

Gripper and vacuum technology ▶ Vacuum generators

Series EBS

Brochure




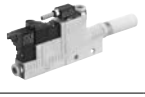



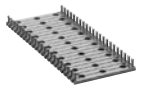





Gripper and vacuum technology ▶ Vacuum generators

Series EBS

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Gripper and vacuum technology ▶ Vacuum generators
Series EBS

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	<p>Connecting cable, Series CN2</p> <ul style="list-style-type: none"> ▶ Socket, M8x1, 4-pin, straight ▶ open cable ends, 4-pin 	100

Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, inline form



00124472

Type	Ejector
Ambient temperature min./max.	+0 °C / +60 °C
Medium temperature min./max.	+0 °C / +60 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³

Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Release ring	Polyamide

Technical Remarks

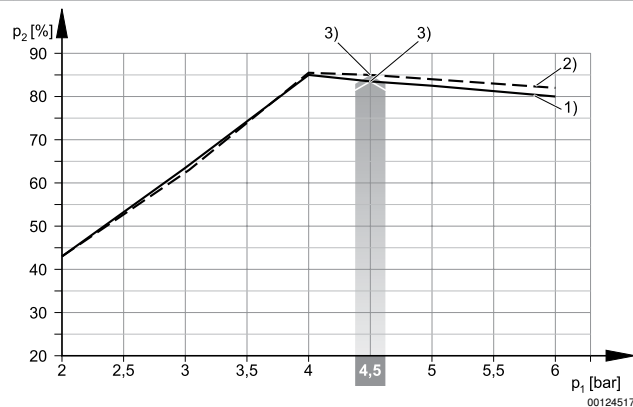
- Note: All data refers to an ambient pressure of 1,013 bar and an ambient temperature of 20 °C.
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

	Type	Nozzle Ø	Com-pressed air connection	Vacuum connec-tion+	Max. vacuum level at p.opt	Max. suction capacity	Part No.
		[mm]			[%]	[l/min]	
	EBS-PI-05-NN	0.5	Ø 4	Ø 4	83	8	R412007447
	EBS-PI-07-NN	0.7			85	15.9	R412007448

Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Weight
	[l/min]	[dB]	[dB]	[kg]
R412007447	13	52	60	0.005
R412007448	25	63	63	

p.opt. = optimum working pressure

Vacuum p₂ depending on working pressure p₁



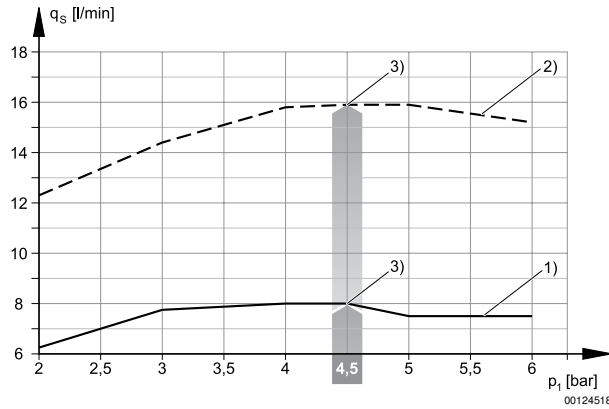
- 1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

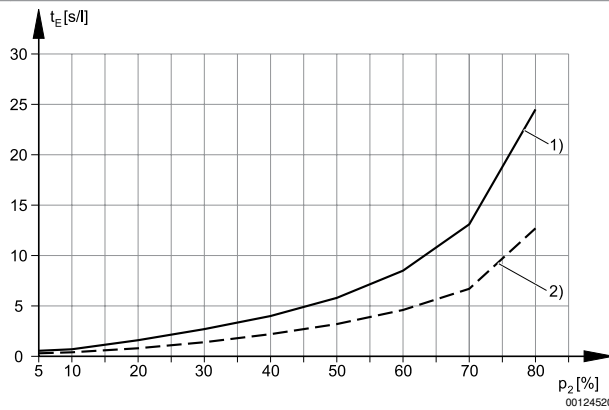
▶ push-in fitting ▶ pneumatic control, inline form

Suction capacity q_s depending on working pressure p_1



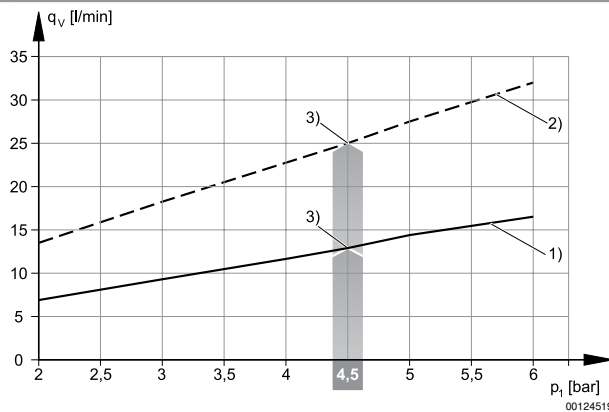
- 1) = Ø nozzle 0.5 mm
- 2) = Ø nozzle 0.7 mm
- 3) optimum working pressure

Evacuation time t_E depending on vacuum p_2 for 1 l volume (with optimal operating pressure p_1 opt)



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

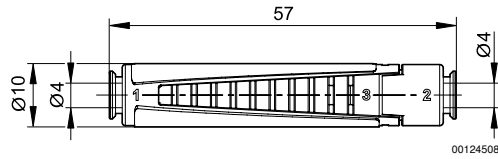
Air consumption q_v depending on working pressure p_1



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

Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, inline form

Dimensions

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer



00124478

Type	Ejector
Ambient temperature min./max.	+0 °C / +60 °C
Medium temperature min./max.	+0 °C / +60 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³

Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Release ring	Polyamide
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

	Type	Nozzle Ø	Com-pressed air connection	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity	Part No.
		[mm]			[%]	[l/min]	
	EBS-PT-05-NN	0.5	Ø 4	Ø 4	84	7	R412007449
	EBS-PT-07-NN	0.7	Ø 4	Ø 4	85	16	R412007450
	EBS-PT-10-NN	1	Ø 6	Ø 8	85	38	R412007451
	EBS-PT-15-NN	1.5	Ø 6	Ø 8	85	70	R412007452
	EBS-PT-20-NN	2	Ø 8	Ø 10	86	123	R412007453
	EBS-PT-25-NN	2.5	Ø 8	Ø 10	82	215	R412007454

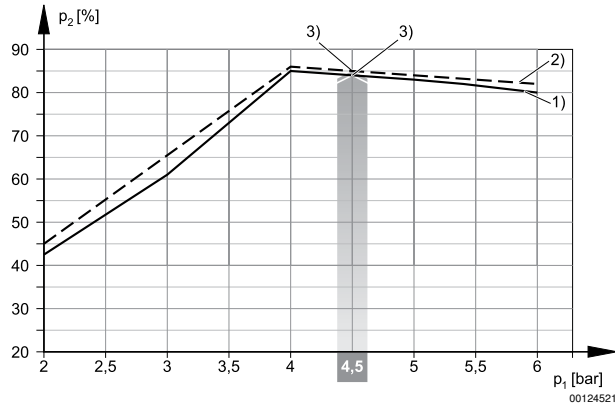
Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
	[l/min]	[dB]	[dB]	[kg]	
R412007449	14	53	58	0.007	Fig. 1
R412007450	25	59	65	0.007	Fig. 1
R412007451	48	59	65	0.02	Fig. 2
R412007452	118	66	72	0.02	Fig. 2
R412007453	208	68	77	0.05	Fig. 3
R412007454	311	75	78	0.05	Fig. 3

p.opt. = optimum working pressure

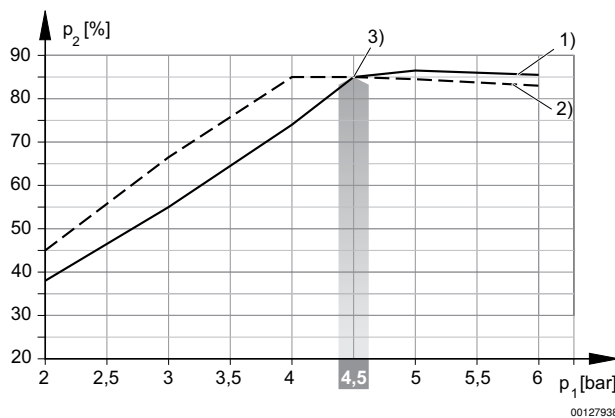
Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer

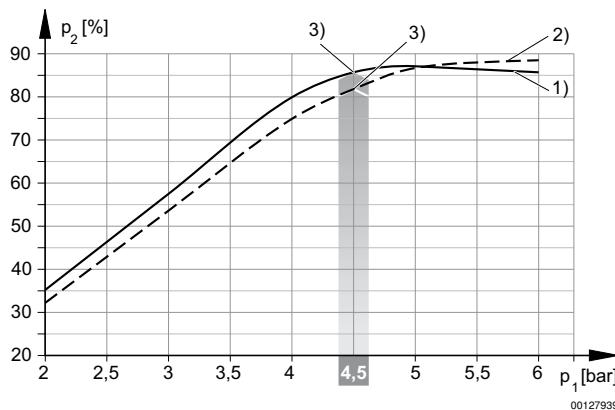
Vacuum p_2 depending on working pressure p_1



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



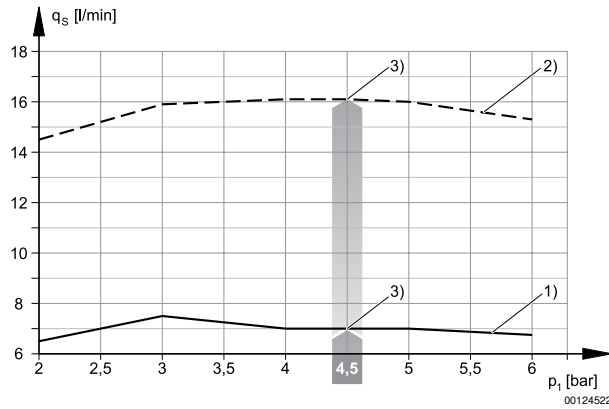
1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

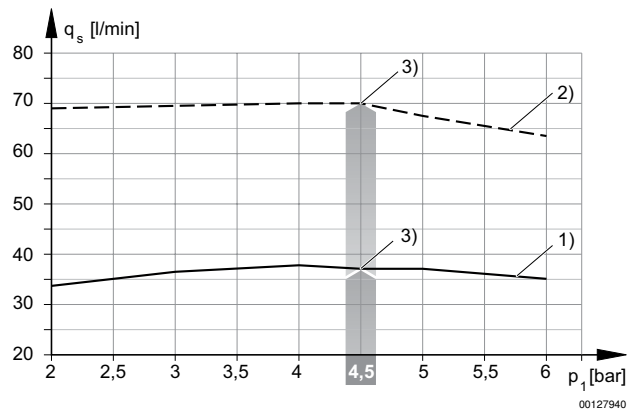
Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer

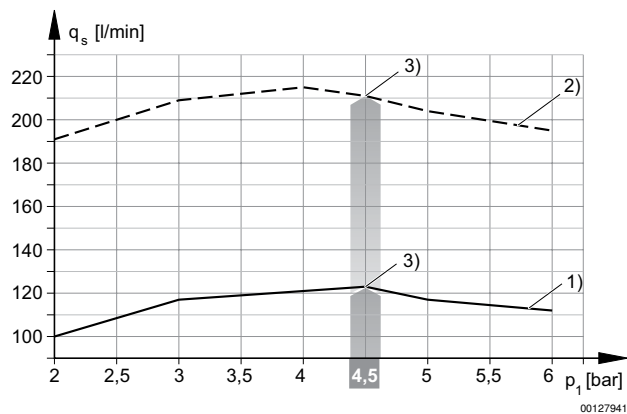
Suction capacity q_s depending on working pressure p_1



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



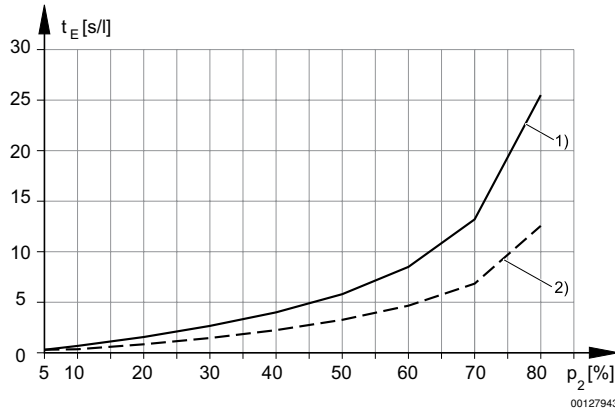
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure



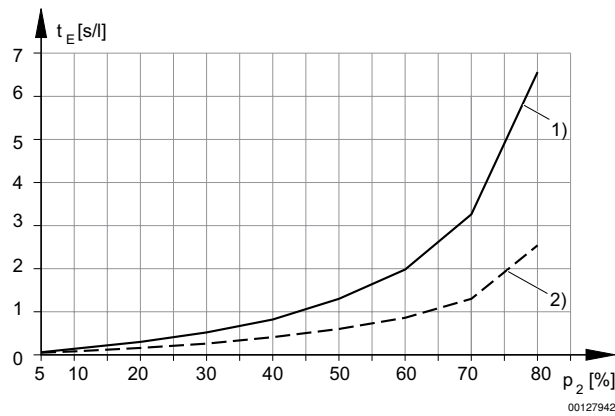
1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Ejector, Series EBS

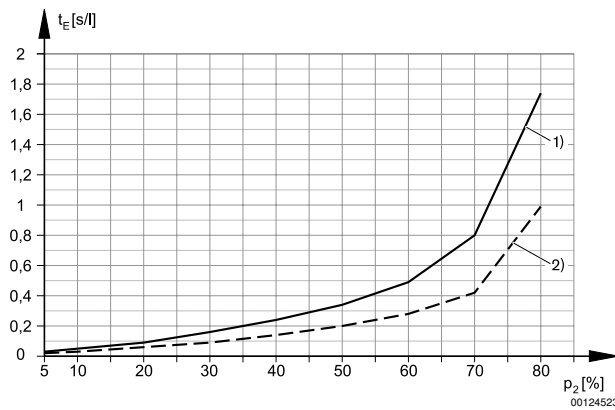
▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer

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

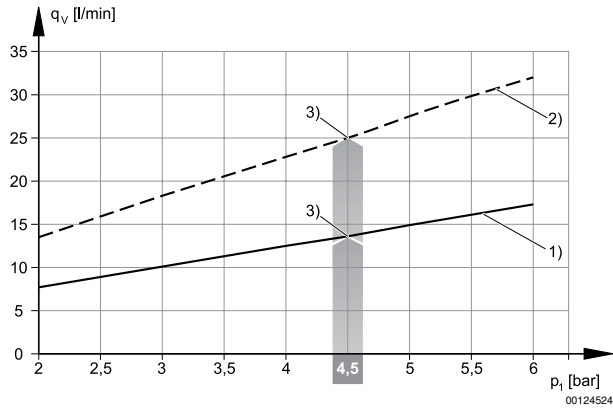


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

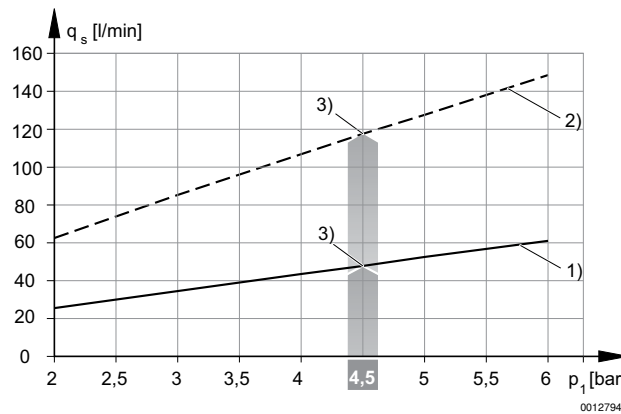
Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer

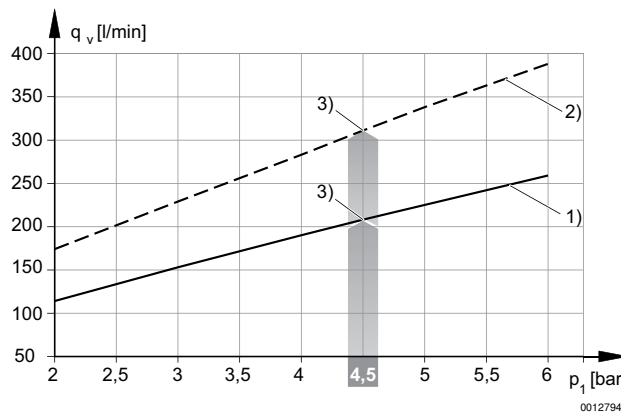
Air consumption q_v depending on working pressure p_1



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

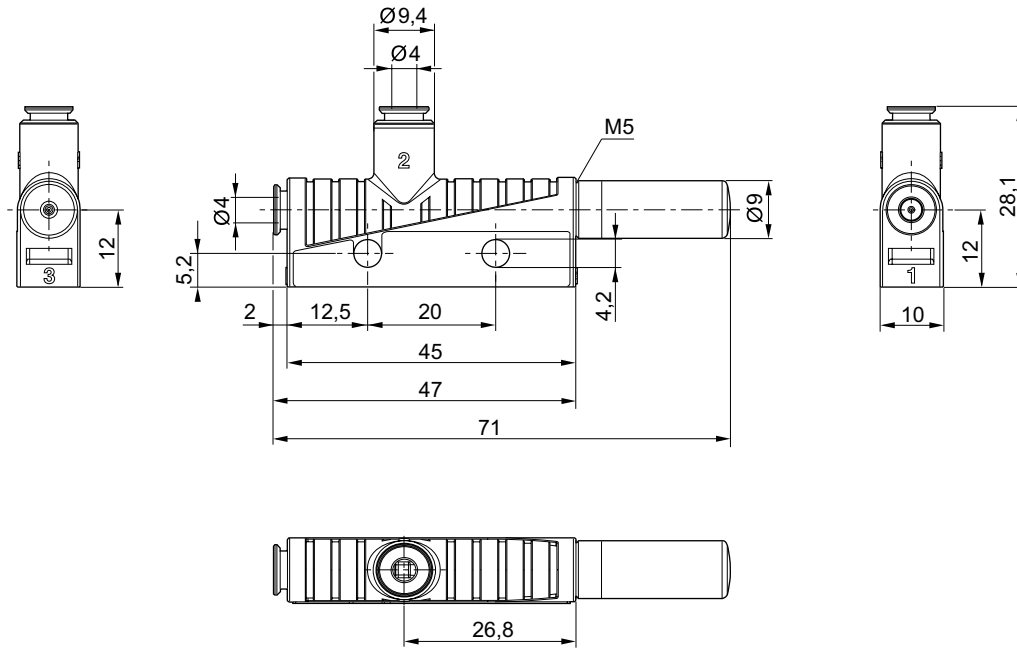


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Ejector, Series EBS

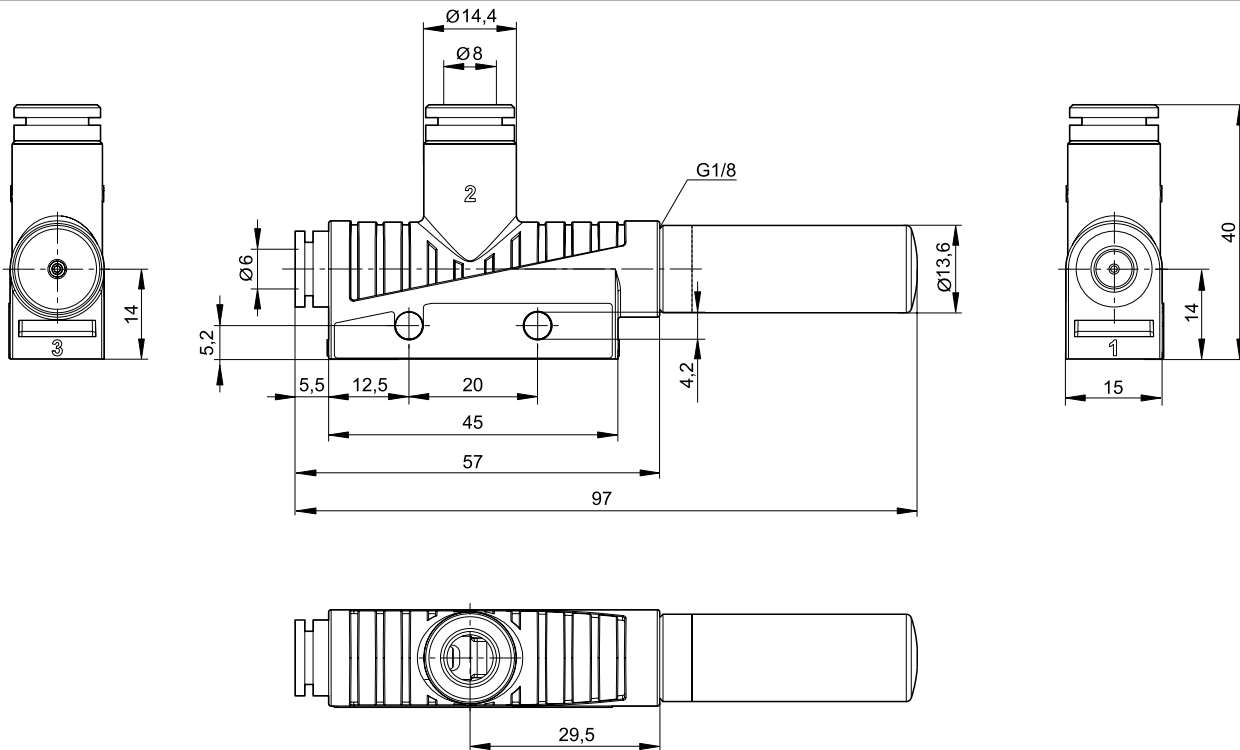
▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer

Fig. 1



00124509

Fig. 2

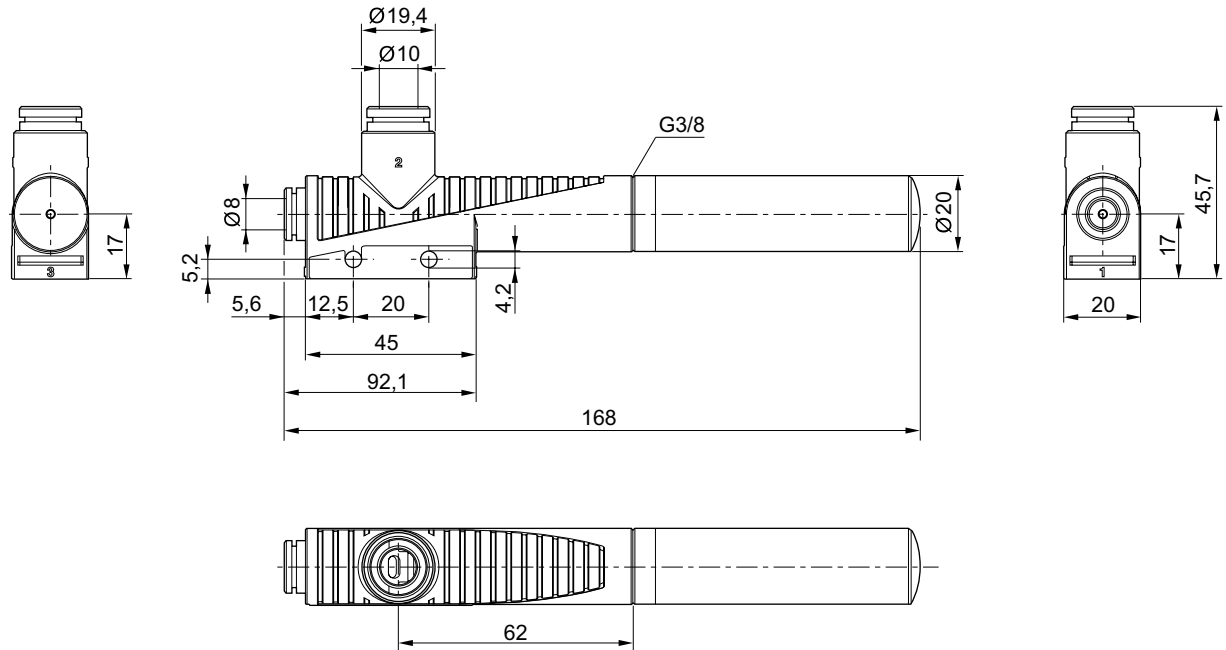


00124510

Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer

Fig. 3



00125698

Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer



00125666

Type	Ejector
Ambient temperature min./max.	+0 °C / +60 °C
Medium temperature min./max.	+0 °C / +60 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³

Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Threaded bushing	Aluminum, anodized
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

	Type	Nozzle Ø	Com-pressed air connection	Vacuum connec-tion+	Max. vacuum level at p.opt	Max. suction capacity	Part No.
		[mm]			[%]	[l/min]	
	EBS-PT-05-NN	0.5	M5	M5	84	7	R412007473
	EBS-PT-07-NN	0.7	M5	M5	85	16	R412007474
	EBS-PT-10-NN	1	G 1/8	G 1/8	85	38	R412007475
	EBS-PT-15-NN	1.5	G 1/8	G 1/8	85	70	R412007476
	EBS-PT-20-NN	2	G 1/4	G 3/8	86	123	R412007477
	EBS-PT-25-NN	2.5	G 1/4	G 3/8	82	215	R412007478

Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
	[l/min]	[dB]	[dB]	[kg]	
R412007473	14	53	58	0.008	Fig. 1
R412007474	25	59	65	0.008	Fig. 1
R412007475	48	59	65	0.022	Fig. 2
R412007476	118	66	72	0.022	Fig. 2
R412007477	208	68	77	0.048	Fig. 3
R412007478	311	75	78	0.048	Fig. 3

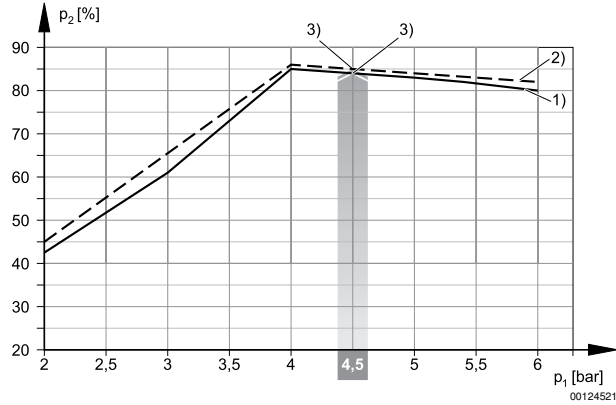
p.opt. = optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

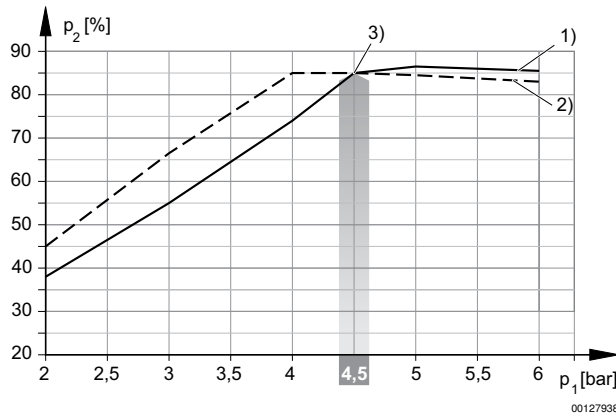
Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer

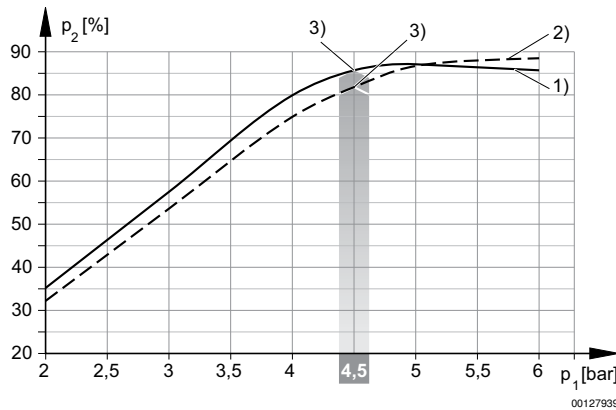
Vacuum p_2 depending on working pressure p_1



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



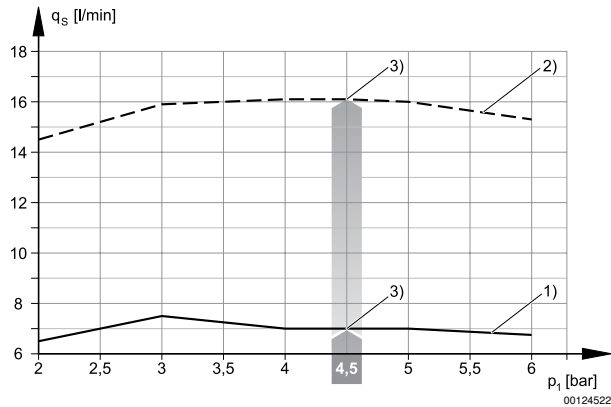
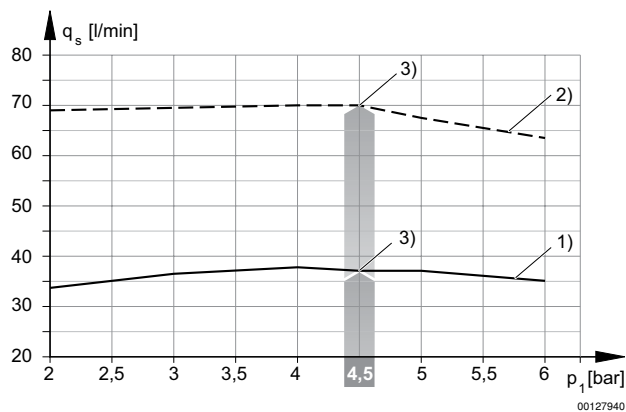
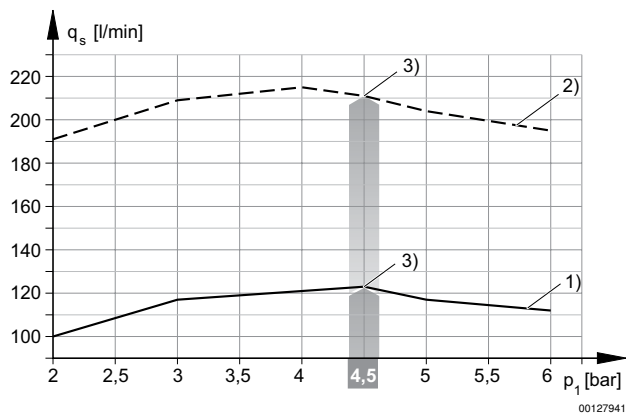
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure



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

Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer

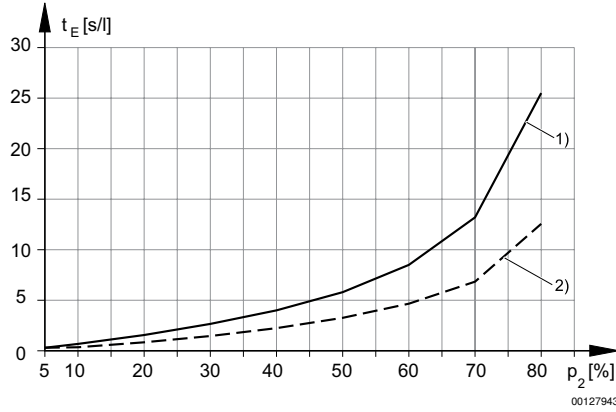
Suction capacity q_s depending on working pressure p_1

 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

Gripper and vacuum technology ▶ Vacuum generators

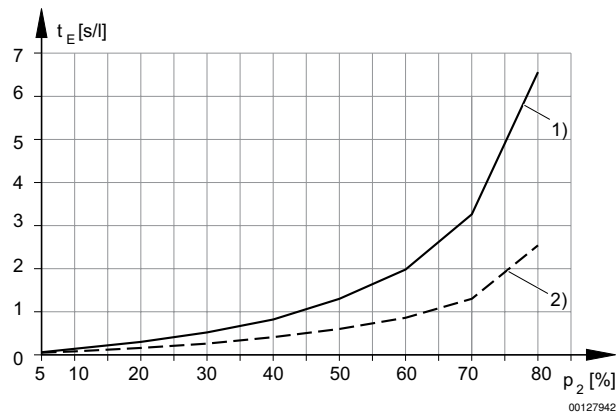
Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer

