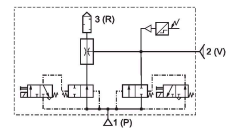
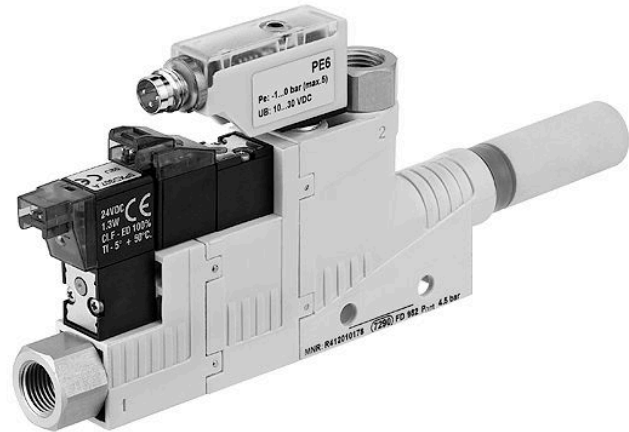


## AVENTICS Series EBS Ejectors

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	2.5 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/m <sup>3</sup>
Max. oil content of compressed air	1 mg/m <sup>3</sup>
Max. particle size	5 µm
Compressed air connection	G 1/4

# Ejector, Series EBS

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Vacuum connection+	G 3/8
Max. suction capacity	223 l/min
Air consumption at p.opt.	320 l/min
Max. vacuum level at p.opt	84 %
Sound pressure level intake effect	70 dB
Sound pressure level intake effect	78 dB
Protection against overpressure (max.) release valve	5 bar 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	0.152 kg
Housing material	Polyamide fiber-glass reinforced
Seal material	Acrylonitrile butadiene rubber
Nozzle material	Aluminum
Silencer material	Polyethylene
Material pressure sensor	Polycarbonate
Part No.	R412010181

## Technical information

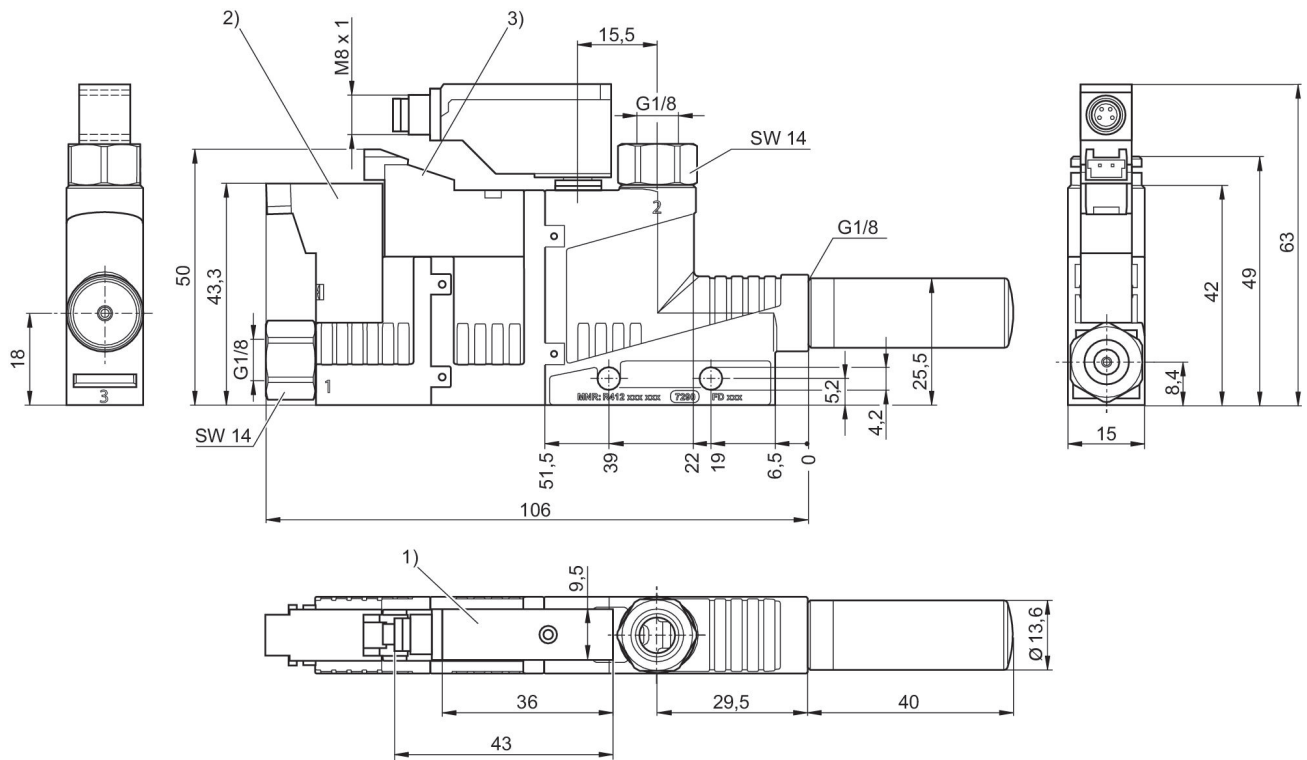
Note: All data refers to an ambient pressure of [[1,013] bar] and an ambient temperature of [[20]°C].  
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

