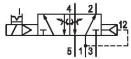
5727450420

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 ATEX optional

Valve type Diaphragm poppet valve Switching principle 5/2, with air spring return

Sealing principle Soft seal

Connection type Pipe connection

Manual override without detent

with detent

Compressed air connection input Ø 10x1
Compressed air connection output Ø 10x1
Compressed air connection, exhaust M14x1

Nominal flow Qn 950 I/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 24 V DC Operational voltage DC 24 V

Voltage tolerance DC -10% / +10%

Pilot Internal
Coil width 30 mm
Compatibility index 13
14

Power consumption DC 2.1 W

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

Blocking principle Single base plate principle

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
Min. ambient temperature -25 °C

Max. ambient temperature 50 °C

Min. medium temperature -25 °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 0.318 kg

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Material

Housing material Polyarylamide

Polyoxymethylene

Seal material Acrylonitrile butadiene rubber

Part No. 5727450420

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.

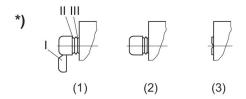
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

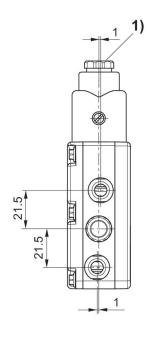
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

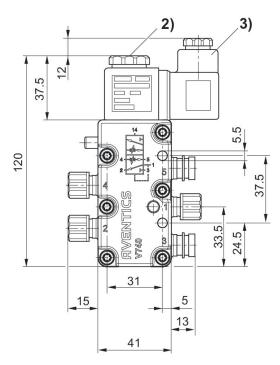
The oil content of compressed air must remain constant during the life cycle.

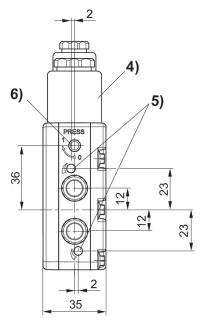
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

Dimensions









*): Manual override:

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

²⁾ Wis 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