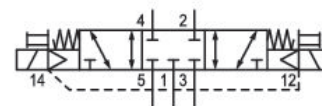


- Excellent ratio of installation space and flow rate
- Large selection of electrical connections
- Electrical or pneumatic operated
- Long service life
- Adjustable coil with four 90° positions

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

Activation

Valve type

Switching principle

Actuating control

Sealing principle

Connection type

Manual override

Industrial

Electrically

Spool valve, positive overlapping

5/3, closed center

Double Solenoid

Soft seal

Pipe connection

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

700 l/min

Flow conductance b

0.34

Flow conductance C

3 l/(s*bar)

Min. working pressure

-0.9 bar

Max. working pressure

10 bar

5/3-directional valve, Series TC08, without detent

Series
TC08

0820061151

2024-10-17

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	10 ms
Typ. switch-off time	11 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/m ³
Max. oil content of compressed air	5 mg/m ³
Max. particle size	5 μm
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2 Nm
Weight	0.178 kg

Material

Housing material	Polyamide fiber-glass reinforced
Seal material	Acrylonitrile butadiene rubber Polyurethane
Material threaded bushing	Brass

5/3-directional valve, Series TC08, without detent

Series
TC08

0820061151

2024-10-17

	Die cast zinc
Material front plate	Polyamide fiber-glass reinforced
Part No.	0820061151

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>).

0820061151

2024-10-17

Technical drawing of the 3000 Series 3-Port In-Line Valve in the closed position. The drawing shows a side view of the valve with three ports labeled 1, 3, and 5. Port 1 is the central port, and ports 3 and 5 are the side ports. The valve is shown in the closed position, with the internal ball valve blocking the flow between the ports. Dimensions are provided: a total length of 168 mm, a port diameter of 19 mm, and a valve body diameter of 84 mm. The valve is labeled with '3000' and '3-PORT'. The drawing also shows the valve's internal structure, including the ball valve and the internal passages.

