R422100965

TC08

Series

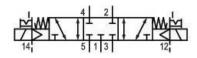
2024-08-06

- Qn = 600 l/min ... 800 l/min
- 2x3/2, 5/2, 5/3 Spool valves with polyamide housing
- Pneumatic connection G1/8, 1/8-27 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

#### **AVENTICS Series TC08 Valve systems**

The AVENTICS Series TC08 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.





#### Technical data

Industry Industrial Activation Electrically

Valve type Spool valve, positive overlapping

Switching principle 5/3, closed center Actuating control Double Solenoid

Sealing principle Soft seal

Connection type Plate connection

Pipe connection

Manual override with detent

Compressed air connection output G 1/8

Nominal flow Qn 700 I/min
Flow conductance b 0.34
Flow conductance C 3 I/(s\*bar)

Min. working pressure -0.9 bar
Max. working pressure 10 bar
Min. control pressure 3 bar

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Max. control pressure 10 bar

Electrical connection type Plug
Electrical connection size M8
Electrical connection number of poles 3-pin

Connector standard DIN EN 60947-5-2

Protection class acc. to DIN EN 61140 Class III
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 LED status display Yellow Power consumption DC 2.2 W Nominal resistance 280  $\Omega$ 

Duty cycle 100 %
Typ. switch-on time 10 ms
Typ. switch-off time 11 ms

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

Weight 0.165 kg

Material

Housing material Polyamide fiber-glass reinforced Seal material Acrylonitrile butadiene rubber

Polyurethane

Material threaded bushing Brass

Die cast zinc

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Material front plate

Polyamide fiber-glass reinforced

Part No.

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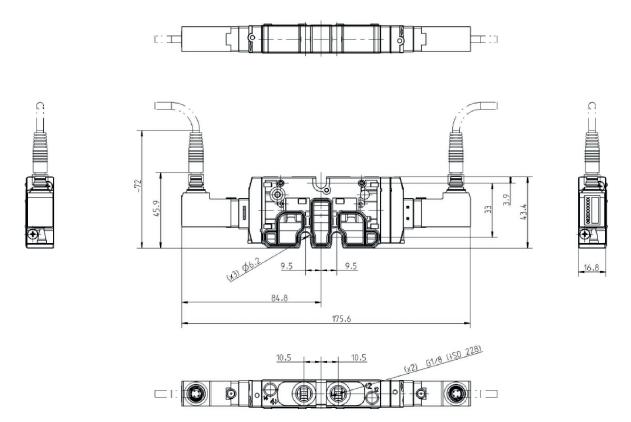
#### Technical information

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).

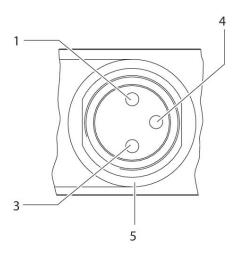


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# PIN assignment and cable colors for valve plug connectors



PIN assignment: 1) PIN not assigned 3) 0 V 4) 24 V 5) LED Cable color 1) Brown 3) Blue 4) Black

Note: Bi-polar protective circuit to prevent overvoltage