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 Activation Valve type Switching principle Actuating control Sealing principle Connection type Manual override

Compressed air connection input Compressed air connection output Compressed air connection, exhaust

Nominal flow Qn

Min. working pressure Max. working pressure

Electrical connection type

Industrial Electrically Diaphragm poppet valve 5/2, double solenoid Double Solenoid Soft seal Pipe connection with detent

5/16" (Ø 8) 5/16" (Ø 8) M14x1

700 l/min

1.5 bar 10 bar

Plug





5/2-directional valve, Series 740

R432030385

| Electrical connection size Connector standard Protection class with connection Reverse polarity protection Operational voltage Operational voltage DC Voltage tolerance DC | EN 175301-803, form A EN 175301-803:2006 IP65 Protected against polarity reversal 12 V DC 12 V -10% / +10% |
|--|---|
| Pilot | Internal |
| Coil width | 30 mm |
| Compatibility index | 13 |
| | 14 |
| Power consumption DC | 2.7 W |
| | |
| Duty cycle | 100 % |
| Typ. switch-on time | 40 ms |
| Placking principla | Single base plate principle |
| Blocking principle | Plate principle |
| Can be assembled into blocks | • |
| | Plate principle |
| Can be assembled into blocks | Plate principle Can be assembled into blocks |
| Can be assembled into blocks Valve plug connector | Plate principle Can be assembled into blocks Without valve plug connector |
| Can be assembled into blocks Valve plug connector Throttle | Plate principle Can be assembled into blocks Without valve plug connector with throttle |
| Can be assembled into blocks Valve plug connector Throttle Min. ambient temperature | Plate principle Can be assembled into blocks Without valve plug connector with throttle -15 °C |
| Can be assembled into blocks Valve plug connector Throttle Min. ambient temperature Max. ambient temperature | Plate principle Can be assembled into blocks Without valve plug connector with throttle -15 °C 50 °C |
| Can be assembled into blocks Valve plug connector Throttle Min. ambient temperature Max. ambient temperature Min. medium temperature | Plate principle Can be assembled into blocks Without valve plug connector with throttle -15 °C 50 °C -15 °C |
| Can be assembled into blocks Valve plug connector Throttle Min. ambient temperature Max. ambient temperature Min. medium temperature Max. medium temperature | Plate principle Can be assembled into blocks Without valve plug connector with throttle -15 °C 50 °C 50 °C |
| Can be assembled into blocks Valve plug connector Throttle Min. ambient temperature Max. ambient temperature Min. medium temperature Max. medium temperature Medium | Plate principle Can be assembled into blocks Without valve plug connector with throttle -15 °C 50 °C -15 °C 50 °C Compressed air |
| Can be assembled into blocks Valve plug connector Throttle Min. ambient temperature Max. ambient temperature Min. medium temperature Max. medium temperature Medium Min. oil content of compressed air | Plate principle Can be assembled into blocks Without valve plug connector with throttle -15 °C 50 °C -15 °C 50 °C Compressed air 0 mg/m ³ |
| Can be assembled into blocks Valve plug connector Throttle Min. ambient temperature Max. ambient temperature Min. medium temperature Max. medium temperature Medium Min. oil content of compressed air Max. oil content of compressed air | Plate principle Can be assembled into blocks Without valve plug connector with throttle -15 °C 50 °C -15 °C 50 °C Compressed air 0 mg/m ³ 5 mg/m ³ |
| Can be assembled into blocks Valve plug connector Throttle Min. ambient temperature Max. ambient temperature Min. medium temperature Max. medium temperature Medium Min. oil content of compressed air Max. oil content of compressed air Max. particle size | Plate principle Can be assembled into blocks Without valve plug connector with throttle -15 °C 50 °C -15 °C 50 °C Compressed air 0 mg/m ³ 5 mg/m ³ 50 μm |

Material

Housing material Seal material Part No. Polyoxymethylene Acrylonitrile butadiene rubber R432030385



2023-11-27

Technical information

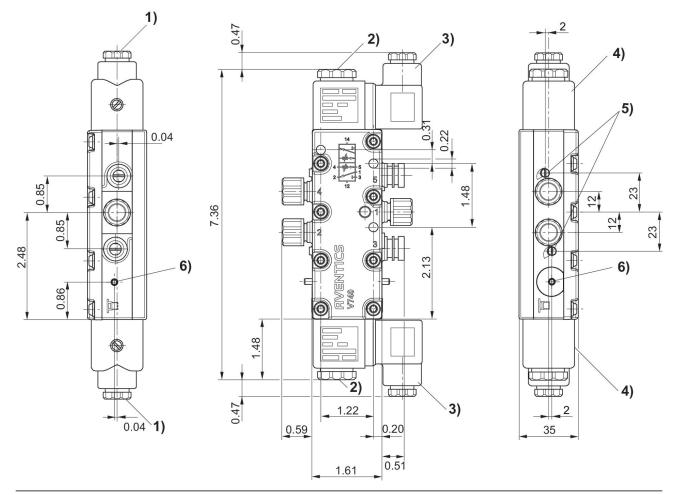
ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

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).



Dimensions in inches

1) Gland fitting M16x1.5

2) M5 internal thread accessible under cap

3) Valve plug connector can be rotated at 90° intervals

4) Coil can be plugged at 45° intervals

5) Flow control screw for exhausts 5 (R) and 3 (S)

6) Manual override and position indicator

