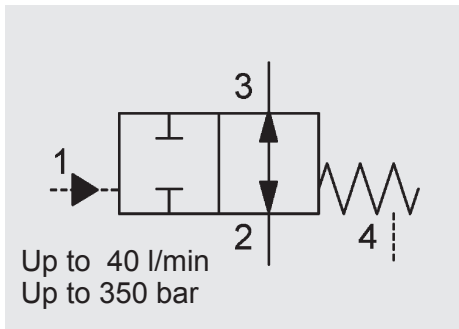


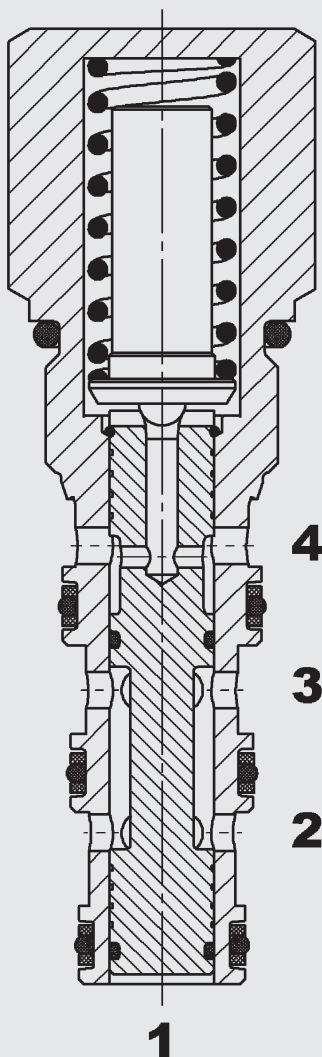
## 2/2 Directional Spool Valve Hydraulically-Operated Direct-Acting Normally Open SAE-10 Cartridge – 350 bar

**UNF**

WKH10V/14



### FUNCTION



The WKH10V is a hydraulically-operated, 2/2 directional valve. Valve is normally open, i.e. free flow between ports 3 and 2 in both directions.

When there is an increase in pressure at port 1 against the spring force, the valve closes in both directions. Any pressure at port 4 is additive to the spring value.

### FEATURES

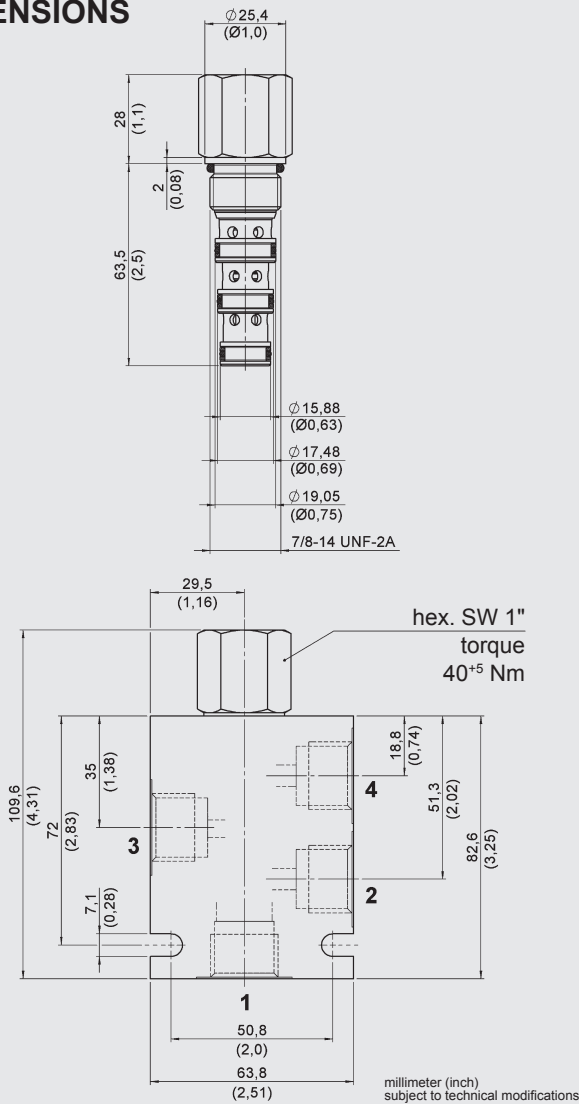
- Low pressure drop throughout flow range
- External surfaces zinc-nickel-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life

### SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 40 l/min
Internal leakage:	max. 200 cm <sup>3</sup> /min at 350 bar and 36 mm <sup>2</sup> /s
Media operating temperature range:	min. -30 °C to +100 °C
Ambient temperature range:	min. -30 °C to +80 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity:	min. 7.4mm <sup>2</sup> /s to max. 420mm <sup>2</sup> /s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
MTTF <sub>d</sub> :	150 years*
Installation:	No orientation restrictions
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
Cavity:	FC10-4
Weight:	approx. 0.192 kg

