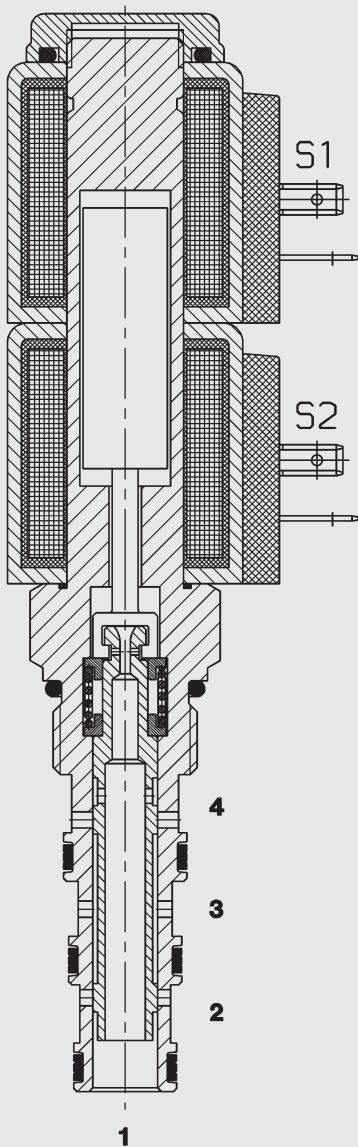


4/3 Solenoid Directional Valve **UNF** Spool Type, Direct-Acting Closed Center, SAE-10 Cartridge – 350 bar WK10E-01

FUNCTION



When the solenoid coil is de-energized, all ports are closed. When the solenoid coil S1 is energized, there is free flow through the valve from port 3 to port 4 and from port 2 to port 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.

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
- Low pressure drop due to CFD optimized flow path

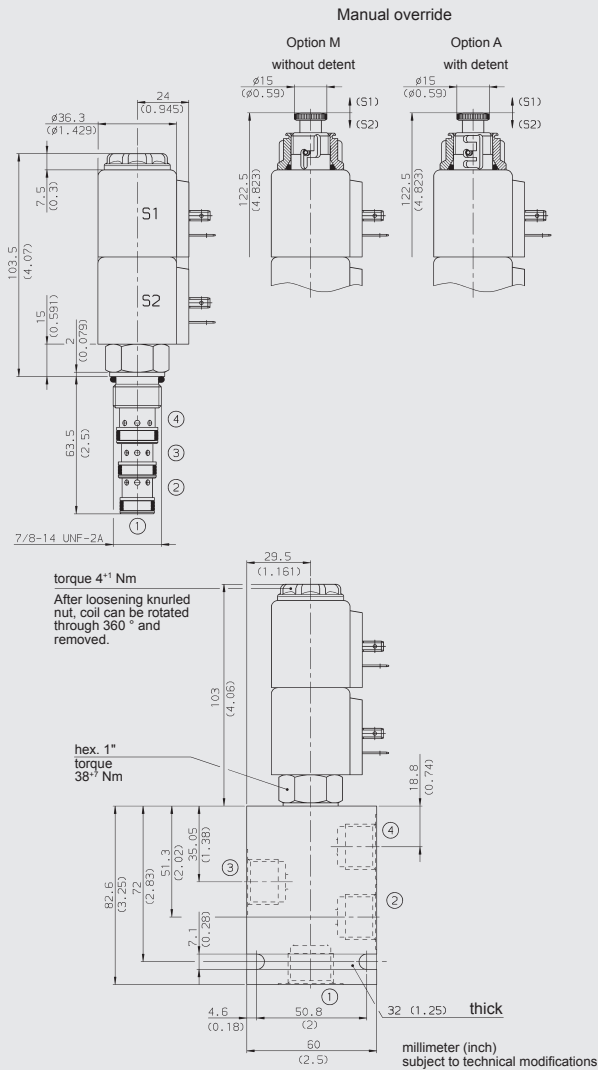
SPECIFICATIONS

Operating pressure:	350 bar
Nominal flow:	23 l/min (Consult HYDAC for flow ratings above 207 bar)
Internal leakage:	max. 120 cm ³ /min at 207 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 and 2
Viscosity range:	7.4 to 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: steel Spool: hardened and ground steel Seals: N = NBR (standard) V = FKM (optional, media temperature range -20 °C to 120 °C) Coil: Steel / Polyamide Back-up rings: PTFE
Cavity:	FC10-4
Weight:	Valve complete: 0.67 kg Coil only: 0.19 kg (2 pieces are required)

