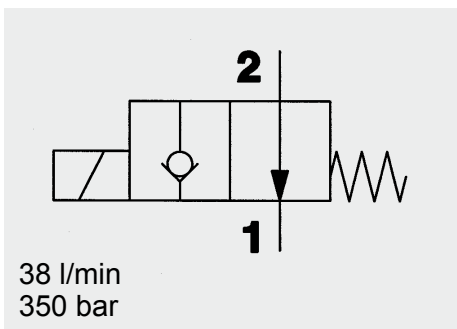


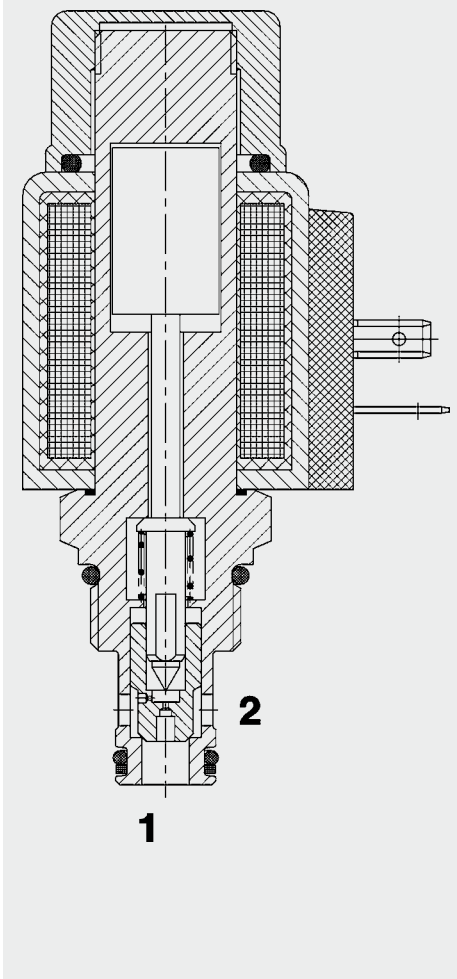
## 2/2 Solenoid Directional Valve **UNF** **Poppet Type, Pilot-Operated** **Normally Open** **SAE-08 Cartridge – 350 bar**

WS08Y-01



38 l/min  
350 bar

### FUNCTION



When de-energized, there is free flow through the valve from port 2 to port 1. Flow is not possible in the reverse direction.

When the solenoid coil is energized, the valve is closed from port 2 to port 1. In the reverse direction from port 1 to 2 there is free flow through the valve when the hydraulic force on the piston overcomes the solenoid force (approx. 9 to 20 bar).