\* see "Conditions and instructions for valves" in brochure 5.300

## DIMENSIONS



## MODEL CODE

WKH 10 V / 14 - 01 - C - NS - 070

### Basic model

Directional valve,  
hydraulically operated

### Cavity

Symbol  
V = normally open

### Internal pressure pilot

1 = control port (X)  
4 = leakage port

### Type

01 = standard

### Body and ports\*

C = cartridge only  
Versions with bodies on request\*

### Seals

N = NBR (standard)  
NS = NBR standard with additional O-ring on control spool  
V = FKM (optional)  
VS = FKM optional with additional O-ring on control spool

### Switching pressure

70 = 4.8 bar ( 70 PSI)  
90 = 6.2 bar ( 90 PSI)  
130 = 9 bar (130 PSI)  
180 = 12.4 bar (180 PSI)

Higher switch pressures on version with O-ring on control spool!

## Standard models

Model code	Part No.
WKH10V/14-01-C-N-070	3633166
WKH10V/14-01-C-N-090	3633167
WKH10V/14-01-C-N-130	3633168
WKH10V/14-01-C-N-180	3633170

Other models on request

## \*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH104-SB4	3037784	Steel, zinc-plated	1/2 BSP	420 bar
FH104-AB4	3038097	Aluminium, anodized	1/2 BSP	210 bar

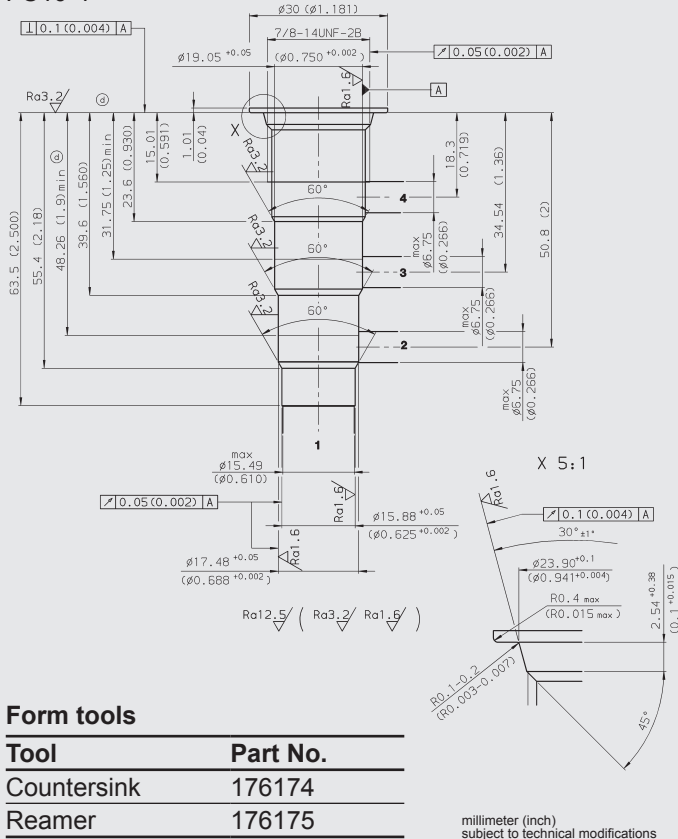
Other line bodies on request

## Seal kits

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

## CAVITY

### FC10-4



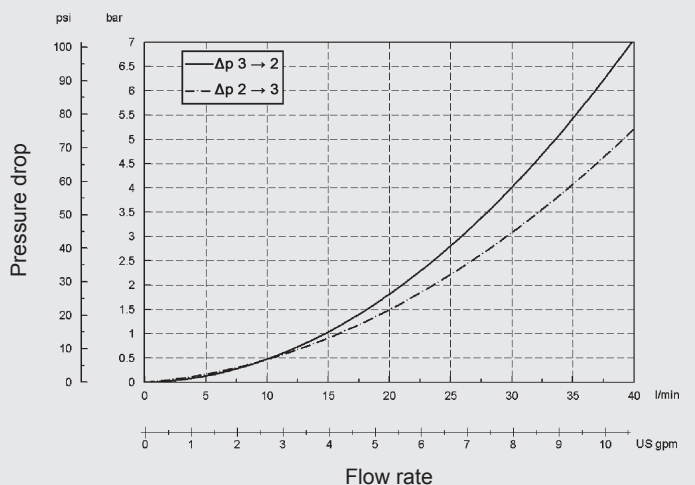
## Form tools

Tool	Part No.
Countersink	176174
Reamer	176175

millimeter (inch)  
subject to technical modifications

## PERFORMANCE

Measured at  $v = 33 \text{ mm}^2/\text{s}$ ,  $T_{\text{oil}} = 46 \text{ }^\circ\text{C}$



## 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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