Series TC08

2024-05-14

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 Industrial Activation Electrically

Valve type Spool valve, positive overlapping

Switching principle 5/2, with air spring return

Actuating control Single Solenoid

Sealing principle Soft seal

Connection type Pipe connection
Manual override without detent

Compressed air connection input G 1/8
Compressed air connection output G 1/8
Compressed air connection, exhaust G 1/8

Nominal flow Qn 800 I/min Flow conductance b 0.36

Flow conductance C 3.5 l/(s*bar)

Min. working pressure -0.9 bar
Max. working pressure 10 bar

5/2-directional valve, Series TC08

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Min. control pressure 3 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 14 ms
Typ. switch-off time 18 ms

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 μ m

Mounting on manifold strip P-strip

Mounting screw tightening torque 2 Nm

Weight 0.14 kg

Material

Housing material Polyamide fiber-glass reinforced Seal material Acrylonitrile butadiene rubber

Polyurethane

Material threaded bushing Brass

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Die cast zinc

Material front plate Polyamide fiber-glass reinforced

Part No. 0820060151

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).



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Dimensions Single Solenoid



