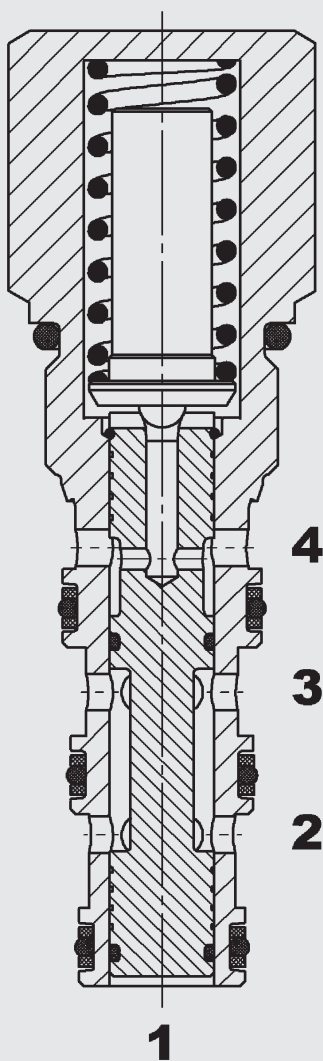


## FUNCTION



The WKH10V is a hydraulically operated, 2/2 directional valve. Valve is normally open, i.e. free flow between ports 3 to 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.

**Hint:** Pressures at port 4 is added to the required switching pressure at port 1.

## 2/2 Directional Spool Valve hydraulically operated direct-acting, normally open UNF Cartridge – 350 bar

### WKH10V/14

## FEATURES

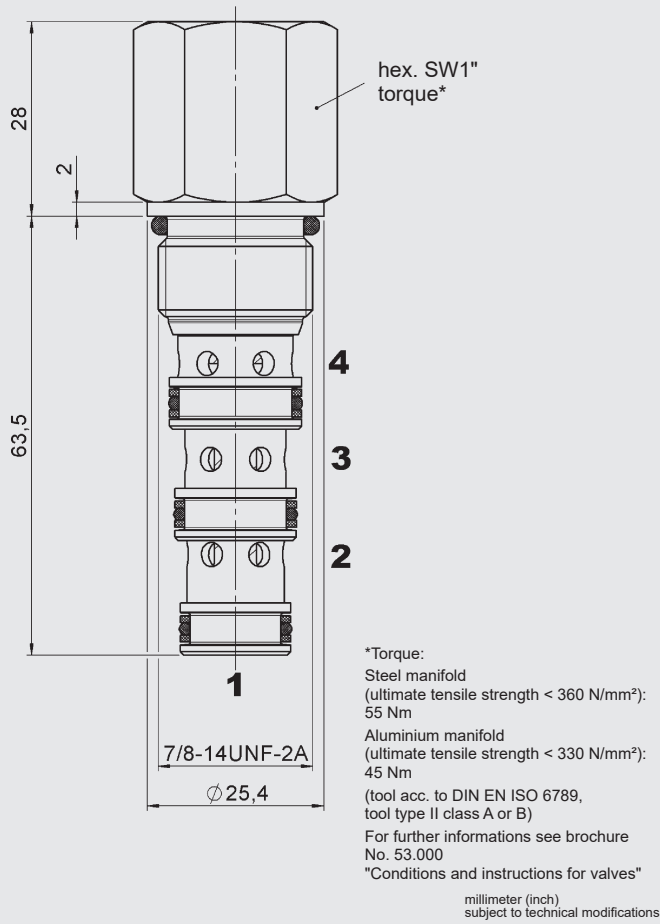
- Low pressure drop throughout flow range
- Exposed surfaces zinc-nickel plated for increased corrosion protection (1.000 h Salt spray test)

## SPECIFICATIONS\*

Operating pressure:	max. 350 bar max. 175 bar at port 4
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 +100 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1, 2 and 3
Viscosity:	min. 10 mm <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s
Filtration: (according to ISO 4406)	< 210 bar: min. class 20/18/15 > 210 bar: min. class 19/17/14
MTTF <sub>d</sub> :	150 - 1200 years, according DIN EN ISO 13849-1
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. 0.145 kg

