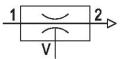
compact ejector, Series ECD-IV R412010614 2024-05-28

### Serie ECD-IV

The AVENTICS Series ECD is an all-inclusive solution that combines vacuum generators, pilot valves, filters, silencers and pressure switches. Simplify installation and optimize your energy footprint by opting for the air economizer function, and increase your degree of status monitoring with the condition monitoring function.





### Technical data

Industry Industrial Activation Electrically

Note IO-Link (function) NC (break contact) Switching logic

with silencer with silencer

Nozzle Ø 1 mm

electronic vacuum switch

Accessories with non-return valve

Min. working pressure 2 bar Max. working pressure 6 bar 4 bar Working pressure p.opt. 0°C Min. ambient temperature 50 °C Max. ambient temperature 0°C Min. medium temperature 50 °C Max. medium temperature

Medium Compressed air

0 mg/m<sup>3</sup> Min. oil content of compressed air Max. oil content of compressed air 1 mg/m<sup>3</sup> Max. particle size 5 µm

# compact ejector, Series ECD-IV

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**IP65** 

Max. suction capacity

Air consumption at p.opt.

Max. vacuum level at p.opt

Sound pressure level intake effect

Sound pressure level intake effect

Frotection against overpressure (max.)

35.4 l/min

46.2 l/min

81.5 %

63 dB

76 dB

release valve release valve

Protection class according to EN 60529:2000,

without electrical connector

Duty cycle according to DIN VDE 0580 standard 100 % Operational voltage DC 24 V

Hysteresis adjustable

Repeatability (% of full scale value) ± 1 %

Voltage tolerance DC -20 % / +10 %

Switch output current 180 mA
Power consumption solenoid valve 1.3 W
Weight 0.195 kg
Housing material Polyamide

Seal material Acrylonitrile butadiene rubber

Nozzle material Brass

Silencer material Polyethylene Part No. R412010614

### Technical information

Note: All data refers to an ambient pressure of [[1,013] bar] and an ambient temperature of [[20]°C].

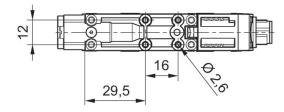
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

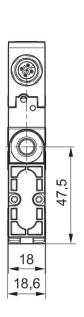
The oil content of compressed air must remain constant during the life cycle.

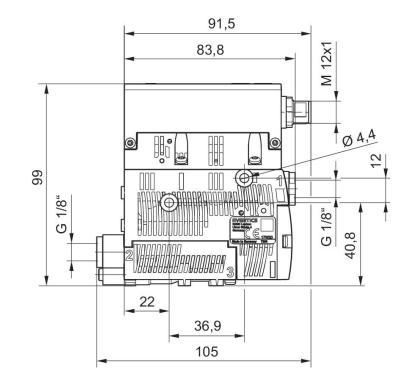
The IO-Link device description (IODD) for the ECD compact ejector is available for download in the Media Center.

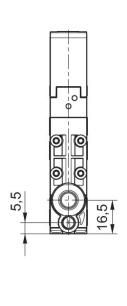
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### **Dimensions**

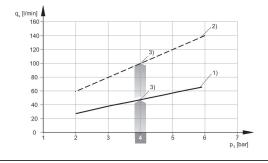






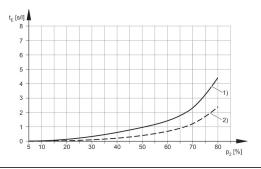


# Air consumption qv depending on working pressure p1



1) Ø nozzle [[1.0] mm]

Evacuation time tE depending on vacuum p2 for 1 I volume (with optimal operating pressure p1opt)



1) Ø nozzle [[1.0] mm]

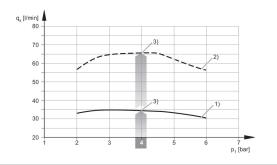
<sup>2)</sup> Ø nozzle [[1.5] mm] 3) optimum working pressure

<sup>2)</sup> Ø nozzle [[1.5] mm]

# compact ejector, Series ECD-IV

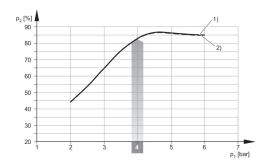
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# Suction capacity qs depending on working pressure p1



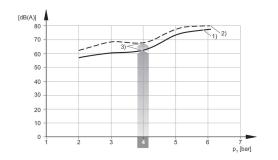
- 1) Ø nozzle [[1.0] mm]
- 2) Ø nozzle [[1.5] mm]
- 3) optimum working pressure

# Vacuum p2 depending on working pressure p1



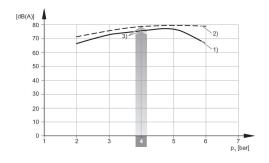
- 1) Ø nozzle [[1.0] mm] 2) Ø nozzle [[1.5] mm]

## Noise level, suctioned



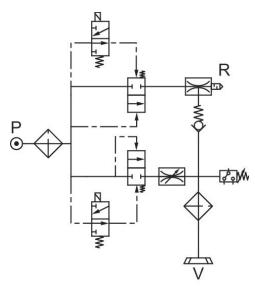
- 1) Ø nozzle [[1.0] mm]
- 2) Ø nozzle [[1.5] mm]
- 3) optimum working pressure

# Noise level at free suctioning



- 1) Ø nozzle [[1.0] mm]
- 2) Ø nozzle [[1.5] mm]
- 3) optimum working pressure

# Circuit diagram ECD-IV-...NC



# Circuit diagram ECD-IV-...NO

