Series EBS

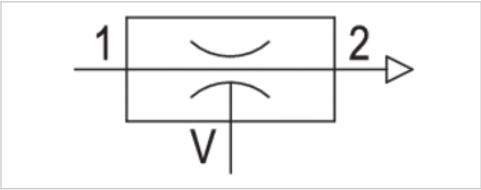
AVENTICS™ Series EBS

EMERSON.

Ejector, Series EBS

- push-in fitting
- pneumatic control, inline form

Type	Ejector
Version	pneumatic control, inline form
Activation	pneumatically
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 60 °C
Medium temperature min./max.	0 ... 60 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Weight	0.005 kg



Technical data

Part No.	Type	Nozzle Ø	Compressed air connection	Vacuum connection+
R412007447	EBS-PI-05-NN	0.5 mm	Ø 4	Ø 4
R412007448	EBS-PI-07-NN	0.7 mm	Ø 4	Ø 4

Part No.	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.
R412007447	83 %	8 l/min	13 l/min
R412007448	85 %	15.9 l/min	25 l/min

Part No.	Sound pressure level intake effect	Sound pressure level intake effect
R412007447	52 dB	60 dB
R412007448	63 dB	63 dB

p.opt. = optimum working pressure

Technical information

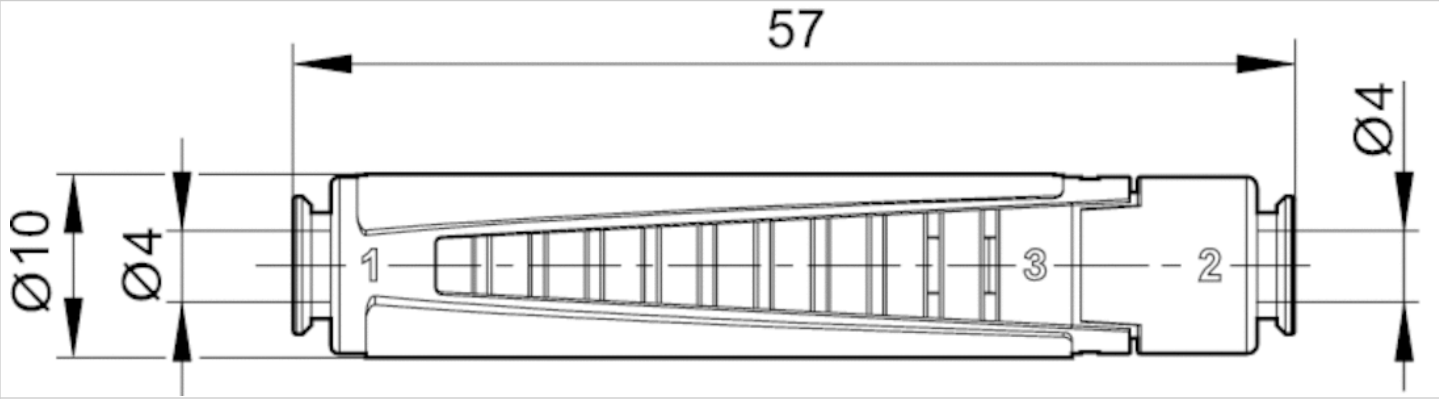
Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Release ring	Polyamide

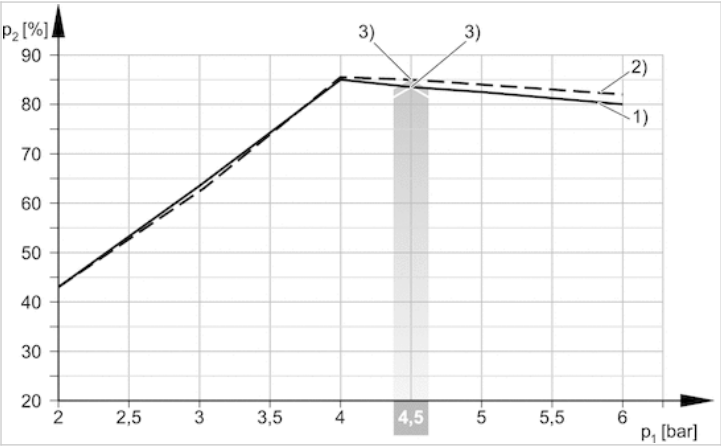
Dimensions

Dimensions



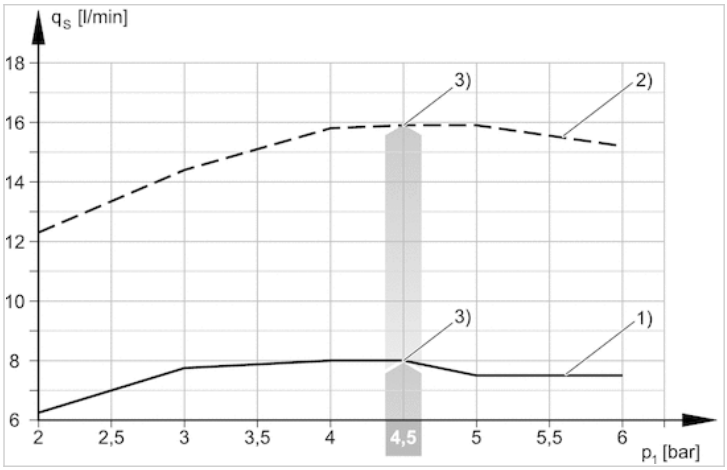
Diagrams

Vacuum p2 depending on working pressure p1



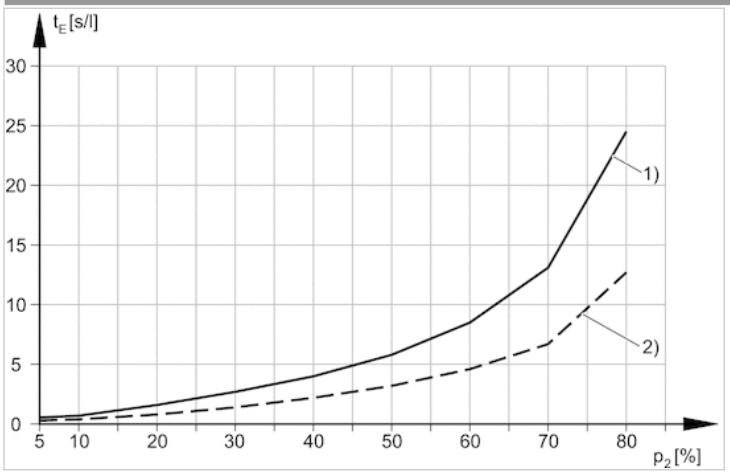
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

Suction capacity qs depending on working pressure p1



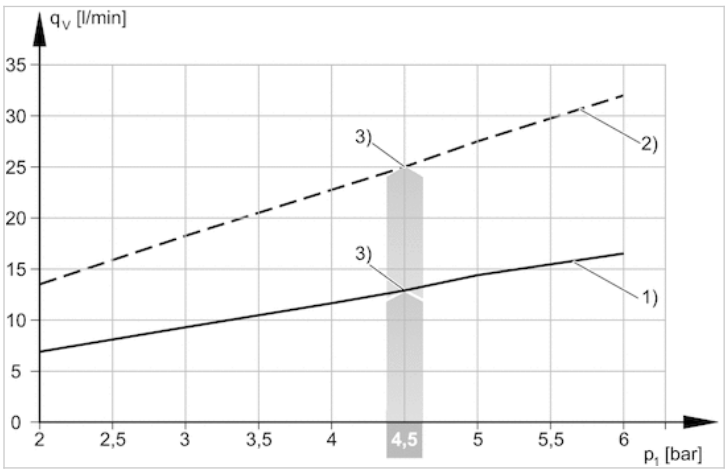
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

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



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

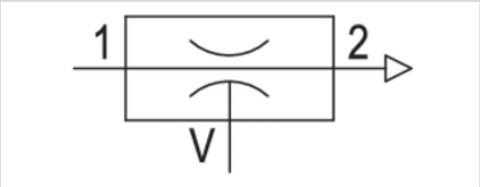
Air consumption qv depending on working pressure p1



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

Ejector, Series EBS

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



Type	Ejector
Version	pneumatic control, T-design
Activation	pneumatically
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 60 °C
Medium temperature min./max.	0 ... 60 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Weight	See table below

Technical data

Part No.	Type	Nozzle Ø	Compressed air connection	Vacuum connection+
R412007449	EBS-PT-05-NN	0.5 mm	Ø 4	Ø 4
R412007450	EBS-PT-07-NN	0.7 mm	Ø 4	Ø 4
R412007451	EBS-PT-10-NN	1 mm	Ø 6	Ø 8
R412007452	EBS-PT-15-NN	1.5 mm	Ø 6	Ø 8
R412007453	EBS-PT-20-NN	2 mm	Ø 8	Ø 10
R412007454	EBS-PT-25-NN	2.5 mm	Ø 8	Ø 10

Part No.	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.
R412007449	84 %	7 l/min	14 l/min
R412007450	85 %	16 l/min	25 l/min
R412007451	85 %	38 l/min	48 l/min
R412007452	85 %	70 l/min	118 l/min
R412007453	86 %	123 l/min	208 l/min
R412007454	82 %	215 l/min	311 l/min

Part No.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
R412007449	53 dB	58 dB	0.007 kg	Fig. 1
R412007450	59 dB	65 dB	0.007 kg	Fig. 1
R412007451	59 dB	65 dB	0.02 kg	Fig. 2

Part No.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
R412007452	66 dB	72 dB	0.02 kg	Fig. 2
R412007453	68 dB	77 dB	0.05 kg	Fig. 3
R412007454	75 dB	78 dB	0.05 kg	Fig. 3

p.opt. = optimum working pressure

Technical information

Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Release ring	Polyamide
Silencer	Polyethylene

