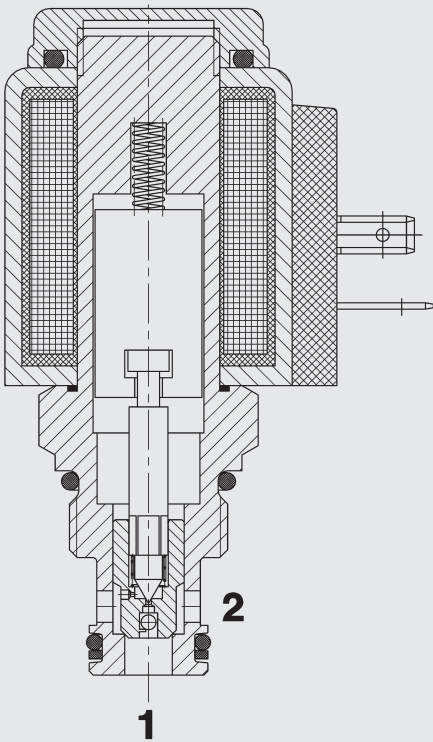


Up to 40 l/min
Up to 350 bar

FUNCTION



When the solenoid coil is not energized, the valve is closed from port 2 to port 1. In the reverse direction there is free flow through the valve. The valve piston opens at a differential pressure of approx. 1.5 bar (check function). When energized the valve allows flow in both directions.

2/2 Solenoid Directional Valve Poppet Type, Pilot Operated Normally Closed (Reverse Flow) Metric Cartridge Valve – 350 bar WSM06020ZR-01

FEATURES

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

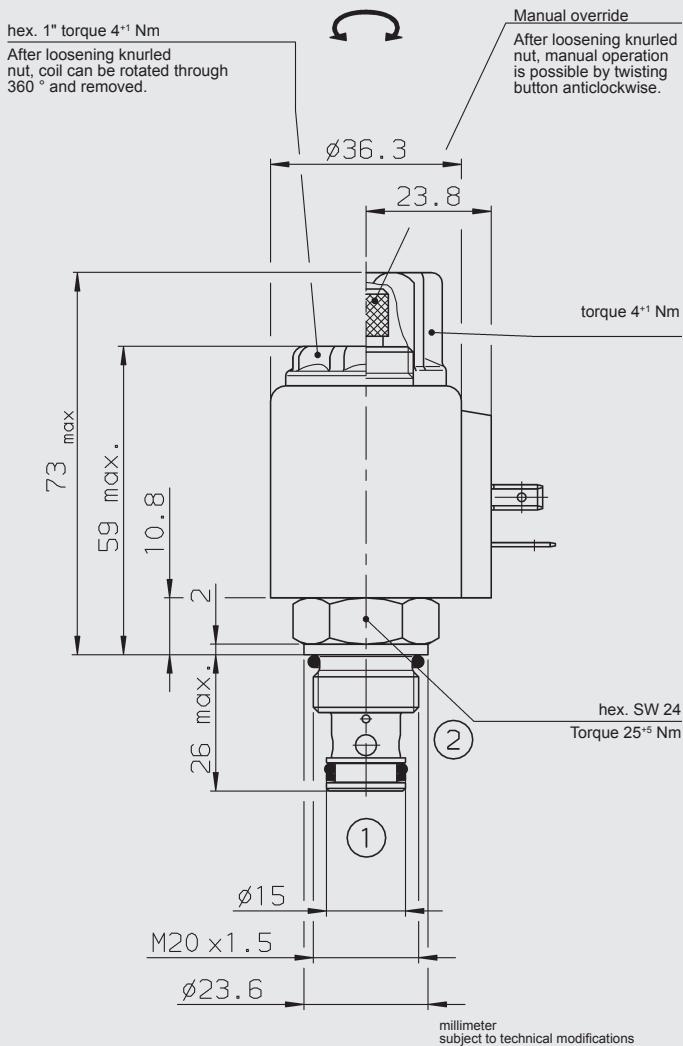
SPECIFICATIONS

Operating pressure:	max. 350 bar	
Nominal flow:	max. 40 l/min	
Internal leakage:	Leakage-free (max. 5 drops = 0,25 cm ³ /min at 350 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 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
	Poppet:	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:	06020	
Weight:	Valve complete	0.33 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 60 °C ambient temperature	
Response time:	Energized:	approx. 35 ms
	De-energized:	approx. 50 ms
Coil type:	Coil...-40-1836	

