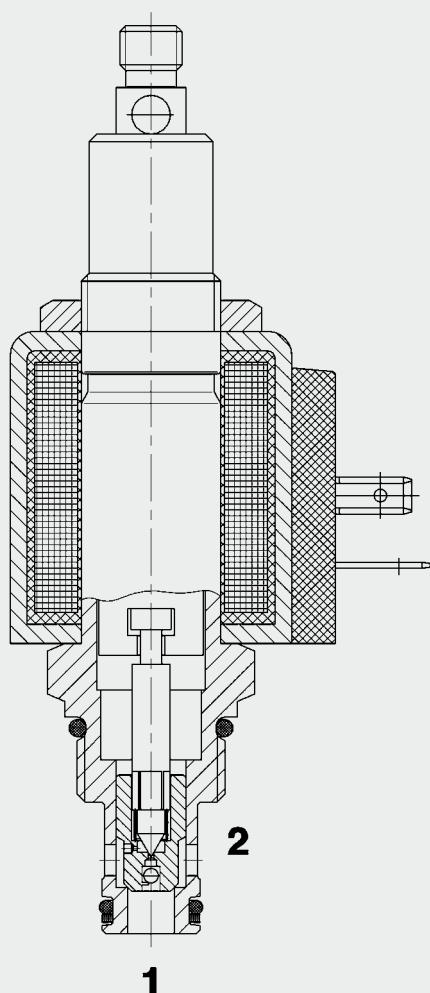


FUNCTION



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.

2/2 Solenoid Directional Valve Poppet Type, Pilot-Operated Spring-Return Manual Override Normally Closed (Reverse Flow) SAE-08 Cartridge – 350 bar

UNF

WS08ZR-01J

FEATURES

- Excellent switching performance by high power HYDAC solenoid
- Wide variety of connectors available
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- External surfaces zinc-plated and corrosion-proof
- Wide variety of connectors available

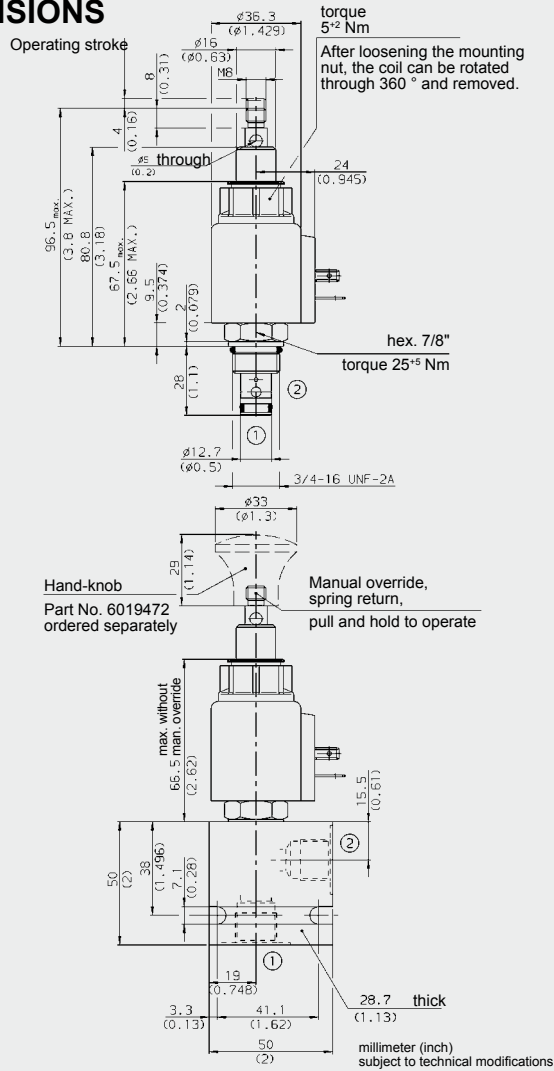
SPECIFICATIONS

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
Manual override:	The pull-force required is dependent on the operating pressure max. approx. 150 N The max. permitted pull-force is 180 N
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
Materials:	Valve body: free-cutting steel Poppet: 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 0.36 kg Coil only 0.19 kg