Electrical data:

Type of voltage:	DC solenoid, AC voltage is rectified using 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 nominal voltage
Coil duty rating:	Continuous up to max. 115% of nominal voltage at max. 60° C ambient temperature
Coil type:	Coil...-40-1836 (2 pieces)

DIMENSIONS



MODEL CODE

WK10E - 01 M - C - N - 24 DG

Basic model _____
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 EN175301-803
DK = Kostal threaded connection M27 x 1
DL = 2 flying leads, 0.75 mm²
DN = Deutsch connector, 2-pole
DT = AMP Junior Timer, 2-pole, radial

AC: AG = DIN Connector to EN 175301-803

Other connectors on request

Standard models

Code	Part No.
WK10E-01-C-N-12DG	3044407
WK10E-01-C-N-24DG	3044428
WK10E-01-C-N-230AG	3044426

Other models on request

*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH104-SB4	3037784	Steel, zinc-plated	G1/2	420 bar
FH104-AB4	3038097	Aluminium, anodized	G1/2	210 bar

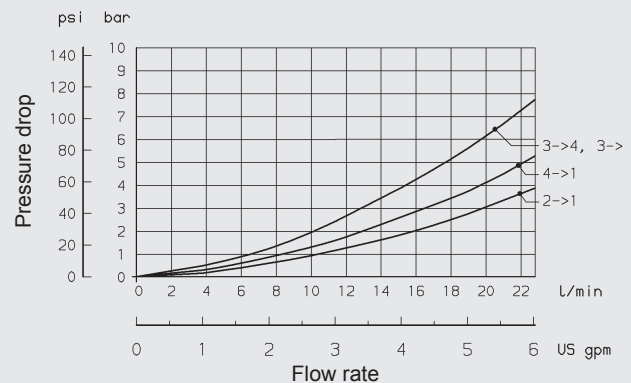
Other models on request

Seal kits

Code	Part No.	Material
Seal kit FS104-N	3051912	NBR
Seal kit FS104-N	3071275	FKM

PERFORMANCE

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



NOTE

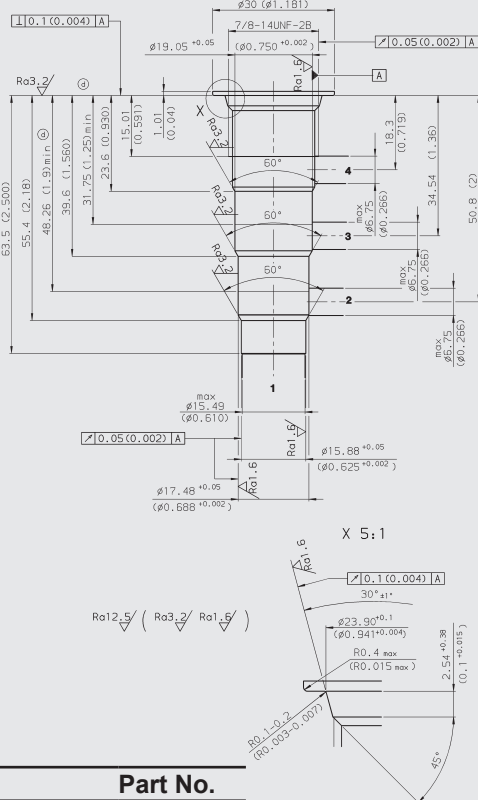
The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

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CAVITY

FC10-4



Form tools

Tool	Part No.
Countersink FC10-4	176174
Reamer FC10-4	176175