# Ejector, Series EBS

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Fig. 2



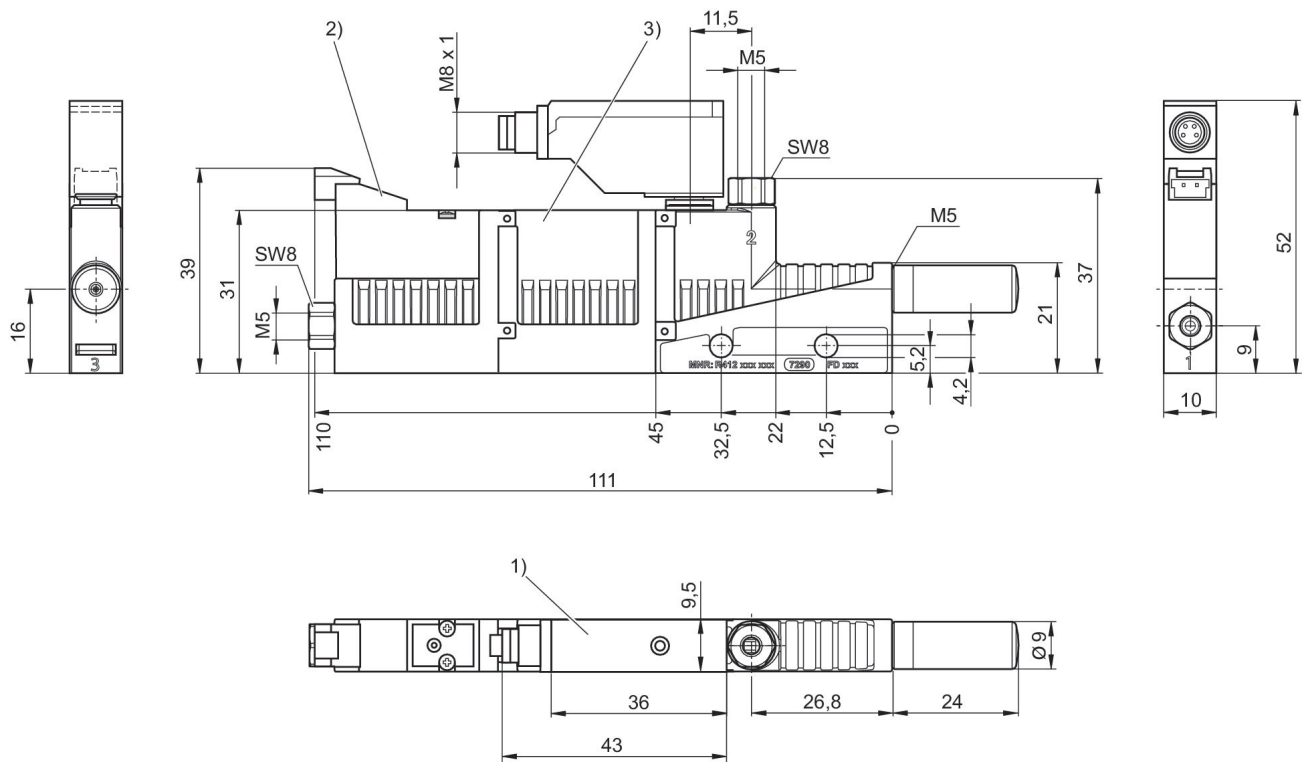
- 1) vacuum switch is rotatable and exchangeable
- 2) Solenoid valve for vacuum ON/OFF
- 3) Solenoid valve for release pulse

