R432016671 2024-05-08

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

Note 4th switching position (coil a and b = actuated)

Valve type Diaphragm poppet valve

Switching principle 5/4, closed center **Closed Center** Valve function

Sealing principle Soft seal

Connection type Pipe connection Manual override without detent

Compressed air connection input 3/8" 3/8" Compressed air connection output Compressed air connection, exhaust M14x1

Nominal flow Qn 700 I/min

Min. working pressure 3 bar Max. working pressure 10 bar

5/4-directional valve, Series 740

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Electrical connection type Plug

Electrical connection size EN 175301-803, form A Connector standard EN 175301-803:2006

Protection class with connection IP65

Reverse polarity protection Protected against polarity reversal

Operational voltage 220 V AC Operational voltage AC at 50 Hz 220 V

Voltage tolerance AC 50 Hz -20% / +10%

Operational voltage AC at 60 Hz 220 V

Voltage tolerance AC 60 Hz -10% / +20%

Pilot Internal
Coil width 30 mm
Compatibility index 14
Holding power AC 50 Hz 3.7 VA
Switch-on power AC 50 Hz 6.4 VA

Duty cycle 100 %
Typ. switch-on time 20 ms
Typ. switch-off time 54 ms

Blocking principle Single base plate principle

Plate principle

Can be assembled into blocks

Valve plug connector

Can be assembled into blocks

Without valve plug connector

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^3 Max. oil content of compressed air 5 mg/m^3 Max. particle size $50 \text{ }\mu\text{m}$

Mounting on manifold strip PRS strip
Weight 0.551 kg

5/4-directional valve, Series 740

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Material

Housing material Polyoxymethylene

Seal material Acrylonitrile butadiene rubber

Part No. R432016671

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.

NOTE: In order to ensure the operating function of the valve, do not fall below the minimum operating pressure of 3 bar!

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

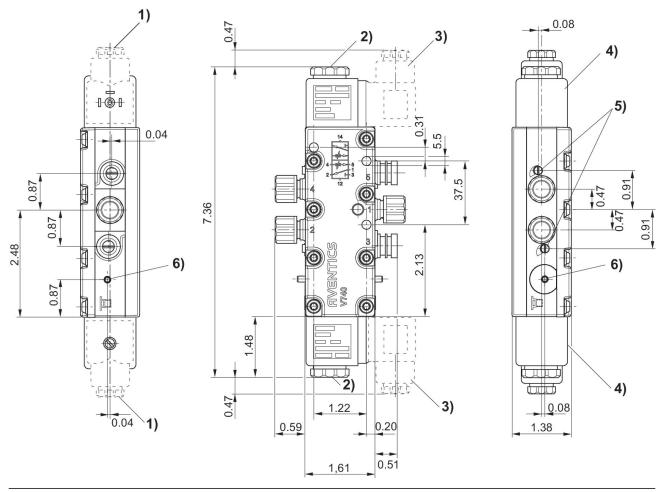
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

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



¹⁾ gland fitting M16x1,5 2) M5 internal thread accessible under cap 3) el. connector can be fixed at 90° intervals 4) coil can be mounted at 45° intervals 5) throttle screw for exhausts 5 (R) and 3 (S) 6) manual override and position indicator