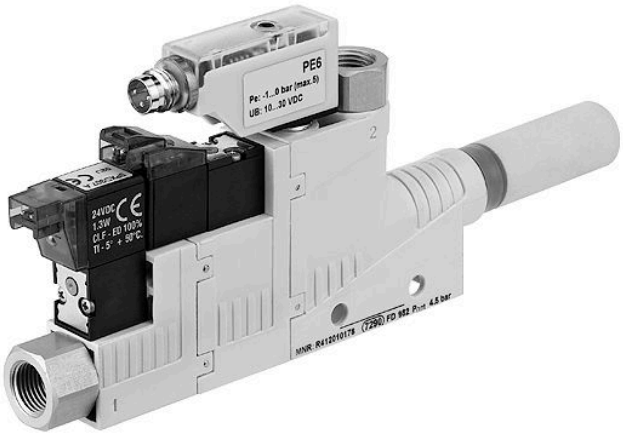
Ejector, Series EBS

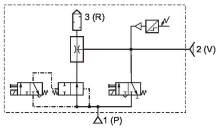
R412010178

2024-02-20

AVENTICS Series EBS Ejectors

The AVENTICS Series EBS ejectors are the convincing and talented multi-taskers within the AVENTICS ejector Series. Parallel to the main advantages of this ejector Series, these ejectors offer additional benefits due to their enormous versatility.





Technical data

Industry	Industrial
Activation	Electrically
Note	Thread connection
Type	Ejector
Version	electrical control, T-design
with silencer	with silencer
Nozzle Ø	1 mm
vacuum switch	electronic adjustable
Min. working pressure	3 bar
Max. working pressure	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
Min. oil content of compressed air	0 mg/m³
Max. oil content of compressed air	1 mg/m³
Max. particle size	5 µm
Compressed air connection	G 1/8