Dimensions

Fig. 1

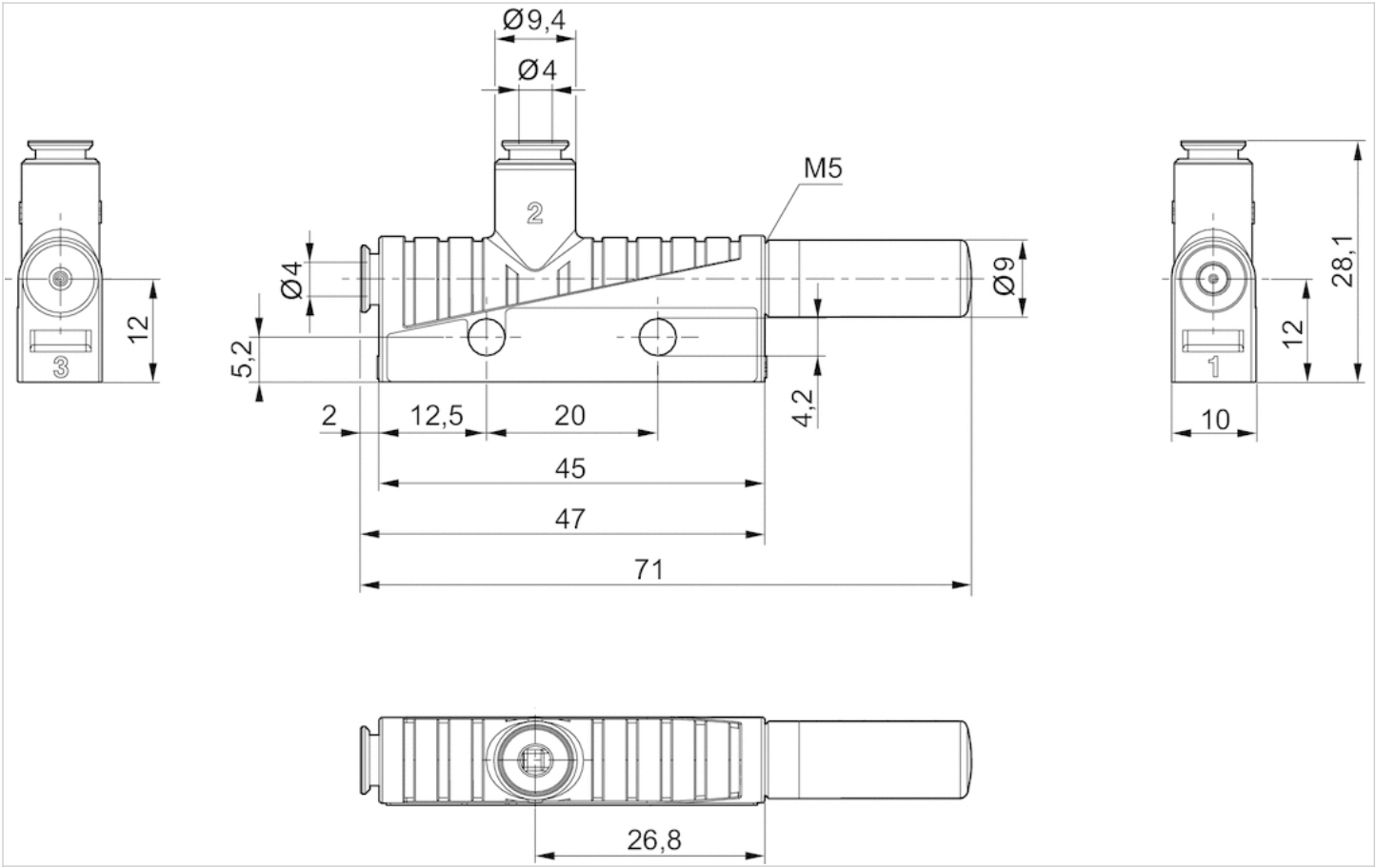


Fig. 2

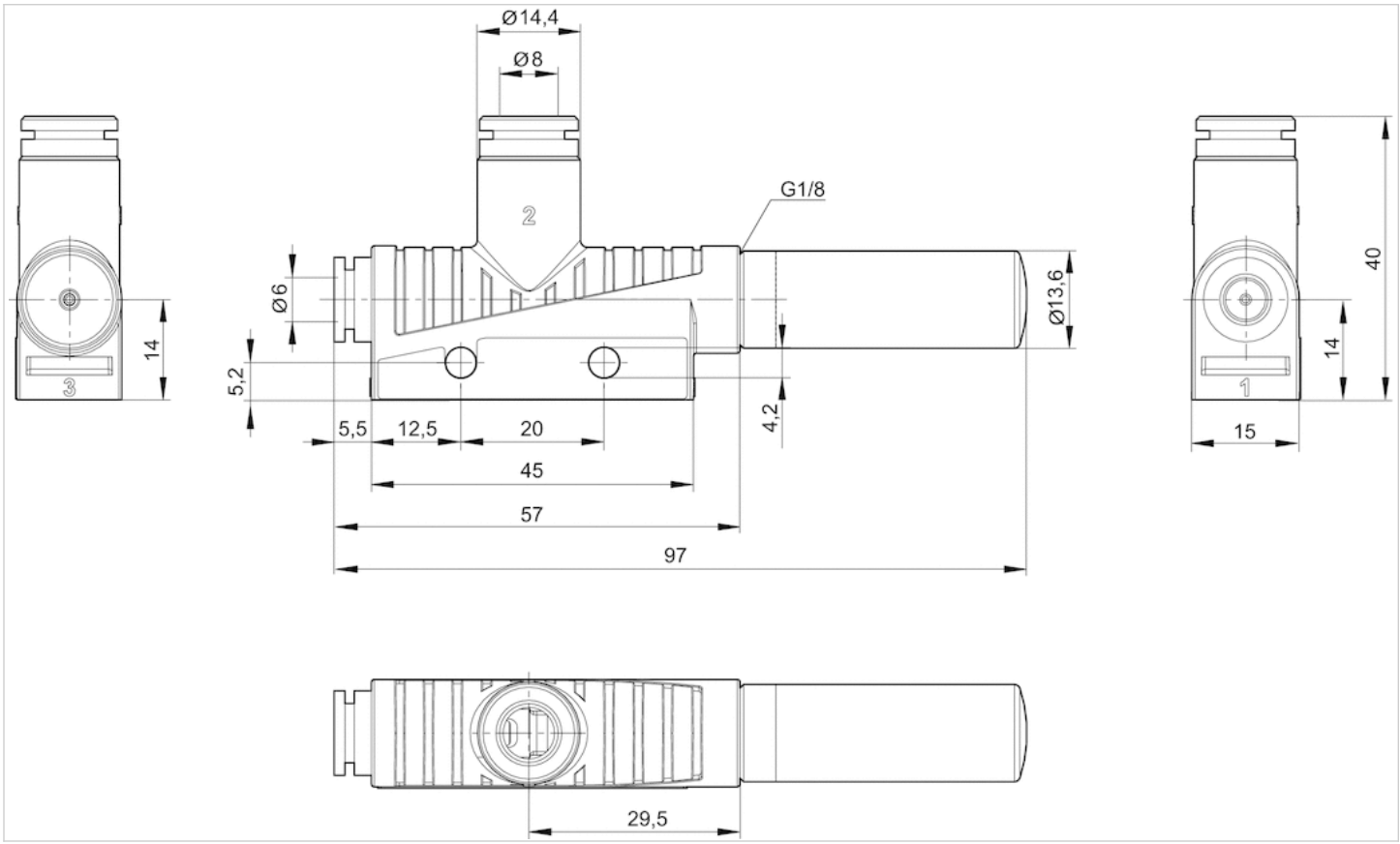
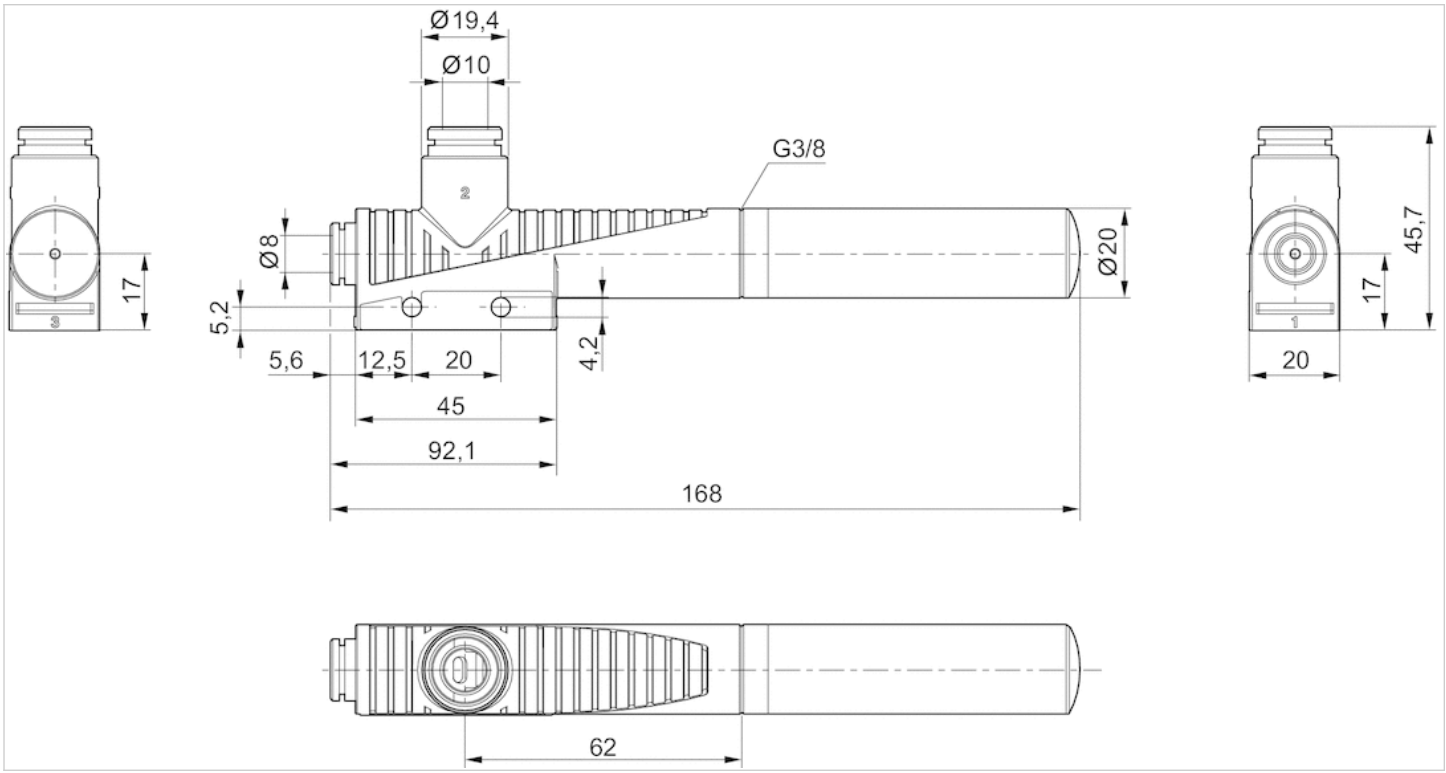
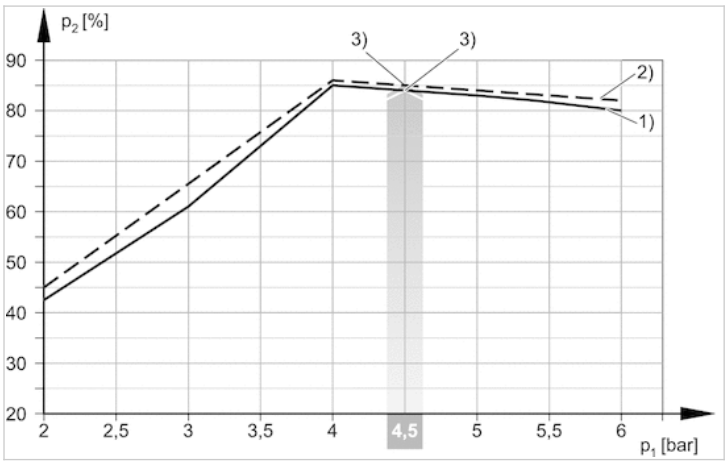

Ø14,4
Ø8
G1/8
Ø6
Ø13,6
5,2
4,2
5,5
12,5
20
45
57
97
14
40
15
29,5

Fig. 3


Ø19,4
Ø10
G3/8
Ø8
Ø20
5,2
4,2
5,6
12,5
20
45
92,1
168
17
45,7
20
62

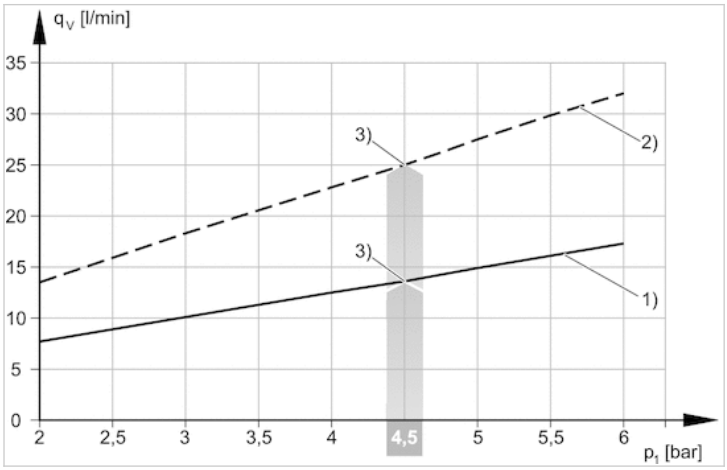
Diagrams

Vacuum p2 depending on working pressure p1

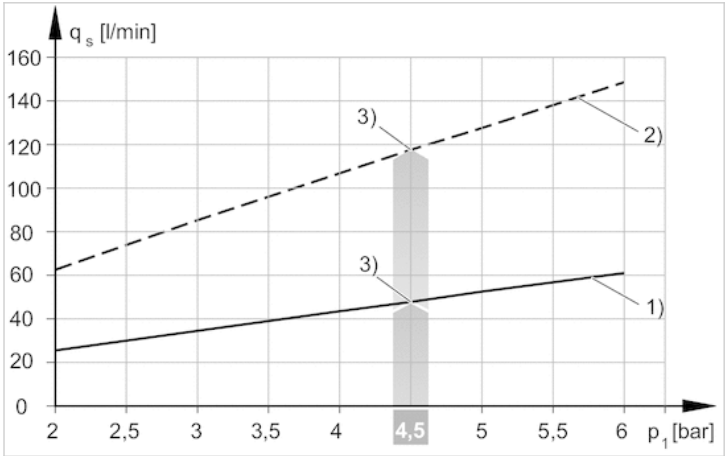


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

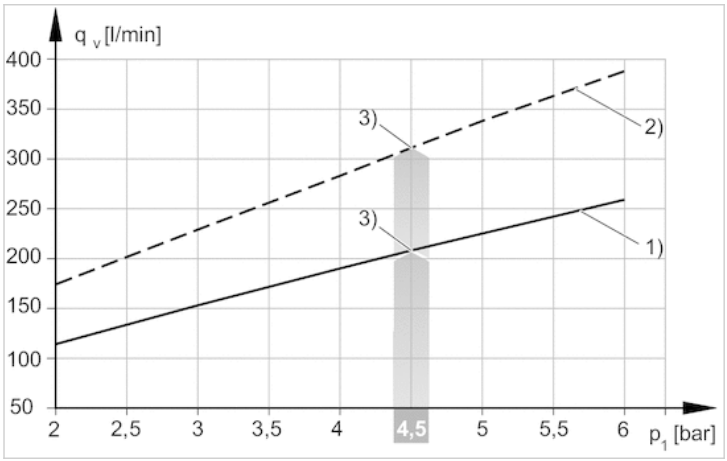
Air consumption qv depending on working pressure p1



