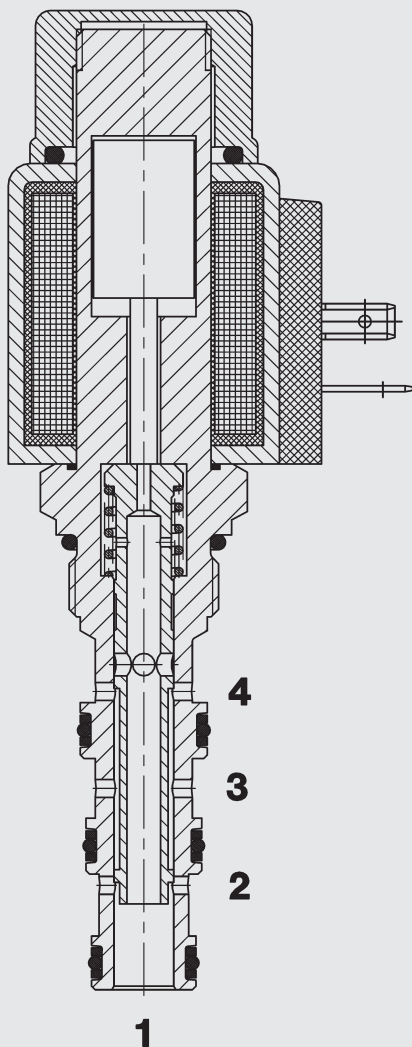


up to 25 l/min  
up to 350 bar

## FUNCTION



When the solenoid coil is not energized, there is free flow through the valve from port 3 to 4 or 4 to 3 and also from 2 to 1 or 1 to 2.

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.

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

WKM08140Y-01

### 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 by CFD optimized flow path

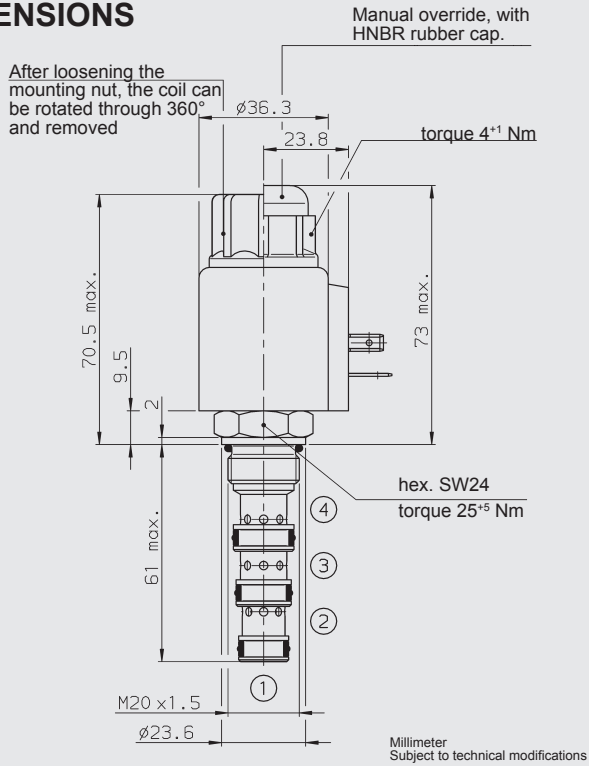
### SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 25 l/min
Internal leakage:	150 cm <sup>3</sup> /min at 250 bar
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 <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
	Piston: 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	
Nominal voltage 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 60 °C ambient temperature	
Switching time:	energized:	approx. 40ms
	de-energized:	approx. 30ms
Coil type:	Coil...-40-1836	

# DIMENSIONS



# MODEL CODE

**WKM08140Y - 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

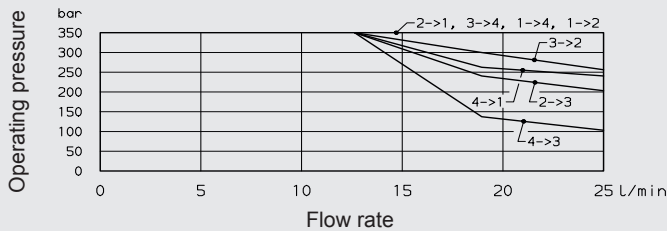
**Seals** \_\_\_\_\_  
N = NBR (standard)  
V = FKM

**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 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

# PERFORMANCE

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



# Standard models

Model code	Part No.
WKM08140Y-01-C-N-24DG	3086566
WKM08140Y-01-C-N-230AG	3091791

# \*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
R08140-01X-01	394473	Steel, zinc-plated	G3/8	420 bar
R08140-01X-01	393535	Steel, zinc-plated	M 14 x 1.5	420 bar

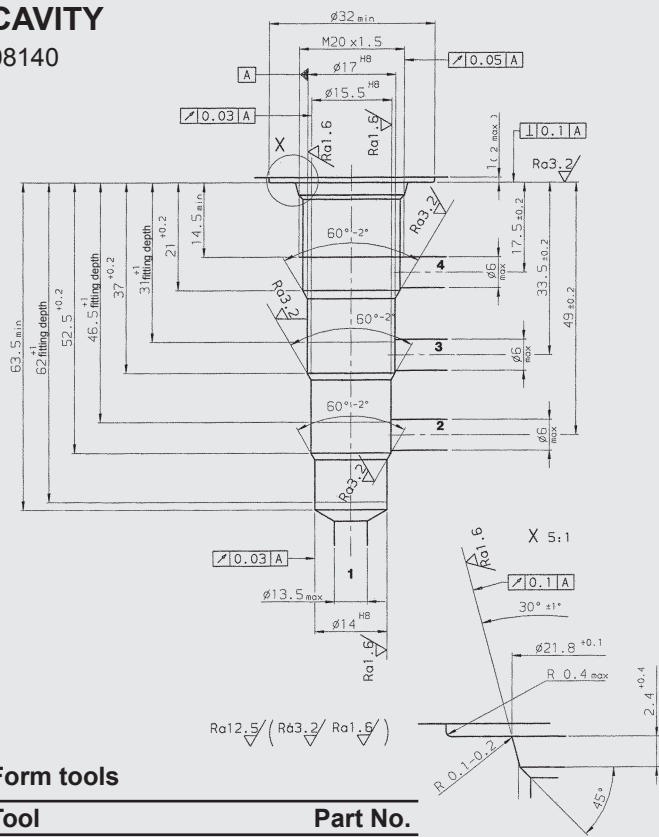
Other housings on request

# Seal kits

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

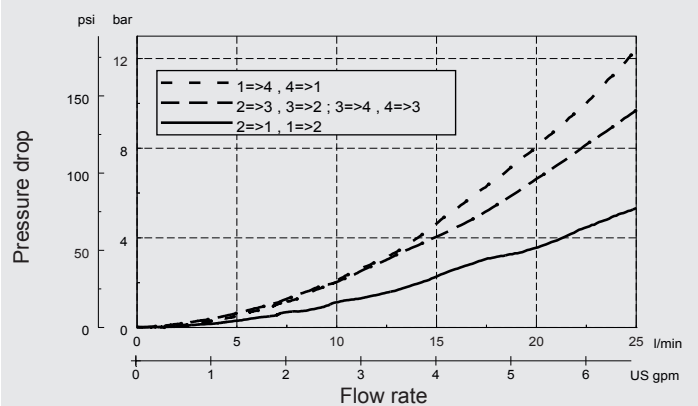
# CAVITY

08140



# PERFORMANCE

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



# 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.

**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