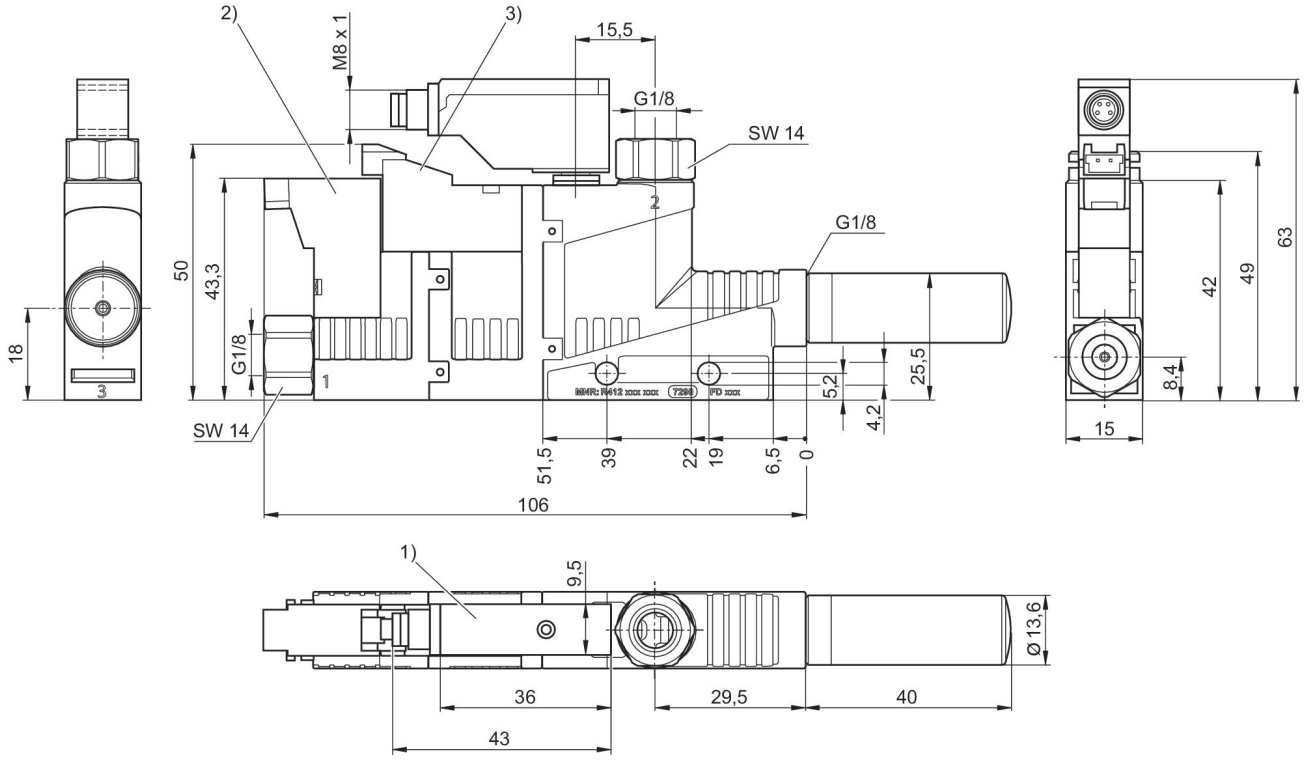
Vacuum connection+	G 1/8
Max. suction capacity	35 l/min
Air consumption at p.opt.	48 l/min
Max. vacuum level at p.opt	86 %
Sound pressure level intake effect	59 dB
Sound pressure level intake effect	65 dB
Protection against overpressure (max.)	5 bar
release valve	release valve
Protection class	IP40
Duty cycle according to DIN VDE 0580 standard	100 %
Operational voltage DC	24 V
Hysteresis	2% of the final value, fixed
Precision (% of full scale value)	± 3 %
Repeatability (% of full scale value)	± 1 %
Voltage tolerance DC	- 5% / +10%
Power consumption solenoid valve	1.3 W
Switching point	adjustable 0 ... 100%
Weight	0.075 kg
Housing material	Polyamide fiber-glass reinforced
Seal material	Acrylonitrile butadiene rubber
Nozzle material	Aluminum
Silencer material	Polyethylene
Material pressure sensor	Polycarbonate
Part No.	R412010178

Technical information

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

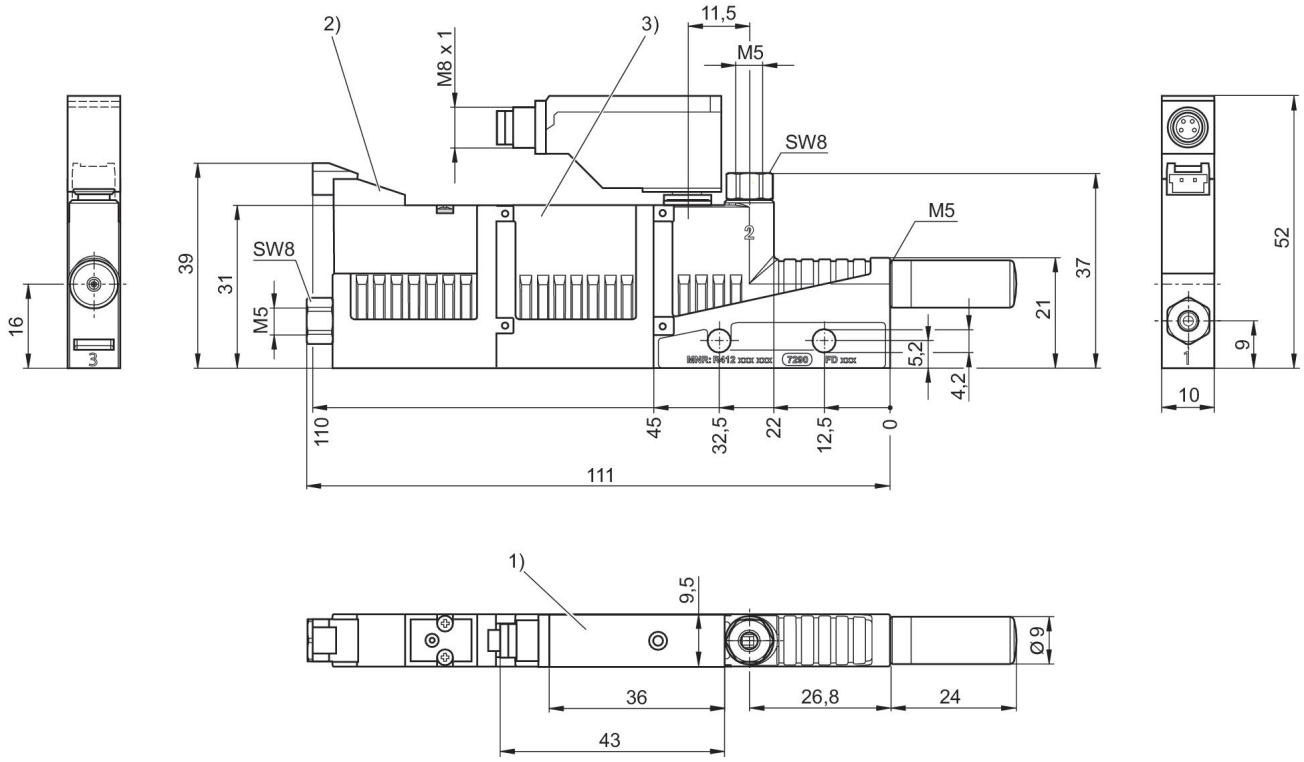
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