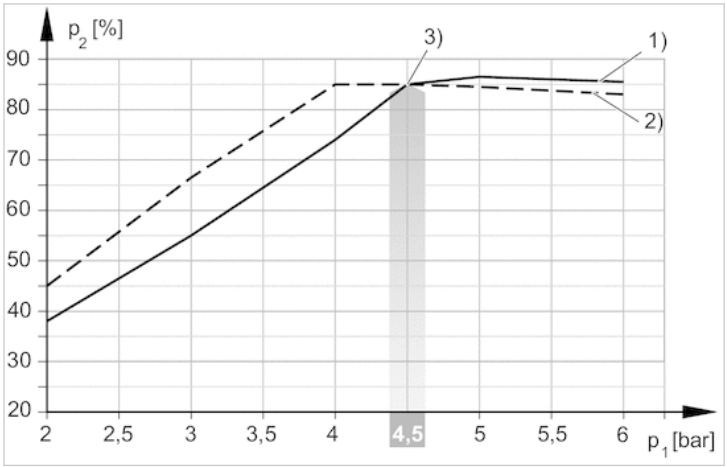
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



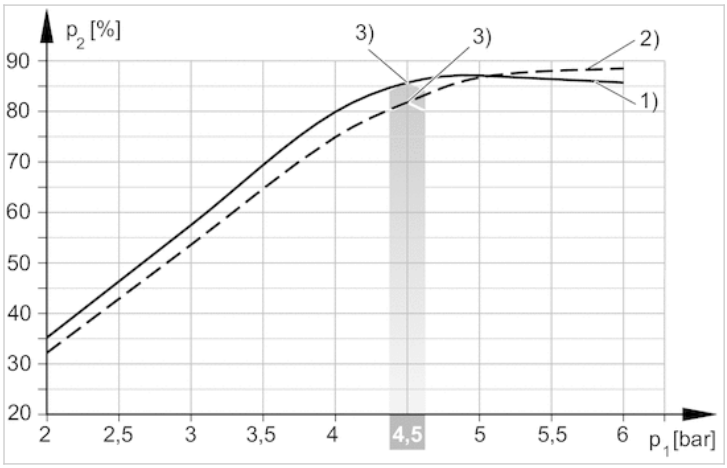
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure



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

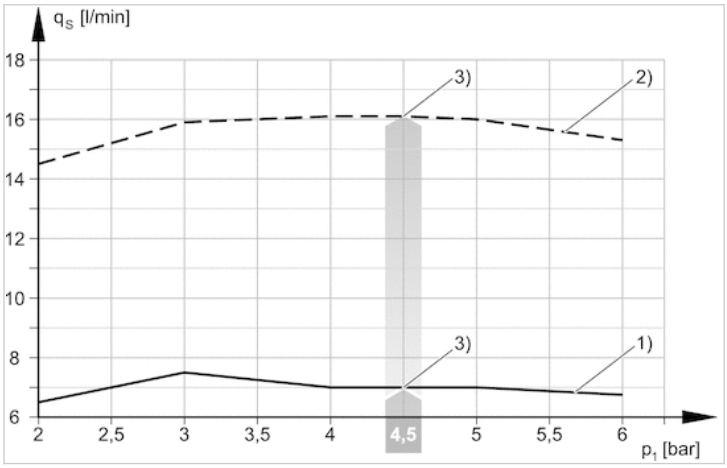


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

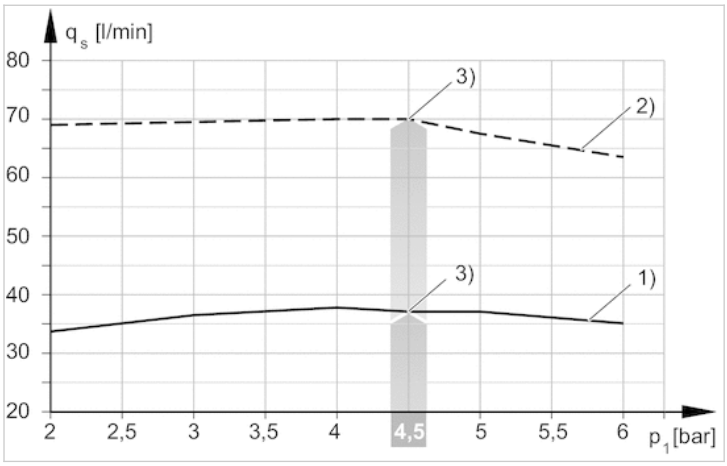


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

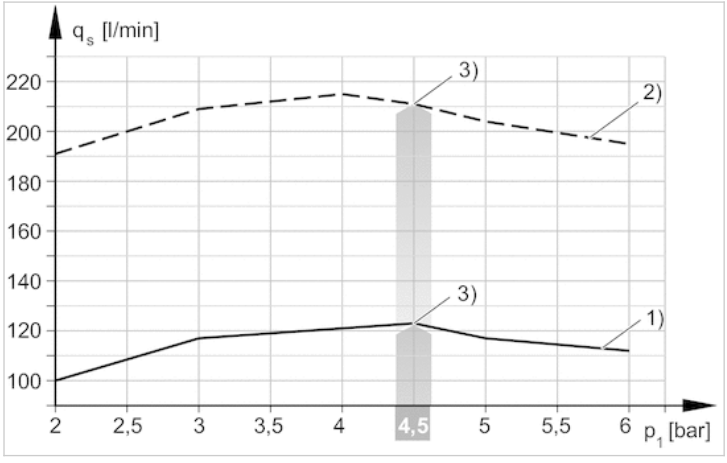
Suction capacity qs depending on working pressure p1



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

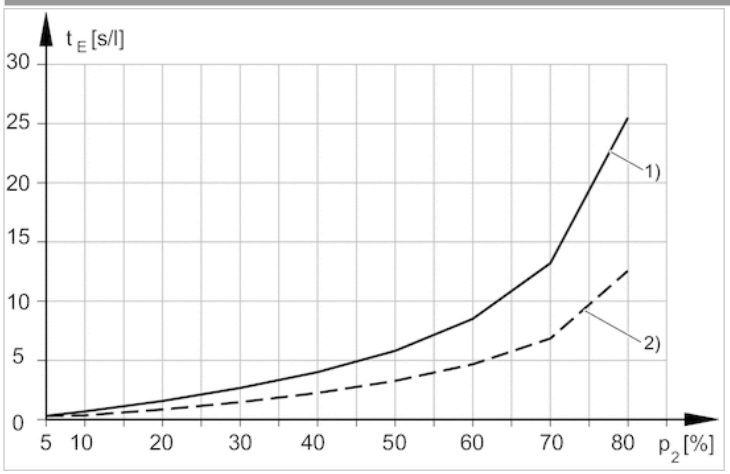


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

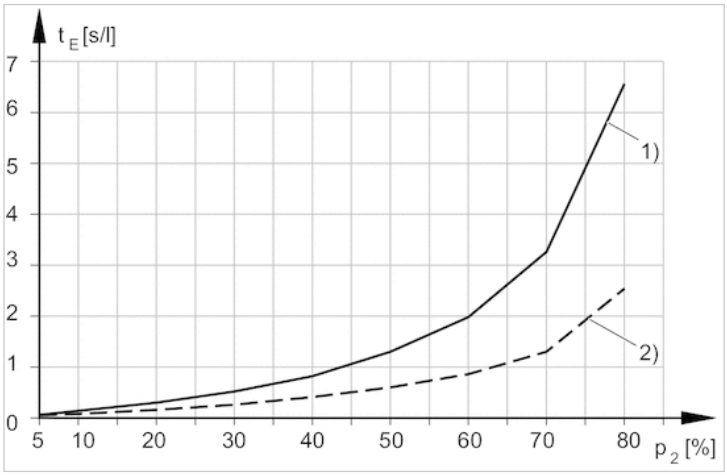


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

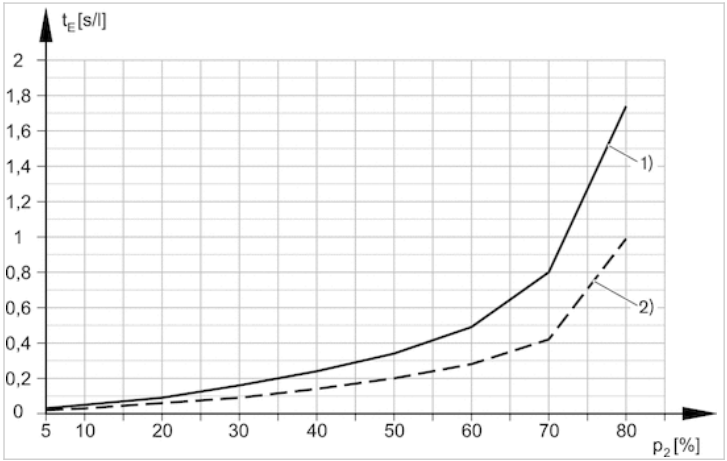
Evacuation time tE depending on vacuum p2 for 1 l volume (with optimal operating pressure p1opt)



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



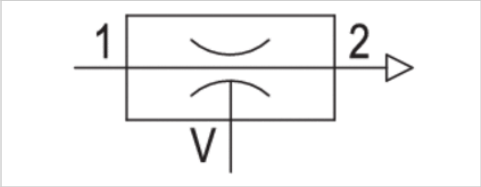
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm



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

Ejector, Series EBS

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



Type	Ejector
Version	pneumatic control, T-design
Activation	pneumatically
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 60 °C
Medium temperature min./max.	0 ... 60 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Weight	See table below

Technical data

Part No.	Type	Nozzle Ø	Compressed air connection	Vacuum connection+
R412007473	EBS-PT-05-NN	0.5 mm	M5	M5
R412007474	EBS-PT-07-NN	0.7 mm	M5	M5
R412007475	EBS-PT-10-NN	1 mm	G 1/8	G 1/8
R412007476	EBS-PT-15-NN	1.5 mm	G 1/8	G 1/8
R412007477	EBS-PT-20-NN	2 mm	G 1/4	G 3/8
R412007478	EBS-PT-25-NN	2.5 mm	G 1/4	G 3/8

Part No.	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.
R412007473	84 %	7 l/min	14 l/min
R412007474	85 %	16 l/min	25 l/min
R412007475	85 %	38 l/min	48 l/min
R412007476	85 %	70 l/min	118 l/min
R412007477	86 %	123 l/min	208 l/min
R412007478	82 %	215 l/min	311 l/min

Part No.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
R412007473	53 dB	58 dB	0.008 kg	Fig. 1
R412007474	59 dB	65 dB	0.008 kg	Fig. 1
R412007475	59 dB	65 dB	0.022 kg	Fig. 2

Part No.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Fig.
R412007476	66 dB	72 dB	0.022 kg	Fig. 2
R412007477	68 dB	77 dB	0.048 kg	Fig. 3
R412007478	75 dB	78 dB	0.048 kg	Fig. 3

p.opt. = optimum working pressure

Technical information

Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Threaded bushing	Aluminum, anodized
Silencer	Polyethylene

