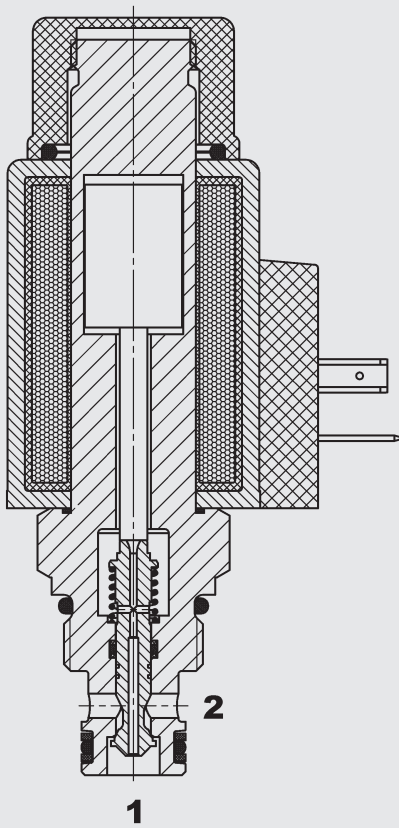


up to 25 l/min
up to 350 bar

FUNCTION



The WSM06020W-61 is the high performance version of the standard WSM06020W-01. Owing to its larger coil and modified design, the valve switches up to 350 bar and permits a flow rate of 25 l/min.

When the solenoid coil is de-energized, the valve blocks flow in both directions. When energized the valve allows flow in both directions.

Caution: No orifice is permitted just before port 1.

2/2 Solenoid Directional Valve Poppet Type, direct-acting Normally Closed Metric Cartridge – 350 bar WSM06020W-61

FEATURES

- High performance version for high pressures and long service life
- Coil seals protect the solenoid system
- Wide variety of connectors available
- Excellent switching performance by high power HYDAC solenoid
- Exposed surfaces zinc-nickel plated for increased corrosion protection (1.000 h Salt spray test)

SPECIFICATIONS

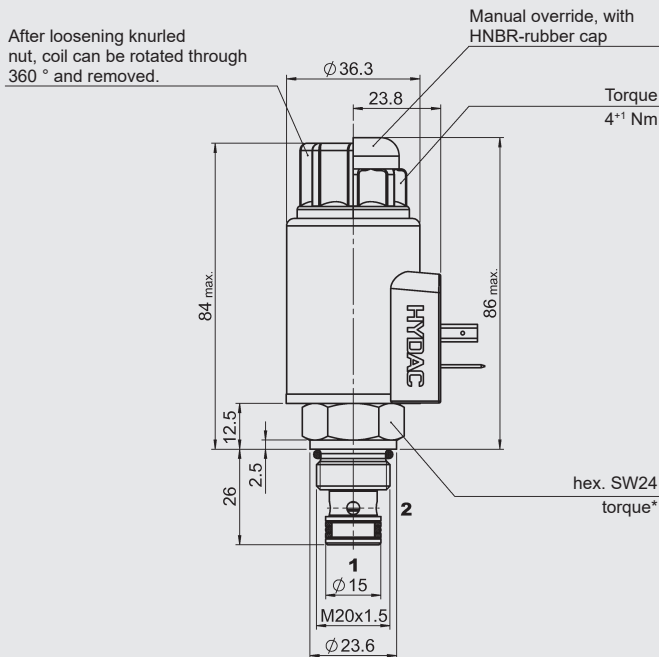
Operating pressure:	max. 350 bar
Nominal flow:	max. 25 l/min
Internal leakage:	Leakage-free, max. 5 drops (0,25 cm ³ /min) at 350 bar
Media operating temperature range:	min. -20 °C to max. +100 °C
Ambient temperature range:	min. -20 °C to max. + 60 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1, 2 and 3
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 - 1200 years, according to DIN EN ISO 13849-1
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 Coil: steel / polyamide
Cavity:	06020
Weight:	Complete valve: 0.42 kg Coil: 0.23 kg

