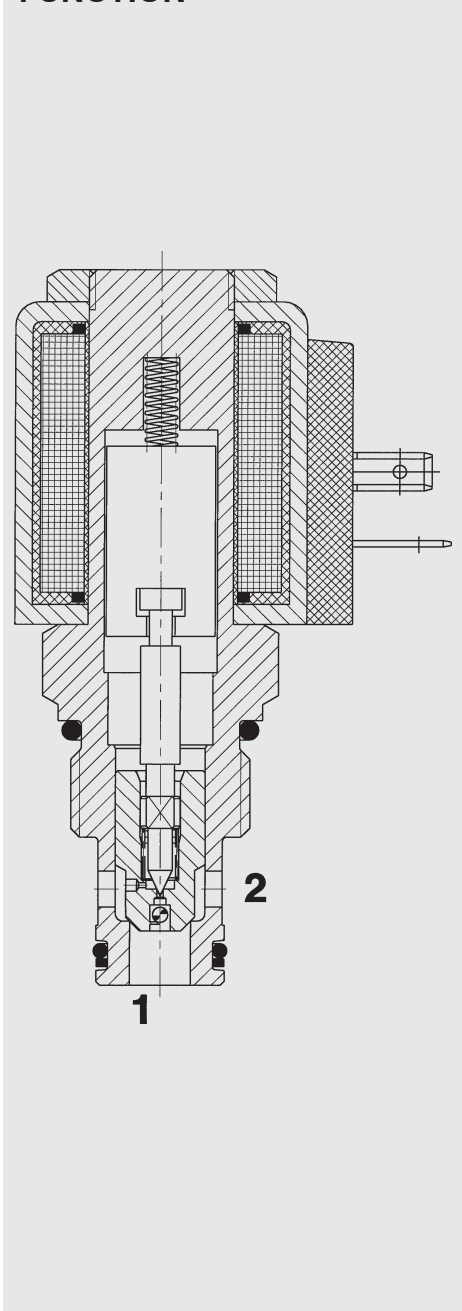


## Solenoid Directional Valve SAE 10-Cartridge – 350 bar 2/2 Normally Closed (Reverse Flow)

WS10ZR-01

Poppet Type - Pilot Operated

### FUNCTION



In the de-energized mode, the valve blocks flow from 2 to 1 and acts as a check allowing the flow from 1 to 2. When energized, the valve allows flow in both directions.

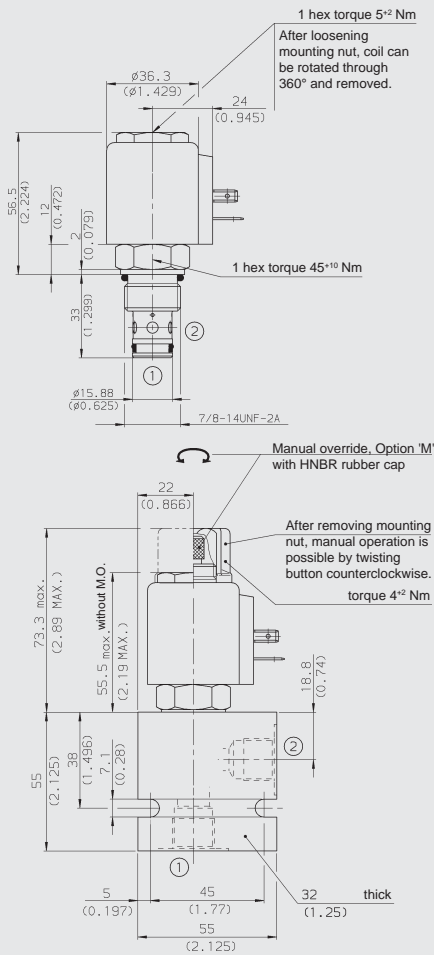
### FEATURES

- Wet armature solenoid
- Wide voltage tolerance
- All valve parts made of high-strength steel with hardened and ground components to assure minimal wear and extended 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:	75 l/min
Internal Leakage:	leakfree (less than 5 drops/min) max. 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: 30 ms De-energized: 60 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 Sealings: NBR (Standard) FKM (Option) Steel/Polyamide
Cavity:	FC10-2
Weights:	Valve complete: 370 g Coil only: 190 g