Dimensions

Fig. 1

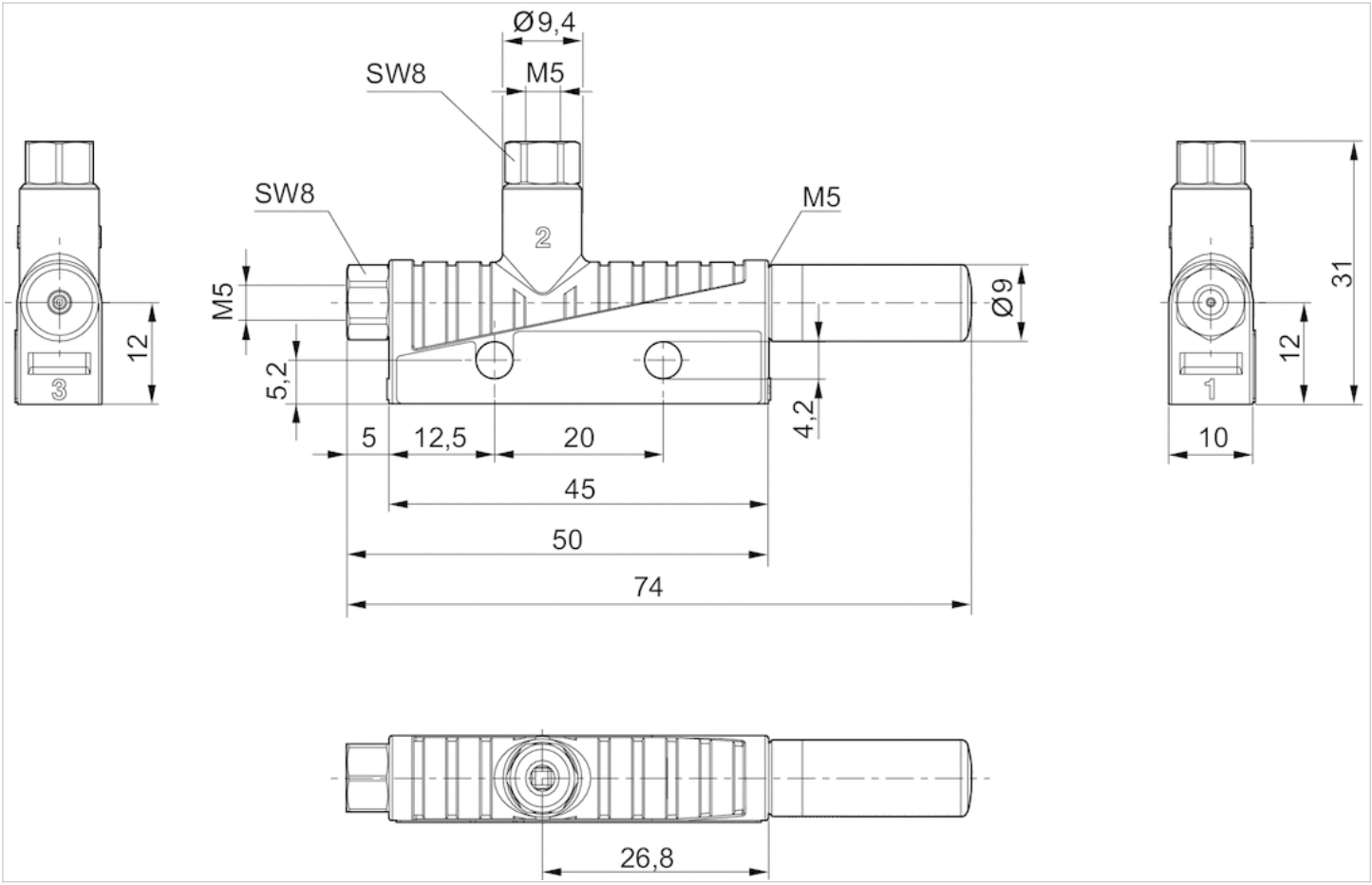
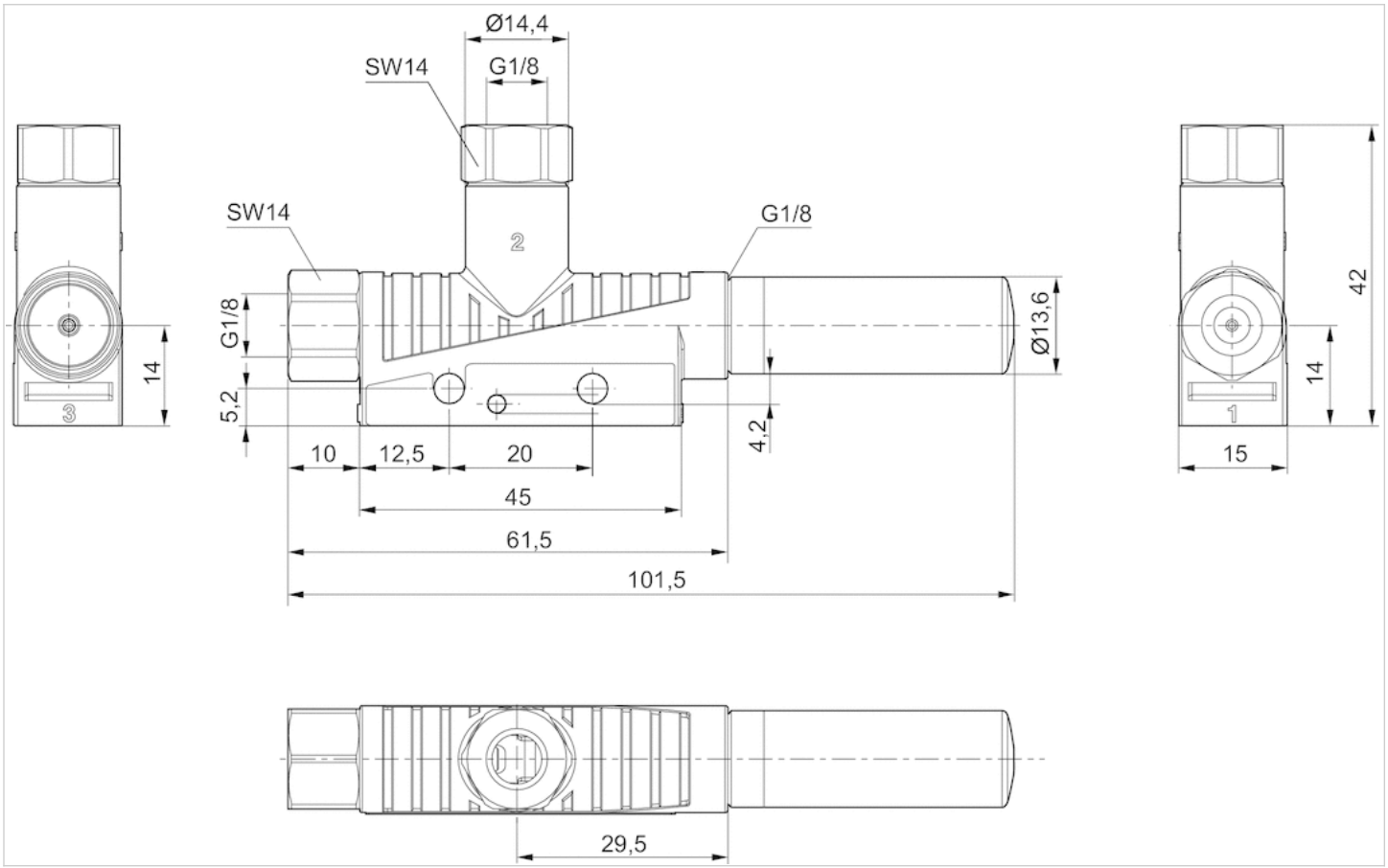


Fig. 2


Ø14,4
SW14
G1/8
SW14
G1/8
2
G1/8
5,2
14
3
Ø13,6
4,2
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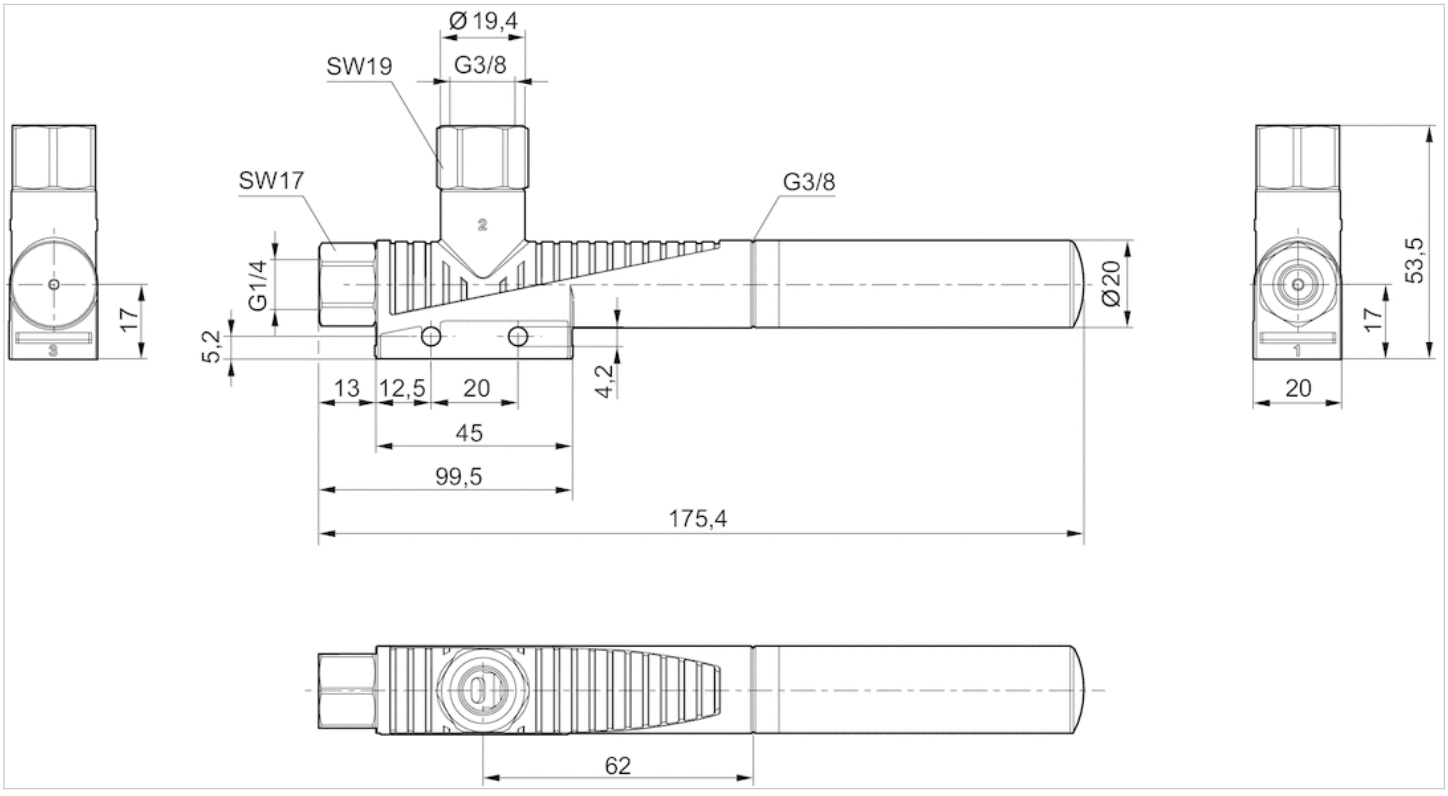
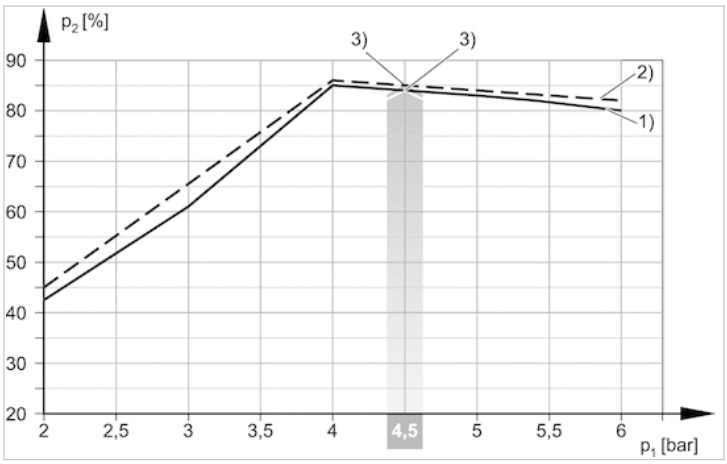
12,5
20
45
61,5
101,5
42
14
1
15
29,5

