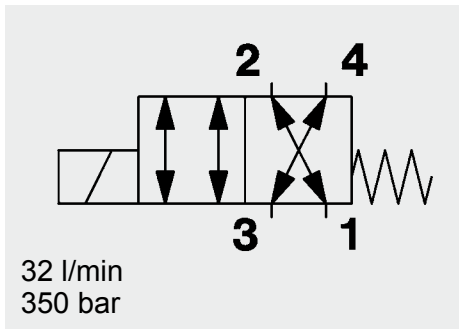
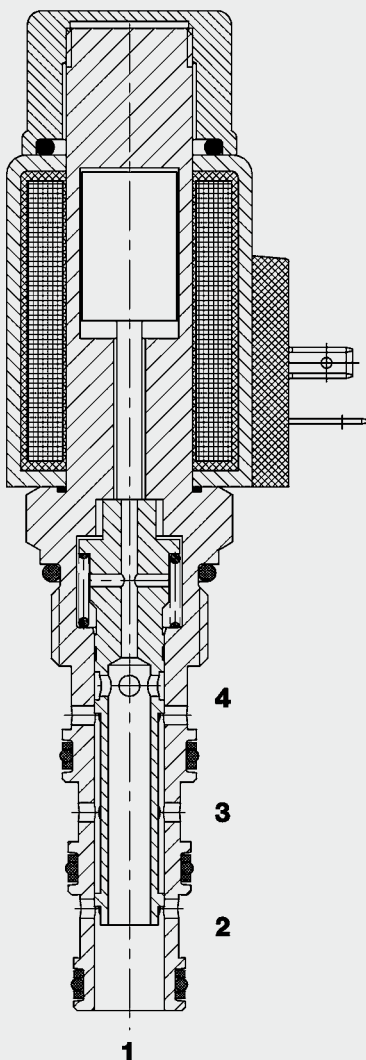


4/2 Solenoid Directional Valve **UNF** Spool Type, Direct-Acting SAE-10 Cartridge – 350 bar

WK10Y-01



FUNCTION



When de-energized, the valve allows flow from port 3 to 4 or from 4 to 3 and from port 1 to 2 or 2 to 1.

When energized, the valve allows flow from port 2 to 3 or from 3 to 2 and from port 1 to 4 or 4 to 1.

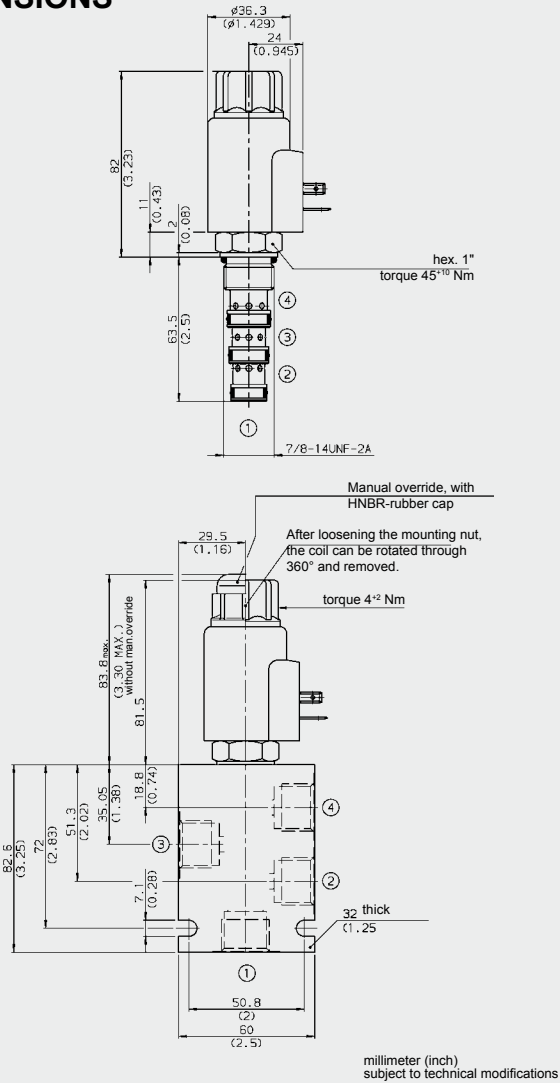
FEATURES

- 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. 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 _a : | 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: | FC10-4 | |
| Weight: | Valve complete | 0.48 kg |
| | Coil only | 0.23 kg |
| Electrical data: | | |
| Response time: | Energized: | approx. 35 ms |
| | De-energized: | approx. 50 ms |
| Type of voltage: | DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil | |
| 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 duty rating: | Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature | |
| Coil type: | Coil...-50-1836 | |

