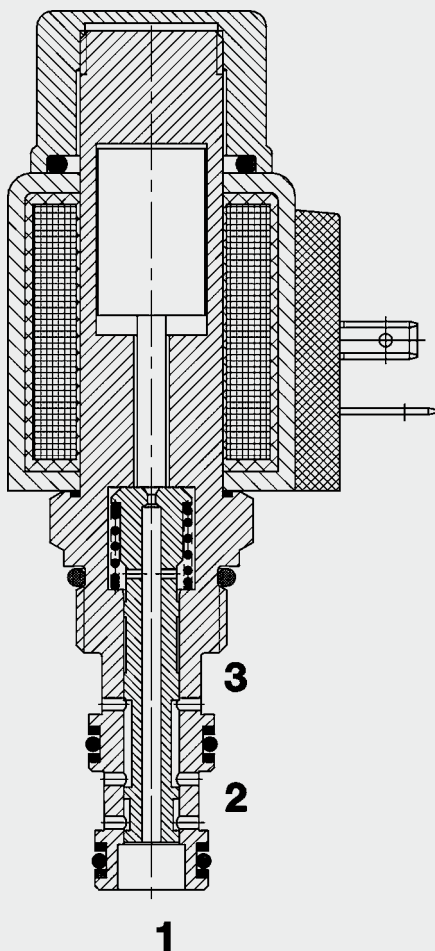


FUNCTION



When the solenoid coil is de-energized, there is free flow through the valve from port 2 to 3 or from 3 to 2, while port 1 is closed. When energized, the valve allows flow from port 1 to 2 or from port 2 to 1, while blocking flow at port 3.

3/2 Solenoid Directional Valve **UNF** Spool Type, Direct-Acting SAE-08 Cartridge – 350 bar

WK08D-01

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

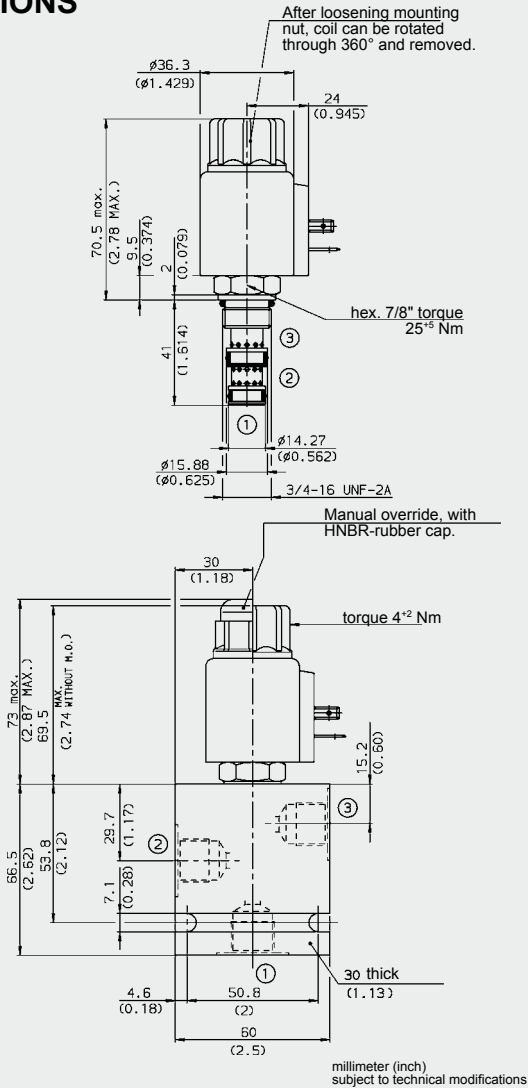
SPECIFICATIONS

| | | |
|------------------------------------|--|---|
| Operating pressure: | max. 350 bar | |
| Nominal flow: | max. 19 l/min (Consult HYDAC for flow rates above 207 bar) | |
| Internal leakage: | 90 cm ³ /min at 250 bar | |
| 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 mm ² /s to max. 420 mm ² /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 |
| | Spool: | 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

| | | |
|------------------------|---|--|
| Type of voltage: | DC solenoid, AC voltage is rectified using 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 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



