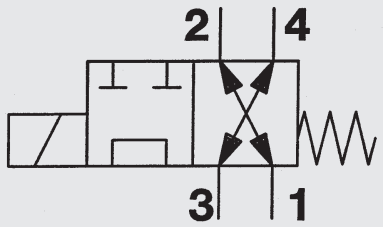
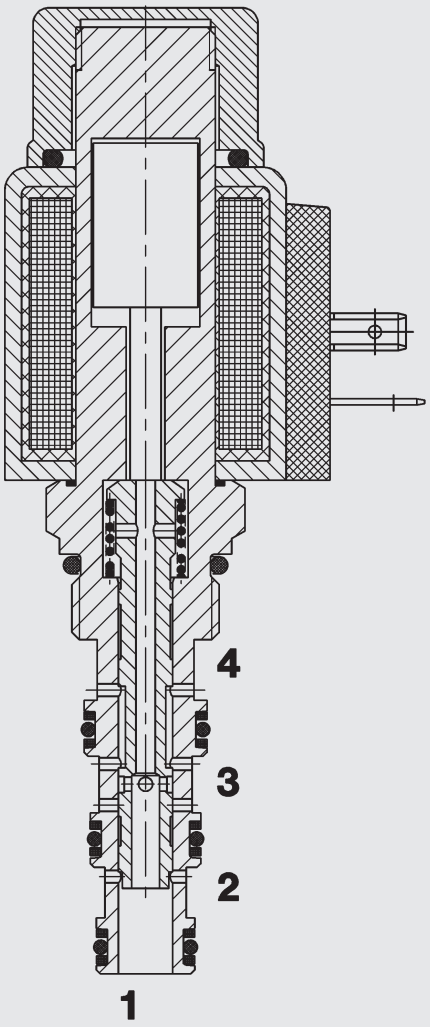


15 l/min
350 bar

4/2 Solenoid Directional Valve UNF Spool Type, Direct-Acting SAE-08 Cartridge – 350 bar

WK08K-01

FUNCTION



In the de-energized mode, the valve allows flow from port 3 to 4 & port 4 to 3, and from port 1 to 2 & port 2 to 1. When the solenoid coil is energized, the valve allows flow in both directions between ports 3 and 1, while blocking flow at ports 2 and 4.

