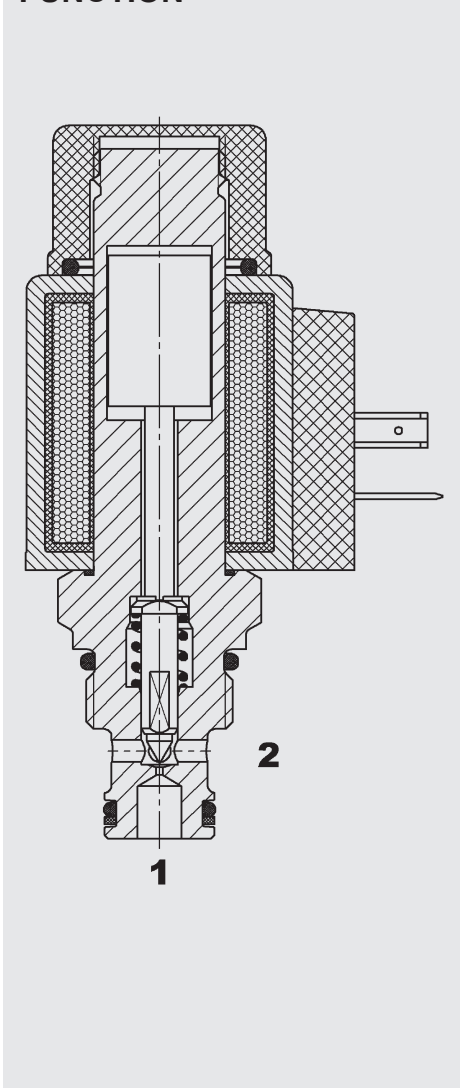


FUNCTION



The WSM06020Y-70 is suitable for particularly low flow rates and is specially designed for use as a pilot valve.

When the solenoid coil is de-energized, the valve is open in both directions. When the solenoid coil is energized, the valve is closed from port 2 to port 1. In the reverse direction the valve will allow flow when the hydraulic force exceeds the solenoid force (from approx. 300 bar depending on operating voltage and coil temperature).

2/2 Solenoid Directional Valve Poppet Type, Direct-Acting Normally Open Metric Cartridge Valve – 350 bar WSM06020Y-70

FEATURES

- Version -70 for particularly low flow rates
- 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

SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 3 l/min
Internal leakage:	Leakage-free
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. 7.4 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: high tensile steel Poppet: Hardened and ground steel Seals: NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C) Back-up rings: PTFE
Cavity:	06020
Weight:	Complete valve 0.33 kg Coil only 0.19 kg

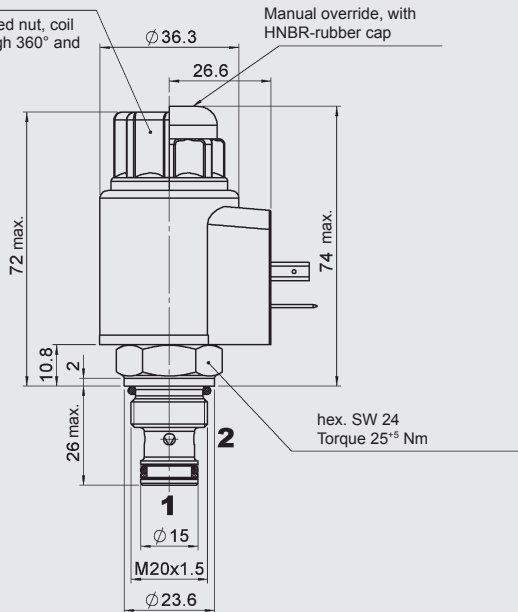
Electrical data:

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:	On: approx. 30 ms Off: approx. 20 ms
Coil type:	Coil ...-40-1836

DIMENSIONS

torque 4⁺¹ Nm

After loosening knurled nut, coil can be rotated through 360° and removed.



