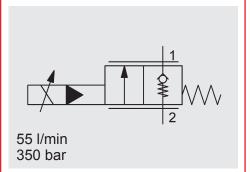
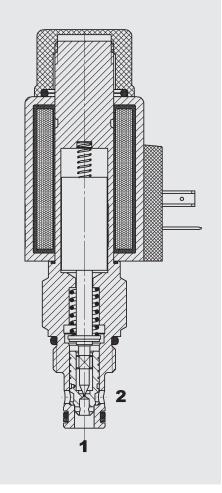
(DAC) INTERNATIONAL



Proportional Flow Controller **Poppet Type, Pilot-Operated,** Normally Closed SAE-08 Cartridge – 350 bar

PWS08Z-01

FUNCTION



The proportional flow controller PWS08Z is a pilot-operated, normally closed, spring-loaded poppet-type flow control

It is non-compensated and its function is to smoothly control the flow from port 2 to port 1.

The energization of the coil opens the pilot stage and oil flows across an orifice to the back of the main piston. The resulting pressure differential causes the main piston to follow the pilot stage. When combined with a pressure compensator the proportional flow controller can be used as a 2-way flow regulator – for example when required to lift/lower variable loads at the same velocity.

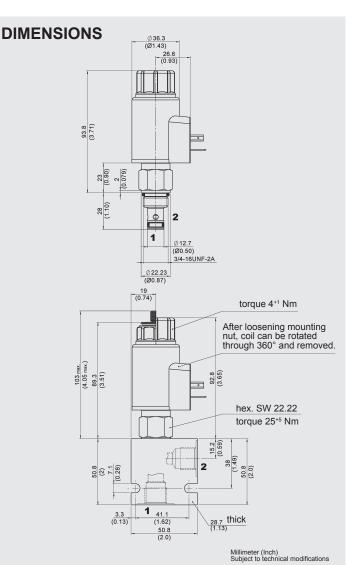
FEATURES

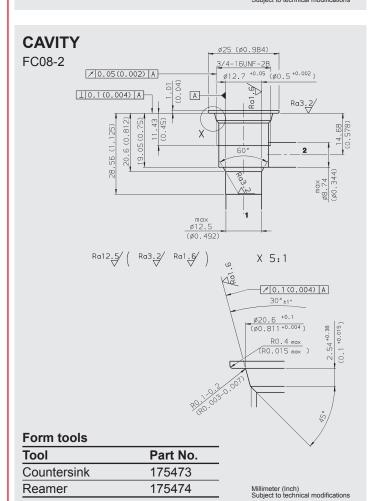
- Stepless adjustment of the flow, depending on the coil current.
- Excellent stability throughout the entire flow range
- Excellent dynamic performance
- External surfaces zinc-plated
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Low pressure drop by CFD optimized flow path
- On request: mechanical adjustment of one point of the curve (Version 01, without option M)
- Optional: Soft shift function with extended switching times possible

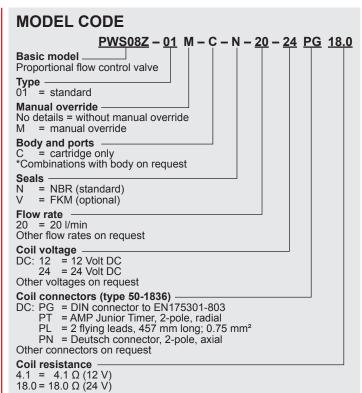
SPECIFICATIONS

Operating pressure:	max. 350 bar		
Nominal flow:	max. 55 l/min		
Internal leakage:	Leakage-free		
	(max. 5 drops = 0,25 cm³/min at 350 bar)		
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. 10 mm ² /s to max. 420 mm ² /s		
Filtration:	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		
Material:	Valve body:	free-cutting steel	
	Piston:	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:	FC08-2		
Weight:	0.5 kg		
Electronic data:			
Control current:	850 mA, 18.0 Ohm (24 Volt) 1750 mA, 4.1 Ohm (12 Volt)		
Dither frequency:	120 Hz – 250 Hz (120 Hz recommended)		
Hysteresis with dither:	4-6% of I _{nom}		
Repeatability:	≤ 1.5 % of I _{nom}		
Reversal error:	≤ 2 % of I _{nom}		
Response sensitivity:	≤ 1 % of I _{nom}		
Type of coil:	Coil (12 or 24) P50-1836		
NOTE			

In order to achieve optimal function, any trapped air should be vented using the bleed screw on the face of the pole tube.







Standard models

Model code	Part No.
PWS08Z-01-C-N-20-12PG-4.1	3525174
PWS08Z-01-C-N-20-24PG-18.0	3486507

Other models on request

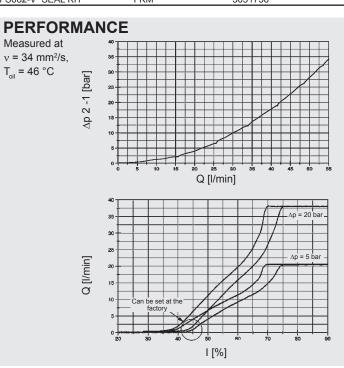
Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH082-SB3	560919	Steel, zinc-plated	G3/8	420 bar
FH082-AB3	3011423	Aluminium, clear anodized	G3/8	210 bar

Other line bodies on request

Seal kits

Code	Material	Part No.
FS082-N SEAL KIT	NBR	3033920
FS082-V SEAL KIT	FKM	3051756



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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