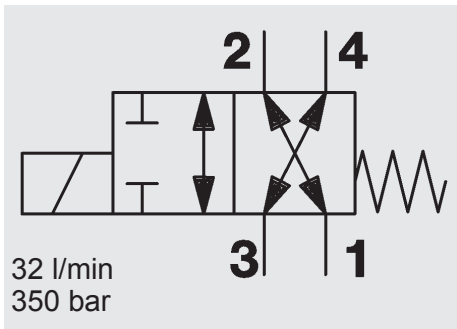
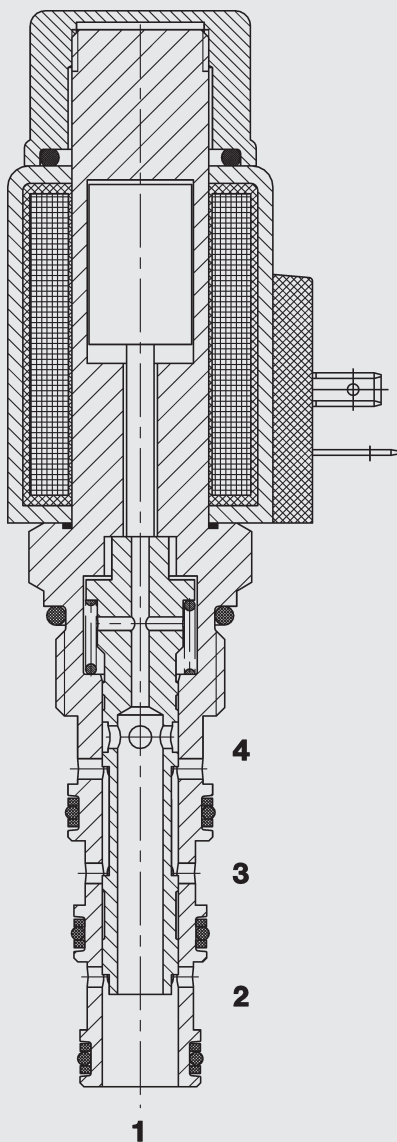


4/2 Solenoid Directional Valve UNF Spool Type, Direct-Acting SAE-10 Cartridge – 350 bar WK10R-01



FUNCTION



When de-energized, the valve allows flow in both directions between ports 3 and 4 and between ports 1 and 2. When energized, the valve allows flow in both directions between ports 4 and 1, while blocking flow at ports 2 and 3.

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

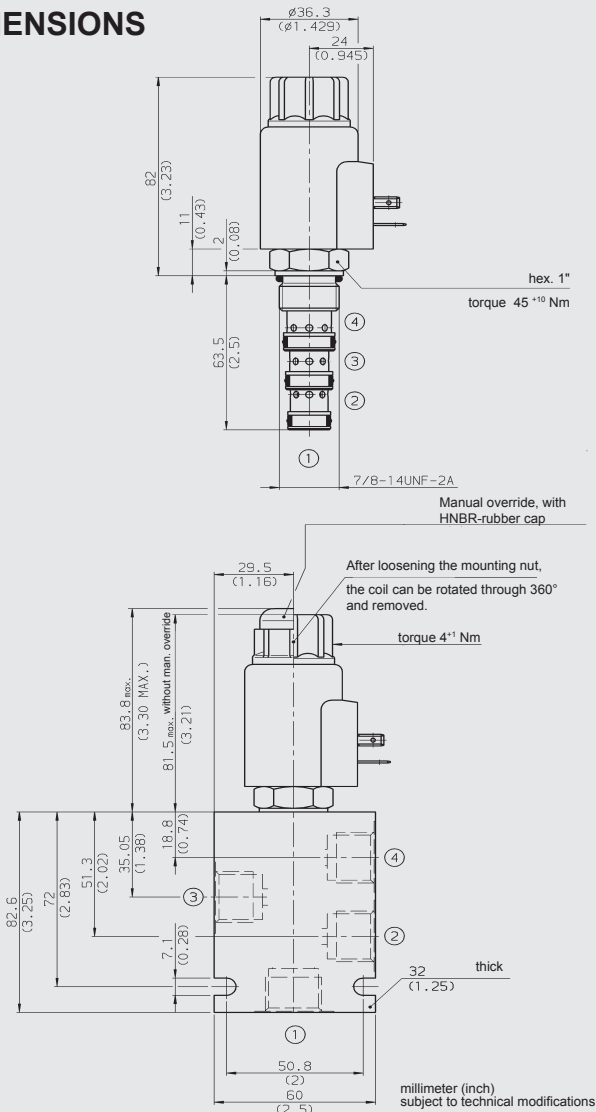
SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 32 l/min
Internal leakage:	max. 160 cm ³ /min at 250 bar and 34 mm ² /s
Media operating temperature range:	min. -20 °C to max. +120 °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:	FC10-4
Weight:	Valve complete 0.48 kg Coil only 0.23 kg

