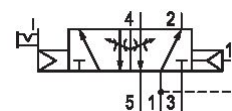


## AVENTICS Series 740 Directional valves

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
Basic valve equipment	Basic valve without coil
Switching principle	5/2, with air spring return
Actuating control	Single Solenoid
Sealing principle	Soft seal
Connection type	Pipe connection
Manual override	with detent
Compressed air connection input	Ø 8x1
Compressed air connection output	Ø 8x1
Compressed air connection, exhaust	M14x1
Nominal flow Qn	700 l/min
Min. working pressure	1.5 bar
Max. working pressure	10 bar

# 5/2-directional valve, Series 740-BV

2023-11-27

R412009690

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Protection class with connection	IP65
Pilot	Internal
Coil width	30 mm
Compatibility index	14
Duty cycle	100 %
Typ. switch-on time	16 ms
Typ. switch-off time	35 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
Throttle	with throttle
ATEX	ATEX optional
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 <sup>3</sup>
Max. oil content of compressed air	5 mg/m <sup>3</sup>
Max. particle size	50 µm
Weight	0.221 kg

## Material

Housing material	Polyoxymethylene
Seal material	Acrylonitrile butadiene rubber
Material front plate	Polyamide
Part No.	R412009690

# 5/2-directional valve, Series 740-BV

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## Technical information

Nominal flow  $Q_n$  at 6 bar and  $\Delta p = 1$  bar

Basic valve without coil

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.

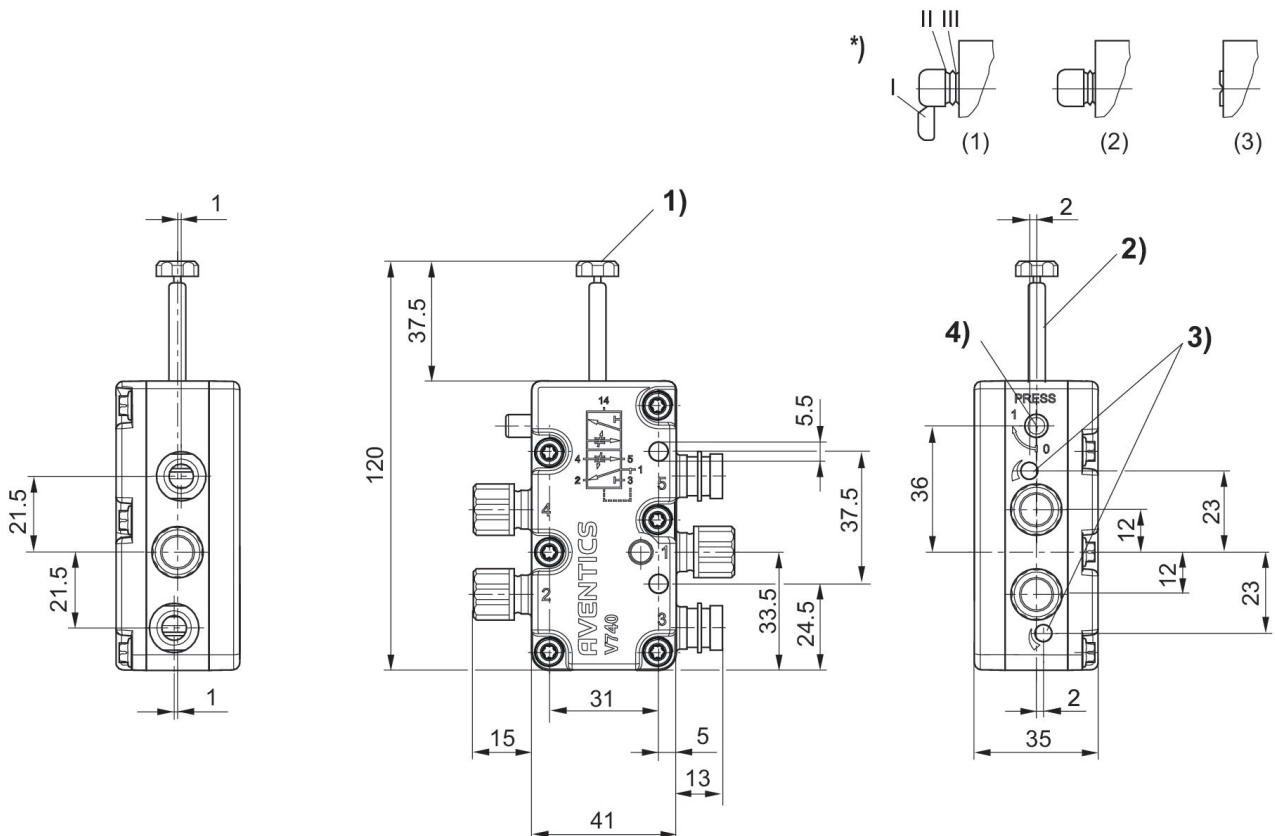
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

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 in mm



1) M 5 internal thread 2) coil can be plugged at 45° intervals 3) throttle screw for exhausts 5 (R) and 3 (S) (S) 4) manual override and position indicator \*) : manual override: manual actuation: (1) with detent - push and turn into position 1 (2) without detent - remove segment 1 - push only actuation by tool: (3) with detent - remove segments up to III - push with tool and turn into position 1