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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 Note 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

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

Ø 8x1 Ø 8x1 M14x1

700 l/min

1.5 bar 10 bar



5/2-directional valve, Series 740

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Electrical connection type Electrical connection size Connector standard Protection class with connection Reverse polarity protection Operational voltage Operational voltage AC at 50 Hz Voltage tolerance AC 50 Hz Voltage tolerance AC 60 Hz	Plug EN 175301-803, form A EN 175301-803:2006 IP65 Protected against polarity reversal 230 V AC 230 V -20% / +10% 230 V -10% / +20%
Pilot	Internal
Coil width	30mm
Compatibility index	14
Power consumption DC	2.1 W
Holding power AC 50 Hz	4.18 VA
Holding power AC 60 Hz	3.3 VA
Switch-on power AC 50 Hz	6.6 VA
Switch-on power AC 60 Hz	5.5 VA
Duty cycle	100 %
Typ. switch-on time	40 ms
Blocking principle	Plate principle Single base plate principle
Can be assembled into blocks	Can be assembled into blocks
Valve plug connector	Without valve plug connector
Throttle	with throttle
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 μm
Mounting on manifold strip	PRS strip
Weight	0.53 kg



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Material

Housing material Seal material Part No. Polyoxymethylene Acrylonitrile butadiene rubber 5727415480

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.

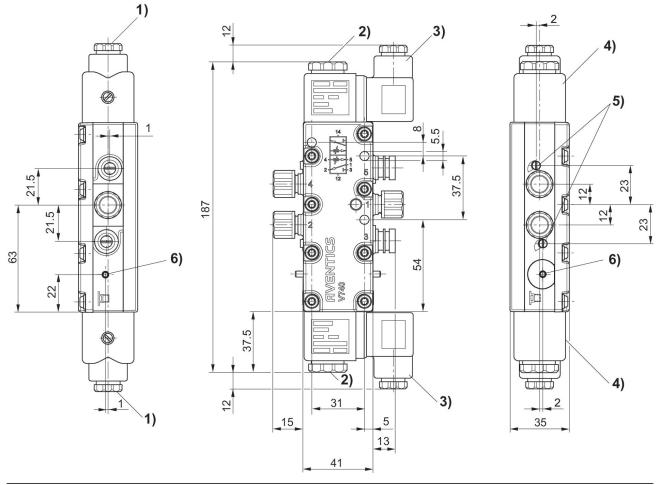
The oil content of compressed air must remain constant during the life cycle.

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).



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Dimensions



Gland fitting M16x1.5
M5 internal thread accessible under cap
Valve plug connector can be rotated at 90° intervals
Coil can be plugged at 45° intervals

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

6) Manual override and position indicator

