R432038439 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 Valve function Closed Center

Actuating control Double Solenoid

Sealing principle Soft seal

Connection type Pipe connection
Manual override with detent

without detent

Compressed air connection input 3/8"

Compressed air connection output 3/8"

Compressed air connection, exhaust M14x1

Nominal flow Qn 700 l/min

Min. working pressure 1.5 bar

5/4-directional valve, Series 740-UL

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Max. working pressure 10 bar

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 24 V DC
Operational voltage DC 24 V

Voltage tolerance DC -10% / +10%

Pilot Internal
Coil width 30 mm
Compatibility index 14
Power consumption DC 2.7 W

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

Blocking principle Plate principle

Can be assembled into blocks

Valve plug connector

Single base plate principle
Can be assembled into blocks
Without valve plug connector

Throttle with throttle

Certificates UL (Underwriters Laboratories)

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/m³ Max. oil content of compressed air 5 mg/m³ Max. particle size 50 μ m

Mounting on manifold strip PRS strip Weight 0.501 kg

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Material

Housing material Polyoxymethylene

Seal material Acrylonitrile butadiene rubber

Part No. R432038439

Technical information

UL recognized solenoid coils with cURus mark

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

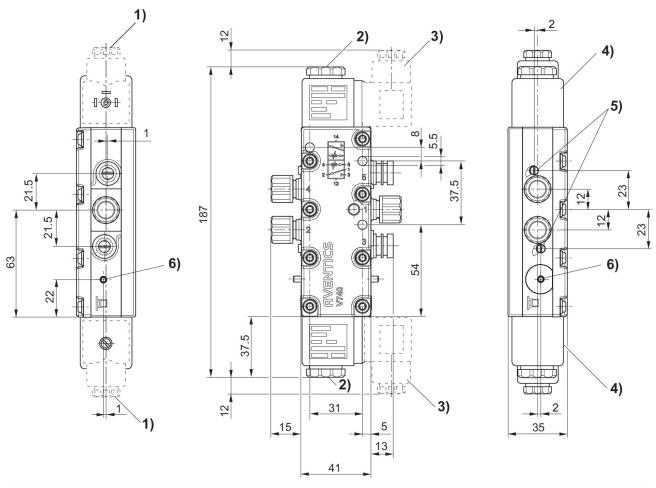
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

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



¹⁾ Gland fitting M16x1.5
2) M5 internal thread accessible under cap

³⁾ Valve plug connector can be rotated at 90° intervals (not included in scope of delivery) 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