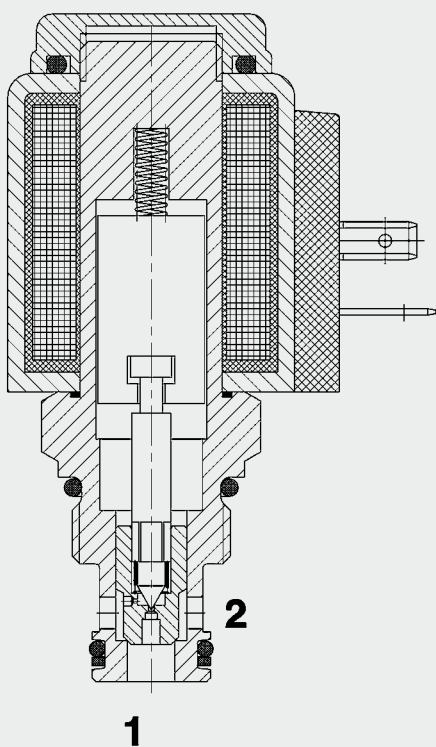


Up to 40 l/min
Up to 350 bar

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, there is free flow through the valve from port 2 to port 1. Return flow from port 1 to 2 is prevented.

2/2 Solenoid Directional Valve Poppet Type, Pilot Operated Normally Closed Metric Cartridge Valve – 350 bar

WSM06020Z-01

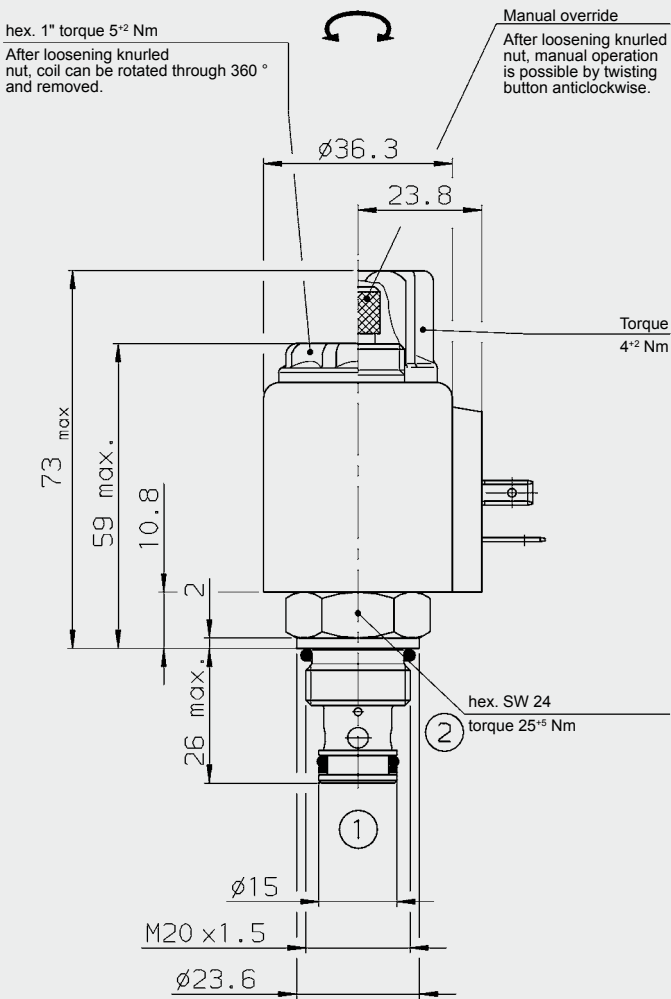
FEATURES

- Excellent switching performance by high power HYDAC solenoid
- Hardened and ground control piston to ensure minimal wear and extended service life
- 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

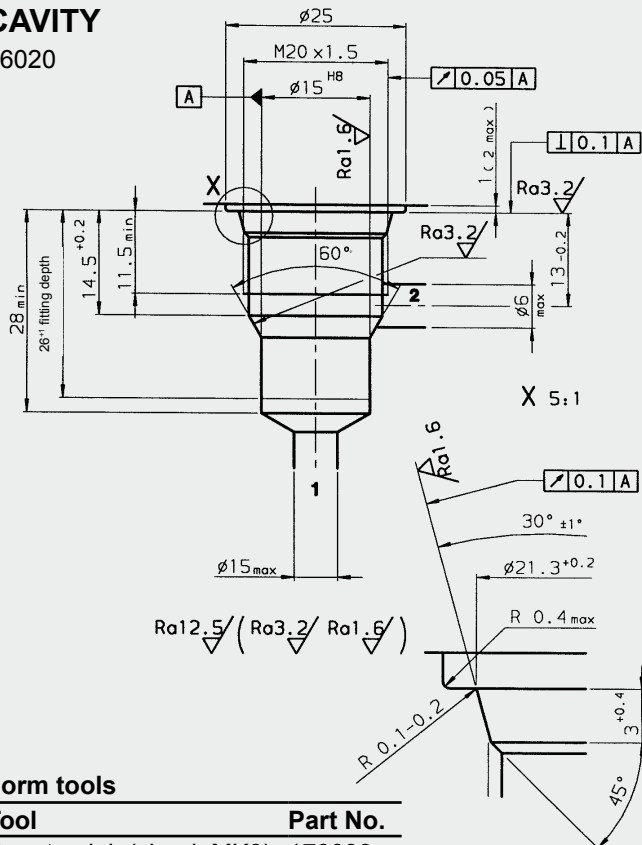
DIMENSIONS



millimeter
subject to technical modifications

CAVITY

06020



Form tools

Tool	Part No.
Countersink (shank MK3)	170033
Reamer (shank MK2)	1000768

millimeter
subject to technical modifications

MODEL CODE

WSM06020Z - 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, 0.75 mm²
DN = Deutsch connector, axial
AC: AG = DIN connector to EN175301-803
Other connectors on request

Standard models

Model code	Part No.
WSM06020Z-01-C-N-24DG	3055428
WSM06020Z-01-C-N-230AG	3055416

Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
R06020-01X-01	275266	Steel, zinc-plated	G3/8	420 bar

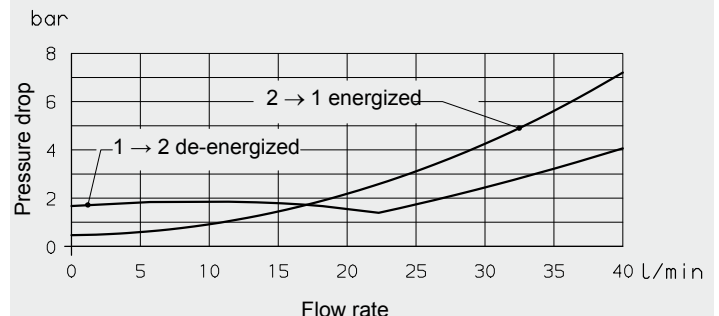
For other connection housings, see brochure no. E 5.252.
"Connection Housings for Cartridge Valves".

Seal kits

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

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.

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