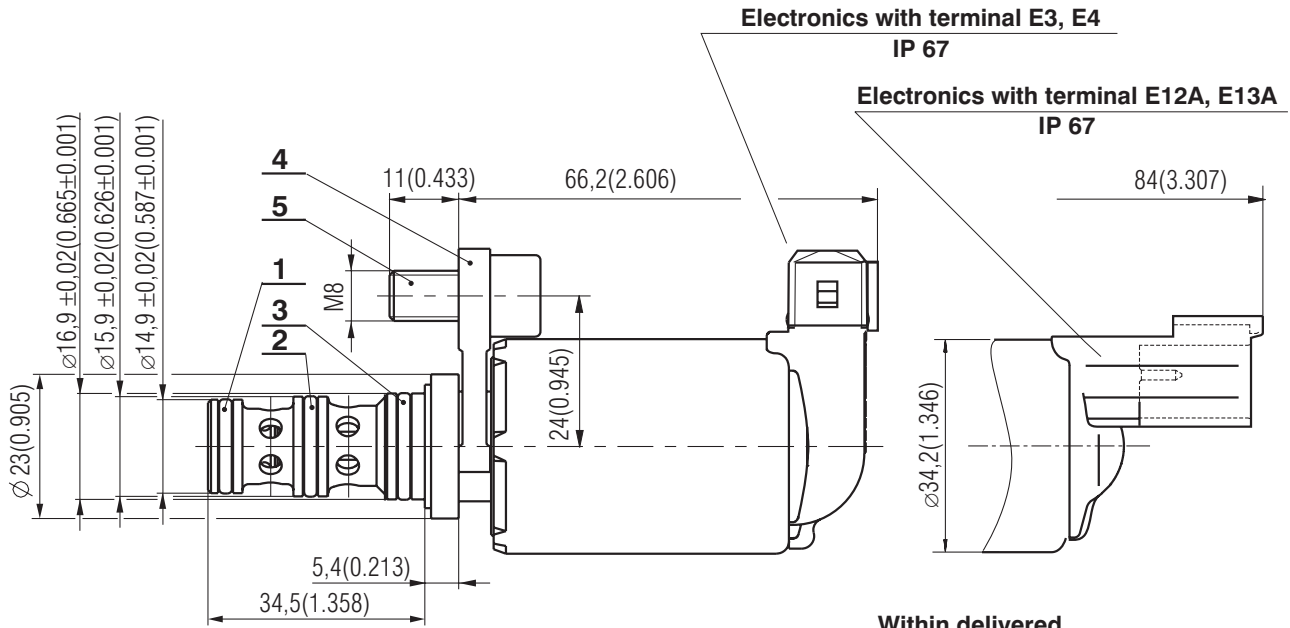


Design	Connecting size	Type code	Body material	Operating pressures
Y	G3/8	SB-Y3-0103AL	Aluminium	250 bar (3625 PSI)
W, X	G3/8	SB-W3-0103AL	Aluminium	250 bar (3625 PSI)

# Valve dimensions

Dimensions in mm (inches)