# Ejector, Series EBS

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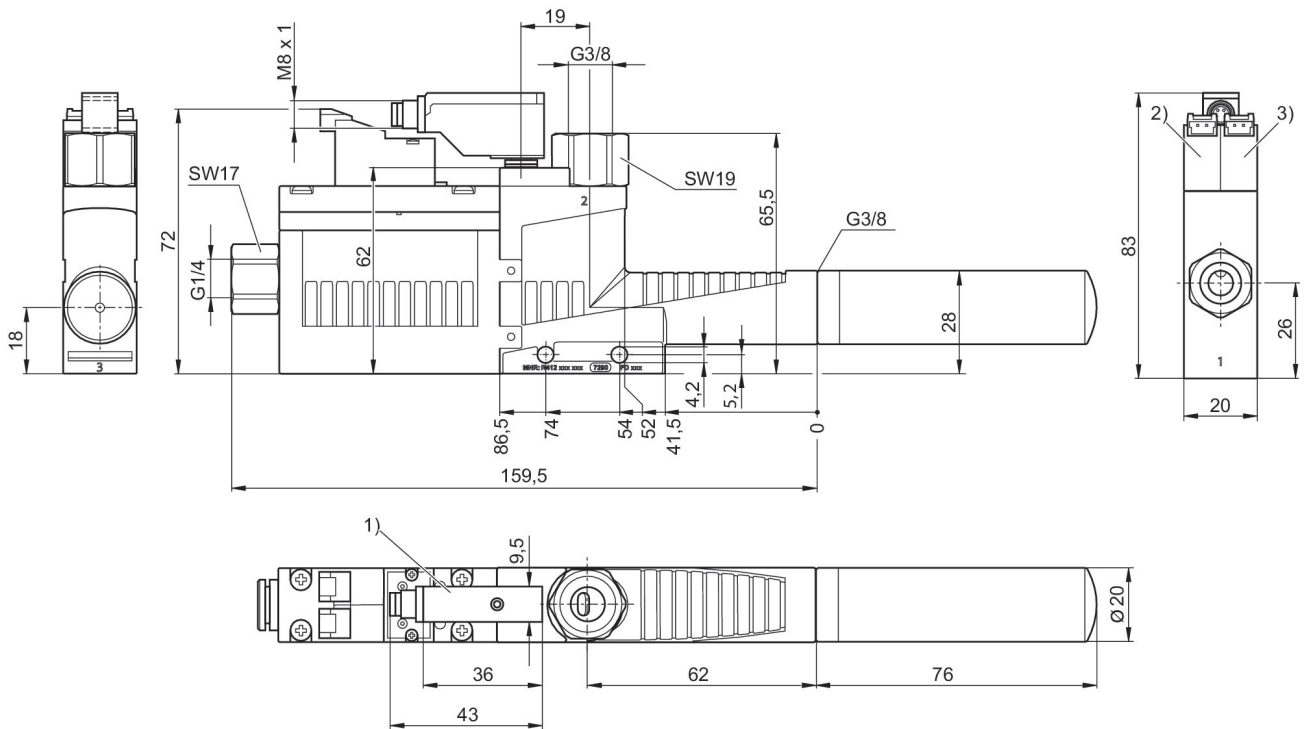
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Fig. 1



