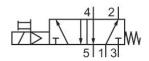
R422103175

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 Single 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 I/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
Operational voltage DC 24 V



5/2-directional valve, Series ES05

2024-04-02

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Voltage tolerance DC -15% / +10%

Power consumption DC 2 W

Duty cycle 100 %
Switch-on time <20
Switch-off time <35

Certificates UR (Underwriters Laboratories)

Min. ambient temperature5 °CMax. ambient temperature50 °CMin. medium temperature5 °CMax. medium temperature50 °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 40 µm

Material

Housing material Polyamide fiber-glass reinforced Seal material Acrylonitrile butadiene rubber

Part No. R422103175

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.

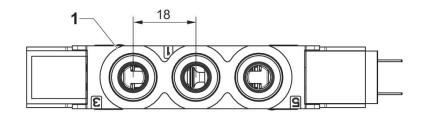
The oil content of compressed air must remain constant during the life cycle.

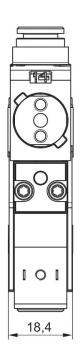
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

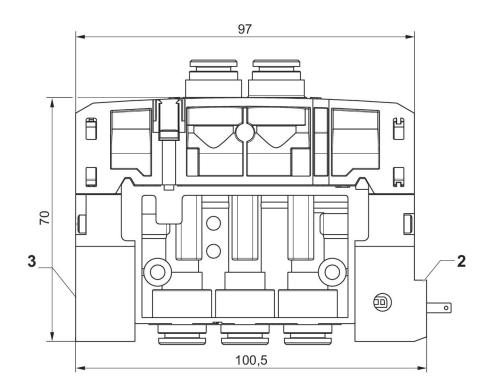
The pilot valve is UL (Underwriters Laboratories) certified.

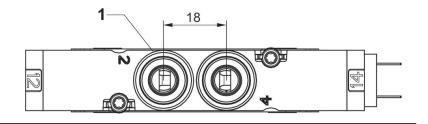
Dimensions

Single Solenoid





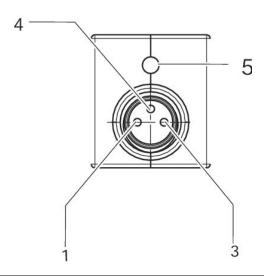




¹⁾ Connections [1,3,5,2,4] Ø 8 2) 1 pilot valve with electrical connection 3) Pilot blanking plate

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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