DIMENSIONS



MODEL CODE

WK10Y - 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
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. |
|--------------------|----------|
| WK10Y-01-C-N-12DG | 3095462 |
| WK10Y-01-C-N-24DG | 3094514 |
| WK10Y-01-C-N-230AG | 3094515 |

Other models on request

*Standard in-line bodies

| Code | Part No. | Material | Ports | Pressure |
|-----------|----------|---------------------|-------|----------|
| FH104-SB4 | 3037784 | Steel, zinc-plated | G1/2 | 420 bar |
| FH104-AB4 | 3038097 | Aluminium, anodized | G1/2 | 210 bar |

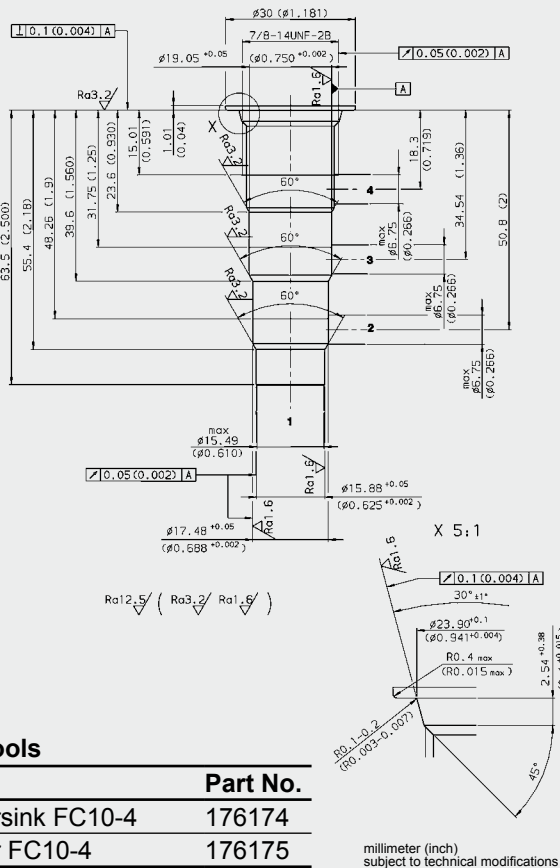
Other bodies on request

Seal kits

| Code | Material | Part No. |
|------------------|----------|----------|
| FS104-N SEAL KIT | NBR | 3051912 |
| FS104-V SEAL KIT | FKM | 3071275 |

CAVITY

FC10-4

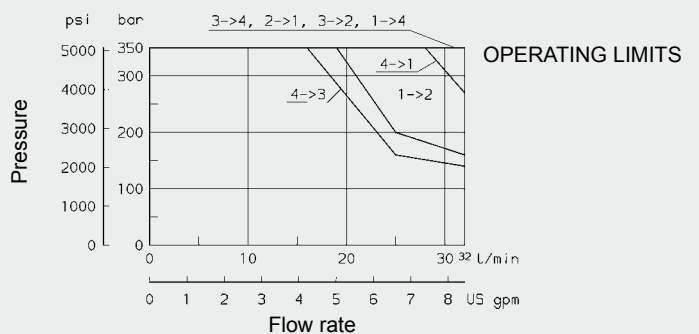
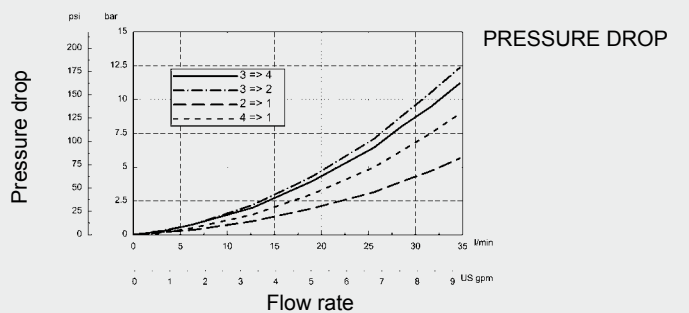


Form tools

| Tool | Part No. |
|--------------------|----------|
| Countersink FC10-4 | 176174 |
| Reamer FC10-4 | 176175 |

PERFORMANCE

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



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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