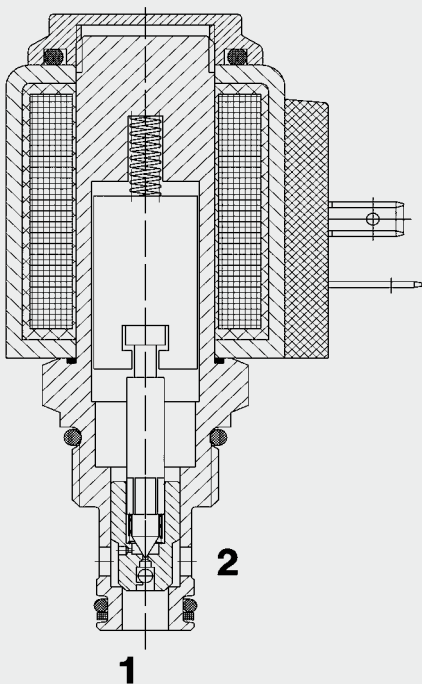


FUNCTION



2/2 Solenoid Directional Valve **UNF** Poppet Type, Pilot-Operated Normally Closed (Reverse Flow) SAE-08 Cartridge – 350 bar

WS08ZR-01

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
- Wide variety of connectors available
- Excellent switching performance by high power HYDAC solenoid
- Low pressure drop due to CFD optimized flow path

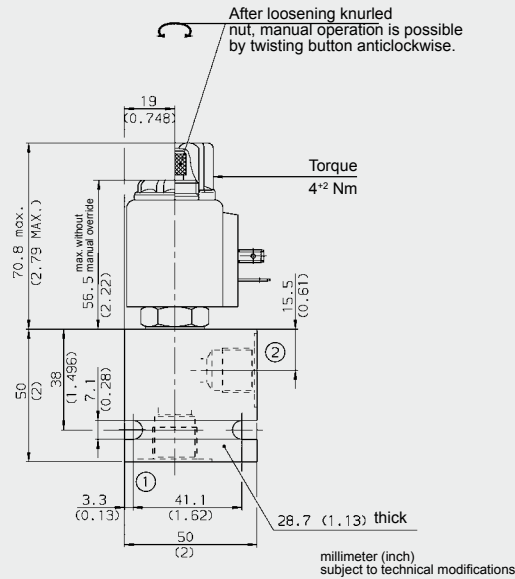
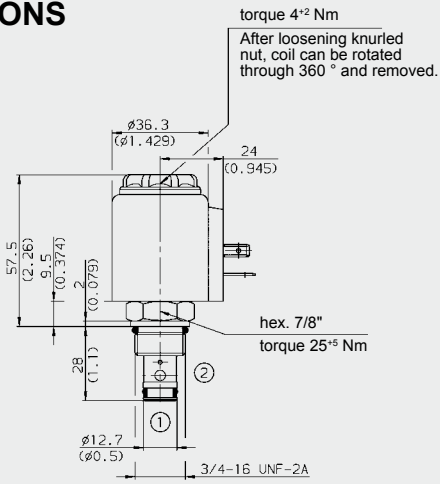
CHARACTERISTICS

Operating pressure:	max. 350 bar
Nominal flow:	max. 38 l/min
Leakage:	Leakage-free (max. 5 drops \approx 0,25 cm ³ /min at 350 bar)
Media operating temperature range:	min. -20 °C to max. +100 °C
Ambient temperature range:	min. -20 °C to max. +60 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity range:	min. 7.4 mm ² /s to max. 420 mm ² /s
Filtration:	Class 21/19/16 according 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:	Valve complete 0.33 kg Coil only 0.19 kg
Electrical data:	
Response time:	Energized: approx. 35 ms De-energized: approx. 50 ms
Type of voltage:	DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil
Current draw at 20 °C:	1.5 A at 12 V DC 0.8 A at 24 V DC
Voltage tolerance:	\pm 15% of the nominal voltage
Coil duty rating:	Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature
Coil type:	Coil...-40-1836

When the solenoid coil is not energized, the valve is closed from port 2 to port 1. Flow is permitted from port 1 to port 2.

