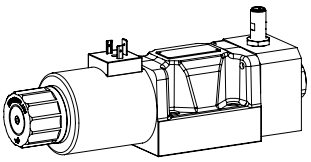
Solenoid operated spool valve with inductive switching position monitoring

NG10
ISO 4401-05



Flange construction

- 4/2-way impulse execution, dentented
- 4/3-way with spring centered mid position
- 4/2-way with spring reset
- Q_{max} = 160 l/min
- p_{max} = 350 bar

DESCRIPTION

Spool valve according to data sheet 1.2-76 with additional inductive switching position monitoring. The contactless sensor transmits the spool position to a step signal.

TYPE CODE

WD M F A10 - [ ] [ ] # [ ]

- Spool valve, direct operated
- Slip-on coil Medium
- Flange construction
- International standard interface ISO NG10
- Other type designation according to type code data sheet 1.2-78
- Polarity /Signal output /Monitoring
  - PNP / NO / Single — Z605
  - PNP / NC / Single — Z482
  - NPN / NO / Single — Z680
  - PNP / NO / Double* — Z72 / Z603
  - PNP / NC / Double* — Z72 / Z482
  - NPN / NO / Double* — Z72 / Z680
  - *not in combination with 4/3-way (spring centred)
- Design index (subject to change)

1.2-77

GENERAL SPECIFICATIONS

Weight	1,30 kg single flange 2,60 kg double flange

Sensor Specifications:

Nominal voltage	24 VDC
Operating voltage	10…30 VDC
Signal current	max. 200 mA
Switching frequency	2000 Hz
Protection class	IP 68 According to the connection type, the protection class of the valve can be lower, see data sheet 1.2-76
Dimensions	M12 x 1
Ambient temperature	-25…50 °C
Fastening torque	15 Nm
Peak pressure	500 bar

Note! Other specifications see data sheet 1.2-76

ACCESSORIES

Mating connector (plug female)	
straight, screw terminal	Article no. 219.2978
90°, screw terminal	Article no. 219.3003

SURFACE TREATMENT

- The valve body is painted with a two component paint
- All the other parts are zinc-nickel coated

ELECTRICAL CONNECTION

Type: Designation: Article no.:	PNP, NO (Normally open) Z603 205.5024
Device receptacle Mating connector	M12, 4 pole male M12, 4 pole female 1 = Supply voltage + 2 = Reserved for extentions 3 = Supply voltage 0 VDC 4 = Signal Plus switched
Mating connector not included in delivery	

Type: Designation: Article no.:	PNP, NC (Normally closed) Z482 205.5023
Device receptacle Mating connector	M12, 4 pole male M12, 4 pole female 1 = Supply voltage + 2 = Signal 3 = Supply voltage 0 VDC 4 = Reserved for extentions Plus switched
Mating connector not included in delivery	

Type: Designation: Article no.:	NPN, NO (Normally open) Z680 205.5026
Device receptacle Mating connector	M12, 4 pole male M12, 4 pole female 1 = Supply voltage + 2 = Reserved for extentions 3 = Supply voltage 0 VDC 4 = Signal Minus switched
Mating connector not included in delivery	

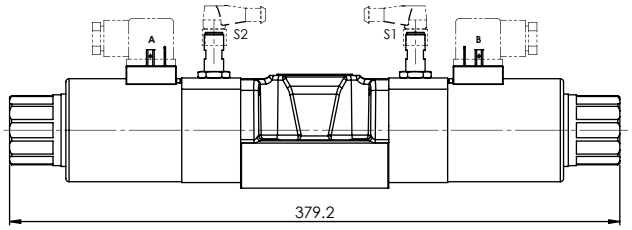
Signal characteristics

Signal of the actuator		Signal of the sensor			
		NO Normally open		NC Normally closed	
A	B	S1	S2	S1	S2
0*	0*	0*	0*	1*	1*
0	1	0	1	1	0
1	0	1	0	0	1

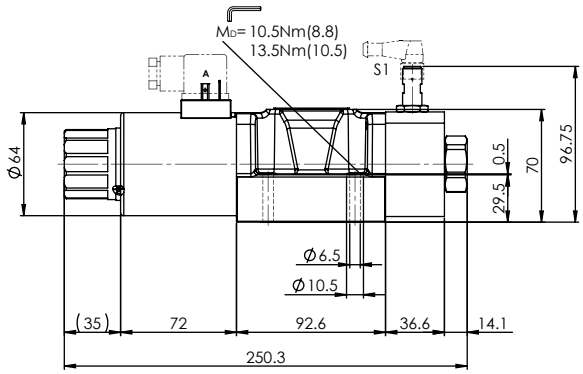
*Middle position 4/3-way

DIMENSIONS / SINGLE MONITORING

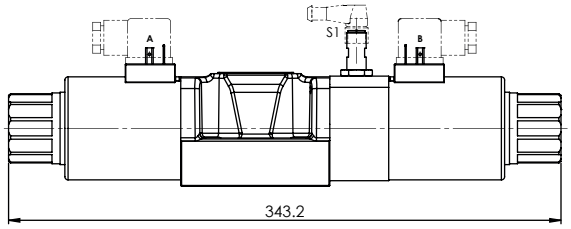
4/3-way spool valve (spring centred)



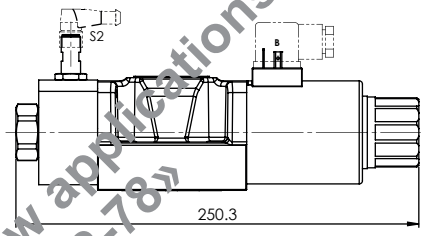
4/2-way spool valve (spring reset) operation A-side



4/2-way spool valve (impulse)

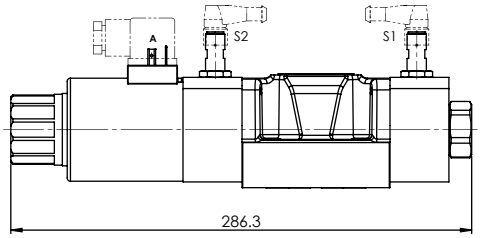


4/2-way spool valve (spring reset) operation B-side

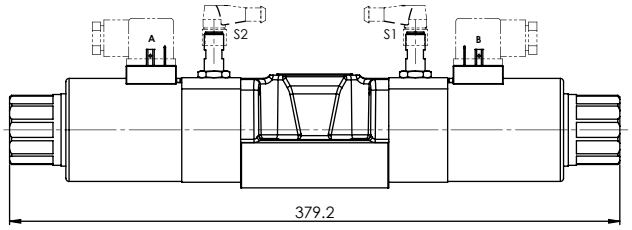


DIMENSIONS / DOUBLE MONITORING

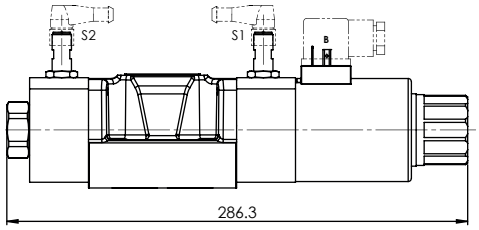
4/2-way spool valve (spring reset) operation A-side



4/2-way spool valve (impulse)



4/2-way spool valve (spring reset) operation B-side



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