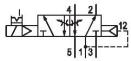
R432038419

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

Actuating control Single 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 Max. working pressure 10 bar

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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 110 V AC
Operational voltage AC at 50 Hz 110 V

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

Operational voltage AC at 60 Hz 110 V

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

Pilot Internal
Coil width 30 mm
Compatibility index 14
Holding power AC 50 Hz 4.8 VA
Holding power AC 60 Hz 3.6 VA
Switch-on power AC 50 Hz 8 VA
Switch-on power AC 60 Hz 6.5 VA

Duty cycle 100 %
Typ. switch-on time 17 ms
Typ. switch-off time 24 ms

Blocking principle Plate principle

Single base plate principle
Can be assembled into blocks
Can be assembled into blocks

Temperature resistance -25 °C cold-resistant

Valve plug connector Without valve plug connector

Throttle with throttle

Certificates UL (Underwriters Laboratories)

 $\begin{array}{lll} \mbox{Min. ambient temperature} & -25 \ ^{\circ}\mbox{C} \\ \mbox{Max. ambient temperature} & 50 \ ^{\circ}\mbox{C} \\ \mbox{Min. medium temperature} & -25 \ ^{\circ}\mbox{C} \\ \mbox{Max. medium temperature} & 50 \ ^{\circ}\mbox{C} \\ \end{array}$

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

5/2-directional valve, Series 740-UL

2023-11-27

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Weight 0.317 kg

Material

Housing material Polyoxymethylene

Seal material Acrylonitrile butadiene rubber

Part No. R432038419

Technical information

UL recognized solenoid coils with cURus mark

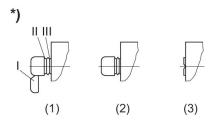
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

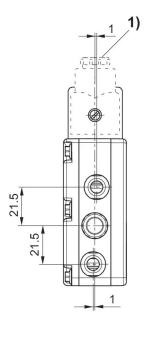
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

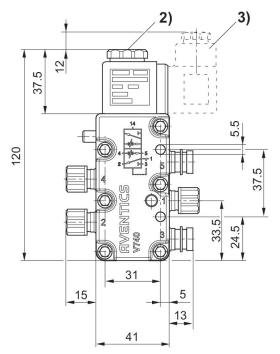
The oil content of compressed air must remain constant during the life cycle.

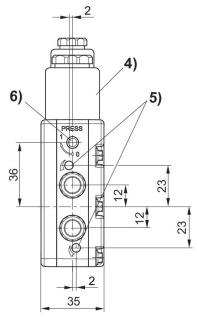
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

Dimensions









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)

Manual actuation: (1) with detent - push and turn into position 1 (2) without detent - remove segment I - push only

Actuation with tool: (3) with detent - remove segments up to II - push with tool and turn into position 1

¹⁾ Gland fitting M16x1.5

²⁾ M5 internal thread accessible under cap

⁶⁾ Manual override and position indicator
*): Manual override: