#### 2023-11-27

### **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 Sealing principle Connection type Manual override

Industrial Electrically ATEX optional Diaphragm poppet valve 5/2, with air spring return Soft seal Pipe connection without detent with detent

Compressed air connection input Compressed air connection output Compressed air connection, exhaust

Nominal flow Qn

Min. working pressure Max. working pressure 950 l/min

Ø 10x1

Ø 10x1

M14x1

1.5 bar 10 bar



5727450220

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 Coil width Compatibility index Power consumption DC	Internal 30 mm 14 14 2.1 W
Duty cycle	100 %
Typ. switch-on time	17 ms
Typ. switch-off time	24 ms
Blocking principle Can be assembled into blocks Temperature resistance Valve plug connector Throttle Min. ambient temperature Max. ambient temperature Min. medium temperature Max. medium temperature Medium Min. oil content of compressed air Max. oil content of compressed air Max. particle size	Single base plate principle Plate principle Can be assembled into blocks -25 °C cold-resistant With valve plug connector with throttle -25 °C 50 °C -25 °C 50 °C Compressed air 0 mg/m <sup>3</sup> 5 mg/m <sup>3</sup> 50 µm
Mounting on manifold strip	PRS strip
Weight	0.341 kg



## Material

Housing material

Seal material Part No. Polyarylamide Polyoxymethylene Acrylonitrile butadiene rubber 5727450220

## **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.

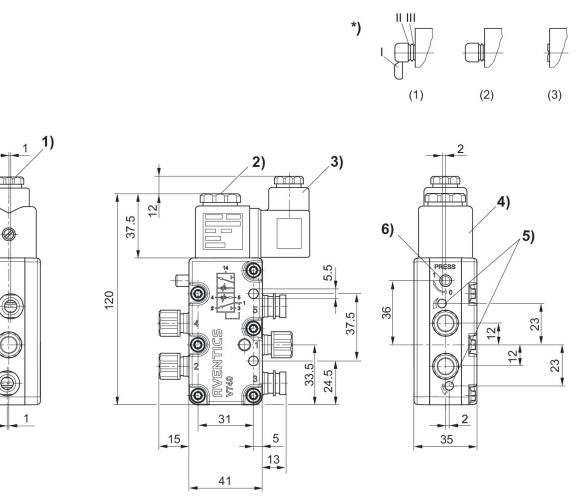
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).



# 5/2-directional valve, Series 740

5727450220

## Dimensions



21.5

21.5

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

- Was internal thread accessible under cap
  Valve plug connector can be rotated at 90° intervals
  Coil can be plugged at 45° intervals
  Flow control screw for exhausts 5 (R) and 3 (S)
  Manual override and position indicator

\*): 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

