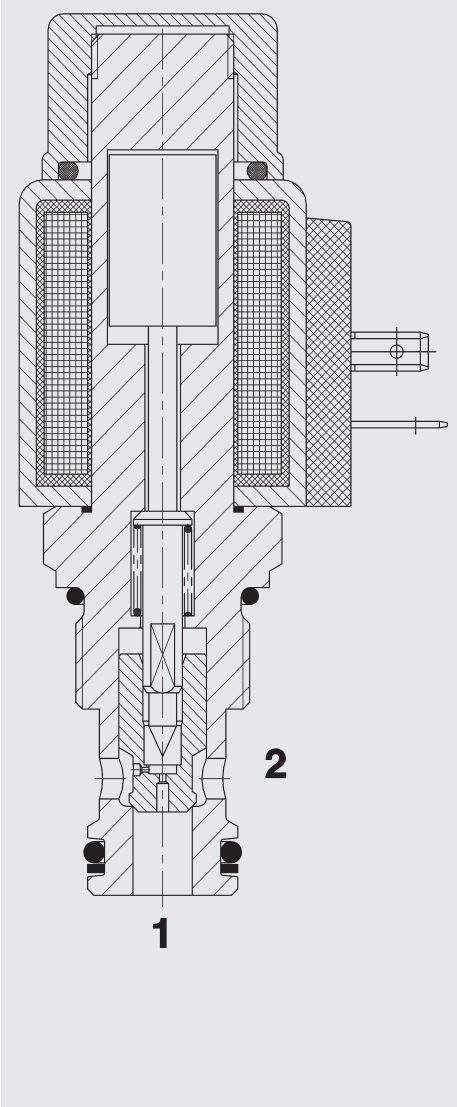


## FUNCTION



In the de-energized mode, the valve allows flow from 2 to 1. Flow from 1 to 2 is severely restricted in this mode. When energized, the valve blocks flow from 2 to 1. In this mode the valve will allow flow from 1 to 2 after the hydraulic force overcomes the solenoid force of 2.5 to 10 bar.

## 2/2 Solenoid Directional Valve Poppet Type - Pilot Operated Normally Open Cartridge Valve – 350 bar

WSM10120Y-01

### FEATURES

- All surfaces zinc-plated and corrosion-proof.
- All valve parts made of high-strength steel with hardened and ground components to ensure minimal wear and extended service life.
- Waterproof design as standard.
- Wide variety of connectors available.
- Rigid design using one-piece body minimises the effect of eccentricity and maximises reliability.
- Excellent switching performance by high power HYDAC solenoid.
- Low pressure drop due to CFD optimised flow-path.

### SPECIFICATIONS

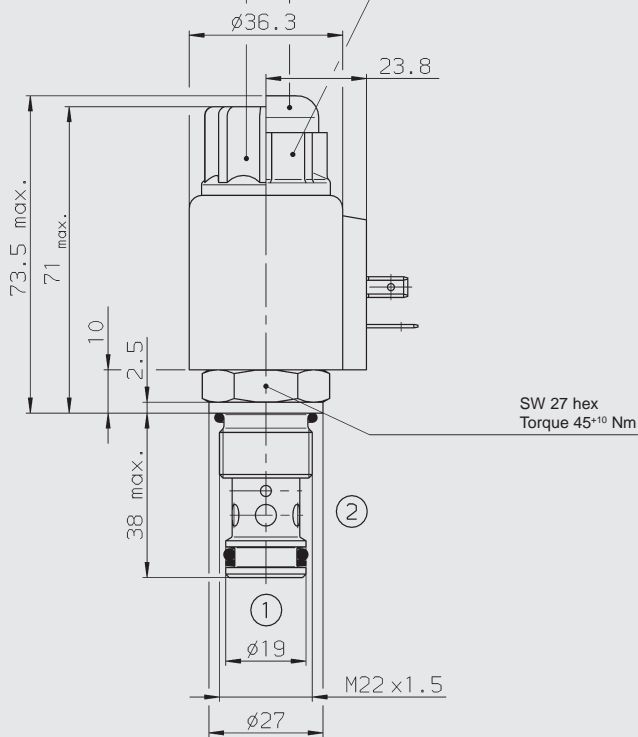
Operating pressure:	max. 350 bar	
Nominal Flow:	max. 75 l/min	
Internal leakage:	leakage-free	
Media operating temp. range:	-20 °C to +120 °C	
Ambient temperature range:	-20 °C to +60 °C	
Type of voltage:	DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil	
Current draw at 20 °C:	1.5 A at 12 V DC 0.8 A at 24 V DC	
Voltage tolerance:	±15% of nominal voltage	
Coil duty rating:	Continuous up to 115 % of nominal voltage at 60 °C ambient temperature	
Response time:	Energized: approx. 60 ms De-energized: approx. 20 ms	
Fluids:	Hydraulic oil to DIN 51524 Part 1 and 2	
Viscosity:	10 mm <sup>2</sup> /s to 420 mm <sup>2</sup> /s is recommended	
Filtration:	Permissible contamination level of the operating fluid to ISO 4406 Class 21/19/16 or cleaner	
Installation:	optional	
Materials:	Valve body:	high tensile steel
	Closing elements:	hardened and ground steel
	Seals:	NBR (standard) FKM (optional) back-up ring in PTFE
	Coil:	Steel/Polyamide
Cavity:	10120	
Weights:	Valve complete:	0.370 kg
	Coil only:	0.190 kg

