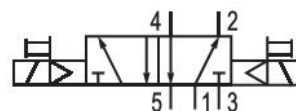


AVENTICS Series ES05 Directional valves

The AVENTICS Series ES05 is ideal for standard pneumatic applications. Its simplicity and modularity make it especially well-suited for applications that require quick changes or extensions. Due to its modular system consisting of a limited number of components and the one-tool concept, the ES05 is also easy to assemble in-house.



Technical data

Industry	Industrial
Activation	Electrically
Switching principle	5/2, double solenoid
Actuating control	Double Solenoid
Manual override	without detent

Compressed air connection input	Ø 8
Compressed air connection output	Ø 8
Compressed air connection, exhaust	Ø 8

Nominal flow Qn 610 l/min

Min. working pressure	3 bar
Max. working pressure	8 bar

Electrical connection size	M8x1
Electrical connection number of poles	3-pin
Protection class with connection	IP65
Operational voltage	24 V DC
Operational voltage DC	24 V
Voltage tolerance DC	-15% / +10%

Power consumption DC 2 W

Duty cycle	100 %
Switch-on time	<20
Switch-off time	<20

Min. ambient temperature	5 °C
Max. ambient temperature	50 °C

5/2-directional valve, Series ES05

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Min. medium temperature	5 °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	40 µm

Material

Housing material	Polyamide fiber-glass reinforced
Seal material	Acrylonitrile butadiene rubber
Part No.	R422103856

Technical information

Exhaust air throttling may only be used in operating lines

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>).

Fig. 1

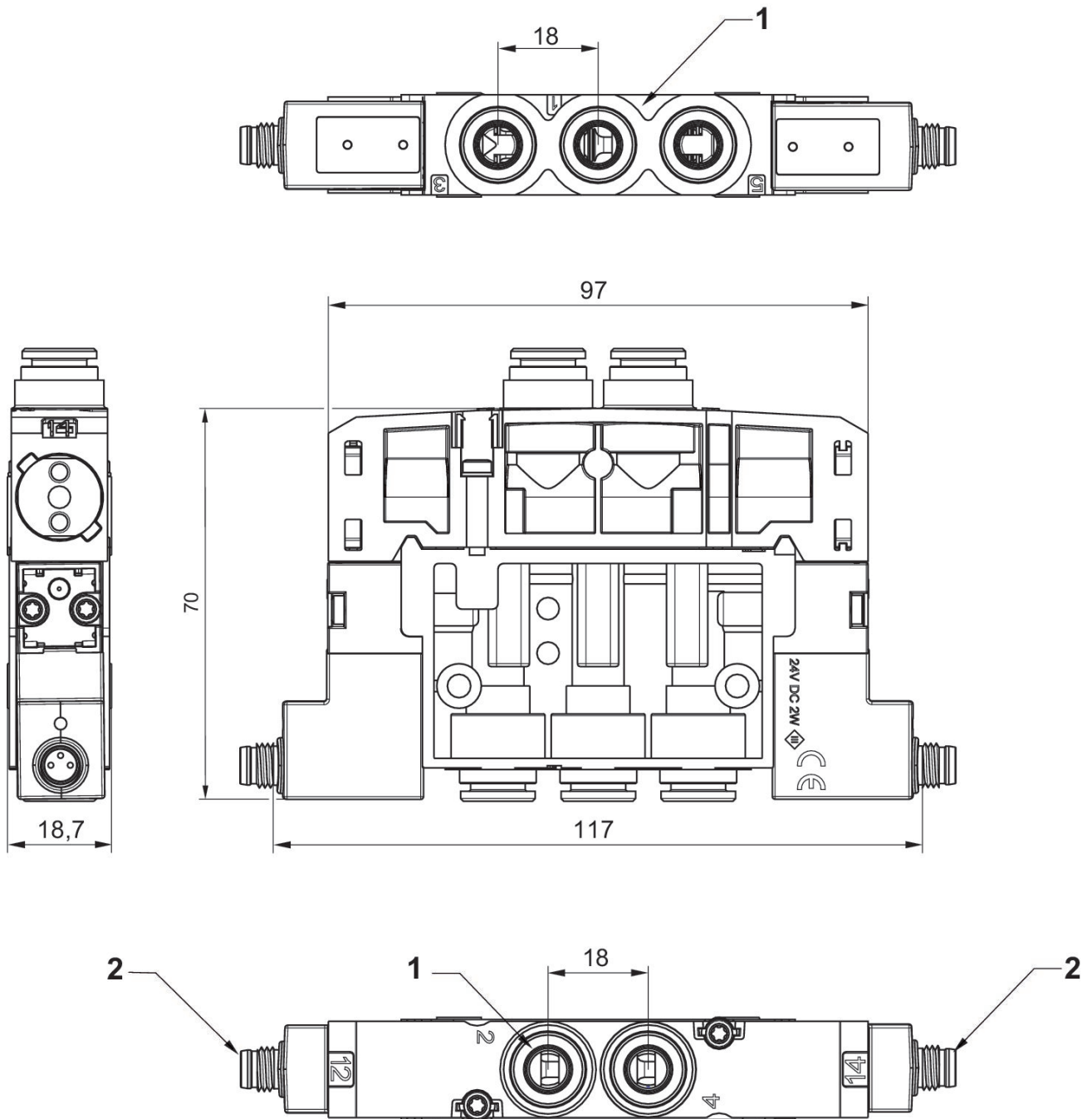
Single Solenoid

5/2-directional valve, Series ES05

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Double Solenoid



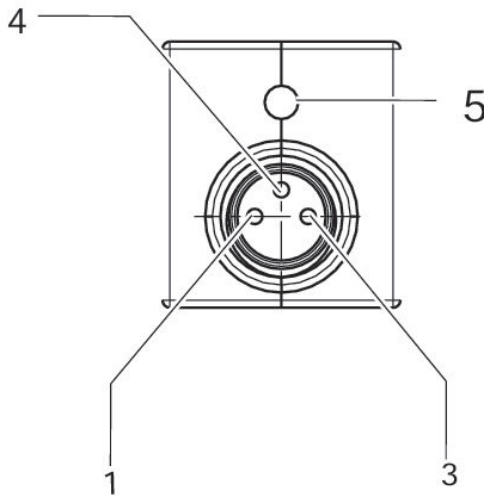
- 1) Connections [1 ,3 ,5, 2, 4] Ø 8
- 2) 1 pilot valve with electrical connection M8x1
- 3) Pilot blanking plate

5/2-directional valve, Series ES05

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PIN assignment for valve plug connectors



Pin assignment (1) Pin not assigned (3) 0 V (4) 24 V (5) LED Note: Bipolar protective circuit to prevent overvoltage