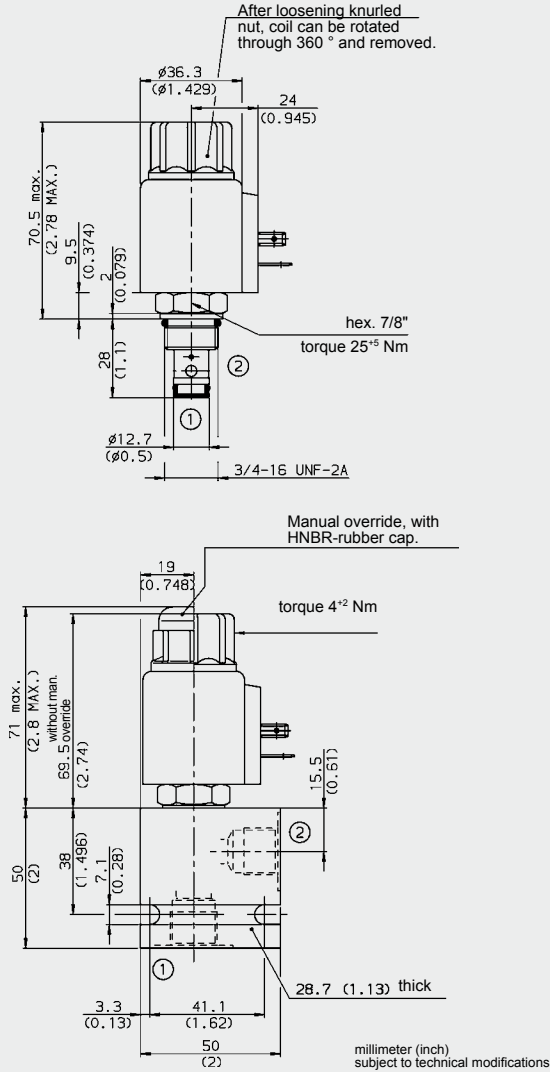
### FEATURES

- 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

### SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 38 l/min
Leakage:	Leakage-free (max. 5 drops = 0,25 cm <sup>3</sup> /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 <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
MTTF <sub>d</sub> :	150 years (see "Conditions and instructions for valves" in brochure 5.300)
Installation:	No orientation restrictions
Materials:	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
<b>Electrical data:</b>	
Switching time:	energized: approx. 50 ms de-energized: approx. 35 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:	± 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

## DIMENSIONS



## MODEL CODE

**WS08Y-01 M-C-N-24 DG**

**Basic model** \_\_\_\_\_  
Directional poppet valve, UNF

**Type** \_\_\_\_\_  
01 = standard

**Manual override** \_\_\_\_\_  
No details = without manual override  
M = 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

**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 mm<sup>2</sup>  
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.
WS08Y-01-C-N-24DG	563048
WS08Y-01-C-N-230AG	3043372

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

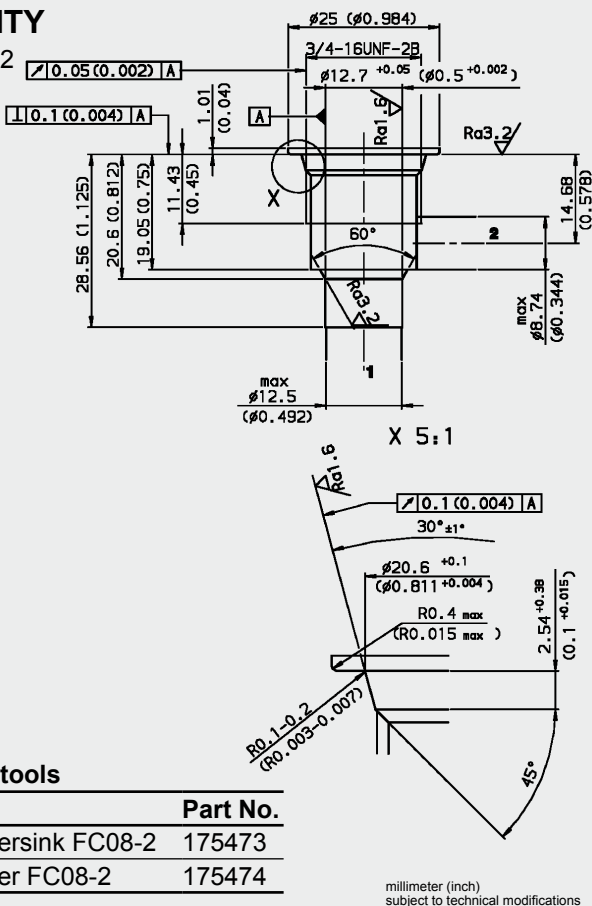
Other line bodies on request

## Seal kits

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

## CAVITY

FC08-2

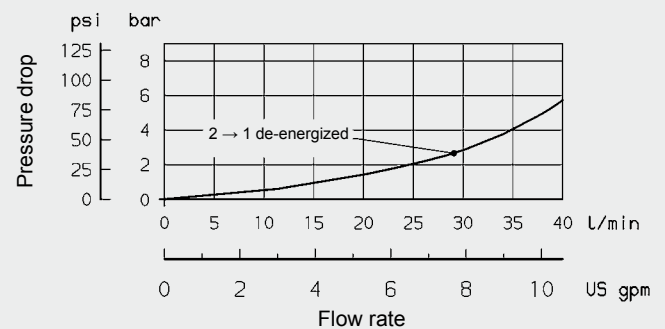


## Form tools

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

## 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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