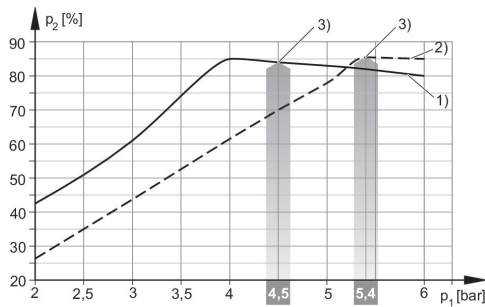
- 1) vacuum switch is rotatable and exchangeable
- 2) Solenoid valve for vacuum ON/OFF
- 3) Release valve from memory

Fig. 3

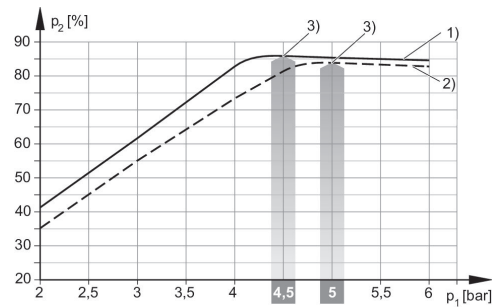


- 1) vacuum switch is rotatable and exchangeable
- 2) Solenoid valve for vacuum ON/OFF
- 3) Solenoid valve for release pulse

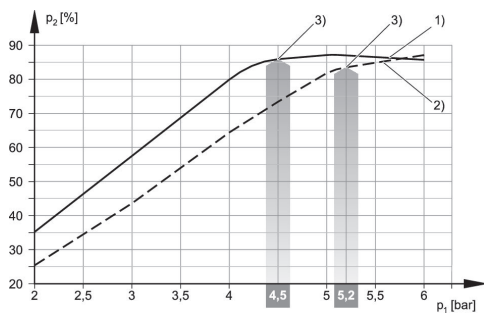
## Vacuum $p_2$ depending on working pressure $p_1$



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

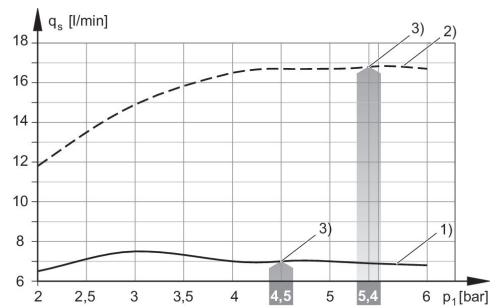


- 1) =  $\varnothing$  nozzle 1.0 mm 2) =  $\varnothing$  nozzle 1.5 mm
- 3) optimum working pressure

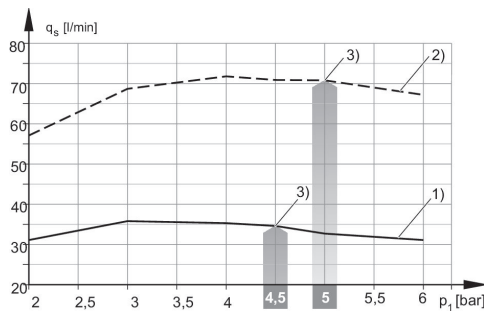


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm  
3) optimum working pressure

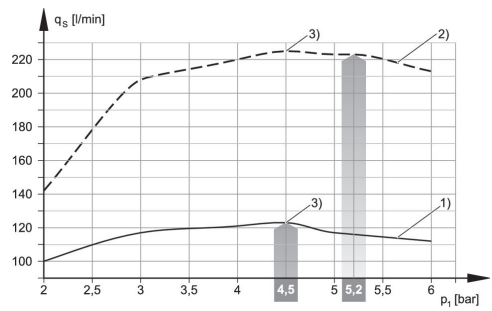
## Suction capacity $q_s$ depending on working pressure $p_1$



