

2x3/2-directional valve, Series TC08, with detent, inch

R422102129

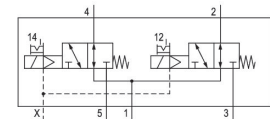
Series
TC08

2024-08-06

- Excellent ratio of installation space and flow rate
- Large selection of electrical connections
- Electrical or pneumatic operated
- Long service life
- Adjustable coil with four 90° positions

AVENTICS Series TC08 Directional valves

The AVENTICS Series TC08/TC15 includes a wide range of spool valves with housings made of high-performance polymers with robust and flexible metal inserts. It is designed for flow rate performances from 800 to 1500 l/min. These directional valves are easy to assemble, making them ideal for applications requiring the highest efficiency in limited spaces.



Technical data

Industry

Activation

Valve type

Switching principle

Valve function

Actuating control

Sealing principle

Connection type

Manual override

Compressed air connection output

Nominal flow Qn

Flow conductance b

Flow conductance C

Min. working pressure

Max. working pressure

Industrial

Electrically

Spool valve, positive overlapping

2x 3/2 NO/NO, with spring return

NO/NO

Double Solenoid

Soft seal

Plate connection

Pipe connection

with detent

1/8-27 NPTF

600 l/min

0.27

2.8 l/(s*bar)

-0.9 bar

10 bar

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Min. control pressure 2.5 bar

Max. control pressure 10 bar

Electrical connection type Plug
Electrical connection size ISO 15217, form C
Connector standard ISO 15217
Protection class with connection IP65
Operational voltage 24 V DC
Operational voltage DC 24 V
Voltage tolerance DC -10 % / +10 %

Pilot External
Coil width 15.6 mm
Pilot valve width 15 mm
Power consumption DC 2 W
Nominal resistance 280 Ω

Duty cycle 100 %
Typ. switch-on time 10 ms
Typ. switch-off time 14 ms
Generic emission standard in accordance with EN 50081-2:1993
Generic immunity standard in accordance with EN 50082-2

Blocking principle Plate principle
Can be assembled into blocks Can be assembled into blocks
Min. ambient temperature -10 °C
Max. ambient temperature 50 °C
Min. medium temperature -10 °C
Max. medium temperature 50 °C
Medium Compressed air
Min. oil content of compressed air 0 mg/m³
Max. oil content of compressed air 5 mg/m³
Max. particle size 5 μm

Mounting screw tightening torque 2.5 Nm
Weight 0.166 kg

Material

Housing material Polyamide fiber-glass reinforced

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Seal material	Acrylonitrile butadiene rubber
	Polyurethane
Material threaded bushing	Brass
	Die cast zinc
Material front plate	Polyamide fiber-glass reinforced

Part No. R422102129

Technical information

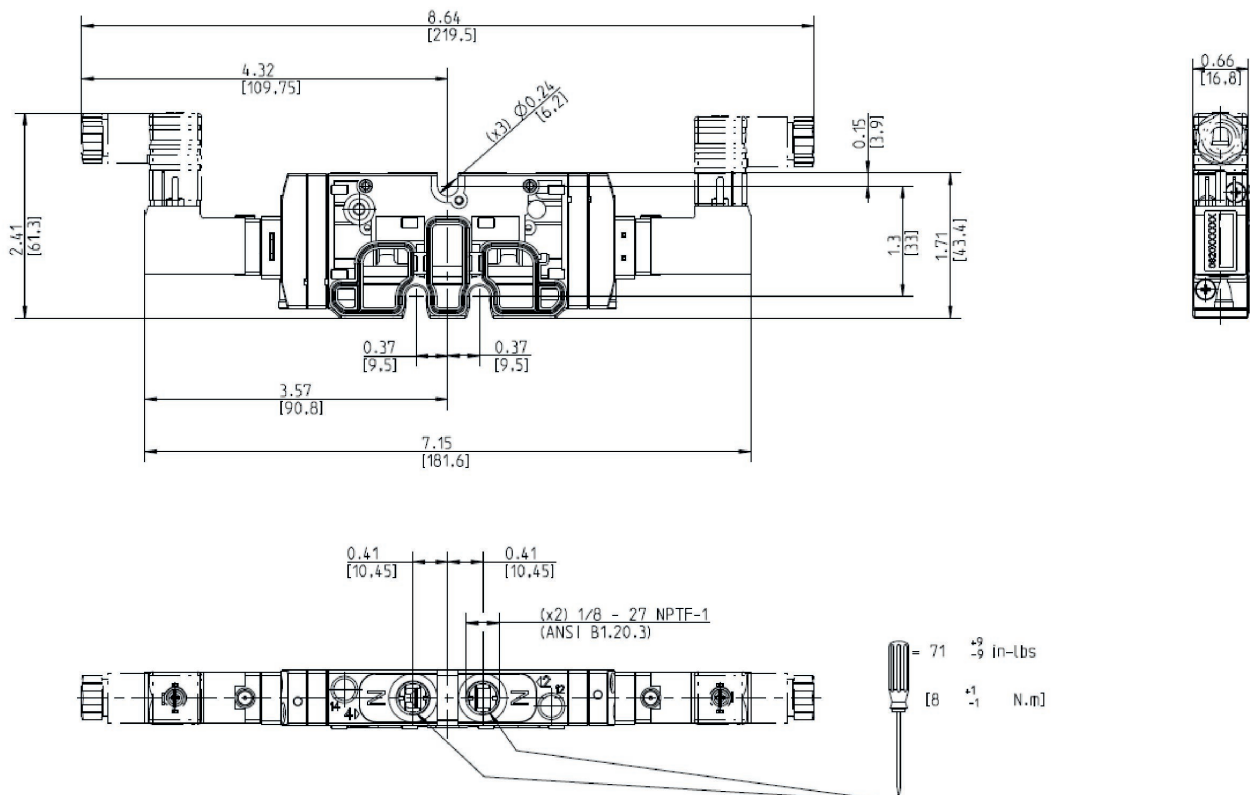
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C less than 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 <https://www.emerson.com/en-us/support>).

Dimensions



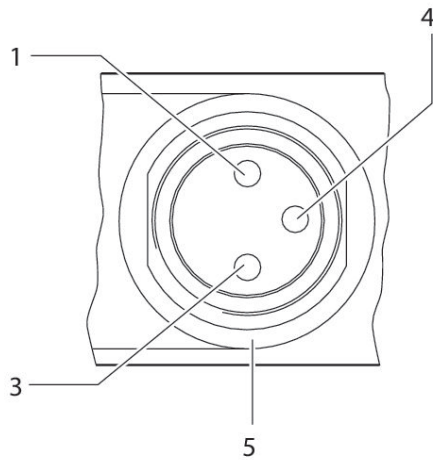
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PIN assignment and cable colors for
valve plug connectors



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