Fig. 2



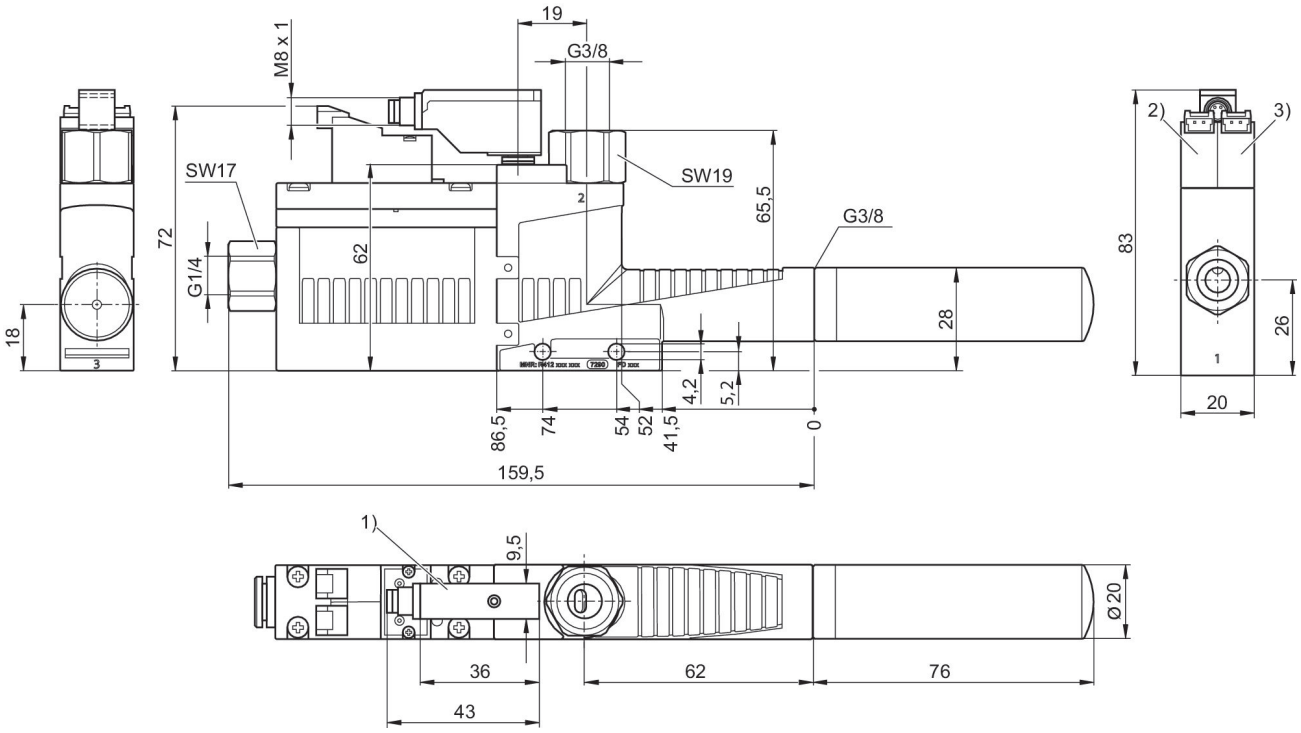
1) vacuum switch is rotatable and exchangeable
2) Solenoid valve for vacuum ON/OFF
3) Solenoid valve for release pulse