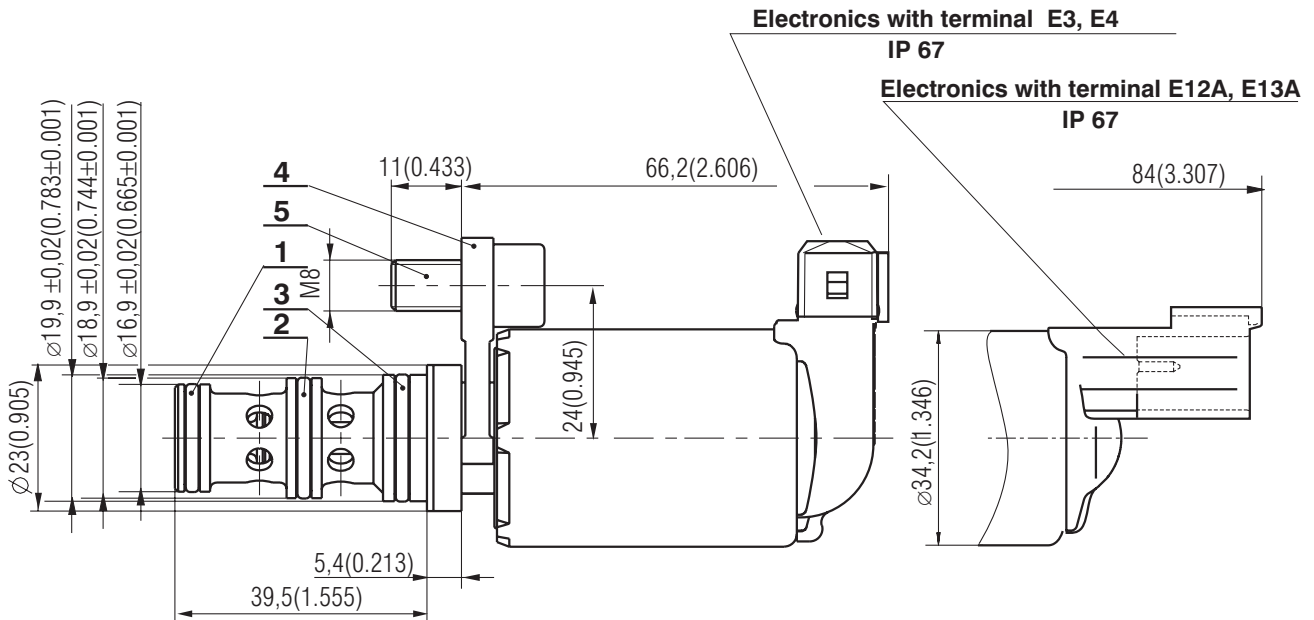
## PD2E1- Y



**Within delivered**

- 1 O-ring 11,2x1,8 NBR 70 (1pc.)
- 2 O-ring 12,42x1,78 NBR 70 (1pc.)
- 3 O-ring 14x1,78-NBR 70 (1 pc.)
- 4 Fork Slip-In M8
- 5 Bolt M8x16 ČSN 021143

## PD2E1- X, W



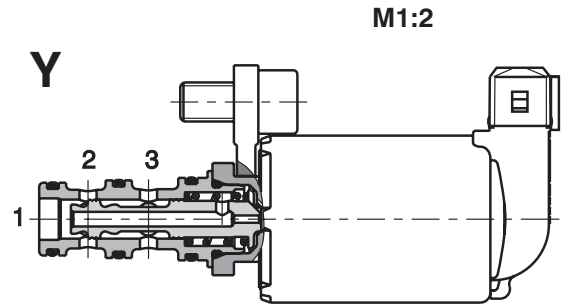
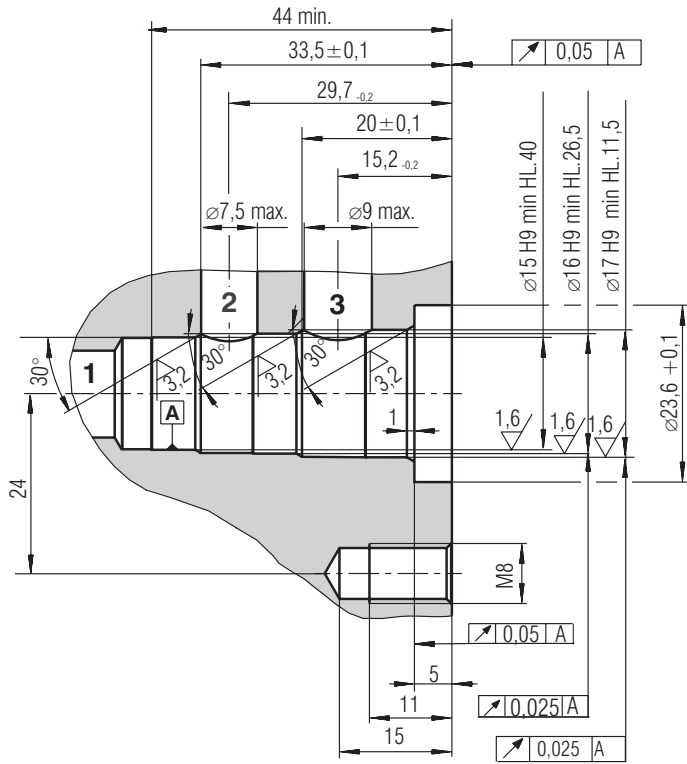
**Within delivered**

