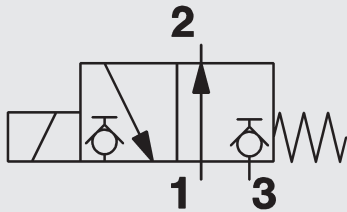
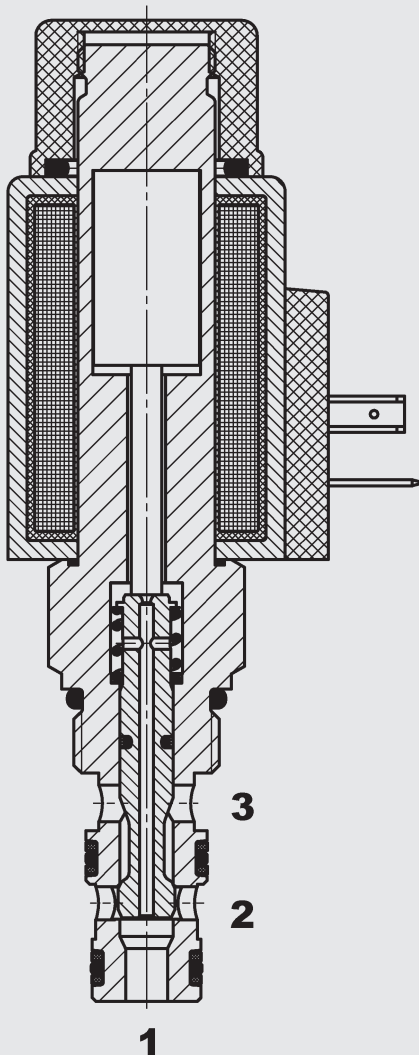


3/2 Solenoid Directional Valve **UNF** **Poppet Type, Direct-Acting** **SAE-08 Cartridge – 350 bar** **WS08D-01**



up to 23 l/min
up to 350 bar

FUNCTION



When de-energized, there is free flow through the valve from port 1 to port 2. Port 3 is closed. When energized, the valve allows flow from port 2 to 3, while blocking flow at port 1.

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

SPECIFICATIONS*

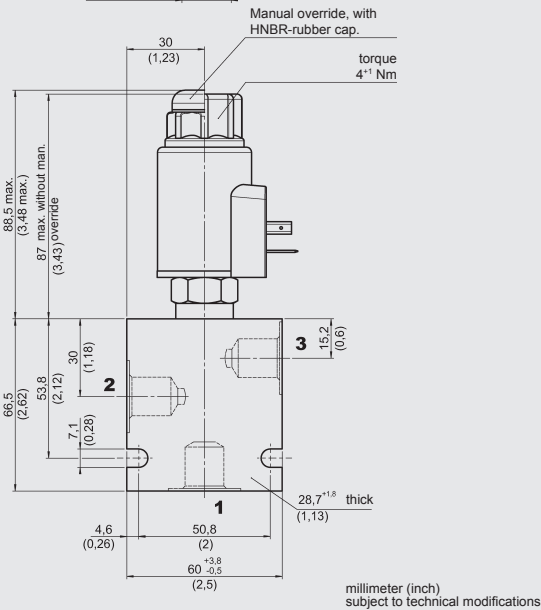
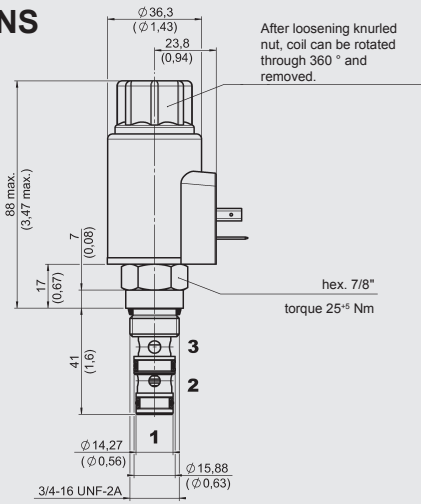
Operating pressure:	max. 350 bar	
Nominal flow:	max. 23 l/min	
Leakage:	leakage-free (max. 5 drops \approx 0,25 cm ³ /min at 350 bar)	
Media operating temperature range:	-20 °C to +100 °C	
Ambient temperature range:	-20 °C to +60 °C	
Fluids:	Hydraulic oil to DIN 51524 part 1 and 2	
Viscosity:	Min. 10 mm ² /s to max. 420 mm ² /s	
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner	
MTTF _d :	150 years	
Installation:	no orientation restrictions	
Material:	Valve body:	steel
	Spool:	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:	FC08-3	
Weights:	Valve complete:	0.45 kg
	Coil only:	0.23 kg

