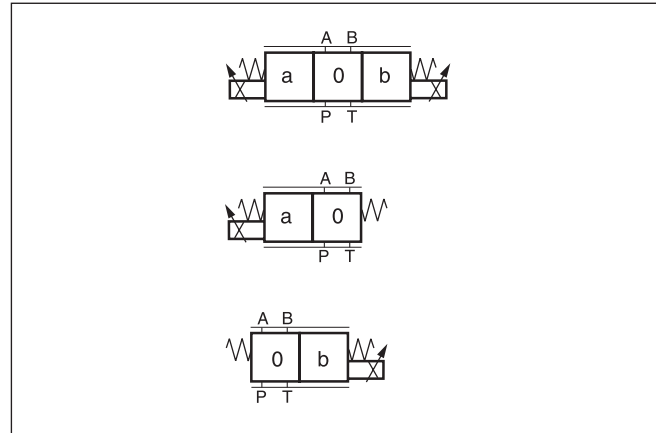


Characteristics

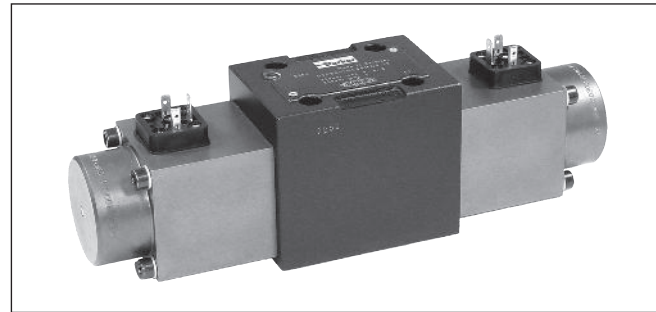
The D3FB directional control valve of the nominal size NG10 (CETOP5) provides variable flow rates.

Due to a spool and sleeve combination with wire EDM window geometry and a special manufacturing adjustment, the valve achieves excellent repeatability from valve to valve and high precision. The D3FB is suited for standard applications particularly with regard to functions on identical machines, which need only to be adjusted once. In combination with the digital power amplifier PWD00A-400, the valve parameters can be saved, changed and duplicated.

