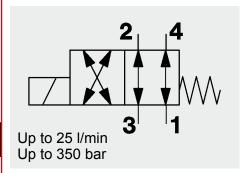


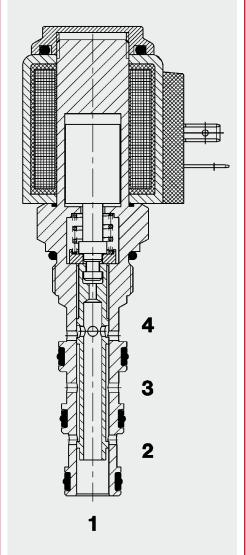
DAOINTERNATIONAL



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

WKM08140X-01

FUNCTION



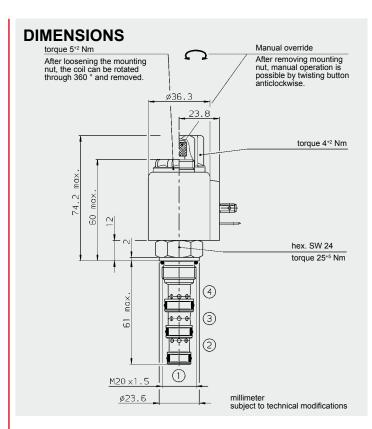
FEATURES

- 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

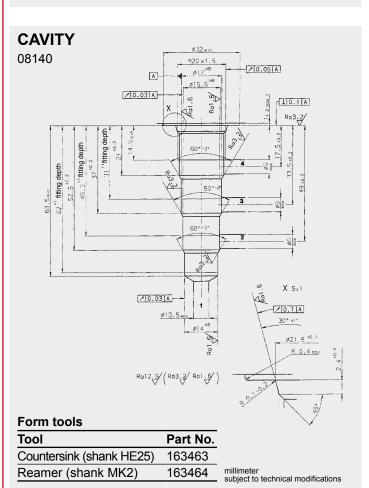
SPECIFICATIONS

Operating pressure:	max. 350 bar		
Nominal flow:	max. 25 l/min		
Internal leakage:	max. 150 cm³/min at 250 bar and 34 mm²/s		
Media operating temperature range:	min20 °C to r	nax. +100 °C	
Ambient temperature range:	min20 °C to max. +60 °C		
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2		
Viscosity range:	min. 10 mm²/s to max. 420 mm²/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:	Coil40-1836		

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.



OPERATING LIMITS $v = 34 \text{ mm}^2/\text{s}, T_{oil} = 46 ^{\circ}\text{C}$ Operating pressure 350 300 3->2 250 200 150 4->3 100 50 5 10 15 20 25 L/min Flow rate



MODEL CODE WKM08140X - 01 M - C - N - 24 DG Basic model -Directional spool valve, metric 01 = standard Manual override No details = without manual override = manual override Body and ports* C = cartridge only Seals Ν = NBR (standard) = FKM Nominal voltage for actuating solenoid DC voltages: 12 = 12 V DC = 24 V DC

AC voltages (bridge rectifier built into the coil) = 115 V AC

= 230 V AC 230

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 WKM08140C-N-	NBR	3098029

PERFORMANCE Measured at $v = 33 \text{ mm}^2/\text{s}$, $T_{oil} = 46 ^{\circ}\text{C}$ 200 175 -3 => 4 150 Pressure drop 125 100 75 50 25 25 I/min 5 20 US gpm Flow rate

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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