

5/2-directional valve, Series 581, size 2

- ISO 5599-1
- ISO 2
- 5/2
- With spring return
- single solenoid
- $Q_n = 2700 \text{ l/min}$
- Compressed air connection output Base plate ISO 5599-1
- Electrical connection Plug, Form B, industry
- Manual override with detent



Type	Spool valve
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Connection type	Plate connection
Standards	ISO 5599-1, ISO 2
Working pressure min./max.	See table below
Control pressure min./max.	3 ... 10 bar
Ambient temperature min./max.	-15 ... 50 °C
Medium temperature min./max.	-15 ... 50 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m ³
Nominal flow Q_n	2700 l/min
Flow conductance C	10,8 l/(s*bar)
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	15 ms
Typ. switch-off time	46 ms
Mounting screw	with hexagon socket
Mounting screw tightening torque	3,5 Nm
Weight	0,34 kg

Technical data

Part No.		MO	Operational voltage DC	Operational voltage AC 50 Hz
5812110500			12 V	-
5812110200			-	24 V
5812110100			24 V	-
5812110600			48 V	-
5812110300			-	-
5812110400			-	230 V
5812110000			-	-
5812111500			12 V	-
5812111200			-	24 V
5812111100			24 V	-
5812111600			48 V	-
5812111300			-	-
5812111400			-	230 V
5812111000			-	-
5812112500			12 V	-
5812112200			-	24 V
5812112100			24 V	-
5812112600			48 V	-
5812112300			-	-
5812112400			-	230 V
5812112000			-	-
5812113500			12 V	-
5812113200			-	24 V
5812113100			24 V	-
5812113600			48 V	-
5812113300			-	-
5812113400			-	230 V
5812113000			-	-

Part No.	Operational voltage AC 60 Hz	Voltage tolerance DC	Voltage tolerance AC 50 Hz	Voltage tolerance AC 60 Hz
5812110500	-	-10% / +10%	-	-
5812110200	-	-	-10% / +10%	-
5812110100	-	-10% / +10%	-	-
5812110600	-	-10% / +10%	-	-
5812110300	110 V	-	-	-10% / +10%
5812110400	-	-	-10% / +10%	-
5812110000	-	-	-	-
5812111500	-	-10% / +10%	-	-
5812111200	-	-	-10% / +10%	-
5812111100	-	-10% / +10%	-	-
5812111600	-	-10% / +10%	-	-
5812111300	110 V	-	-	-10% / +10%

Part No.	Operational voltage AC 60 Hz	Voltage tolerance DC	Voltage tolerance AC 50 Hz	Voltage tolerance AC 60 Hz
5812111400	-	-	-10% / +10%	-
5812111000	-	-	-	-
5812112500	-	-10% / +10%	-	-
5812112200	-	-	-10% / +10%	-
5812112100	-	-10% / +10%	-	-
5812112600	-	-10% / +10%	-	-
5812112300	110 V	-	-	-10% / +10%
5812112400	-	-	-10% / +10%	-
5812112000	-	-	-	-
5812113500	-	-10% / +10%	-	-
5812113200	-	-	-10% / +10%	-
5812113100	-	-10% / +10%	-	-
5812113600	-	-10% / +10%	-	-
5812113300	110 V	-	-	-10% / +10%
5812113400	-	-	-10% / +10%	-
5812113000	-	-	-	-

