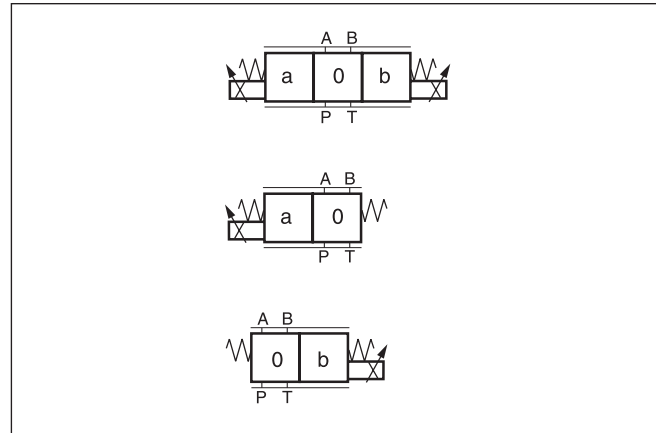


Characteristics

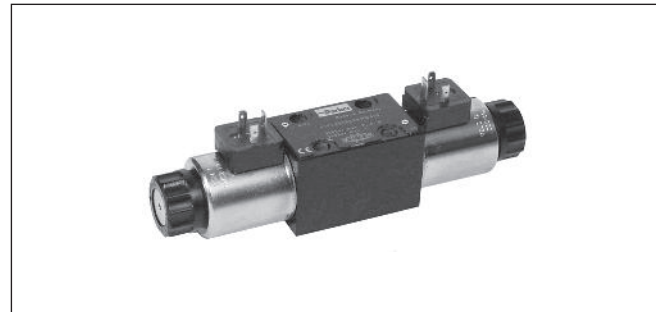
The D1FB directional control valve of the nominal size NG6 (CETOP3) provides variable flow rates.

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 D1FB 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.

