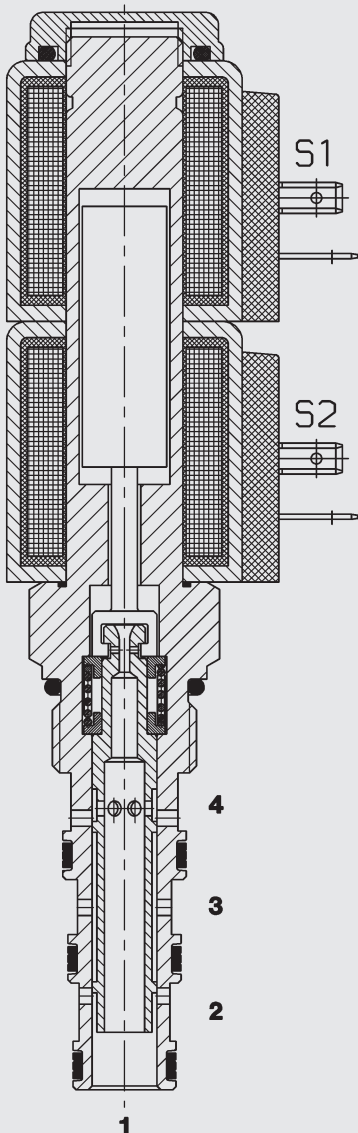


up to 23 l/min
up to 350 bar

FUNCTION



When de-energized, the valve allows flow from ports 2 and 4 to port 1, while blocking flow at port 3. When solenoid coil S1 is energized, there is free flow through the valve from port 3 to 4 and from port 2 to 1. When solenoid coil S2 is energized, there is free flow through the valve from port 3 to 2 and from port 4 to 1.

4/3 Solenoid Directional Valve spool type, direct-acting UNF Cartridge – 350 bar

WK10J-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*

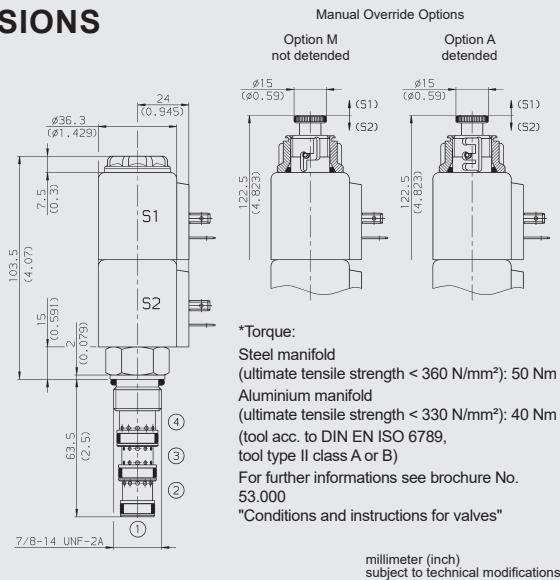
Operating pressure:	max. 350 bar	
Nominal flow:	max. 23 l/min	
Internal leakage:	max. 470 ml/min at 210 bar and 34 mm ² /s	
Media operating temperature range:	min. -20 °C to max. +100 °C	
Ambient temperature range:	min. -20 °C to max. +60 °C	
Operating fluid:	Hydraulic oil to DIN 51524 Part 1, 2 and 3	
Viscosity range:	min. 7.4 mm ² /s to max. 420 mm ² /s	
Filtration: (according to ISO 4406)	< 210 bar: min. class 20/18/15 > 210 bar: min. class 19/17/14	
MTTF _d :	150 - 1200 years, according to DIN EN ISO 13849-1	
Materials:	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:	FC10-4	
Weight:	Valve complete	0.77 kg
	Coil only	0.18 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:	1.5 A at 12 V DC 0.8 A at 24 V DC
Voltage tolerance:	± 15% of the nominal voltage
Coil duty rating:	Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature
Coil type:	Coil...-40-1836 (2 pieces)

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

DIMENSIONS



MODEL CODE

WK10J - 01 M - C - N - 24 DG

Basic model
4/2-directional spool valve, UNF

Type
01 = standard

Manual override
no details = without manual override
M = manual override, without detent
A = manual override, with detent

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

Other voltages on request

Coil connectors (type 40-1836)