MODEL CODE

WK08D - 01 M - C - N - 24 DG

Basic model _____
Directional spool valve, UNF

Type _____
01 = standard

Manual override _____
no details = without manual override
M = manual override

Body and ports* _____
C = cartridge only
SB3 = G3/8 ports, steel body
AB3 = G3/8 ports, aluminium body

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

| Code | Part No. |
|--------------------|----------|
| WK08D-01-C-N-24DG | 3020504 |
| WK08D-01-C-N-230AG | 3043904 |

Other models on request

* Standard in-line bodies

| Code | Part No. | Material | Ports | Pressure |
|-----------|----------|---------------------------|-------|----------|
| FH083-SB3 | 560922 | Steel, zinc-plated | G3/8 | 420 bar |
| FH083-AB3 | 3011427 | Aluminium, clear anodized | G3/8 | 210 bar |

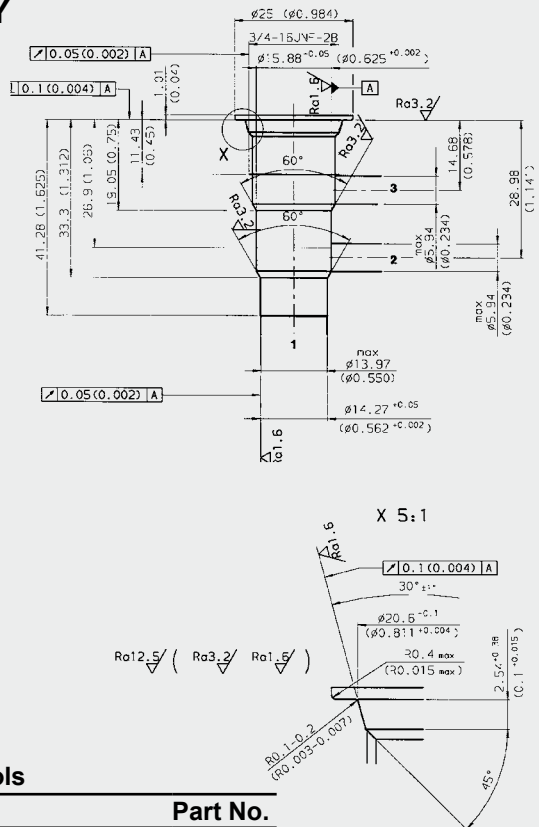
Other line bodies on request

Seal kits

| Code | Material | Part No. |
|------------------|----------|----------|
| FS083-N SEAL KIT | NBR | 3054795 |
| FS083-V SEAL KIT | FKM | 2591059 |

CAVITY

FC08-3



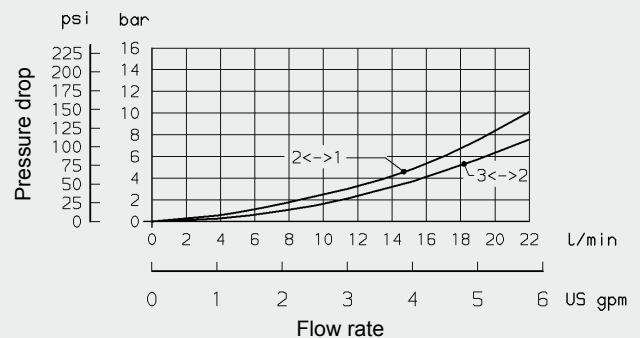
Form tools

| Tool | Part No. |
|--------------------|----------|
| Countersink FC08-3 | 175644 |
| Reamer FC08-3 | 175645 |

millimeter (inch)
subject to technical modifications

PERFORMANCE

Measured at $v = 34 \text{ mm}^2/\text{s}$, $T_{oil} = 46 \text{ }^\circ\text{C}$



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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