Electrical data:

Reponse time:	Energized:	approx. 30 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 amps at 12 V DC	
	1.13 amps at 24 V DC	
Voltage tolerance:	\pm 15% of nominal	
Coil duty rating:	Continuous up to 115% of nominal voltage at max 60 °C ambient temperature	
Coil type	Coil...-50-1836	

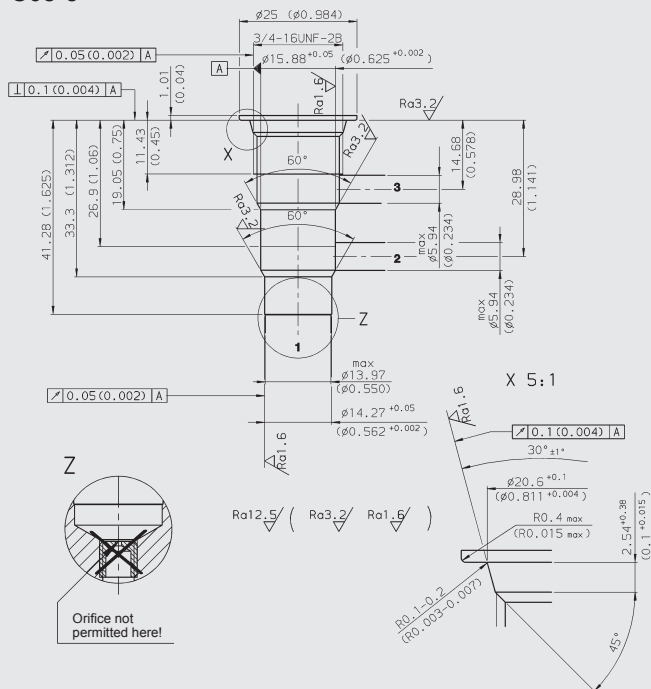
* see "Conditions and instructions for valves" in brochure 53.000

DIMENSIONS



CAVITY

FC08-3



Form tools

Tool	Part No.
Countersink FC10-2	175644
Reamer FC10-2	175645

millimeter (inch)
subject to technical modifications

MODEL CODE

WS08D - 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 (optional)

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 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.
WS08D-01-C-N-12DG	3229015
WS08D-01-C-N-24DG	3229020
WS08D-01-C-N-230AG	3229019

Other models on request

* Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH083-SB3	560922	Steel, zinc-plated	G3/8	420 bar
FH083-AB3	3011427	Aluminium, clear anodized	G3/8	210 bar

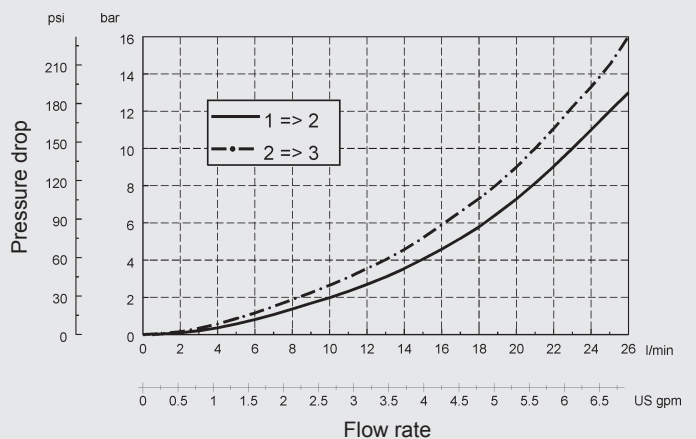
Other models on request

Seal kits

Code	Material	Part No.
FS UNF 08/N	NBR	3651385
FS UNF 08/V	FKM	3651356

PERFORMANCE

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



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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