## DIMENSIONS

After loosening nut, coil can be turned through 360° and removed

Manual override with HNBR rubber cap

Torque 4<sup>+2</sup> Nm



millimeter subject to technical modifications

## MODEL CODE

WSM 10120 Y - 01 M - C - N - 24 DG

**Designation**  
(Directional poppet valve, metric)

**Cavity**  
10120 = 2-way cavity

**Function code**

**Type**  
01 = standard model

**Manual override**  
omission = no option  
M = manual override

**Body and ports**  
C = cartridge only

**Seals**  
N = NBR  
V = FKM

**Coil voltage**  
**DC voltages**  
12 = 12 V DC  
24 = 24 V DC

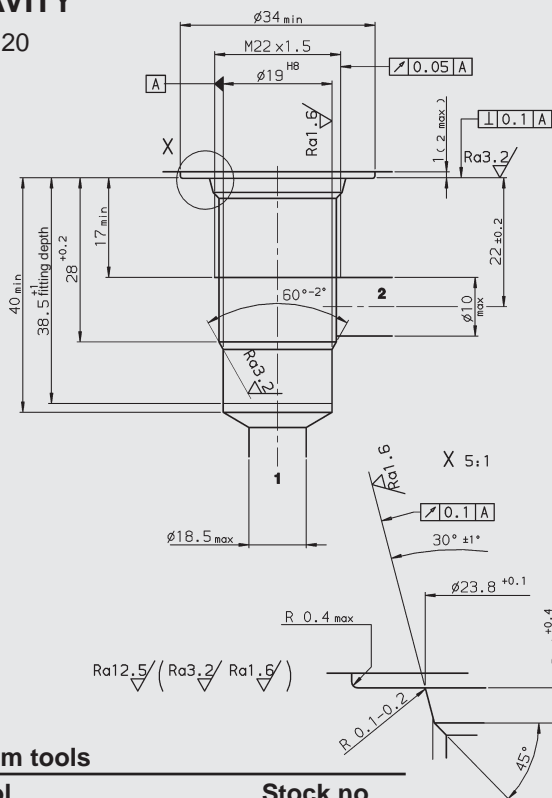
**AC voltages** (internally full wave rectified)  
24 = 24 V AC  
115 = 115 V AC  
230 = 230 V AC  
other voltages on request

**Coil connectors**  
**DC:** DG = DIN connector to EN 175301-803  
DL = Leadwires (2) - 457 mm, 18" long  
DW = Weather Pack connector on leadwires - 241 (9.5") long  
DT = AMP Junior Timer, 2-pole, radial  
DK = KOSTAL threaded connection M27x1

**AC:** AG = DIN connector to EN 175301-803  
other connection types on request

## CAVITY

10120



millimeter subject to technical modifications

## Form tools

Tool	Stock no.
Rougher (shank MK3)	170418
Finisher (shank MK2)	1014206

## Standard models

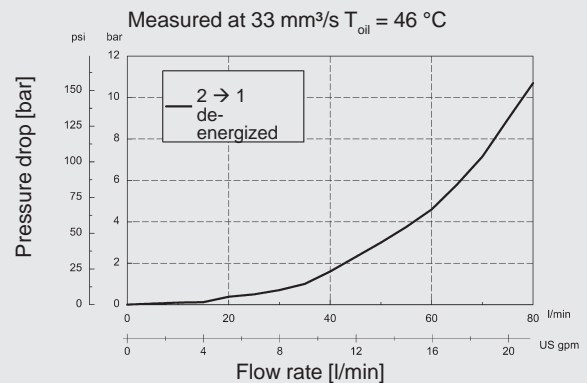
Model code	Stock no.
WSM10120Y-01-C-N-24DG	3178525
WSM10120Y-01-C-N-230AG	3178524

## Inline connection housings

Code	Stock no.	Material	Ports
R10120-01X-01	395234	Steel, zinc-plated	G 1/2

For other connection housings, see brochure no. E 5.252.4 "Connection Housings for Cartridge Valves".

## PERFORMANCE



## 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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