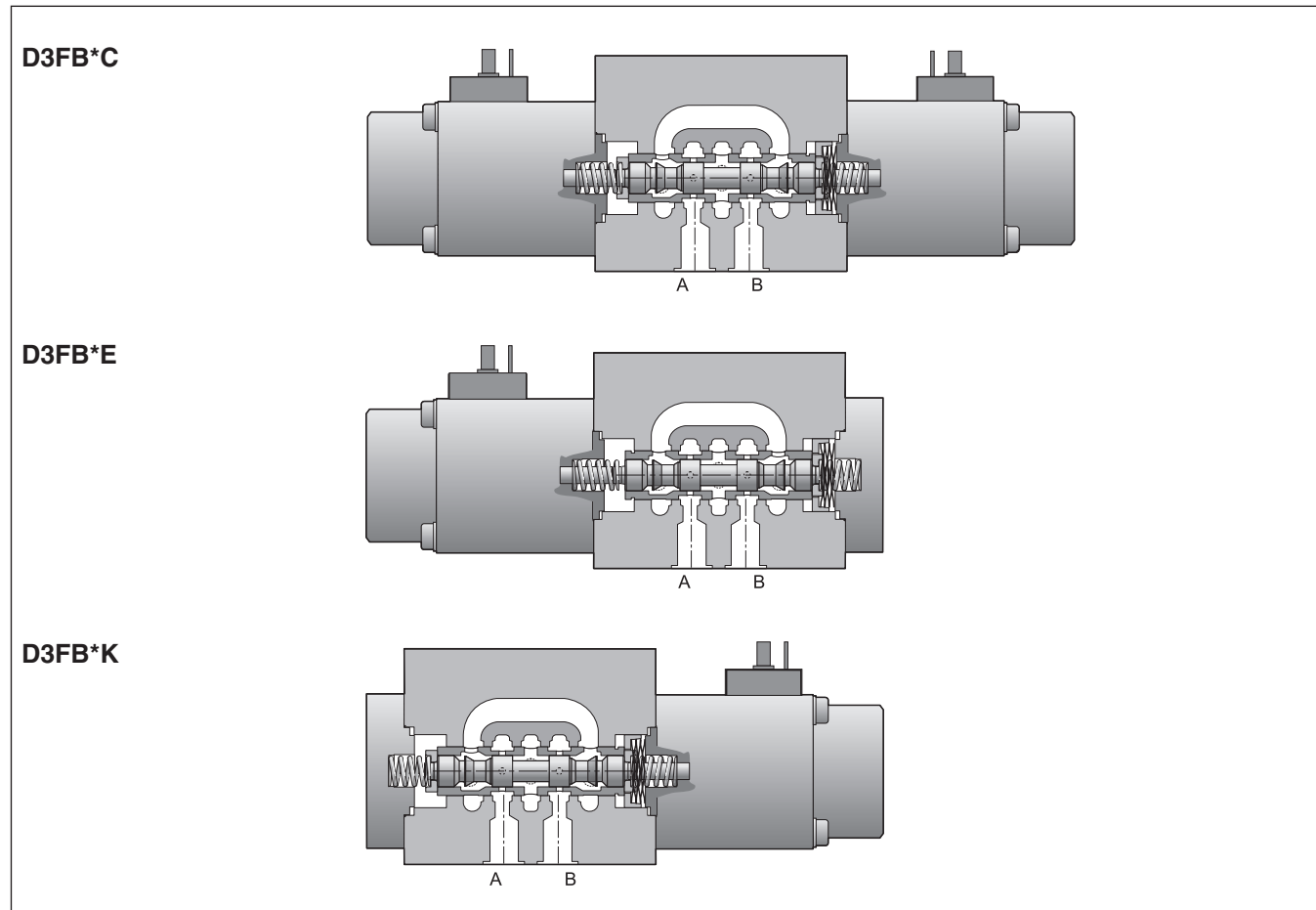


Technical features

- Spool/sleeve design
- High repeatability from valve to valve
- Low hysteresis
- Manual override
- Fail-safe centre position

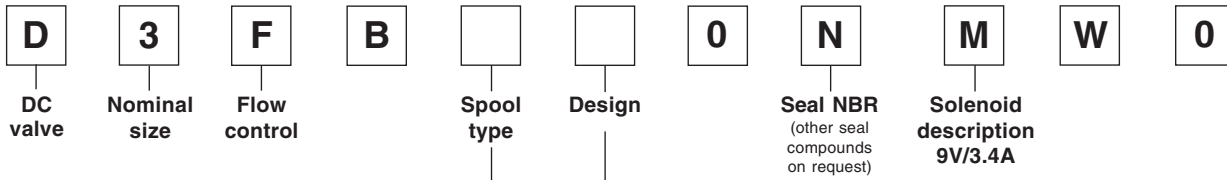


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D3FB.PMD CM





3

Code	Spool type	Flow [l/min] at Δp 5bar per metering edge
E01S		60
E01M		40
E01K		25
E02S		60
E02M		40
E03S		60
E03M		40
B31S		60 / 30
B31M		40 / 20
B32S		60 / 30
B32M		40 / 20

Code	Design
C	
E	
K	

**Bold letters =
Short-term availability**

Please order plugs separately.
See chapter 3 accessories.

Technical Data

General		
Design		Direct-operated proportional DC valve
Actuation		Proportional Solenoid
Size		NG10 (CETOP 5)
Mounting interface		DIN 24340 / ISO 4401 / CETOP RP121 / NFPA
Mounting position		Any
Ambient temperature	[°C]	-20...+60
Weight	[kg]	6.5
Vibration resistance	[g]	25 acc. DIN IEC68, part 2-6
Hydraulic		
Max. operating pressure	[bar]	Ports P, A, B, T max. 350
Fluid		Hydraulic oil as per DIN 51524...535, other on request
Fluid temperature	[°C]	-20...+60
Viscosity permitted	[mm ² /s]	20...380
Viscosity recommended	[mm ² /s]	30...80
Filtration		ISO 4406 (1999) 18/16/13 (acc. NAS 1683: 7)
Flow nominal at Δp=5bar per control edge *	[l/min]	25 / 40 / 60
Leakage at 100 bar	[ml/min]	<100
Static / Dynamic		
Hysteresis	[%]	<4
Electrical characteristics		
Duty ratio	[%]	100%
Protection class		IP54
Solenoid		Code M
Supply voltage	[V]	9
Current consumption	[A]	3.4
Power consumption	[W]	31
Resistance	[Ohm]	1.8
Coil insulation class		F (155 °C)
Electrical connection		2+PE acc. EN 175301-801
Wiring min.	[mm ²]	3x1.5 (AWG 16) overall braid shield
Wiring length max.	[m]	50