Electrical data:

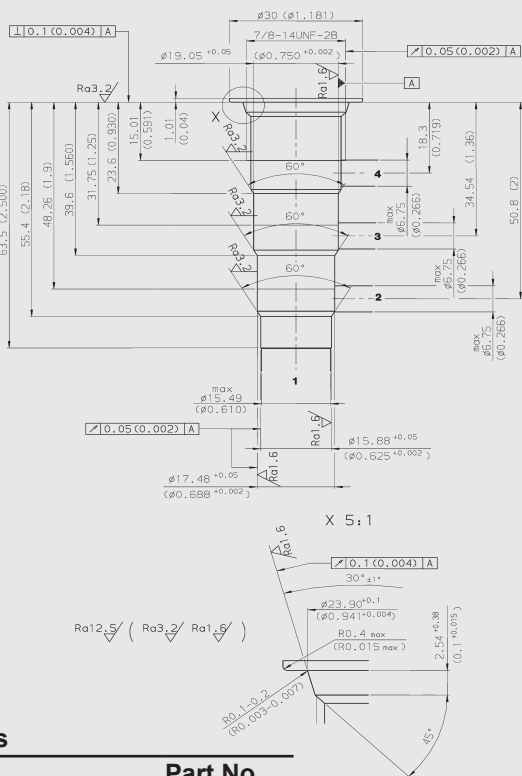
Type of voltage:	DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil
Current draw at 20 °C:	2.22 A at 12 V DC 1.13 A at 24 V DC
Voltage tolerance:	± 15% of the nominal voltage
Coil duty rating:	Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature
Coil type:	Coil...-50-1836

DIMENSIONS



CAVITY

FC10-4



Form tools

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

MODEL CODE

WK10R-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)
24 = 24 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.
WK10R-01-C-N-24DG	3097259
WK10R-01-C-N-230AG	3097260

Other models on request

*Standard line body

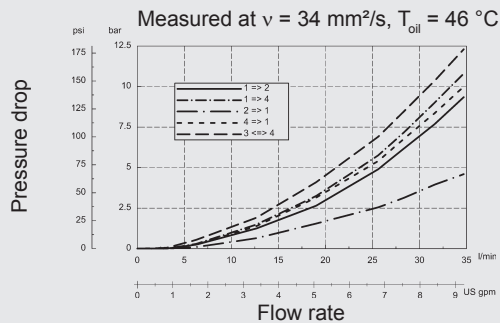
Code	Part No.	Material	Ports	Pressure
FH104-SB4	3037784	Steel, zinc-plated	G1/2	420 bar
FH104-AB4	3038097	Aluminium, anodized	G1/2	210 bar

Other bodies on request

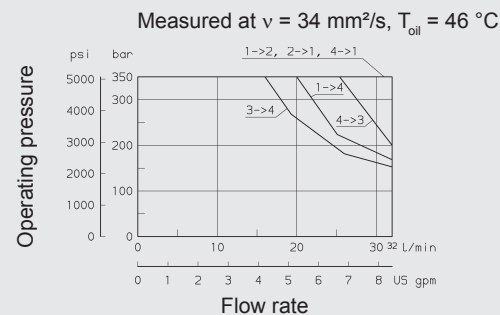
Seal kits

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

PERFORMANCE



OPERATING LIMITS



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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