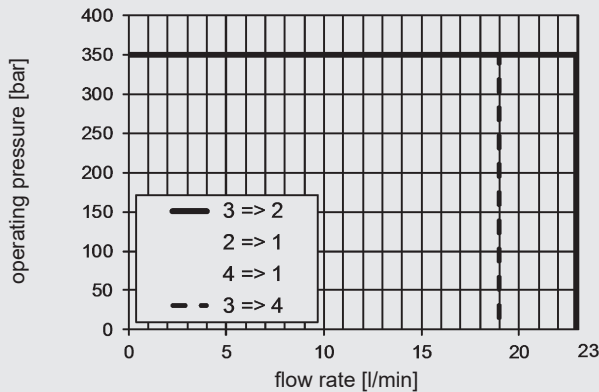
DC: DG = DIN connector to EN 175301-803
DK = KOSTAL threaded connection M27x1
DL = 2 flying leads, 457 mm long, 0.75 mm²
DN = Deutsch connector, 2-pole, axial
DT = AMP Junior Timer, 2-pole, radial

AC: AG = DIN connector to EN 175301-803

Other connectors on request

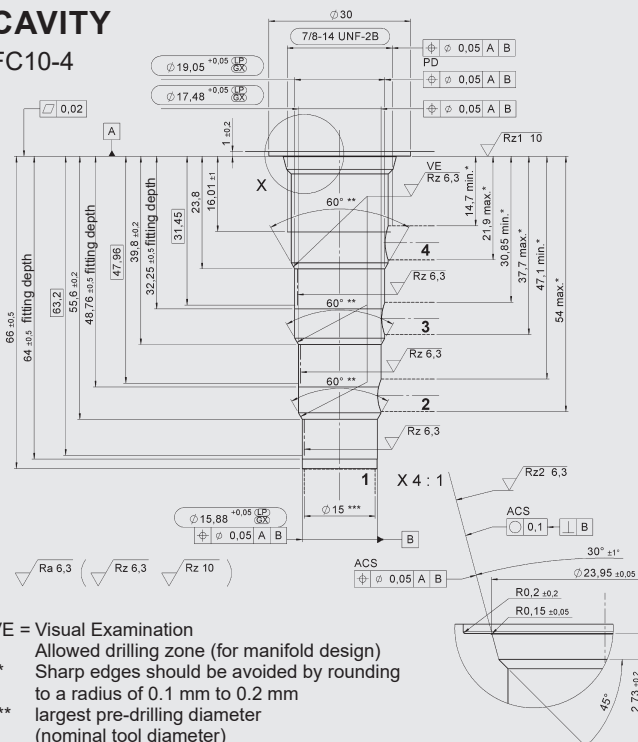
SWITCHING PERFORMANCE

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



CAVITY

FC10-4



Form tools

Tool	Part No.
Countersink	176174
Reamer	176175

millimeter (inch)
subject to technical modifications

Standard models

Model code	Part No.
WK10J-01A-C-N-12DN	4058107
WK10J-01-C-N-24DG	3045614
WK10J-01-C-N-230AG	3051523

Other housings on request

*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH104-SB4	3037784	Steel, zinc-plated	G1/2"	350 bar
FH104-AB4	3038097	Aluminium, anodized	G1/2"	210 bar

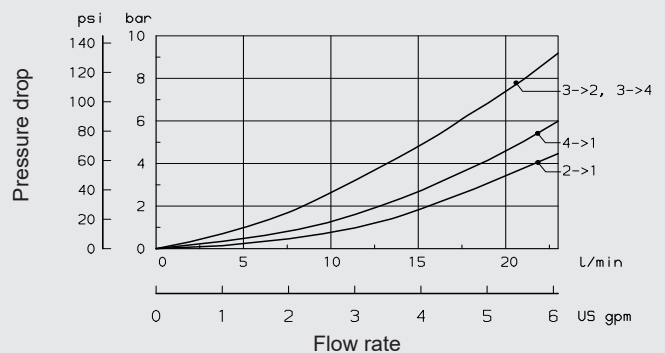
Other models on request

Seal kits

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

TYPICAL PERFORMANCE

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



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.

HYDAC Fluidtechnik GmbH

Justus-von-Liebig-Str.
D-66280 Sulzbach/Saar
Tel: 0 68 97 /509-01
Fax: 0 68 97 /509-598
E-Mail: valves@hydac.com