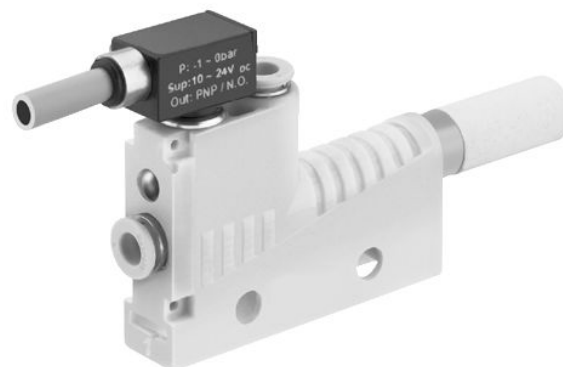


Ejector, Series EBS

R412007457

Series EBS



Technical data

Industry

Industrial

Type

Ejector

Version

pneumatic control, T-design

with silencer

with silencer

Nozzle Ø

1 mm

vacuum switch

electronic, non-adjustable

Working pressure min.

3 bar

Working pressure max

6 bar

Min. ambient temperature

0 °C

Max. ambient temperature

50 °C

Min. medium temperature

0 °C

Max. medium temperature

50 °C

Medium

Compressed air

Oil content of compressed air min.

0 mg/m³

Oil content of compressed air max.

1 mg/m³

Max. particle size

5 µm

Compressed air connection

Ø 6

Vacuum connection+

Ø 8

Max. suction capacity

38 l/min

Air consumption at p.opt.

48 l/min

Max. vacuum level at p.opt

85 %

Sound pressure level intake effect

59 dB

Sound pressure level intake effect

65 dB

Protection against overpressure (max.)

5 bar

Display

LED

Protection class

IP40

DC operating voltage

24 V

Hysteresis

< [[0,02] bar]

Repeatability (% of full scale value)
± 1 %

Voltage tolerance DC
-20% / +10%

Switch output current
60 mA

Local power consumption
<15 mA

Switching point
-0.6 bar

Weight
0.1 kg

Housing material
Polyamide fiber-glass reinforced

Seal material
Acrylonitrile butadiene rubber

Nozzle material
Aluminum

Material release ring
Polyamide

Silencer material
Polyethylene

Part No.
R412007457

Technical information

Note: All data refers to an ambient pressure of $[[1,013]]$ bar] and an ambient temperature of $[[20]]^{\circ}\text{C}$.