Part No.	Power consumption DC	Holding power AC 50 Hz	Holding power AC 60 Hz	Switch-on power AC 50 Hz
5812110500	5 W	-	-	-
5812110200	-	8 VA	-	10 VA
5812110100	5 W	-	-	-
5812110600	5 W	-	-	-
5812110300	-	-	8 VA	-
5812110400	-	8 VA	-	10 VA
5812110000	-	-	-	-
5812111500	5 W	-	-	-
5812111200	-	8 VA	-	10 VA
5812111100	5 W	-	-	-
5812111600	5 W	-	-	-
5812111300	-	-	8 VA	-
5812111400	-	8 VA	-	10 VA
5812111000	-	-	-	-
5812112500	5 W	-	-	-
5812112200	-	8 VA	-	10 VA
5812112100	5 W	-	-	-
5812112600	5 W	-	-	-
5812112300	-	-	8 VA	-
5812112400	-	8 VA	-	10 VA
5812112000	-	-	-	-
5812113500	5 W	-	-	-
5812113200	-	8 VA	-	10 VA
5812113100	5 W	-	-	-
5812113600	5 W	-	-	-
5812113300	-	-	8 VA	-
5812113400	-	8 VA	-	10 VA

Part No.	Power consumption DC	Holding power AC 50 Hz	Holding power AC 60 Hz	Switch-on power AC 50 Hz
5812113000	-	-	-	-

Part No.	Switch-on power AC 60 Hz	Pilot	Working pressure min./max.	Electrical connection Pilot valve
5812110500	-	Internal	3 ... 10 bar	Plug Form B, industry
5812110200	-	Internal	3 ... 10 bar	Plug Form B, industry
5812110100	-	Internal	3 ... 10 bar	Plug Form B, industry
5812110600	-	Internal	3 ... 10 bar	Plug Form B, industry
5812110300	10 VA	Internal	3 ... 10 bar	Plug Form B, industry
5812110400	-	Internal	3 ... 10 bar	Plug Form B, industry
5812110000	-	Internal	3 ... 10 bar	Plug Form B, industry
5812111500	-	Internal	3 ... 10 bar	Plug Form B, industry
5812111200	-	Internal	3 ... 10 bar	Plug Form B, industry
5812111100	-	Internal	3 ... 10 bar	Plug Form B, industry
5812111600	-	Internal	3 ... 10 bar	Plug Form B, industry
5812111300	10 VA	Internal	3 ... 10 bar	Plug Form B, industry
5812111400	-	Internal	3 ... 10 bar	Plug Form B, industry
5812111000	-	Internal	3 ... 10 bar	Plug Form B, industry
5812112500	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812112200	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812112100	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812112600	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812112300	10 VA	External	-0,95 ... 10 bar	Plug Form B, industry
5812112400	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812112000	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812113500	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812113200	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812113100	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812113600	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812113300	10 VA	External	-0,95 ... 10 bar	Plug Form B, industry
5812113400	-	External	-0,95 ... 10 bar	Plug Form B, industry
5812113000	-	External	-0,95 ... 10 bar	Plug Form B, industry

Part No.	basic valve with electrical connector	Throttle
5812110500	-	-
5812110200	-	-
5812110100	-	-
5812110600	-	-
5812110300	-	-
5812110400	-	-
5812110000	Basic valve without coil	-
5812111500	-	with throttle
5812111200	-	with throttle
5812111100	-	with throttle
5812111600	-	with throttle
5812111300	-	with throttle

Part No.	basic valve with electrical connector	Throttle
5812111400	-	with throttle
5812111000	Basic valve without coil	with throttle
5812112500	-	-
5812112200	-	-
5812112100	-	-
5812112600	-	-
5812112300	-	-
5812112400	-	-
5812112000	Basic valve without coil	-
5812113500	-	with throttle
5812113200	-	with throttle
5812113100	-	with throttle
5812113600	-	with throttle
5812113300	-	with throttle
5812113400	-	with throttle
5812113000	Basic valve without coil	with throttle

Connection 12 must be connected with atmospheres, Nominal flow Q_n at 6 bar and Δp = 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.