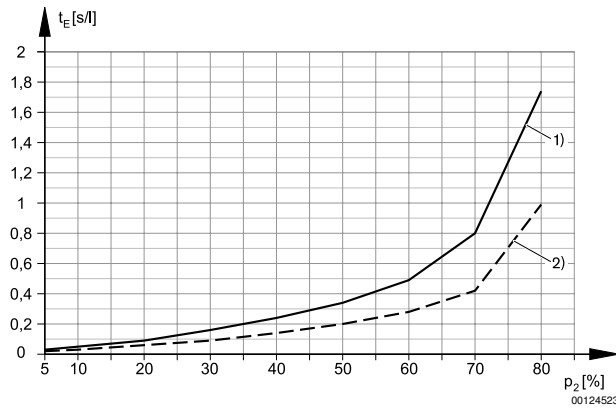
Evacuation time t_E depending on vacuum p_2 for 1 l volume (with optimal operating pressure p_{1opt})



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



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

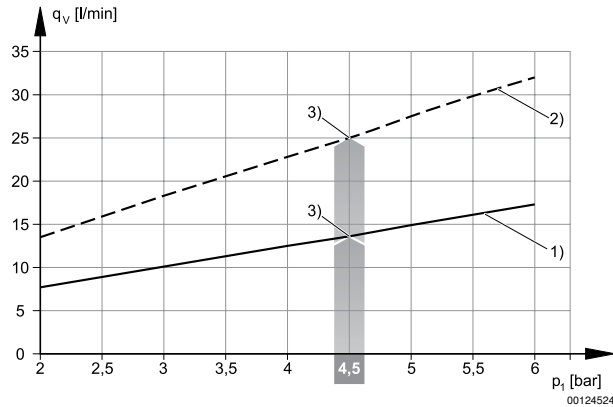


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

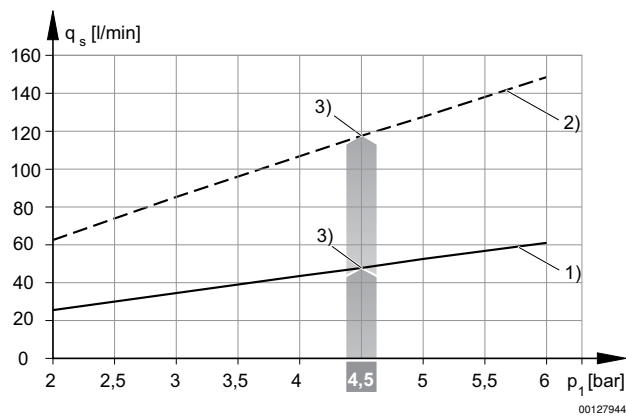
Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer

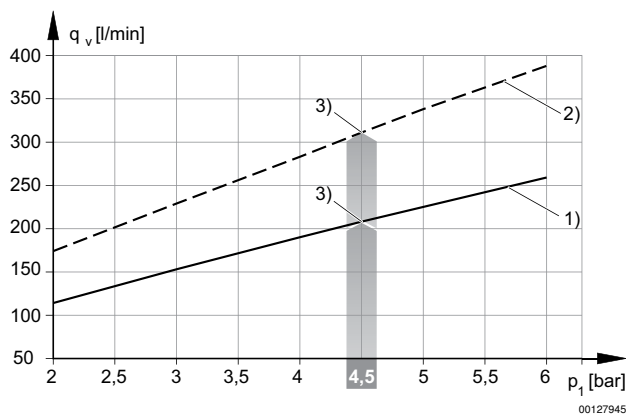
Air consumption q_v depending on working pressure p_1



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

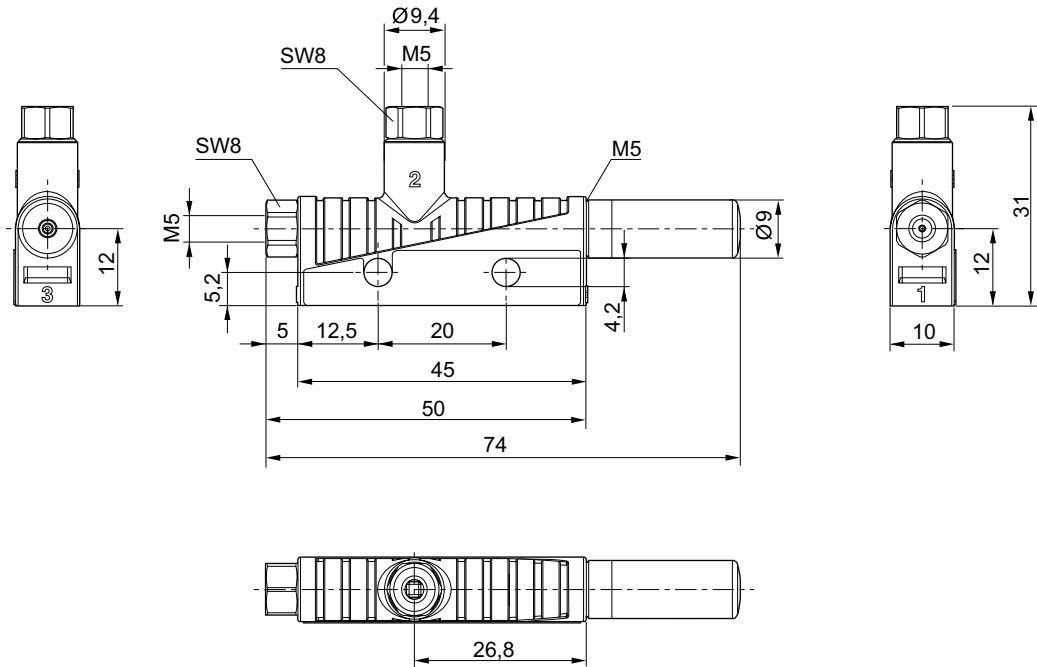


1) = \varnothing nozzle 2.0 mm 2) = \varnothing nozzle 2.5 mm
3) optimum working pressure

Ejector, Series EBS

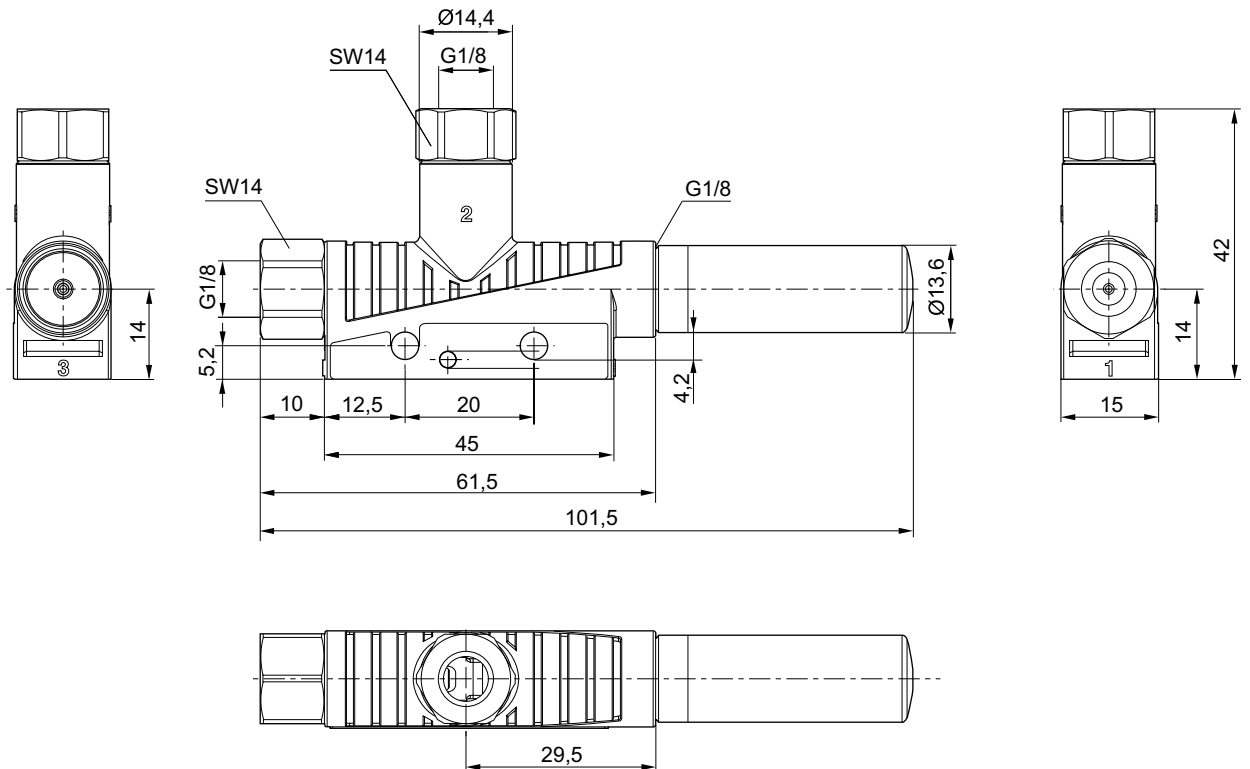
▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer

Fig. 1



00124511

Fig. 2

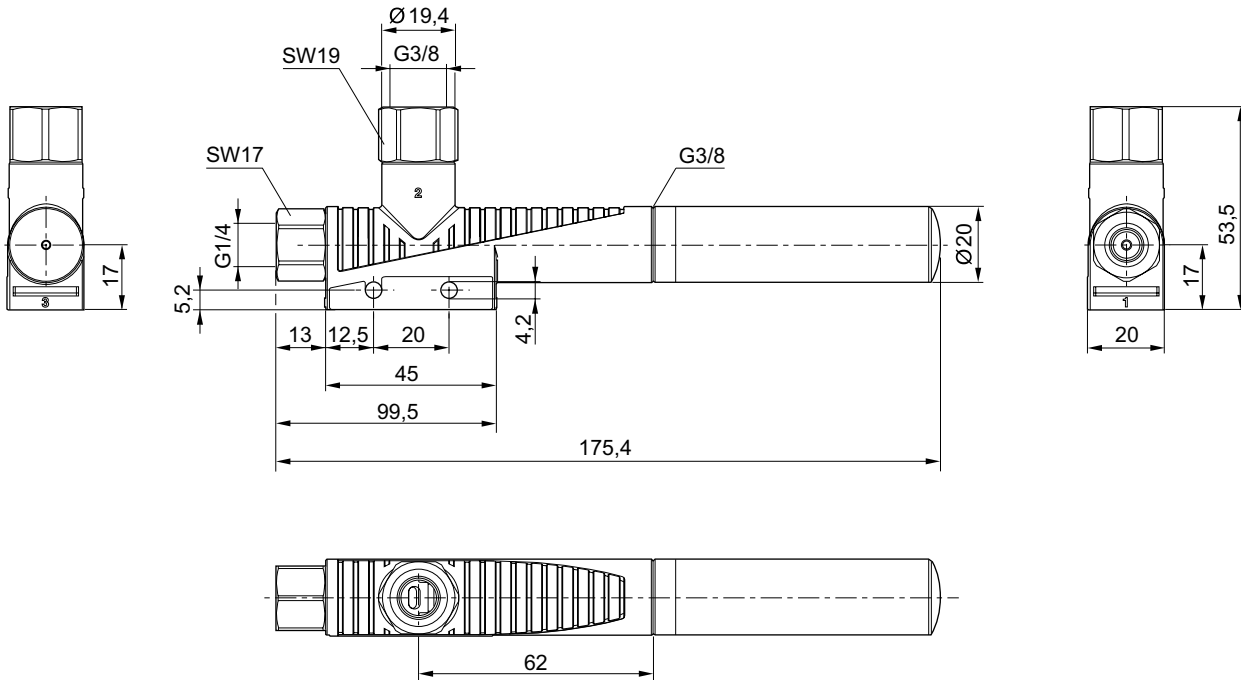


00124512

Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer

Fig. 3



00125699

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with silencer



00125711

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Protection class:2001 with electrical connector	IP40
Display	LED
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Status display	LED
Power consumption Solenoid valve	1.3 W
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Release ring	Polyamide
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

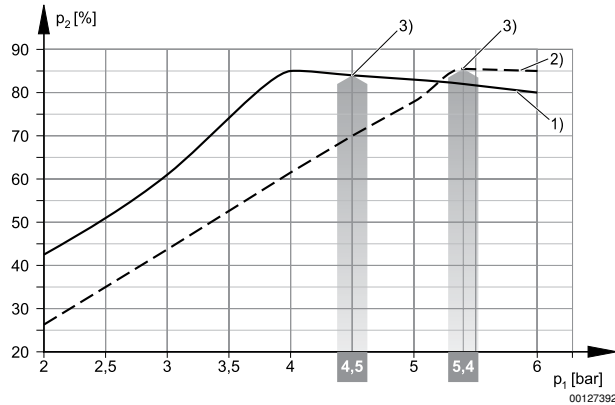
Type	Nozzle Ø	Com-pressed air con-nection	Vacuum connec-tion+	Max. vacuum level at p.opt	Max. suction capacity	Air con-sumption at p.opt.	Sound pressure level intake effect	Part No.
	[mm]			[%]	[l/min]	[l/min]	[dB]	
EBS-ET-05-NC	0.5	Ø 4	Ø 4	84	7.5	14	53	R412007764
EBS-ET-07-NC	0.7	Ø 4	Ø 4	85	16.8	24	59	R412007765

Part No.	Sound pressure level intake effect	Weight
	[dB]	[kg]
R412007764	58	0.027
R412007765	65	0.027

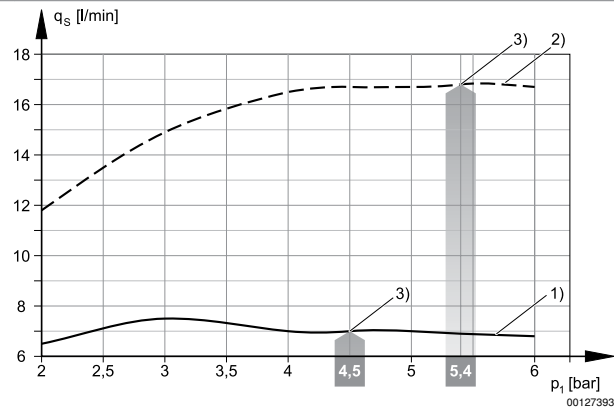
NC = ejector line closed without current
p.opt. = optimum working pressure

Ejector, Series EBS

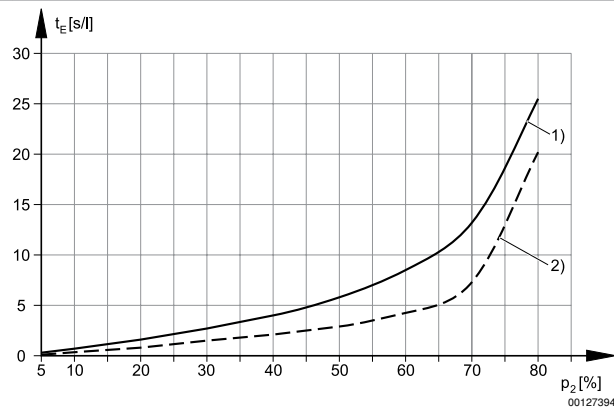
▶ push-in fitting ▶ electrical control, T-design ▶ with silencer

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

Suction capacity q_s depending on working pressure p_1


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

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


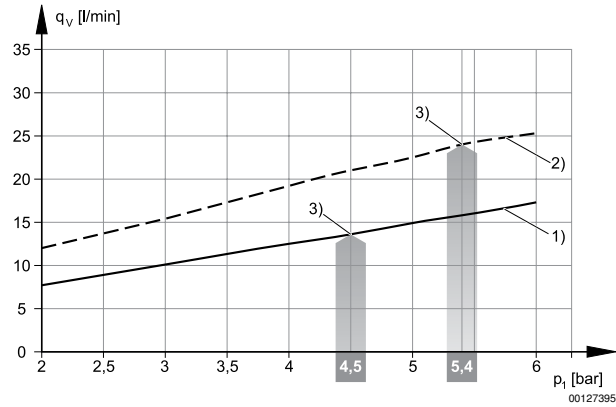
1) = \varnothing nozzle 0.5 mm 2) = \varnothing nozzle 0.7 mm

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

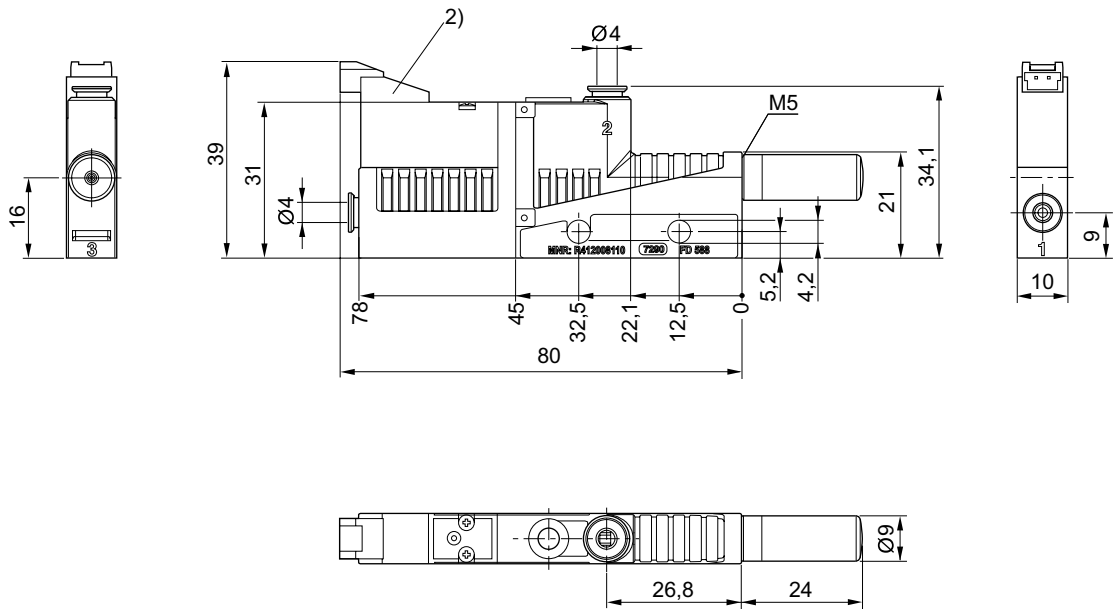
▶ push-in fitting ▶ electrical control, T-design ▶ with silencer

Air consumption q_v depending on working pressure p_1



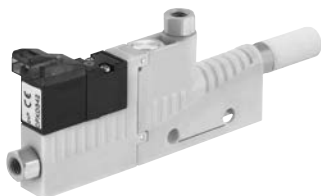
- 1) = \varnothing nozzle 0.5 mm
- 2) = \varnothing nozzle 0.7 mm
- 3) optimum working pressure

Dimensions



2) Solenoid valve for vacuum ON/OFF

00127390

Ejector, Series EBS
▶ Thread connection ▶ electrical control, T-design ▶ with silencer


00125712

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class:2001with electrical connector	IP40
Display	LED
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Status display	LED
Power consumption Solenoid valve	1.3 W

Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Threaded bushing	Aluminum, anodized
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

Type	Nozzle Ø	Com-pressed air con-nection	Vacuum connec-tion+	Max. vacuum level at p.opt	Max. suction capacity	Air con-sumption at p.opt.	Sound pressure level intake effect	Part No.
	[mm]			[%]	[l/min]	[l/min]	[dB]	
EBS-ET-05-NC	0.5	M5	M5	84	7.5	14	53	R412007768
EBS-ET-07-NC	0.7	M5	M5	85	16.8	24	59	R412007769

Part No.	Sound pressure level intake effect	Weight
	[dB]	[kg]
R412007768	58	0.027
R412007769	65	0.027

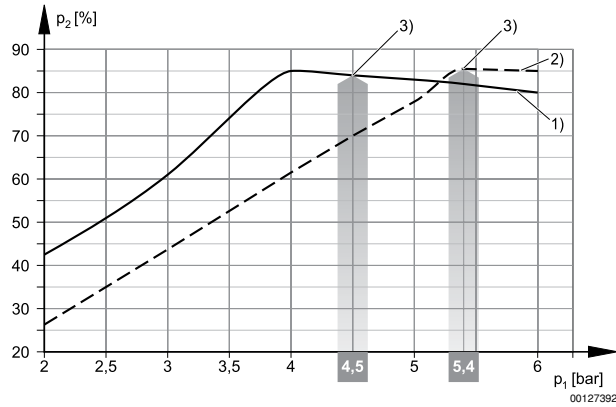
NC = ejector line closed without current
p.opt. = optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

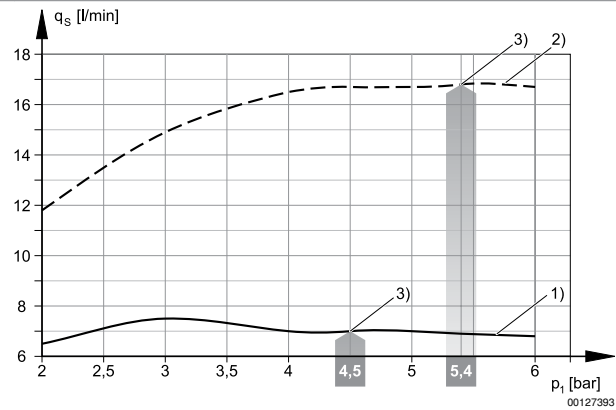
▶ Thread connection ▶ electrical control, T-design ▶ with silencer

Vacuum p_2 depending on working pressure p_1



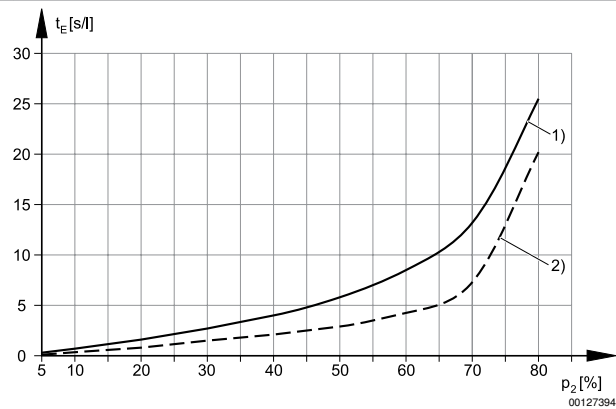
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

Suction capacity q_s depending on working pressure p_1

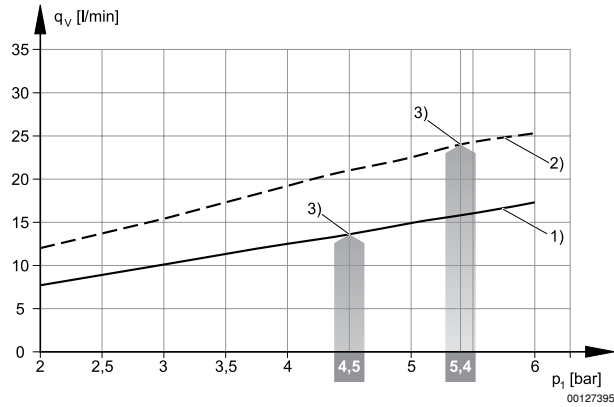


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

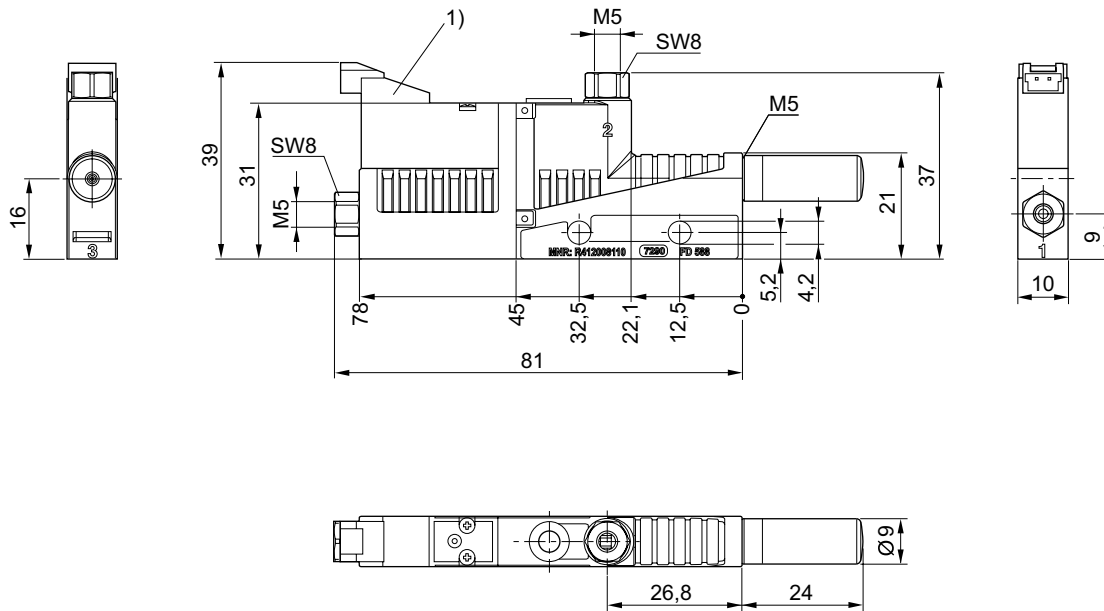
Evacuation time t_E depending on vacuum p_2 for 1 l volume (with optimal operating pressure p_{1opt})



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

Ejector, Series EBS
▶ Thread connection ▶ electrical control, T-design ▶ with silencer
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

Dimensions


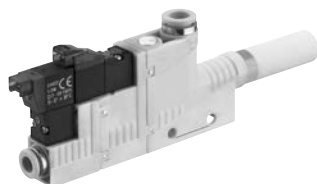
- 1) Solenoid valve for vacuum ON/OFF

00127391

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer



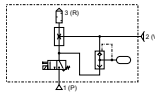
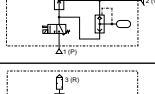
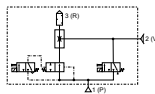
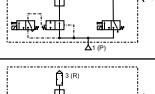
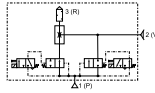
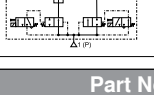
00125705

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Protection class:2001with electrical connector	IP40
Display	LED
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Status display	LED
Power consumption Solenoid valve	1.3 W

Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Release ring	Polyamide
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

Type	Nozzle Ø	Compressed air connection	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity	Part No.
	[mm]			[%]	[l/min]	
 EBS-ET-05-NC	0.5			84	7.5	R412007461
 EBS-ET-07-NC	0.7	Ø 4	Ø 4	85	16.8	R412007462
 EBS-ET-10-NO	1			86	35	R412007463
 EBS-ET-15-NO	1.5	Ø 6	Ø 8	84	71	R412007464
 EBS-ET-20-NO	2			86	123	R412007465
 EBS-ET-25-NO	2.5	Ø 8	Ø 10	84	223	R412007466

Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
	[l/min]	[dB]	[dB]	[kg]	
R412007461	14	53	58	0.035	Fig. 1
R412007462	24	59	65		
R412007463	48	59	65	0.065	Fig. 2
R412007464	118	71	71		

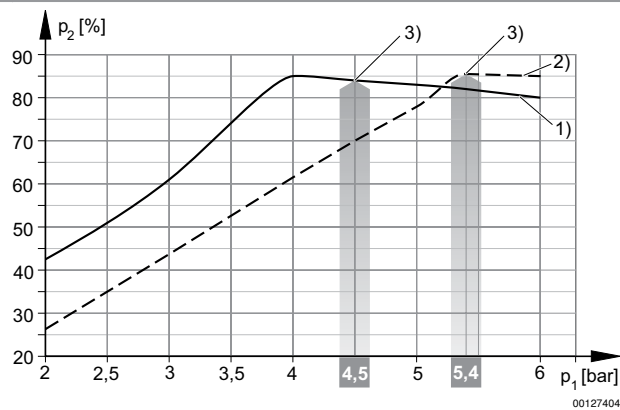
NC = ejector line closed without current
 NO = ejector suction line open without current
 p.opt. = optimum working pressure

Ejector, Series EBS

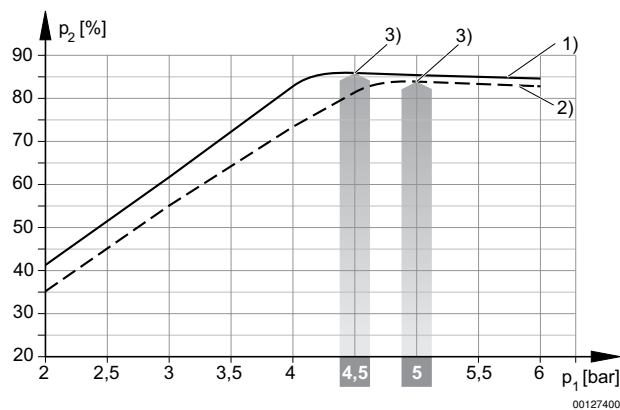
▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer

Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
	[l/min]	[dB]	[dB]		
R412007465	208	68	77	0.146	Fig. 3
R412007466	320	70	78		

NC = ejector line closed without current
 NO = ejector suction line open without current
 p.opt. = optimum working pressure

Vacuum p₂ depending on working pressure p₁


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

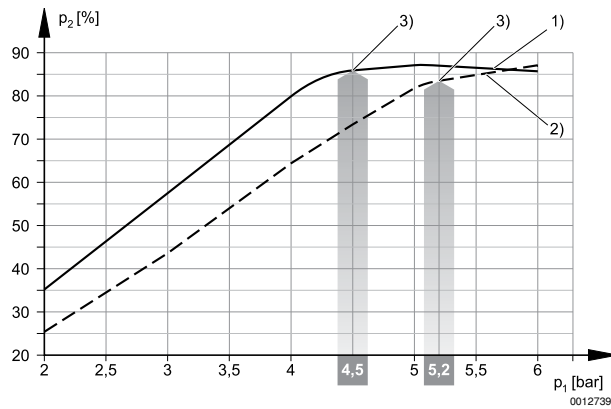


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
 3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

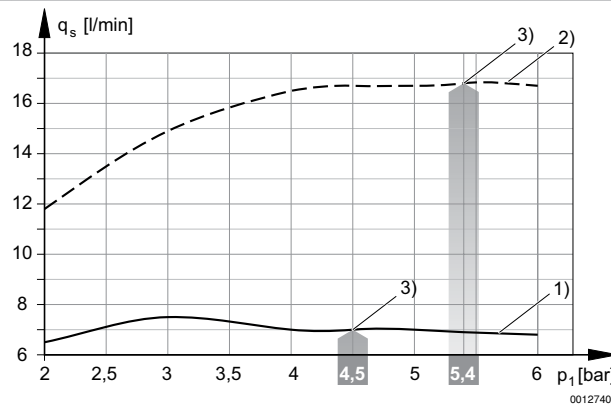
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer

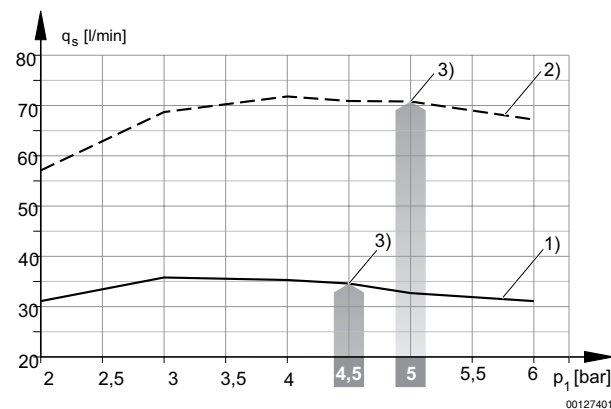


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Suction capacity q_s depending on working pressure p_1



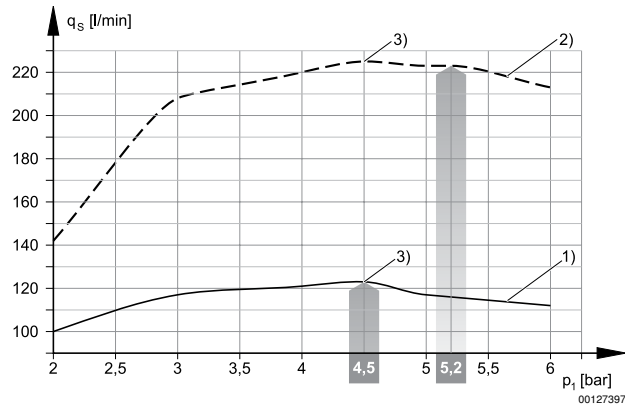
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

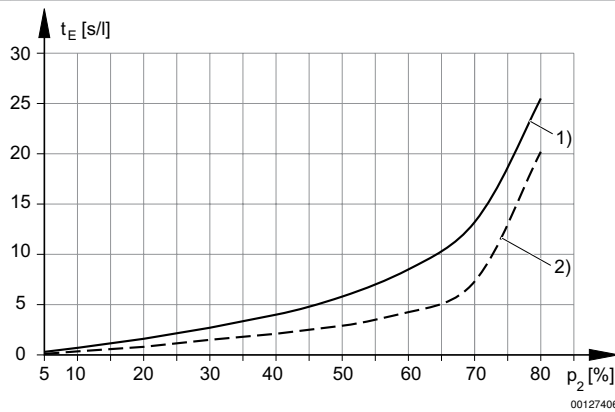
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer

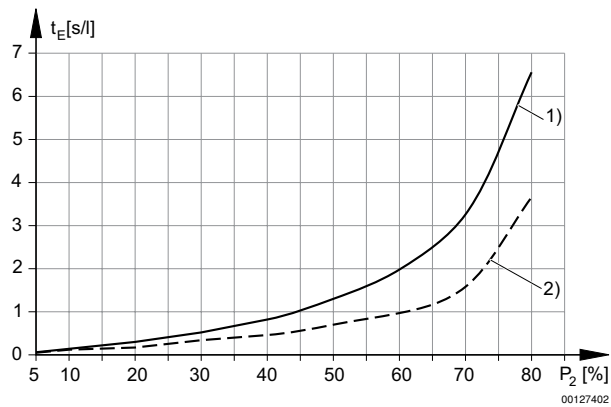


- 1) = \varnothing nozzle 2.0 mm 2) = \varnothing nozzle 2.5 mm
 3) optimum working pressure

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



- 1) = \varnothing nozzle 0.5 mm 2) = \varnothing nozzle 0.7 mm

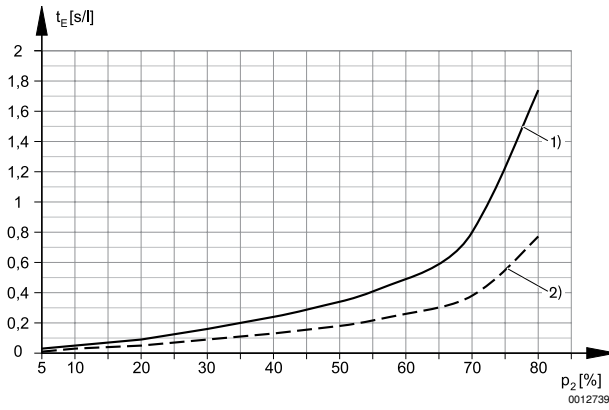


- 1) = \varnothing nozzle 1.0 mm 2) = \varnothing nozzle 1.5 mm

Gripper and vacuum technology ▶ Vacuum generators

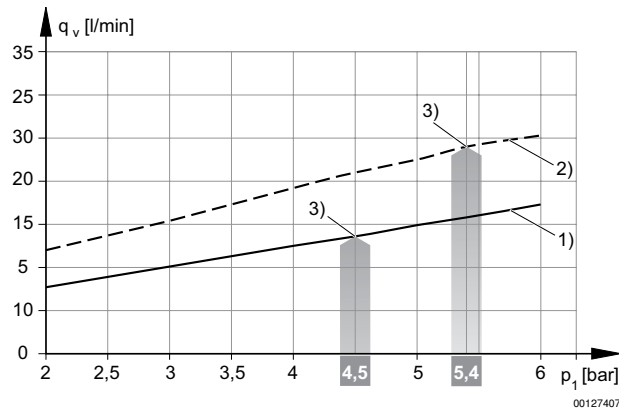
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer

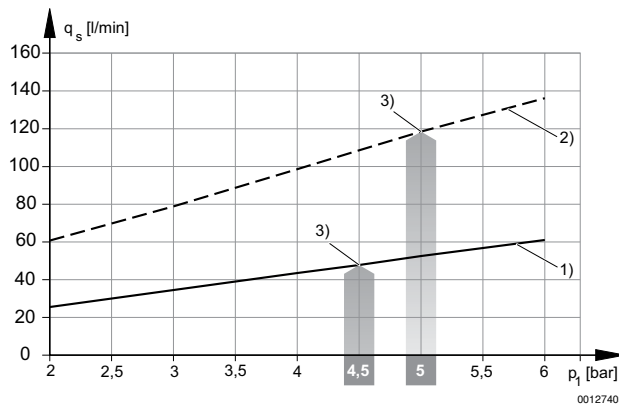


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

Air consumption q_v depending on working pressure p_1



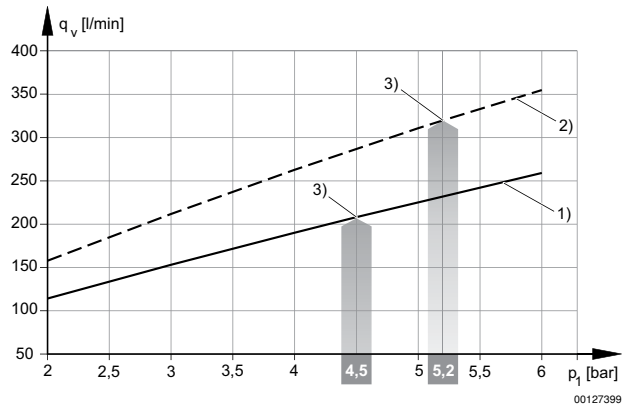
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

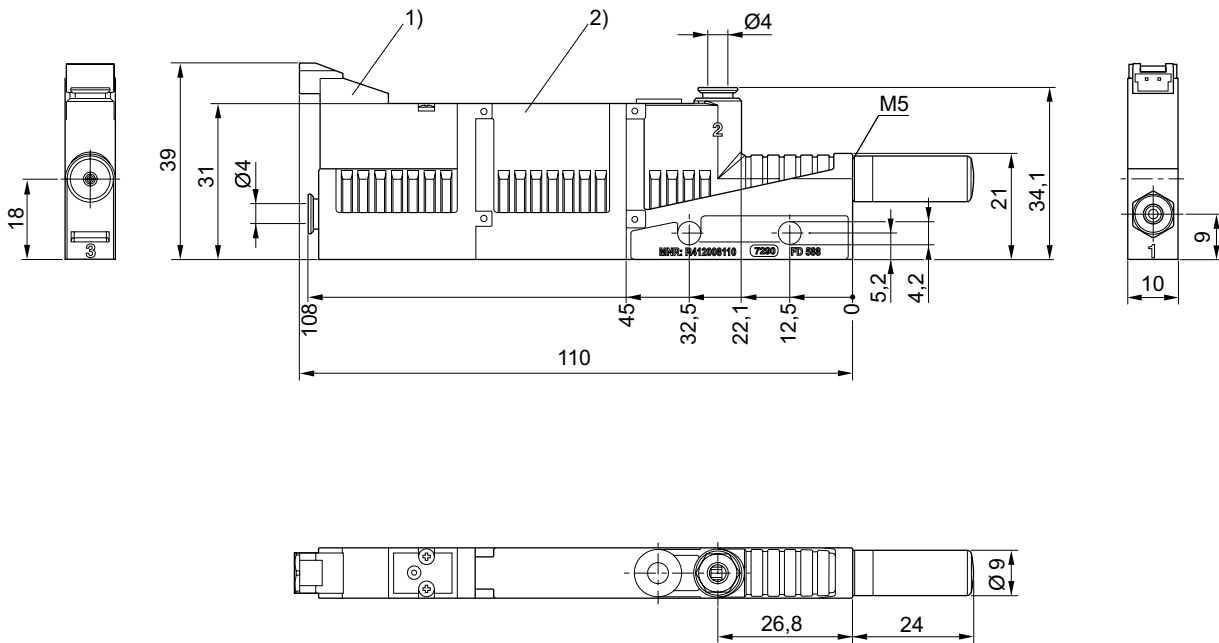
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer



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

00127399

Fig. 1


- 1) Solenoid valve for vacuum ON/OFF
 2) Release valve from memory

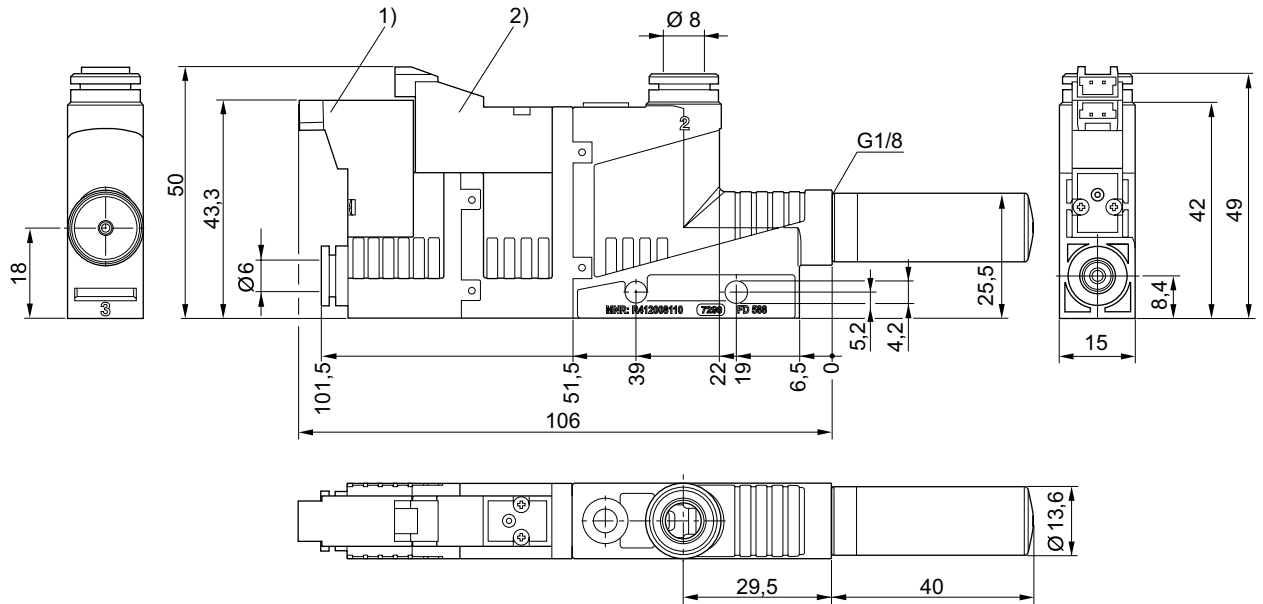
00127382

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer

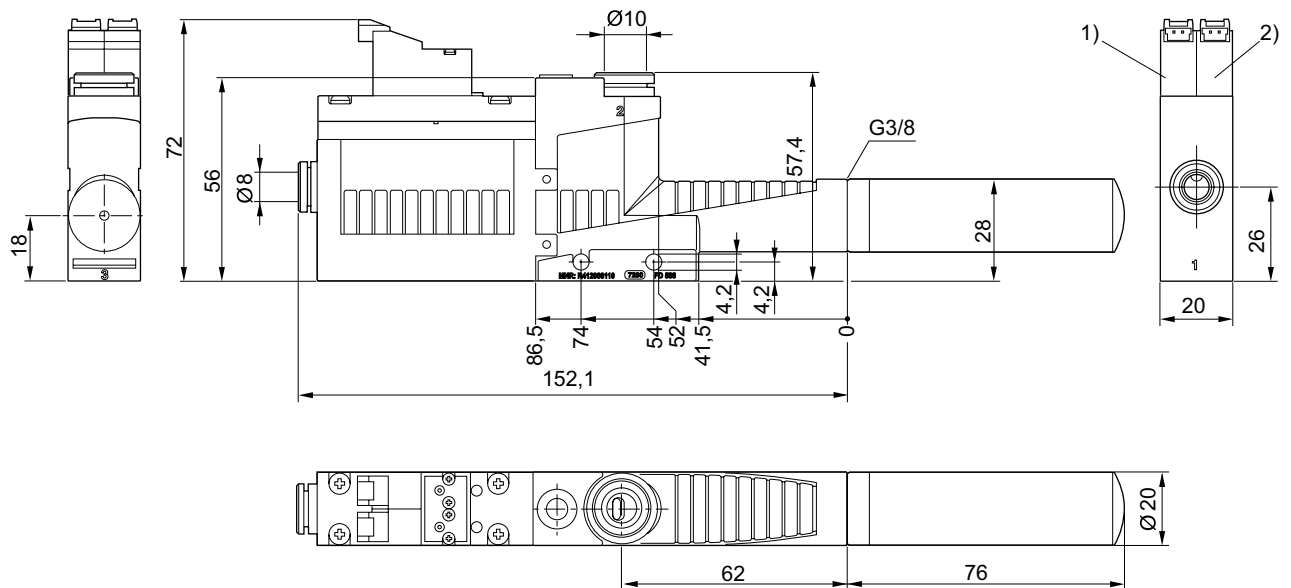
Fig. 2



00127384

- 1) Solenoid valve for vacuum ON/OFF
- 2) Solenoid valve for release pulse

Fig. 3

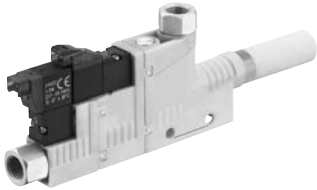


00127387

- 1) Solenoid valve for vacuum ON/OFF
- 2) Solenoid valve for release pulse

Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer



00125706

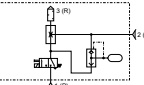
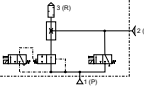
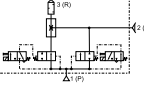
Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class:2001with electrical connector	IP40
Display	LED
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Status display	LED
Power consumption Solenoid valve	1.3 W

Materials:

Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Threaded bushing	Aluminum, anodized
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

	Type	Nozzle Ø	Com-pressed air connection	Vacuum connec-tion+	Max. vacuum level at p.opt	Max. suction capacity	Part No.
		[mm]			[%]	[l/min]	
	EBS-ET-05-NC	0.5			84	7.5	R412007485
	EBS-ET-07-NC	0.7	M5	M5	85	16.8	R412007486
	EBS-ET-10-NO	1			86	35	R412007487
	EBS-ET-15-NO	1.5	G 1/8	G 1/8	84	71	R412007488
	EBS-ET-20-NO	2			86	123	R412007489
	EBS-ET-25-NO	2.5	G 1/4	G 3/8	84	223	R412007490

Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
	[l/min]	[dB]	[dB]	[kg]	
R412007485	14	53	58	0.035	Fig. 1
R412007486	24	59	65		
R412007487	48	59	65	0.07	Fig. 2
R412007488	118	71	71		

NC = ejector line closed without current
 NO = ejector suction line open without current
 p.opt. = optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

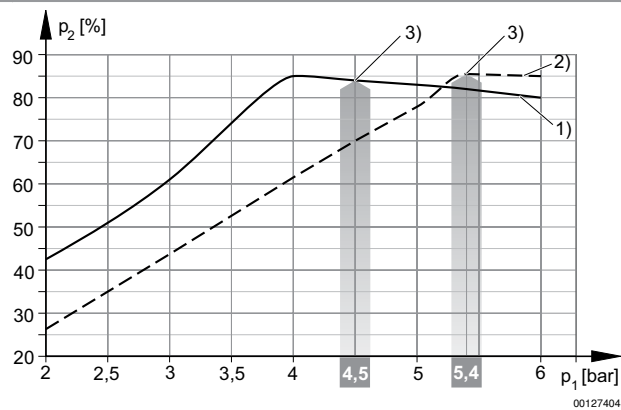
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer

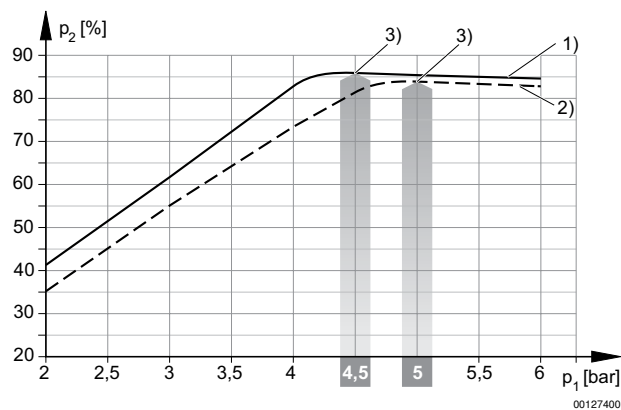
Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
	[l/min]	[dB]	[dB]		
R412007489	208	68	77	0.144	Fig. 3
R412007490	320	70	78		

NC = ejector line closed without current
 NO = ejector suction line open without current
 p.opt. = optimum working pressure

Vacuum p_2 depending on working pressure p_1



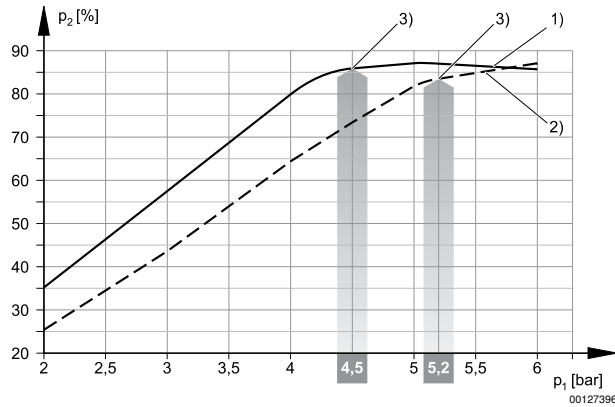
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
 3) optimum working pressure



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

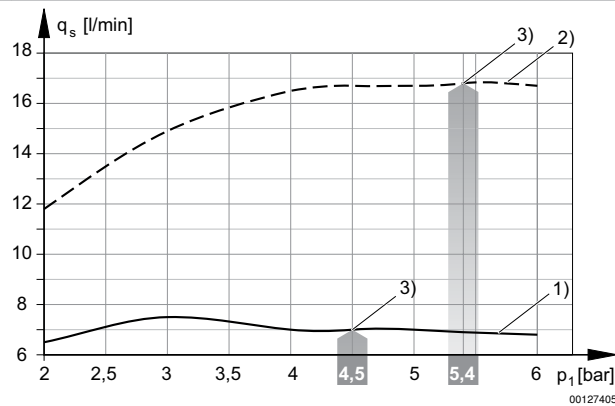
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer

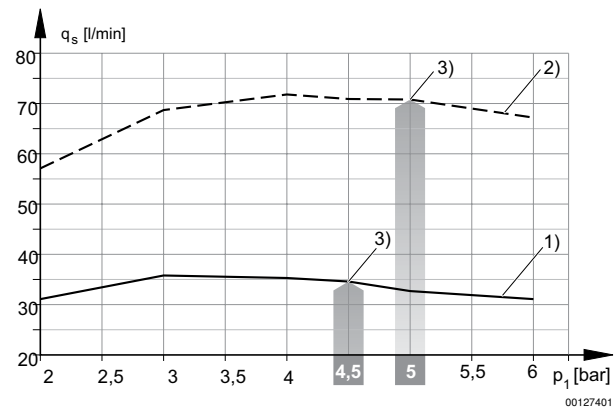


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Suction capacity q_s depending on working pressure p_1



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

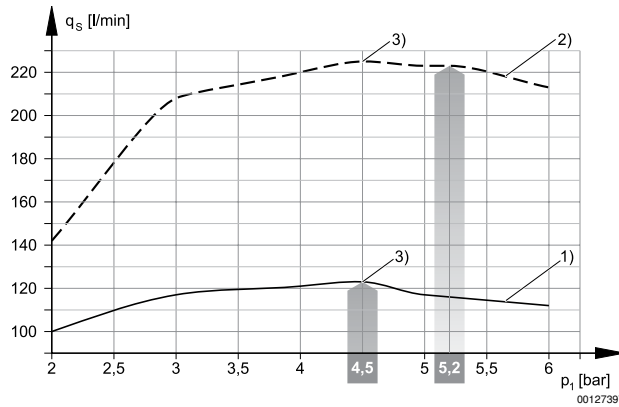


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

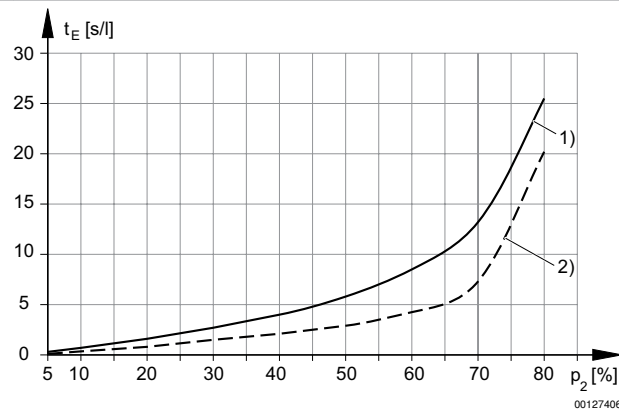
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer

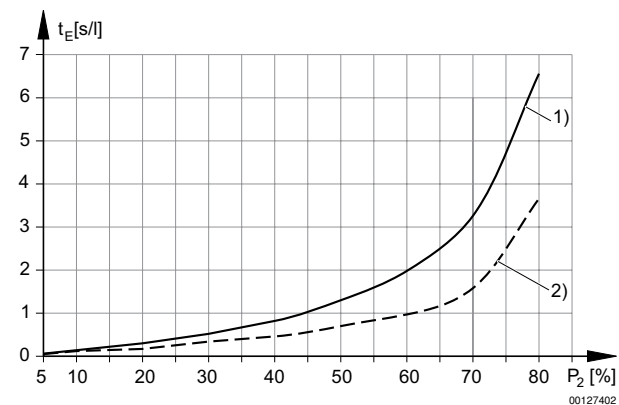


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
 3) optimum working pressure

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



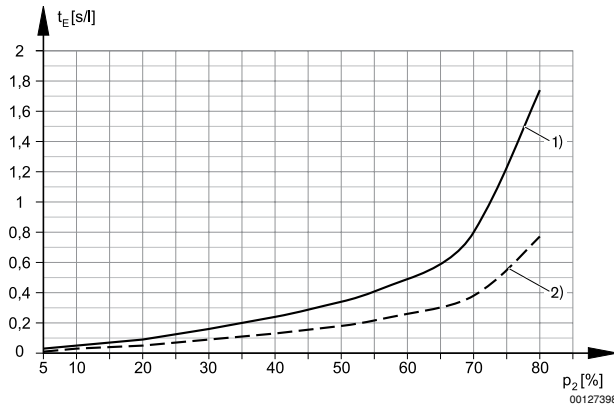
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
 3) optimum working pressure



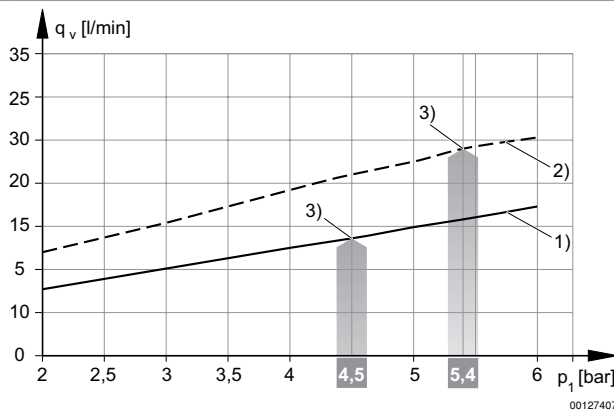
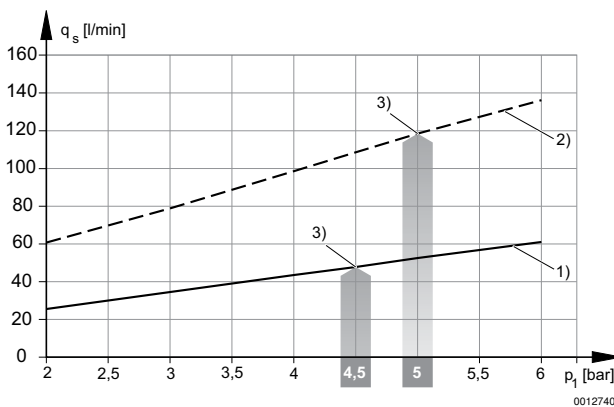
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm

Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer



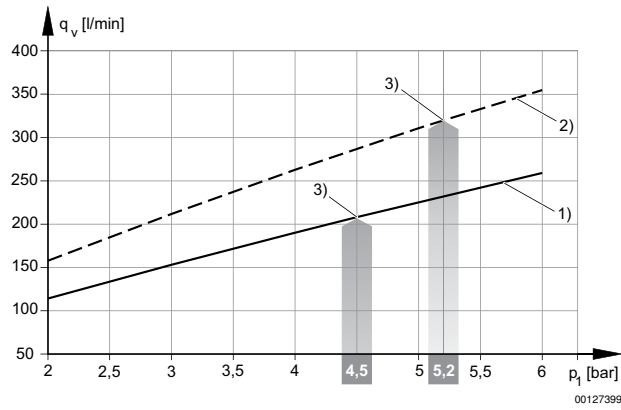
1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

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

Gripper and vacuum technology ▶ Vacuum generators

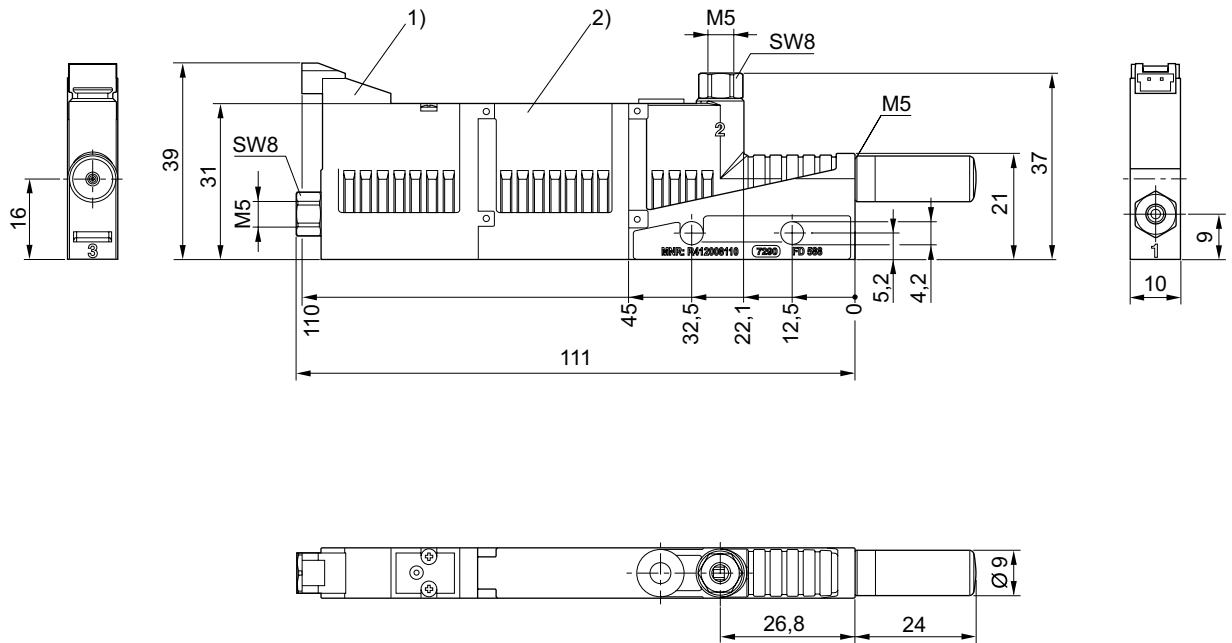
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer



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

Fig. 1



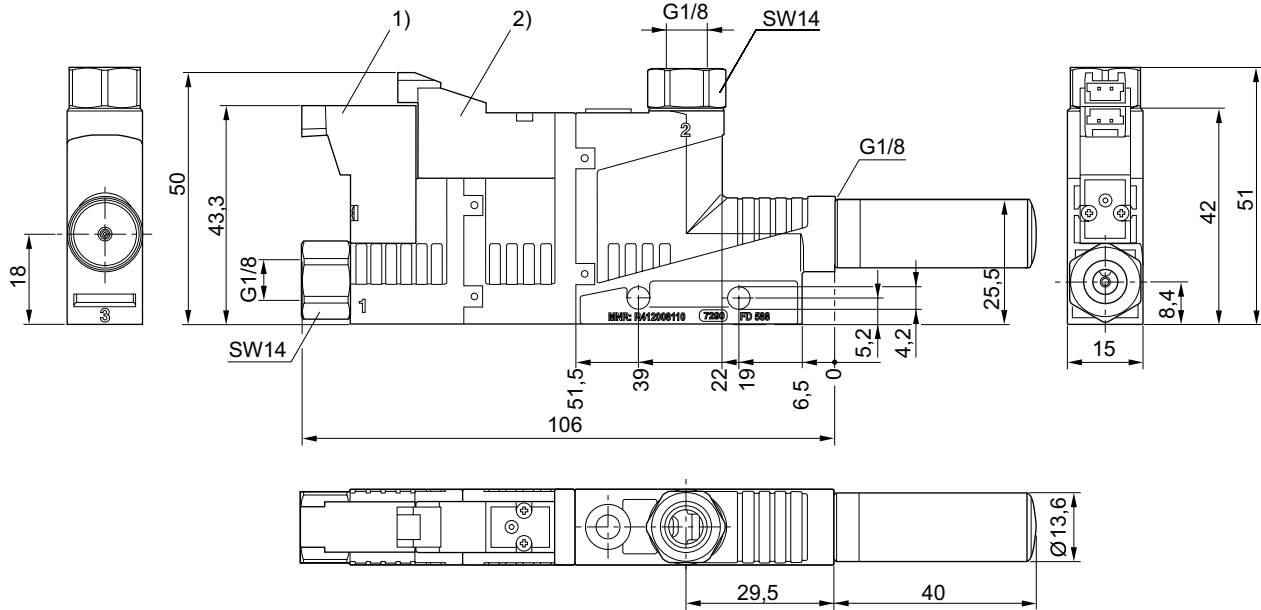
1) Solenoid valve for vacuum ON/OFF
2) Release valve from memory

00127383

Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer

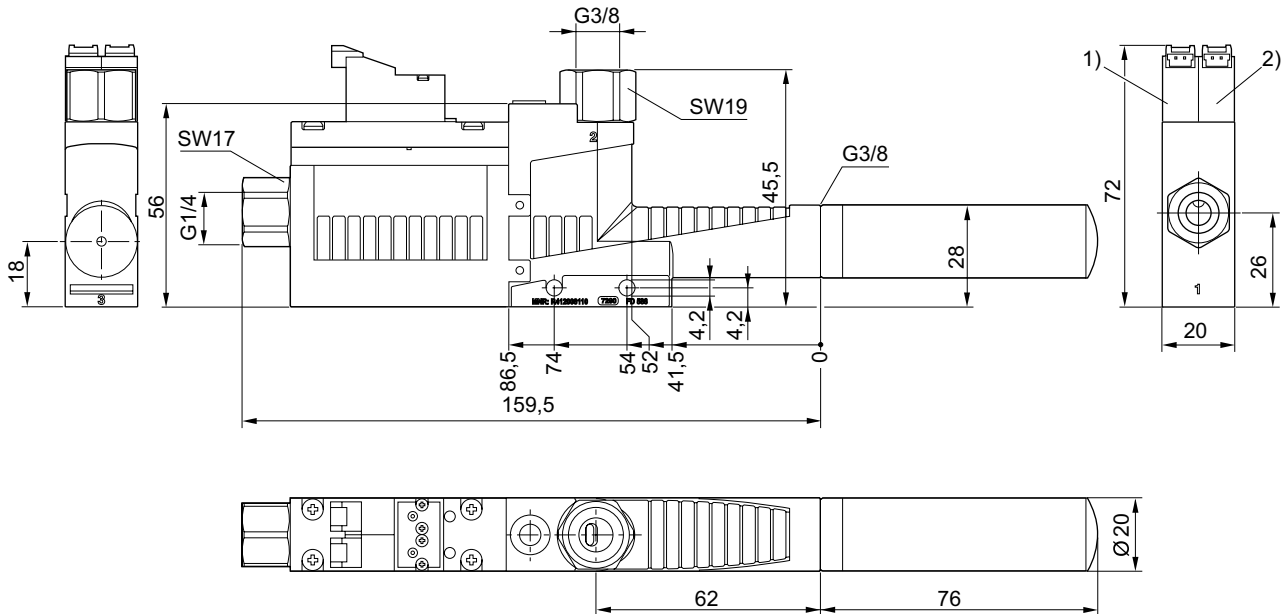
Fig. 2



00127385

- 1) Solenoid valve for vacuum ON/OFF
2) Solenoid valve for release pulse

Fig. 3



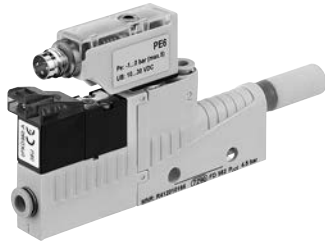
00127388

- 1) Solenoid valve for vacuum ON/OFF
2) Solenoid valve for release pulse

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, adjustable



00135362

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class	IP40
Duty cycle according to DIN VDE 0580 standard	100 %
Hysteresis	2% of the final value, fixed
Precision (% of full scale value)	± 3 %
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Power consumption Solenoid valve	1.3 W
Switching point	adjustable 0-100%
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Silencers	Polyethylene
Pressure sensor	Polycarbonate

