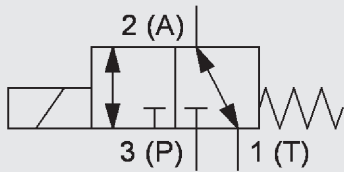
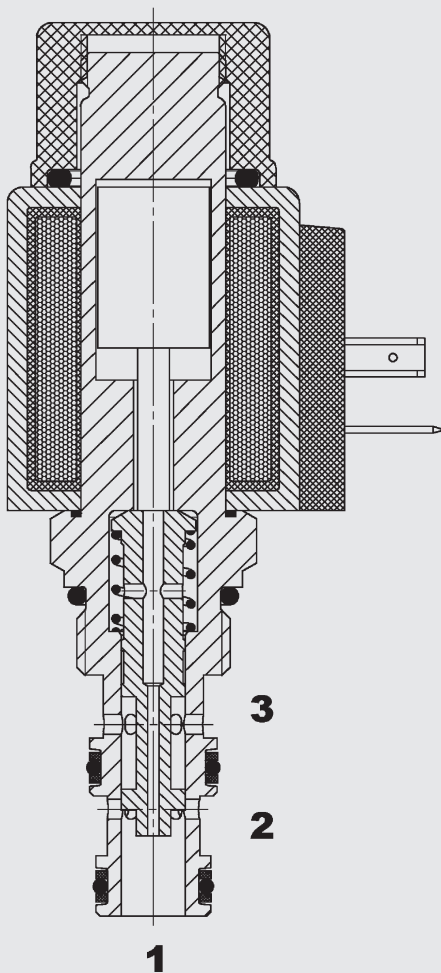


3/2 Solenoid Directional Valve spool type, direct-acting UNF Cartridge – 350 bar WK08C-13



up to 19 l/min
up to 350 bar

FUNCTION



When de-energized, the valve allows flow from port 2 to 1 and from port 1 to 2, while blocking flow at port 3.

When energized, the valve allows flow from port 3 to 2 or from port 2 to 3 and from port 3 to 2, while blocking flow at port 1.

FEATURES

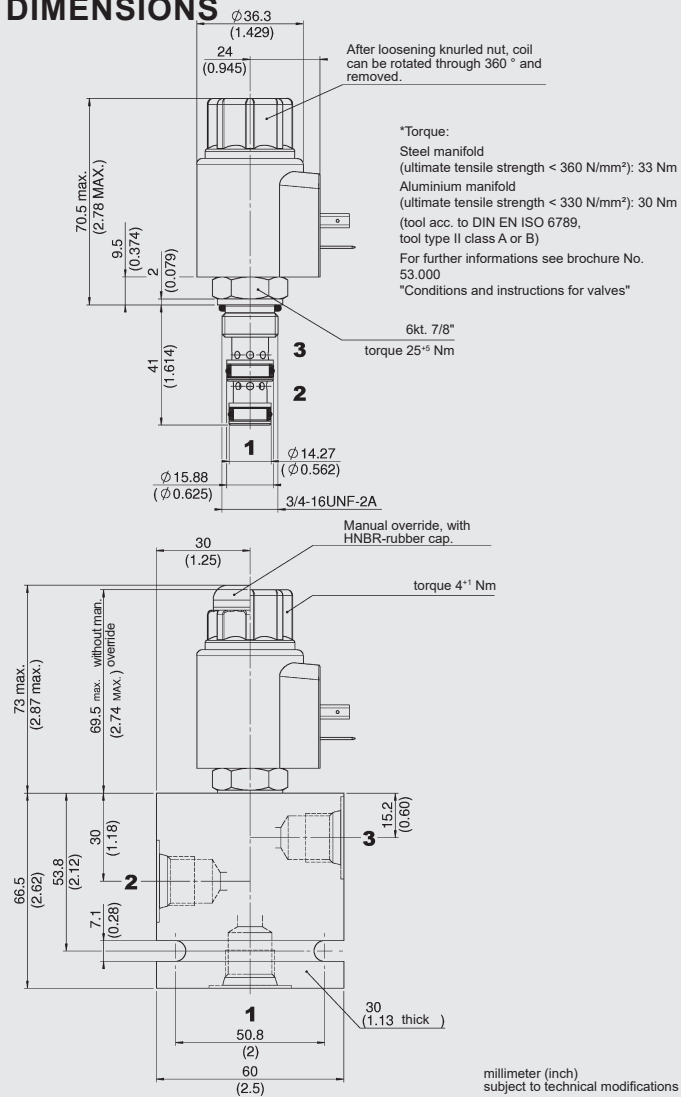
- Δp optimized, for lower pressure drop from port 2 to port 1
- Excellent switching performance by high power HYDAC solenoid
- Coil seals protect the solenoid system
- Wide variety of connectors available
- Exposed surfaces zinc-nickel plated for increased corrosion protection (1000 h Salt spray test)

