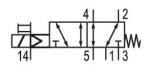
0820058177

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 I/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

Note Operating voltage 24 V AC, 110 V AC, 230 V AC

Valve type Spool valve, positive overlapping

Actuating control Single Solenoid

Soft seal

Sealing principle

Connection type Pipe connection Manual override without detent

G 1/4 Compressed air connection input Compressed air connection output G 1/4 G 1/4 Compressed air connection, exhaust Compressed air connection pilot input M5

Nominal flow Qn 1500 I/min Flow conductance b 0.33

Flow conductance C 6.8 I/(s*bar)

Min. working pressure -0.9 bar 0820058177

Max. working pressure10 barMin. control pressure3 barMax. control pressure10 bar

Electrical connection type Plug

Electrical connection size ISO 15217, form C

Connector standard ISO 15217
Protection class with connection IP65
Operational voltage 110 V AC
Operational voltage AC at 50 Hz 110 V

Voltage tolerance AC 50 Hz -10% / +10%

Operational voltage AC at 60 Hz 110 V

Voltage tolerance AC 60 Hz -10% / +10%

Pilot External Coil width 15.6 mm Pilot valve width 15 mm Nominal resistance 3700 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 12 ms
Typ. switch-off time 35 ms

Generic emission standard in accordance with EN 50081:1992

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 5 μ m

Mounting on manifold strip P-strip

Mounting screw tightening torque 2.5 Nm

Weight 0.235 kg

0820058177

Material

Housing material Polyamide fiber-glass reinforced 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. 0820058177

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, single solenoid