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

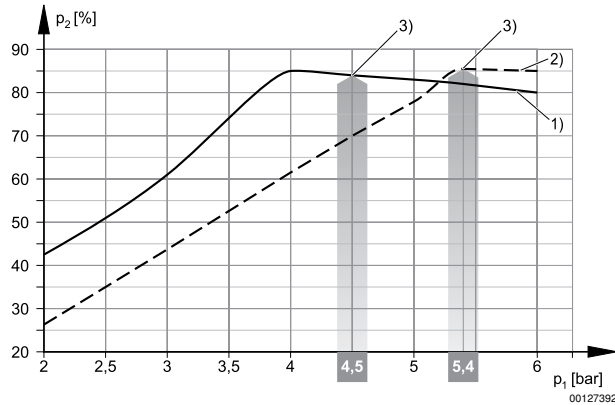
Type	Nozzle Ø	Compressed air connection	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Sound pressure level intake effect	Part No.
	[mm]			[%]	[l/min]	[l/min]	[dB]	
EBS-ET-05-NC	0.5	Ø 4	Ø 4	84	7.5	14	53	R412010166
EBS-ET-07-NC	0.7	Ø 4	Ø 4	85	16.8	24	59	R412010167

Part No.	Sound pressure level intake effect	Protection against overpressure (max.)	Weight
	[dB]	[bar]	[kg]
R412010166	58	5	0.033
R412010167	65	5	0.033

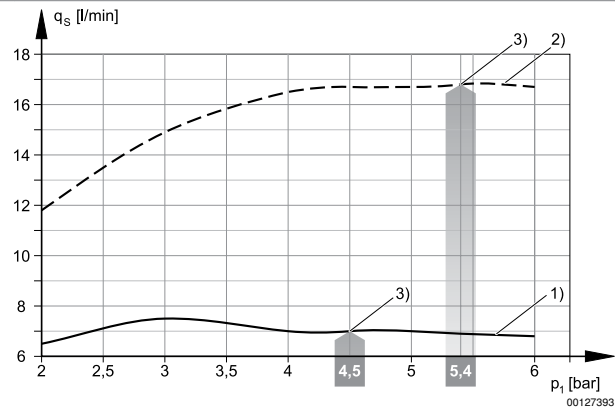
NC = ejector line closed without current
 p.opt. = optimum working pressure
 Output signal: 2 x PNP, NO (normally open contact)

Ejector, Series EBS

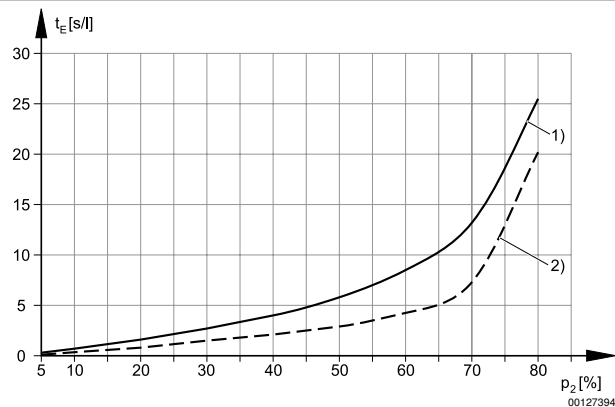
▶ push-in fitting ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, adjustable

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

Suction capacity q_s depending on working pressure p_1 

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

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

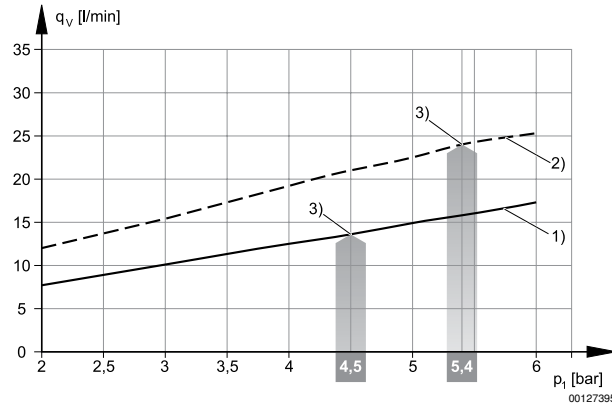
1) = \varnothing nozzle 0.5 mm 2) = \varnothing nozzle 0.7 mm

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

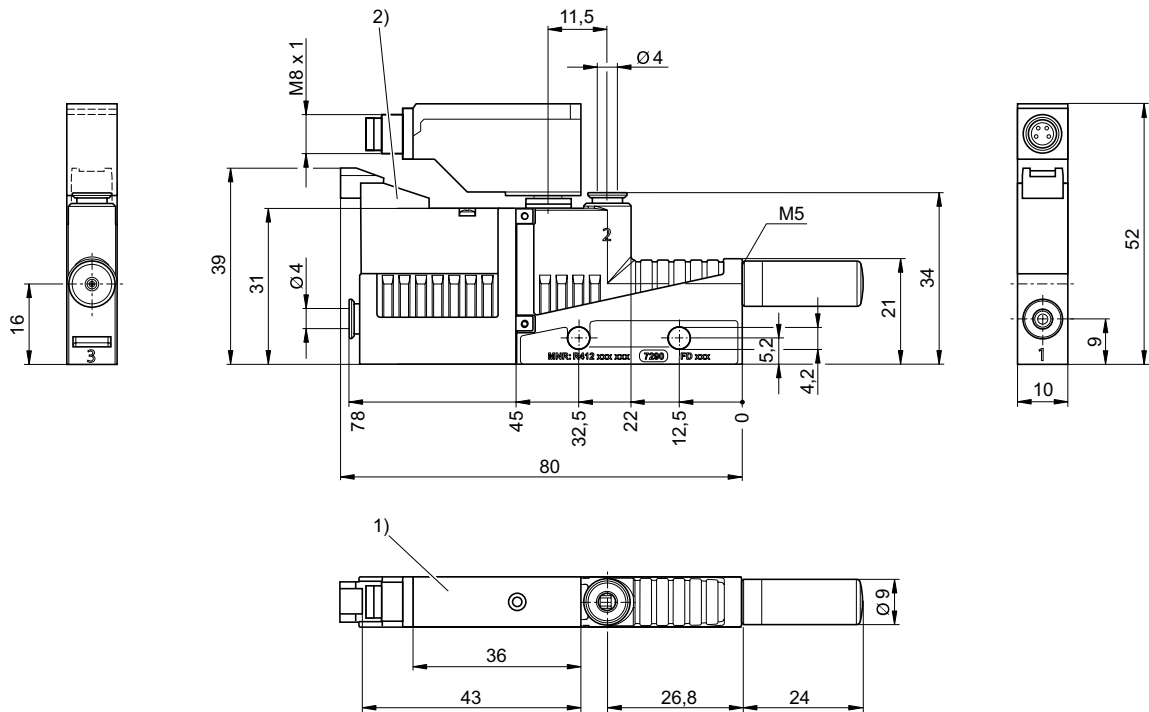
▶ push-in fitting ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, adjustable

Air consumption q_v depending on working pressure p_1



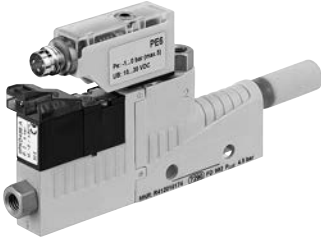
- 1) = \varnothing nozzle 0.5 mm
- 2) = \varnothing nozzle 0.7 mm
- 3) optimum working pressure

Dimensions



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

00134006

Ejector, Series EBS
▶ Thread connection ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, adjustable


00135361

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class	IP40
Duty cycle according to DIN VDE 0580 standard	100 %
Hysteresis	2% of the final value, fixed
Precision (% of full scale value)	± 3 %
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Power consumption Solenoid valve	1.3 W
Switching point	adjustable 0-100%
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Silencers	Polyethylene
Pressure sensor	Polycarbonate

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

Type	Nozzle Ø	Compressed air connection	Vacuum connection	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Sound pressure level intake effect	Part No.
	[mm]			[%]	[l/min]	[l/min]	[dB]	
EBS-ET-05-NC	0.5	M5	M5	84	7.5	14	53	R412010174
EBS-ET-07-NC	0.7	M5	M5	85	16.8	24	59	R412010175

Part No.	Sound pressure level intake effect	Protection against overpressure (max.)	Weight
	[dB]	[bar]	[kg]
R412010174	58	5	0.0335
R412010175	65	5	0.0335

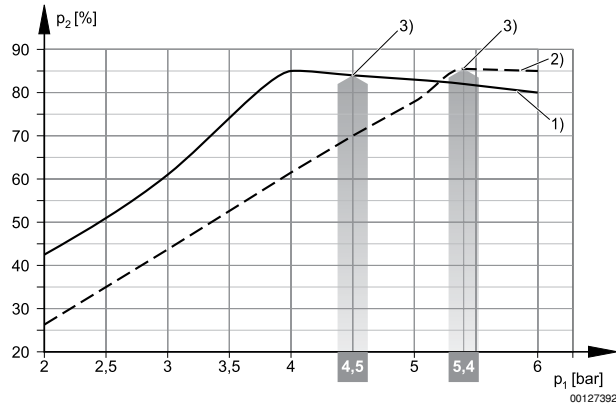
NC = ejector line closed without current
 p.opt. = optimum working pressure
 Output signal: 2 x PNP, NO (normally open contact)

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

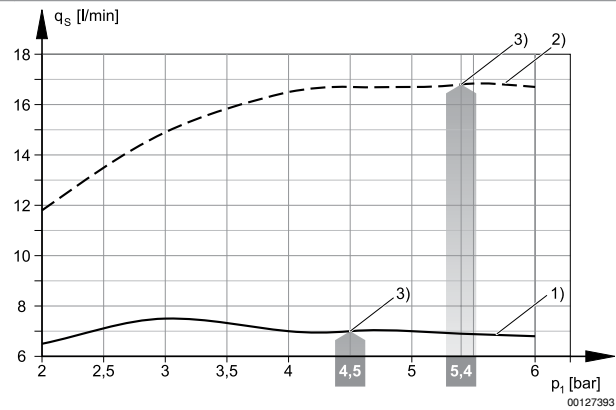
▶ Thread connection ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, adjustable

Vacuum p_2 depending on working pressure p_1



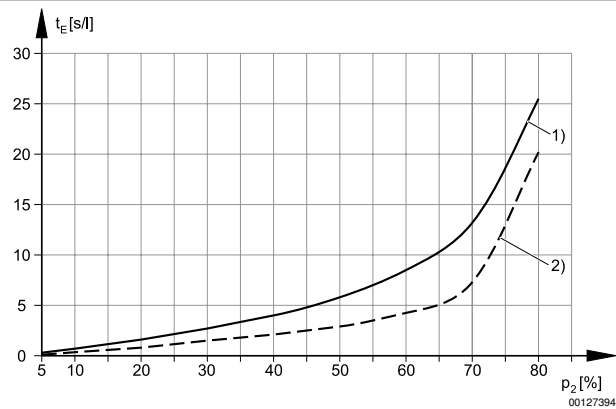
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

Suction capacity depending on working pressure p_1



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

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

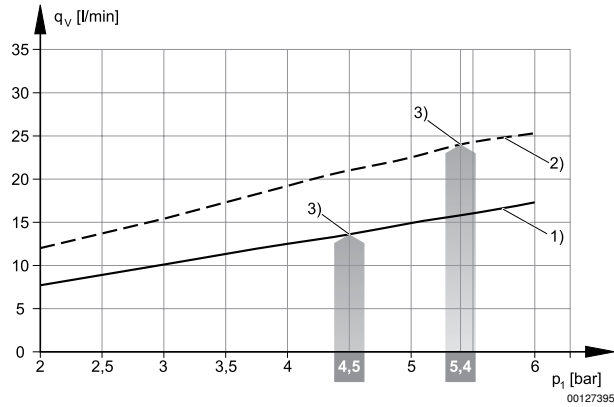


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm

Ejector, Series EBS

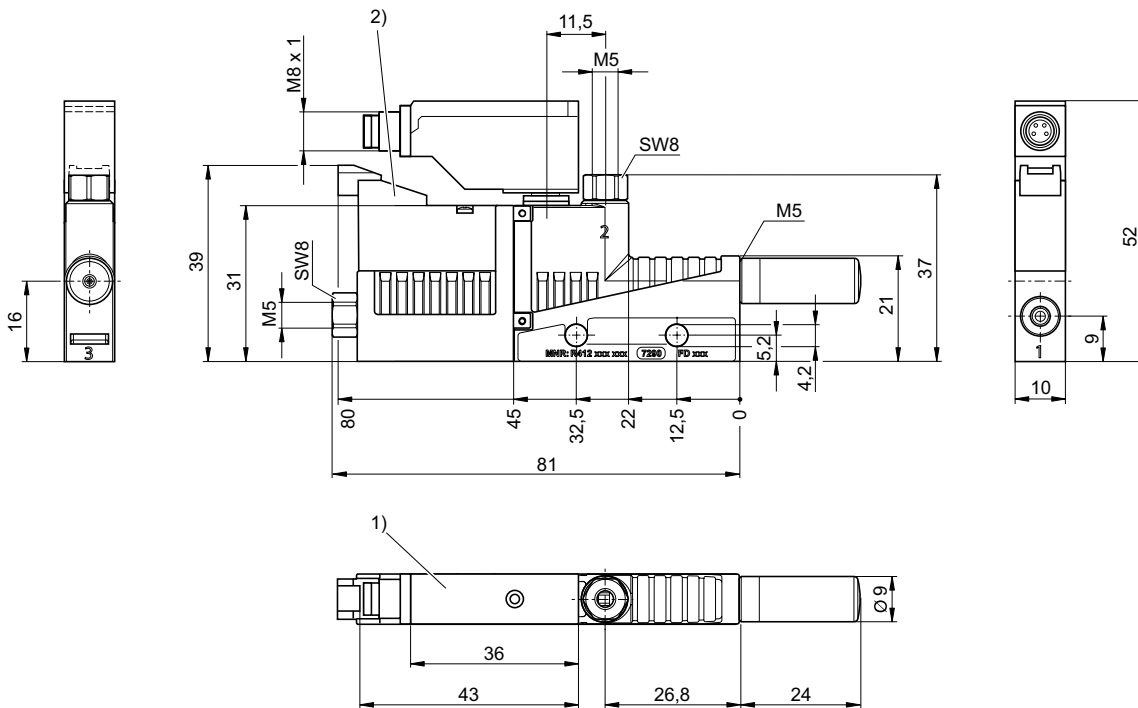
▶ Thread connection ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, adjustable

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

Dimensions



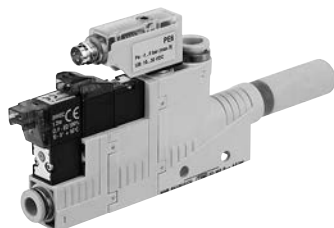
- 1) vacuum switch is rotatable and exchangeable
 2) Solenoid valve for vacuum ON/OFF

00134013

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable



00135359

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class	IP40
Duty cycle according to DIN VDE 0580 standard	100 %
Hysteresis	2% of the final value, fixed
Precision (% of full scale value)	± 3 %
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Power consumption Solenoid valve	1.3 W
Switching point	adjustable 0-100%
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Silencers	Polyethylene
Pressure sensor	Polycarbonate

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

	Type	Nozzle Ø	Com-pressed air connection	Vacuum connec-tion+	Max. vacuum level at p.opt	Max. suction capacity	Part No.
		[mm]			[%]	[l/min]	
	EBS-ET-05-NC	0.5			84	7.5	R412010168
	EBS-ET-07-NC	0.7	Ø 4	Ø 4	85	16.8	R412010169
	EBS-ET-10-NO	1	Ø 6	Ø 8	86	35	R412010170
	EBS-ET-15-NO	1.5	Ø 6	Ø 8	84	71	R412010171
	EBS-ET-20-NO	2	Ø 8	Ø 8	86	123	R412010172
	EBS-ET-25-NO	2.5	Ø 8	Ø 8	84	223	R412010173

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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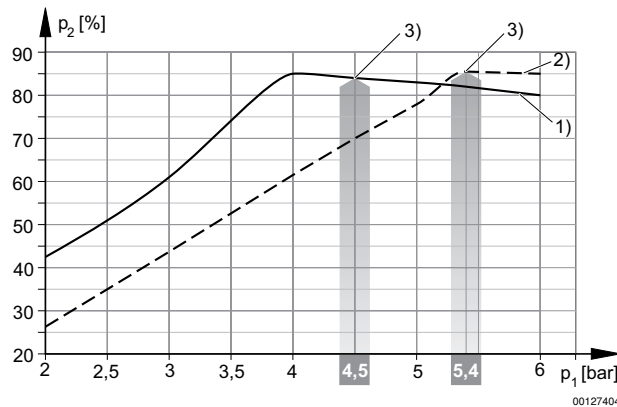
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable

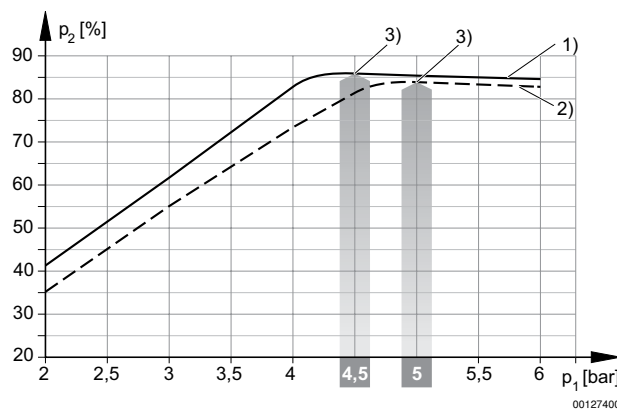
Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Protection against overpressure (max.)	Weight	Fig.
	[l/min]	[dB]	[dB]			
R412010168	14	53	58	5	0.041	Fig. 1
R412010169	24	65	68			
R412010170	48	59	65	5	0.07	Fig. 2
R412010171	118	71	71			
R412010172	208	68	77	5	0.154	Fig. 3
R412010173	320	70	78			

NC = ejector line closed without current
 NO = ejector suction line open without current
 Output signal: 2 x PNP, NO (normally open contact)
 p.opt. = optimum working pressure

Vacuum depending on working pressure p_e



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

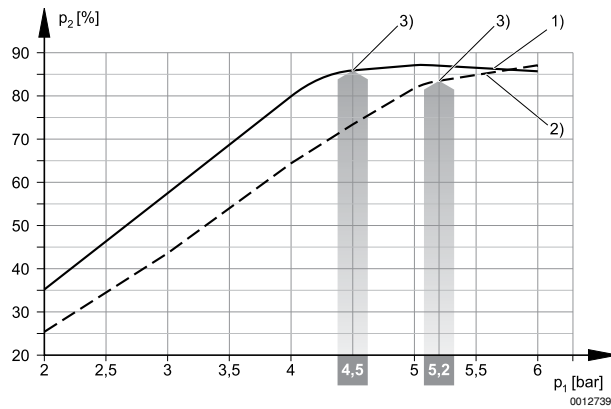


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
 3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

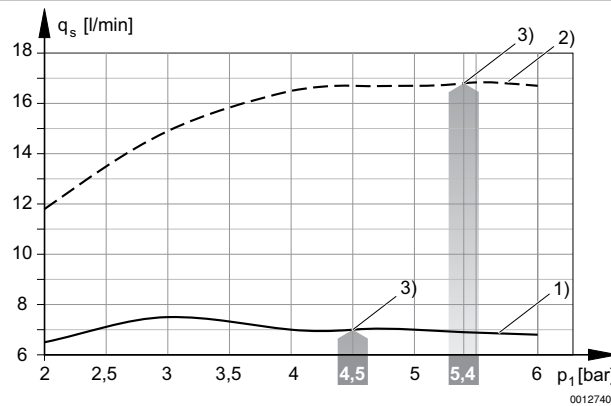
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable

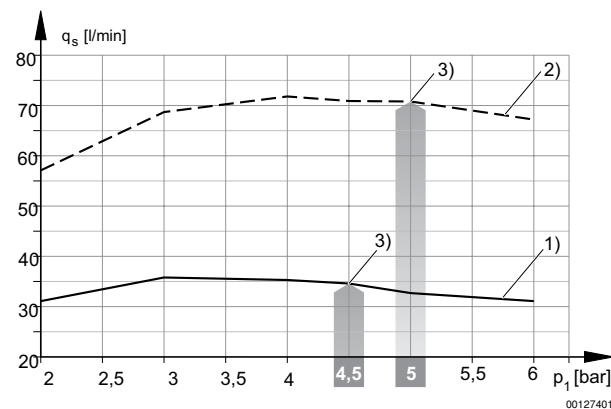


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Suction capacity depending on working pressure p_e



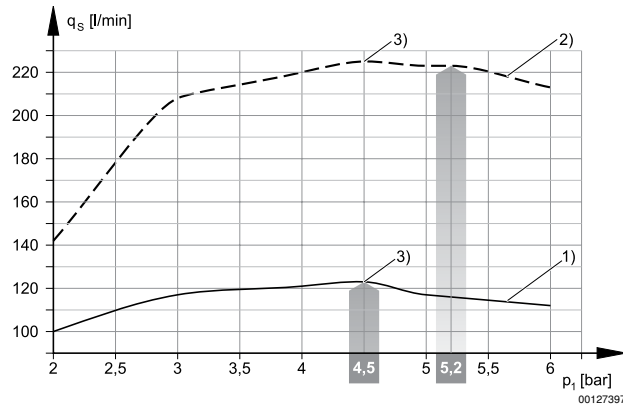
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

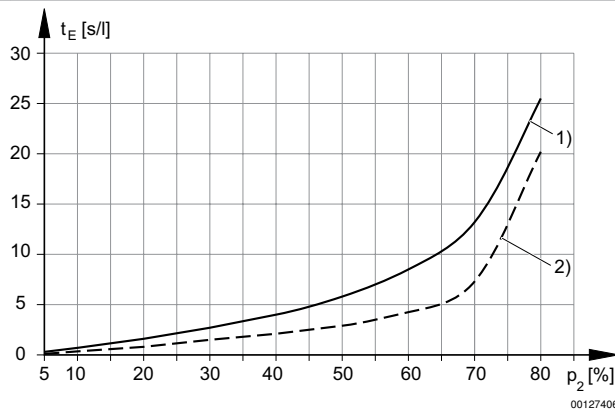
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable

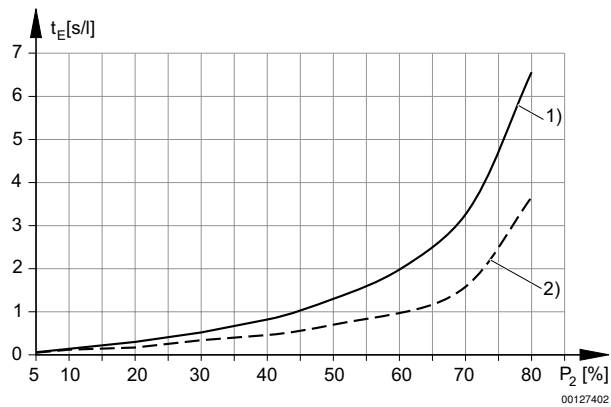


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

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

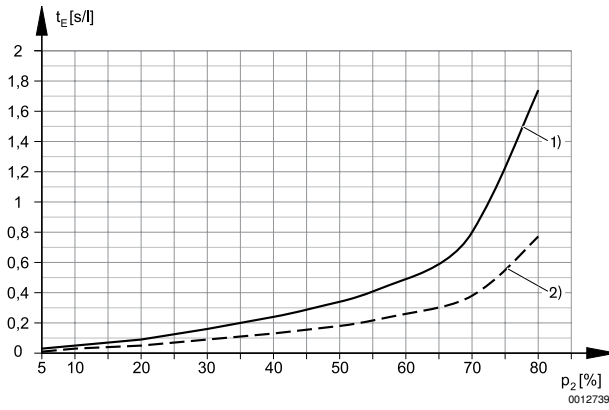


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm

Gripper and vacuum technology ▶ Vacuum generators

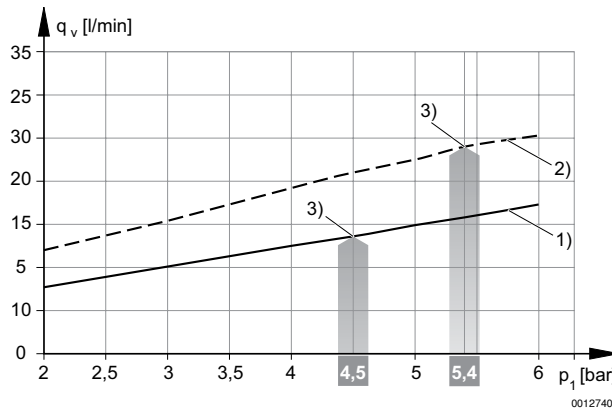
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable

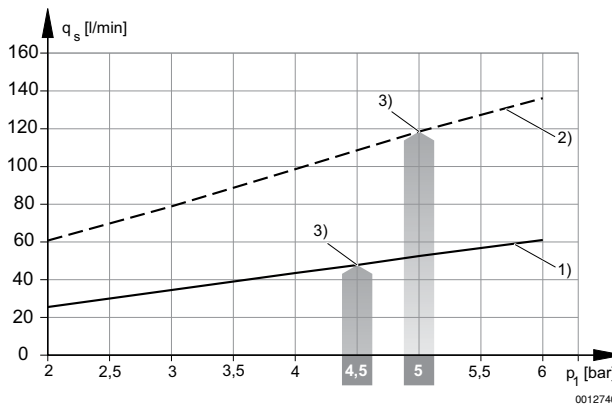


1) = \varnothing nozzle 2.0 mm 2) = \varnothing nozzle 2.5 mm

Air consumption q_v depending on working pressure p_1



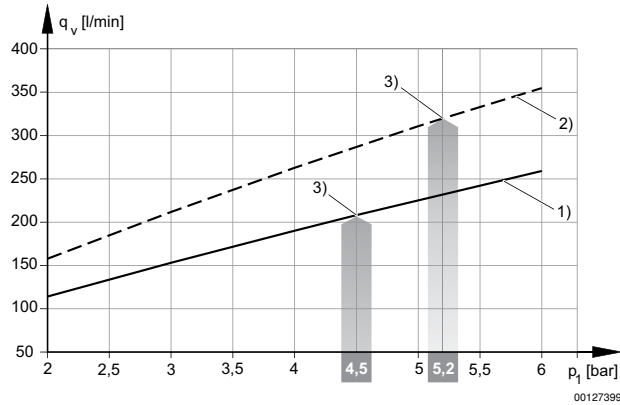
1) = \varnothing nozzle 0.5 mm 2) = \varnothing nozzle 0.7 mm
3) optimum working pressure



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

Ejector, Series EBS

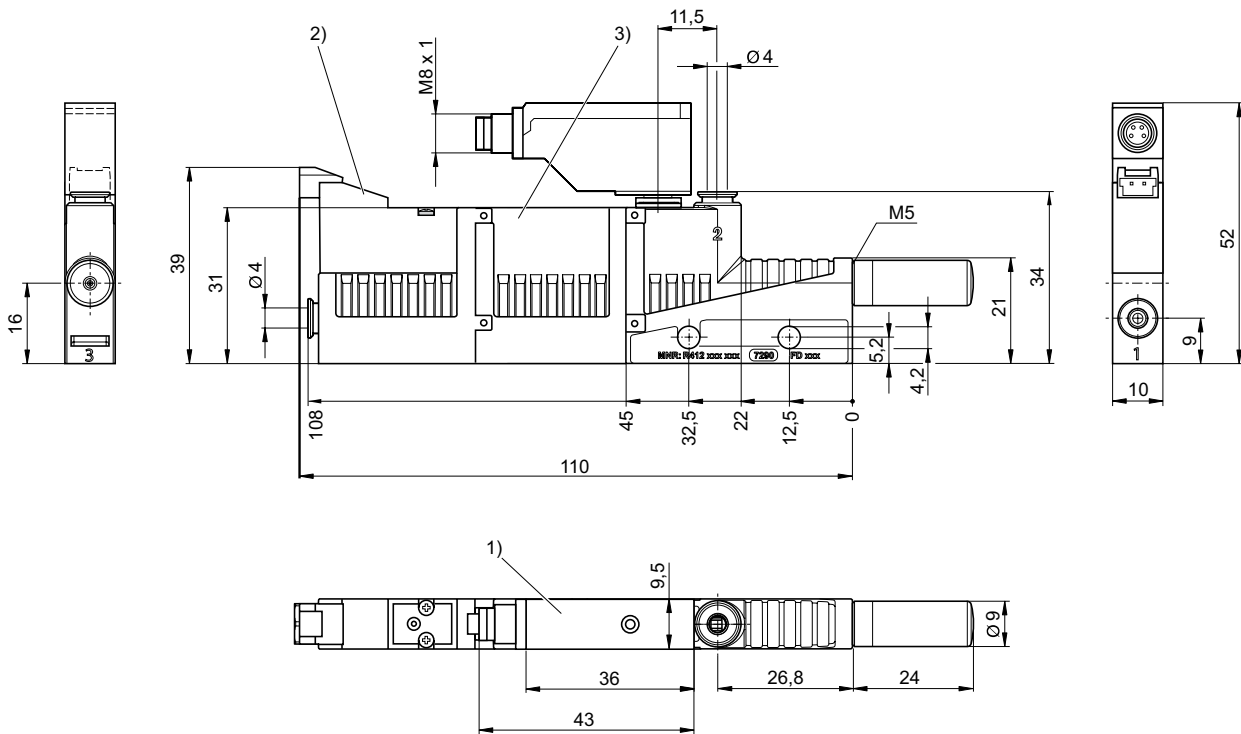
▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable



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

00127399

Fig. 1



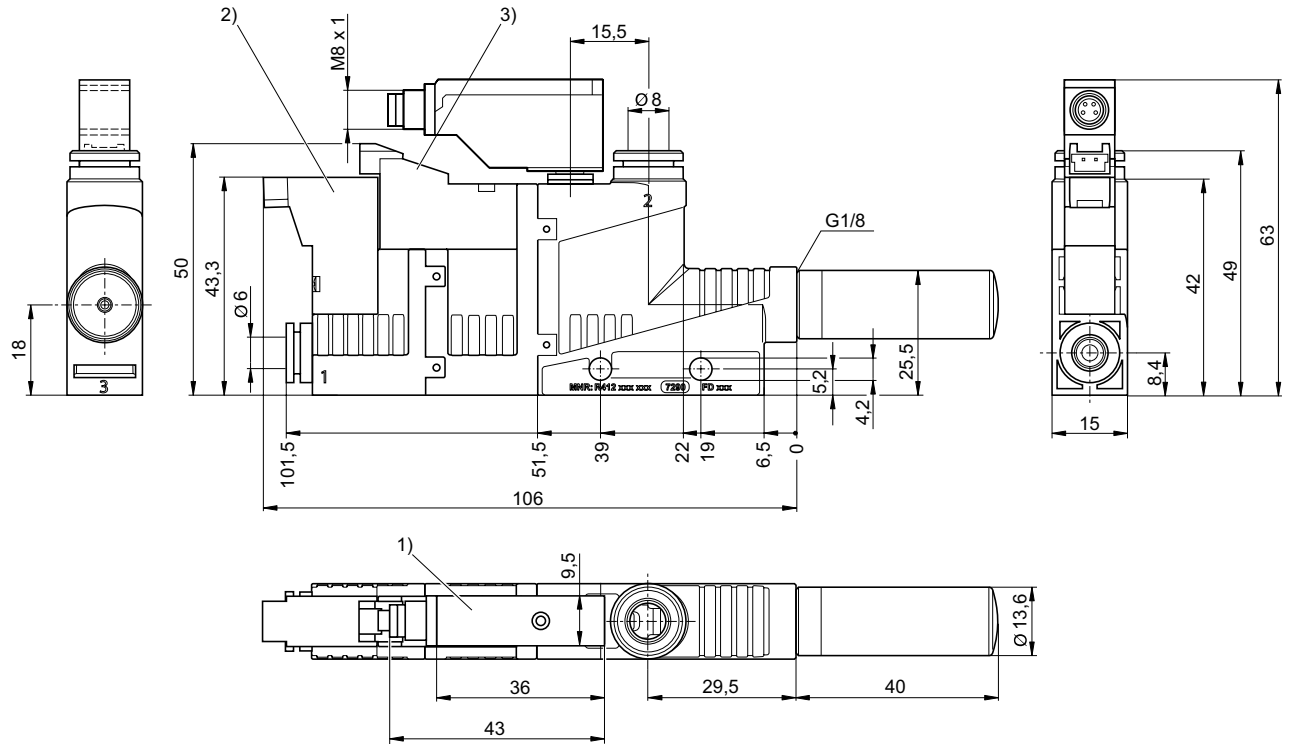
00134007

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

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable

Fig. 2



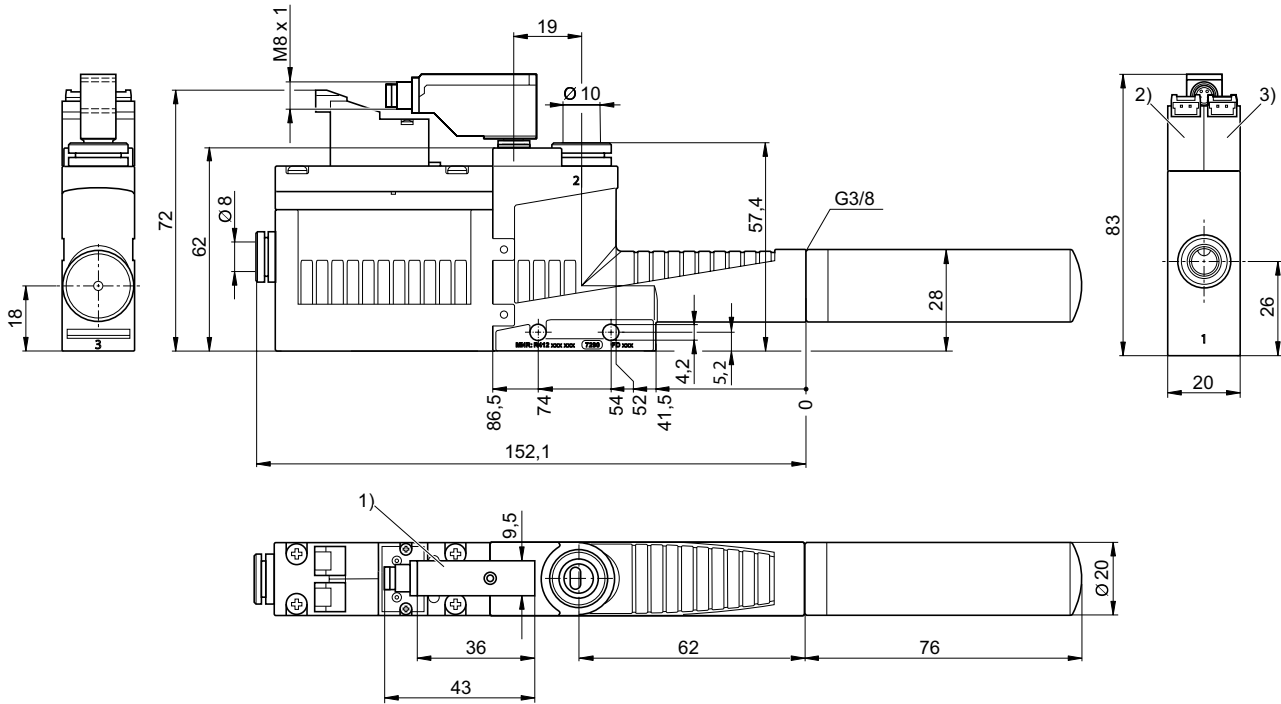
- 1) vacuum switch is rotatable and exchangeable
- 2) Solenoid valve for vacuum ON/OFF
- 3) Solenoid valve for release pulse

00134008

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable

Fig. 3



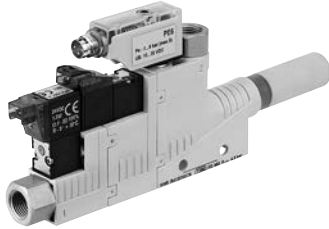
- 1) vacuum switch is rotatable and exchangeable
 2) Solenoid valve for vacuum ON/OFF
 3) Solenoid valve for release pulse

00134009

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable



00135358

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class	IP40
Duty cycle according to DIN VDE 0580 standard	100 %
Hysteresis	2% of the final value, fixed
Precision (% of full scale value)	± 3 %
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Power consumption Solenoid valve	1.3 W
Switching point	adjustable 0-100%
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Silencers	Polyethylene
Pressure sensor	Polycarbonate

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

	Type	Nozzle Ø	Com-pressed air connection	Vacuum connec-tion+	Max. vacuum level at p.opt	Max. suction capacity	Part No.
		[mm]			[%]	[l/min]	
	EBS-ET-05-NC	0.5	M5	M5	84	7.5	R412010176
	EBS-ET-07-NC	0.7			85	16.8	R412010177
	EBS-ET-10-NO	1	G 1/8	G 1/8	86	35	R412010178
	EBS-ET-15-NO	1.5			84	71	R412010179
	EBS-ET-20-NO	2	G 1/4	G 3/8	86	123	R412010180
	EBS-ET-25-NO	2.5			84	223	R412010181

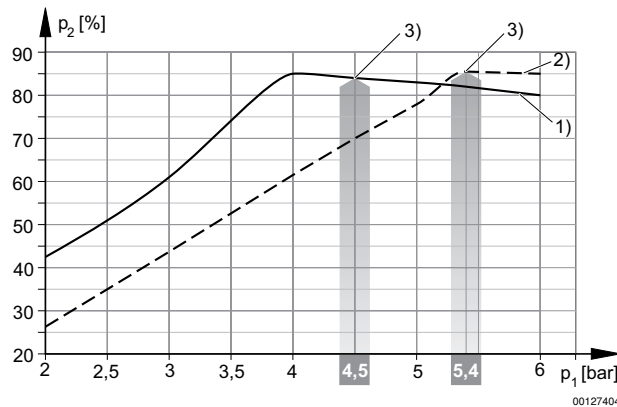
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
electronic, adjustable

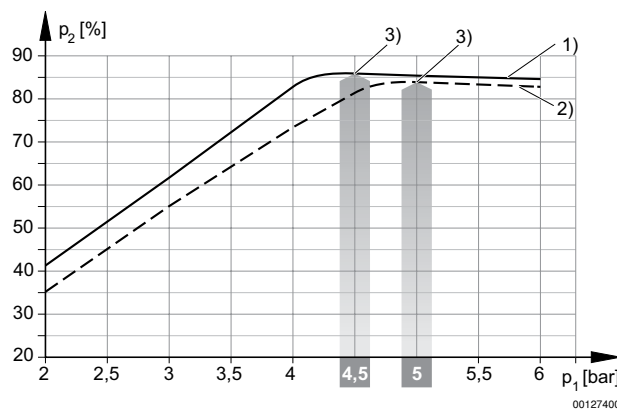
Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Protection against overpressure (max.)	Weight	Fig.
	[l/min]	[dB]	[dB]			
R412010176	14	53	58	5	0.0415	Fig. 1
R412010177	24	65	68			
R412010178	48	59	65	5	0.075	Fig. 2
R412010179	118	71	71			
R412010180	208	68	77	5	0.152	Fig. 3
R412010181	320	70	78			

NC = ejector line closed without current
 NO = ejector suction line open without current
 Output signal: 2 x PNP, NO (normally open contact)
 p.opt. = optimum working pressure

Vacuum p_2 depending on working pressure p_1



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

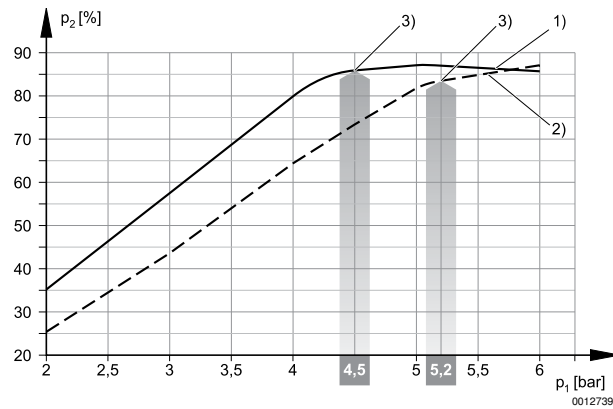


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
 3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

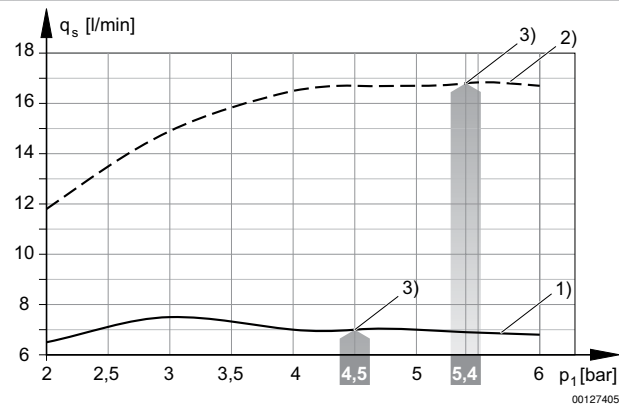
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
electronic, adjustable

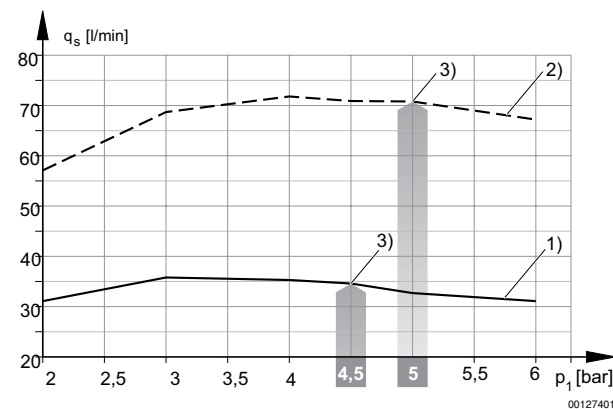


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Suction capacity depending on working pressure p_e



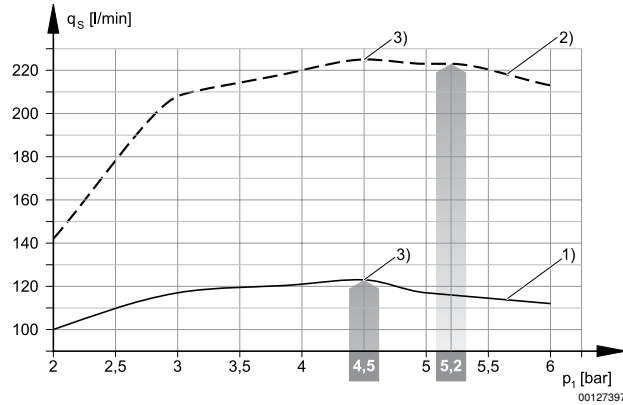
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

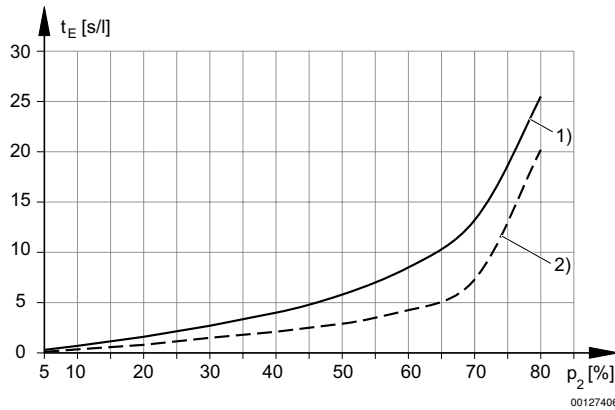
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
electronic, adjustable

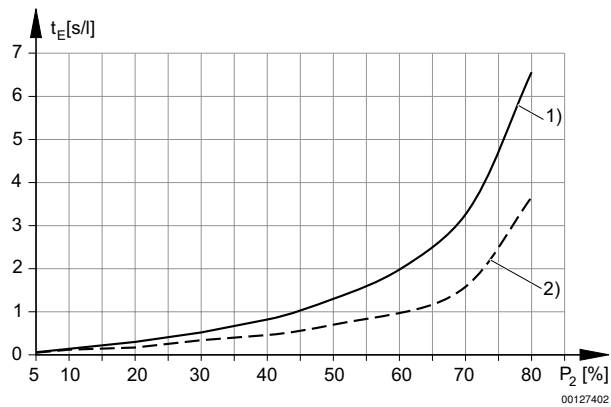


1) = \varnothing nozzle 2.0 mm 2) = \varnothing nozzle 2.5 mm
3) optimum working pressure

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



1) = \varnothing nozzle 0.5 mm 2) = \varnothing nozzle 0.7 mm

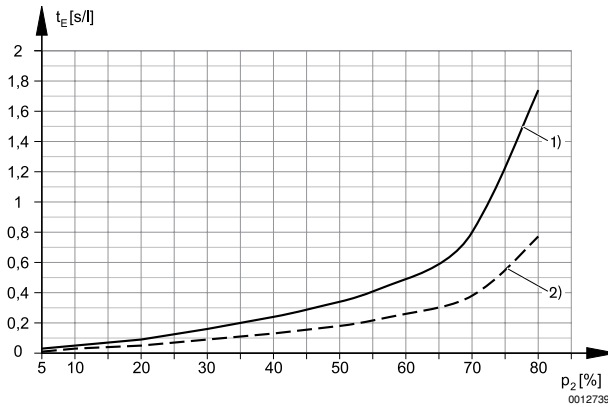


1) = \varnothing nozzle 1.0 mm 2) = \varnothing nozzle 1.5 mm

Gripper and vacuum technology ▶ Vacuum generators

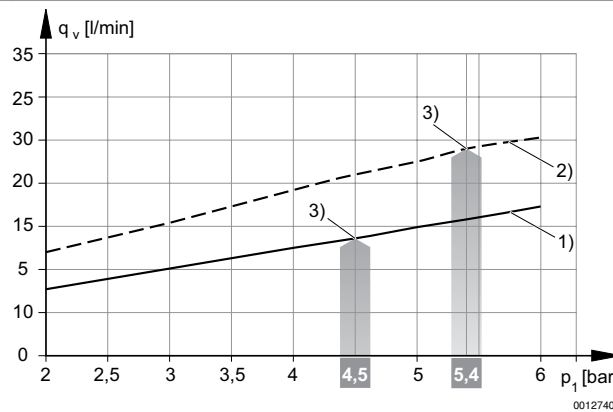
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable

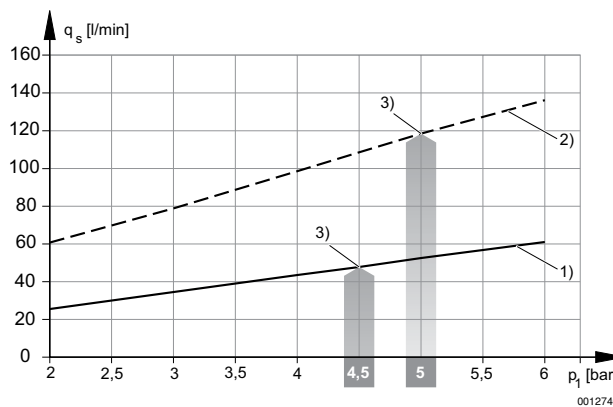


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

Air consumption q_v depending on working pressure p_1



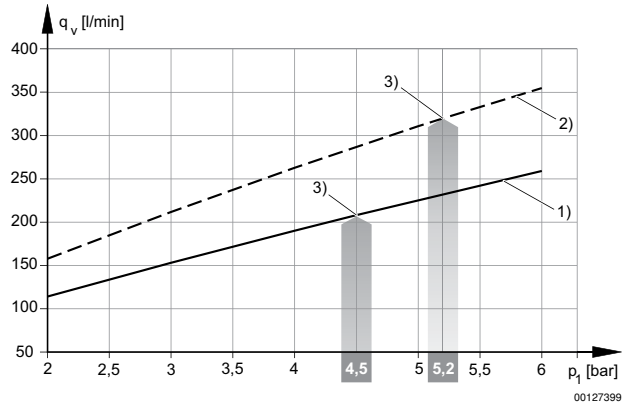
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

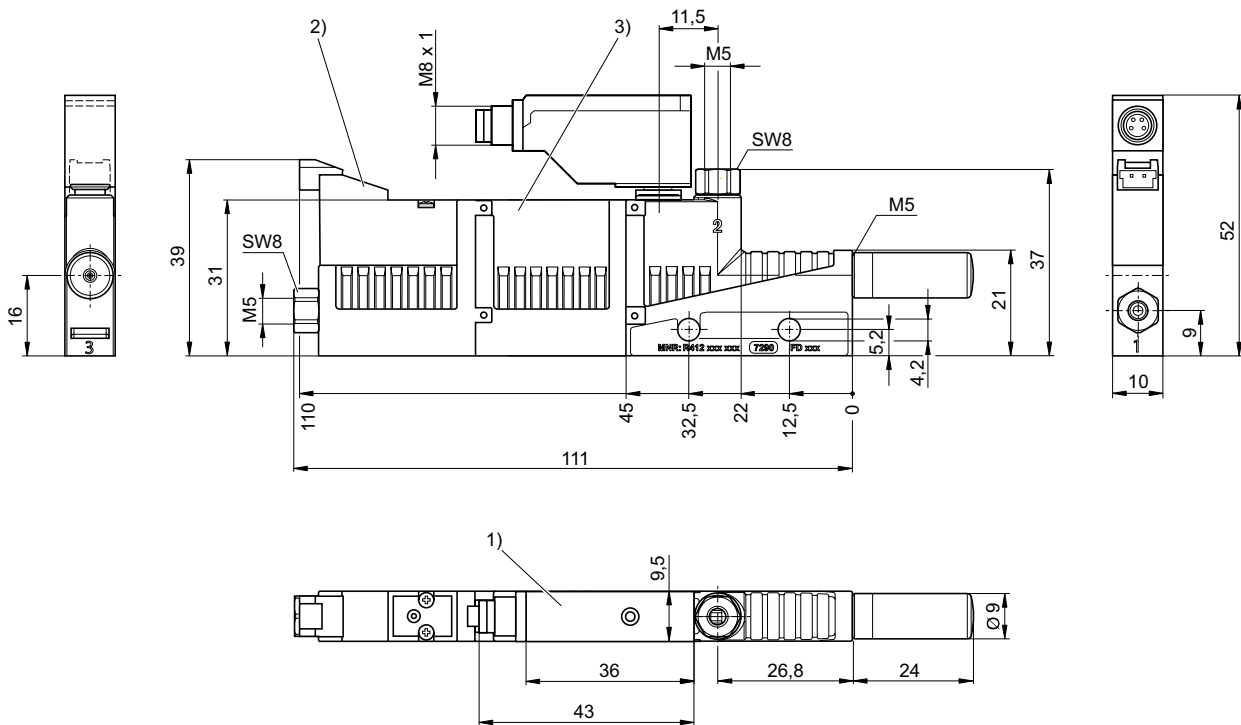
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
 electronic, adjustable



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

Fig. 1



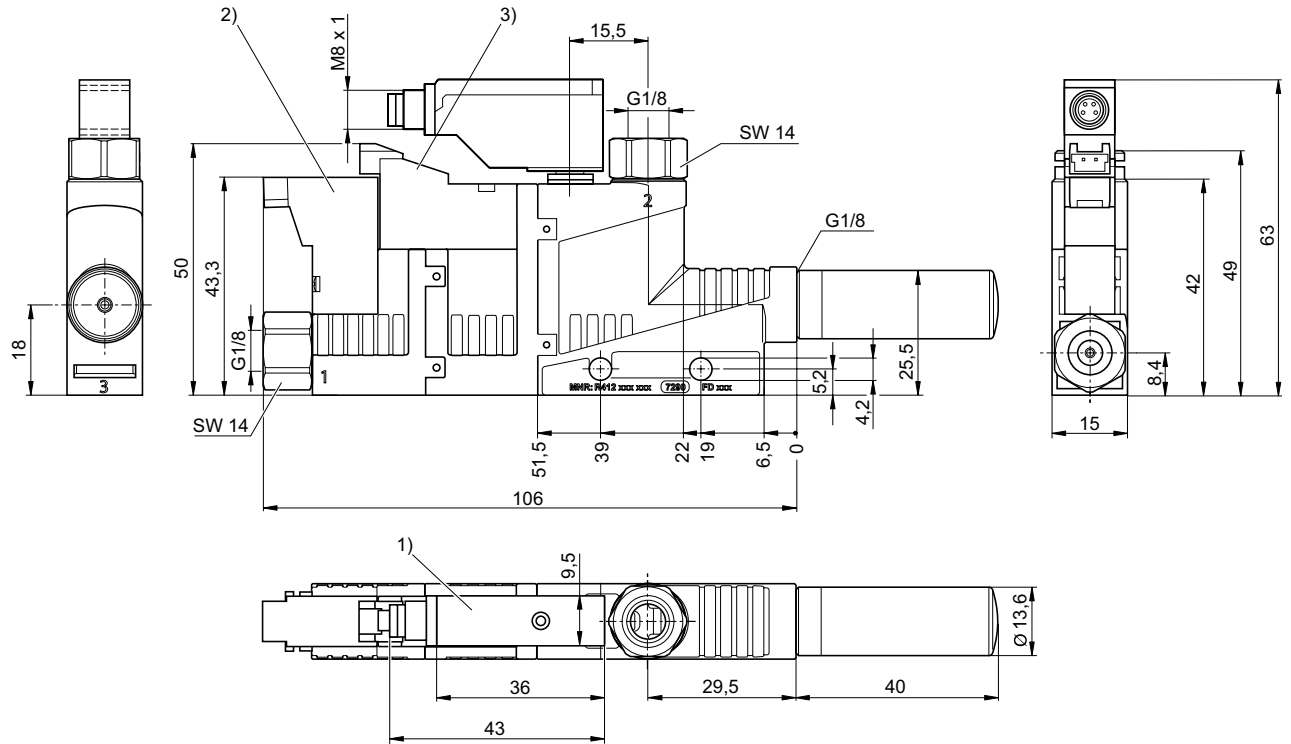
- 1) vacuum switch is rotatable and exchangeable
 2) Solenoid valve for vacuum ON/OFF
 3) Release valve from memory

00134010

Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable

Fig. 2

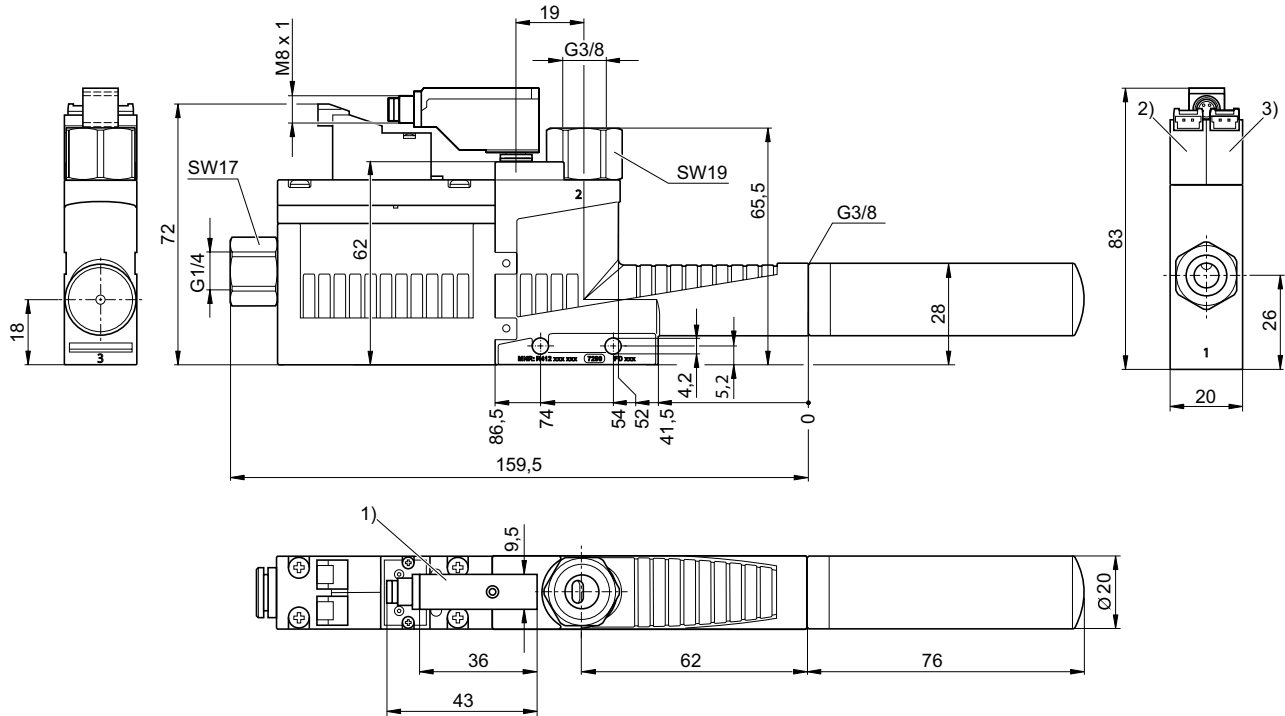


- 1) vacuum switch is rotatable and exchangeable
- 2) Solenoid valve for vacuum ON/OFF
- 3) Solenoid valve for release pulse

00134011

Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, adjustable

Fig. 3


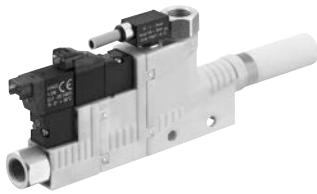
- 1) vacuum switch is rotatable and exchangeable
- 2) Solenoid valve for vacuum ON/OFF
- 3) Solenoid valve for release pulse

00134012

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, non-adjustable



00125704

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Protection class:2001with electrical connector	IP40
Display	LED
Hysteresis	< 0,02 bar
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	-20% / +10%
Switch output current Max.	60 mA
Status display	LED
Power consumption Solenoid valve	1.3 W
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Threaded bushing	Aluminum, anodized
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

	Type	Nozzle Ø	Com-pressed air connection	Vacuum connec-tion+	Max. vacuum level at p.opt	Max. suction capacity	Part No.
		[mm]			[%]	[l/min]	
	EBS-ET-05-NC	0.5	M5	M5	84	7.5	R412007491
	EBS-ET-07-NC	0.7			85	16.8	R412007492
	EBS-ET-10-NO	1	G 1/8	G 1/8	86	35	R412007493
	EBS-ET-15-NO	1.5			84	71	R412007494
	EBS-ET-20-NO	2	G 1/4	G 3/8	86	123	R412007495
	EBS-ET-25-NO	2.5			84	223	R412007496

Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
 electronic, non-adjustable

Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Protection against overpressure (max.)	Switching point	Weight	Fig.
	[l/min]	[dB]	[dB]				
R412007491	14	53	58	5	-0.6	0.111	Fig. 1
R412007492	24	59	65				
R412007493	48	59	65	5	-0.6	0.145	Fig. 2
R412007494	118	71	71				
R412007495	208	68	77	5	-0.6	0.22	Fig. 3
R412007496	320	70	78				

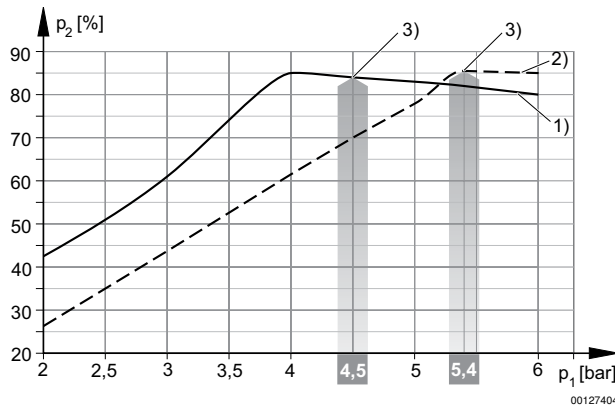
NC = ejector line closed without current

NO = ejector suction line open without current

Switching point: non-adjustable vacuum switch

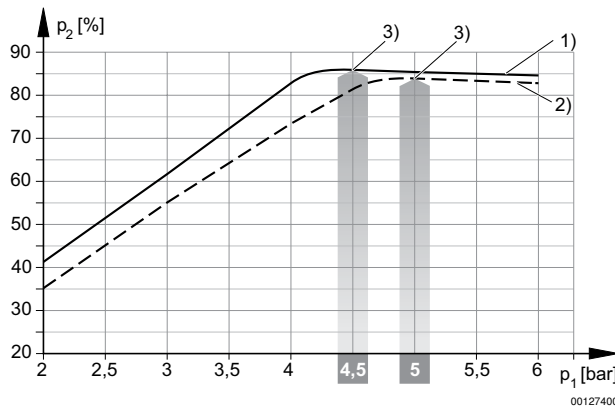
Output signal: 1 x PNP, NO (normally open contact)

p.opt. = optimum working pressure

Vacuum p₂ depending on working pressure p₁


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

3) optimum working pressure



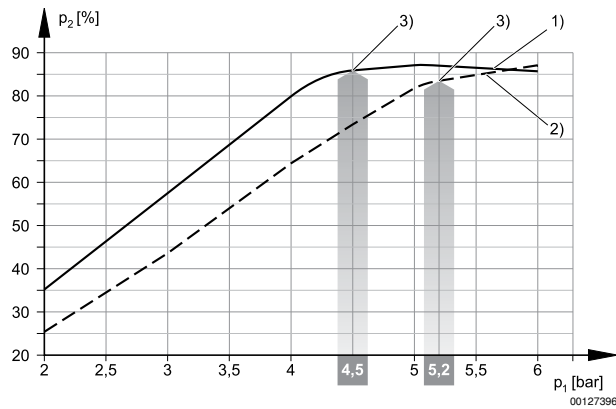
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm

3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

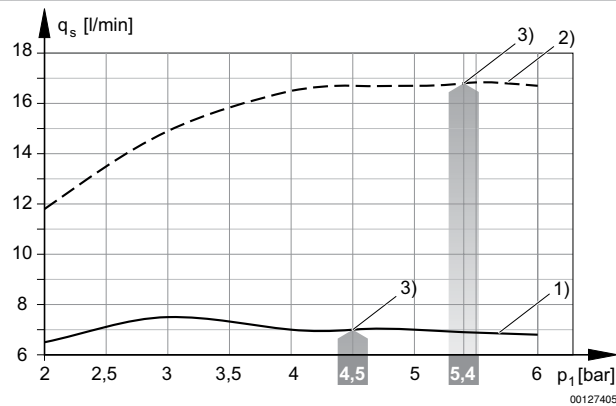
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
electronic, non-adjustable

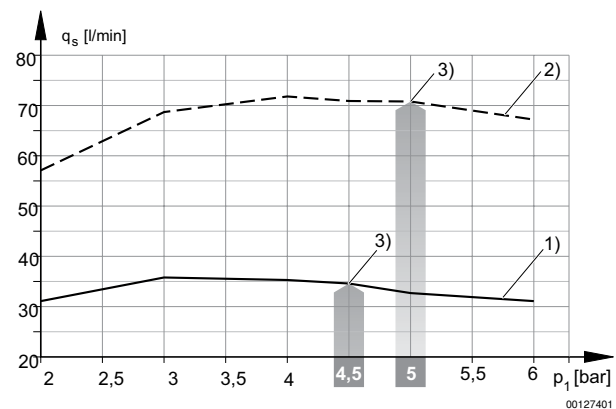


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Suction capacity q_s depending on working pressure p_1



