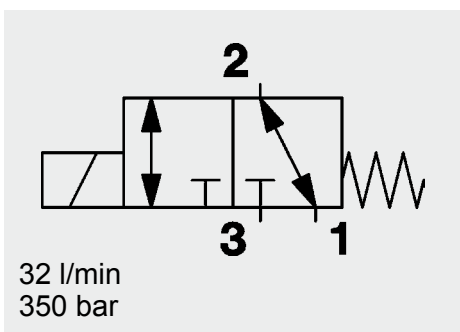
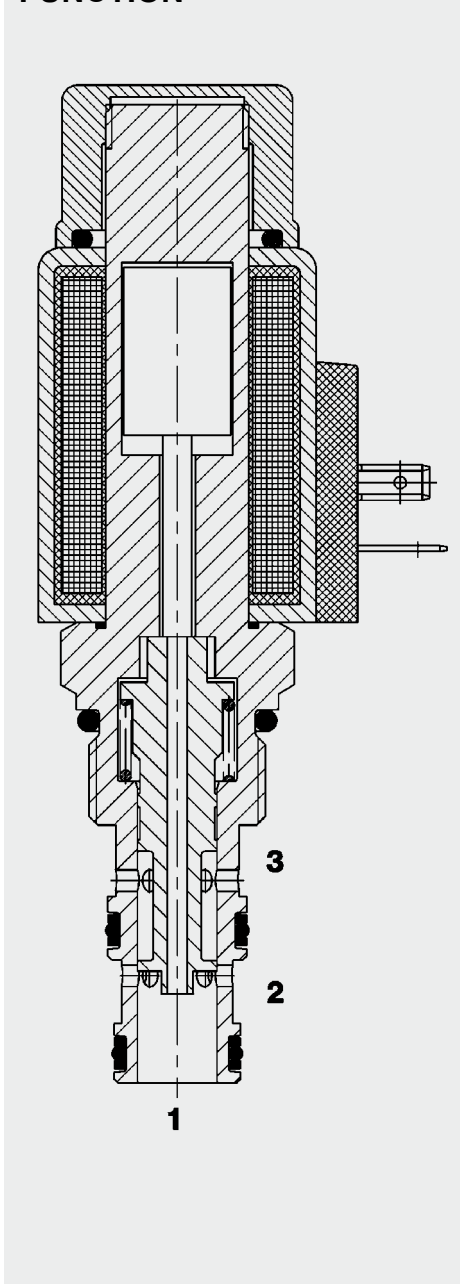


3/2 Solenoid Directional Valve **UNF** **Spool Type, Direct Acting** **SAE-10 Cartridge – 350 bar** **WK10C-40**



FUNCTION



When de-energized, the valve allows flow in both directions between ports 2 to 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

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

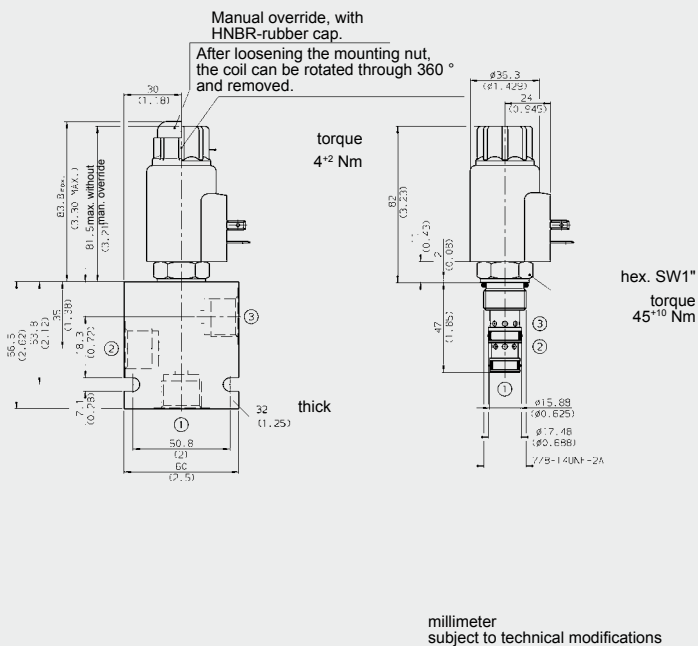
SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 32 l/min
Internal leakage:	max. 250 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)
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
Type of voltage:	DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil
Coil type:	Coil...-50-1836

