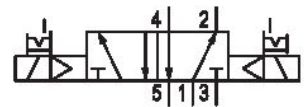


AVENTICS Series TC08 Directional valves

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, negative overlapping
Switching principle	5/2, with air spring return
Actuating control	Double Solenoid
Sealing principle	Soft seal
Manual override	with detent
Standard compressed air connection	according to ANSI B1.20.3
Compressed air connection input	1/8-27 NPTF
Compressed air connection output	1/8-27 NPTF
Compressed air connection, exhaust	1/8-27 NPTF
Compressed air connection pilot exhaust	M5
Nominal flow Qn	800 l/min
Flow conductance b	0.36
Flow conductance C	3.5 l/(s*bar)
Min. working pressure	2 bar

5/2-directional valve, Series TC08 - inch

R422101216

Series
TC08

2024-07-30

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	12 V DC
Operational voltage DC	12 V
Voltage tolerance DC	-10 % / +10 %
Pilot	Internal
Pilot valve width	15 mm
Power consumption DC	2 W
Nominal resistance	185 Ω
Duty cycle	100 %
Typ. switch-on time	10 ms
Typ. switch-off time	10 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/m ³
Max. oil content of compressed air	5 mg/m ³
Max. particle size	50 μm
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2 Nm
Tightening torque tolerance	±0,2 mT
Weight	0.14 kg

Material

Housing material Polyamide fiber-glass reinforced

5/2-directional valve, Series TC08 - inch

R422101216

Series
TC08

2024-07-30

Seal material	Acrylonitrile butadiene rubber
Material threaded bushing	Brass Die cast zinc
Material front plate	Polyamide fiber-glass reinforced
Part No.	R422101216

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>).

Dimensions in inches

5/2-directional valve, Series TC08 - inch

R422101216

Series
TC08

2024-07-30

Double Solenoid

