



5/2-directional valve, Series TC08

- Operating voltage 24 V DC

- 5/2

- Qn = 800 I/min

- Pilot valve width: 15 mm

- Pipe connection

- Compressed air connection output : G 1/8 - Electrical connection: Plug, M8, 3-pin

- Manual override : with detent - single solenoid double solenoid

- Pilot : Internal External



Spool valve, positive overlapping Туре

Activation Electrically Sealing principle Soft sealing See table below Working pressure min./max. See table below Control pressure min./max. -10 ... 50 °C Ambient temperature min./max. -10 ... 50 °C Medium temperature min./max. Medium Compressed air

Max. particle size 5 µm

Oil content of compressed air 0 ... 5 mg/m³ Nominal flow Qn 800 l/min

Class III

Protection class acc. to DIN EN 61140

Electrically

Connector standard

IP65 Protection class with connection LED status display Yellow Duty cycle 100 % Mounting on manifold strip P-strip Mounting screw tightening torque 2 Nm

Weight See table below

Comment An example configuration is illustrated.

The delivered product may thus deviate

from the illustration.

DIN EN 60947-5-2



Technical data

Part No.		MO	Compressed air connection	Compressed air connection
			Input	Output
R422100968	4 2 5 1 3		G 1/8	G 1/8
R422100969	4 2 1		G 1/8	G 1/8
R422100970	4 2 W		G 1/8	G 1/8
R422100971	4 2 4 2 4 5 1 3		G 1/8	G 1/8
R422100972	4 2 M		G 1/8	G 1/8
R422100973			G 1/8	G 1/8

Part No.	Compressed air connection	Operational	Voltage tolerance
		voltage	
	Exhaust	DC	DC
R422100968	G 1/8	24 V	-10% / +10%
R422100969	G 1/8	24 V	-10% / +10%
R422100970	G 1/8	24 V	-10% / +10%
R422100971	G 1/8	24 V	-10% / +10%
R422100972	G 1/8	24 V	-10% / +10%
R422100973	G 1/8	24 V	-10% / +10%

Part No.	Power consumption	Pilot	Flow conductance	Flow conductance	Nominal
	DC		b	C-value	resistance
R422100968	2,2 W	Internal	0,36	3,5 l/(s*bar)	280 Ω
R422100969	2,2 W	External	0,36	3,5 l/(s*bar)	280 Ω
R422100970	2,2 W	Internal	0,36	3,5 l/(s*bar)	280 Ω
R422100971	2,2 W	External	0,36	3,5 l/(s*bar)	280 Ω
R422100972	2,2 W	Internal	0,36	3,5 l/(s*bar)	280 Ω
R422100973	2,2 W	External	0,36	3,5 l/(s*bar)	280 Ω

Part No.	Working pressure min./max.	Control pressure min./max.	Typ. switch-on time	Typ. switch-off time
R422100968	3 10 bar	2,5 10 bar	14 ms	18 ms
R422100969	-0,9 10 bar	2,5 10 bar	14 ms	18 ms
R422100970	3 10 bar	3 10 bar	14 ms	17 ms
R422100971	-0,9 10 bar	3 10 bar	14 ms	17 ms
R422100972	2 10 bar	2 10 bar	10 ms	10 ms
R422100973	-0,9 10 bar	2 10 bar	10 ms	10 ms

Part No.	Weight
R422100968	0,14 kg
R422100969	0,14 kg
R422100970	0,14 kg
R422100971	0,14 kg
R422100972	0,172 kg
R422100973	0,172 kg

Nominal flow Qn 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).

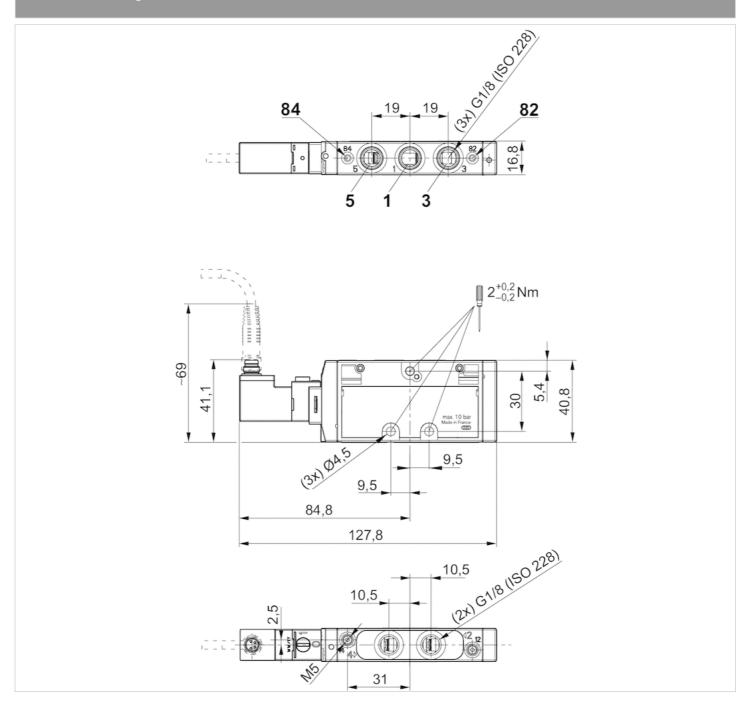
Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Polyurethane
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated



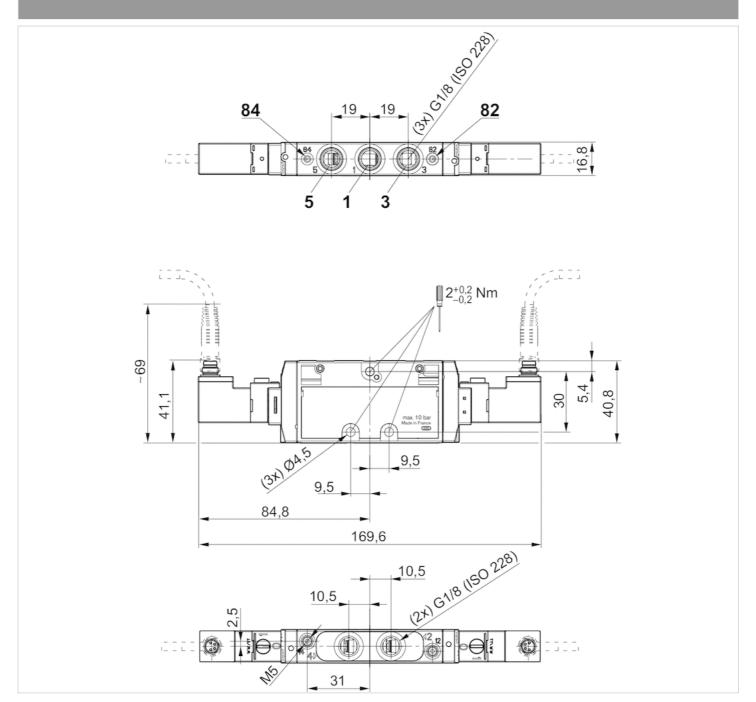
Dimensions

Dimensions, single solenoid





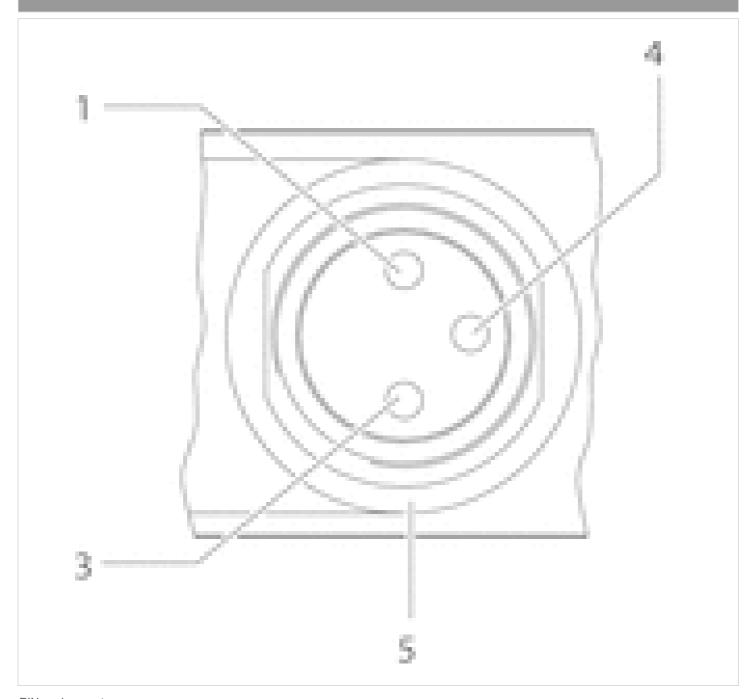
Dimensions, double solenoid





Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:

- 1) PIN not assigned
- 3) 0 V
- 4) 24 V
- 5) LED

Cable color

- 1) Brown
- 3) Blue
- 4) Black

Note: Bi-polar protective circuit to prevent overvoltage

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.

2020 Emerson Electric Co. All rights reserved.