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

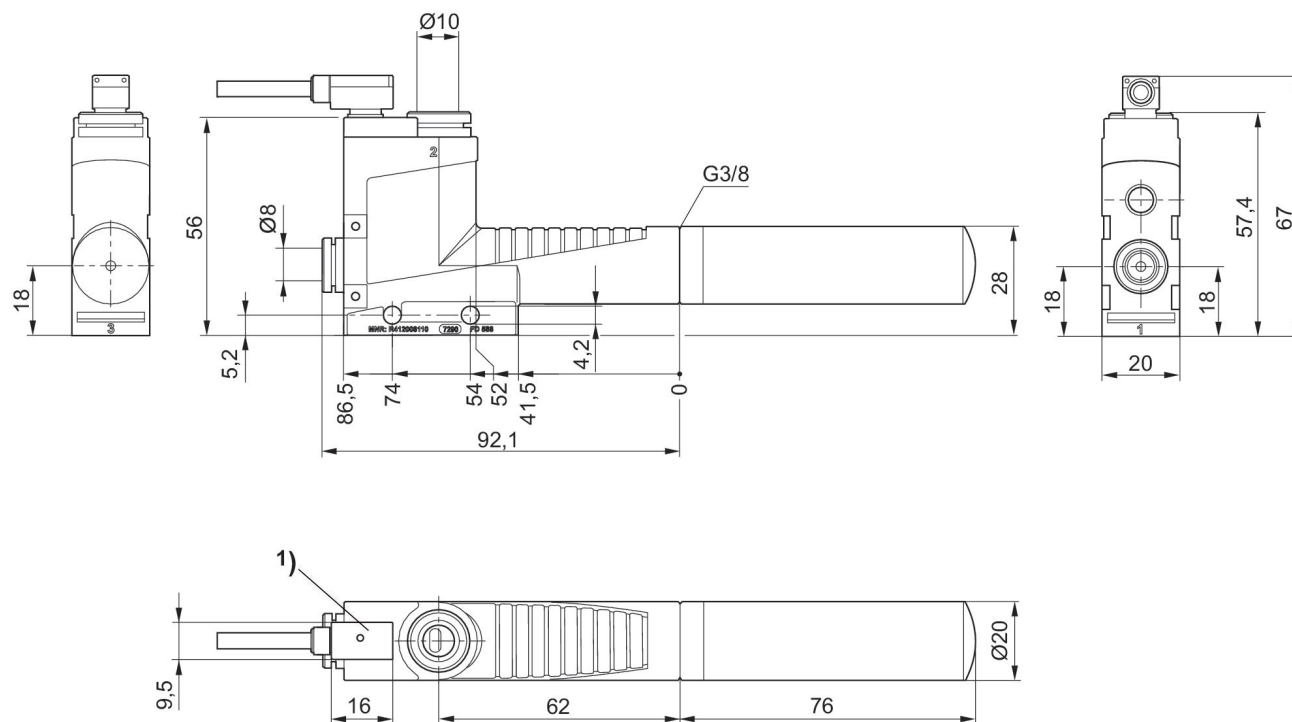
The pressure dew point must be at least 15°C under ambient and medium temperature and may not exceed 3°C .

