

5/3-directional valve, Series AV03

- 5/3
- $Q_n = 240 \text{ l/min}$
- closed center
- Plate connection
- Manual override : with detent without detent
- double solenoid
- With spring return
- Pilot : External



Version	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Base plate principle, multiple
Working pressure min./max.	-0.9 ... 10 bar
Control pressure min./max.	3 ... 8 bar
Ambient temperature min./max.	-10 ... 60 °C
Medium temperature min./max.	-10 ... 60 °C
Medium	Compressed air
Max. particle size	40 μm
Oil content of compressed air	0 ... 5 mg/m^3
Nominal flow Q_n	240 l/min
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 %
Typ. switch-on time	12 ms
Typ. switch-off time	12 ms
mounting screws	Hexalobular socket (TORX) ISO 10664-8
Mounting screw tightening torque	0.5 Nm
Weight	0.046 kg

Technical data

Part No.		MO		Operational voltage	Voltage tolerance
				DC	DC
R422102428			closed center	24 V	-10% / +10%
R422102429			closed center	24 V	-10% / +10%

Part No.	Power consumption	Flow conductance	Flow conductance
	DC	b	C-value
R422102428	0.55 W	0.32	0.92 l/(s*bar)
R422102429	0.55 W	0.32	0.92 l/(s*bar)

Part No.	basic valve with electrical connector
R422102428	Basic valve with pilot valve
R422102429	Basic valve without pilot valve

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar, 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 15 °C under ambient and medium temperature and may not exceed 3 °C .

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).

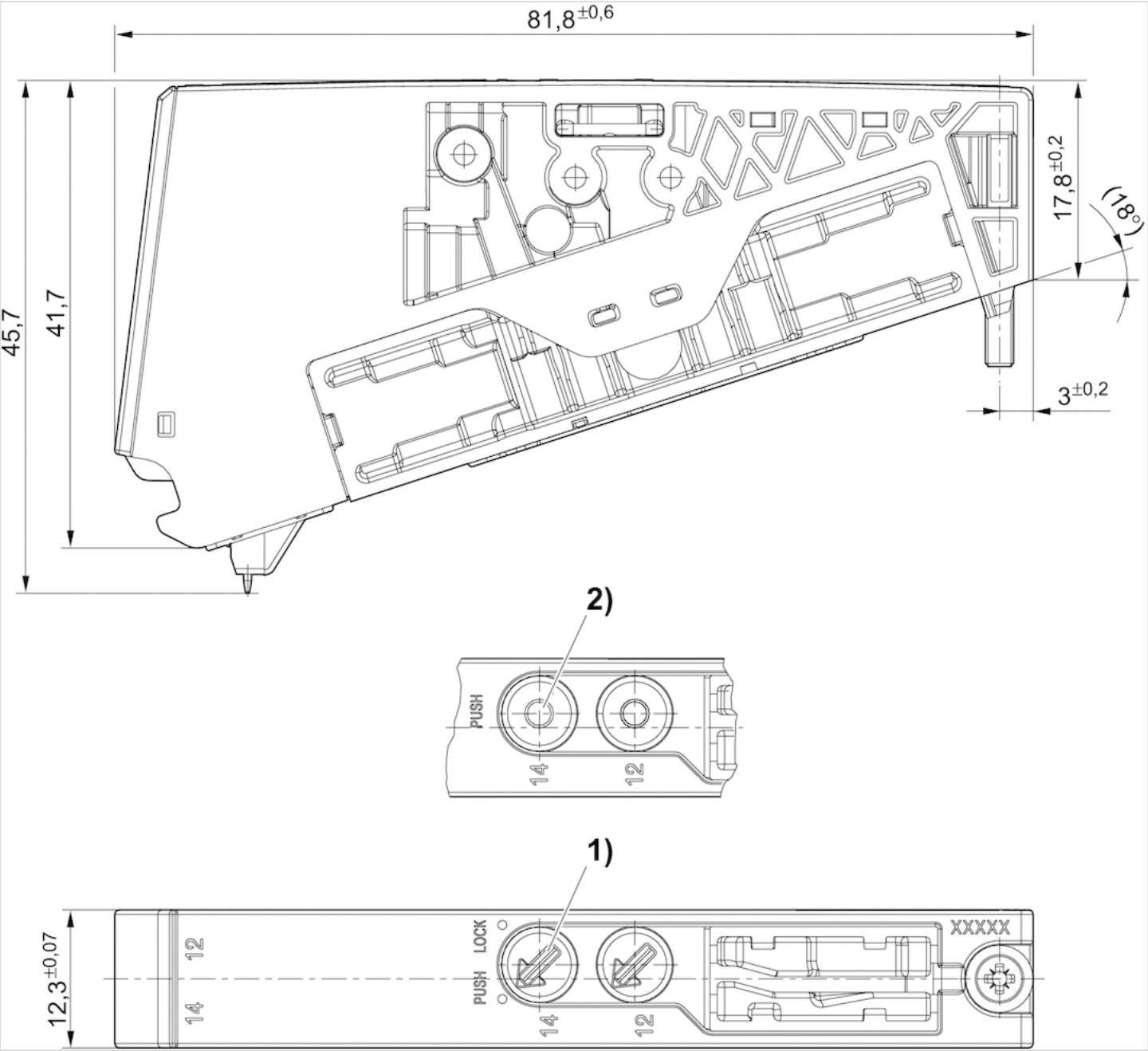
The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve system.

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