MODEL CODE

WSM06020Y - 70 M - C - N - 24 DG

Basic model _____
Directional poppet valve, metric

Type _____
70 = standard
(for particularly low flow rates)

Manual override _____
no details = without manual override
M = manual override

Body and ports _____
C = cartridge only
Combinations with body on request

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 EN 175301-803
DK = KOSTAL threaded connection M27x1
DL = 2 flying leads, 457 mm long, 0.75 mm²
DN = Deutsch connector, 2-pole, axial
DT = AMP Junior Timer, 2-pole, radial

AC: AG = DIN connector to EN 175301-803
Other connectors on request

Standard models

Model code	Part No.
WSM06020Y-70-C-N-12DG	3581218
WSM06020Y-70-C-N-24DG	3534259
WSM06020Y-70-C-N-230AG	3534260

Other models on request

Standard in-line bodies

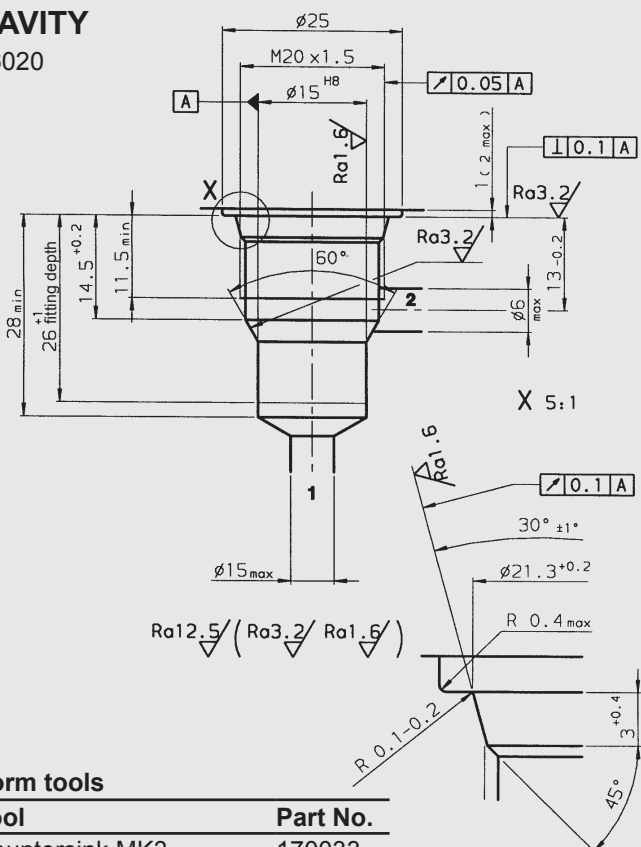
Code	Part No.	Material	Ports	Pressure
R06020-01X-01	275266	Steel, zinc-plated	G 3/8	420 bar

Seal kits

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

CAVITY

06020



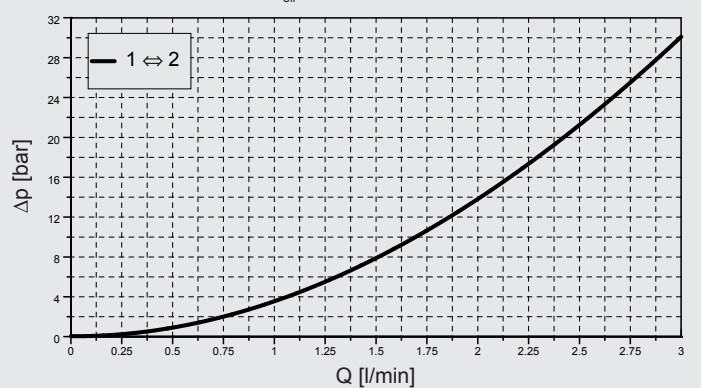
Form tools

Tool	Part No.
Countersink MK3	170033
Reamer MK2	1000768

millimeter subject to technical modifications

PERFORMANCE

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



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.

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