

Ejector, Series EBS

R412007479

Series EBS



Technical data

Industry
Industrial

Type
Ejector

Version
pneumatic control, T-design

with silencer
with silencer

Nozzle Ø
0.5 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
M5

Vacuum connection+
M5

Max. suction capacity
7 l/min

Air consumption at p.opt.
14 l/min

Max. vacuum level at p.opt
84 %

Sound pressure level intake effect
53 dB

Sound pressure level intake effect
58 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)
 $\pm 1\%$

Voltage tolerance DC
-20% / +10%

Switch output current
60 mA

Local power consumption
<15 mA

Switching point
-0.6 bar

Weight
0.086 kg

Housing material
Polyamide fiber-glass reinforced

Seal material

Acrylonitrile butadiene rubber

Nozzle material

Aluminum

Material threaded bushing

Aluminum

Surface threaded bushing
anodized

Silencer material

Polyethylene

Part No.

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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 .

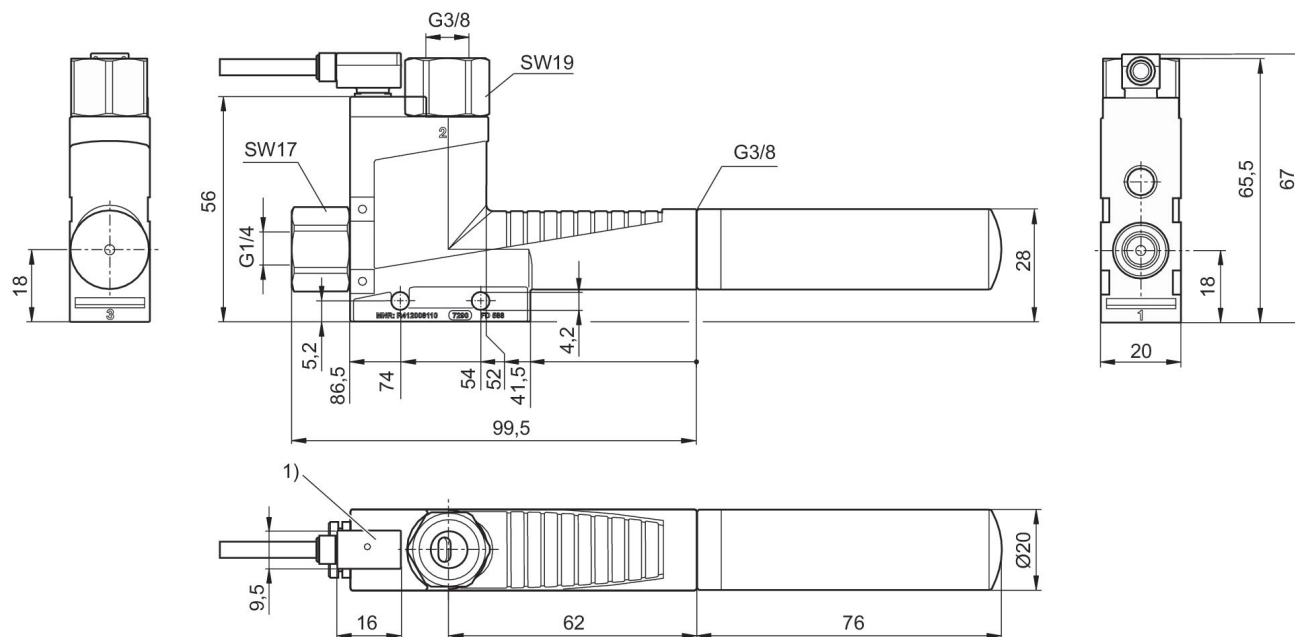
The pressure dew point must be at least 15°C under ambient and medium temperature and may not exceed 3°C .

