



5/3-directional valve, Series 581, size 2

- ISO 5599-1
- ISO 2
- 5/3
- exhausted center
- Qn = 2100 l/min
- Compressed air connection output Base plate ISO 5599-1
- Electrical connection Plug, M12, 4-pin
- Manual override with detent without 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. -0.95 ... 10 bar
Control pressure min./max. 3 ... 10 bar

Ambient temperature min./max. 0 ... 50 °C

Medium temperature min./max. 0 ... 50 °C

 $\begin{tabular}{lll} Medium & Compressed air \\ Max. particle size & 5 \ \mu m \\ \end{tabular}$

Oil content of compressed air 0 ... 5 mg/m³

Nominal flow Qn 2100 I/min
Flow conductance C 8.9 I/(s*bar)
Protection class with connection IP65

Duty cycle 100 %

Typ_switch-on time 15 ms

Typ. switch-on time 15 ms
Typ. switch-off time 35 ms

Mounting screw with hexagon socket

Mounting screw tightening torque 3.5 Nm Weight 0.28 kg

Technical data

Part No.		МО		Operational voltage DC
5812522720	79X 1 1 7 95		exhausted center	24 V
5812522710			exhausted center	24 V
5812520720			exhausted center	24 V
5812520710	254 1 1 7 MA		exhausted center	24 V
5812523720			exhausted center	24 V
5812523710			exhausted center	24 V
5812521720			exhausted center	24 V
5812521710			exhausted center	24 V

Part No.	Voltage tolerance DC	Power consumption DC	Pilot	Electrical connection Pilot valve
5812522720	-10% / +10%	0.35 W	External	Plug M12 4-pin



Part No.	Voltage tolerance DC	Power consumption DC	Pilot	Electrical connection Pilot valve
5812522710	-10% / +10%	0.35 W	External	Plug M12 4-pin
5812520720	-10% / +10%	0.35 W	Internal	Plug M12 4-pin
5812520710	-10% / +10%	0.35 W	Internal	Plug M12 4-pin
5812523720	-10% / +10%	0.35 W	External	Plug M12 4-pin
5812523710	-10% / +10%	0.35 W	External	Plug M12 4-pin
5812521720	-10% / +10%	0.35 W	Internal	Plug M12 4-pin
5812521710	-10% / +10%	0.35 W	Internal	Plug M12 4-pin

Part No.	Throttle
5812522720	-
5812522710	-
5812520720	-
5812520710	-
5812523720	with throttle
5812523710	with throttle
5812521720	with throttle
5812521710	with throttle

Nominal flow Qn 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).

Switch-on power: 1 W for 40 ms

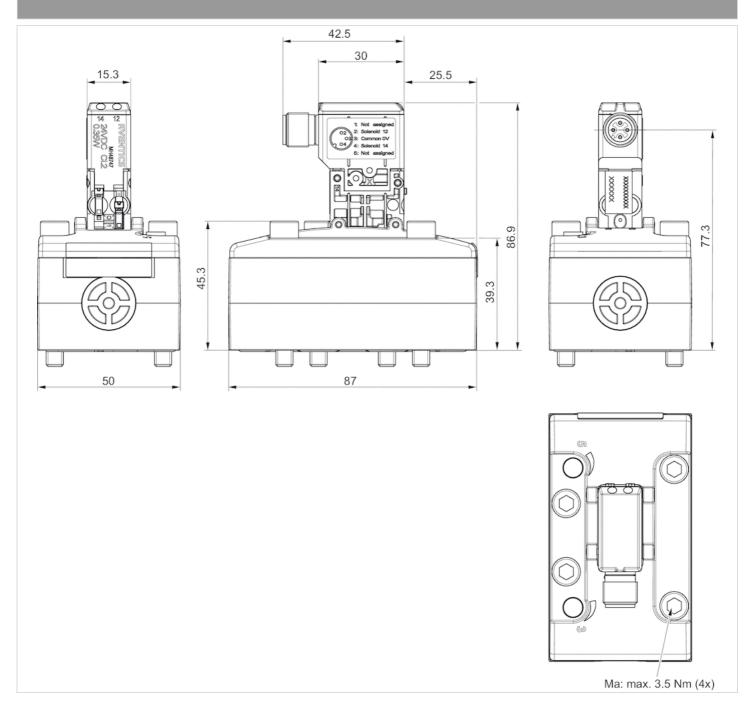
Technical information

Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber



Dimensions

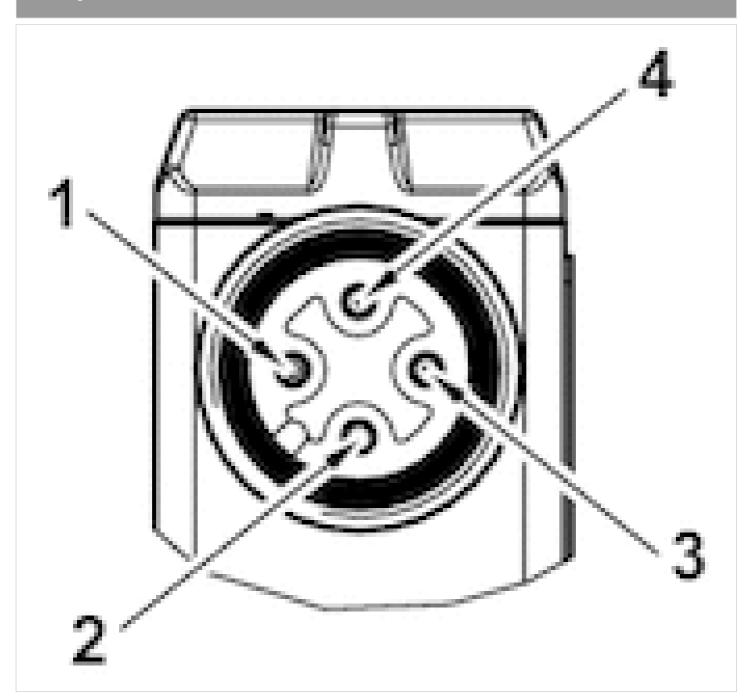
Dimensions





Pin assignments

Pin assignments



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

Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



Visit us: Emerson.com/Aventics

Your local contact: Emerson.com/contactus



Emerson.com



Facebook.com/EmersonAutomationSolutions



LinkedIn.com/company/Emerson-Automation-Solutions



Twitter.com/EMR_Automation

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. This Document, as well as the data, specifications and other information set forth in it, are the exclusive property of AVENTICS GmbH. It may not be reproduced or given to third parties without its consent. Only use the AVENTICS products shown in industrial applications. Read the product documentation completely and carefully before using the product. Observe the applicable regulations and laws of the respective country. When integrating the product into applications, note the system manufacturer's specifications for safe use of the product. The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgement and verification. It must be remembered that the products are subject to a natural process of wear and again.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Brand logotype are registered trademarks of one of the Emerson family of companies. All other marks are the property of their respective owners. © 2021 Emerson Electric Co. All rights reserved. 2021-04.