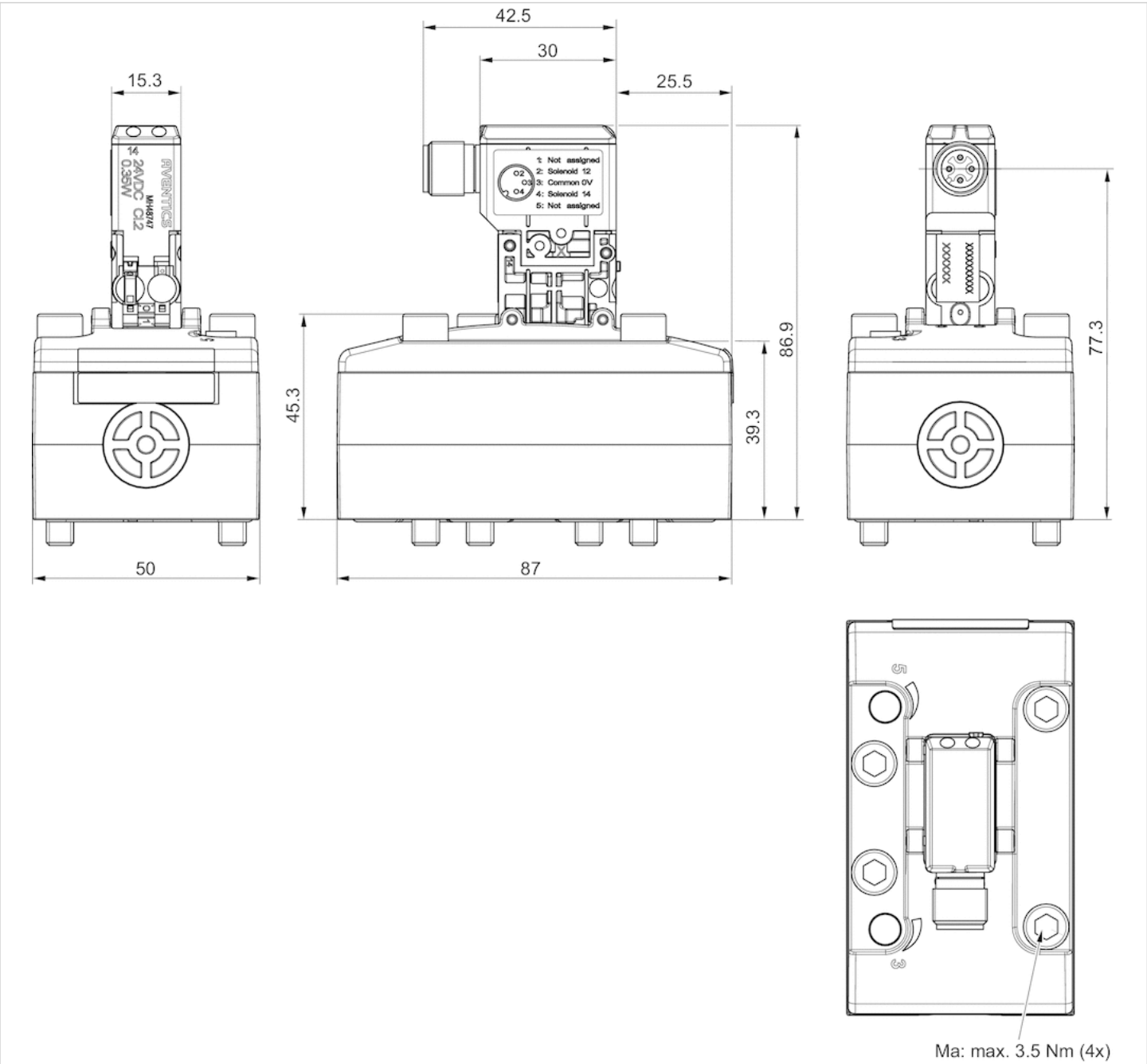
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

