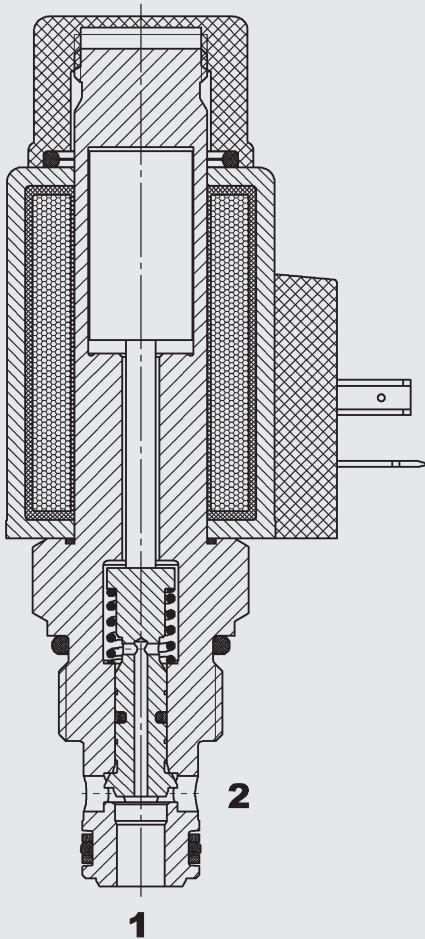


up to 40 l/min
up to 350 bar

FUNCTION



The 2/2 directional valve is a direct-acting, poppet type valve.

When the solenoid is de-energized, there is free flow through the valve in both directions.

When the solenoid is energized, the valve is closed in both directions.

2/2 solenoid directional valve poppet type, direct-acting normally open UNF Cartridge – 350 bar WS10V-01

FEATURES

- Coil seals protect the solenoid system
- Wide variety of connectors available
- Excellent switching performance by high power HYDAC solenoid
- External surfaces zinc-nickel plated for increased corrosion protection (1 000 h salt spray test)

SPECIFICATIONS*

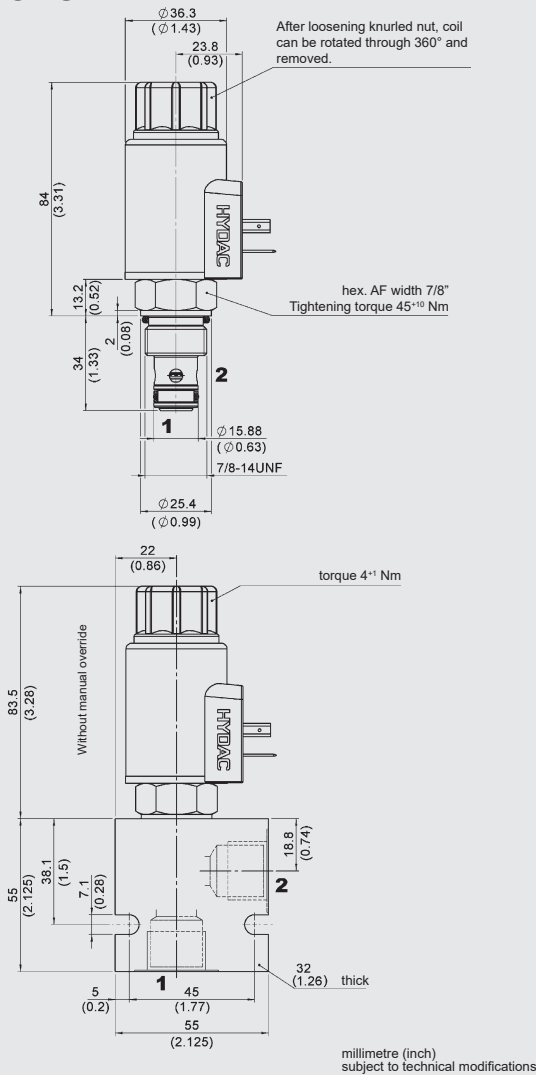
Operating pressure:	max. 350 bar
Nominal flow:	max. 40 l/min
Internal leakage:	leakage-free, max. 5 drops/min (0.25 cm ³ /min) at 350 bar
Media operating temperature range:	min. -20°C to max. +100°C
Ambient temperature range:	min. -20°C to max. + 60°C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1, 2 and 3
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 – 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, media temperature range -20°C up to +120°C) Back-up rings: PTFE Coil: steel / polyamide
Cavity:	FC10-2
Weight:	Complete valve: 0.46 kg Coil only: 0.23 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 max. 115% of the nominal voltage at 60°C ambient temperature
Coil type:	Coil ...-50-1836