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

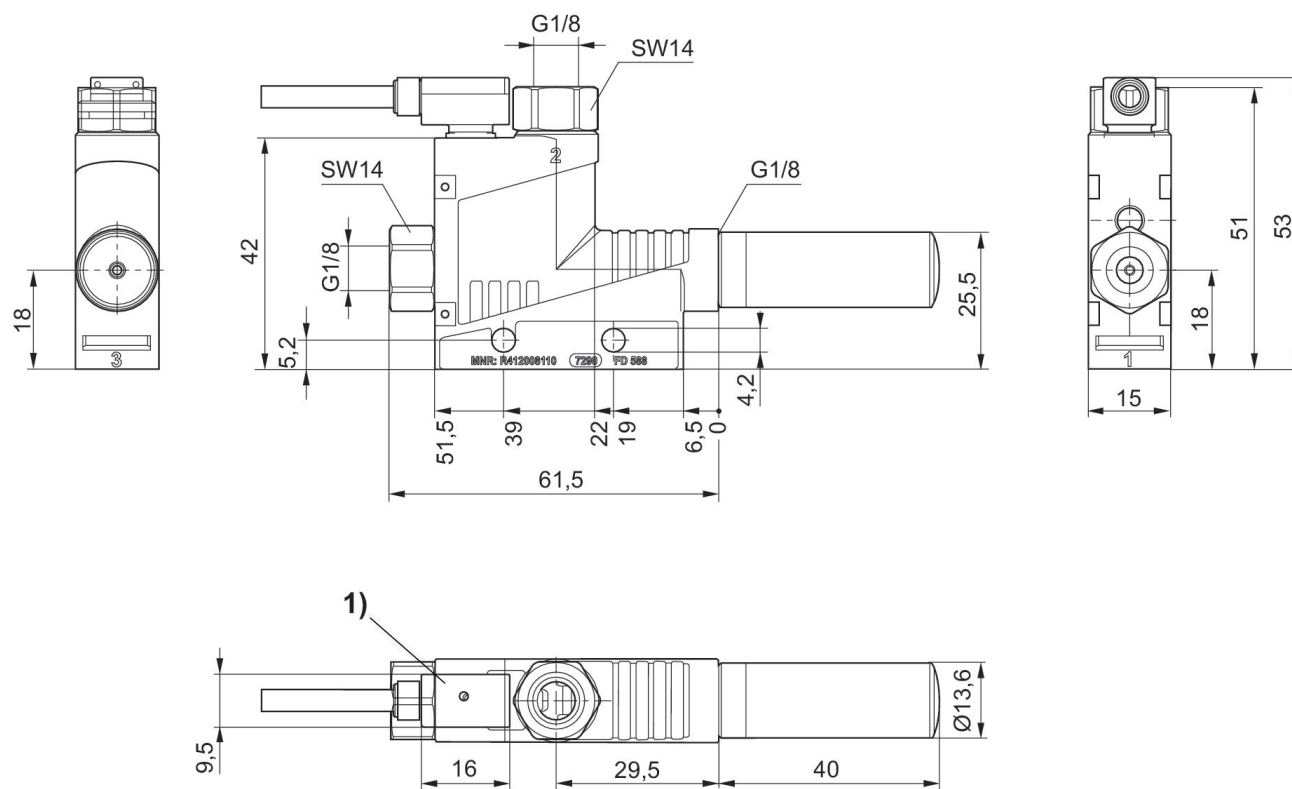
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1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded

Fig. 2
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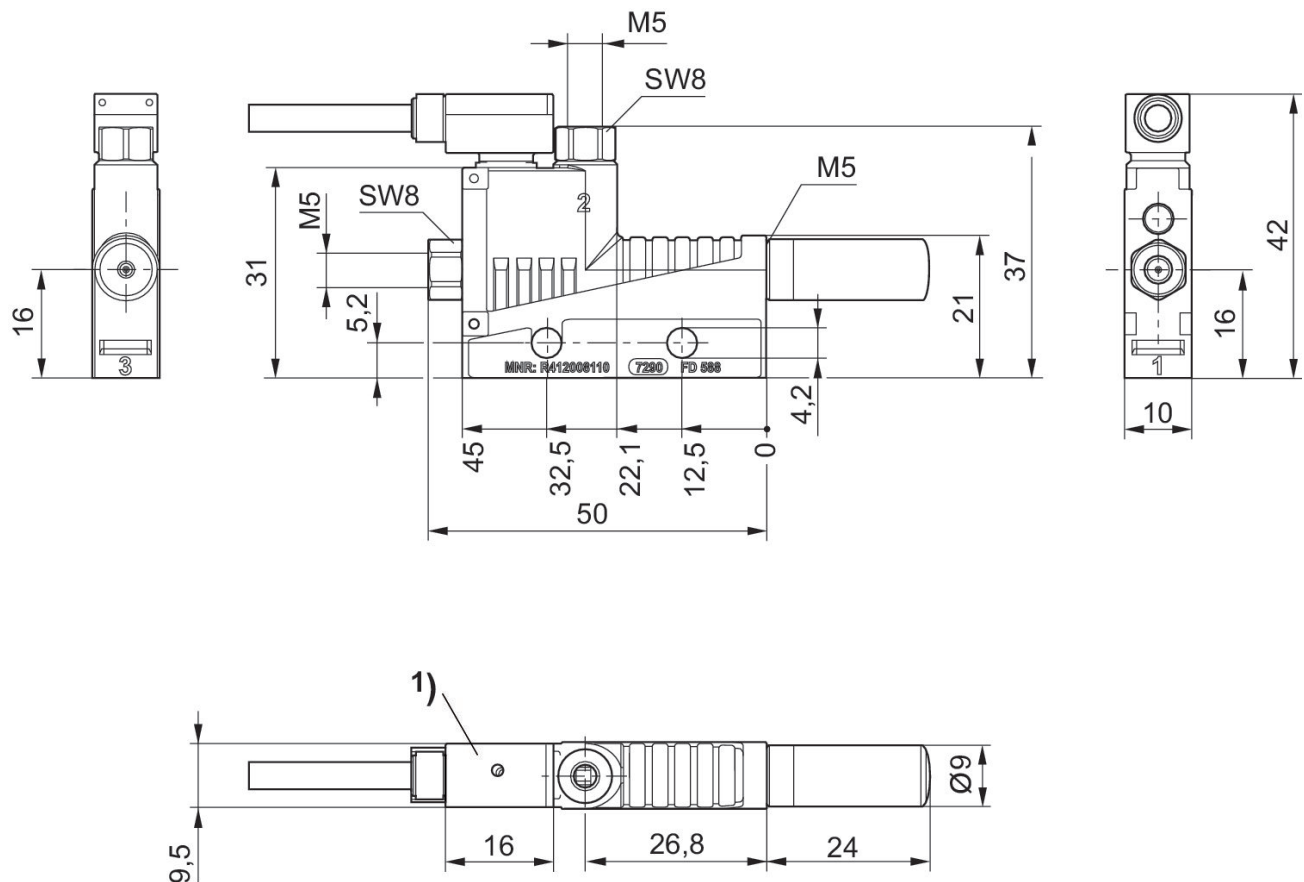
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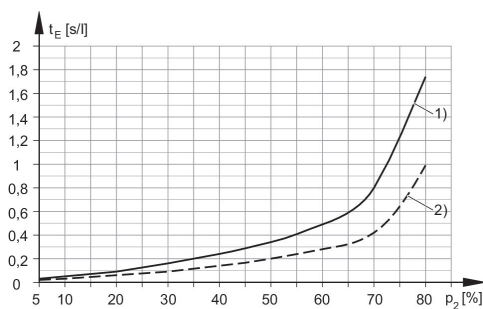
1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded

Fig. 1
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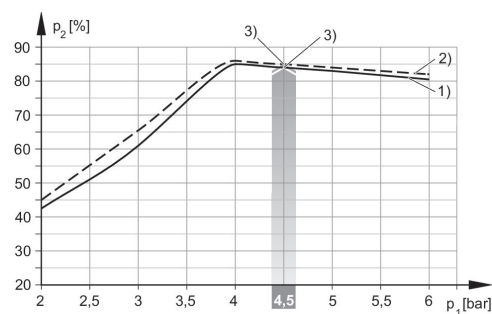


1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded

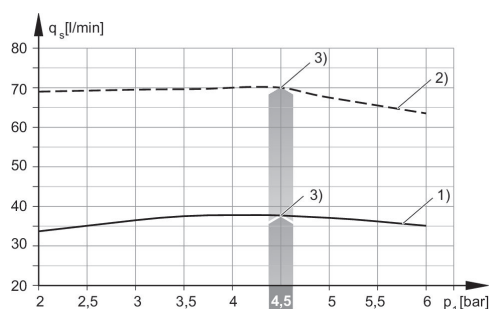


1) = $\varnothing$ nozzle 2.0 mm 2) = $\varnothing$ nozzle 2.5 mm

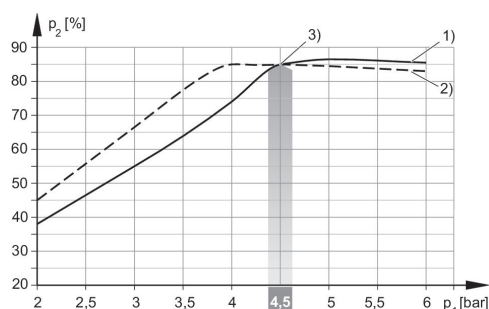
Vacuum p_2 depending on working pressure p_1