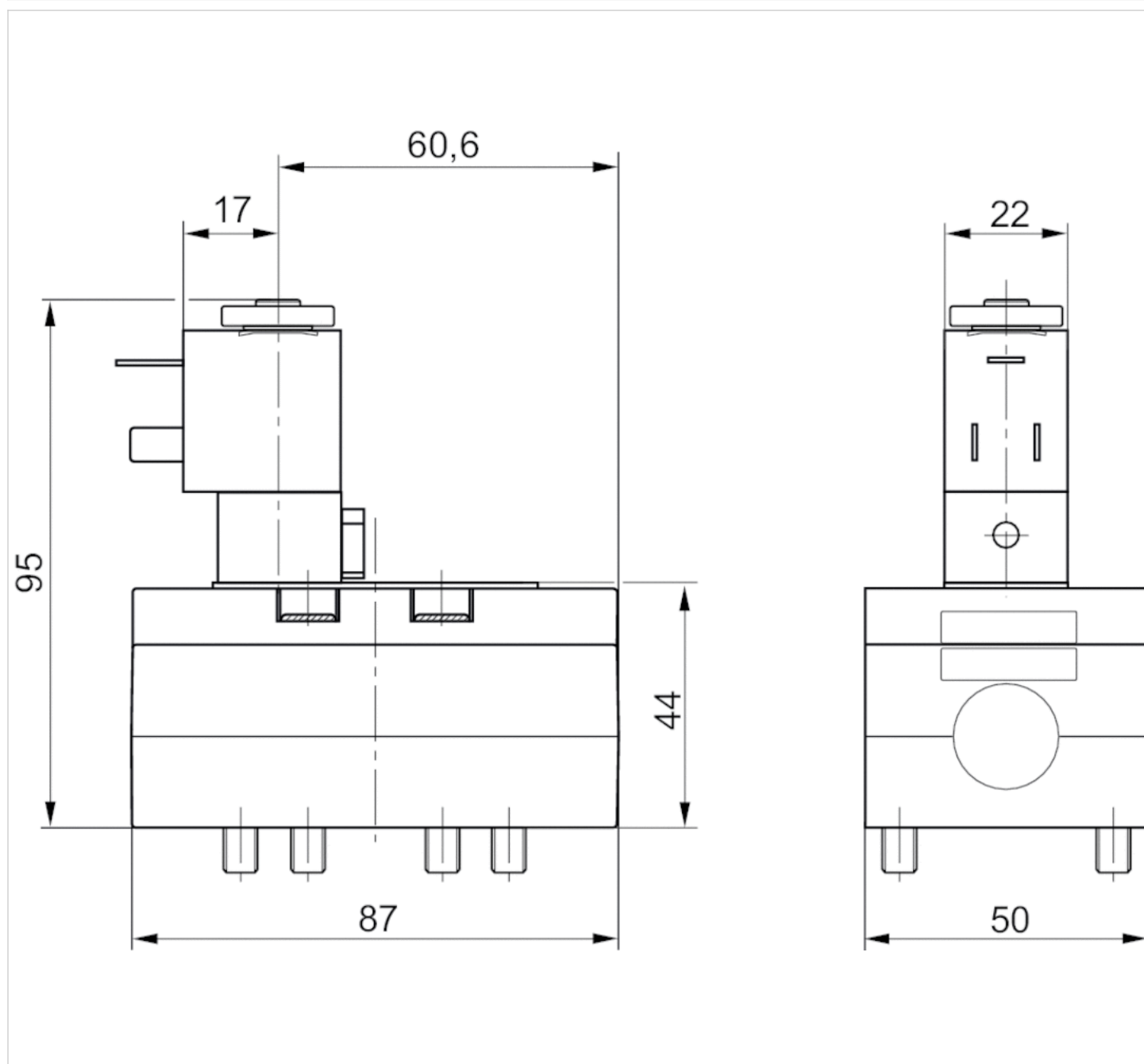
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



