

# 5/2-directional valve, Series 740, single solenoid

Series 740

R432015592

2025-10-20

## AVENTICS Series 740 Directional valves

The AVENTICS Series 740/840 feature directional valves with soft, abrasion-free diaphragm technology. The simple, reliable and robust design is suitable for all air qualities and ensures high repeatability and unsurpassed service life. Due to its high resilience, the corrosion-resistant polyamide housing is also suited for dusty and damp environments.



## Technical data

|                                    |                                          |
|------------------------------------|------------------------------------------|
| Industry                           | Industrial                               |
| Activation                         | Electrically                             |
| Valve type                         | Diaphragm poppet valve                   |
| Switching principle                | 5/2, with air spring return              |
| Sealing principle                  | Soft seal                                |
| Connection type                    | Pipe connection                          |
| Manual override                    | with detent<br>without detent            |
| Compressed air connection type     | Internal thread<br>plug-in with tube nut |
| Compressed air connection input    | 3/8"                                     |
| Compressed air connection output   | 3/8"                                     |
| Compressed air connection, exhaust | M14x1                                    |
| Min. working pressure              | 2 bar                                    |
| Max. working pressure              | 10 bar                                   |

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|                                       |                                                |
|---------------------------------------|------------------------------------------------|
| Electrical connection type            | Plug                                           |
| Electrical connection size            | EN 175301-803, form B                          |
| Electrical connection number of poles | 3-pin                                          |
| Connector standard                    | EN 175301-803:2006                             |
| Protection class with connection      | IP65                                           |
| Reverse polarity protection           | Protected against polarity reversal            |
| Operational voltage                   | 12 V DC                                        |
| Operational voltage DC                | 12 V                                           |
| Voltage tolerance DC                  | -10 % / +10 %                                  |
| Pilot                                 | Internal                                       |
| Coil width                            | 30 mm                                          |
| Compatibility index                   | 52                                             |
| Power consumption DC                  | 2.7 W                                          |
| Duty cycle                            | 100 %                                          |
| Typ. switch-on time                   | 16 ms                                          |
| Typ. switch-off time                  | 36 ms                                          |
| Blocking principle                    | Plate principle<br>Single base plate principle |
| Can be assembled into blocks          | Can be assembled into blocks                   |
| Corrosion resistance                  | corrosion-protected                            |
| Valve plug connector                  | Without valve plug connector                   |
| Throttle                              | with throttle                                  |
| Min. ambient temperature              | -15 °C                                         |
| Max. ambient temperature              | 50 °C                                          |
| Min. medium temperature               | -15 °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                    | 50 µm                                          |
| Mounting on manifold strip            | PRS strip                                      |
| Weight                                | 0.326 kg                                       |

## Material

|                      |                                |
|----------------------|--------------------------------|
| Housing material     | Polyoxymethylene               |
| Seal material        | Acrylonitrile butadiene rubber |
| Material front plate | Polyarylamide                  |

|          |            |
|----------|------------|
| Part No. | R432015592 |
|----------|------------|

## Technical information

ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

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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## Dimensions in inches