Fig. 3


Ø 19,4
SW19
G3/8
SW17
G3/8
2
G1/4
5,2
17
3
Ø20
4,2
13
12,5
20
45
99,5
175,4
53,5
17
1
20
62

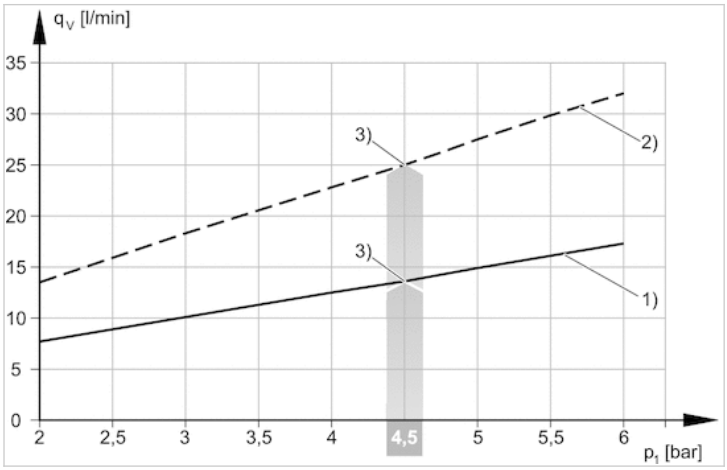
Diagrams

Vacuum p2 depending on working pressure p1

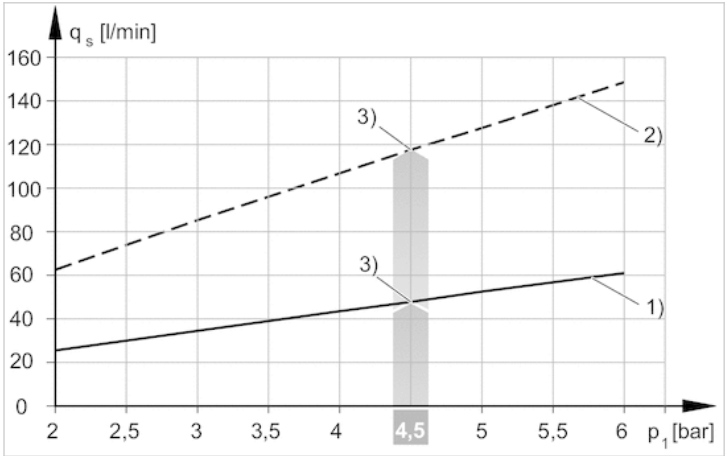


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

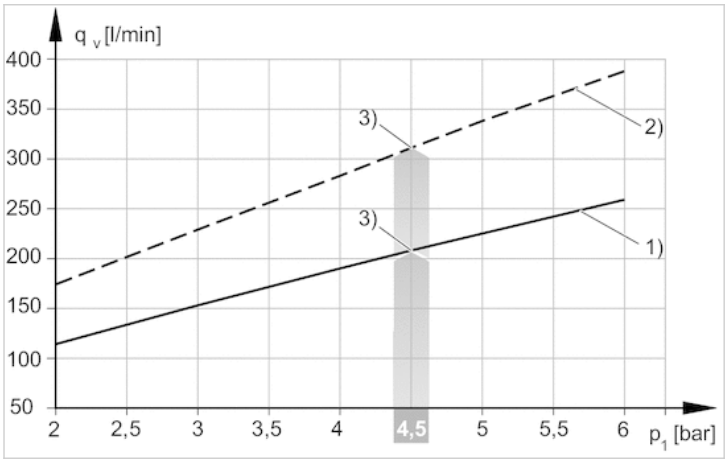
Air consumption qv depending on working pressure p1



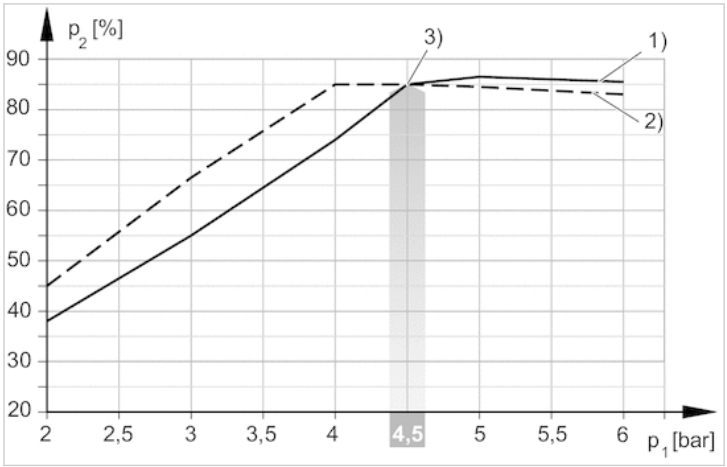
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



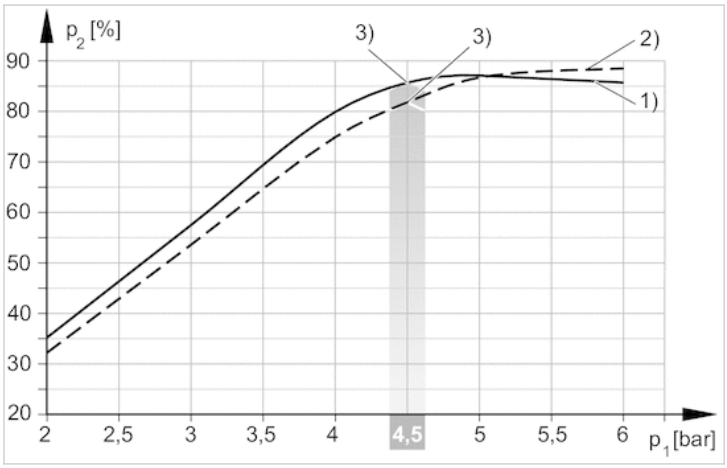
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure



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

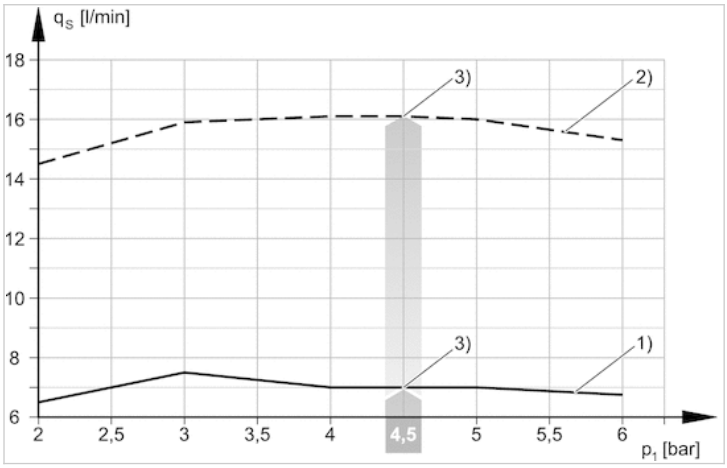


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

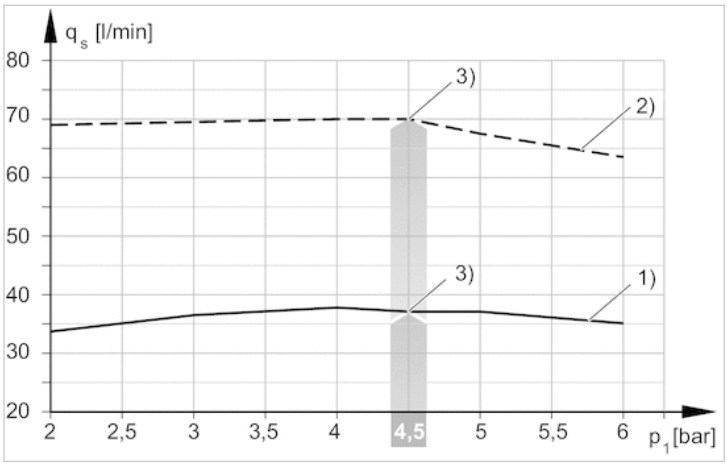


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

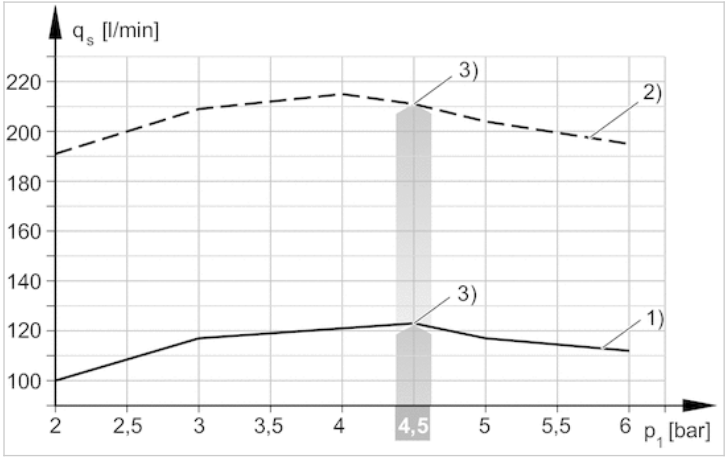
Suction capacity qs depending on working pressure p1



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

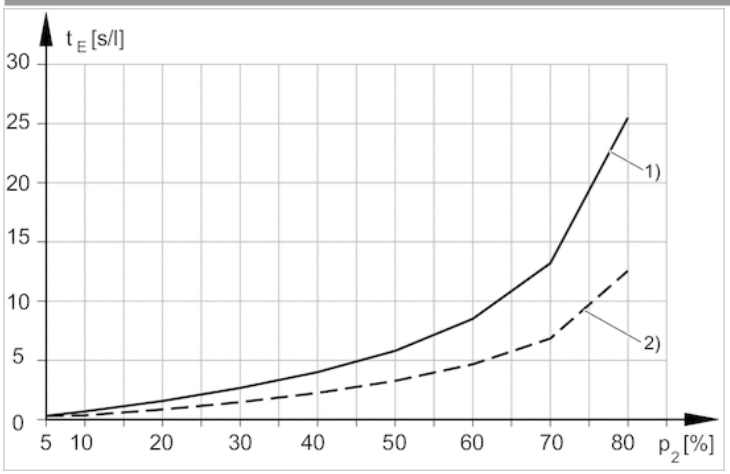


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

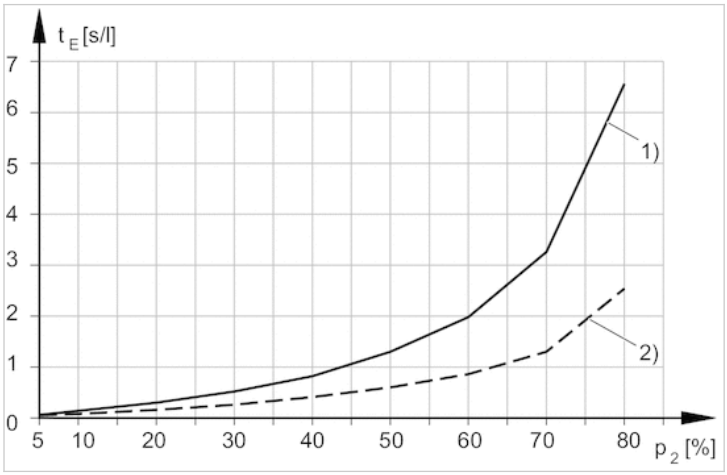


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

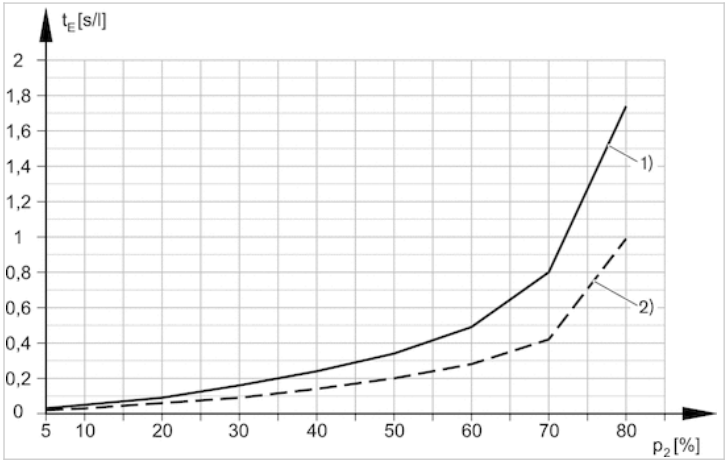
Evacuation time tE depending on vacuum p2 for 1 l volume (with optimal operating pressure p1opt)