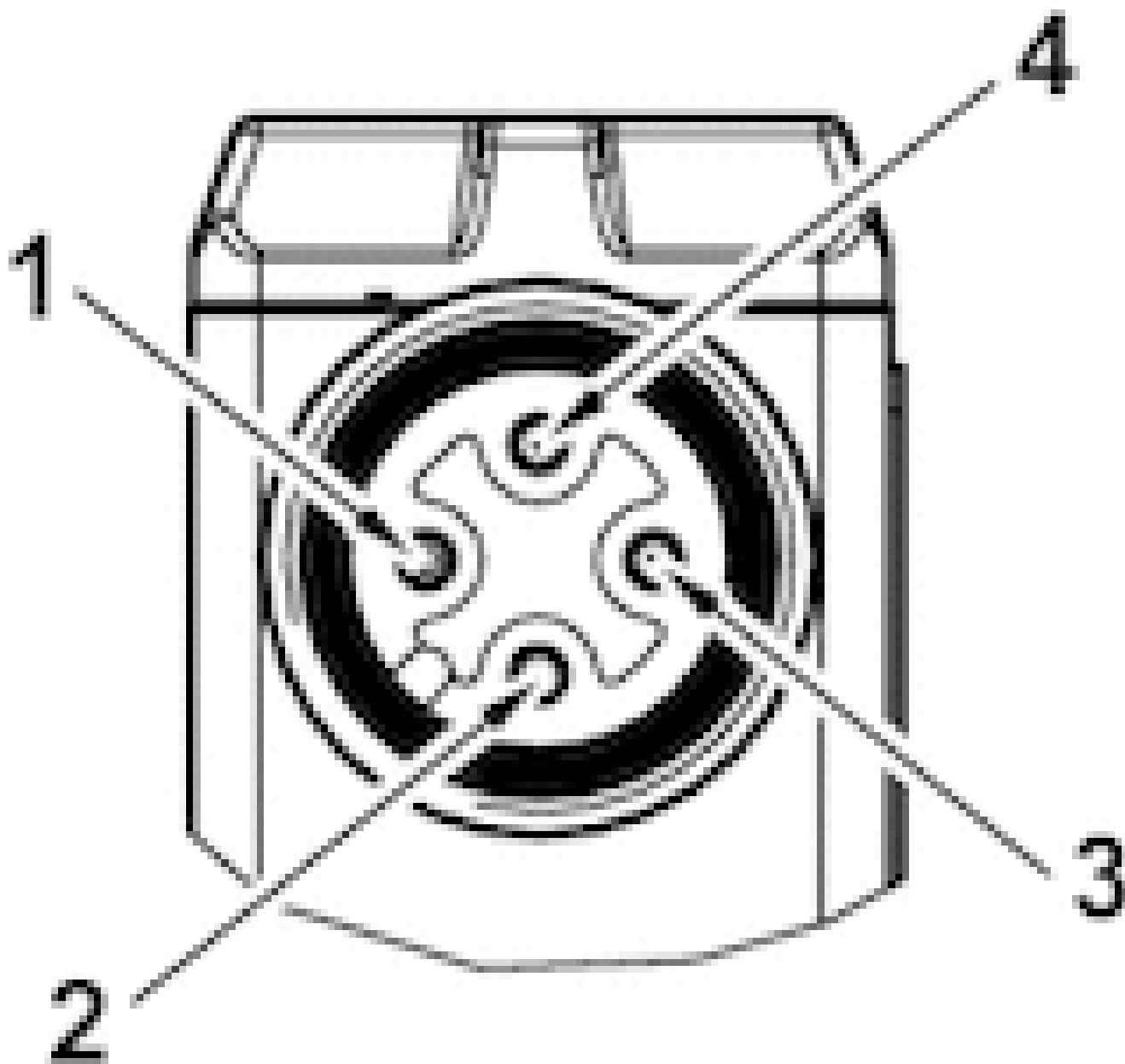
Dimensions



The pilot valves can be loosened and turned through 180°.

Pin assignments

Pin assignments



- 1) not assigned
- 2) Coil 12
- 3) 0 V DC
- 4) Coil 14

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