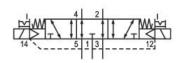
2024-05-06

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 Exhausted Center
Actuating control Double Solenoid

Sealing principle Soft seal

Connection type Pipe connection

Manual override with detent

Standard compressed air connection according to ANSI B1.20.3

Compressed air connection input 1/4 - 18 NPTF
Compressed air connection output 1/4 - 18 NPTF
Compressed air connection, exhaust 1/4 - 18 NPTF

Nominal flow Qn 1300 l/min

Flow conductance b 0.31

Flow conductance C 5.9 l/(s*bar)

5/3-directional valve, Series TC15 - inch

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Series TC15

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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%

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 12 ms Typ. switch-off time 13 ms

-10 °C Min. ambient temperature Max. ambient temperature 50 °C -10 °C Min. medium temperature Max. medium temperature 50 °C

Compressed air Medium

Min. oil content of compressed air 0 mg/m³ Max. oil content of compressed air 5 mg/m³ Max. particle size 5 µm

P-strip Mounting on manifold strip Mounting screw tightening torque 2.5 Nm Weight 0.309 kg

Material

Housing material Polyamide fiber-glass reinforced

5/3-directional valve, Series TC15 - inch

Series TC15

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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. R422101285

Technical information

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

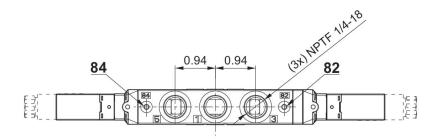
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

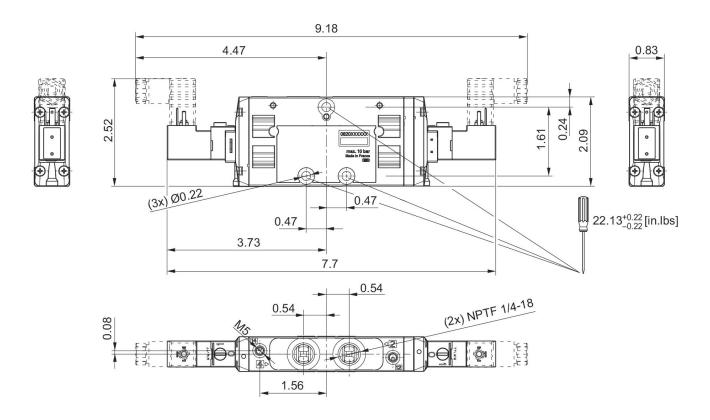
The oil content of compressed air must remain constant during the life cycle.

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 in inches





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Dimensions in mm

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