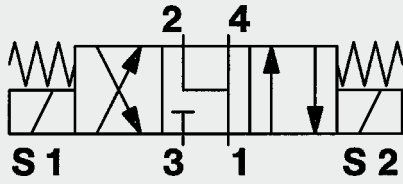


## 4/3 Solenoid Directional Valve UNF

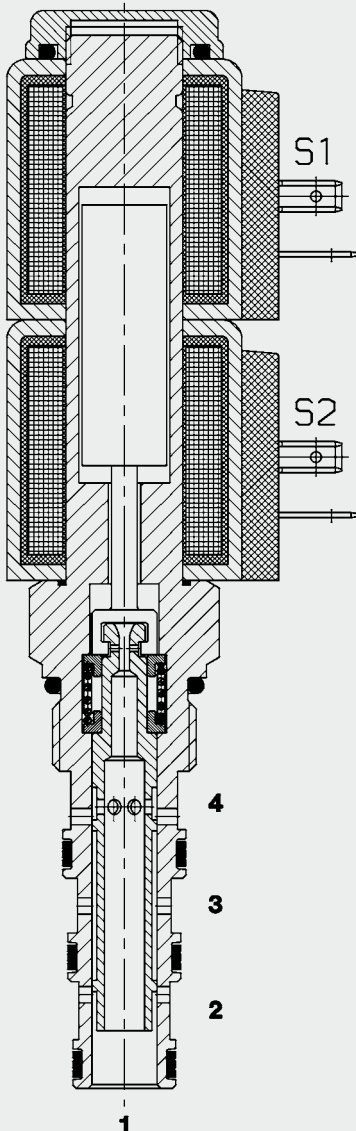
### Spool Type, Direct-Acting SAE-10 Cartridge – 350 bar

WK10J-01



23 l/min  
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.

#### 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

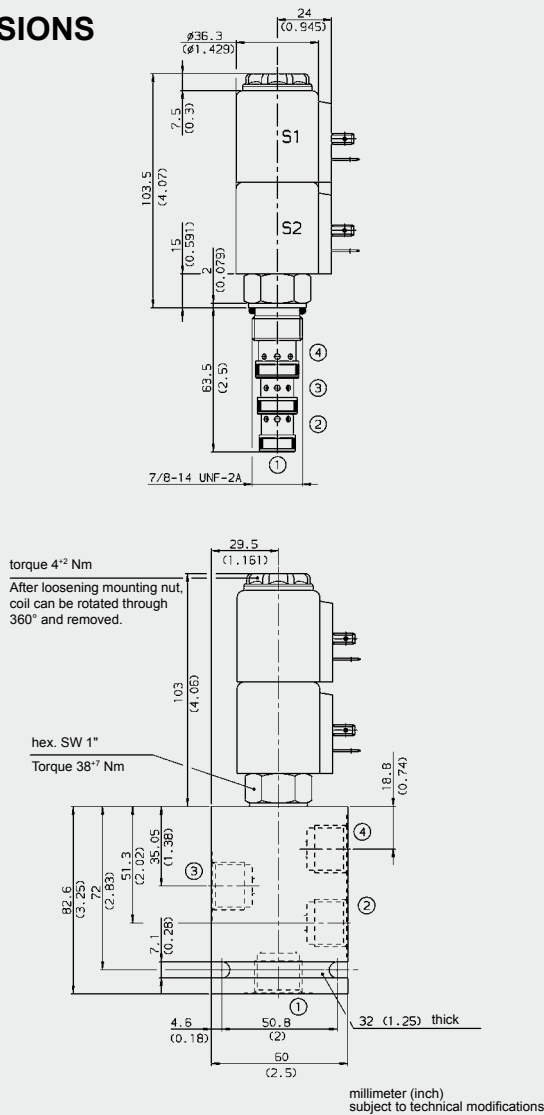
#### SPECIFICATIONS

Operating pressure:	max. 350 bar	
Nominal flow:	max. 23 l/min (Consult HYDAC for flow ratings above 207 bar)	
Internal leakage:	164 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 mm <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s	
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner	
MTTF <sub>d</sub> :	150 years (see "Conditions and instructions for valves" in brochure 5.300)	
Materials:	Valve body:	free-cutting 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 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)	

## DIMENSIONS



## MODEL CODE

**WK10J - 01 - C - N - 24 DG**

**Basic model** \_\_\_\_\_  
Directional spool valve, UNF

**Type** \_\_\_\_\_  
01 = standard

**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.
WK10J-01-C-N-24DG	3045614
WK10J-01-C-N-230AG	3051523
Other housings on request	

## \*Standard in-line bodies

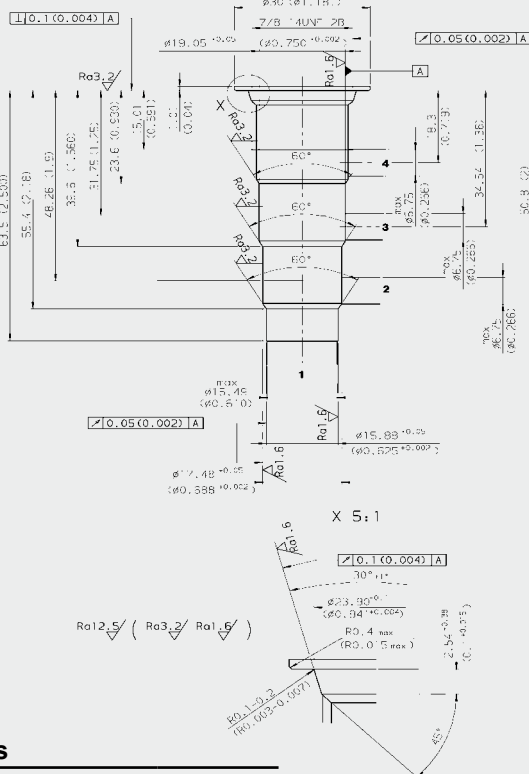
Code	Part No.	Material	Ports	Pressure
FH104-SB4	3037784	Steel, zinc-plated	G1/2	420 bar
FH104-AB4	3038097	Aluminium, anodized	G1/2	250 bar
Other models on request				

## Seal kits

Code	Material	Part No.
FS104-N SEAL KIT	NBR	3051912
FS104-V SEAL KIT	FKM	3071275

## CAVITY

FC10-4



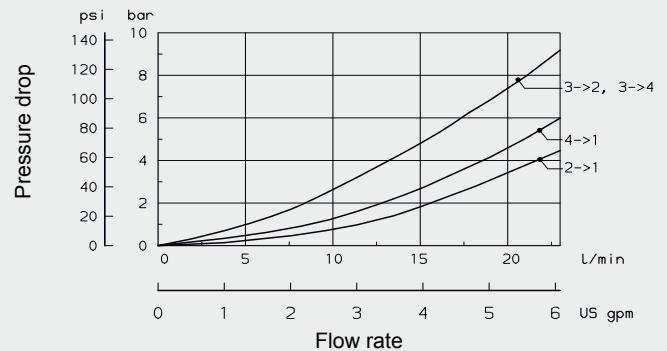
## Form tools

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

millimeter (inch)  
subject to technical modifications

## 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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