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



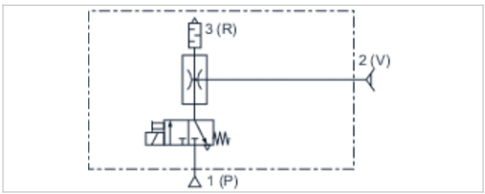
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm



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

Ejector, Series EBS

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



Type	Ejector
Version	electrical control, T-design
Activation	Electrically
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 50 °C
Medium temperature min./max.	0 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Protection class With valve plug connector	IP40
Display	LED
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Power consumption Solenoid valve	1.3 W
Weight	0.027 kg

Technical data

Part No.	Type	Nozzle Ø	Compressed air connection	Vacuum connection+
R412007764	EBS-ET-05-NC	0.5 mm	Ø 4	Ø 4
R412007765	EBS-ET-07-NC	0.7 mm	Ø 4	Ø 4

Part No.	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.
R412007764	84 %	7.5 l/min	14 l/min
R412007765	85 %	16.8 l/min	24 l/min

Part No.	Sound pressure level intake effect	Sound pressure level intake effect
R412007764	53 dB	58 dB
R412007765	59 dB	65 dB

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

Technical information

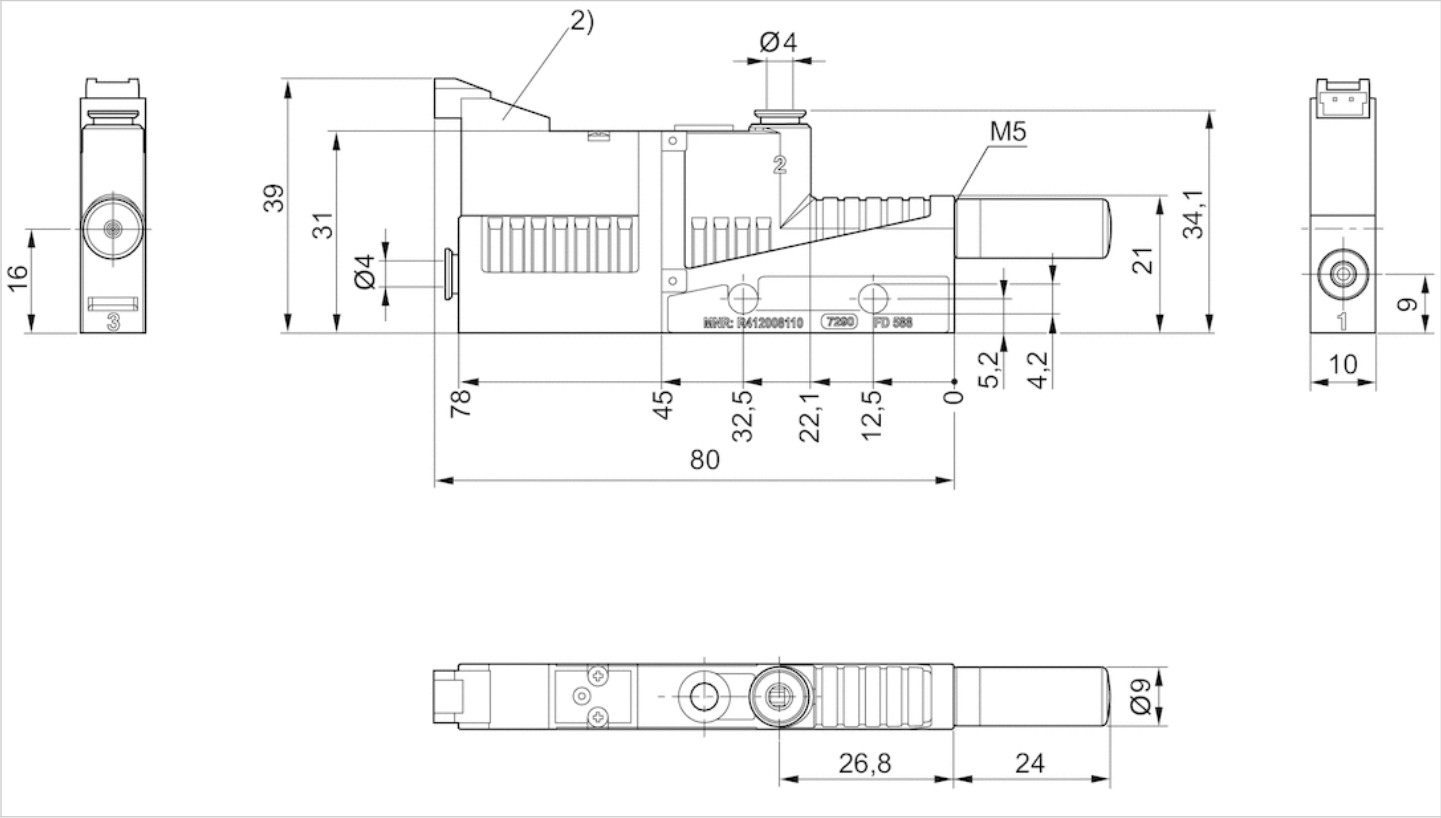
Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Release ring	Polyamide
Silencer	Polyethylene

Dimensions

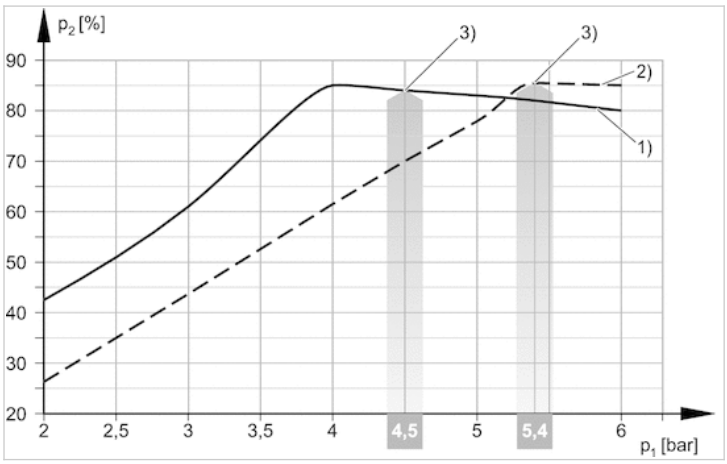
Dimensions



2) Solenoid valve for vacuum ON/OFF

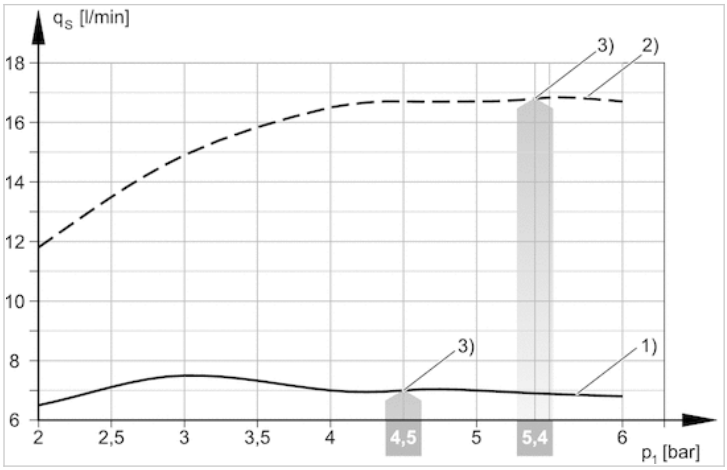
Diagrams

Vacuum p2 depending on working pressure p1



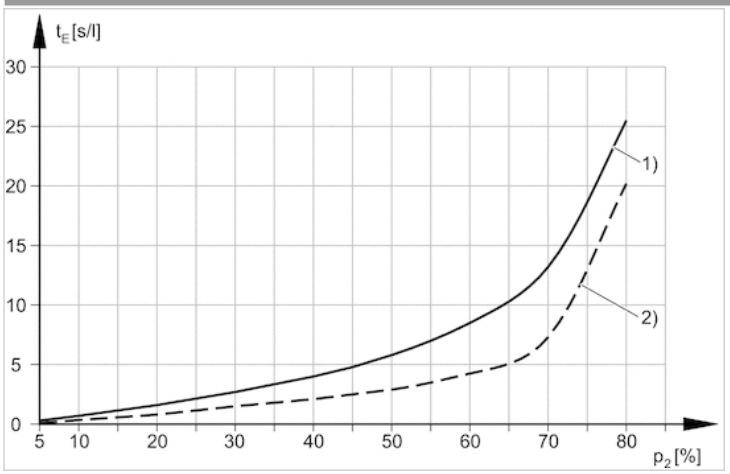
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

Suction capacity qs depending on working pressure p1



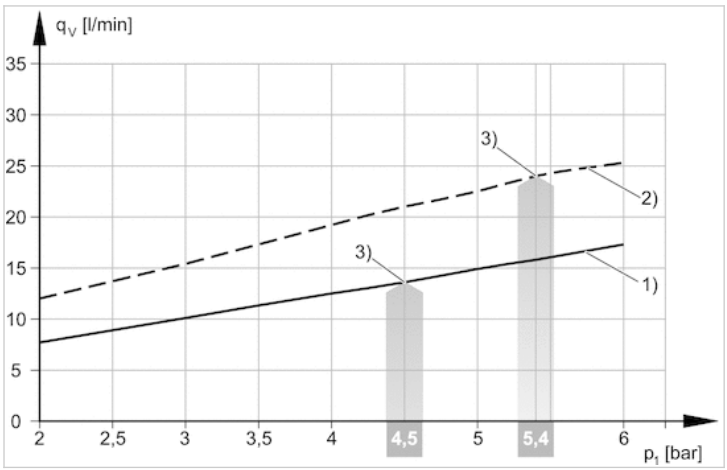
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

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



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

Air consumption qv depending on working pressure p1



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

Ejector, Series EBS

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

Type	Ejector
Version	electrical control, T-design
Activation	Electrically
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 50 °C
Medium temperature min./max.	0 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Protection class With valve plug connector	IP40
Display	LED
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Power consumption Solenoid valve	1.3 W
Weight	0.027 kg

Technical data

Part No.	Type	Nozzle Ø	Compressed air connection	Vacuum connection+
R412007768	EBS-ET-05-NC	0.5 mm	M5	M5
R412007769	EBS-ET-07-NC	0.7 mm	M5	M5

Part No.	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.
R412007768	84 %	7.5 l/min	14 l/min
R412007769	85 %	16.8 l/min	24 l/min

Part No.	Sound pressure level intake effect	Sound pressure level intake effect
R412007768	53 dB	58 dB
R412007769	59 dB	65 dB

