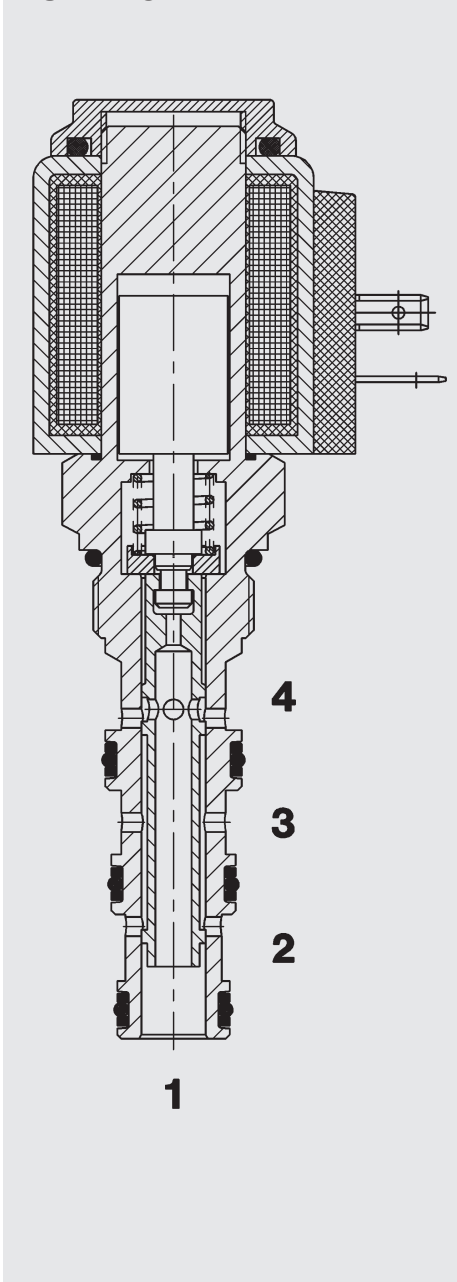


FUNCTION



When the solenoid coil is de-energised, the valve allows flow from port 3 to 2 or 2 to 3 and from port 4 to 1 and 1 to 4.

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

4/2 Solenoid Directional Valve Spool Type, Direct-Acting, Metric Cartridge – 350 bar WKM08140X-01

FEATURES

- Coil seals protect the solenoid system
- Wide variety of connectors available
- Hardened and ground control spool to ensure minimal wear and extended service life
- Low pressure drop due to CFD optimized flow path
- External surfaces zinc-plated and corrosion-proof
- Excellent stability throughout the entire flow range
- Compact design enables space-saving installation in connection housings and control blocks

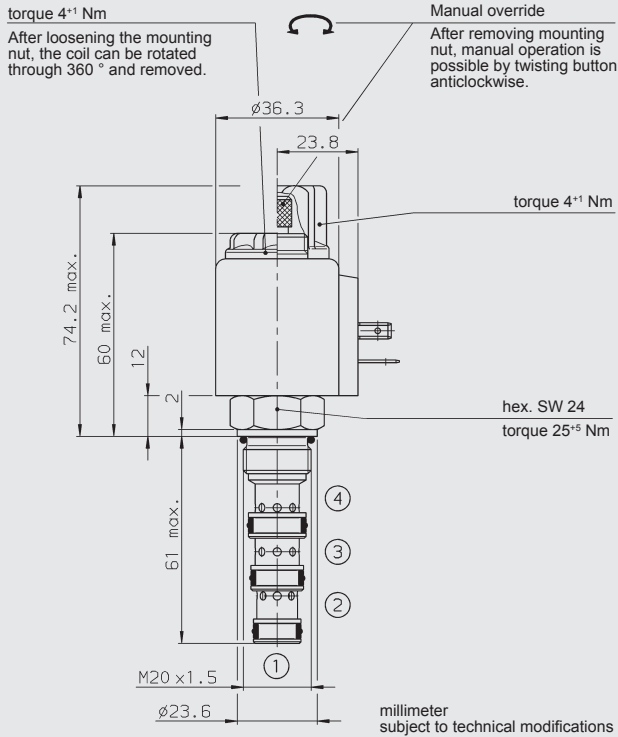
SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 25 l/min
Internal leakage:	max. 150 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. 10 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:	08140
Weight:	Valve complete 0.38 kg Coil only 0.19 kg

Electrical data:

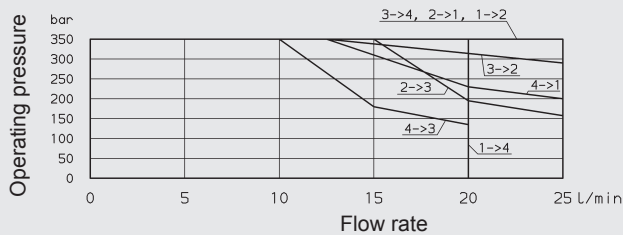
Type of voltage:	DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil
Current draw at 20 °C:	1.5 A at 12 V DC 0.8 A at 24 V DC
Voltage tolerance:	± 15% of the nominal voltage
Coil duty rating:	100% (continuous) up to max. 115% of the nominal voltage at 60 °C ambient temperature
Coil type:	Coil...-40-1836

DIMENSIONS



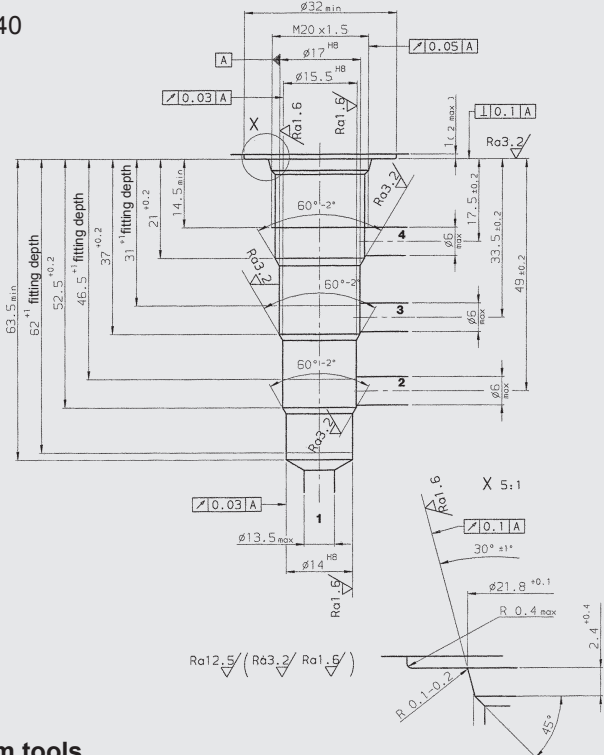
OPERATING LIMITS

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



CAVITY

08140



Form tools

Tool	Part No.	millimeter subject to technical modifications
Countersink (shank HE25)	163463	
Reamer (shank MK2)	163464	

MODEL CODE

WKM08140X - 01 M - C - N - 24 DG

Basic model _____
Directional spool valve, metric

Type _____
01 = standard

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

Body and ports* _____
C = cartridge only

Seals _____
N = NBR (standard)
V = FKM

Nominal voltage for actuating solenoid _____

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 EN175301-803
DT = AMP Junior Timer, 2 pole, radial
DK = Kostal threaded connection M27 x 1
DL = 2 flying leads, 475 mm long; 0.75 mm²
DN = Deutsch connector, axial

AC: AG = DIN connector to EN175301-803

Other connectors on request

Standard models

Model code	Part No.
WKM08140X-01-C-N-24DG	3121197
WKM08140X-01-C-N-230AG	3121258

*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
R08140-01X-01	394473	Steel, zinc-plated	G 3/8	420 bar
R08140-01X-02	393535	Steel, zinc-plated	M 14 x 1.5	420 bar

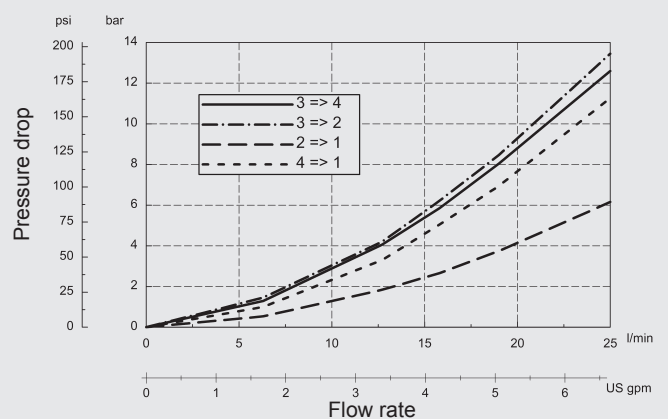
Other bodies on request

Seal kits

Code	Material	Part No.
SEAL KIT WKM08140-...-C-N-	NBR	3098029

PERFORMANCE

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



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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