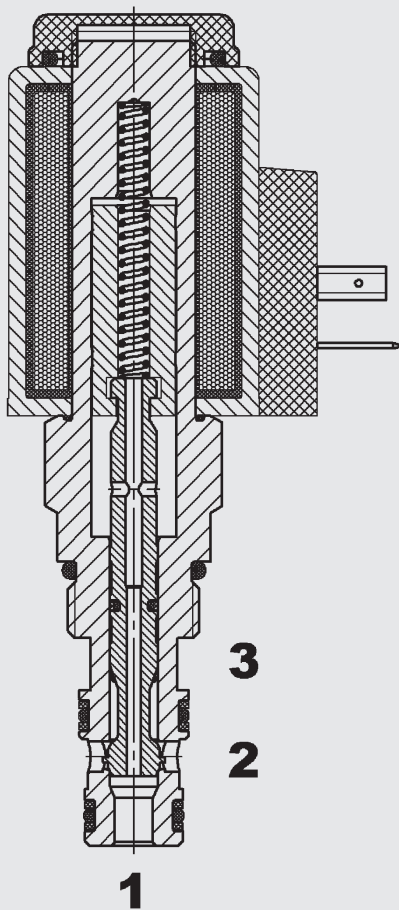


up to 22 l/min
up to 350 bar

FUNCTION



The directional valve is an electromagnetically actuated, direct-acting 3/2 poppet valve.

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

3/2 solenoid directional valve poppet type, direct-acting UNF Cartridge – 350 bar

WS08C-01

FEATURES

- Coil seals protect the solenoid system
- Wide variety of connectors available
- Excellent switching performance by high power HYDAC solenoid
- Exposed surfaces zinc-nickel plated for increased corrosion protection (1000 h Salt spray test)

SPECIFICATIONS*

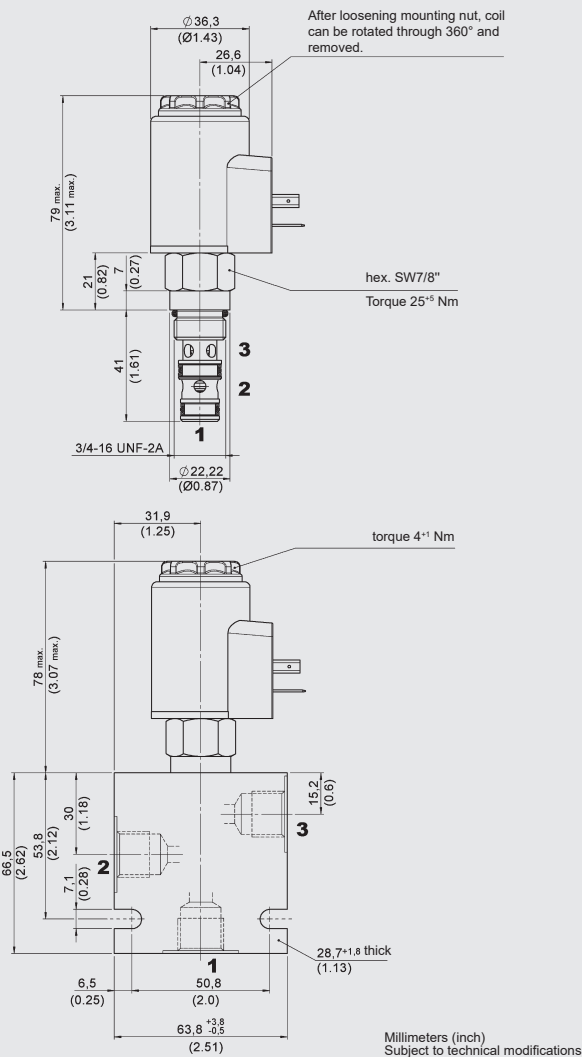
Operating pressure:	max. 350 bar
Nominal flow:	max. 22 l/min
Internal leakage:	leak-free max. 5 drops/min at 350 bar
Media operating temperature range	min. -20 °C to max. +100 °C
Ambient temperature range:	min. -20 °C to max. + 60 °C
Operating fluid:	Hydraulic oil to DIN 51524 part 1, 2 and 3
Viscosity range:	min. 7.4 mm ² /s to max. 420 mm ² /s
Filtration: (to ISO 4406)	≤ 210 bar: min. class 20/18/15 > 210 bar: min. class 18/16/13
MTTF _d :	150 - 1200 years, according to DIN EN ISO 13849-1
Installation:	no orientation restrictions
Materials:	Valve body: steel Piston: hardened and ground steel Seals: NBR (standard) FKM (optional, fluid temperature range -20 °C to +120 °C) Back-up rings: PTFE Solenoid coil: steel / polyamide
Cavity:	FC08-3
Weight:	Coil only: 0.23 kg Valve complete: 0.49 kg