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. 3

R412007459



1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded

Fig. 2
R412007457

R412007458

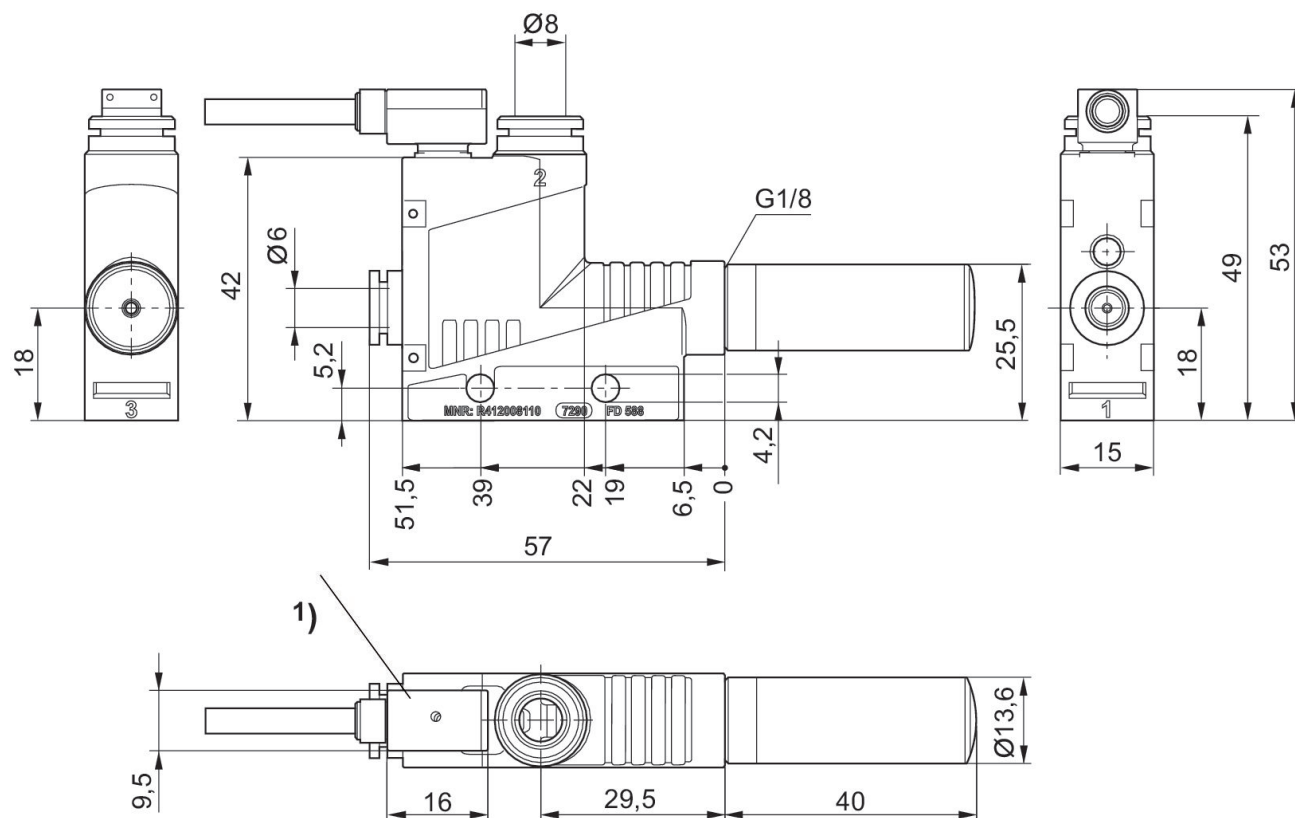
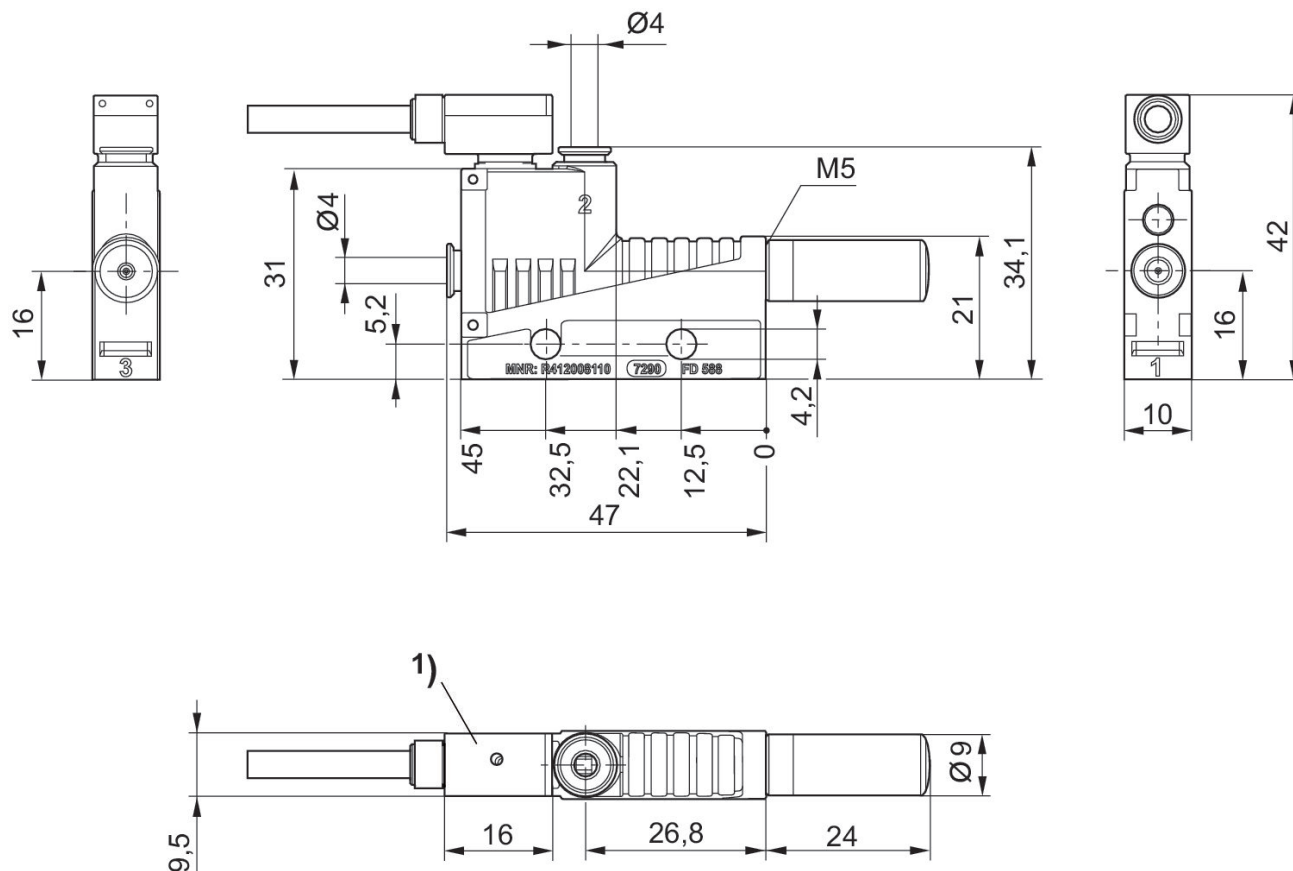
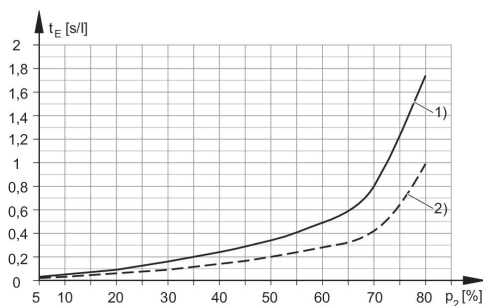