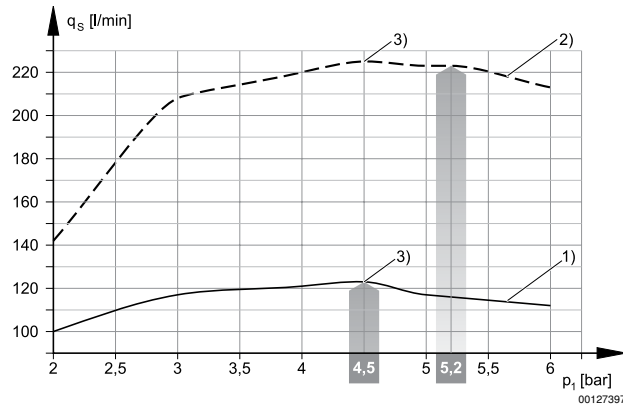
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

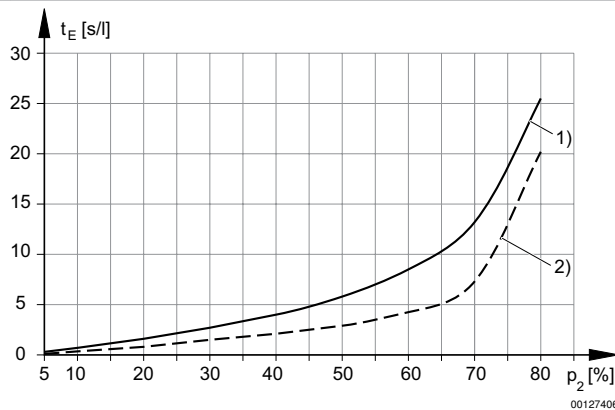
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
 electronic, non-adjustable

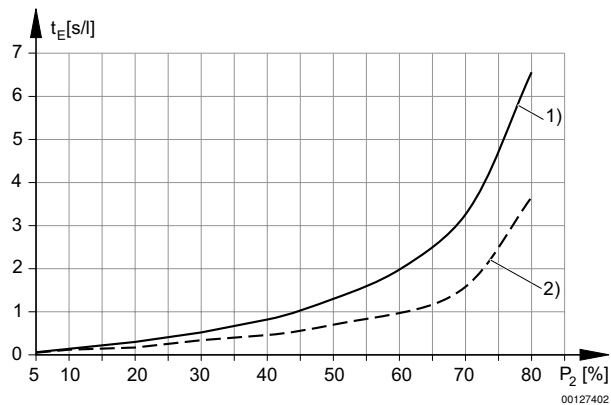


1) = \varnothing nozzle 2.0 mm 2) = \varnothing nozzle 2.5 mm
 3) optimum working pressure

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



1) = \varnothing nozzle 0.5 mm 2) = \varnothing nozzle 0.7 mm

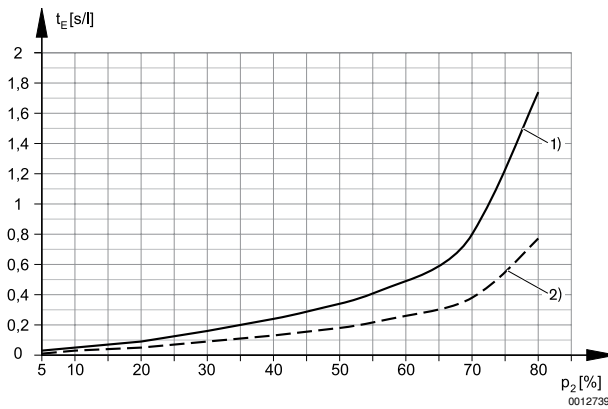


1) = \varnothing nozzle 1.0 mm 2) = \varnothing nozzle 1.5 mm

Gripper and vacuum technology ▶ Vacuum generators

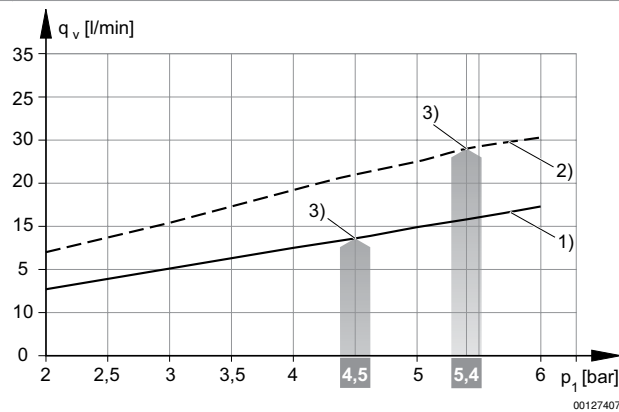
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
electronic, non-adjustable

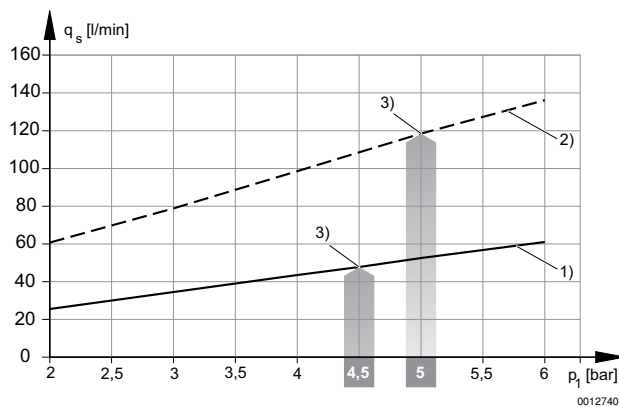


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

Air consumption q_v depending on working pressure p_1



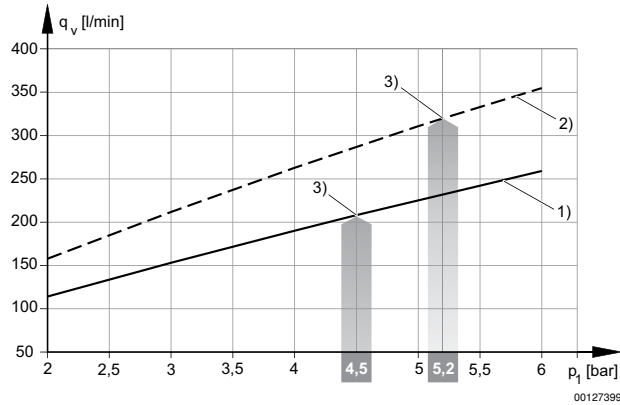
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

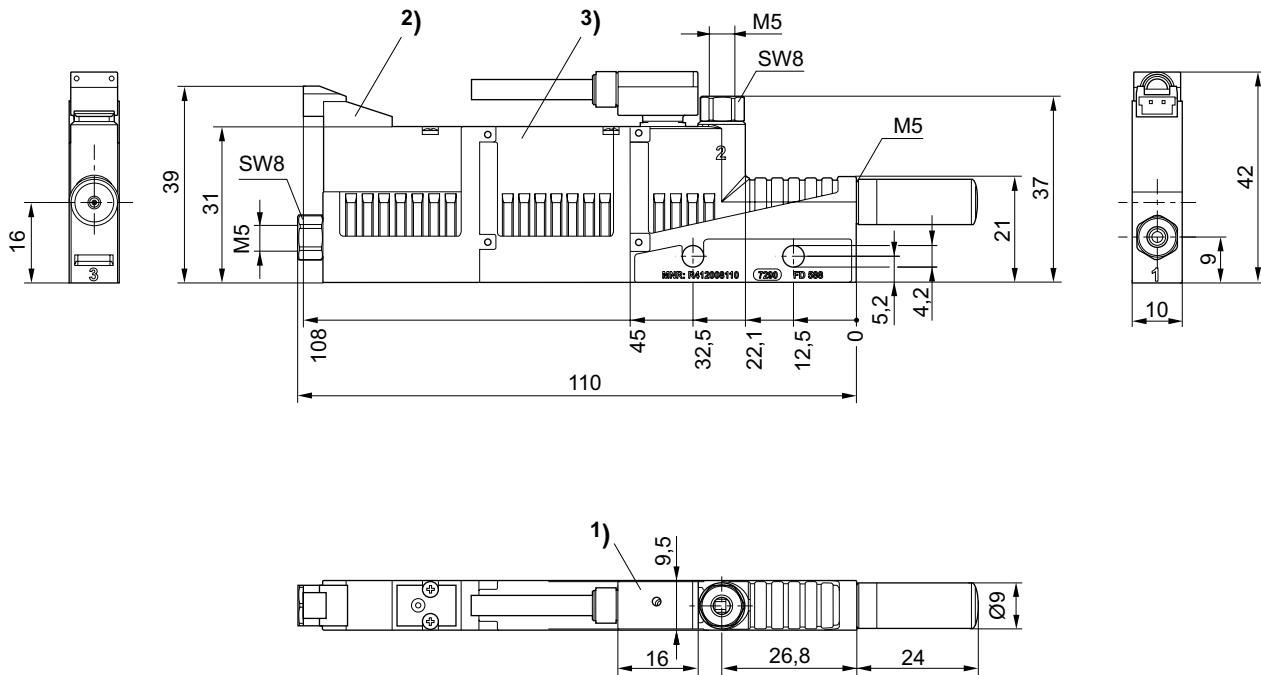
Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
 electronic, non-adjustable



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

Fig. 1



- 1) Vacuum switch is rotatable, not exchangeable
 Cable length, 3 m, 3-wire, shielded
 2) Solenoid valve for vacuum ON/OFF
 3) Release valve from memory

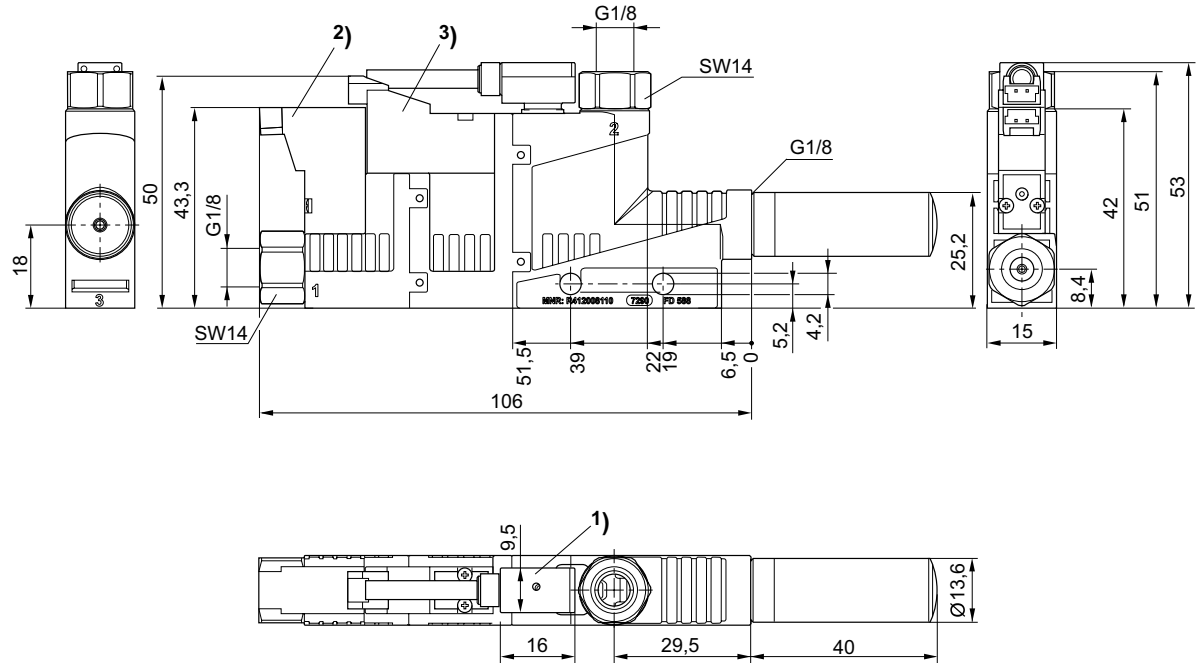
00128194

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ Thread connection ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch:
electronic, non-adjustable

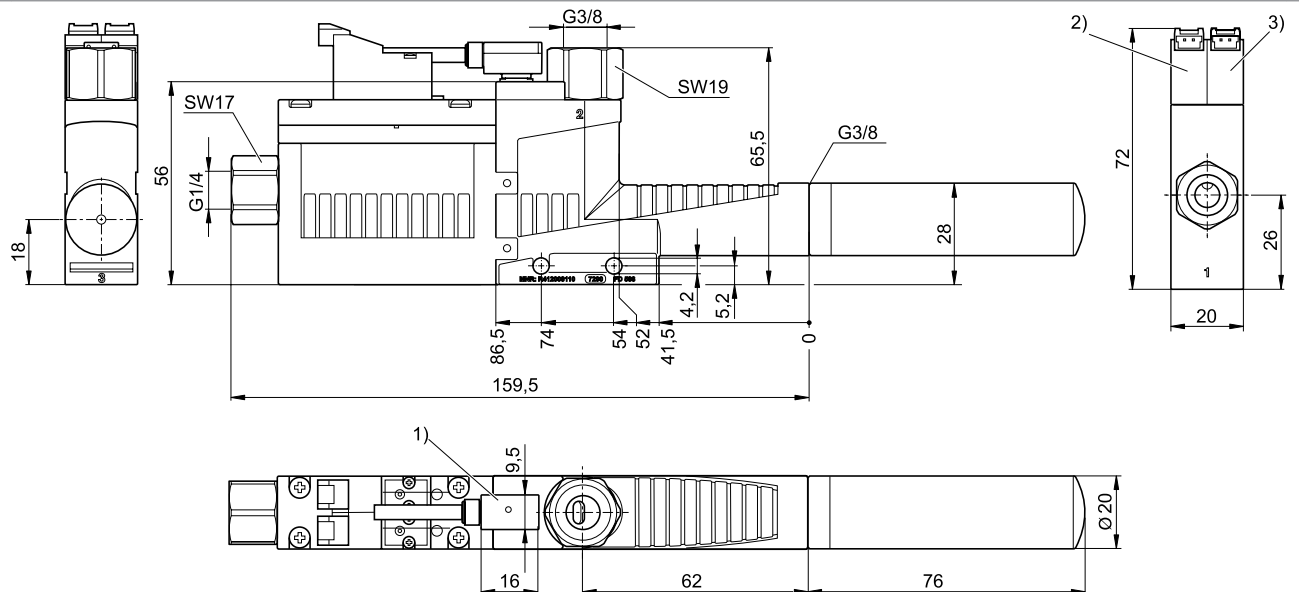
Fig. 2



- 1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded
- 2) Solenoid valve for vacuum ON/OFF
- 3) Solenoid valve for release pulse

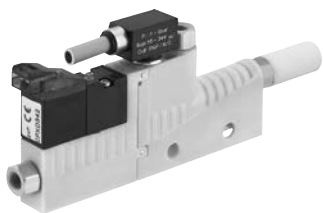
00128196

Fig. 3



- 1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded
- 2) Solenoid valve for vacuum ON/OFF
- 3) Solenoid valve for release pulse

00128198

Ejector, Series EBS
▶ Thread connection ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable


00125714

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class:2001with electrical connector	IP40
Display	LED
Hysteresis	< 0,02 bar
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	-20% / +10%
Switch output current Max.	60 mA
Status display	LED
Power consumption Solenoid valve	1.3 W
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Threaded bushing	Aluminum, anodized
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

Type	Nozzle Ø	Com-pressed air con-nection	Vacuum connec-tion+	Max. vacuum level at p.opt	Max. suction capacity	Air con-sumption at p.opt.	Sound pressure level intake effect	Part No.
	[mm]			[%]	[l/min]	[l/min]	[dB]	
EBS-ET-05-NC	0.5	M5	M5	84	7.5	14	53	R412007770
EBS-ET-07-NC	0.7	M5	M5	85	16.8	24	59	R412007771

Part No.	Sound pressure level intake effect	Protection against over-pressure (max.)	Switching point	Weight
	[dB]	[bar]	[bar]	[kg]
R412007770	58	5	-0.6	0.103
R412007771	65	5	-0.6	0.103

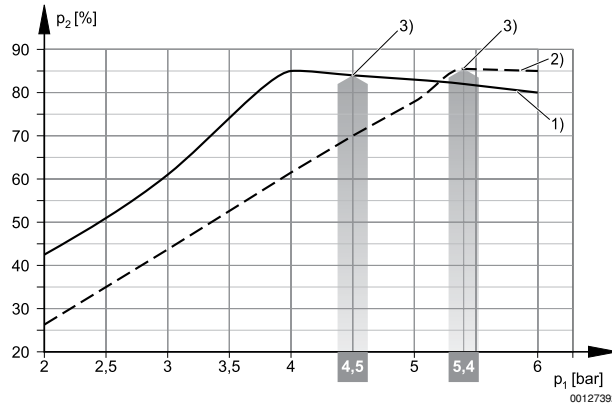
NC = ejector line closed without current
 Switching point: non-adjustable vacuum switch
 Output signal: 1 x PNP, NO (normally open contact)
 p.opt. = optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

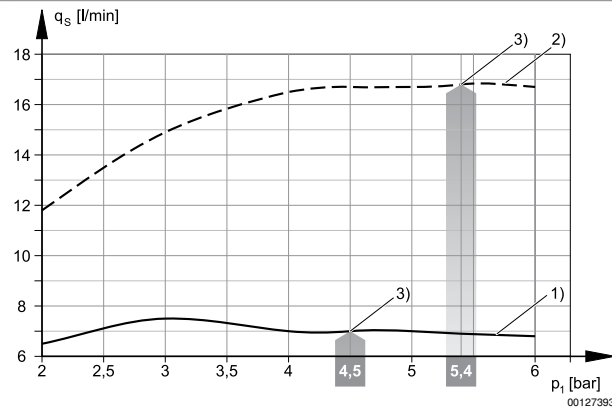
▶ Thread connection ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

Vacuum p₂ depending on working pressure p₁



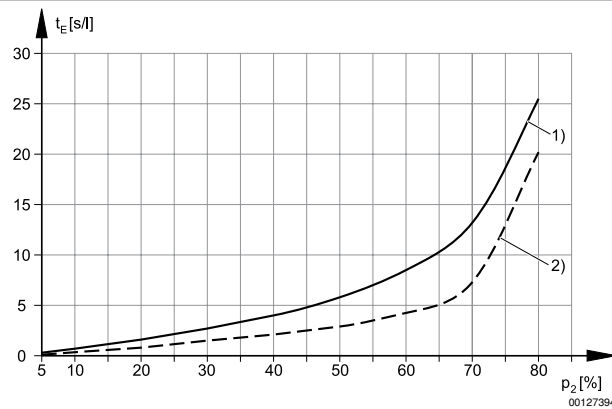
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

Suction capacity q_s depending on working pressure p₁



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

Evacuation time t_E depending on vacuum p₂ for 1 l volume (with optimal operating pressure p_{1opt})

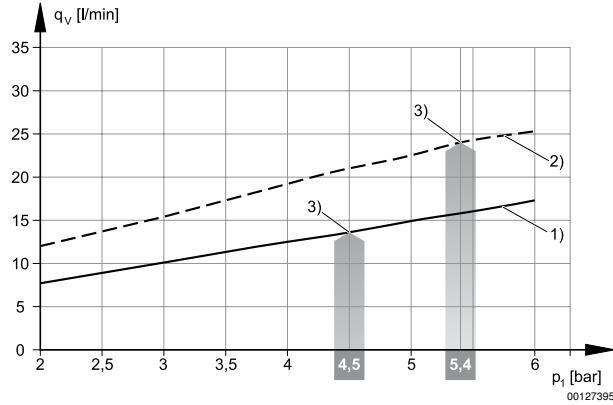


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm

Ejector, Series EBS

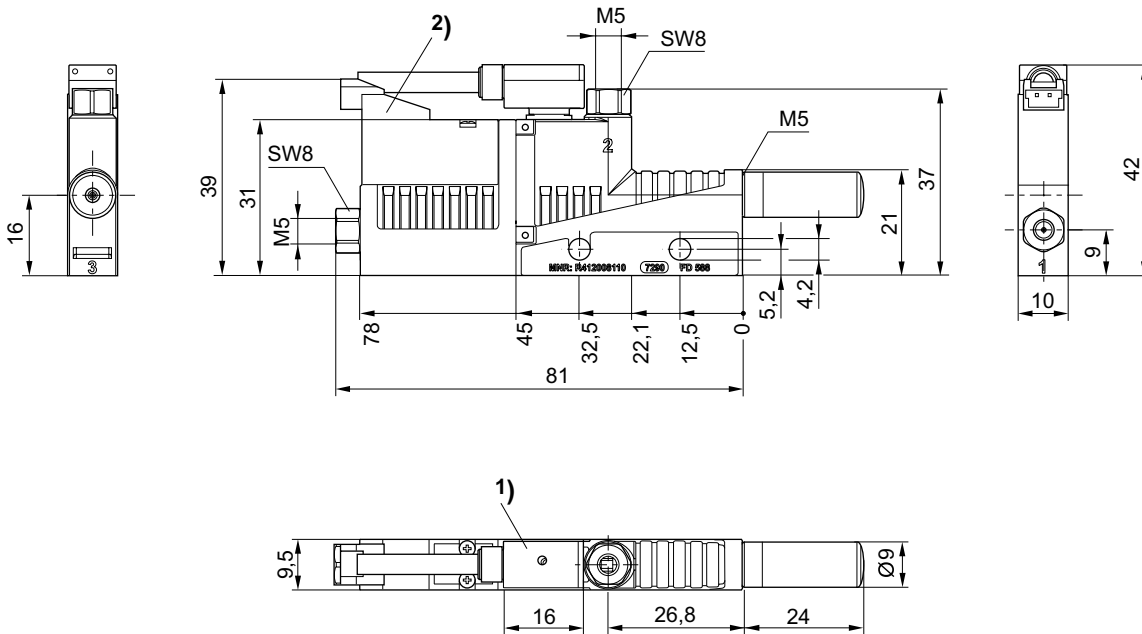
▶ Thread connection ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

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

Dimensions



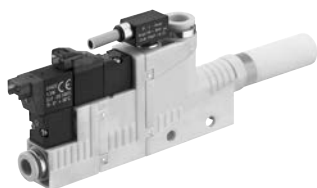
- 1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded
2) Solenoid valve for vacuum ON/OFF

00128200

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, non-adjustable



00125703

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Protection class:2001with electrical connector	IP40
Display	LED
Hysteresis	< 0,02 bar
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	-20% / +10%
Switch output current Max.	60 mA
Status display	LED
Power consumption Solenoid valve	1.3 W
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Release ring	Polyamide
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

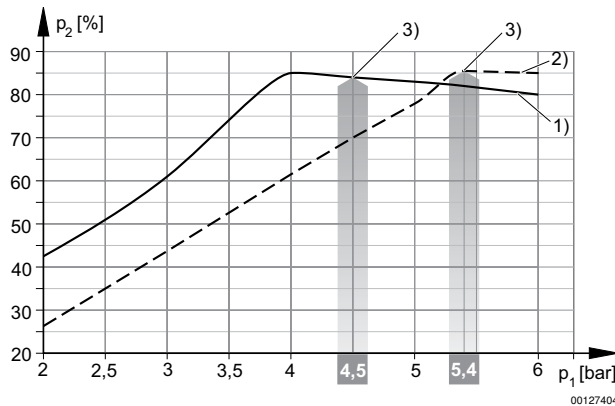
	Type	Nozzle Ø	Com-pressed air connection	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity	Part No.
		[mm]			[%]	[l/min]	
	EBS-ET-05-NC	0.5			84	7.5	R412007467
	EBS-ET-07-NC	0.7	Ø 4	Ø 4	85	16.8	R412007468
	EBS-ET-10-NO	1	Ø 6	Ø 8	86	35	R412007469
	EBS-ET-15-NO	1.5	Ø 6	Ø 8	84	71	R412007470
	EBS-ET-20-NO	2	Ø 8	Ø 10	86	123	R412007471
	EBS-ET-25-NO	2.5	Ø 8	Ø 10	84	223	R412007472

Ejector, Series EBS

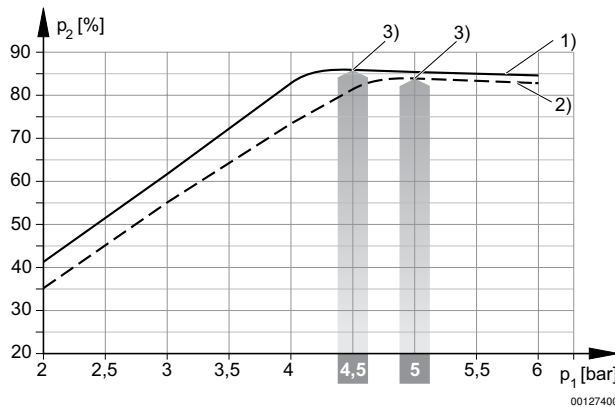
▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

Part No.	Air consumption at p.opt.	Sound pressure level intake effect	Sound pressure level intake effect	Protection against overpressure (max.)	Switching point	Weight	Fig.
	[l/min]	[dB]	[dB]				
R412007467	14	53	58	5	-0.6	0.111	Fig. 1
R412007468	24	59	65				
R412007469	48	59	65	5	-0.6	0.145	Fig. 2
R412007470	118	71	71				
R412007471	208	68	77	5	-0.6	0.222	Fig. 3
R412007472	320	70	78				

NC = ejector line closed without current
 NO = ejector suction line open without current
 Switching point: non-adjustable vacuum switch
 Output signal: 1 x PNP, NO (normally open contact)
 p.opt. = optimum working pressure

Vacuum p₂ depending on working pressure p₁


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

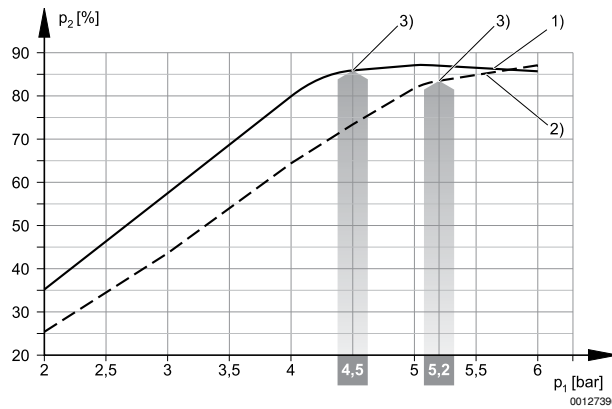


- 1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
 3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

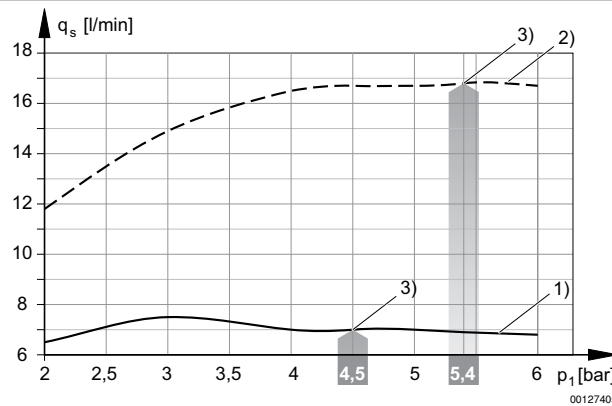
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

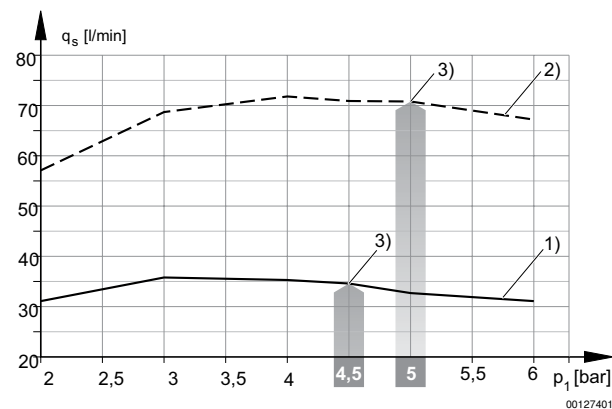


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

Suction capacity q_s depending on working pressure p_1



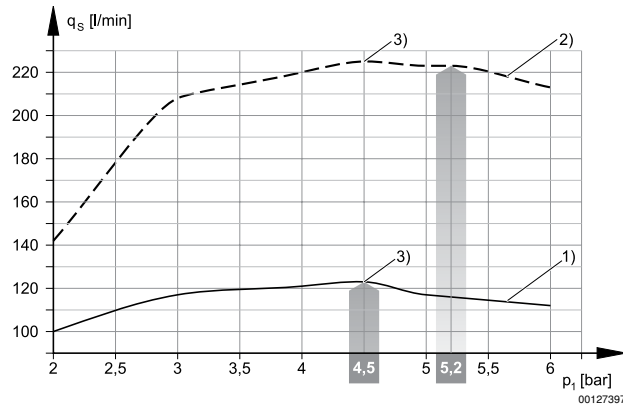
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

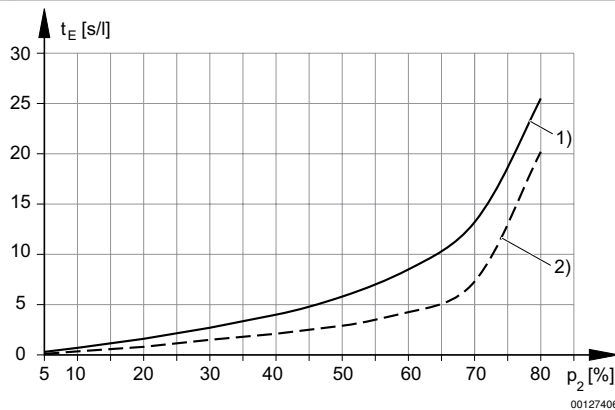
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

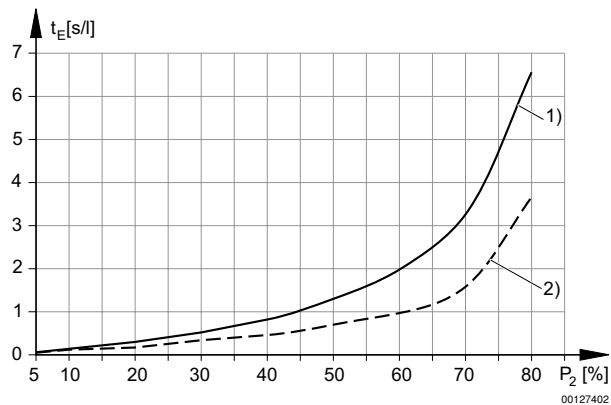


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

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

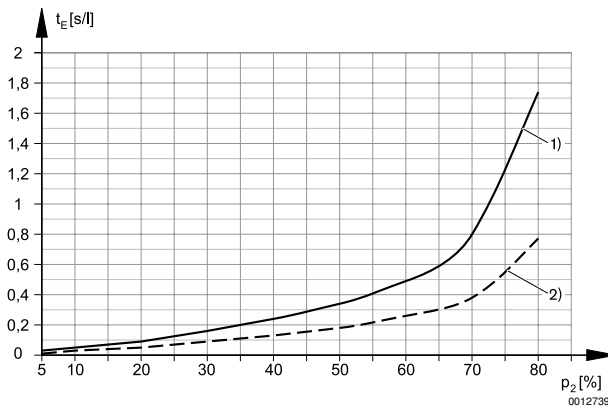


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm

Gripper and vacuum technology ▶ Vacuum generators

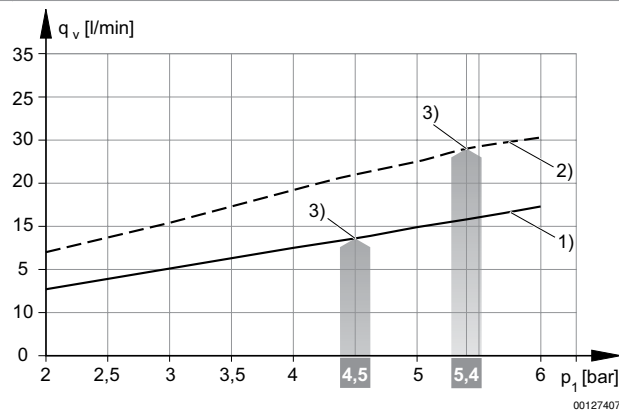
Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

