

# 2x3/2-directional valve, Series TC08, without detent

R422102089

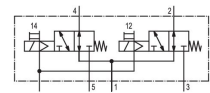
Series  
TC08

2024-08-06

- $Q_n = 600 \text{ l/min} \dots 800 \text{ l/min}$
- 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              | 2x 3/2 NO/NO, with spring return    |
| Valve function                   | NO/NO                               |
| Actuating control                | Double Solenoid                     |
| Sealing principle                | Soft seal                           |
| Connection type                  | Plate connection<br>Pipe connection |
| Manual override                  | without detent                      |
| Compressed air connection output | G 1/8                               |
| Nominal flow $Q_n$               | 600 l/min                           |
| Flow conductance b               | 0.27                                |
| Flow conductance C               | 2.8 l/(s*bar)                       |
| Min. working pressure            | -0.9 bar                            |
| Max. working pressure            | 10 bar                              |

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Min. control pressure 2.5 bar

Max. control pressure 10 bar

|                                       |                  |
|---------------------------------------|------------------|
| Electrical connection type            | Plug             |
| Electrical connection size            | M8               |
| Electrical connection number of poles | 4-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 Ω    |

|                      |       |
|----------------------|-------|
| Duty cycle           | 100 % |
| Typ. switch-on time  | 10 ms |
| Typ. switch-off time | 14 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               |
| Min. oil content of compressed air | 0 mg/m <sup>3</sup>          |
| Max. oil content of compressed air | 5 mg/m <sup>3</sup>          |
| Max. particle size                 | 5 µm                         |

|        |          |
|--------|----------|
| Weight | 0.167 kg |
|--------|----------|

## Material

|                  |                                  |
|------------------|----------------------------------|
| Housing material | Polyamide fiber-glass reinforced |
|------------------|----------------------------------|

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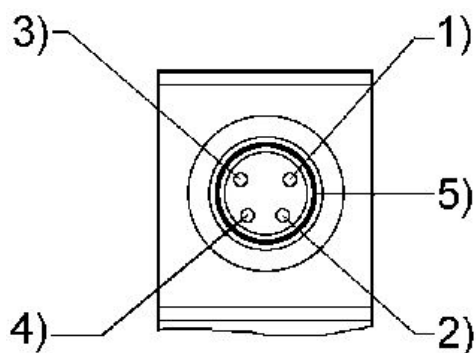
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PIN assignment and cable colors for  
valve plug connectors



PIN assignment: 1) PIN not assigned 2) PIN not assigned 3) 0 V 4) 24 V 5)  
LED Cable colors 1) Brown 2) White 3) Blue 4) Black