DIMENSIONS



MODEL CODE

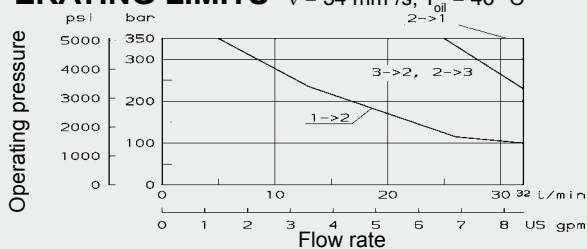
WK10C - 40 M - C - N - 24 DG

- Basic model _____
- Directional spool valve, UNF _____
- Type _____
- 40 = 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 _____

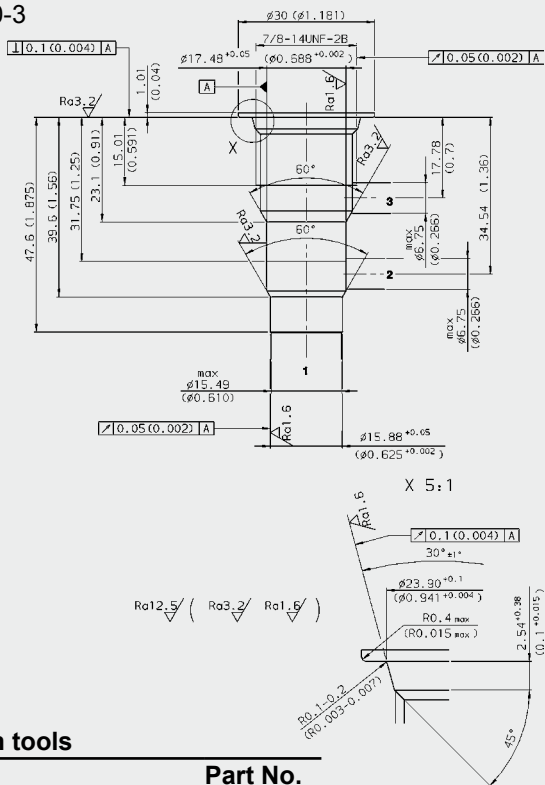
OPERATING LIMITS

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



CAVITY

FC10-3



Form tools

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

millimeter subject to technical modifications

Standard models

Model code	Part No.
WK10C-40-C-N-24DG	3129698
WK10C-40-C-N-230AG	3129699

*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

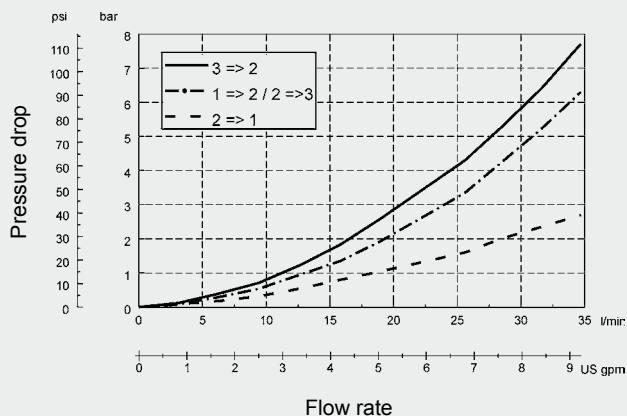
Other line bodies on request

Seal kits

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

PERFORMANCE

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



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.

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: flutec@hydac.com