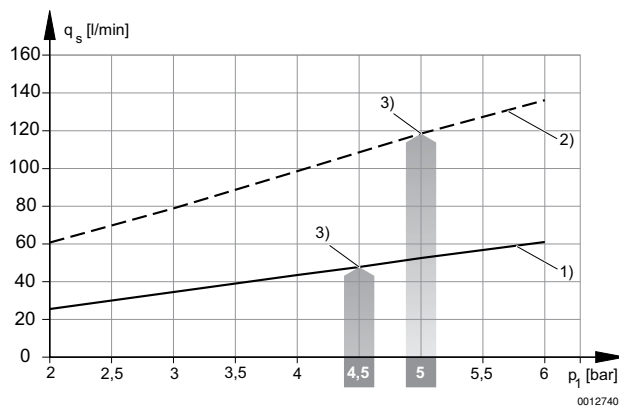


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

Air consumption q_v depending on working pressure p_1



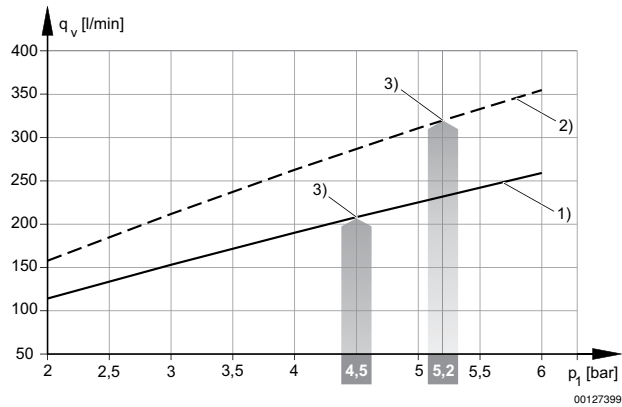
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

Ejector, Series EBS

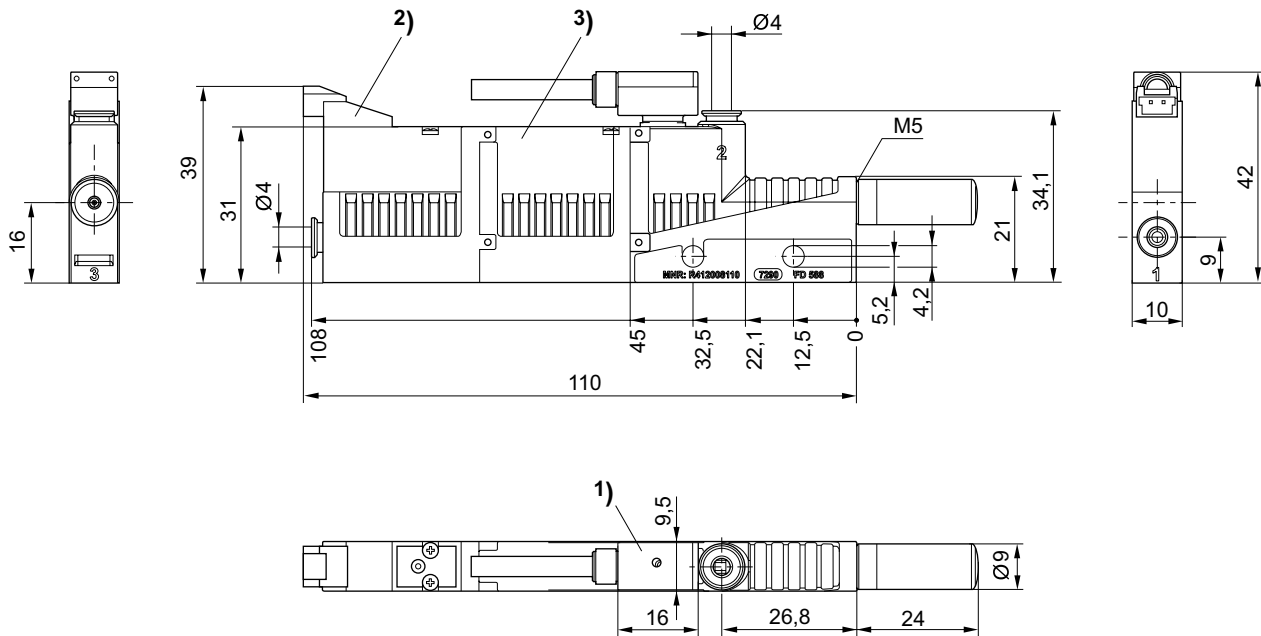
▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, non-adjustable



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

00127399

Fig. 1



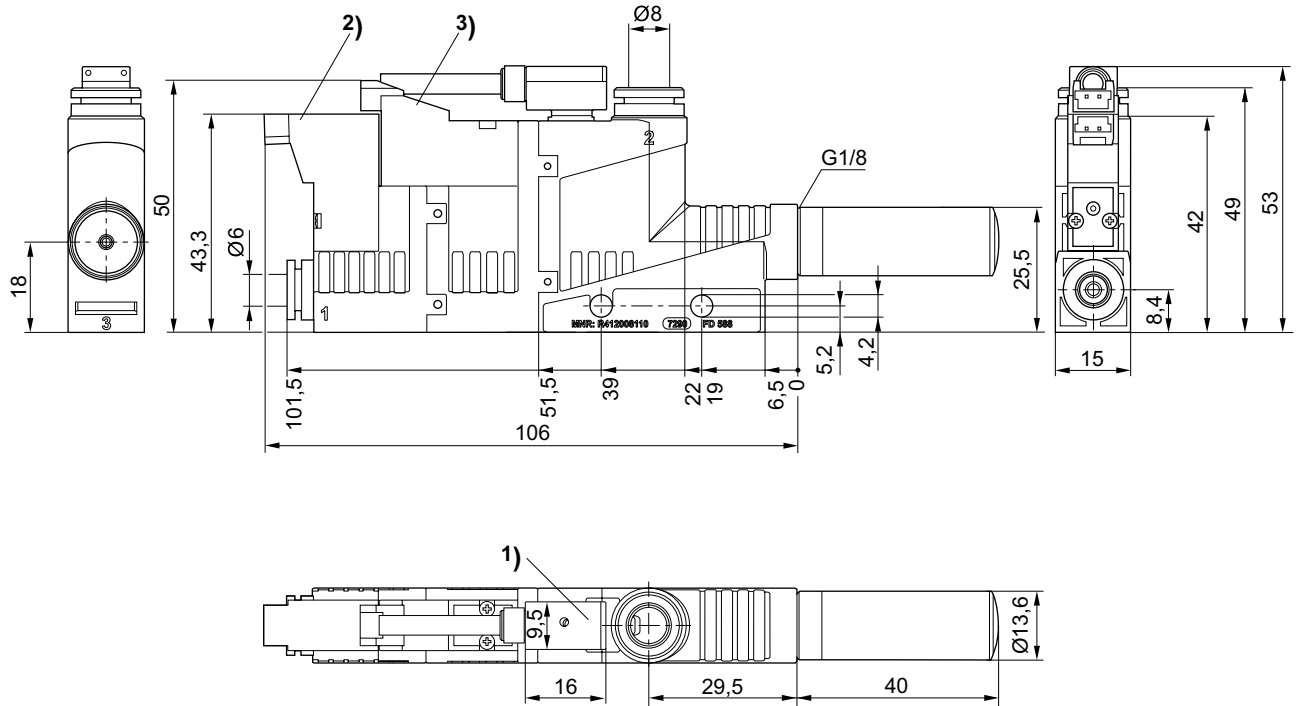
00128193

- 1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded
2) Solenoid valve for vacuum ON/OFF
3) Release valve from memory

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

Fig. 2



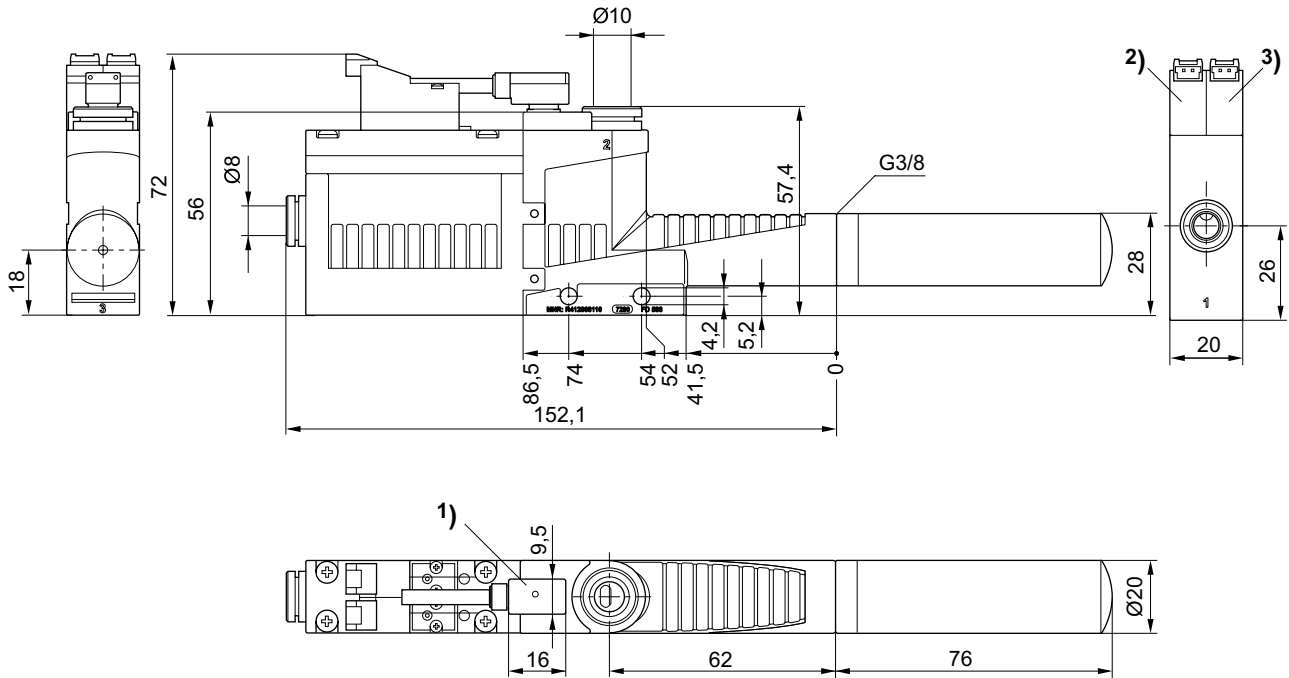
- 1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded
- 2) Solenoid valve for vacuum ON/OFF
- 3) Solenoid valve for release pulse

00128195

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with release valve ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

Fig. 3



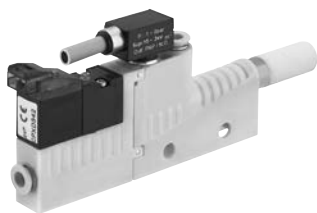
00128197

- 1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded
- 2) Solenoid valve for vacuum ON/OFF
- 3) Solenoid valve for release pulse

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable



00125713

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class:2001 with electrical connector	IP40
Display	LED
Hysteresis	< 0,02 bar
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	-20% / +10%
Switch output current Max.	60 mA
Status display	LED
Power consumption Solenoid valve	1.3 W
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Release ring	Polyamide
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

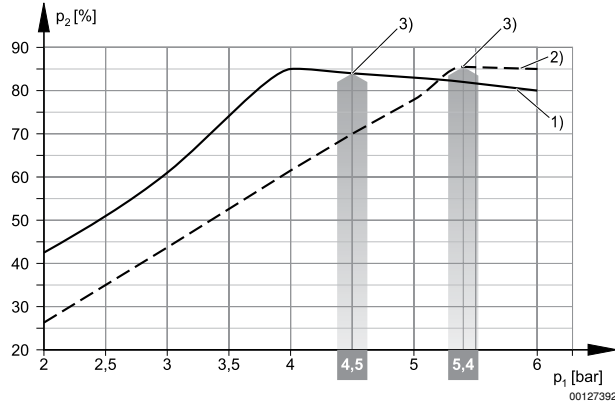
Type	Nozzle Ø	Compressed air connection	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Sound pressure level intake effect	Part No.
	[mm]			[%]	[l/min]	[l/min]	[dB]	
EBS-ET-05-NC	0.5	Ø 4	Ø 4	84	7.5	14	53	R412007766
EBS-ET-07-NC	0.7	Ø 4	Ø 4	85	16.8	24	59	R412007767

Part No.	Sound pressure level intake effect	Protection against over-pressure (max.)	Switching point	Weight
	[dB]	[bar]	[bar]	[kg]
R412007766	58	5	-0.6	0.103
R412007767	65	5	-0.6	0.103

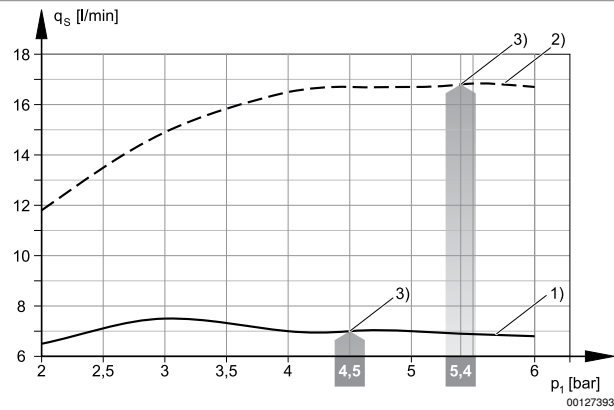
NC = ejector line closed without current
 Switching point: non-adjustable vacuum switch
 Output signal: 1 x PNP, NO (normally open contact)
 p.opt. = optimum working pressure

Ejector, Series EBS

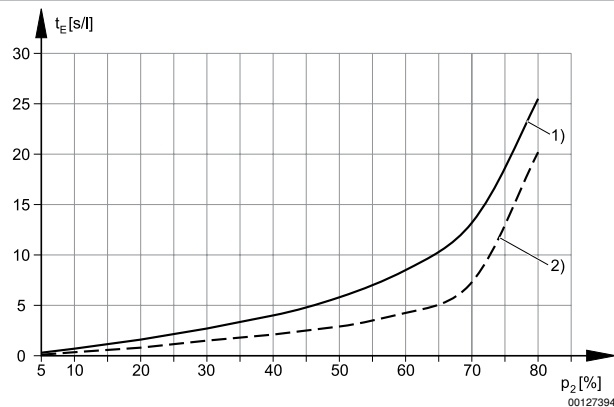
▶ push-in fitting ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

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

Suction capacity q_s depending on working pressure p_1 

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

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

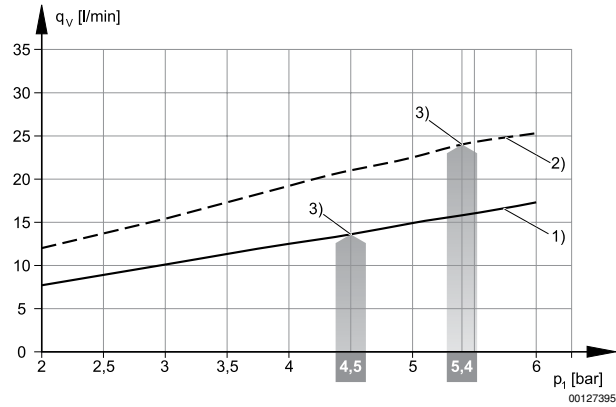
1) = \varnothing nozzle 0.5 mm 2) = \varnothing nozzle 0.7 mm

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

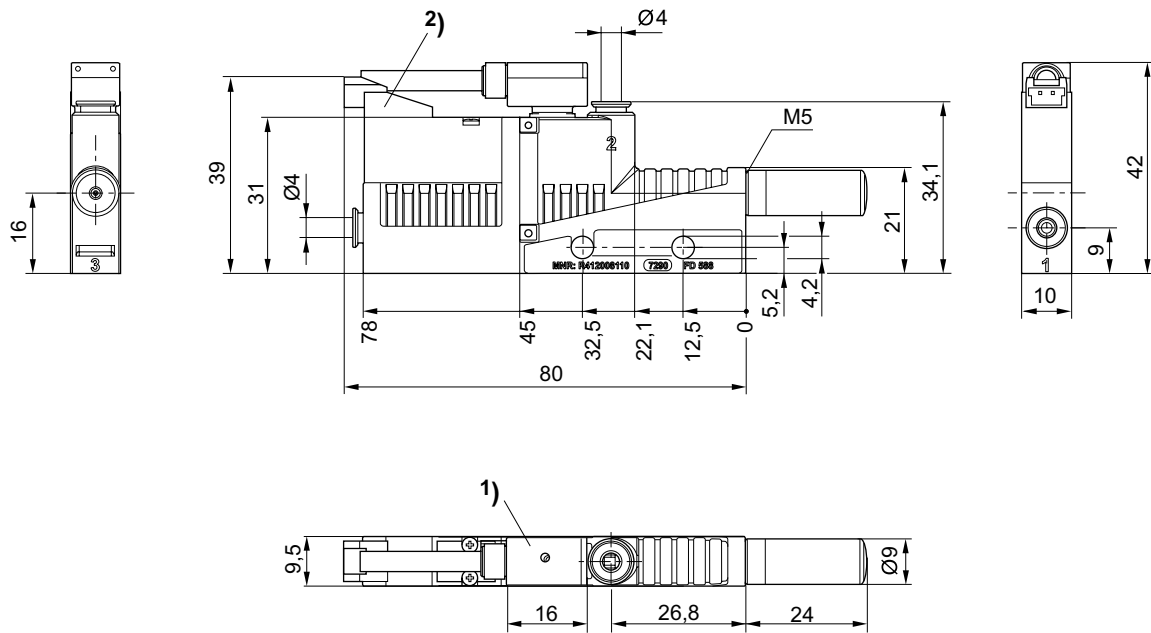
▶ push-in fitting ▶ electrical control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

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

Dimensions



- 1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded
- 2) Solenoid valve for vacuum ON/OFF

00128199

Ejector, Series EBS
▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable


00125702

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class	IP40
Display	LED
Hysteresis	< 0,02 bar
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	-20% / +10%
Switch output current Max.	60 mA
Local power consumption	<15 mA
Status display	LED
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Threaded bushing	Aluminum, anodized
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

Type	Nozzle Ø	Compressed air connection	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Sound pressure level intake effect	Part No.
	[mm]			[%]	[l/min]	[l/min]	[dB]	
EBS-PT-05-NN	0.5	M5	M5	84	7	14	53	R412007479
EBS-PT-07-NN	0.7	M5	M5	85	16	25	59	R412007480
EBS-PT-10-NN	1	G 1/8	G 1/8	85	38	48	59	R412007481
EBS-PT-15-NN	1.5	G 1/8	G 1/8	85	70	118	66	R412007482
EBS-PT-20-NN	2	G 1/4	G 3/8	86	123	208	68	R412007483
EBS-PT-25-NN	2.5	G 1/4	G 3/8	82	218	311	75	R412007484

Part No.	Sound pressure level intake effect	Protection against overpressure (max.)	Switching point	Weight	Fig.
	[dB]	[bar]	[bar]	[kg]	
R412007479	58	5	-0.6	0.086	Fig. 1
R412007480	65	5	-0.6	0.086	Fig. 1
R412007481	65	5	-0.6	0.105	Fig. 2
R412007482	72	5	-0.6	0.105	Fig. 2
R412007483	77	5	-0.6	0.143	Fig. 3

Switching point: non-adjustable vacuum switch
 Output signal: 1 x PNP, NO (normally open contact)
 p.opt. = optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

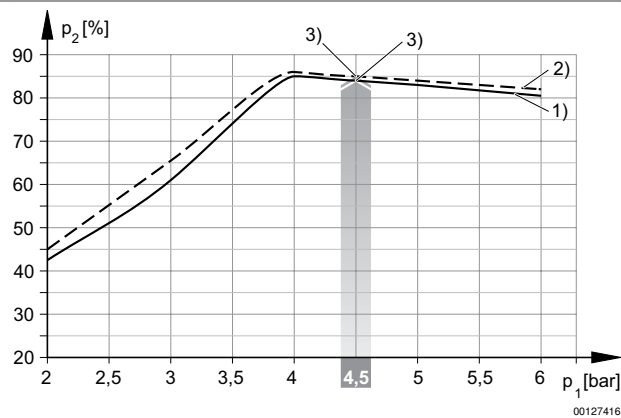
Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

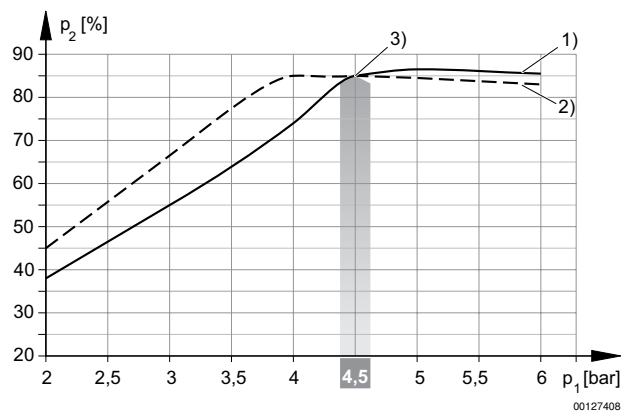
Part No.	Sound pressure level intake effect	Protection against overpressure (max.)	Switching point	Weight	Fig.
	[dB]	[bar]	[bar]	[kg]	
R412007484	78	5	-0.6	0.143	Fig. 3

Switching point: non-adjustable vacuum switch
 Output signal: 1 x PNP, NO (normally open contact)
 p.opt. = optimum working pressure

Vacuum p_2 depending on working pressure p_1



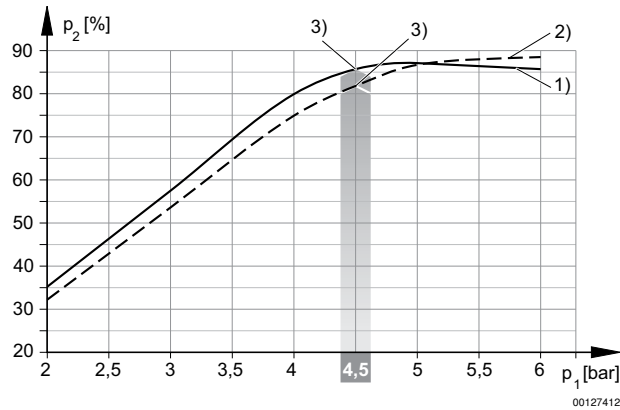
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
 3) optimum working pressure



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

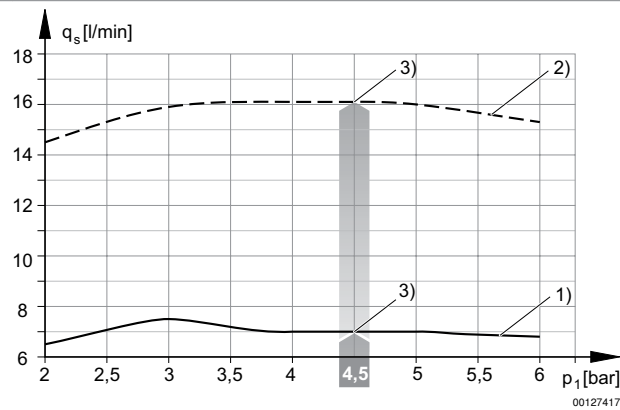
Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

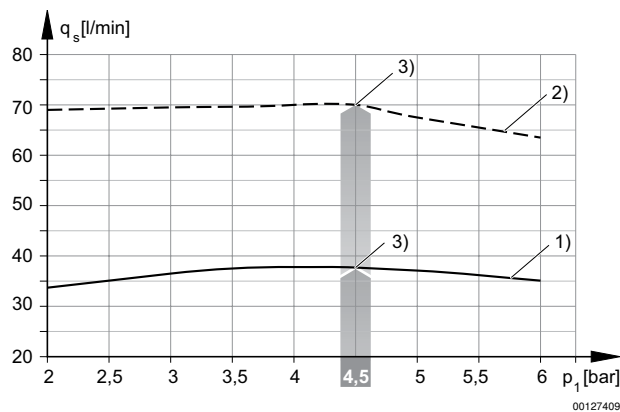


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

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

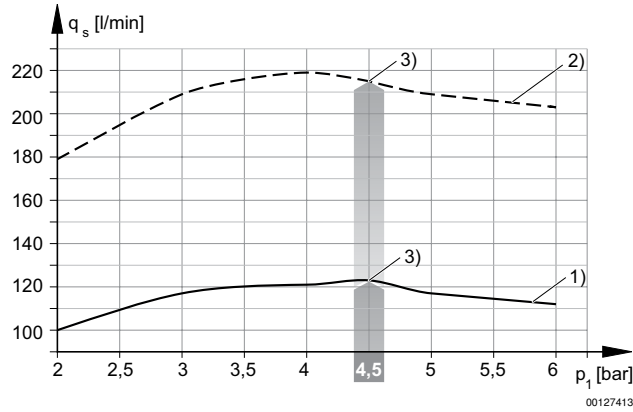


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

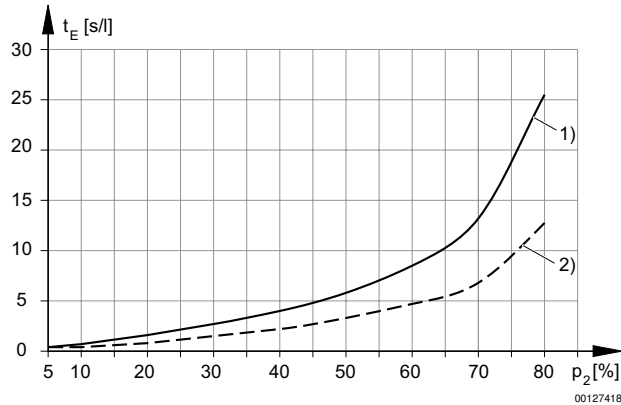
Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

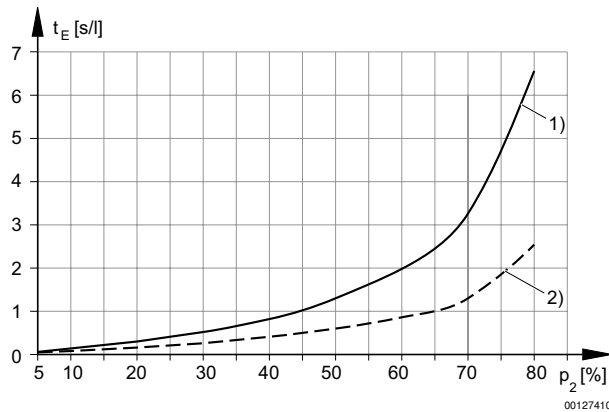


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

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



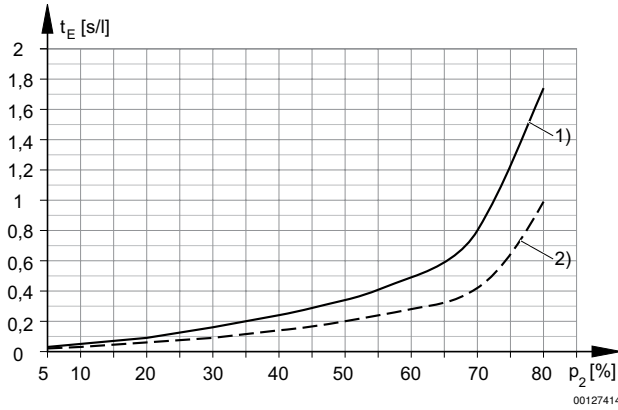
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm



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

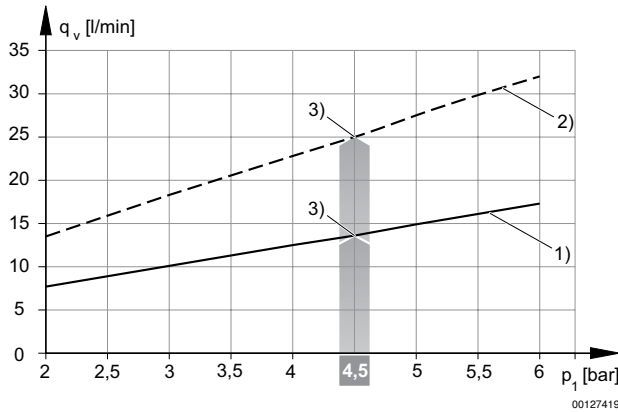
Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

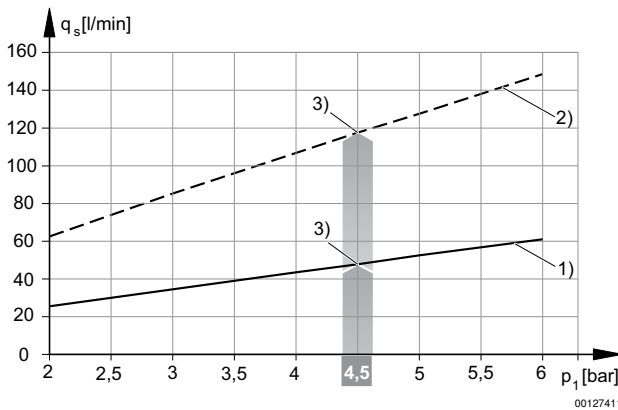


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

Air consumption q_v depending on working pressure p₁



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

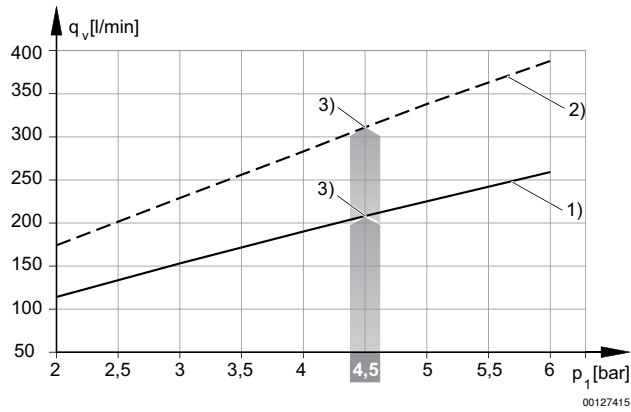


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

Gripper and vacuum technology ▶ Vacuum generators

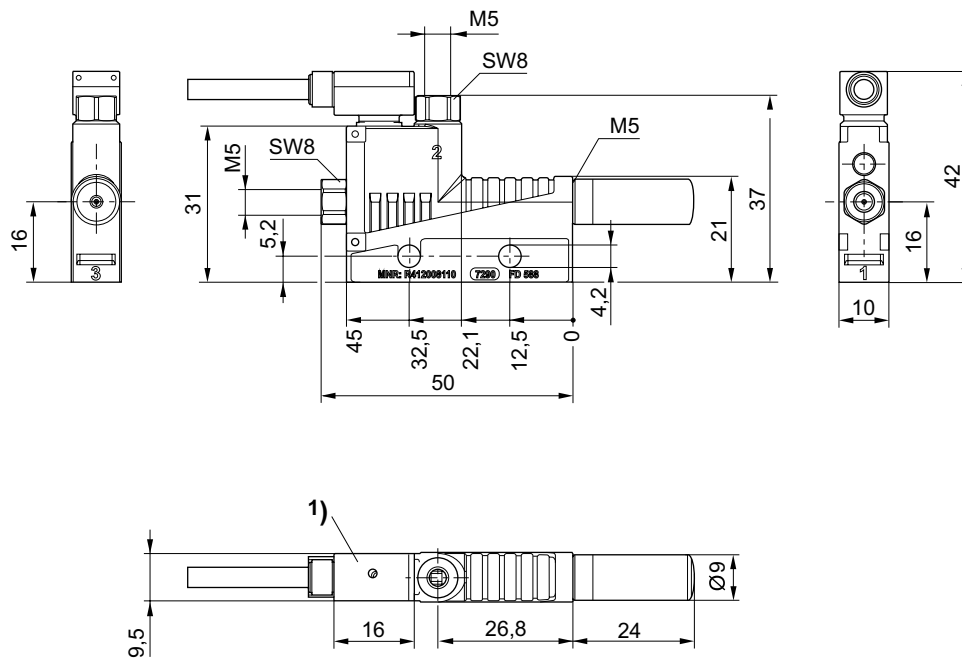
Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable



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

Fig. 1



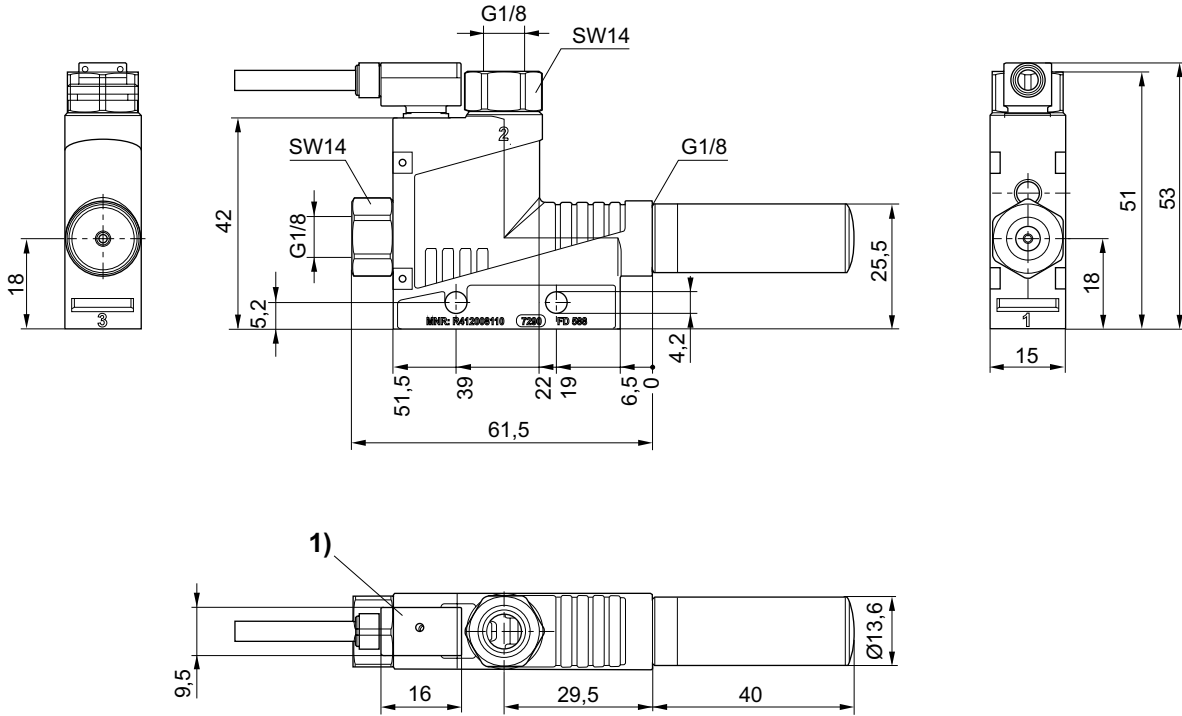
- 1) Vacuum switch is rotatable, not exchangeable
- Cable length, 3 m, 3-wire, shielded

00127375

Ejector, Series EBS

▶ Thread connection ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

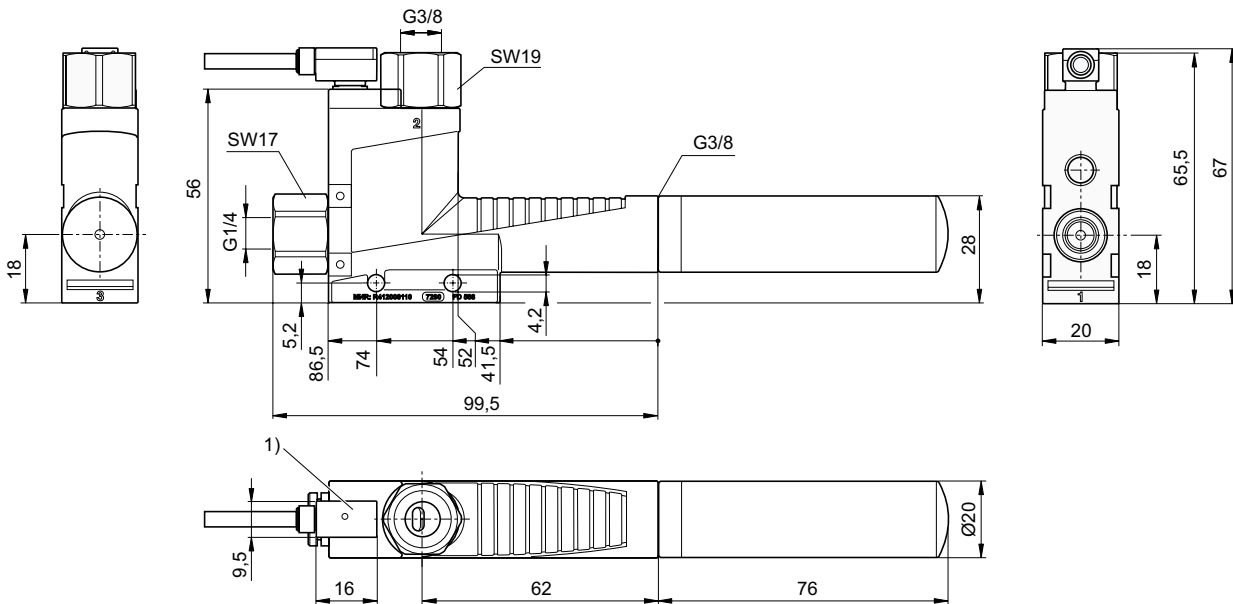
Fig. 2



00127377

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

Fig. 3



00127380

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

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable



00125709

Type	Ejector
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Protection class	IP40
Display	LED
Hysteresis	< 0,02 bar
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	-20% / +10%
Switch output current Max.	60 mA
Local power consumption	<15 mA
Status display	LED
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile Butadiene Rubber
Nozzle	Aluminum
Release ring	Polyamide
Silencers	Polyethylene

Technical Remarks

- 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 under ambient and medium temperature and may not exceed 3 °C.

Type	Nozzle Ø	Compressed air connection	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Sound pressure level intake effect	Part No.
	[mm]			[%]	[l/min]	[l/min]	[dB]	
EBS-PT-05-NN	0.5	Ø 4	Ø 4	84	7	14	53	R412007455
EBS-PT-07-NN	0.7	Ø 4	Ø 4	85	16	25	59	R412007456
EBS-PT-10-NN	1	Ø 6	Ø 8	85	38	48	59	R412007457
EBS-PT-15-NN	1.5	Ø 6	Ø 8	85	70	118	66	R412007458
EBS-PT-20-NN	2	Ø 8	Ø 10	86	123	208	68	R412007459
EBS-PT-25-NN	2.5	Ø 8	Ø 10	82	218	311	75	R412007460

Part No.	Sound pressure level intake effect	Protection against overpressure (max.)	Switching point	Weight	Fig.
	[dB]	[bar]	[bar]	[kg]	
R412007455	58	5	-0.6	0.086	Fig. 1
R412007456	65	5	-0.6	0.086	Fig. 1
R412007457	65	5	-0.6	0.1	Fig. 2
R412007458	72	5	-0.6	0.1	Fig. 2
R412007459	77	5	-0.6	0.145	Fig. 3

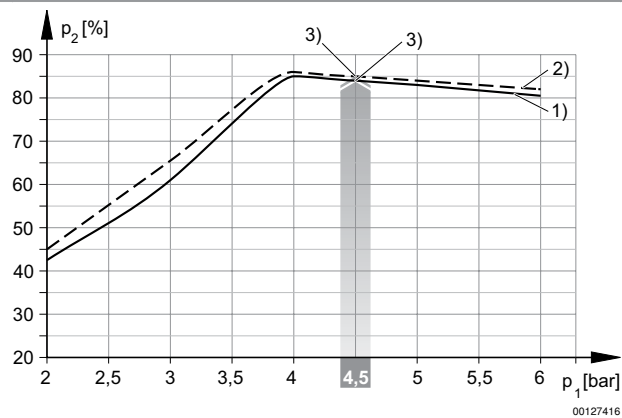
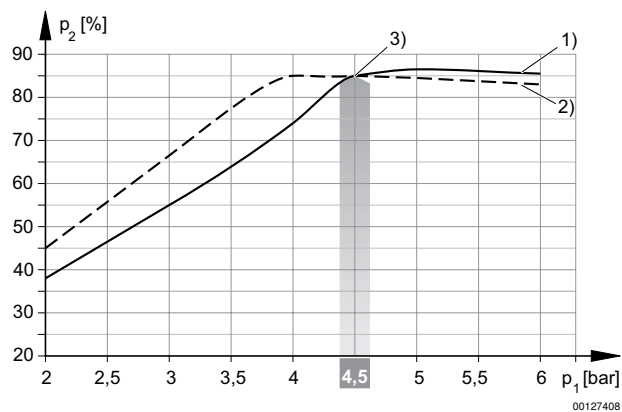
Switching point: non-adjustable vacuum switch
 Output signal: 1 x PNP, NO (normally open contact)
 p.opt. = optimum working pressure

Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

Part No.	Sound pressure level intake effect	Protection against overpressure (max.)	Switching point	Weight	Fig.
	[dB]	[bar]	[bar]	[kg]	
R412007460	78	5	-0.6	0.145	Fig. 3

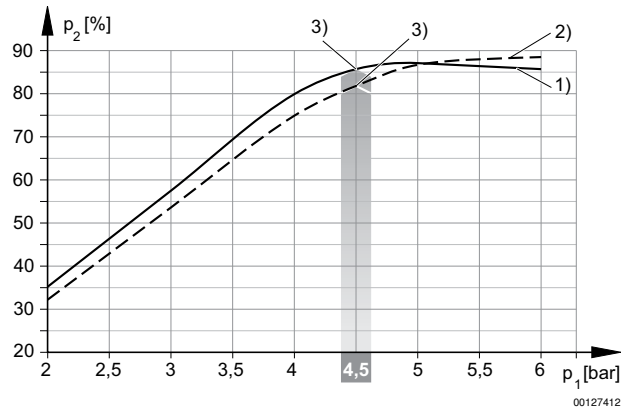
Switching point: non-adjustable vacuum switch
 Output signal: 1 x PNP, NO (normally open contact)
 p.opt. = optimum working pressure

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

Gripper and vacuum technology ▶ Vacuum generators

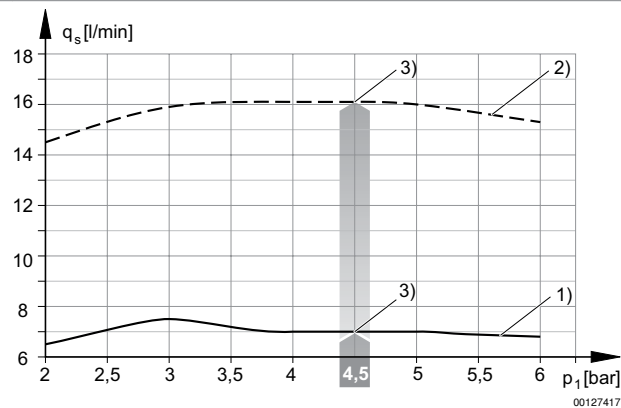
Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

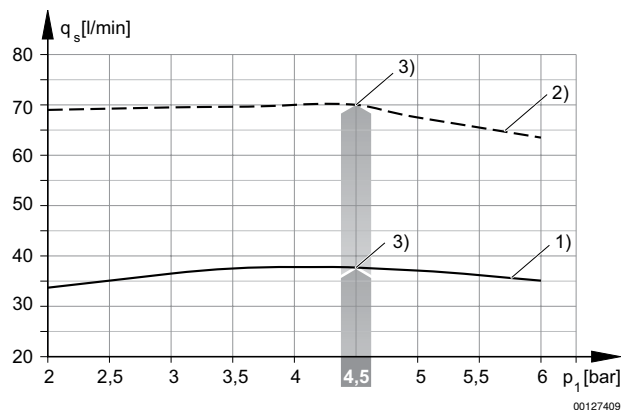


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
 3) optimum working pressure

Suction capacity q_s depending on working pressure p_1



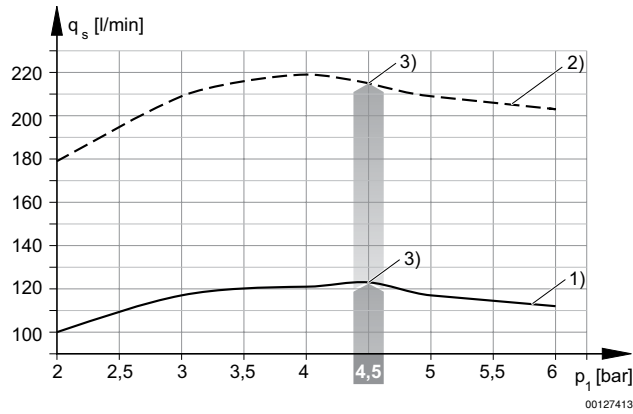
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
 3) optimum working pressure



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

Ejector, Series EBS

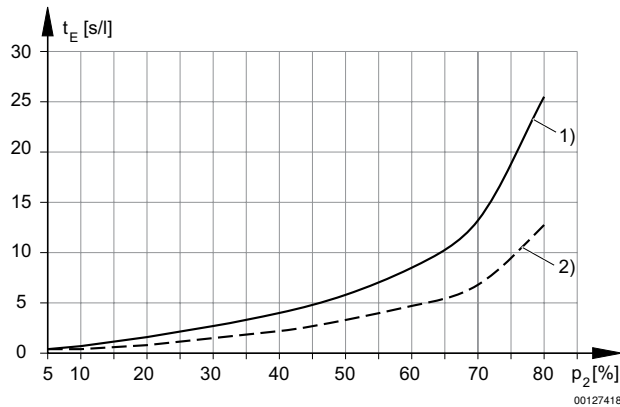
▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable



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

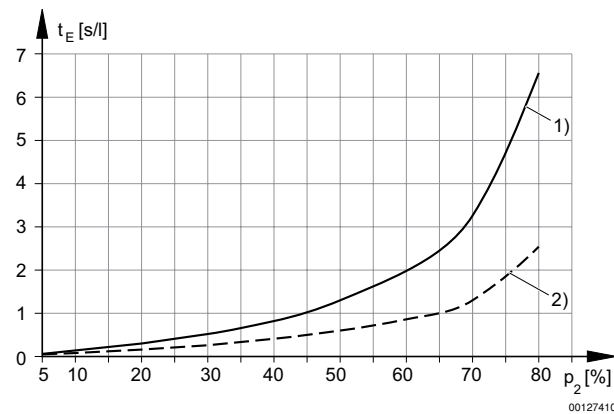
00127413

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

00127418



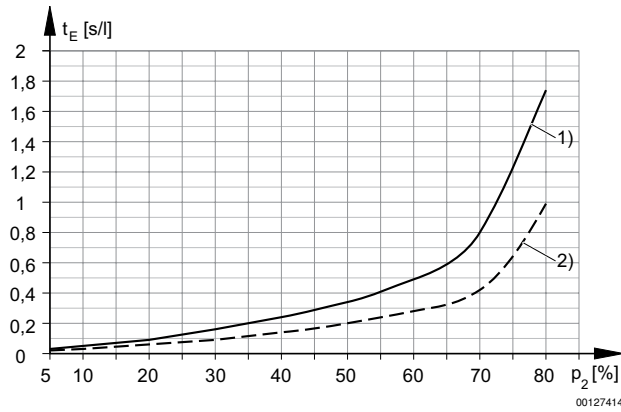
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm

00127410

Gripper and vacuum technology ▶ Vacuum generators

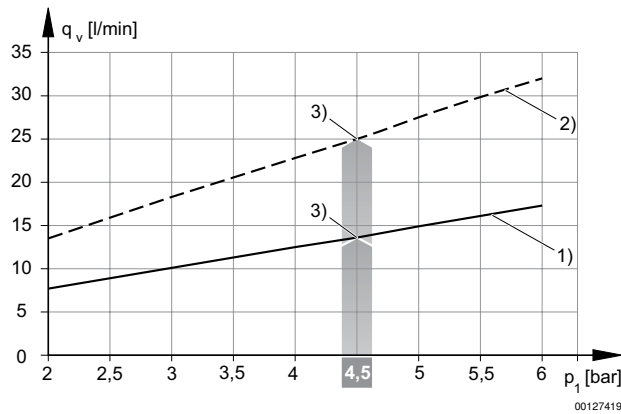
Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

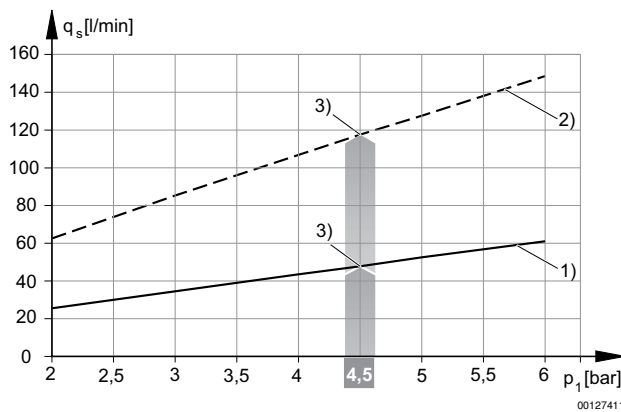


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm

Air consumption q_v depending on working pressure p_1



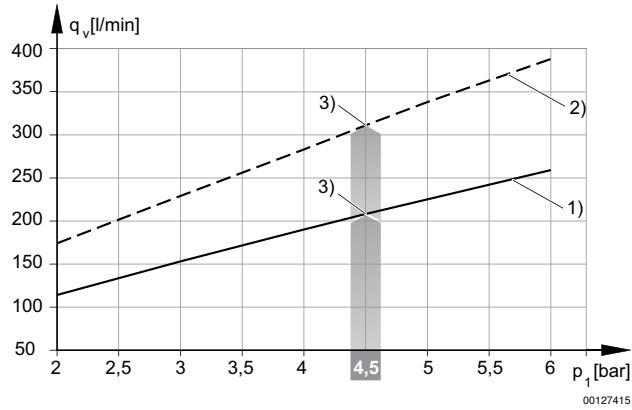
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



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

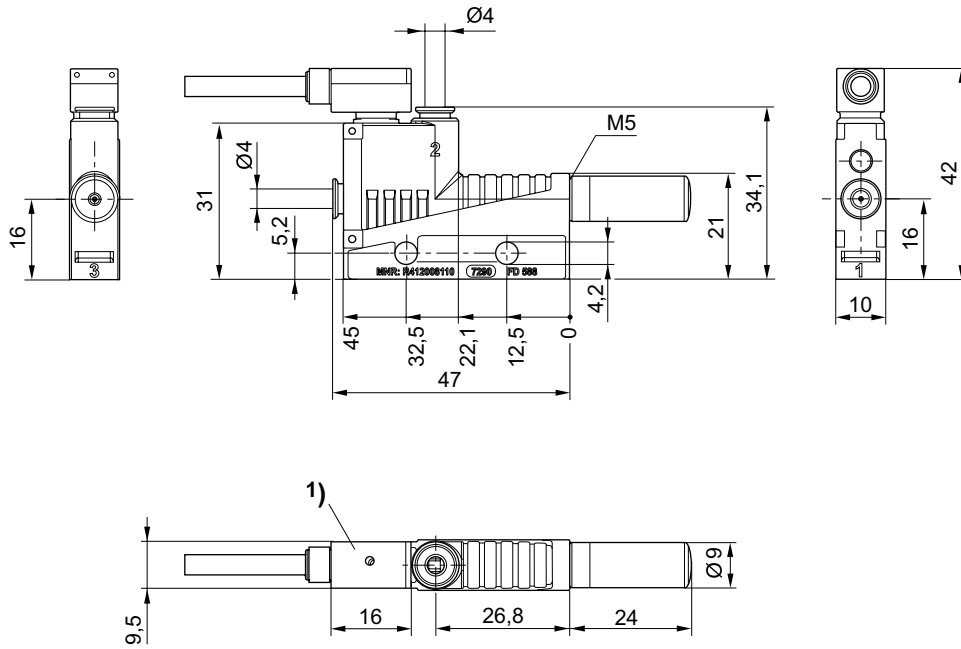
Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable



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

Fig. 1



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

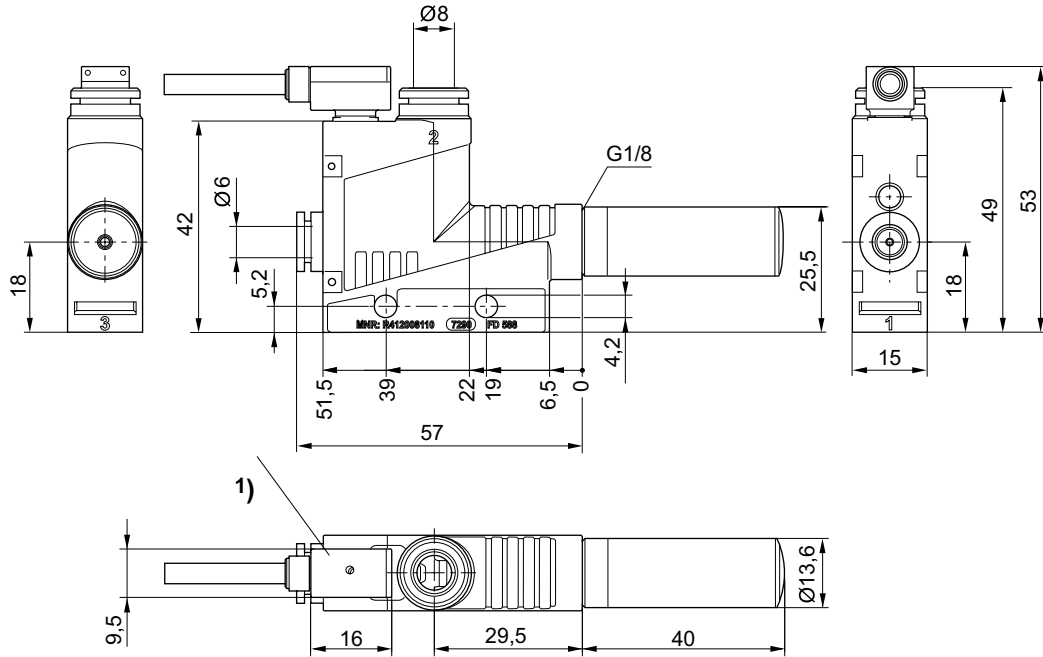
00127374

Gripper and vacuum technology ▶ Vacuum generators

Ejector, Series EBS

▶ push-in fitting ▶ pneumatic control, T-design ▶ with silencer ▶ vacuum switch: electronic, non-adjustable

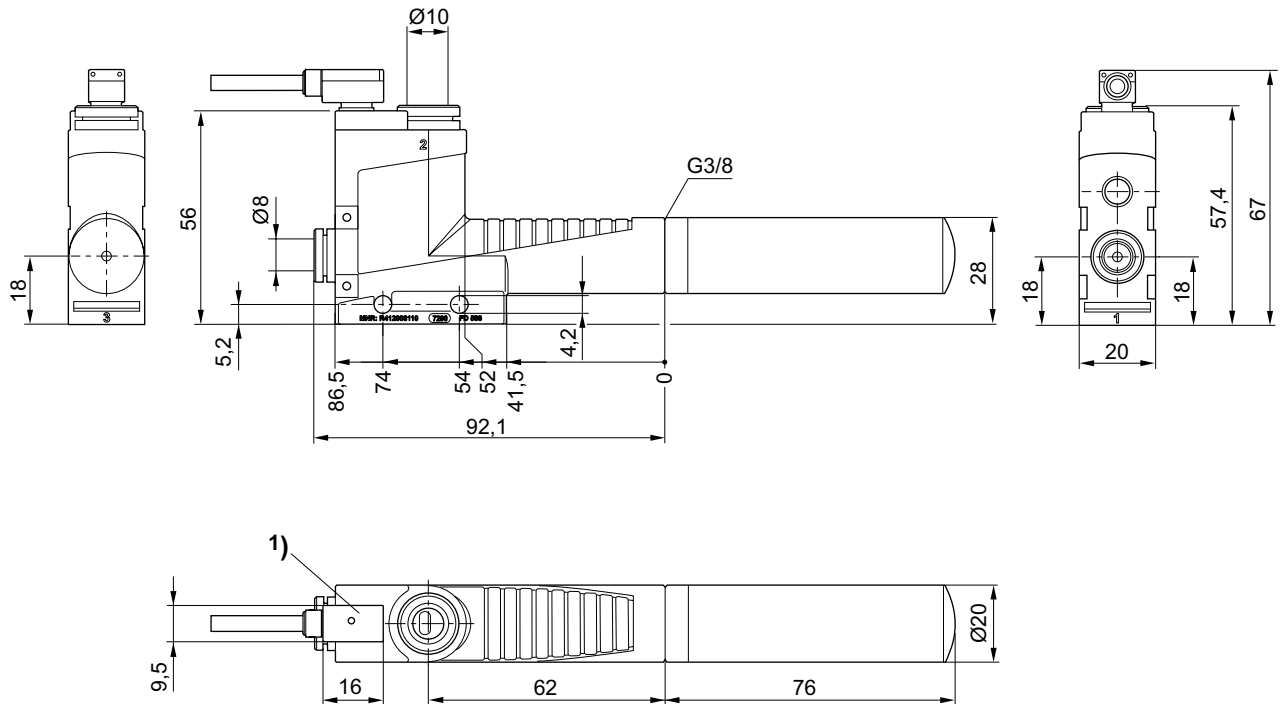
Fig. 2



00127376

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

Fig. 3

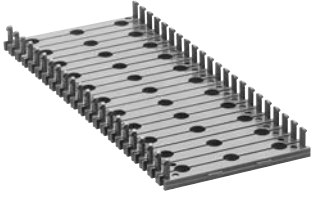


00127379

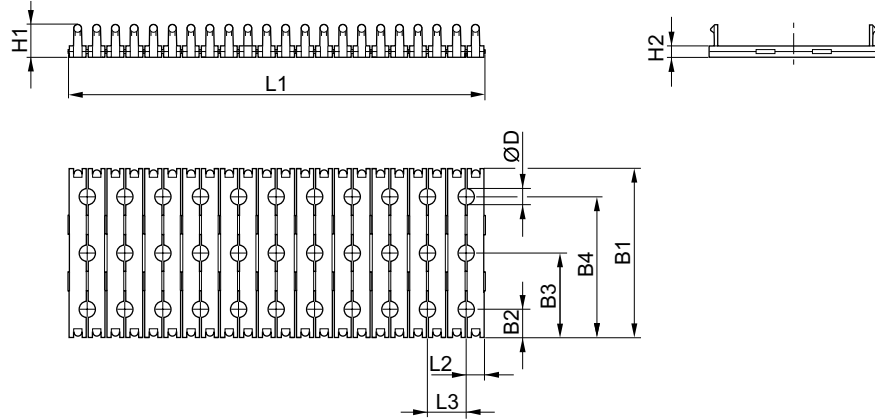
1) Vacuum switch is rotatable, not exchangeable
Cable length, 3 m, 3-wire, shielded

Series EBS
Accessories

Mounting strip, Series EBS



00125668



00125552

Part No.	B1	B2	B3	B4	Ø D	H1	H2	L1	L2	L3	Ambient temperature min./max.
R412007595	45	7,5	22,5	37,5	4,2	8,6	3	110	4,7	10	0 / 50
Part No.	Material	Weight [kg]	Delivery quantity [Piece]								
R412007595	Polyoxymethylene	0.015	5								

Mounting strip for EBS-PT/ -ET

Silencers, Series EBS
▶ Polyethylene

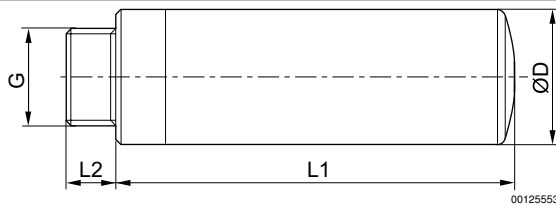


00125667

Working pressure min./max. 0 bar / 6 bar
Ambient temperature min./max. +0°C / +50°C
Medium Compressed air

Materials:
Silencers Polyethylene
Thread Polyethylene

Dimensions



00125553

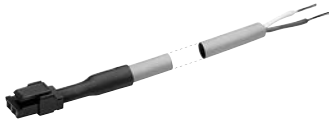
Gripper and vacuum technology ► Vacuum generators

Series EBS
Accessories

Part No.	Port G	L1	L2	Ø D								
R412007592	M5	24	4	9								
R412007593	G 1/8	40	5	13,6								
R412007594	G 3/8	76	9	20								

Connecting cable, Series CN2

► Socket, 2-pin, straight ► without wire end ferrule, tin-plated, 2-pin ► RJ plug connector, Halogen-free



Ambient temperature min./max. +0°C / +50°C
 Protection class IP40
 Wire cross-section 0.25 mm²

Materials:
 Housing Polyoxymethylene
 Cable sheath Polyurethane

00130630

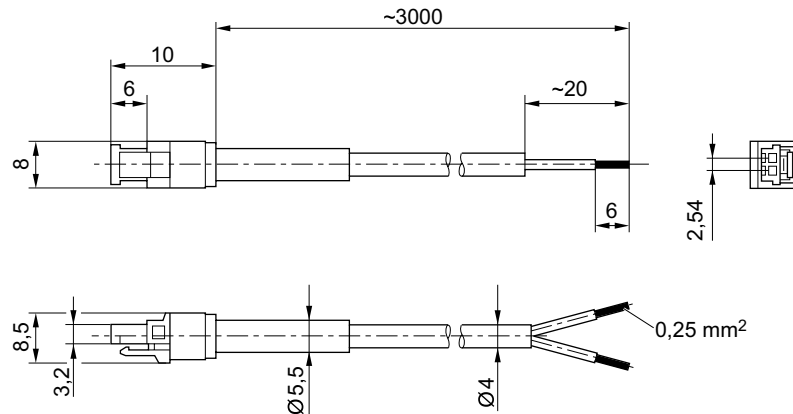
Technical Remarks

- The specified protection class is only valid in assembled and tested state.

Number of wires	Cable-Ø [mm]	Cable length L [m]	Weight [kg]	Note	Part No.
2	4	3	0.05	1)	1834484253

1) Halogen-free

Dimensions



00128286

Series EBS Accessories

Connecting cable, Series CN2

▶ Socket, M8x1, 4-pin, straight ▶ open cable ends, 4-pin



00107009_b

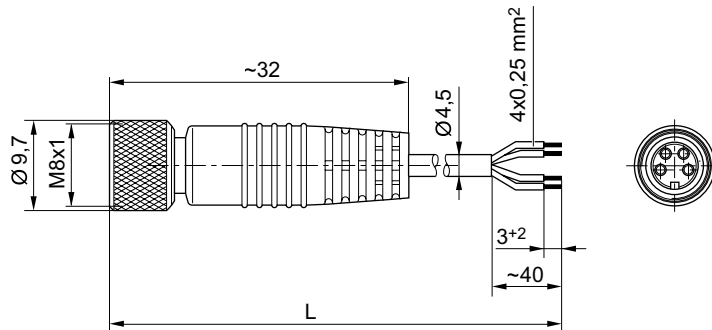
Ambient temperature min./max.	-40°C / +85°C
Protection class	IP65
Wire cross-section	0.25 mm ²
Materials:	
Cable sheath	Polyurethane

Technical Remarks

- The specified protection class is only valid in assembled and tested state.

	Operational voltage max.	Number of wires	Cable-Ø	Cable length L	Part No.												
	[V DC]		[mm]	[m]													
<table border="1"> <tr> <td>1</td> <td>—</td> <td>BN</td> </tr> <tr> <td>2</td> <td>—</td> <td>WH</td> </tr> <tr> <td>3</td> <td>—</td> <td>BU</td> </tr> <tr> <td>4</td> <td>—</td> <td>BK</td> </tr> </table>	1	—	BN	2	—	WH	3	—	BU	4	—	BK	24	4	4.5	3	1834484144
1	—	BN															
2	—	WH															
3	—	BU															
4	—	BK															

Dimensions

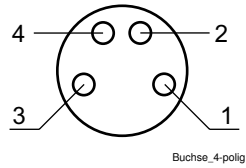


00127634_1

L = length

Series EBS
Accessories

Pin assignment



- (1) BN=brown
- (2) WH=white
- (3) BU=blue
- (4) BK=black

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No statements concerning a certain condition or suitability for a certain application can be derived from our information.

The information given does not release the user from the obligation of own judgment and verification. It must be remembered that the products are subject to a natural process of wear and aging.

29-11-2016

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. © AVENTICS S.à r.l.
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