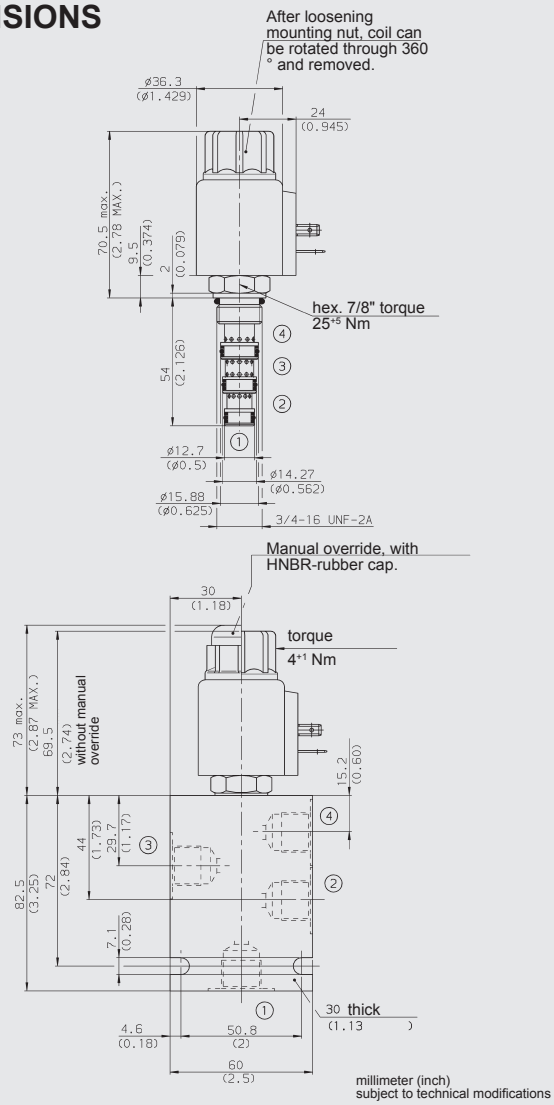
FEATURES

- 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

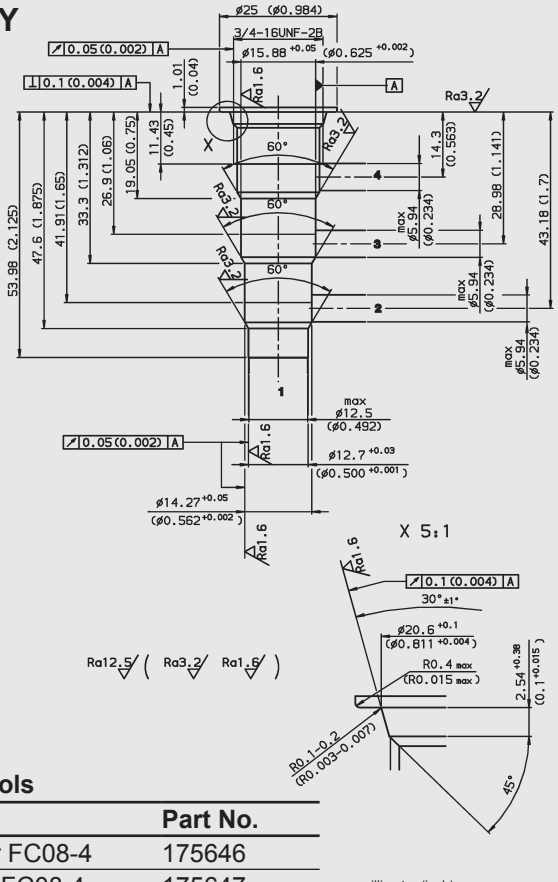
Operating pressure:	max. 350 bar	
Nominal flow:	max. 15 l/min (consult HYDAC for flow rates above 207 bar)	
Internal leakage:	max. 90 cm³/min at 250 bar and 34 mm²/s	
Media operating temperature range:	min. -20 °C to max. +100 °C	
Ambient temperature range:	min. -20 °C to max. + 60 °C	
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2	
Viscosity range:	min. 7.4 mm²/s to max. 420 mm²/s	
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner	
$MTTF_d$:	150 years (see "Conditions and instructions for valves" in brochure 5.300)	
Installation:	No orientation restrictions	
Materials:	Valve body:	free-cutting 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:	FC08-4	
Weight:	Valve complete	0.38 kg
	Coil only	0.19 kg
Electrical data:		
Type of voltage:	DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil	
Nominal voltage at 20 °C:	1.5 A at 12 V DC 0.8 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...-40-1836	

DIMENSIONS



CAVITY

FC08-4



Form tools

Tool	Part No.
Rougher FC08-4	175646
Reamer FC08-4	175647

MODEL CODE

WK08K-01 M – C – N – 24 DG

Basic model
Directional spool valve, UNF

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.
WK08K-01-C-N-24DG	3021093
WK08K-01-C-N-230AG	3043933

Other models on request

*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH084-SB3	563383	Steel, zinc-plated	G3/8	420 bar
FH084-AB3	3011407	Aluminium, clear anodized	G3/8	210 bar

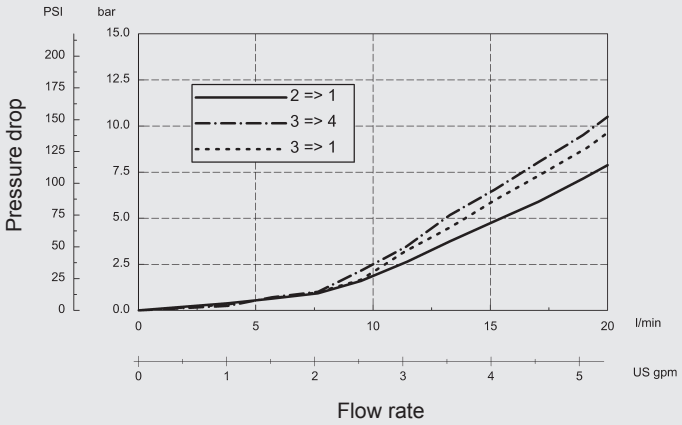
Other housings on request

Seal kits

Code	Material	Part No.
FS084-N SEAL KIT	NBR	3071272
FS084-V SEAL KIT	FKM	3071273

PERFORMANCE

Measured at ν = 34 mm²/s, T_{oil} = 46 °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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