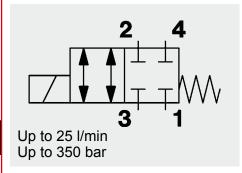


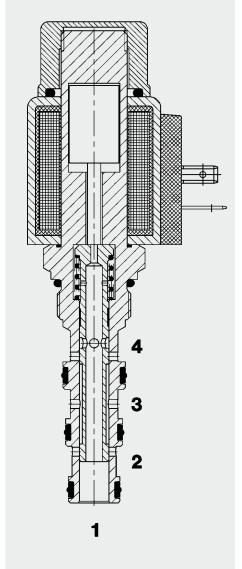
## DAGINTERNATIONAL



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

WKM08140EB-01

#### **FUNCTION**



### **FEATURES**

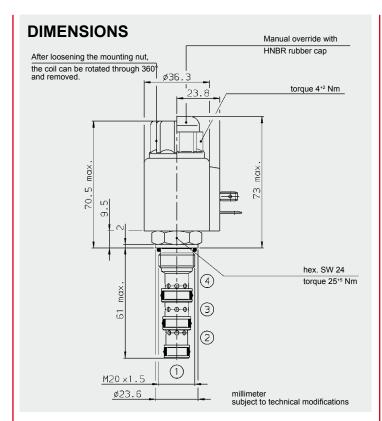
- Coil seals protect the solenoid system
- Wide variety of connectors available
- Hardened and ground control spool to ensure minimal wear and extended service life
- Low pressure drop due to CFD optimized flow path
- External surfaces zinc-plated and corrosion-proof
- Excellent stability throughout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

#### **SPECIFICATIONS**

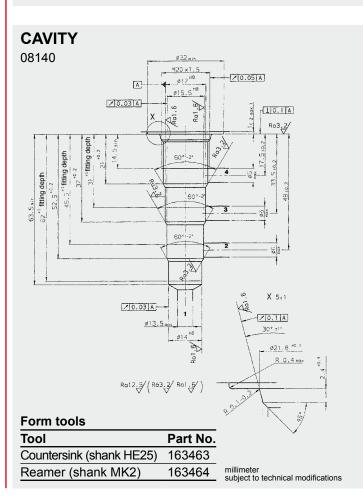
Operating pressure:	max. 350 bar		
Nominal flow:	max. 25 l/min		
Internal leakage:	max. 150 cm³/min at 250 bar and 34 mm²/s		
Media operating temperature range:	min20 °C to max. +100 °C		
Ambient temperature range:	min20 °C to max. +60 °C		
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2		
Viscosity range:	min. 10 mm <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s		
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner		
MTTF <sub>d</sub> :	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:	Continuous up to max. 115% of the nominal voltage at 50 °C ambient temperature		
Response time:	Energized: approx. 40 ms De-energized: approx. 30 ms		
Coil type:	Coil40-1836		

When the solenoid coil is de-energized, all ports are closed.

When the solenoid coil is energized, there is free flow through the valve from port 3 to 2 or from 2 to 3 and also from port 4 to 1 or from 1 to 4.



#### **OPERATING LIMITS** v = 34 mm²/s, T<sub>oil</sub> = 46 °C bar 350 2->3, 4->1 Operating pressure 300 200 150 100 50 0 5 10 15 20 25 L/min Flow rate



#### **MODEL CODE** WKM08140EB - 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 Coil voltage DC voltages 12 = 12 V DC = 24 V DC AC voltages (bridge rectifier built into the coil) = 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 mm<sup>2</sup>

DN = Deutsch connector, axial AC: AG = DIN connector to EN175301-803

Other connectors on request

#### Standard models

Model code	Part No.
WKM08140EB-01-C-N-24DG	3117855
WKM08140EB-01-C-N-230AG	3117854

### \*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
R08140-01X-01	394473	Steel, zinc-plated	G 3/8	420 bar
R08130-01X-02	393535	Steel, zinc-plated	M 14 x 1.5	420 bar

Other bodies on request

#### Seal kits

Code	Material	Part No.
SEAL KIT 08130-NBR	NBR	3164596
SEAL KIT 08130-FKM	FKM	3183746

#### PERFORMANCE Measured at $v = 33 \text{ mm}^2/\text{s}$ , $T_{oil} = 46 ^{\circ}\text{C}$ 200 180 3 => 2 / 2=>3 160 10 140 120 100 80 60 40 20 0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 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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