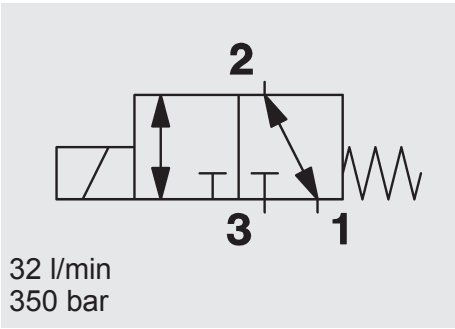
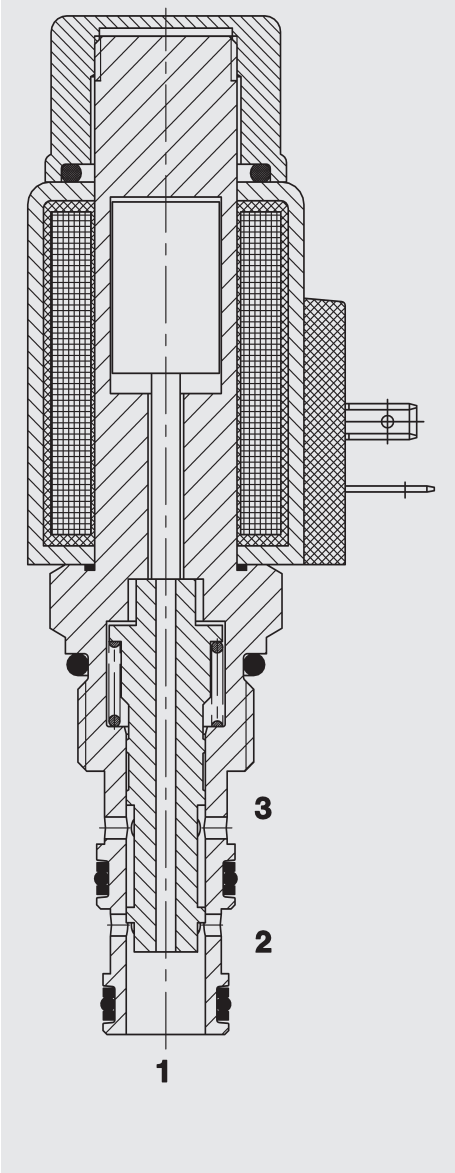


3/2 Solenoid Directional Valve **UNF** **Spool Type, Direct Acting** **SAE-10 Cartridge – 350 bar** **WK10C-01**



FUNCTION



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

When energized, the valve allows flow in both directions between ports 3 and 2, while blocking flow at port 1.

FEATURES

- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Wide variety of connectors available
- Excellent switching performance by high power HYDAC solenoid
- Low pressure drop due to CFD optimized flow path

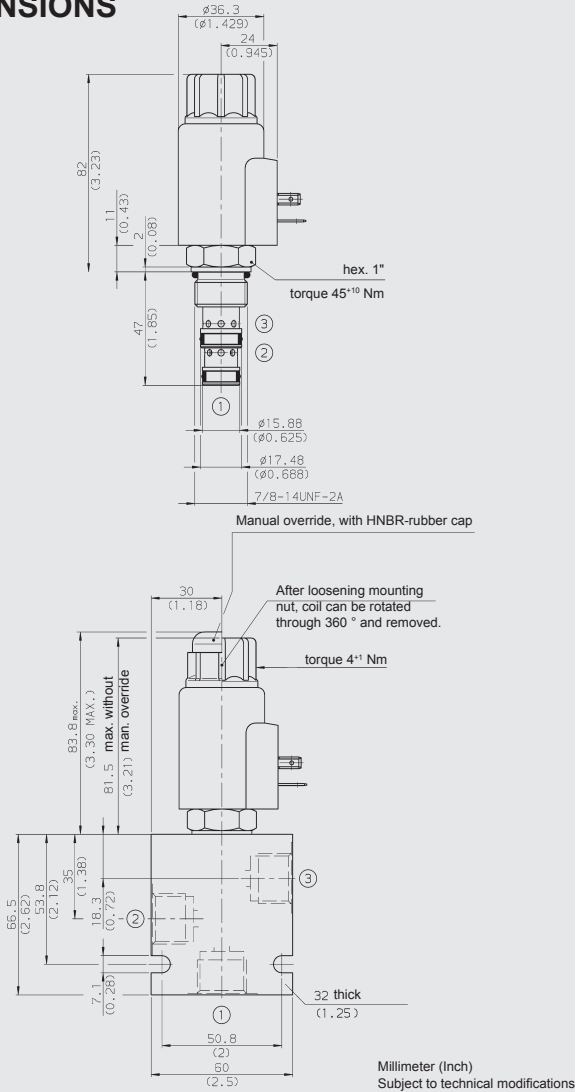
SPECIFICATIONS

| | |
|------------------------------------|--|
| Operating pressure: | max. 350 bar |
| Nominal flow: | max. 32 l/min |
| Internal leakage: | max. 120 cm ³ /min at 250 bar and 34 mm ² /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 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: | FC10-3 |
| Weight: | Valve complete 0.47 kg Coil only 0.23 kg |

Electrical data:

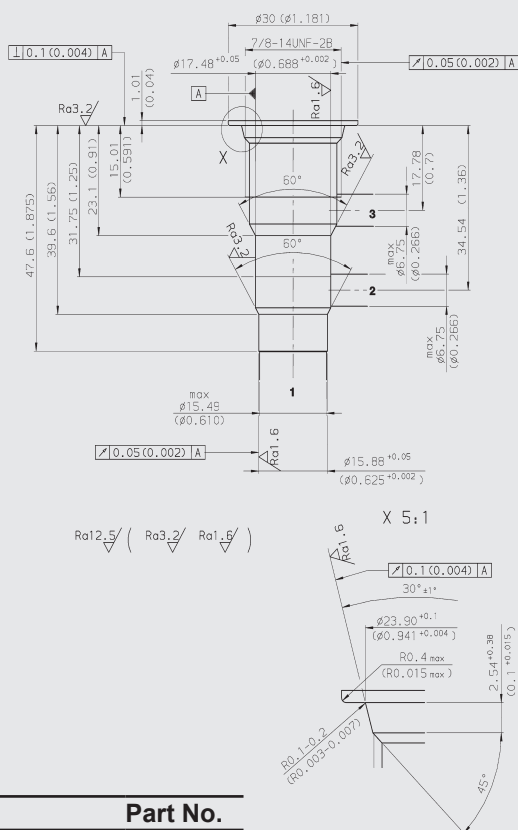
| | |
|------------------------|--|
| Coil duty rating: | Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature |
| Current draw at 20 °C: | 2.22 A at 12 V DC 1.13 A at 24 V DC |
| Voltage tolerance: | ± 15% of the nominal voltage |
| Coil type: | Coil...-50-1836 |

DIMENSIONS



CAVITY

FC10-3



Form tools

| Tool | Part No. |
|--------------------|----------|
| Countersink FC10-3 | 176282 |
| Reamer FC10-3 | 176283 |

Millimeter (Inch)
subject to technical modifications

MODEL CODE

WK10C - 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

SB4 = G1/2 ports, steel body

AB4 = G1/2 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 50-1836)

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. |
|--------------------|----------|
| WK10C-01-C-N-24DG | 3079848 |
| WK10C-01-C-N-230AG | 3094630 |

Standard in-line bodies

| Code | Part No. | Material | Ports | Pressure |
|-----------|----------|---------------------|-------|----------|
| FH103-SB4 | 3037697 | Steel, zinc-plated | G1/2 | 420 bar |
| FH103-AB4 | 3038092 | Aluminium, anodized | G1/2 | 210 bar |

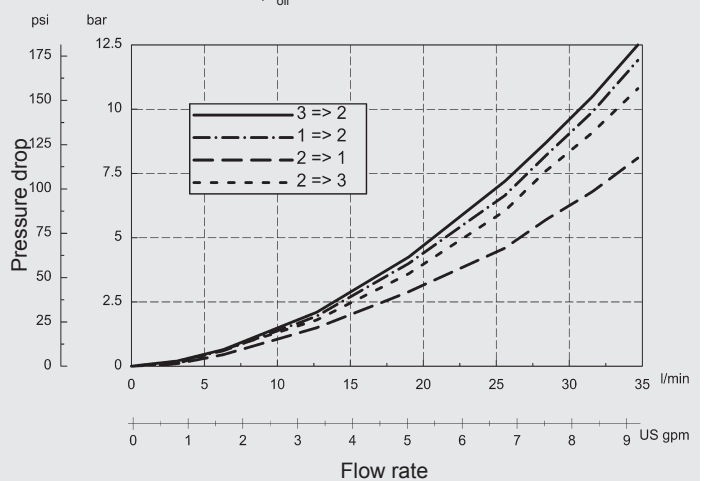
Other line bodies on request

Seal kits

| Code | Material | Part No. |
|------------------|----------|----------|
| FS103-N SEAL KIT | NBR | 3071274 |
| FS103-V SEAL KIT | FKM | 3049443 |

PERFORMANCE

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



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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