Fig. 1
R412007455

R412007456

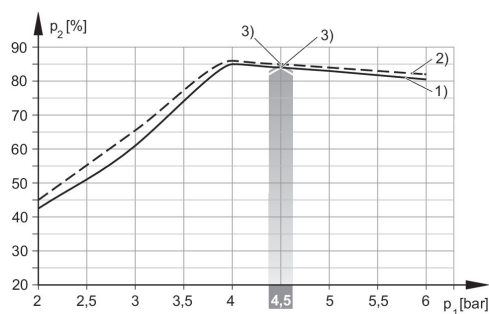


1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded

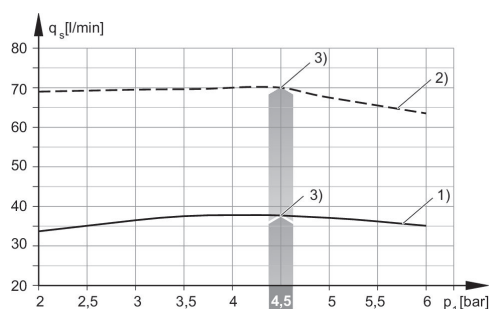


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

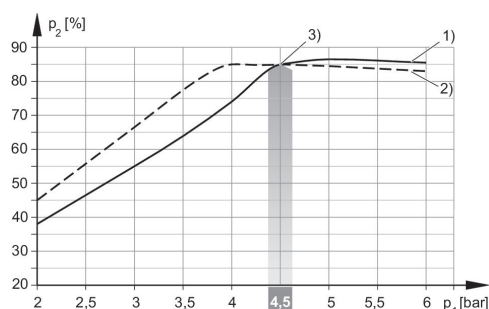
Vacuum p₂ depending on working pressure p₁



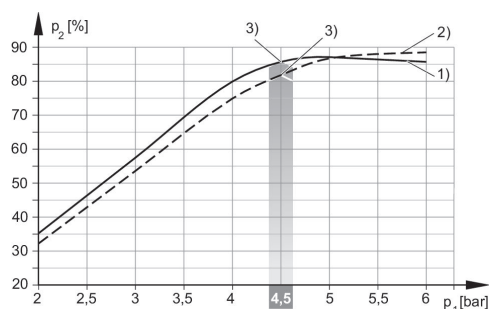
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

