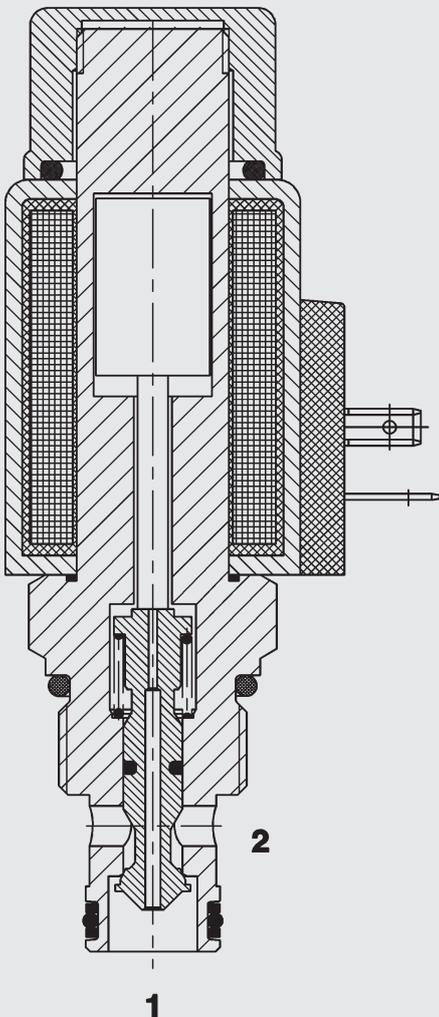


2/2 Solenoid Directional Valve **UNF** **Poppet Type, Direct-Acting** **Normally Closed** **SAE-10 Cartridge – 350 bar** **WS10W**

FUNCTION



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

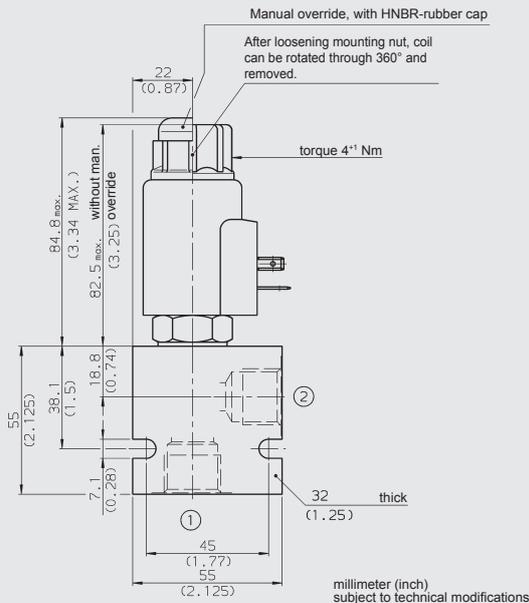
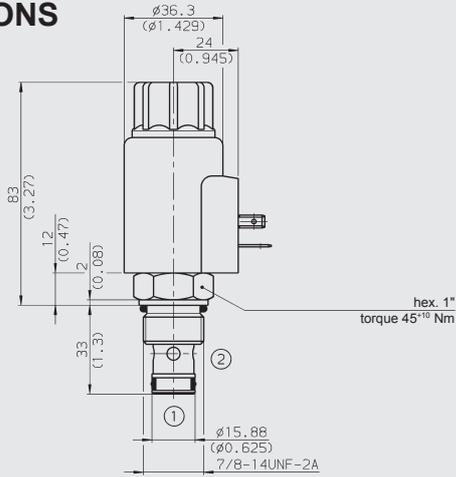
FEATURES

- 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 connections available
- Excellent switching performance by high power HYDAC solenoid

SPECIFICATIONS

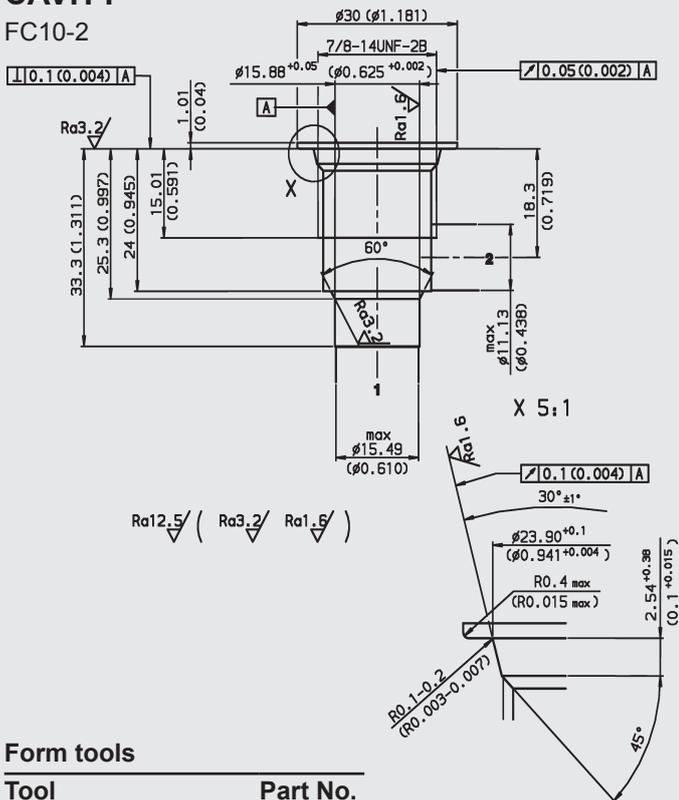
Operating pressure:	350 bar
Nominal flow:	40 l/min
Internal leakage:	Leakage-free (max. 5 drops \approx 0,25 cm ³ /min at 350 bar)
Media operating temperature range:	min. -20 °C to max. +100 °C
Ambient temperature range:	min. -20 °C to max. +60 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity range:	min. 7.4 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
Material:	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:	FC10-2
Weight:	Valve complete: 0.46 kg Coil only: 0.23 kg
Electrical data:	
Response time:	Energized: approx. 50 ms De-energized: approx. 50 ms
Type of voltage:	DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil
Current draw at 20 °C:	2.22 A at 12 V DC 1.13 A at 24 V DC
Voltage tolerance:	\pm 15 % of nominal voltage
Coil duty rating:	Continuous up to max. 115% of nominal voltage at max. 60° C ambient temperature
Coil type:	Coil...-50-1836

DIMENSIONS



CAVITY

FC10-2



Form tools

Tool	Part No.
Countersink FC10-2	176379
Reamer FC10-2	165706

millimeter (inch)
subject to technical modifications

MODEL CODE

WS10W - 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
SB4 = G1/2 ports, steel body
AB4 = G1/2 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

Coil connectors (type 50-1836) _____
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.
WS10W-01-C-N-12DG	3105542
WS10W-01-C-N-24DG	3105385
WS10W-01-C-N-230AG	3105386

Other models on request

*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH102-SB4	3037594	Steel, zinc-plated	G1/2	420 bar
FH102-AB4	3037777	Aluminium, clear anodized	G1/2	210 bar

Seal kits

Code	Part No.	Material
Seal kit FS102-N	3033872	NBR
Seal kit FS102-N	3051757	FKM

PERFORMANCE

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