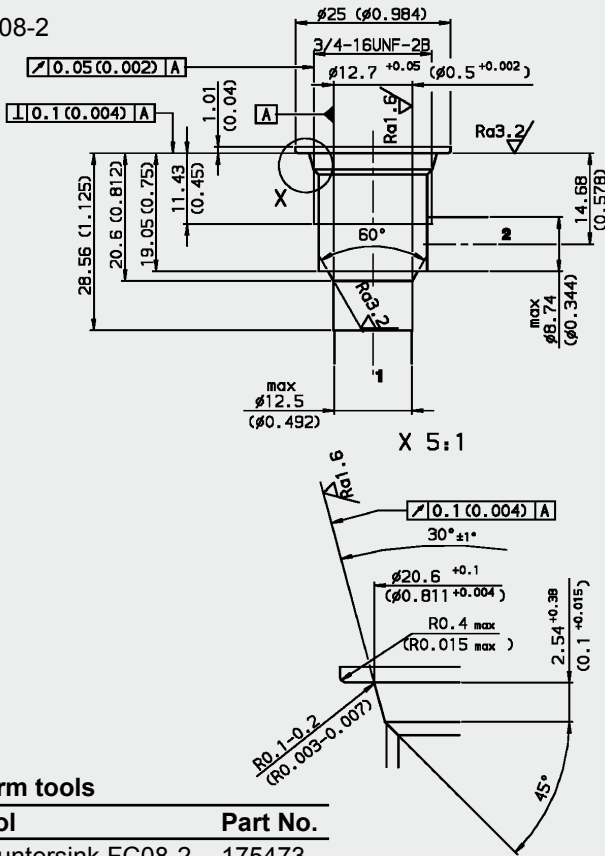
When energized the valve allows flow in both directions.

DIMENSIONS



CAVITY

FC08-2



Form tools

Tool	Part No.
Countersink FC08-2	175473
Reamer FC08-2	175474

MODEL CODE

WS08ZR-01 M - C - N - 24 DG

Basic model _____
Directional poppet valve, UNF

Manual override _____
no details = without manual override
M = manual override

Body and ports _____
C = cartridge only

Seals _____
N = NBR (standard)
V = FKM

Coil voltage _____
DC voltages
12 = 12 V DC
24 = 24 V DC
AC voltages (bridge rectifier built into the coil)
115 = 115 V AC
230 = 230 V AC
Other voltages on request

Coil connectors (type 40-1836) _____
DC: DG = DIN connector to EN 175301-803
DK = KOSTAL threaded connection M27x1
DL = 2 flying leads, 457 mm long, 0.75 mm²
DN = Deutsch connector, 2-pole, axial
DT = AMP Junior Timer, 2-pole, radial

AC: AG = DIN connector to EN 175301-803
Other connectors on request

Standard models

Model code	Part No.
WS08ZR-01-C-N-12DG	558859
WS08ZR-01-C-N-24DG	562806
WS08ZR-01-C-N-230AG	3043419

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

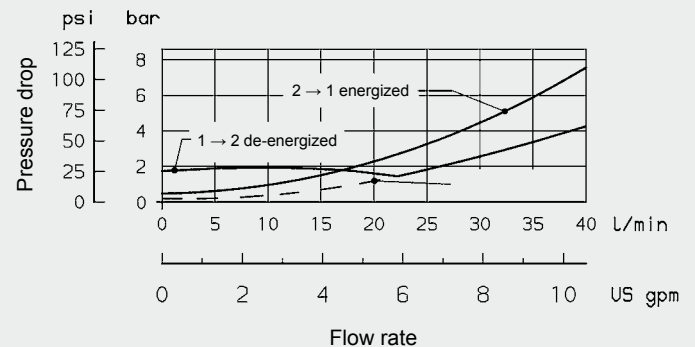
Other line bodies on request

Seal kits

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

PERFORMANCE

Measured at $v = 34 \text{ mm}^2/\text{s}$, $T_{\text{oil}} = 46 \text{ }^\circ\text{C}$



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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