Fig. 1



1) vacuum switch is rotatable and exchangeable
2) Solenoid valve for vacuum ON/OFF
3) Release valve from memory

Fig. 3



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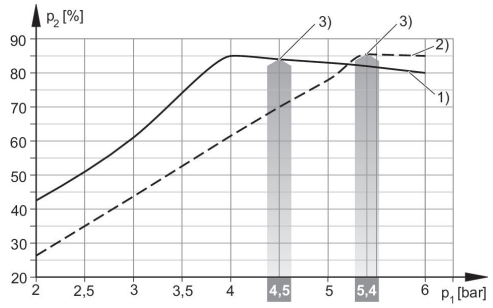
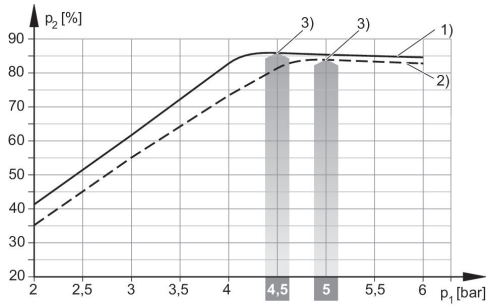
Vacuum p2 depending on working pressure p1



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



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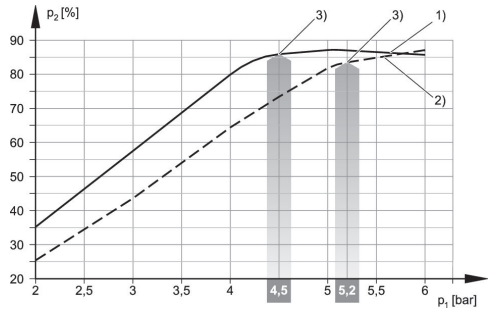

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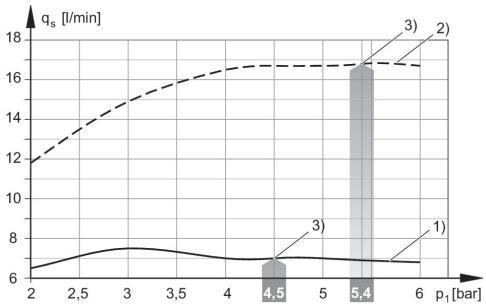
Suction capacity qs depending on working pressure p1



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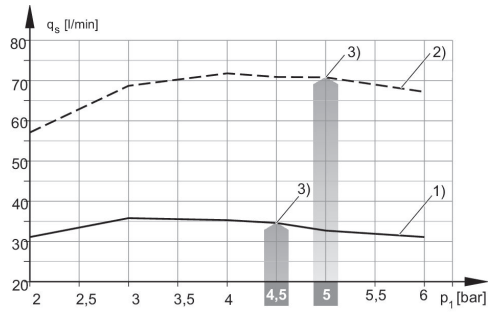

