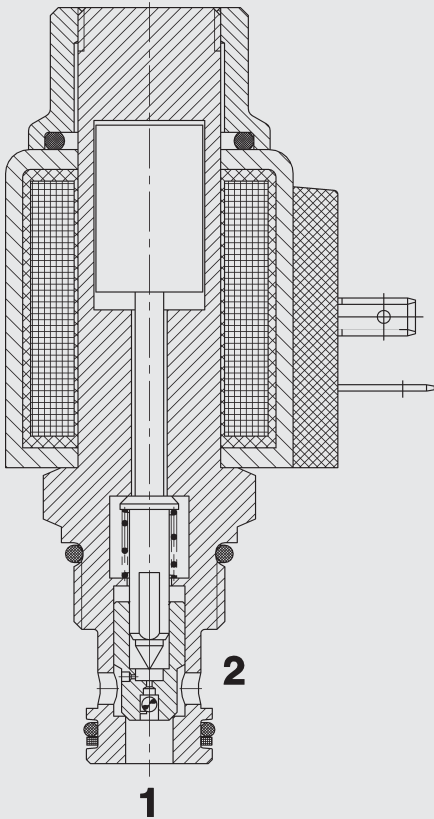


## FUNCTION



In the de-energized mode, the valve allows flow in both directions.

When energized, the valve blocks flow from 2 to 1. In this mode the valve will allow flow from 1 to 2 after the hydraulic force overcomes the solenoid force of 9 to 20 bar.

## Solenoid Directional Valve SAE 8-Cartridge – 350 bar

2/2-Normally Open (Reverse Flow)  
WS081YR-01  
Poppet Type - Pilot Operated

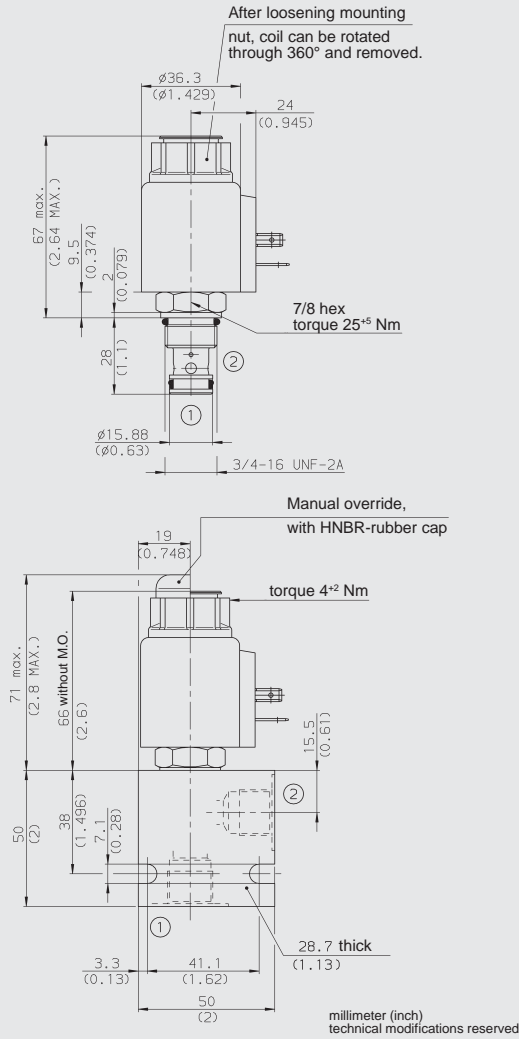
### FEATURES

- Wet armature solenoid
- Wide voltage tolerance
- All valve parts made of high-strength steel with hardened and ground components to ensure minimal wear and to extend service life
- All surfaces zinc-plated and corrosion-proof
- Waterproof design standard
- Wide variety of coils and connectors available
- One piece body design

### SPECIFICATIONS

Operating pressure:	350 bar
Proof pressure:	520 bar
Nominal flow:	38 l/min
Internal leakage:	leakfree (less than 5 drops/min) at 350 bar
Media operating temp. range:	-20 °C to +120 °C
Ambient temp. range:	-20 °C to +60 °C
Coil duty rating:	Continuous from 85% to 115% of nominal voltage
Current draw at 20 °C:	1.5 amps at 12 V DC 0.8 amps at 24 V DC
Minimum pull-in voltage:	85 % of nominal
Response time:	Energized: 35 ms De-energized: 50 ms typical 24 V DC-coil
Fluids:	Mineral-based or synthetics with lubricating properties
Viscosity:	7.4 to 420 cSt
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
Installation:	No orientation restrictions
Material:	Valve body: carbon steel Piston: carbon steel Seals: NBR (standard) FKM (optional) Steel/Polyamide
Cavity:	FC081-2
Weights:	Valve complete: 330 g Coil only: 190 g