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

Technical information

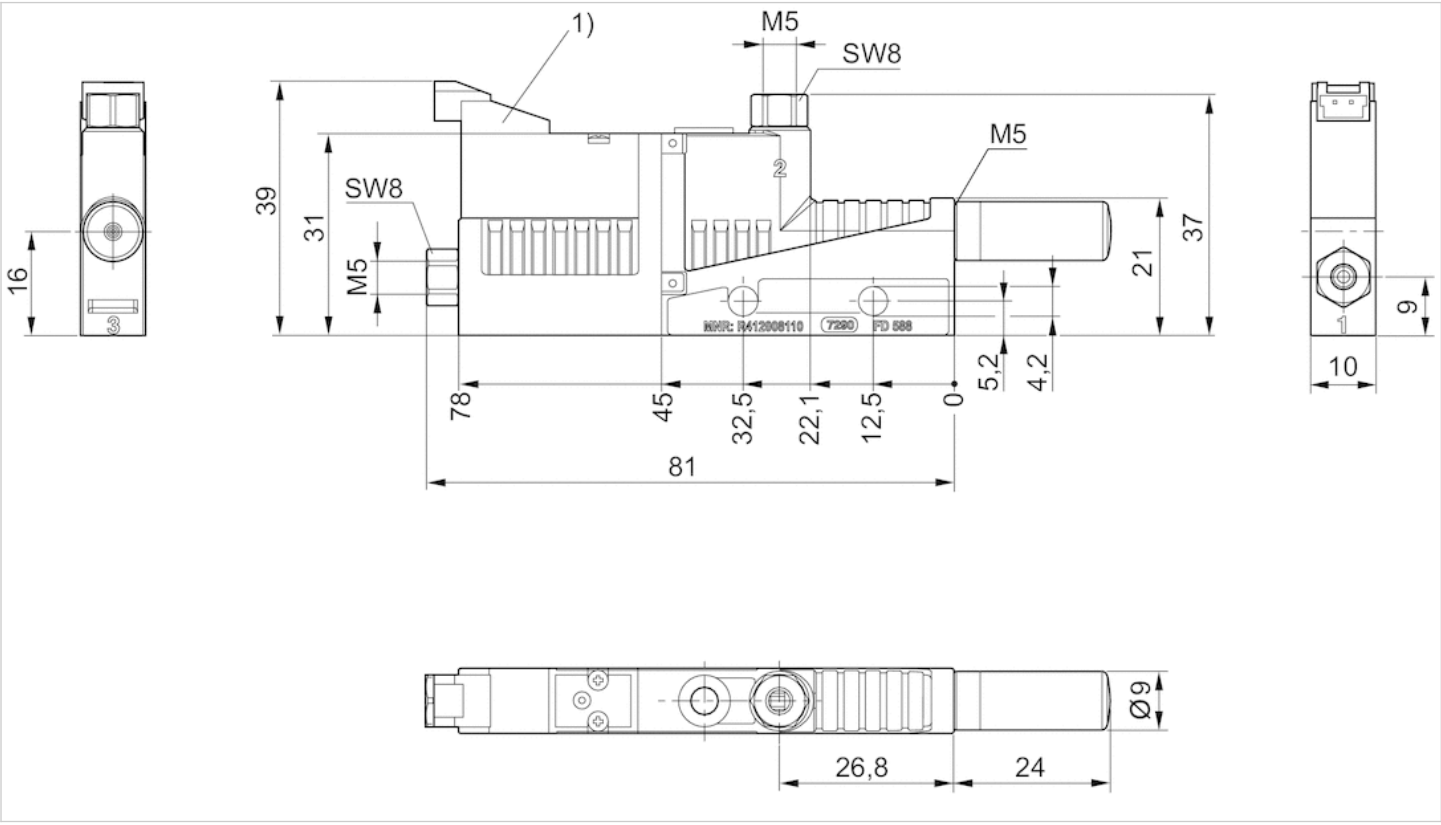
Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Threaded bushing	Aluminum, anodized
Silencer	Polyethylene

Dimensions

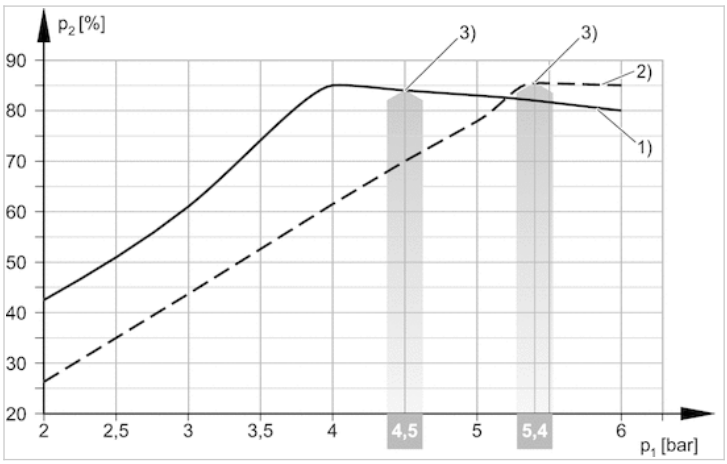
Dimensions



1) Solenoid valve for vacuum ON/OFF

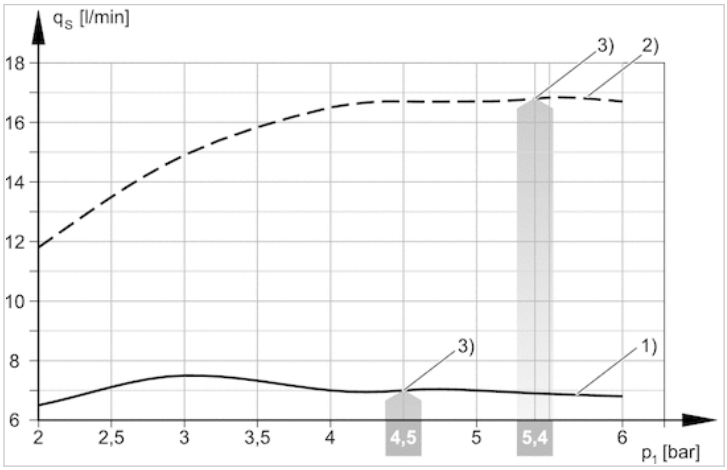
Diagrams

Vacuum p2 depending on working pressure p1



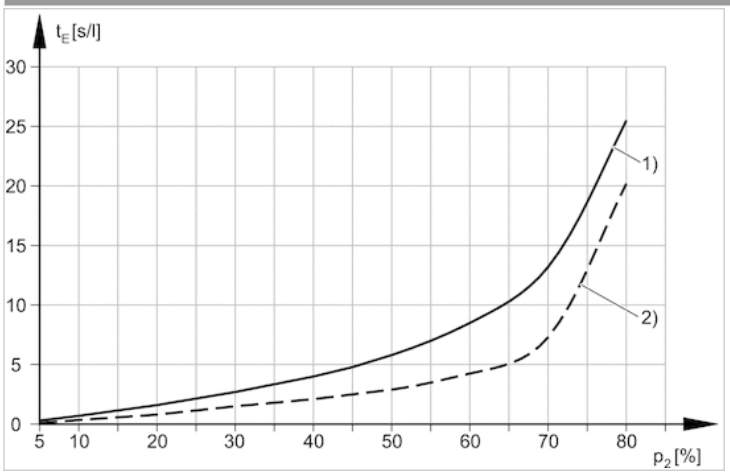
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

Suction capacity qs depending on working pressure p1



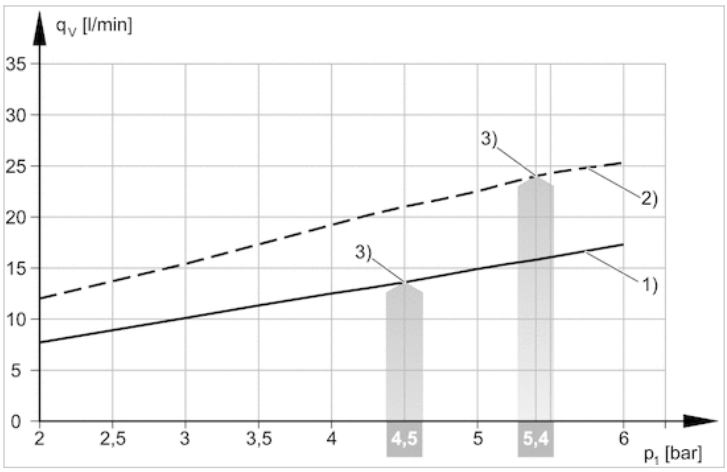
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

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



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

Air consumption qv depending on working pressure p1



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

Ejector, Series EBS

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

Type	Ejector
Version	electrical control, T-design
Activation	Electrically
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 50 °C
Medium temperature min./max.	0 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Protection class With valve plug connector	IP40
Display	LED
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Power consumption Solenoid valve	1.3 W
Weight	See table below

Technical data

Part No.		Type	Nozzle Ø	Compressed air connection
R412007461		EBS-ET-05-NC	0.5 mm	Ø 4
R412007462		EBS-ET-07-NC	0.7 mm	Ø 4
R412007463		EBS-ET-10-NO	1 mm	Ø 6
R412007464		EBS-ET-15-NO	1.5 mm	Ø 6
R412007465		EBS-ET-20-NO	2 mm	Ø 8
R412007466		EBS-ET-25-NO	2.5 mm	Ø 8

Part No.	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity
R412007461	Ø 4	84 %	7.5 l/min
R412007462	Ø 4	85 %	16.8 l/min
R412007463	Ø 8	86 %	35 l/min
R412007464	Ø 8	84 %	71 l/min
R412007465	Ø 10	86 %	123 l/min
R412007466	Ø 10	84 %	223 l/min

Part No.	Air consumption at p.opt.	Sound pressure level intake effect
R412007461	14 l/min	53 dB
R412007462	24 l/min	59 dB
R412007463	48 l/min	59 dB
R412007464	118 l/min	71 dB

Part No.	Air consumption at p.opt.	Sound pressure level intake effect
R412007465	208 l/min	68 dB
R412007466	320 l/min	70 dB

Part No.	Sound pressure level intake effect	Weight	Fig.
R412007461	58 dB	0.035 kg	Fig. 1
R412007462	65 dB	0.035 kg	Fig. 1
R412007463	65 dB	0.065 kg	Fig. 2
R412007464	71 dB	0.065 kg	Fig. 2
R412007465	77 dB	0.146 kg	Fig. 3
R412007466	78 dB	0.146 kg	Fig. 3

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

Technical information

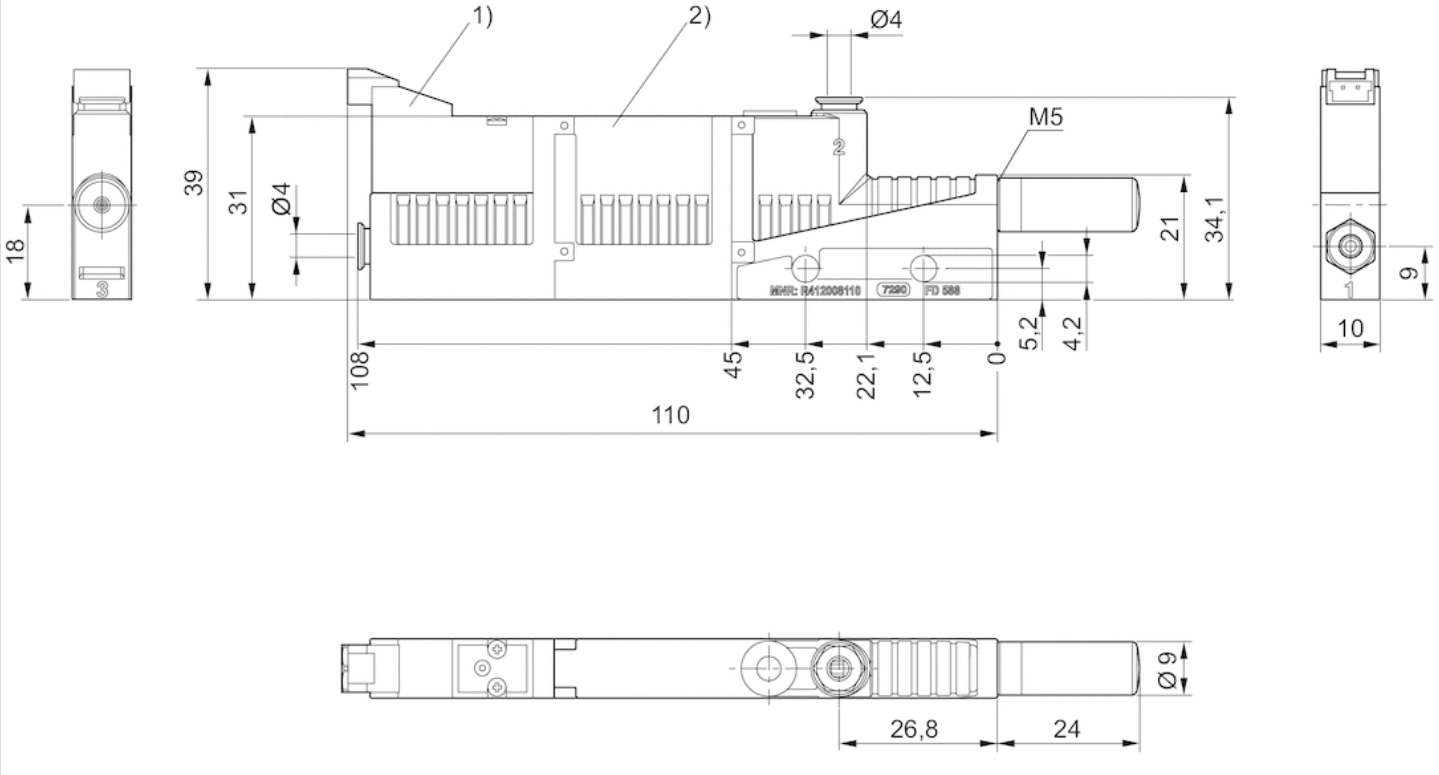
Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Release ring	Polyamide
Silencer	Polyethylene