## DIMENSIONS



millimeter (inch)  
technical modifications reserved

## MODEL CODE

**WS10ZR-01 M - C - N - 24 DG**

**Basic Model** \_\_\_\_\_

**Option** \_\_\_\_\_

Omission = No Option  
M = Manual Override

**Body and Ports\*** \_\_\_\_\_

C = Cartridge Only  
SB4 = 1/2 BSP ports, steel body  
SS8 = SAE-8 ports, steel body  
AB4 = 1/2 BSP ports, aluminium body  
AS8 = SAE-8 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 termination DG 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

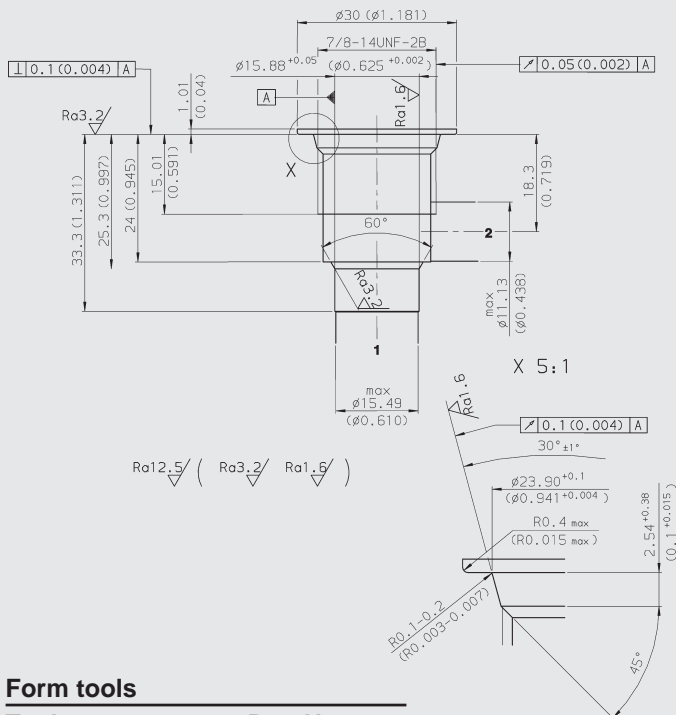
Model code	Stock no.
WS10ZR-01-C-N-24DG	3030604
WS10ZR-01-C-N-230AG	3043820

## \* Standard Line Bodies

Code	Part No	Material	Ports	Pressure
FH102-SB4	3037594	Steel, zinc-plated	1/2 BSP	420 bar
FH102-SS8	3037612	Steel, zinc-plated	SAE-8	420 bar
FH102-AB4	3037777	Aluminium, clear anodized	1/2 BSP	245 bar
FH102-AS8	3037778	Aluminium, clear anodized	SAE-8	245 bar

## CAVITY

FC10-2

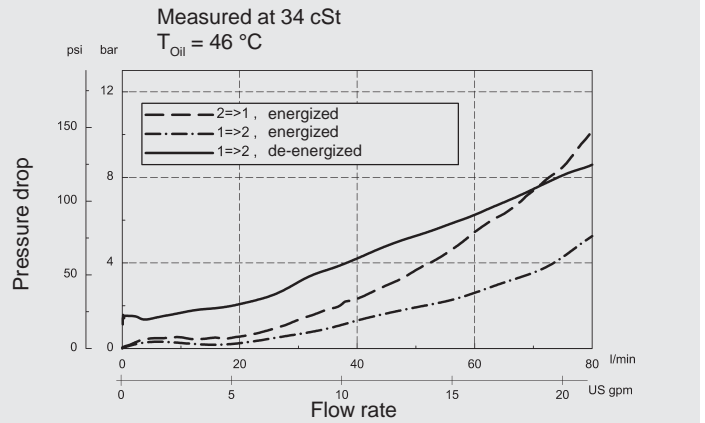


millimeter (inch)  
technical modifications reserved

## Form tools

Tool	Part No
Rougher FC10-2	in preparation
Finisher FC10-2	in preparation

## PERFORMANCE (Cartridge Only)



## 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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