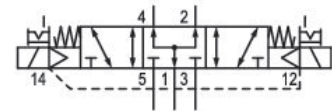


AVENTICS Series TC15 Directional valves

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 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

Note

Operating voltage 24 V DC

Valve type

Spool valve, positive overlapping

Valve function

Pressurized Center

Actuating control

Double Solenoid

Sealing principle

Soft seal

Connection type

Pipe connection

Manual override

with detent

Standard compressed air connection

according to ANSI B1.20.3

Compressed air connection input

1/4 - 18 NPTF

Compressed air connection output

1/4 - 18 NPTF

Compressed air connection, exhaust

1/4 - 18 NPTF

Nominal flow Qn

1300 l/min

Flow conductance b

0.31

Flow conductance C

5.9 l/(s*bar)

5/3-directional valve, Series TC15 - inch

R422101293

Series
TC15

2024-05-06

| | |
|------------------------------------|---------------------|
| Min. working pressure | -0.9 bar |
| Max. working pressure | 10 bar |
| 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 | 12 ms |
| Typ. switch-off time | 13 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 | 2.5 Nm |
| Weight | 0.309 kg |

Material

Housing material Polyamide fiber-glass reinforced

5/3-directional valve, Series TC15 - inch

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| | |
|---------------------------|---|
| 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. R422101293

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>).

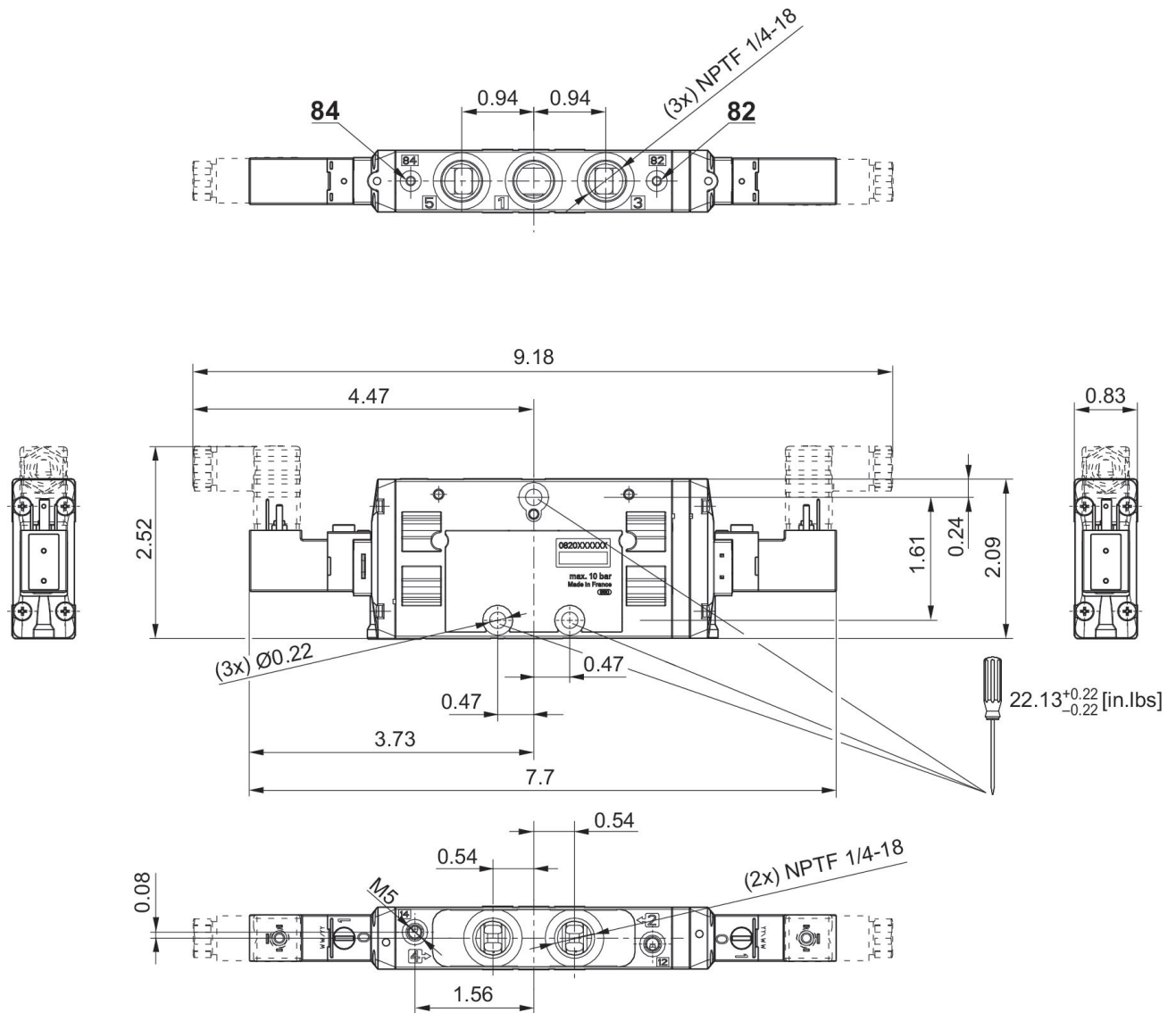
5/3-directional valve, Series TC15 - inch

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Dimensions in inches



5/3-directional valve, Series TC15 - inch

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Dimensions in mm

