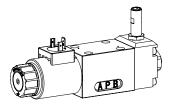


# Solenoid operated spool valve with inductive switching position monitoring

# Flange construction

- ◆ 4/2-way impulse execution, dentented
- ◆ 4/3-way with spring centered mid position
- ◆ 4/2-way with spring reset
- $Q_{max} = 80 \text{ l/min}$   $p_{max} = 350 \text{ bar}$

| NG  | 6       |  |
|-----|---------|--|
| IS0 | 4401-03 |  |



# **DESCRIPTION**

Spool valve according to data sheet 1.2-59 with additional inductive switching position monitoring. The contactless sensor transmits the spool position to a step signal.

|   | 10,          |     |
|---|--------------|-----|
| TYPE CODE   | <b>.</b>     |     |
|   | WD M F A06 - | # [ |
| Spool valve, direct operated                                    |              |     |
| Slip-on coil Medium   |              |     |
| Flange construction   |              |     |
| International standard interface ISO NG6                        |              |     |
| Other type designation according to type code data sheet 1.2-59 |              |     |
| Polarity /Signal output /Monitoring                             |              |     |
| PNP / NO / Single   |              |     |
| PNP / NC / Single   |              |     |
| NPN / NO / Single   |              |     |
| PNP / NO / Double*  |              |     |
| PNP / NC / Double* <u>Z72 / Z482</u>                            |              |     |
| NPN / NO / Double* Z72 / Z680                                   |              |     |
| *not in combination with 4/3-way (srmg centred)                 |              |     |
|   |              |     |
| Design index (subject to change)                                |              |     |
| 1,2-62  |              |     |



# **GENERAL SPECIFICATIONS**

Weight 0,5 kg single flange 1,0 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 1.2-59

Dimensions M12 x 1
Ambient temperature -25...50 °C
Fastening torque 15 Nm
Peak pressure 500 bar

Note! Other specifications see data sheet 1.2-59



# **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

# Type: Designation: Article no. Devi

# **ELECTRICAL CONNECTION**

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

| Type:                                     | NPN, NO (Normally open)     |  |  |
|---|-----------------------------|--|--|
| Designation:                              | Z680                        |  |  |
| Article no.:                              | 205.5026                    |  |  |
| Device receptacle                         | M12, 4 pole male            |  |  |
| Mating connector                          | M12, 4 pole female          |  |  |
| 2 1                                       | 1 = Supply voltage +        |  |  |
| ( 2, .4)                                  | 2 = Reserved for extentions |  |  |
|   | 3 = Supply voltage 0 VDC    |  |  |
| 111                                       | 4 = Signal                  |  |  |
| 4   | Minus switched              |  |  |
| 3—  |                             |  |  |
| Mating connector not included in delivery |                             |  |  |

| I      | rpe:                                      | PNP, NC (Normally closed)   |  |
|--------|---|-----------------------------|--|
| DD.    | esignation:                               | Z482                        |  |
| ∲   Ai | rticle no.:                               | 205.5023                    |  |
| D      | evice receptacle                          | M12, 4 pole male            |  |
| M      | lating connector                          | M12, 4 pole female          |  |
|        | (2 T)                                     | 1 = Supply voltage +        |  |
|        | (( ))                                     | 2 = Signal                  |  |
|        | 3 4                                       | 3 = Supply voltage 0 VDC    |  |
|        | <u>111</u>                                | 4 = Reserved for extentions |  |
|        | 2   | Plus switched               |  |
|        |   |                             |  |
| М      | Mating connector not included in delivery |                             |  |

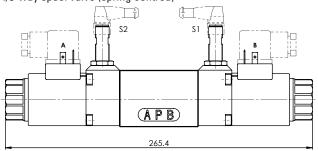
# Signal characteristics

| Signal of the actuator   |    | Signal o      | Signal of the sensor |    |                       |  |
|--------------------------|----|---------------|----------------------|----|-----------------------|--|
|                          |    | NO<br>Normall | NO<br>Normally open  |    | NC<br>Normally closed |  |
| Α                        | В  | 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 |    |               |                      |    |                       |  |

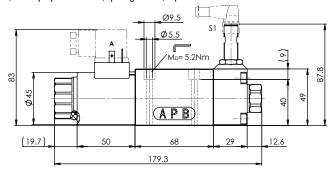


# **DIMENSIONS** / SINGLE MONITORING

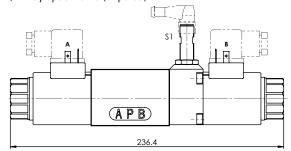
4/3-way spool valve (spring centred)



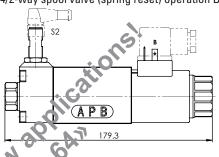
4/2-way spool valve (spring reset) operation A-side



4/2-way spool valve (impulse)



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

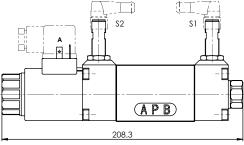


**DIMENSIONS / DOUBLE MONITORING** 

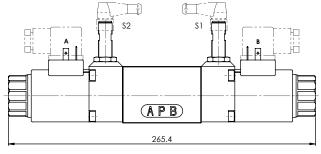
de for her 1/2-wr

wise)

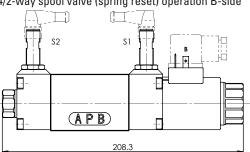
4/2-way spool valve (spring reset) operation A-side



4/2-way spool valve (impulse)



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



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