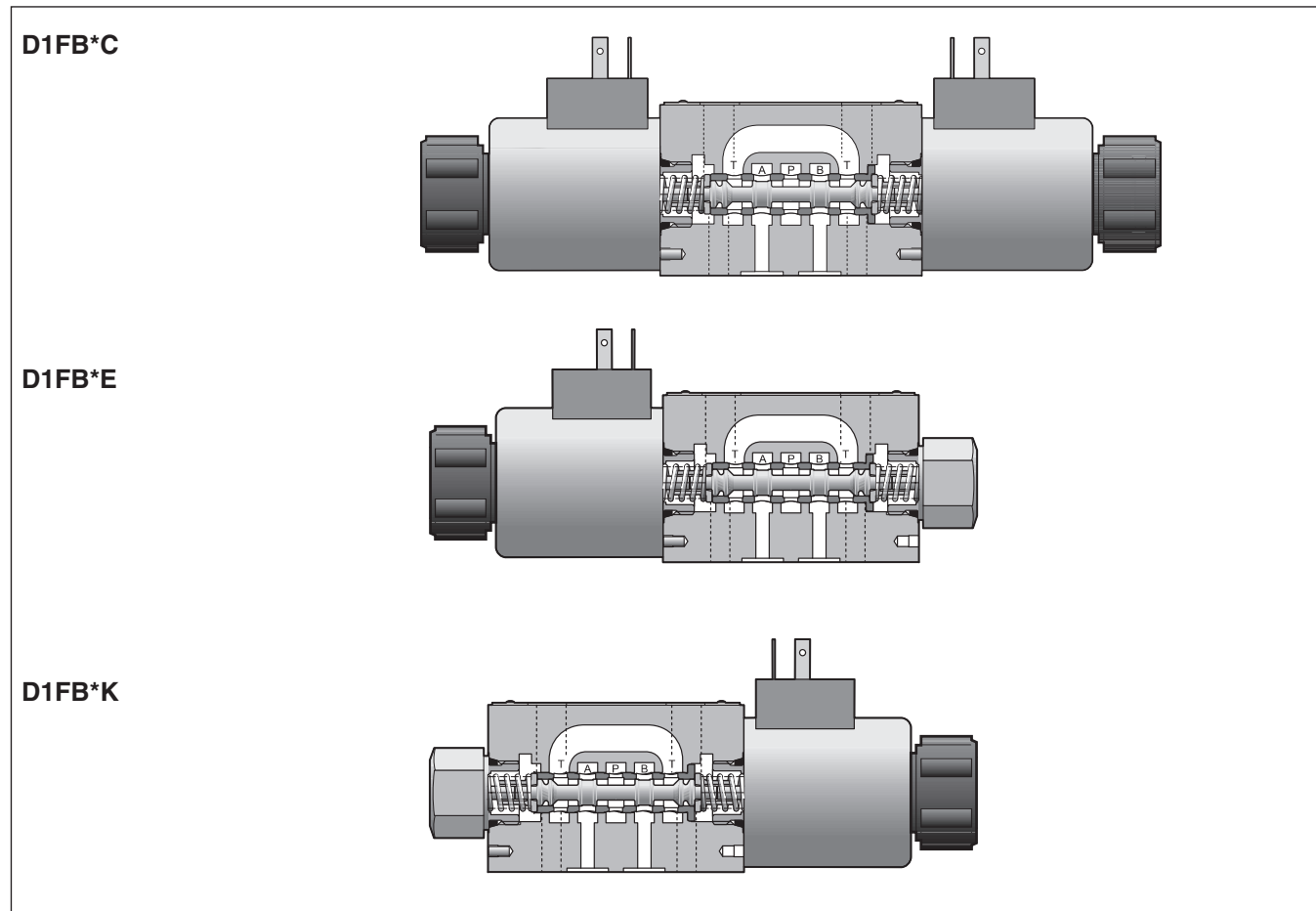


Technical features

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

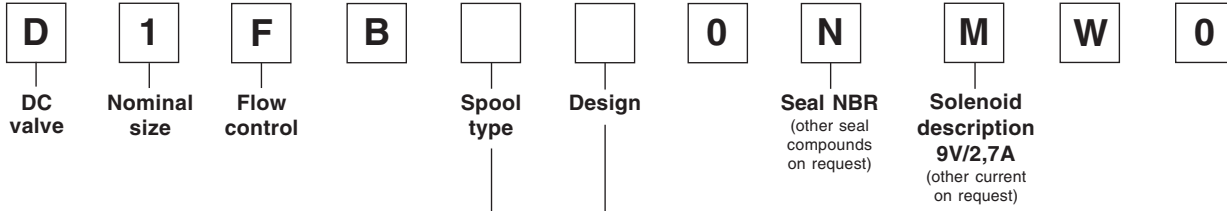


3



D1FB.PMD CM





3

Code	Spool type	Flow [l/min] at Δp 5bar per metering edge
E01H		20
E01F		12
E01C		6
E02H		20
E02F		12
E02C		6
E03H		20
E03F		12
E03C		6
B31H	 $Q_B = Q_A / 2$	20 / 10
B31F		12 / 6
B32H	 $Q_B = Q_A / 2$	20 / 10
B32F		12 / 6

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		NG6 (CETOP 3)
Mounting interface		DIN 24340 / ISO 4401 / CETOP RP121 / NFPA
Mounting position		Any
Ambient temperature	[°C]	-20...+60
Weight	[kg]	2.2
Vibration resistance	[g]	25 acc. DIN IEC68, part 2-6
Hydraulic		
Max. operating pressure	[bar]	Ports P, A, B max. 350; Port T max. 250
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]	6 / 12 / 20
Leakage at 100 bar	[ml/min]	<50
Static / Dynamic		
Hysteresis	[%]	<4
Electrical characteristics		
Duty ratio	[%]	100%
Protection class		IP65 in accordance with DIN 40050 (plugged and mounted)
Solenoid		Code M
Supply voltage	[V]	9
Current consumption	[A]	2.7
Resistance	[Ohm]	2.7
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