Electrical data:

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
Coil duty rating:	Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature
Voltage tolerance:	\pm 15% of the nominal voltage
Response time:	Energized: approx. 35 ms De-energized: approx. 50 ms
Coil type:	Coil...-40-1836

DIMENSIONS



MODEL CODE

WS08ZR - 01 J - C - N - 24 DG

Basic model _____
Directional poppet valve UNF

Type _____
01 = standard

Manual override _____
J = pull-and-hold,
spring-return manual override

Body and ports* _____
C = cartridge only
SB3 = G3/8 ports, steel body
AB3 = G3/8 ports, aluminium body

Seals _____
N = NBR (standard)
V = FKM

Nominal voltage for actuating solenoid _____

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-01J-C-N-24DG	3122604
WS08ZR-01J-C-N-230AG	3122605

*Standard in-line bodies

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

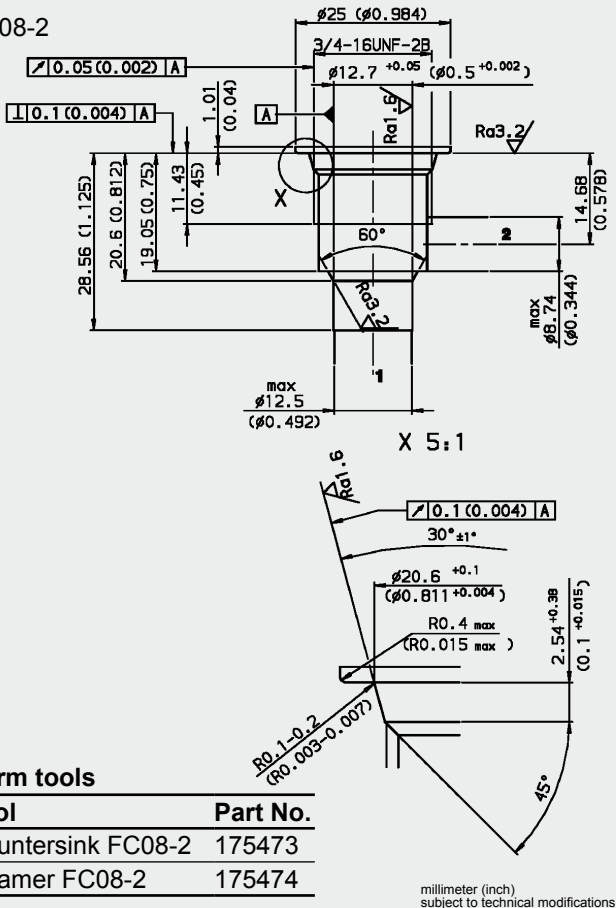
Other bodies on request

Seal kits

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

CAVITY

FC08-2



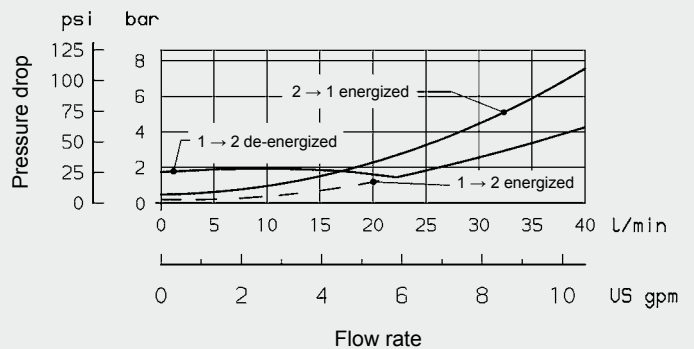
Form tools

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

millimeter (inch)
subject to technical modifications

PERFORMANCE

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



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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