SPECIFICATIONS*

Operating pressure:	max. 350 bar	
Nominal flow:	max. 19 l/min	
Internal leakage:	max. 170 ml/min at 210 bar and 36 mm ² /s	
Media operating temperature range:	min. -20 °C to max. +120 °C	
Ambient temp. range:	min. -20 °C to max. + 60 °C	
Operating fluid:	Hydraulic oil to DIN 51524 Part 1, 2 and 3	
Viscosity range:	min. 10 mm ² /s to max. 420 mm ² /s	
Filtration operating fluid: (to ISO 4406)	p ≤ 210 bar: min. class 20/18/15 p > 210 bar: min. class 19/17/14	
MTTF _d :	150 - 1200 years, according to DIN EN ISO 13849-1	
Installation:	No orientation restrictions	
Material:	Valve body:	steel
	Piston:	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:	FC08-3	
Weight:	Valve complete:	0.37 kg
	Coil only:	0.19 kg
Electrical data:		
Response time: (at p _{max} , Q _{max} , v = 33 mm ² /s)	energized:	approx. 20 - 85 ms
	de-energized:	approx. 40 - 80 ms
		substantially extended response times possible at other operating conditions
Type of voltage:	DC: direct current solenoid AC: alternating current solenoid with 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 nominal voltage	
Coil duty rating:	Continuous up to max. 115% of nominal voltage at max. 60° C ambient temperature	
Coil type:	Coil...-40-1836	

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

DIMENSIONS



MODEL CODE

WK08C - 13 M - C - N - 24 DG

Basic model

Directional spool valve, UNF

Type

13 = standard, with less pressure drop

Manual override

no details = without manual override

M = manual override

Body and ports*

C = cartridge only

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 mm²

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.
WK08C-13-C-N-12DG	3381283
WK08C-13-C-N-24DG	3257855

Other models on request

* Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH083	560922	Steel, zinc-plated	G3/8"	350 bar
FH083	3011427	Aluminium, clear anodized	G3/8"	210 bar

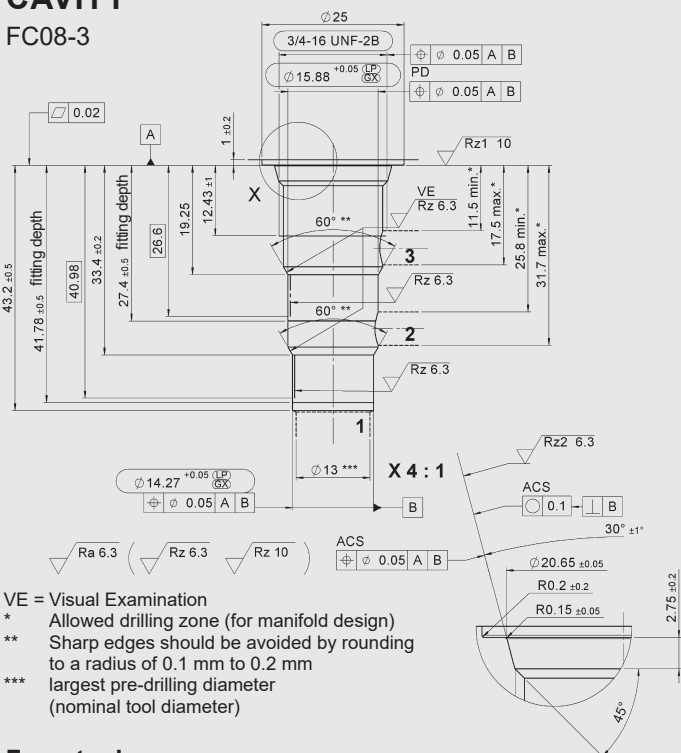
Other models on request

Seal kits

Code	Material	Part No.
FS UNF 08/N	NBR	3651385
FS UNF 08/V	FKM	3651356

CAVITY

FC08-3



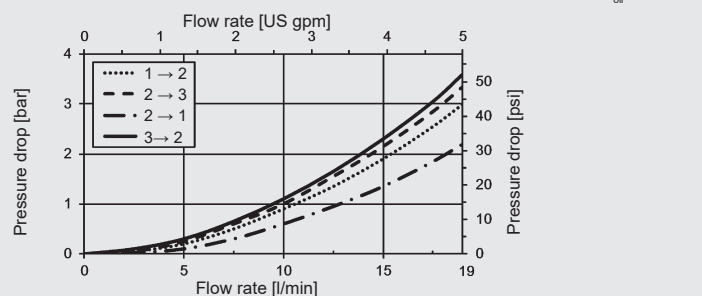
Form tools

Tool	Part No.
Countersink	175644
Reamer	175645

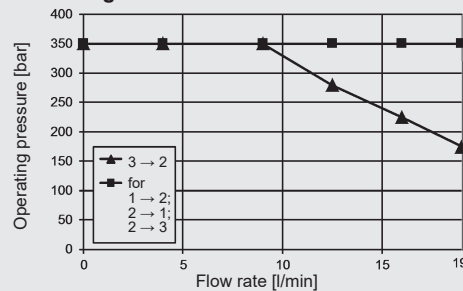
millimeter (inch) subject to technical modifications

TYPICAL PERFORMANCE

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



Switching Performance



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.

HYDAC Fluidtechnik GmbH

Justus-von-Liebig-Str.
D-66280 Sulzbach/Saar
Tel: 0 68 97 /509-01
Fax: 0 68 97 /509-598
E-Mail: valves@hydac.com