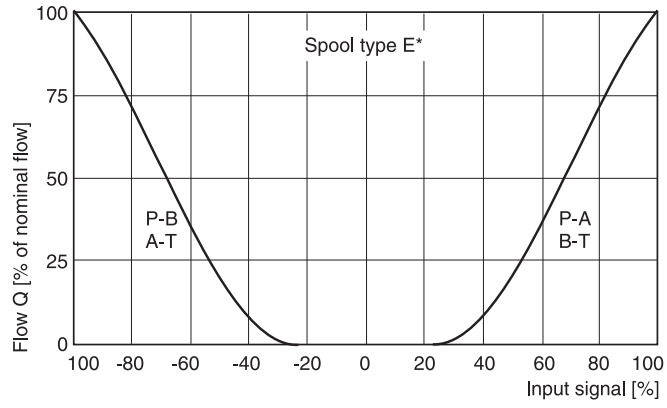
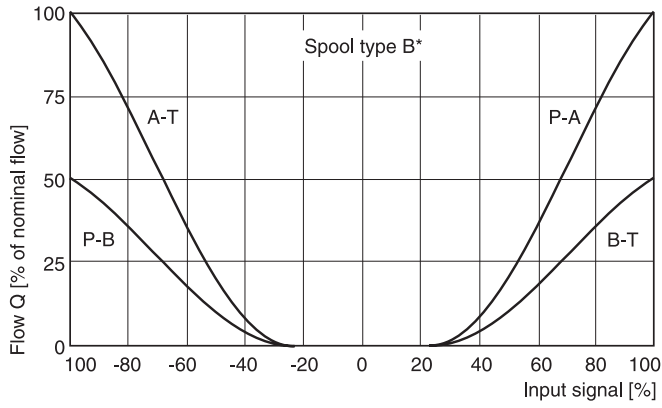
* Flow rate for different Δp per control edge:

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

Flow characteristics

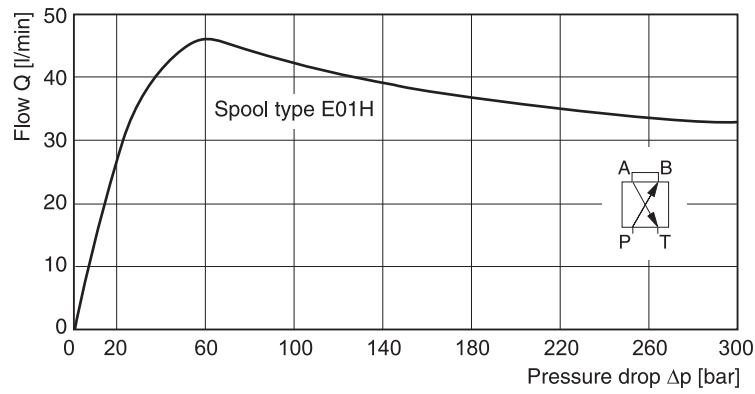
at $\Delta p = 5$ bar per metering edge

3



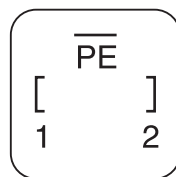
Flow limit

100% command signal



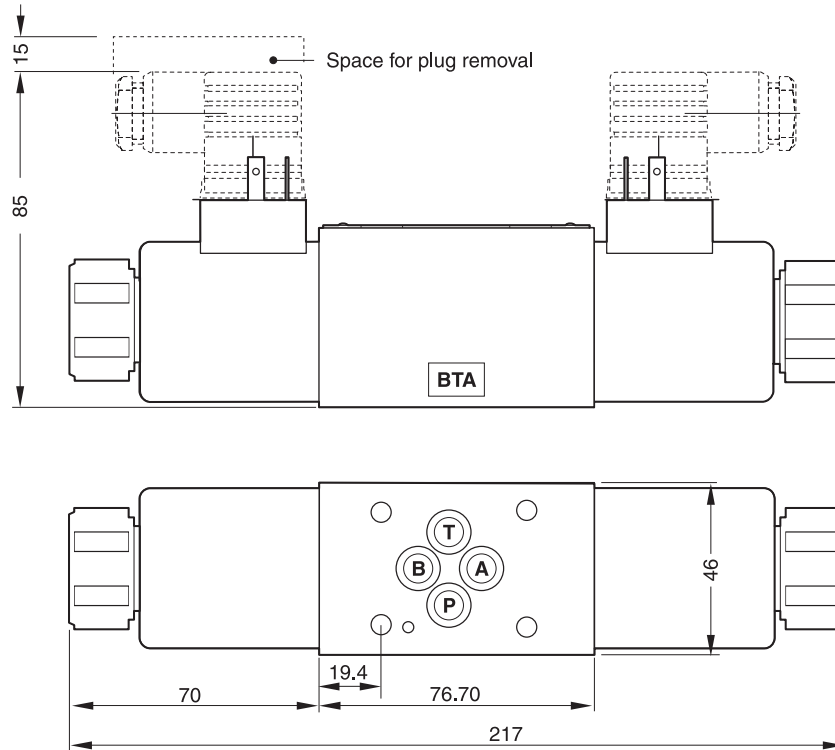
Plug

Solenoid coil



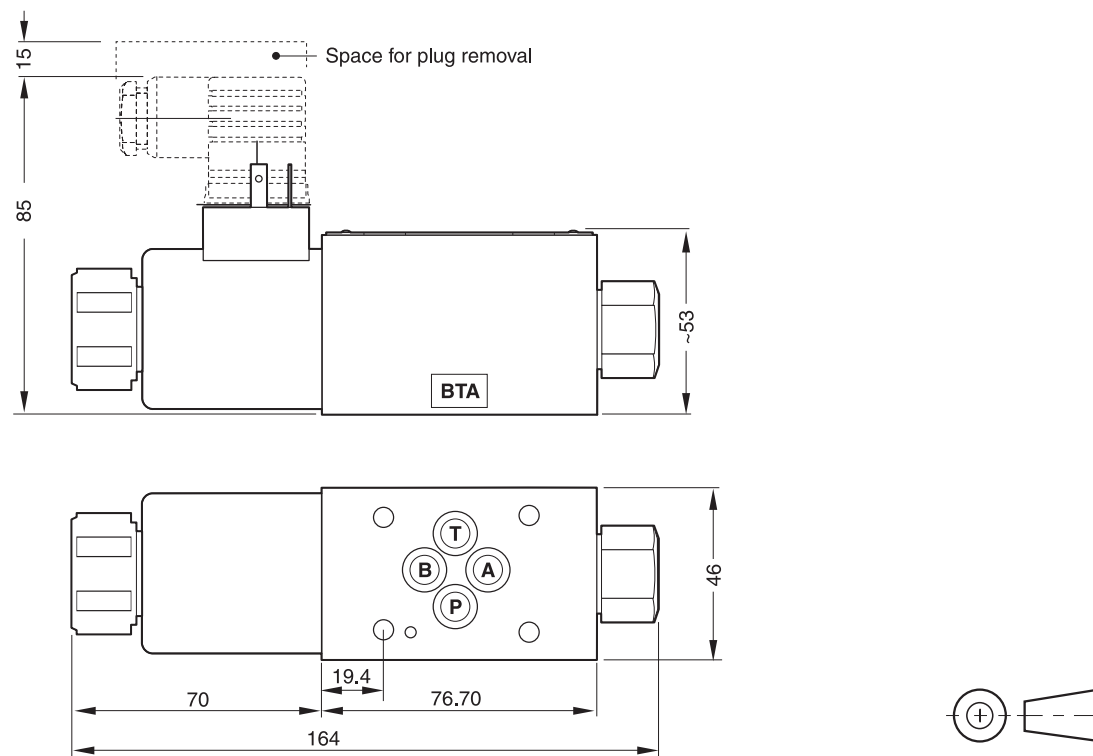
- 1 = coil connection
- 2 = coil connection
- PE = ground potential

D1FB*C



3

D1FB*K



Surface finish	Kit	Kit	Kit	Kit NBR
$\sqrt{R_{max} 6.3}$ $\square 0.01/100$	BK375	4x M5x30 DIN 912 12.9	6.8 Nm ±15 %	SK-D1FB-N

D1FB.PMD CM