\*see "Conditions and instructions for valves" in brochure 53.000

## DIMENSIONS



## MODEL CODE

WKH10V / 14 - 01 - C - NS - 070

### Basic model

Directional valve, hydraulically operated

**Internal pressure pilot**  
14 = control port 1 and 4

### 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

55 = 3.8 bar (55 PSI)

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	350 bar
FH104-AB4	3038097	Aluminium, anodized	1/2 BSP	210 bar

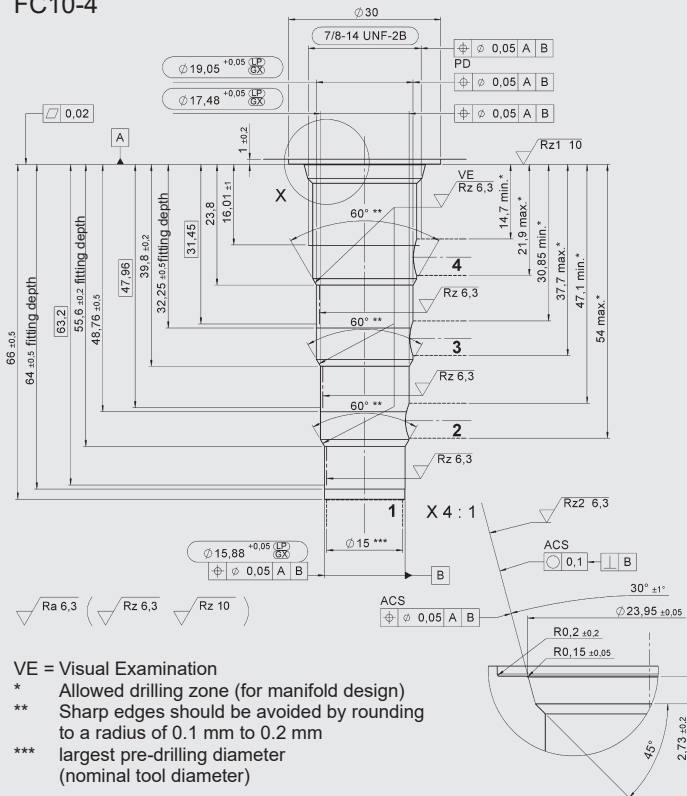
Other line bodies on request

## Seal kits

Code	Material	Part No.
FS UNF 10/N	NBR	3651557
FS UNF 10/V	FKM	3651559

## CAVITY

FC10-4



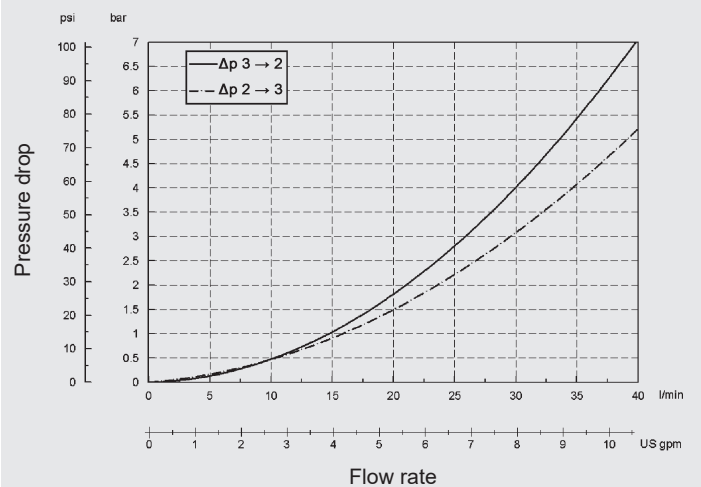
## Form tools

Tool	Part No.
Countersink	176174
Reamer	176175

millimeter (inch)  
subject to technical modifications

## TYPICAL PERFORMANCE

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



## 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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