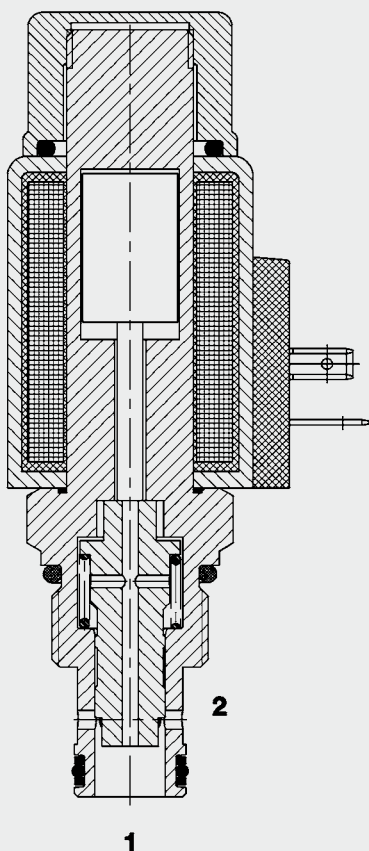


## FUNCTION



## 2/2 Solenoid Directional Valve **UNF** Spool Type, Direct-Acting, SAE-10 Cartridge – 350 bar WK10V-01

### FEATURES

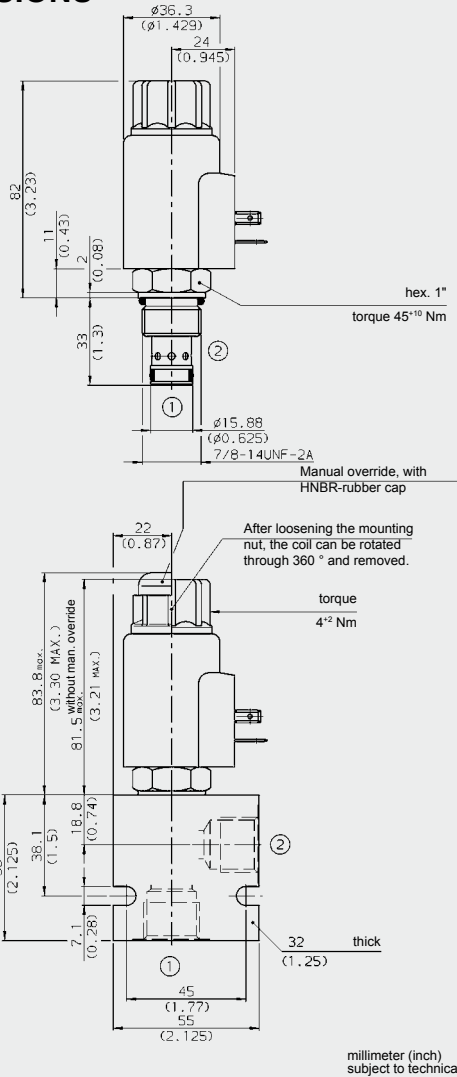
- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Coil seals protect the solenoid system
- Wide variety of connectors available
- Excellent switching performance by high power HYDAC solenoid
- Low pressure drop due to CFD optimized flow path

### SPECIFICATIONS

Operating pressure:	max. 350 bar										
Nominal flow:	max. 35 l/min										
Internal leakage:	max. 190 cm <sup>3</sup> /min at 250 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										
Materials:	<table border="0"> <tr> <td>Valve body:</td> <td>free-cutting steel</td> </tr> <tr> <td>Spool:</td> <td>hardened and ground steel</td> </tr> <tr> <td>Seals:</td> <td>NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C)</td> </tr> <tr> <td>Back-up rings:</td> <td>PTFE</td> </tr> <tr> <td>Coil:</td> <td>steel / polyamide</td> </tr> </table>	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
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:	FC10-2										
Weight:	Valve complete 0.45 kg Coil only 0.23 kg										
<b>Electrical data:</b>											
Type of voltage:	DC solenoid, AC voltage is rectified using 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 the nominal voltage										
Coil duty rating:	Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature										
Coil type:	Coil...-50-1836										

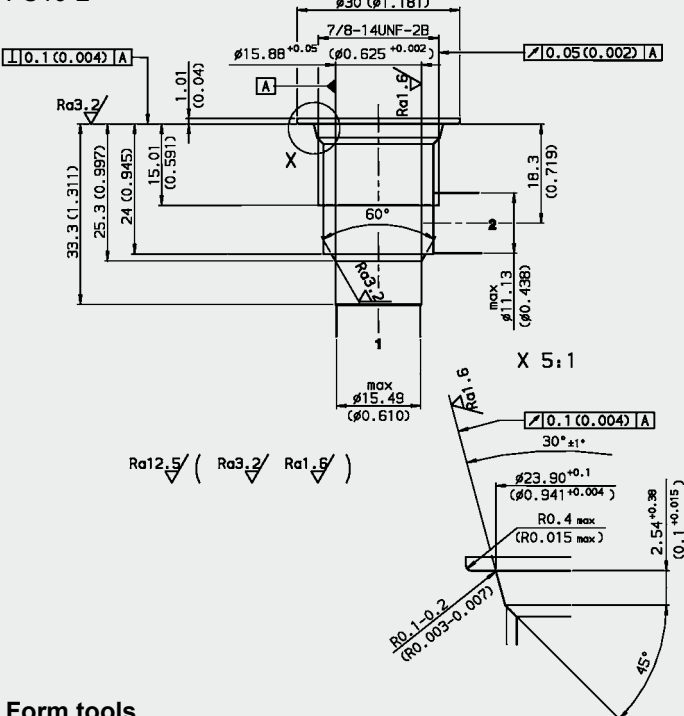
When the solenoid coil is de-energized, the valve is open in both directions.  
When the solenoid coil is energized, the valve is closed in both directions.

## DIMENSIONS



## CAVITY

FC10-2



## Form tools

Tool	Part No.
Countersink FC10-2	176379
Reamer FC10-2	165706

## MODEL CODE

**WK10V-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

### 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 50-1836)

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.
WK10V-01-C-N-24DG	3094516
WK10V-01-C-N-230AG	3094517

Other models on request

## \*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH102-SB4	3037594	Steel, zinc-plated	G1/2	420 bar
FH102-AB4	3037777	Aluminium, anodized	G1/2	210 bar

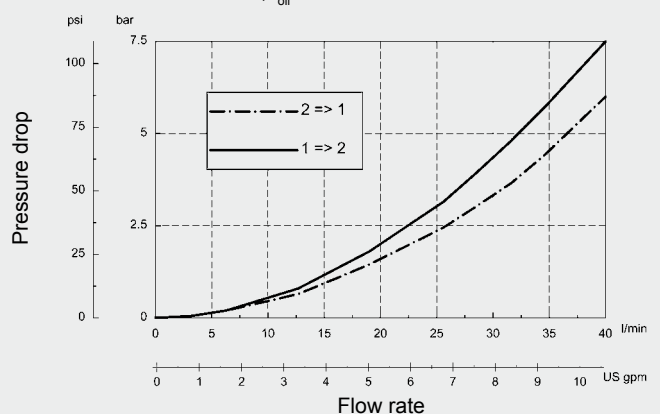
Other bodies on request

## Seal kits

Code	Material	Part No.
FS102-N SEAL KIT	NBR	3033872
FS102-V SEAL KIT	FKM	3051757

## PERFORMANCE

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



## 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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