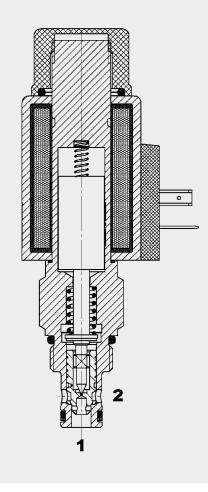


55 l/min 350 bar

FUNCTION



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

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.

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

PWS08Z-01

FEATURES

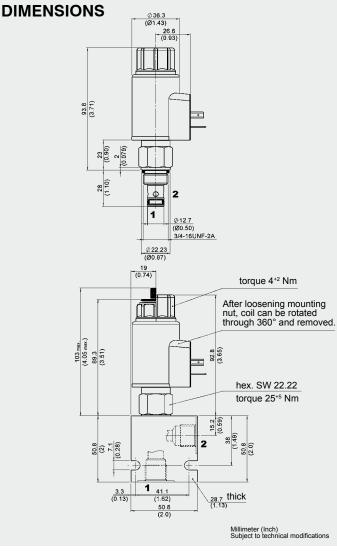
- Stepless adjustment of the flow, depending on the coil current.
- Excellent stability throughout the entire flow range
- Excellent dynamic performance
- External surfaces zinc-plated
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Low pressure drop 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

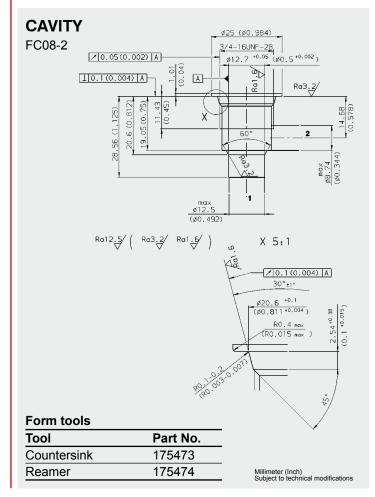
SPECIFICATIONS

screw on the face of the pole tube.

Operating pressure:	max. 350 bar			
Nominal flow:	max. 55 l/min	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 instructions for	150 years (see "Conditions and instructions for valves" in brochure 5.300)		
Installation:	No orientation re	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	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 H	120 Hz – 250 Hz (120 Hz recommended)		
Hysteresis with dither:	4-6% of I _{nom}			
Repeatability:	\leq 1.5 % of I _{nom}			
Reversal error:	\leq 2 % of I _{nom}	≤ 2 % of I _{nom}		
Response sensitivity:	\leq 1 % of I _{nom}			
Type of coil:	Coil (12 or 24) F	Coil (12 or 24) P50-1836		

E 5.127.1/01.13





MODEL CODE PWS08Z - 01 M - C - N - 20 - 24 PG 18.0 **Basic model** Proportional flow control valve Type 01 = standard Manual override ______ No details = without manual override M = manual override Body and ports C = cartridge only *Combinations with body on request Seals = NBR (standard) = FKM (optional) N V Flow rate _____ 20 = 20 l/min Other flow rates on request Coil voltage DC: 12 = 12 Volt DC 24 = 24 Volt DC Other voltages on request Coil connectors (type 50-1836) DC: PG = DIN connector to EN175301-803 PT = AMP Junior Timer, 2-pole, radial PL = 2 flying leads, 457 mm long; 0.75 mm² PN = Deutsch connector, 2-pole, axial Other connectors on request Coil resistance $4.1 = 4.1 \Omega (12 V)$ $18.0 = 18.0 \Omega (24 V)$

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

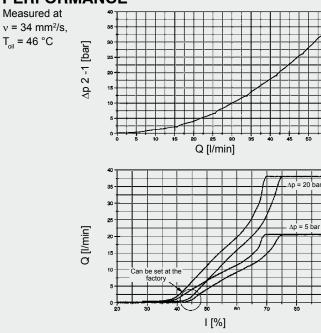
Code	Part No.	Material	Ports	Pressure
FH082-SB3	560919	Steel, zinc-plated	G3/8	420 bar
FH082-AB3	3011423	Aluminium, clear anodized	G3/8	210 bar
Other line bodi	as on request			

Other line bodies on request

Seal kits

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

PERFORMANCE



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

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