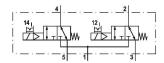
AVENTICS Series TC08 Directional valves

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 Valve function Actuating control Sealing principle Manual override

Standard compressed air connection Compressed air connection input Compressed air connection output Compressed air connection, exhaust

Nominal flow Qn Flow conductance b Flow conductance C

Min. working pressure

Industrial Electrically Spool valve, negative overlapping 2x 3/2 NC/NO, with spring return NC/NO Double Solenoid Soft seal with detent

according to ANSI B1.20.3 1/8-27 NPTF 1/8-27 NPTF 1/8-27 NPTF

600 I/min 0.27 2.8 I/(s*bar)

3 bar



2x3/2-directional valve, Series TC08 - inch

R422102111

Series TC08

R422102111	2024-07-30
Max. working pressure	10 bar
Min. control pressure	2.5 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	230 V AC
Operational voltage AC at 50 Hz	230 V
Voltage tolerance AC 50 Hz	-10 % / +10 %
Pilot	Internal
Pilot valve width	15 mm
Nominal resistance	14700 Ω
Holding power AC 50 Hz	1.6 VA
Holding power AC 60 Hz	1.4 VA
Switch-on power AC 50 Hz	2.2 VA
Switch-on power AC 60 Hz	2 VA
Duty cycle	100 %
Typ. switch-on time	10 ms
Typ. switch-off time	14 ms
Generic emission standard in accordance with	EN 50081-2:1993
Generic immunity standard in accordance with	EN 50082-2
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	5 mg/m³
Max. particle size	50 µm
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2 Nm
Tightening torque tolerance	±0,2 mT
Weight	0.181 kg



Material

Housing material Seal material Material threaded bushing

Material front plate

Part No.

Acrylonitrile butadiene rubber Brass Die cast zinc Polyamide fiber-glass reinforced

Polyamide fiber-glass reinforced

R422102111

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).

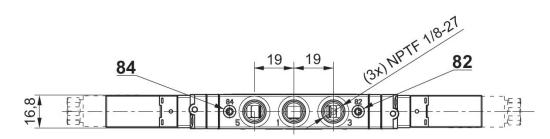


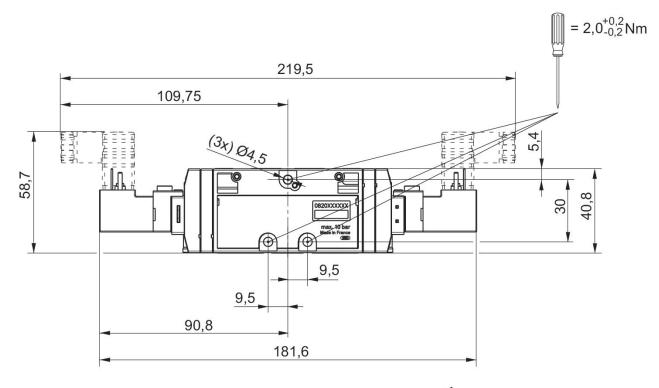
2x3/2-directional valve, Series TC08 - inch

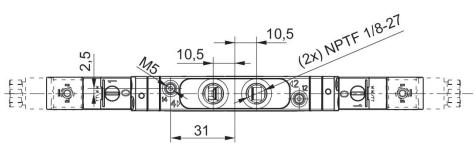
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Series TC08 2024-07-30

Dimensions in mm









2x3/2-directional valve, Series TC08 - inch

R422102111

Dimensions in inches