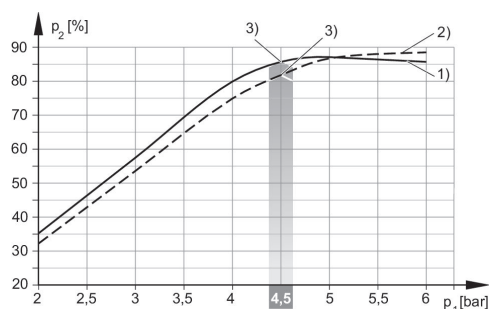
1) = $\varnothing$ nozzle 0.5 mm 2) = $\varnothing$ nozzle 0.7 mm
3) optimum working pressure



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

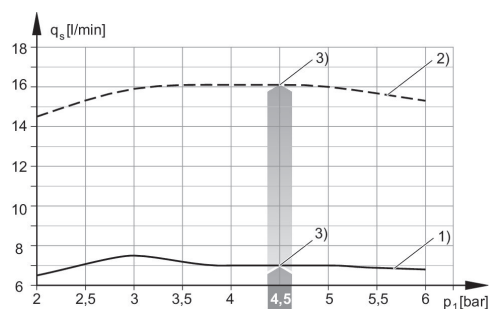


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

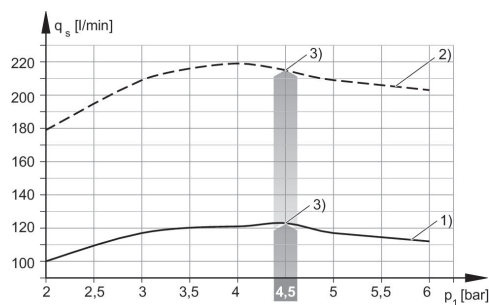


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Suction capacity q_s depending on working pressure p_1

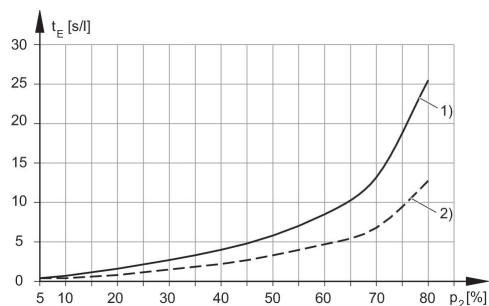


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

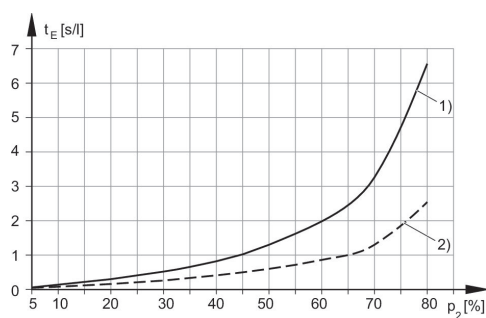


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

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

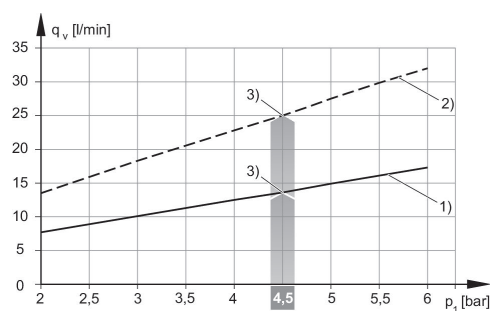


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm

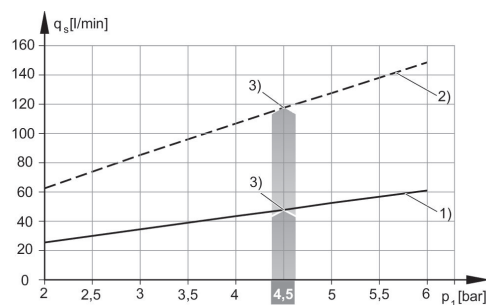


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm

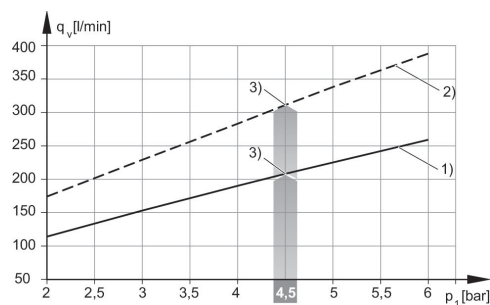
Air consumption q_v depending on working pressure p_1



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