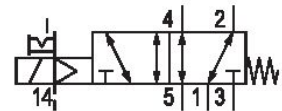
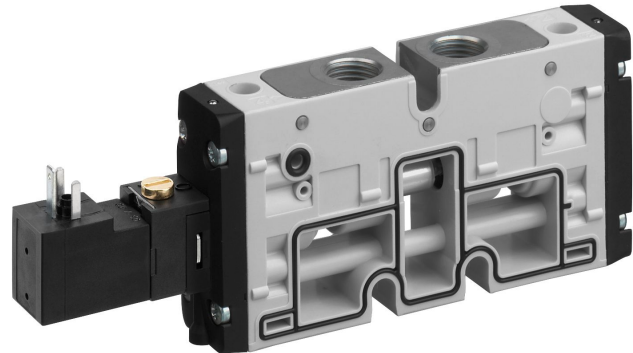


AVENTICS Series TC15 Valve systems

The AVENTICS Series TC15 valve system is the perfect choice for applications calling for lightweight valves with high flow rate in a small space. With valves operated either pneumatically or electrically, the valve system can be modularly expanded to up to 12 valves. Valves can be exchanged without dismantling the valve block.

- $Q_n = 1100 \text{ l/min} \dots 1500 \text{ l/min}$
- 2x3/2, 5/2, 5/3 Spool valves with polyamide housing
- Pneumatic connection G1/4, 1/4-18 NPTF
- Working pressure min./max. -0.9/10 bar
- Voltage 12 V DC, 24 V DC, 24 V AC, 110 V AC, 230 V AC
- Electrical connection ISO form C, M8 3-pin; M8 4-pin



Technical data

Industry	Industrial
Activation	Electrically
Valve type	Spool valve, positive overlapping
Switching principle	5/2, with spring return
Actuating control	Single Solenoid
Sealing principle	Soft seal
Connection type	Plate connection Pipe connection
Manual override	with detent
Compressed air connection type	Internal thread
Standard compressed air connection	according to ANSI B1.20.3
Compressed air connection output	1/4 - 18 NPTF
Nominal flow Q_n	1500 l/min
Flow conductance b	0.33
Flow conductance C	6.8 l/(s*bar)
Min. working pressure	-0.9 bar

5/2-directional valve, Series TC15, inch

R422101181

Series
TC15

2025-10-22

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	35 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
Rail mounting DIN EN 60715	TH35 x 15
Weight	0.201 kg
Material	
Housing material	Polyamide, fiber-glass reinforced

5/2-directional valve, Series TC15, inch

R422101181

Series
TC15

2025-10-22

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.	R422101181

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>).

5/2-directional valve, Series TC15, inch

R422101181

Series
TC15

2025-10-22

Dimensions in mm

Double Solenoid

