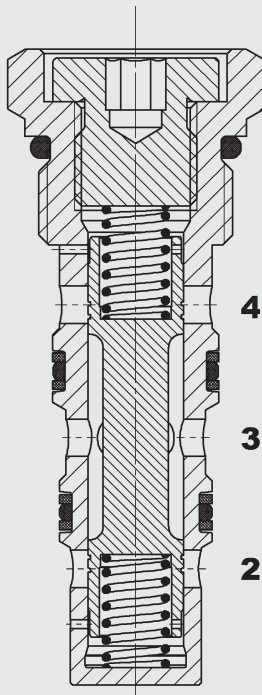


up to 45 l/min
up to 350 bar

FUNCTION



The directional valve is a hydraulically operated 3/3 directional valve in a 4-way cavity. In the spring-centred normal position, all ports are closed.

When there is an increase in pressure at port 2 against the spring force, the valve opens between port 3 and port 4. Oil can flow through the valve in both directions.

Alternatively, when there is an increase in pressure at port 4 against the spring force, the valve opens between port 2 and port 3. Oil can flow through the valve in both directions.

3/3 Directional Valve Hydraulically Operated, Direct Acting UNF Cartridge – 350 bar WKH10DC

FEATURES

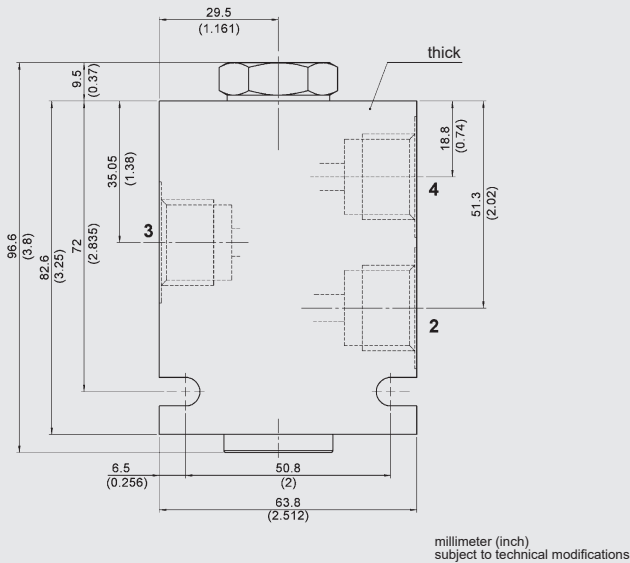
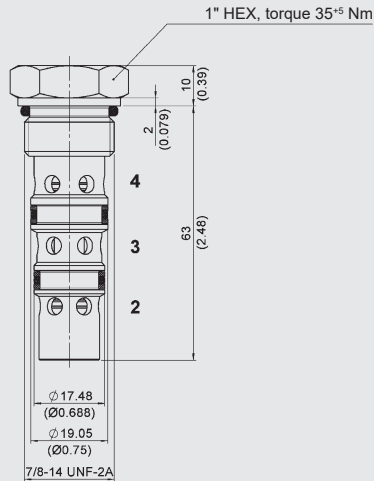
- Principal application is as a flushing valve for hydrostatic drives
- Excellent stability throughout the entire flow range
- Versions available with various switch pressures
- Exposed surfaces zinc-nickel plated for increased corrosion protection (1.000 h Salt spray test)

SPECIFICATIONS*

Operating pressure:	max. 350 bar
Nominal flow:	max. 45 l/min
Internal leakage:	max. 400 cm ³ /min at 350 bar and 36 mm ² /s
Media operating temperature range:	min. -30 °C to max. +100 °C
Ambient temperature range:	min. -30 °C to max. +100 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1, 2 und 3
Viscosity:	min. 10mm ² /s to max. 420mm ² /s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
MTTF _d :	150 - 1200 years, according to 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 ring: PTFE
Cavity:	FC10-4 (port 1 not used)
Weight:	approx. 0.115 kg

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

DIMENSIONS



MODEL CODE

WKH10DC / 24 - 01 - C - N - 050

Basic model

3/3 directional valve,
hydraulically operated

Internal pressure tap

24 = at port 2 and port 4

Type

01 = standard, negative overlap in centre position
14 = positive overlap in centre position

Body and ports*

C = cartridge only
Versions with bodies on request*

Seals

N = NBR (standard)
V = FKM

Switch pressure

050 = 50 PSI (3.5 bar)

Standard models

Model code	Part No.
WKH10DC/24-01-C-N-050	3543256
WKH10DC/24-14-C-N-050	3481315

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, clear anodized	1/2 BSP	210 bar

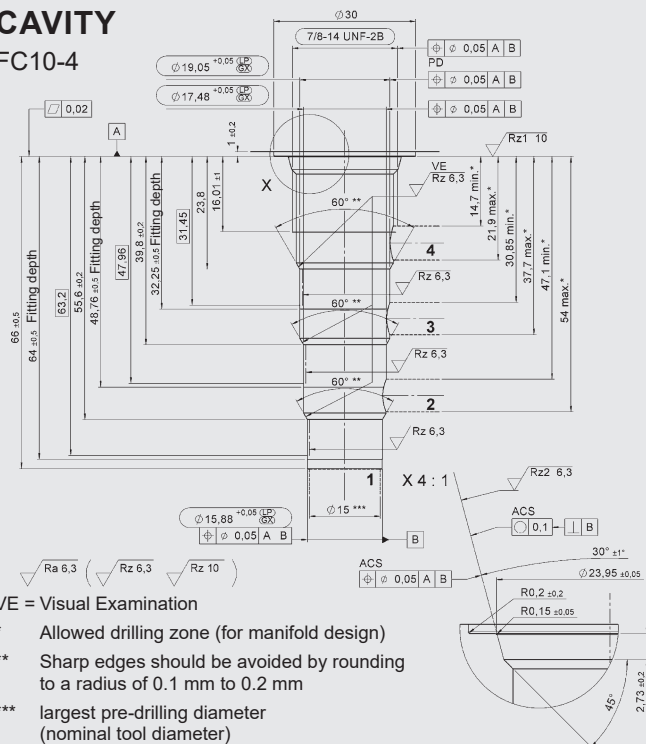
other bodies on request

Seal kits

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

CAVITY

FC10-4



Form tools

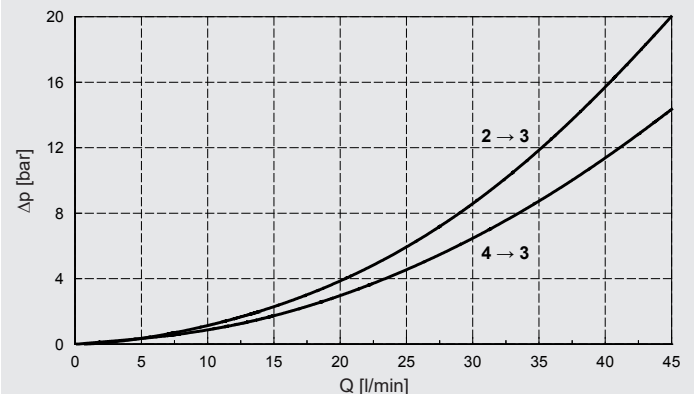
Tool	Part No.
Countersink	176174
Reamer	176175

millimeter (inch)
subject to technical modifications

TYPICAL PERFORMANCE

Measured at $v = 46 \text{ mm}^2/\text{s}$

$T_{\text{oil}} = 40 \text{ }^\circ\text{C}$



NOTE

The information in this brochure relates to the operating conditions and applications described. For applications and operating conditions not described, please contact the relevant technical department. Subject to technical modifications.

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