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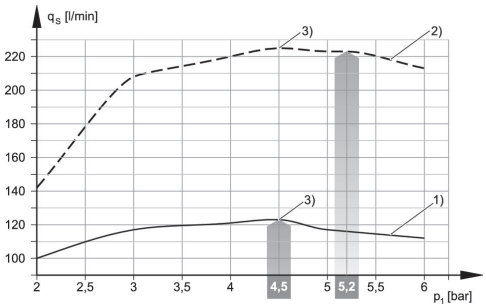

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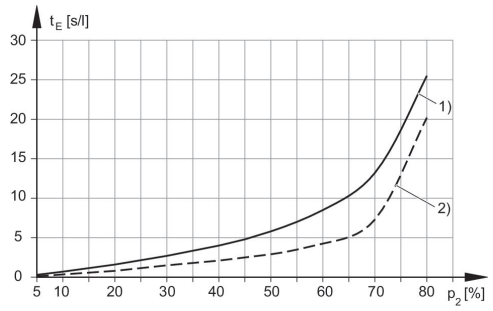
Evacuation time tE depending on vacuum p2 for 1 l volume (with optimal operating pressure p1opt)



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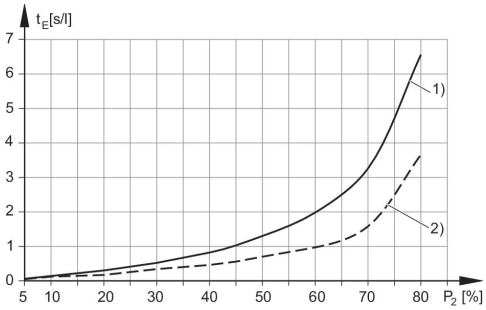

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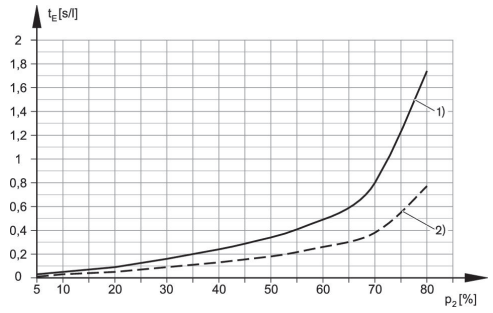

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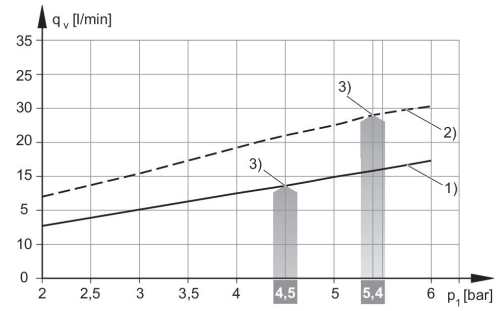
Air consumption qv depending on working pressure p1



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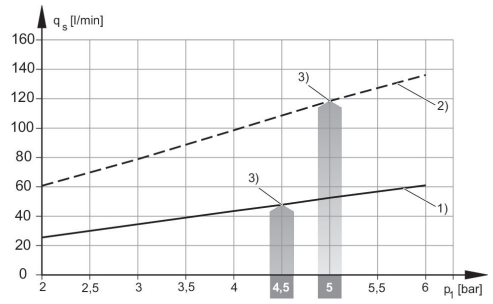

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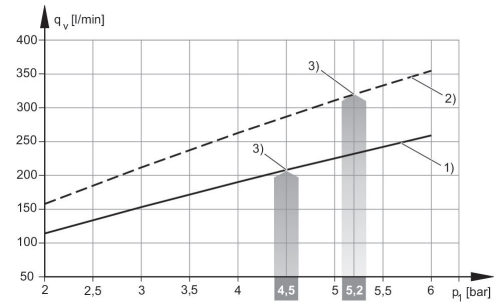

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