

5/2-directional valve, Series AV03

- 5/2
- $Q_n = 0.305 \text{ Cv}$
- Plate connection
- Manual override : with detent without detent
- single solenoid double solenoid
- Pilot : External



Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Base plate principle, multiple
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	44 ... 116 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air
Max. particle size	40 µm
Oil content of compressed air	0 ... 5 mg/m ³
Nominal flow Q_n	0.305 Cv
Pilot control exhaust	with directional pilot air exhaust
Protection class with connection	IP65
Protective circuit	Z-diode
Reverse polarity protection	Protected against polarity reversal
LED status display	Yellow
Duty cycle	100 %
mounting screws	Hexalobular socket (TORX) ISO 10664-8
Mounting screw tightening torque	0.37 ft./lbs.
Weight	See table below

Technical data

Part No.		MO	Operational voltage	Voltage tolerance
			DC	DC
R422102503			24 V	-10% / +10%
R422102504			24 V	-10% / +10%
R422102426			24 V	-10% / +10%
R422102424			24 V	-10% / +10%
R422102427			24 V	-10% / +10%
R422102425			24 V	-10% / +10%

Part No.	Power consumption	Flow conductance	Flow conductance	Typ. switch-on time
	DC	b	C-value	
R422102503	0.55 W	0.29	1.17 l/(s*bar)	10 ms
R422102504	0.55 W	0.29	1.17 l/(s*bar)	10 ms
R422102426	0.55 W	0.29	1.17 l/(s*bar)	8 ms
R422102424	0.55 W	0.29	1.17 l/(s*bar)	12 ms
R422102427	0.55 W	0.29	1.17 l/(s*bar)	8 ms

Part No.	Power consumption	Flow conductance	Flow conductance	Typ. switch-on time
	DC	b	C-value	
R422102425	0.55 W	0.29	1.17 l/(s*bar)	12 ms

Part No.	Typ. switch-off time	Weight
R422102503	17 ms	0.099 lbs
R422102504	17 ms	0.099 lbs
R422102426	8 ms	0.106 lbs
R422102424	17 ms	0.095 lbs
R422102427	8 ms	0.106 lbs
R422102425	17 ms	0.095 lbs

Nominal flow Qn at 87 psi and $\Delta p = 14.5$ psi, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

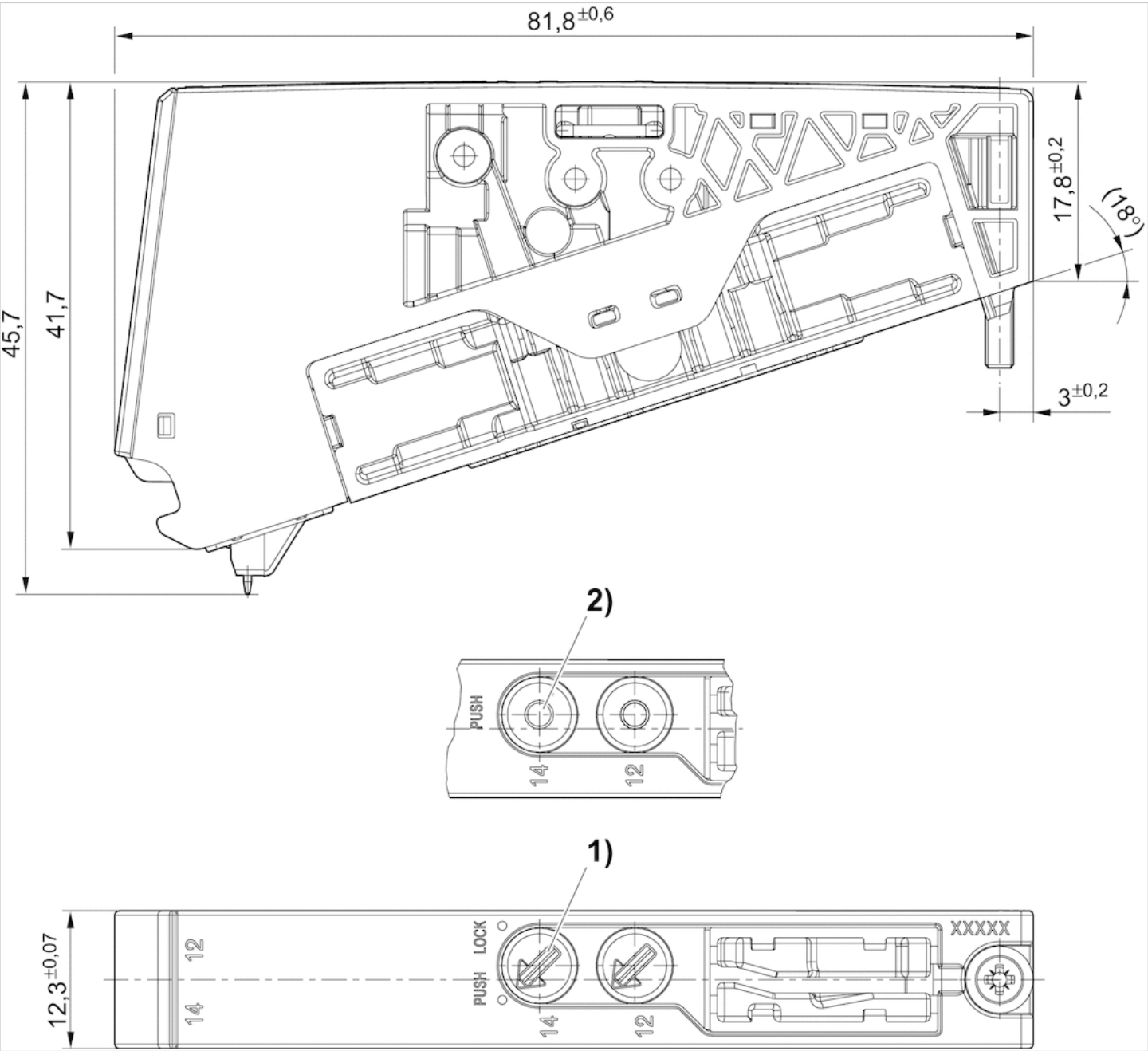
The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve system.

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Hydrogenated acrylonitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
End plate	Polyamide

Dimensions

Dimensions



- 1) with detent
- 2) without detent