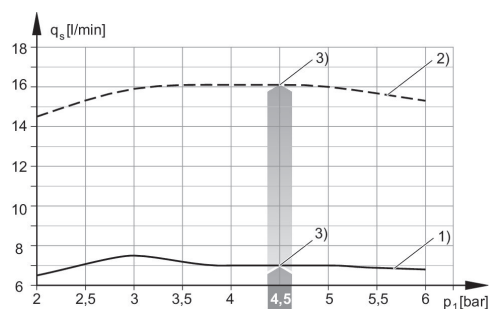


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

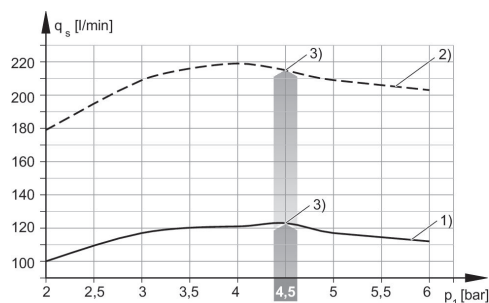


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Suction capacity q_s depending on working pressure p_1

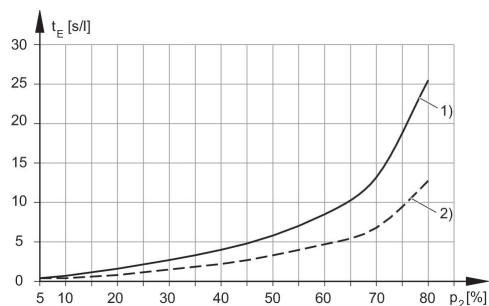


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

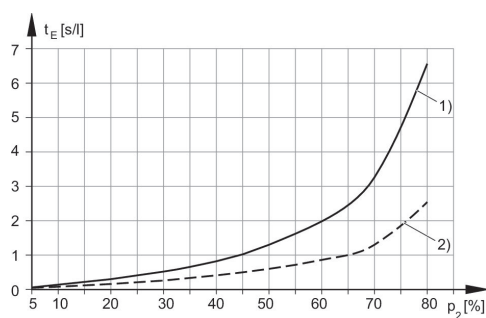


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Evacuation time t_E depending on vacuum p_2 for 1 l volume (with optimal operating pressure p_{1opt})

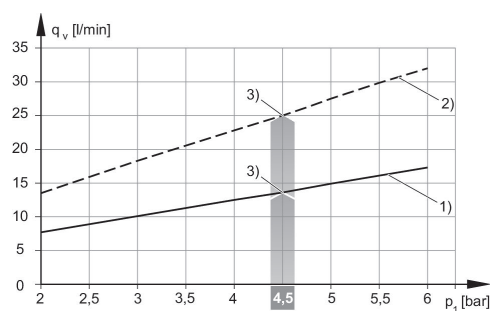


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm

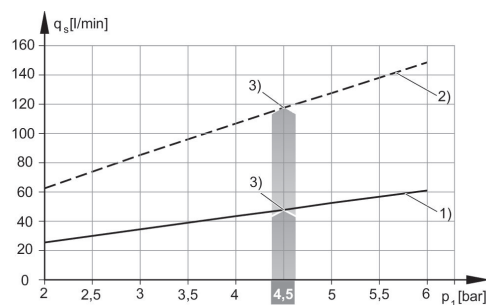


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm

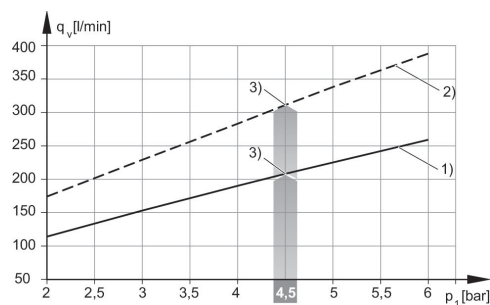
Air consumption q_v depending on working pressure p_1



1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure



1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure