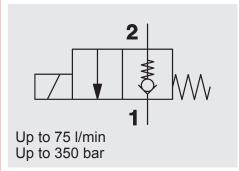
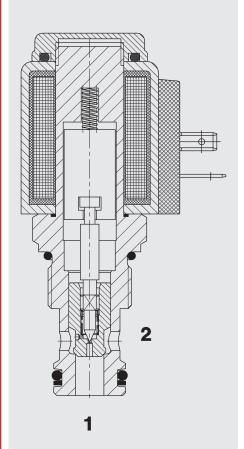


MAC INTERNATIONAL



2/2 Solenoid Directional Valve **Poppet Type, Pilot Operated** Normally Closed **Metric Cartridge Valve - 350 bar** WSM10120Z-01

FUNCTION



When the solenoid coil is not energized, the valve is closed from port 2 to port 1. Flow is permitted from port 1 to port 2. When energized, there is free flow

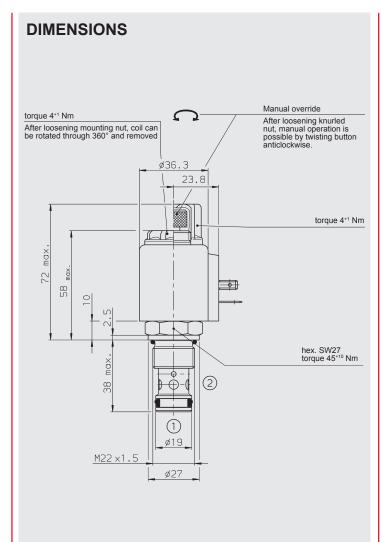
through the valve from port 2 to 1. Reverse flow from port 1 to 2 is prevented.

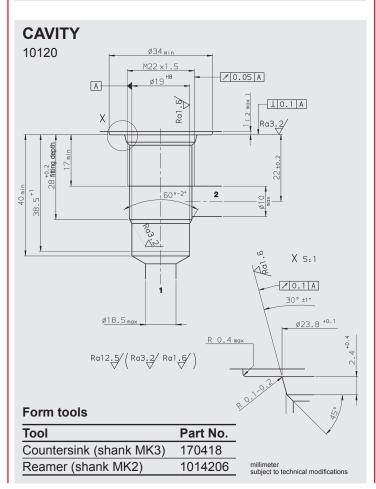
FEATURES

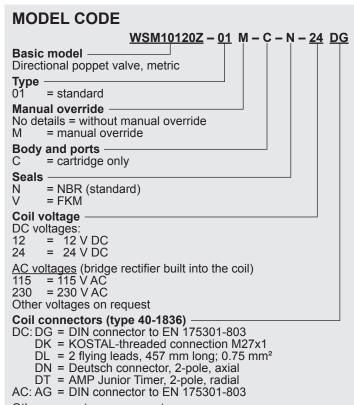
- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Coil seals protect the solenoid system
- Excellent switching performance by high power HYDAC solenoid
- Low pressure drop due to CFD optimized flow path

SPECIFICATIONS

Operating pressure:	max. 350 bar		
Nominal flow:	max. 75 l/min		
Internal leakage:	Leakage-free		
	(max. 5 drops ≘ 0,25 cm³/min at 350 bar)		
Media operating temperature range:	min20 °C to max. +100 °C		
Ambient temperature range:	min20 °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)		
Mounting position:	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:	10120		
Weight:	Valve complete	0.37 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. 80 ms	
Coil type:	Coil40-1836		







Standard models

Model code	Part No.
WSM10120Z-01-C-N-24DG	3179153
WSM10120Z-01-C-N-230AG	3179152

* Standard in-line bodies

Other connectors on request

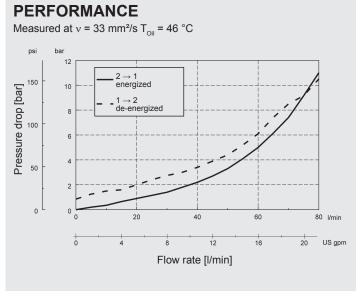
Code	Part No.	Material	Ports	Pressure
R10120-01X-01	395234	Steel, zinc-plated	G 1/2	420 bar

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

Seal kits

millimeter subject to technical modifications

Code	Material	Part No.
SEAL KIT 10120-NBR	NBR	3382346
SEAL KIT 10120-FKM	FKM	3178281



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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