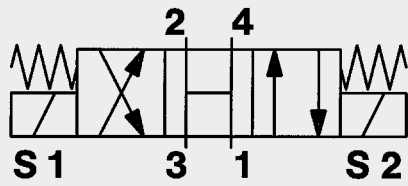


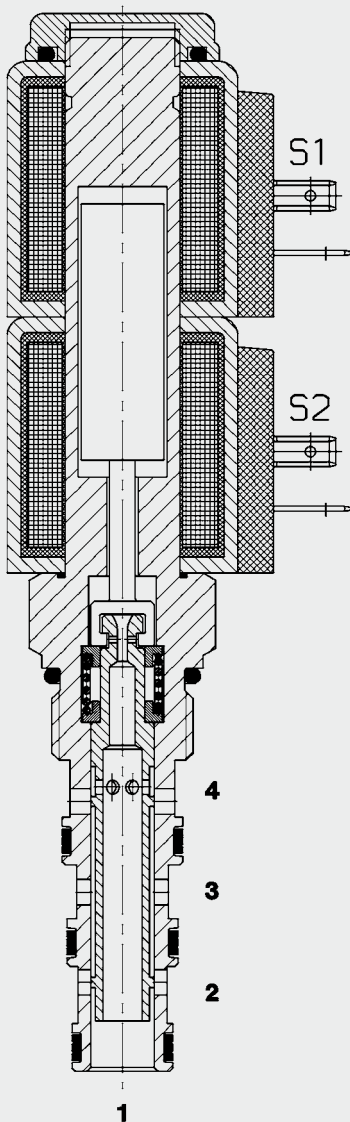
## 4/3 Solenoid Directional Valve **UNF** Spool Type, Direct-Acting SAE-10 Cartridge – 350 bar

WK10H-01



23 l/min  
350 bar

### FUNCTION



When de-energized, there is free flow through the valve from ports 2 and 4 to ports 3 and 1. 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

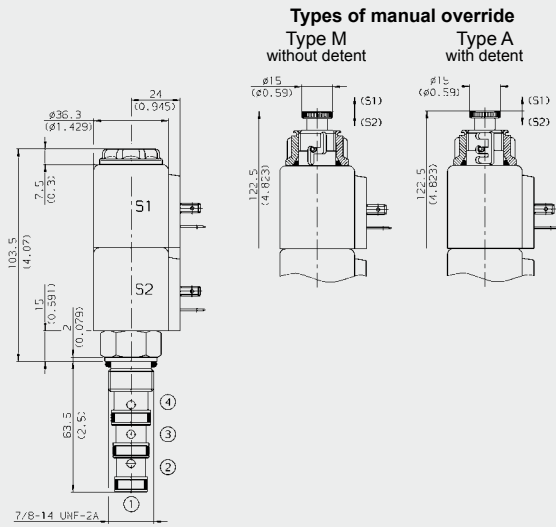
### SPECIFICATIONS

Operating pressure:	350 bar
Nominal flow:	23 l/min (Consult HYDAC for flow ratings above 207 bar)
Internal leakage:	max. 160 cm <sup>3</sup> /min at 207 bar and 34 mm <sup>2</sup> /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:	min. 7.4 to max. 420 mm <sup>2</sup> /s
Filtration:	Class 19/17/14 to ISO 4406 or cleaner
MTTF <sub>d</sub> :	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: 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: 0.67 kg Coil only: 0.19 kg

### 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)

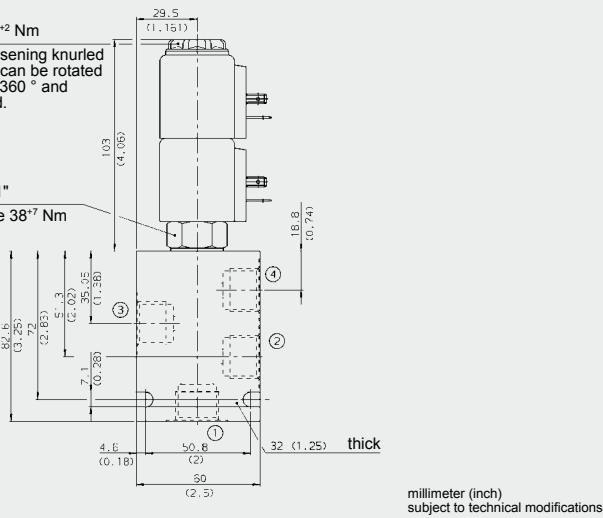
## DIMENSIONS



torque 4<sup>±2</sup> Nm

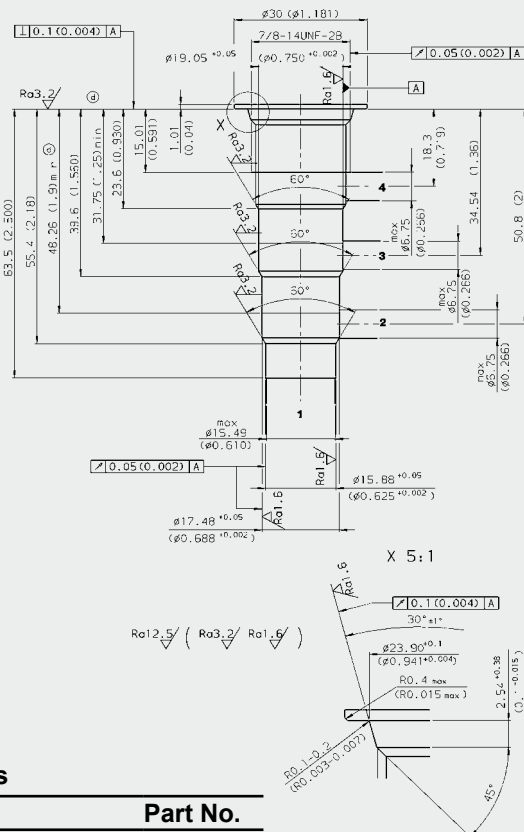
After loosening knurled nut, coil can be rotated through 360° and removed.

hex. 1" torque 38<sup>±7</sup> Nm



## CAVITY

FC10-4



## Form tools

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

millimeter (inch)  
subject to technical modifications

## MODEL CODE

WK10H - 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  
A = manual override, lockable

**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 mm<sup>2</sup>  
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.
WK10H-01-C-N-12DG	3044518
WK10H-01-C-N-24DG	3038914
WK10H-01-C-N-230AG	3044526

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

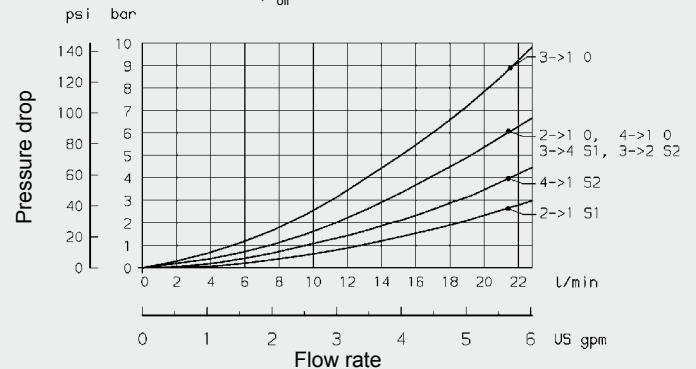
Other line bodies on request

## Seal kits

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

## 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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