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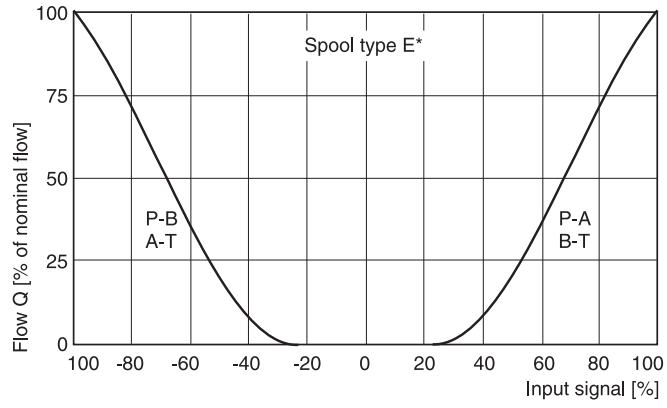
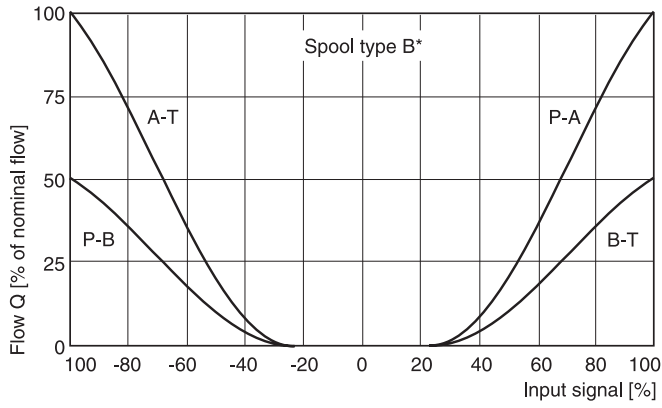
* Flow rate for different Δp per control edge:

$$Q_x = Q_{Nom.} \cdot \sqrt{\frac{\Delta p_x}{\Delta p_{Nom.}}}$$

Flow characteristics

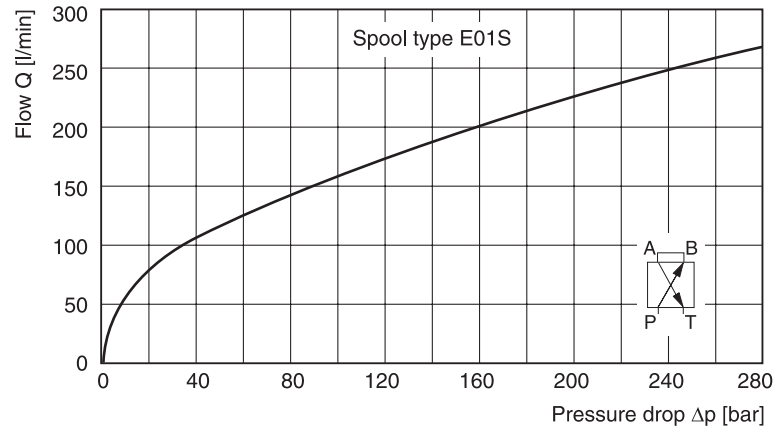
at $\Delta p = 5$ bar per metering edge

3



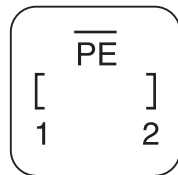
Flow limit

100% command signal



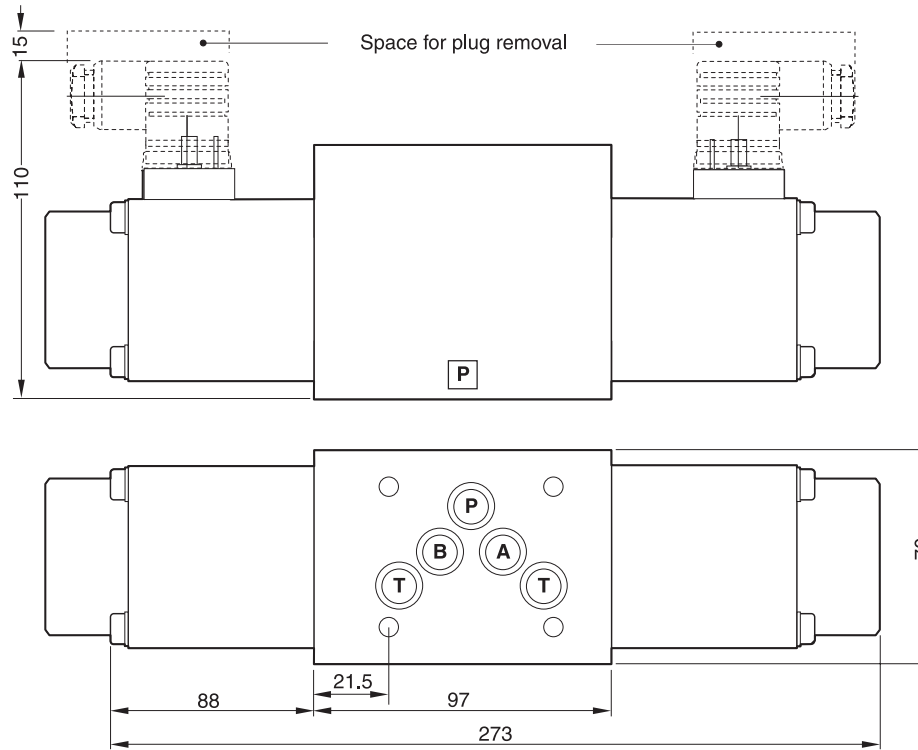
Plug

Solenoid coil



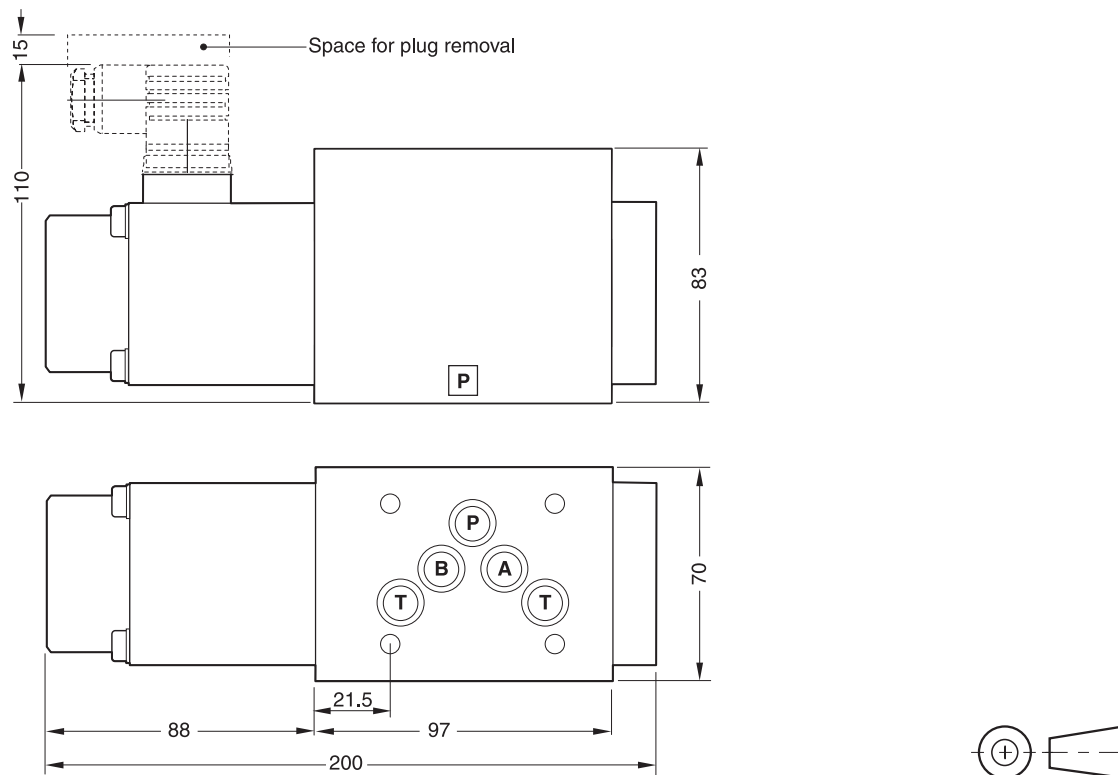
- 1 = coil connection
- 2 = coil connection
- PE = ground potential

D3FB*C



3

D3FB*K



Surface finish	Kit	Kit	Kit	Kit NBR
$\sqrt{R_{max}6.3}$ $\square 0.01/100$	BK385	4x M6x40 DIN 912 12.9	11 Nm ±15 %	SK-D3FB-N

D3FB.PMD CM



