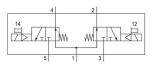
## AVENTICS Series ES05 Directional valves

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 onetool concept, the ES05 is also easy to assemble in-house.





Technical data Industry Activation Switching principle Valve function Actuating control Manual override	Industrial Electrically 2x 3/2 NO/NO, with spring return NO/NO Single Solenoid without detent
Compressed air connection input Compressed air connection output Compressed air connection, exhaust	Ø 8 Ø 8 Ø 8
Nominal flow Qn	370 l/min
Min. working pressure	3 bar
Max. working pressure	8 bar
Electrical connection size	form C, industry
Protection class with connection	IP65
Operational voltage	24 V DC



#### 2x3/2-directional valve, Series ES05

R422103178

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
Certificates	UR (Underwriters Laboratories)
Min. ambient temperature	5 °C
Max. ambient temperature	50 °C
Min. medium temperature	5 °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	40 μm

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Housing material	Polyamide fiber-glass reinforced
Part No.	R422103178

#### **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).

The pilot valve is UL (Underwriters Laboratories) certified.

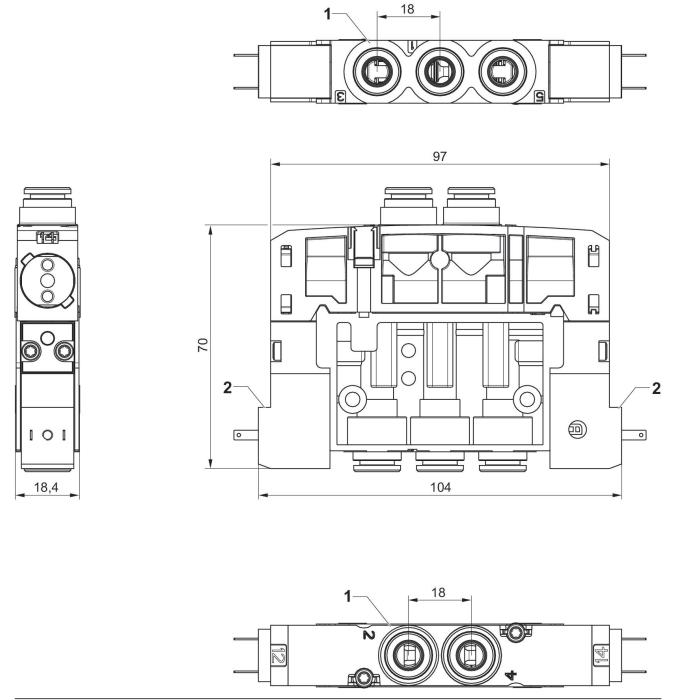
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**EMERSON** 

## 2x3/2-directional valve, Series ES05

R422103178

#### Dimensions



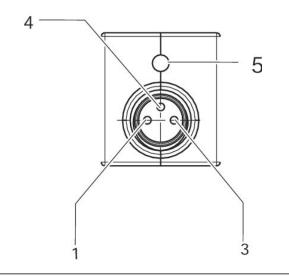
- 1) Connections [1,3,5,2,4] Ø 8 2) 2 pilot valves with external electrical connection



### 2x3/2-directional valve, Series ES05

R422103178

# 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



