

5/2-directional valve, Series TC08 - inch

R422101157

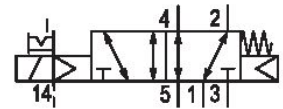
Series
TC08

2024-08-06

- 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	Industrial
Activation	Electrically
Valve type	Spool valve, positive overlapping
Switching principle	5/2, with air spring return
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	1/8-27 NPTF
Nominal flow Qn	800 l/min
Flow conductance b	0.36
Flow conductance C	3.5 l/(s*bar)
Min. working pressure	-0.9 bar
Max. working pressure	10 bar

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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	14 ms
Typ. switch-off time	17 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
Weight	0.125 kg
Material	
Housing material	Polyamide fiber-glass reinforced
Seal material	Acrylonitrile butadiene rubber Polyurethane

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Material threaded bushing	Brass Die cast zinc
Material front plate	Polyamide fiber-glass reinforced
Part No.	R422101157

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>).