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

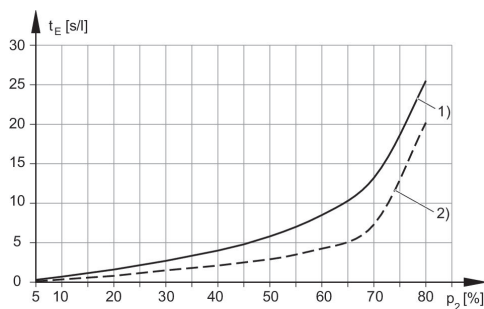


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm  
3) optimum working pressure

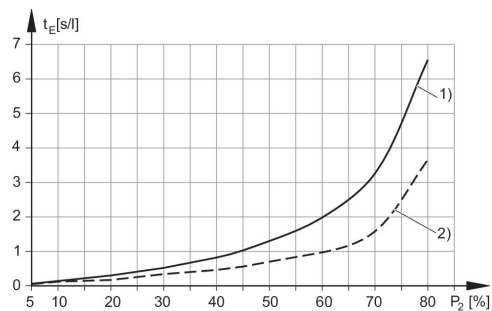


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm  
3) optimum working pressure

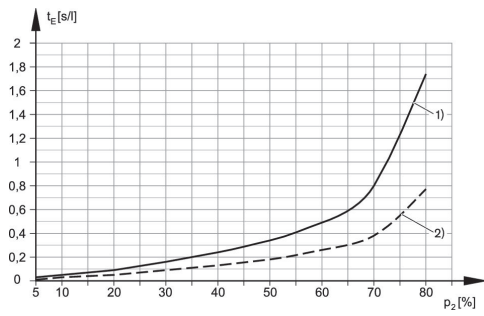
## Evacuation time $t_E$ depending on vacuum $p_2$ for 1 l volume (with optimal operating pressure $p_{1opt}$ )



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

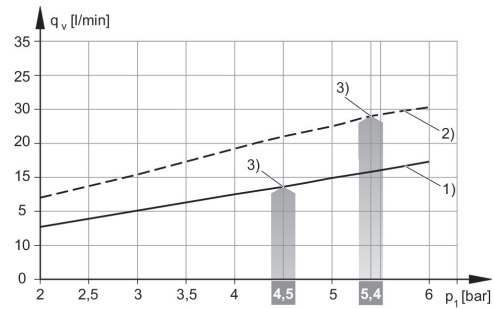


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm

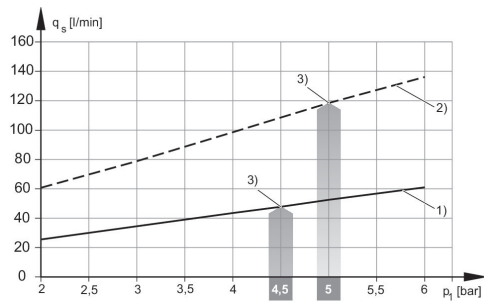


1) =  $\varnothing$  nozzle 2.0 mm 2) =  $\varnothing$  nozzle 2.5 mm

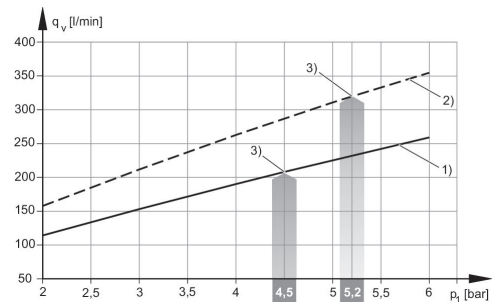
## Air consumption $q_v$ depending on working pressure $p_1$



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



1) =  $\varnothing$  nozzle 1.0 mm 2) =  $\varnothing$  nozzle 1.5 mm  
3) optimum working pressure



1) =  $\varnothing$  nozzle 2.0 mm 2) =  $\varnothing$  nozzle 2.5 mm  
3) optimum working pressure