Electrical data

Type of voltage:	<u>DC</u> : direct current solenoid <u>AC</u> : alternating current solenoid with a bridge rectifier built into the coil
Current draw at 20 °C:	2.22 A at 12 V DC 1.13 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: (at p _{max} , Q _{max} , v = 34 mm ² /s)	energized: approx. 30 ms de-energized: approx. 40 ms substantially extended response times possible at other operating conditions
Coil type:	Coil ...-50-1836

* see "Conditions and instructions for valves" in brochure 53.000

DIMENSIONS



*Torque:
Steel manifold
(ultimate tensile strength < 360 N/mm²):
40 Nm
Aluminium manifold
(ultimate tensile strength < 330 N/mm²):
35 Nm
(tool acc. to DIN EN ISO 6789,
tool type II class A or B)
For further informations see brochure
No. 53.000
"Conditions and instructions for valves"

millimeter (inch)
subject to technical modifications

MODEL CODE

WSM06020W - 61 M - C - N - 24 DG

Basic model
Directional poppet valve, metric

Type
61 = 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 50-1836)

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.
WSM06020W-61-C-N-24DG	3531890
WSM06020W-61-C-N-230AG	3531891

Other models on request

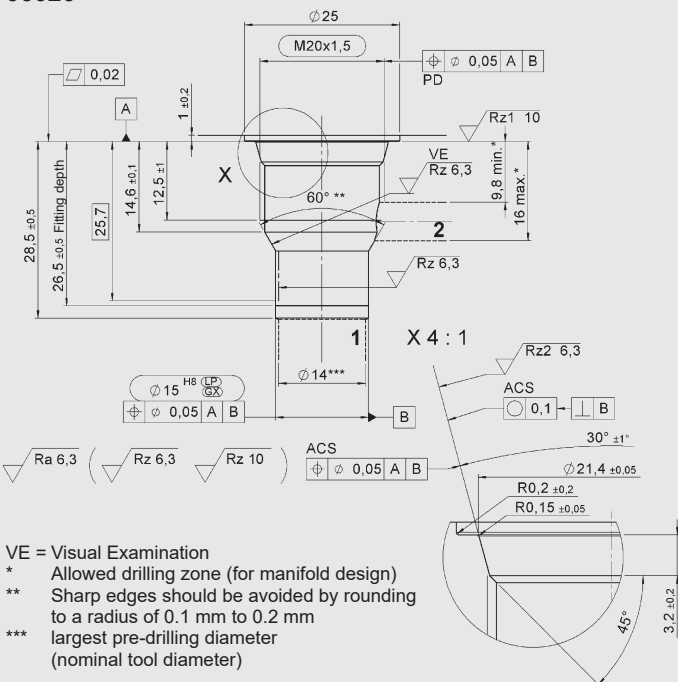
*Standard in-line bodies

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

Other line bodies on request

CAVITY

06020



Form tools

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

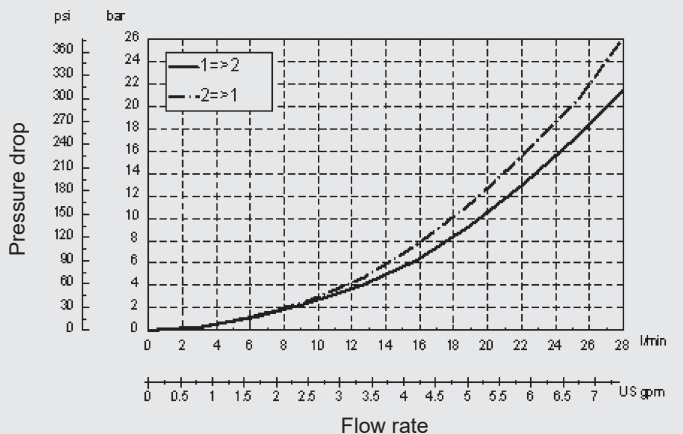
millimeter (inch)
subject to technical modifications

Seal kits

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

TYPICAL 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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