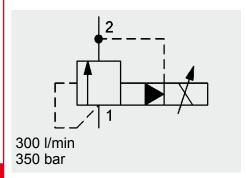
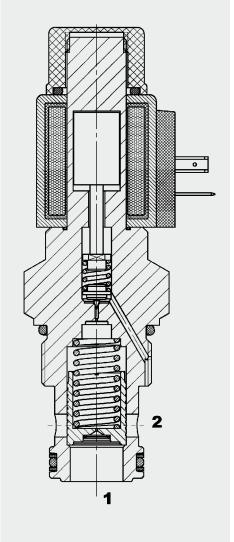
DAGINTERNATIONAL



Proportional Pressure Relief Valve Spool Type, Pilot-Operated SAE-16 Cartridge - 350 bar

PDB16P-01

FUNCTION



The PDB16P is a pilot-operated, spool type proportional pressure relief valve. If pressure at port 1 exceeds the setting defined by the electrical signal, the pilot poppet opens and oil flows from behind the main spool to tank port 2. The resulting pressure differential causes the main spool to lift against the return spring and allows flow from port 1 to port 2. As a function of the electrical signal, the relief pressure at port 1 can be changed steplessly.

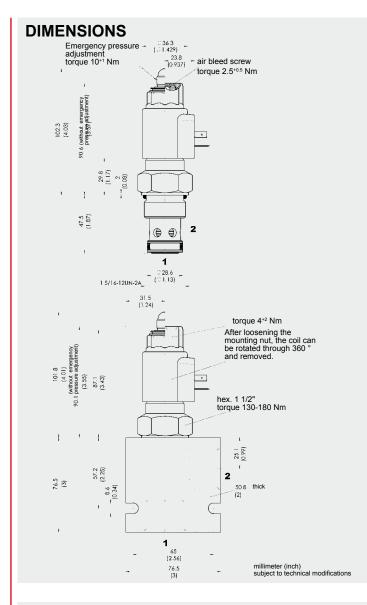
FEATURES

- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Coil seals protect the solenoid system
- Excellent stability throughout the entire flow range
- Excellent dynamic performance
- Low pressure drop due to CFD optimized flow path
- Screen-protected metering orifice enhances safety

SPECIFICATIONS

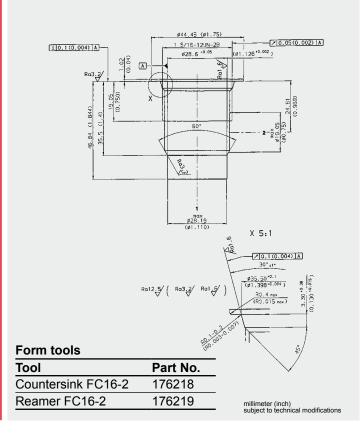
Operating pressure:	max. 350 bar		
Nominal flow:	max. 300 l/min		
Operating pressure ranges:	up to 60 bar		
	up to 230 bar up to 350 bar		
Madia an audium taman audu un manan		1400 °C	
Media operating temperature range:	min20 °C to max. +100 °C		
Ambient temperature range:	min20 °C to max. 60 °C		
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2		
Viscosity range:	min. 7.4 mm²/s to max. 420 mm²/s		
Filtration:	Class 18/16/13 to class 19/17/14 to ISO 4406 or cleaner		
MTTF _d :	150 years (see "Conditions and instructions for valves" in brochure 5.300)		
Installation:	No orientation restrictions		
Materials:	Valve body:	free-cutting steel	
	Spool:	hardened and ground steel	
	Seals:	NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C)	
	Back-up rings:	PTFE	
	Coil:	steel / polyamide	
Cavity:	FC16-2		
Weight:	Valve complete	0.79 kg	
	Coil only	0.23 kg	
Electronic data:			
Control currents:	1050 mA, 8.8 Ohm (24 Volt) 2100 mA, 2.2 Ohm (12 Volt)		
Internal leakage:	< 1 l/min at 350 bar		
Dither frequency:	approx. 160 Hz - 250 Hz		
Response time:	Energized: De-energized:	approx. 70 ms approx. 40 ms	
Hysteresis with dither:	2 - 4% of I _{nom}		
Repeatability:	≤ 1.5 % of I _{nom}		
Hysteresis:	≤ 2 % of I _{nom}		
Response sensitivity:	≤ 1 % of I _{nom}		
Call hands		-	
Coil type: The PDB16P can also be supplied with an emerge	Coil40-1836		

This allows a manual pressure adjustment of the valve if the electrical signal is interrupted. This adjustment should be used only in the case of electrical failure since the manual setting would be additive to the electrical setting and the system could be damaged when power is restored.

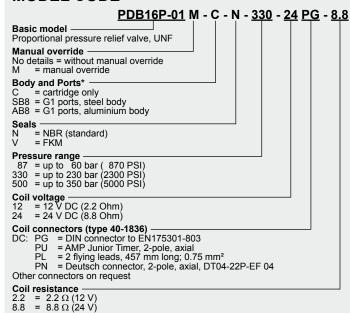


CAVITY

FC16-2



MODEL CODE



Standard models

Model code	Part No.
PDB16P-01-C-N-87-12PG-2.2	3144468
PDB16P-01-C-N-330-12PG-2.2	3144469
PDB16P-01-C-N-500-12PG-2.2	3144470
PDB16P-01-C-N-87-24PG-8.8	3144471
PDB16P-01-C-N-330-24PG-8.8	3144472
PDB16P-01-C-N-500-24PG-8.8	3144473

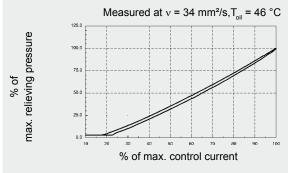
*Standard in-line bodies

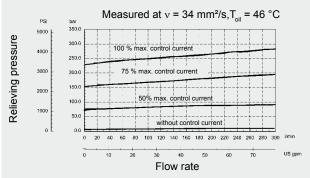
Code	Part No.	Material	Ports	Pressure
FH162-SB8	3032496	Steel, zinc-plated	G1	420 bar
FH162-AB8	3037193	Aluminium, anodized	G1	210 bar
Other bodies on request				

Seal kits

Code	Material	Part No.
FS162-N SEAL KIT	NBR	3052427
FS162-V SEAL KIT	FKM	3051758

PERFORMANCE





NOTE
The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

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