- 1 O-ring 14x1,78 NBR 70 (1pc.)
- 2 O-ring 16x1,8 NBR 70 (1pc.)
- 3 O-ring 17x1,8 NBR 70 (1 pc.)
- 4 Fork Slip-In M8
- 5 Bolt M8x16 ČSN 021143

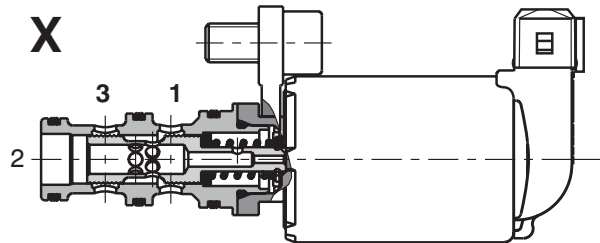
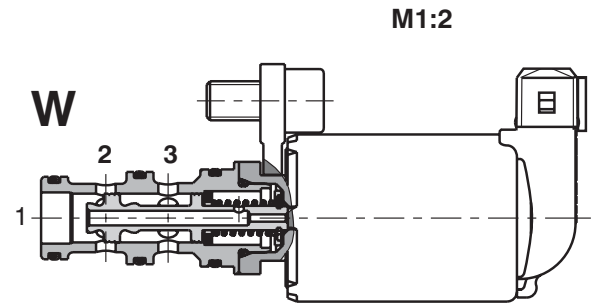
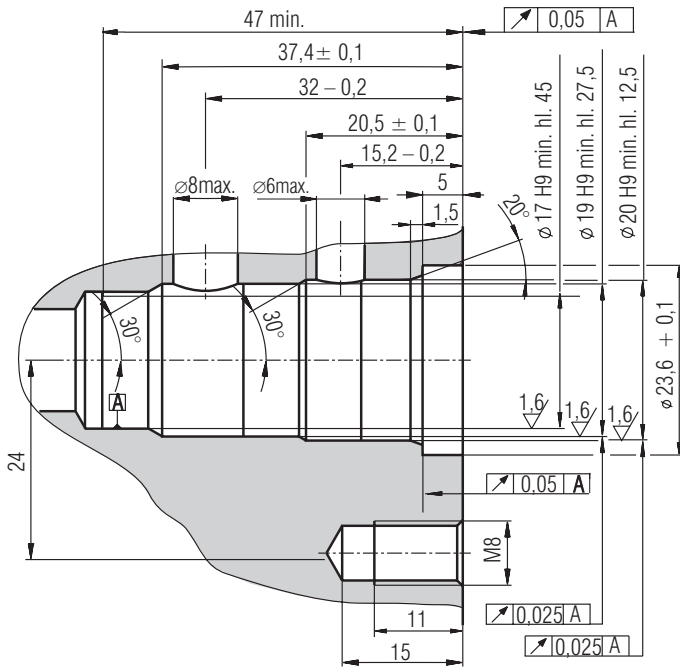
**Cavity**

Dimensions in mm (inches)

**Y -  $\varnothing$  D17**



**X, W -  $\varnothing$  D20**



## Spare parts

### Seal set

Design -Standard (NBR70)	Size, umber			Order number
<b>Y</b>	11,2x1,8 (1pc.)	12,42x1,78 (1pc.)	14x1,78 (1pc.)	17938600
<b>X, W</b>	14x1,78 (1pc.)	16x1,8 (1pc.)	17x1,8 (1pc.)	16961300
<b>Fork+Bolt M8</b>	Fork SLIP-IN M8 (1pc.)	Bolt M8x16 021143 Zn	PO-A (1pc.)	16961500

### Caution!

- The plastic packaging is recyclable.
- Certified documentation is available per request.

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