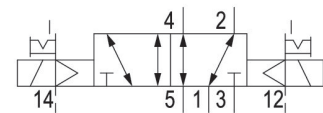


AVENTICS Series TC15 Directional valves

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.

- 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



Technical data

Industry

Activation

Valve type

Switching principle

Actuating control

Sealing principle

Connection type

Manual override

Industrial

Electrically

Spool valve, positive overlapping

5/2, with spring return

Single Solenoid

Soft seal

Plate connection

Pipe connection

with detent

Compressed air connection type

Standard compressed air connection

Compressed air connection output

Internal thread

according to ANSI B1.20.3

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

5/2-directional valve, Series TC15, double, inch

R422101185

Series

TC15

2025-10-22

Max. working pressure	10 bar
Min. control pressure	2 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	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/m ³
Max. oil content of compressed air	1 mg/m ³
Max. particle size	5 µm
Rail mounting DIN EN 60715	TH35 x 15
Weight	0.229 kg
Material	
Housing material	Polyamide, fiber-glass reinforced

5/2-directional valve, Series TC15, double, inch

R422101185

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.	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>).

5/2-directional valve, Series TC15, double, inch

R422101185

Series
TC15

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Dimensions in mm