Electrical data

Type of voltage:	DC: direct current solenoid AC: alternating current solenoid with 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:	± 15 % of nominal voltage
Coil duty rating:	Continuous up to 115 % of the nominal voltage at max. 60 °C ambient temperature
Response time:	On: approx. 30 mn
Coil type:	Coil...-50-1836

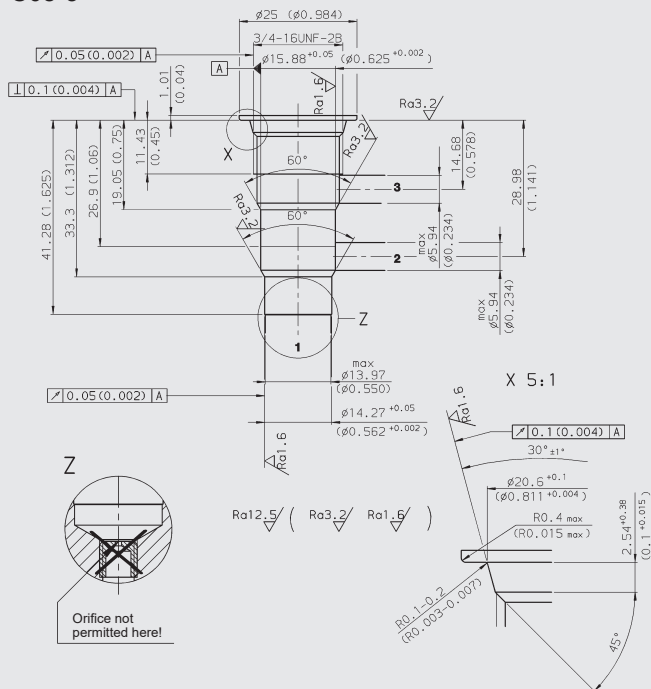
* see "Conditions and instructions for valves" in brochure 53.000

DIMENSIONS



CAVITY

FC08-3



Form tools

Tool	Part No.
Countersink	175644
Reamer	175645

Millimeters (Inch)
Subject to technical modifications

MODEL CODE

WS08C - 01 - C - N - 24 DG

Basic model
Directional poppet valve

Type
01 = standard

Body and ports*
C = cartridge only

Seals
N = NBR
V = FKM (optional)

Coil voltage
DC voltage
12 = 12 VDC
24 = 24 VDC
AC voltage (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

Code	Part No.
WS08C-01-C-N-12DG	3778047
WS08C-01-C-N-24DG	3778048

Other models on request

*Standard Line Bodies

Code	Part No.	Material	Ports	Pressure
FH083-SB3	560922	Steel, zinc-plated	G3/8"	350 bar
FH083-AB3	3011427	Aluminium, 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

TYPICAL PERFORMANCE

measured at $v = 33 \text{ mm}^2/\text{s}$, $T_{\text{oil}} = 46^\circ \text{C}$



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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