5/3-directional valve, Series TC15

0820059151

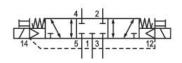
Series TC15

2024-05-06

AVENTICS Series TC15 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

Note Operating voltage 24 V DC

Valve type Spool valve, positive overlapping

Valve function Closed Center
Actuating control Double Solenoid

Sealing principle Soft seal

Connection type Pipe connection Manual override without detent

Compressed air connection input G 1/4
Compressed air connection output G 1/4
Compressed air connection, exhaust G 1/4
Compressed air connection pilot input M5

Nominal flow Qn 1300 l/min

Flow conductance b 0.31

Flow conductance C 5.9 l/(s*bar)

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

PilotExternalCoil width15.6 mmPilot valve width15 mmPower consumption DC2 WNominal resistance280 Ω

Duty cycle 100 %
Typ. switch-on time 12 ms
Typ. switch-off time 13 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 2.5 Nm

Weight 0.278 kg

Material

Housing material Polyamide fiber-glass reinforced

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Seal material Acrylonitrile butadiene rubber

Hydrogenated nitrile butadiene rubber

Material threaded bushing Brass

Die cast zinc

Material front plate Polyamide fiber-glass reinforced

Part No. 0820059151

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).

AVENTICS

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Dimensions

