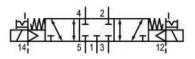
AVENTICS Series CL03-EV Directional valves

The AVENTICS Series CL03-EV spool valves are hygienically designed. They easily resist wet cleaning with aggressive cleaning detergents. The Series complies with protection class IP69K, is suitable for class NSF-H1 lubricants and designed for intensive application in the food and beverage industry.





Technical data

Industry Industrial Activation Electrically

Valve type Spool valve, positive overlapping

Switching principle 5/3, closed center Valve function Closed Center Sealing principle Soft seal

Connection type Plate connection

Manual override with detent

Compressed air connection input G 1/8
Compressed air connection output G 1/8
Compressed air connection, exhaust G 1/8

Pilot control exhaust With collective pilot air exhaust

Compressed air connection pilot input M5
Compressed air connection pilot exhaust M5

Nominal flow Qn 700 l/min Flow conductance b 0.39

Flow conductance C 2.5 l/(s*bar)

Min. working pressure -0.9 bar
Max. working pressure 10 bar
Min. control pressure 3 bar
Max. control pressure 10 bar

Protection class with connection IP65

IP67 IP69K

Protective circuit Z-diode

Reverse polarity protection Protected against polarity reversal

Operational voltage 24 V DC
Operational voltage DC 24 V

Voltage tolerance DC -15% / +20%

Pilot External
Pilot valve width 16 mm
LED status display Yellow
Power consumption DC 0.35 W

Duty cycle 100 %
Typ. switch-on time 14 ms
Typ. switch-off time 15 ms

Blocking principle Single base plate principle

suitable for use in food processing

Certificates

suitable for use in food processing

UR (Underwriters Laboratories)

Min. ambient temperature0 °CMax. ambient temperature50 °CMin. medium temperature0 °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 5 μ m

Mounting screwsM5Mounting screw tightening torque2 NmTightening torque tolerance±0,2 mTWeight0.165 kg

Material

Housing material Polyamide fiber-glass reinforced
Seal material Acrylonitrile butadiene rubber
Part No. R412017955

Technical information

For series QR2 fittings, see "Pneumatic connection technologies".

The inner valve can be replaced by all series CL03 valves described under "Valve systems".

The pilot valve is UL (Underwriters Laboratories) certified.

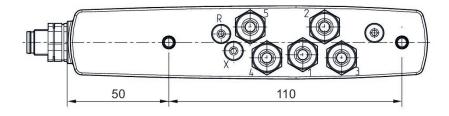
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

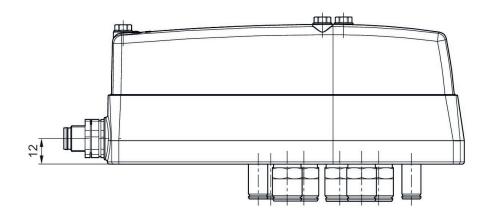
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

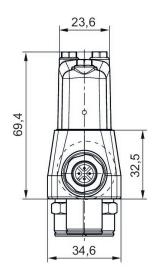
The oil content of compressed air must remain constant during the life cycle.

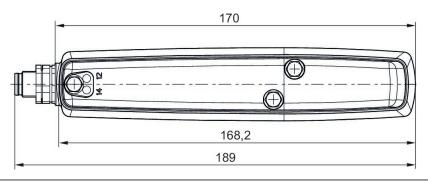
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

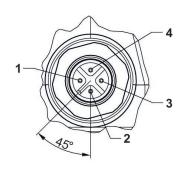
Dimensions











Electrical connection:
1) Not connected 2) Solenoid 12 3) 0 V 4) Solenoid 14