DIMENSIONS



MODEL CODE

WSM06020ZR - 01 M - C - N - 24 DG

Basic model
Directional poppet 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
DN = Deutsch connector, axial

AC: AG = DIN connector to EN175301-803
Other connectors on request

Standard models

Model code	Part No.
WSM06020ZR-01-C-N-24DG	3055535
WSM06020ZR-01-C-N-230AG	3055533

Standard in-line bodies

Code	Part No.	Material	Ports
R06020-01X-01	275266	Steel, zinc-plated	G 3/8

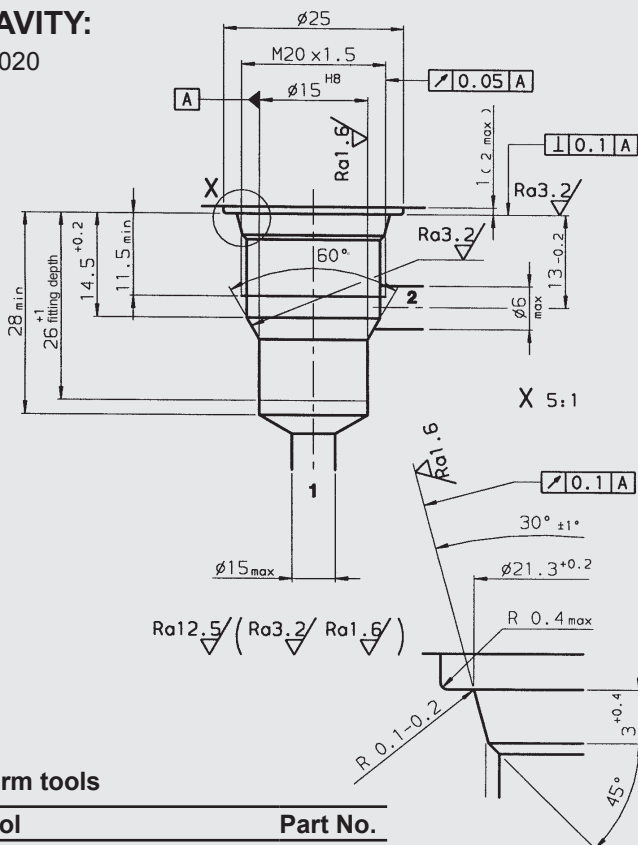
Other housings on request

Seal kits

Code	Material	Part No.
SEAL KIT 06020-NBR	NBR	3119017
SEAL KIT 06020-FKM	FKM	3262477

CAVITY:

06020

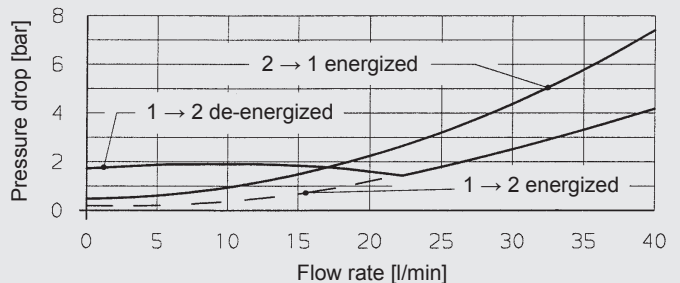


Form tools

Tool	Part No.	millimeter subject to technical modifications
Countersink (shank MK3)	170033	
Reamer (shank MK2)	1000768	

PERFORMANCE

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



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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