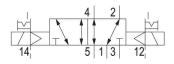
2024-05-06

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

Valve type Spool valve, positive overlapping

Actuating control Double Solenoid

Sealing principle Soft seal

Connection type Plate connection

Pipe connection

Manual override with detent

Standard compressed air connection according to ANSI B1.20.3

Compressed air connection output 1/4 - 18 NPTF

Nominal flow Qn 1500 l/min Flow conductance b 0.33

Flow conductance C 6.8 l/(s*bar)

Min. working pressure -0.9 bar
Max. working pressure 10 bar
Min. control pressure 2 bar

5/2-directional valve, Series TC15 - inch

Series TC15

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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 185 Ω

Duty cycle 100 %
Typ. switch-on time 11 ms
Typ. switch-off time 11 ms

Generic emission standard in accordance with EN 50081:1992

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 1 mg/m³ Max. particle size 5 μ m

Rail mounting DIN EN 60715 TH35 x 15
Weight 0.229 kg

Material

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

Hydrogenated nitrile butadiene rubber

5/2-directional valve, Series TC15 - inch

Series TC15

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Material threaded bushing Brass

Die cast zinc

Material front plate Polyamide fiber-glass reinforced

Part No. R422101185

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

2024-05-06

Dimensions in mm

R422101185