* see "Conditions and Instructions for Valves" in brochure 53.000

DIMENSIONS



MODEL CODE

WS10V - 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

Seals

N = NBR (standard)

V = FKM

Nominal voltage for actuating solenoid

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, 0.75 mm², 475 mm long

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.
WS10V-01-C-N-24DG	3606448
WS10V-01-C-N-12DG	3795871
WS10V-01-C-N-230AG	3795872

Other models on request

Standard in-line bodies

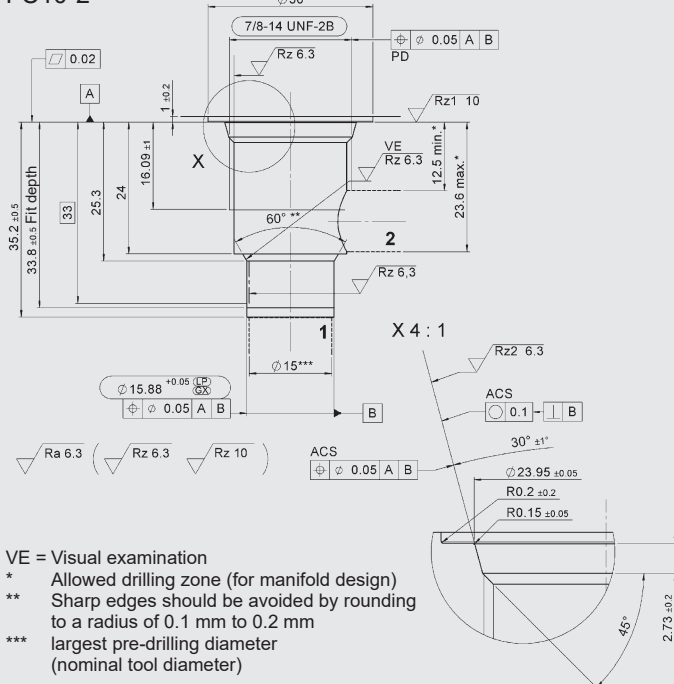
Code	Part no.	Material	Ports	Pressure
FH102-SB4	3037594	Steel, zinc-plated	G1/2"	350 bar
FH102-AB4	3037777	Aluminium, anodized	G1/2"	210 bar

Seal kits

Code	Material	Part. no.
FS UNF 10/N	NBR	3651557
FS UNF 10/V	FKM	3651559

CAVITY

FC10-2



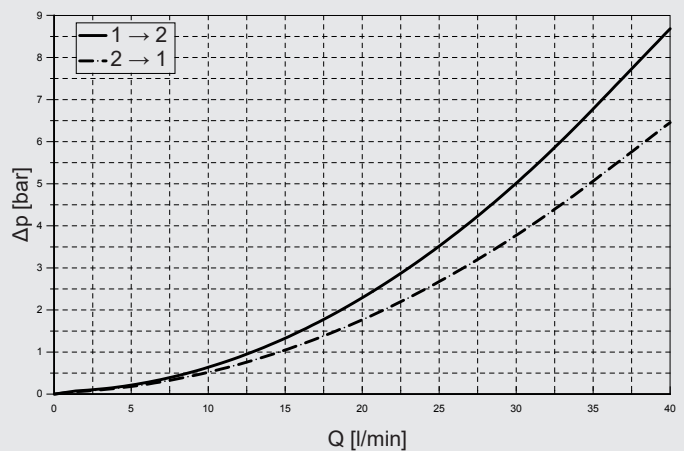
Form tools

Tool	Part no.
Countersink	176379
Reamer	165706

millimetre (inch) subject to technical modifications

TYPICAL PERFORMANCE

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



Comment

The information in this brochure relates to the operating conditions and applications described. For applications not described, please contact the relevant technical departments.
Subject to technical modifications.

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