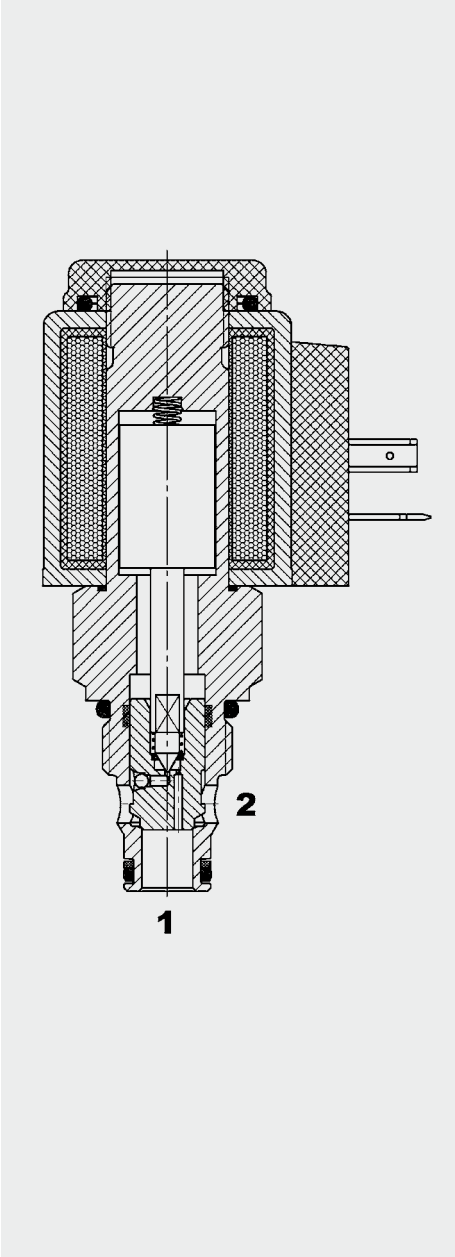


FUNCTION



The directional poppet valve WS08BR is a pilot-operated, normally closed, spring-loaded valve. When the solenoid is de-energized, the valve blocks flow from port 1 to 2 and acts as a check allowing flow from port 2 to 1. When energized the valve allows flow in both directions.

2/2 Solenoid Directional Valve **UNF** Poppet Type, Pilot Operated, Normally Closed **SAE-08 Cartridge – 350 bar** WS08BR-31

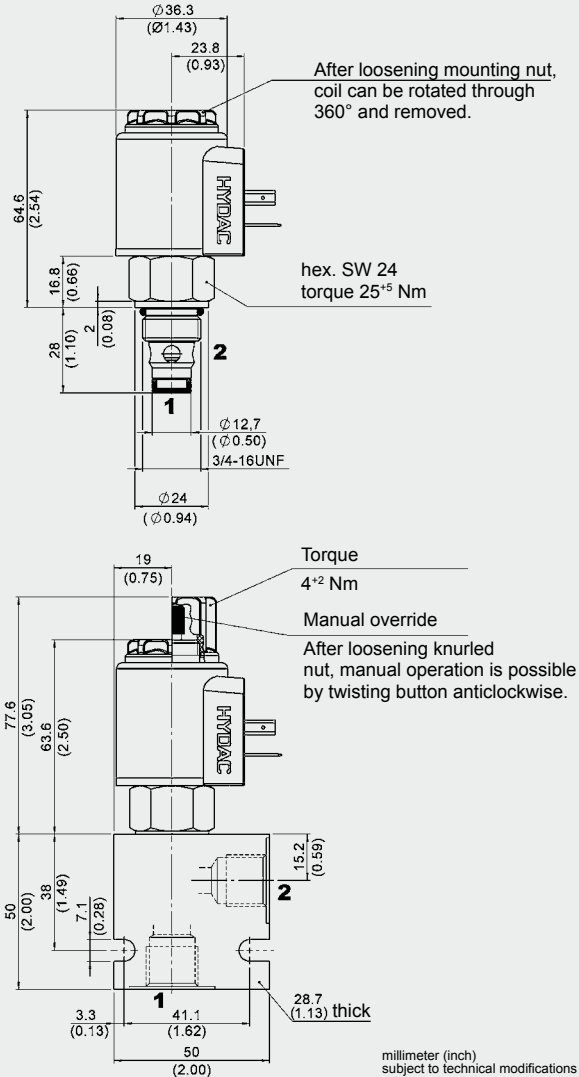
FEATURES

- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Excellent stability throughout the entire flow range
- Excellent dynamic performance
- Coil seals protect the solenoid system
- Wide variety of connections available
- Low pressure drop due to CFD optimized flow path

SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 40 l/min
Internal leakage:	Leakage-free
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
MTTFd:	150 years (see "Conditions and instructions for valves" in brochure 5.300)
Installation:	No orientation restrictions
Materials:	Valve body: high tensile steel Piston: hardened and ground steel Seals: NBR (standard) FKM (optional) Back-up rings: PTFE
Cavity:	FC08-2
Weight:	Valve complete 0.33 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
Voltage tolerance:	± 15% of nominal
Coil duty rating:	Continuous up to max. 115% of nominal voltage at max. 60° C ambient temperature
Response time:	On: approx. 20 ms Off: approx. 80 ms
Coil type:	Coil... –40-1836

DIMENSIONS



MODEL CODE

WS08BR - 31 M - C - N - 24 DG

Basic model _____
Directional poppet valve, metric

Type _____
31 = standard (spanner width 24 metric)

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

Body and ports _____
C = cartridge only
Combinations with body on request

Seals _____
N = NBR (standard)
V = FKM (optional)

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

Coil connections 40-1836 _____
DC: DG = DIN connection to EN175301-803
DT = AMP Junior Timer, 2 pole, radial
DK = Kostal threaded connection M27 x 1
DL = leadwires (2), 475mm long
DN = Deutsch connection, axial
AC: AG = DIN connection to EN175301-803
Other connections on request

Standard models

Model code	Part No.
WS08BR-31-C-N-24DG	3554847
WS08BR-31-C-N-230AG	3554848

Other models on request

Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH082-SB3	560919	Steel, zinc-plated	3/8 BSP	420 bar
FH082-AB3	3011423	Aluminium, clear anodized	3/8 BSP	210 bar

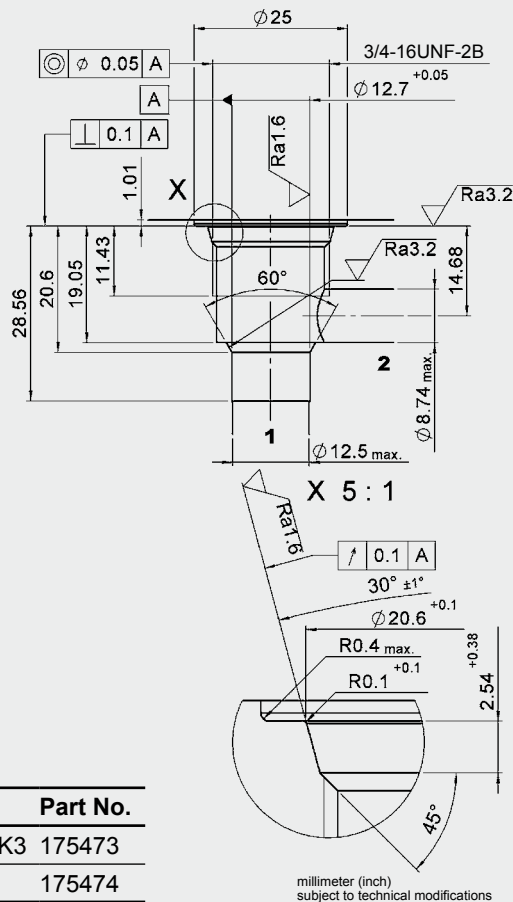
Other bodies on request

Seal kits

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

CAVITY

FC08-2

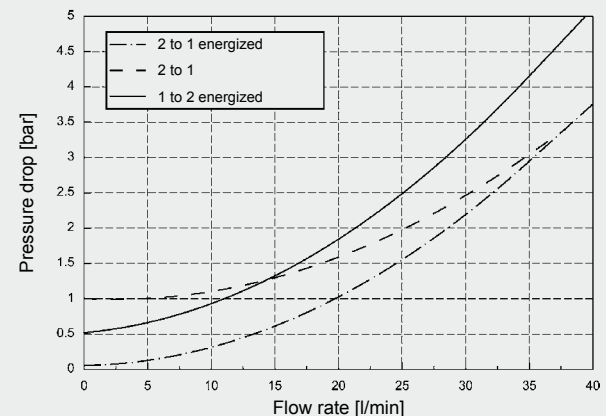


Form tools

Tool	Part No.
Countersink MK3	175473
Reamer	175474

PERFORMANCE

Measured at $v = 33 \text{ mm}^2/\text{s}$, $T_{oil} = 46 \text{ }^\circ\text{C}$



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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