## DIMENSIONS



## MODEL CODE

**WS081YR-01 M - C - N - 24 DG**

**Basic Model**

**Option**

Omission = No Option  
M = Manual Override

**Body and Ports\***

C = Cartridge Only  
SB3 = 3/8 BSP ports, steel body  
SS6 = SAE-6 ports, steel body  
AB3 = 3/8 BSP ports, aluminium body  
AS6 = SAE-6 ports, aluminium body

**Seals**

N = NBR  
V = FKM

**Coil Voltage**

**DC**

10 = 10 V DC  
12 = 12 V DC  
24 = 24 V DC  
36 = 36 V DC  
48 = 48 V DC

110 = 110 V DC available with DG termination only  
**AC (internally full wave rectified)**

24 = 24 V AC  
115 = 115 V AC  
230 = 230 V AC

**Coil Connector**

DC: DG = DIN Connector (DIN 43650)  
DS = Dual Spade SAEJ858a  
DL = Leadwires (2) - 457mm (18") long  
DW = Weather Pack Connector on leadwires - 241 mm (9.5") long  
DK = Kostal connector  
DT = 2-pole AMP Junior Timer plug  
AC: AG = DIN Connector (DIN 43650)

## Standard models

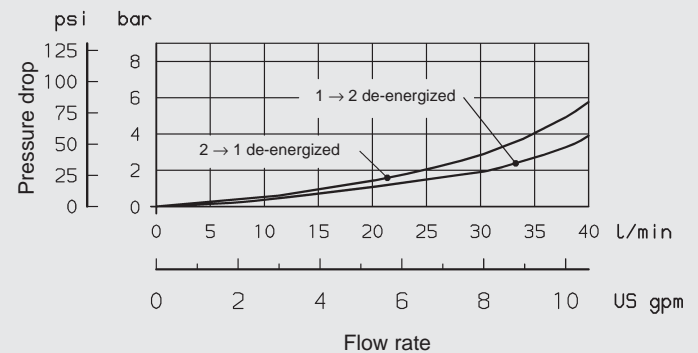
Model code	Stock no.
WS081YR-01-C-N-24DG	3124813
WS081YR-01-C-N-230AG	3124814

## \* Standard Line Bodies

Code	Part No	Material	Ports	Pressure
FH0812-SB3	3067468	Steel, zinc-plated	3/8 BSP	420 bar
FH0812-SS6	3067471	Steel, zinc-plated	SAE-6	420 bar
FH0812-AB3	3067477	Aluminium, clear anodized	3/8 BSP	245 bar
FH0812-AS6	3067518	Aluminium, clear anodized	SAE-6	245 bar

## PERFORMANCE

Measured at 34 cSt  
T<sub>Oil</sub> = 46 °C



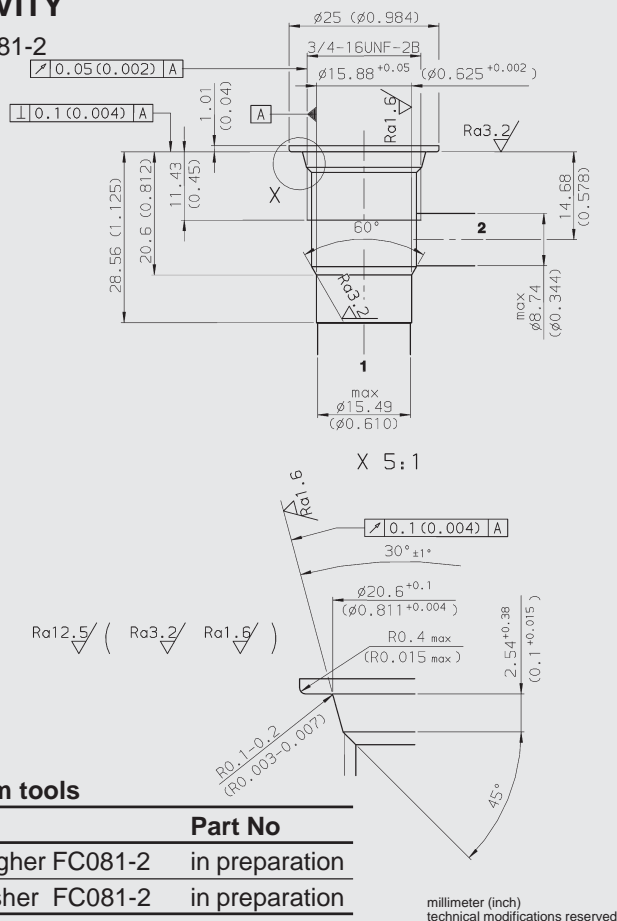
## NOTE

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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## CAVITY

FC081-2



## Form tools

Tool	Part No
Rougher FC081-2	in preparation
Finisher FC081-2	in preparation