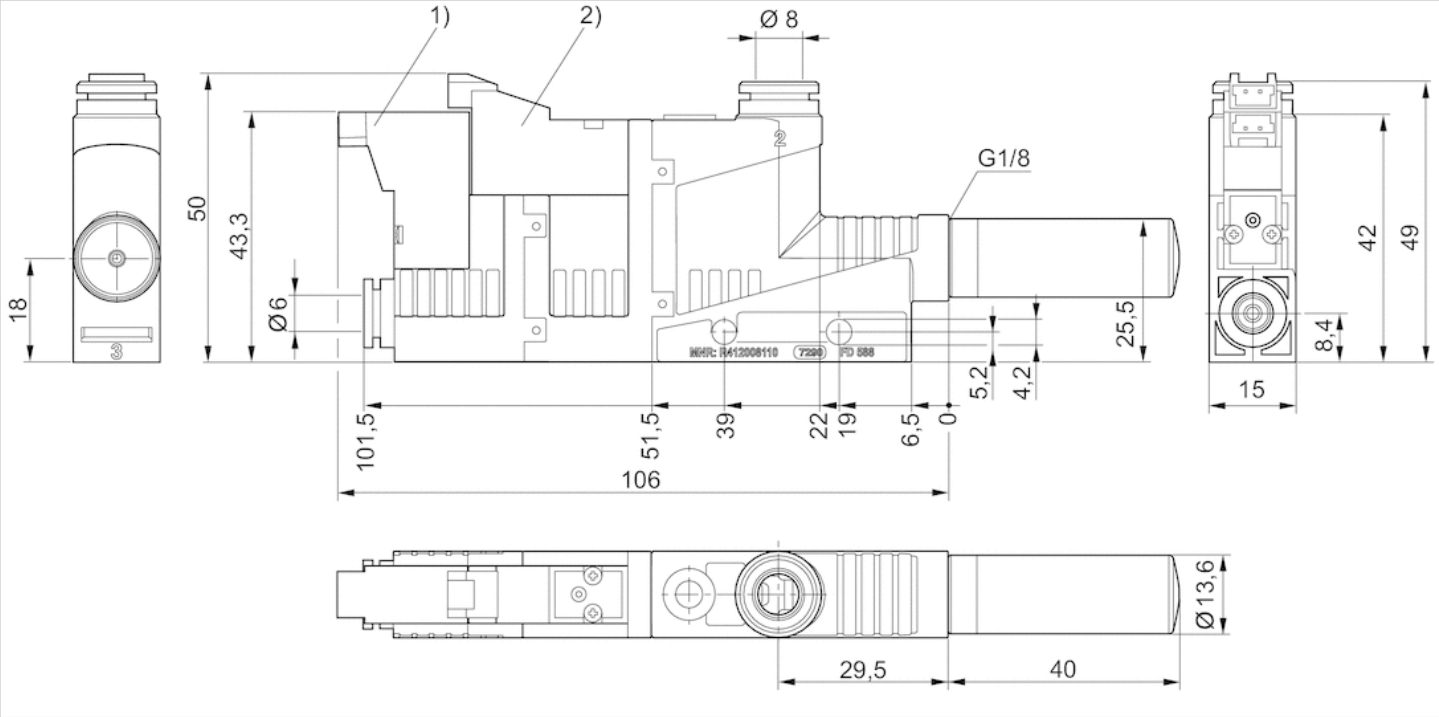
Dimensions

Fig. 1



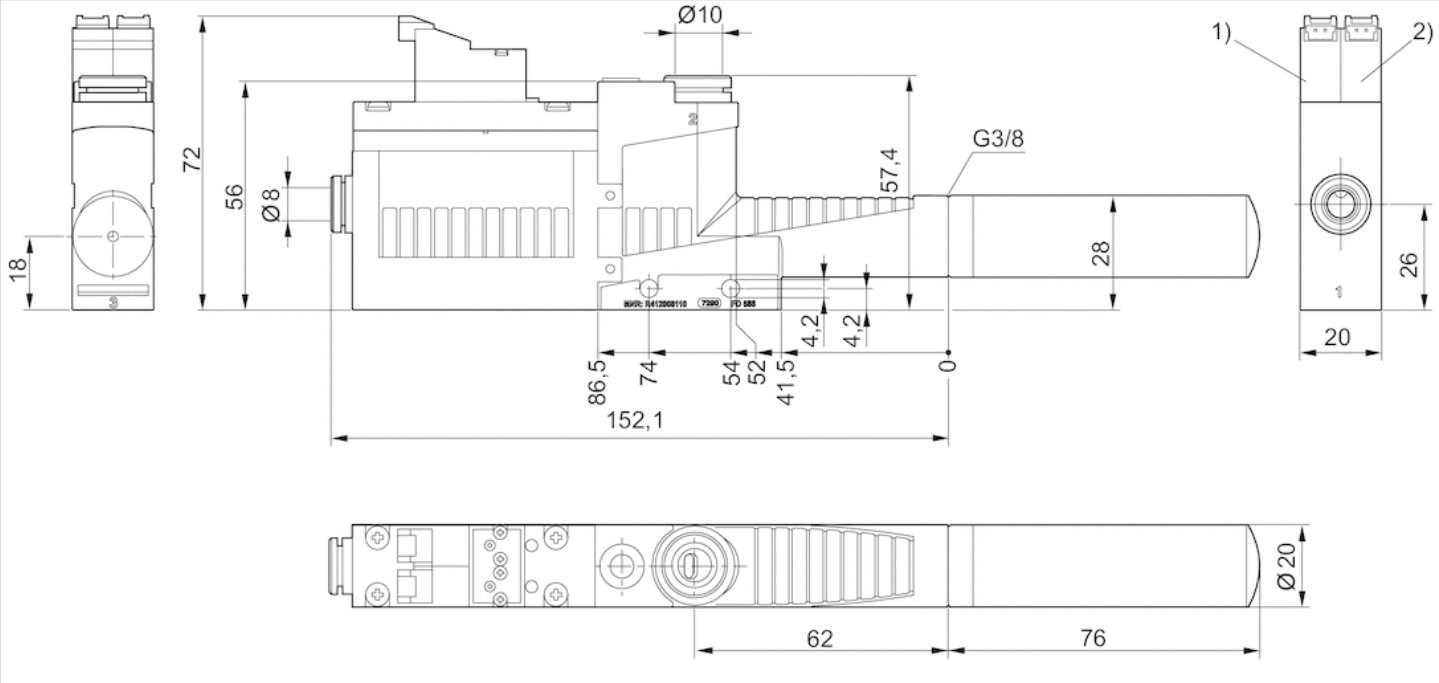
1) Solenoid valve for vacuum ON/OFF
2) Release valve from memory

Fig. 2



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

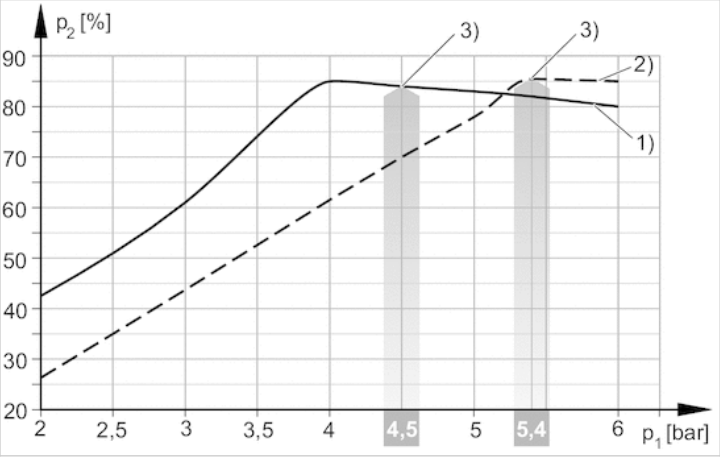
Fig. 3



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

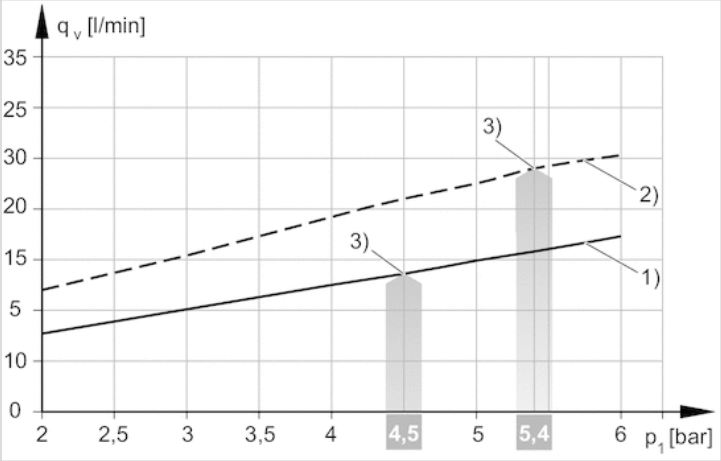
Diagrams

Vacuum p2 depending on working pressure p1

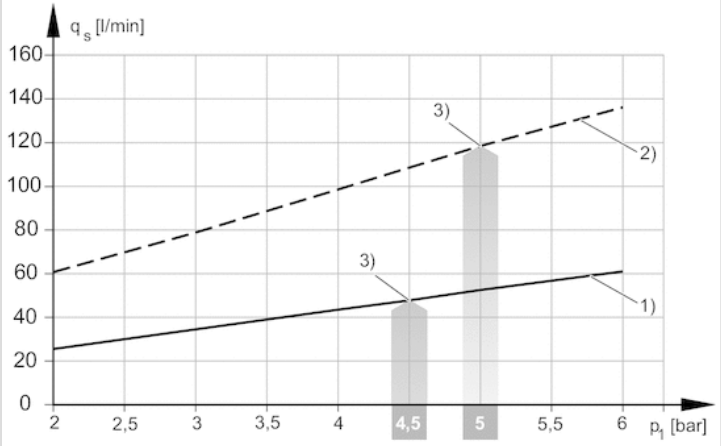


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

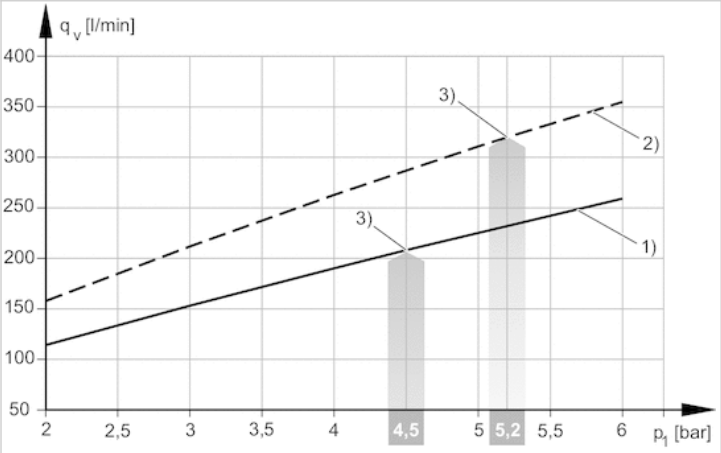
Air consumption qv depending on working pressure p1



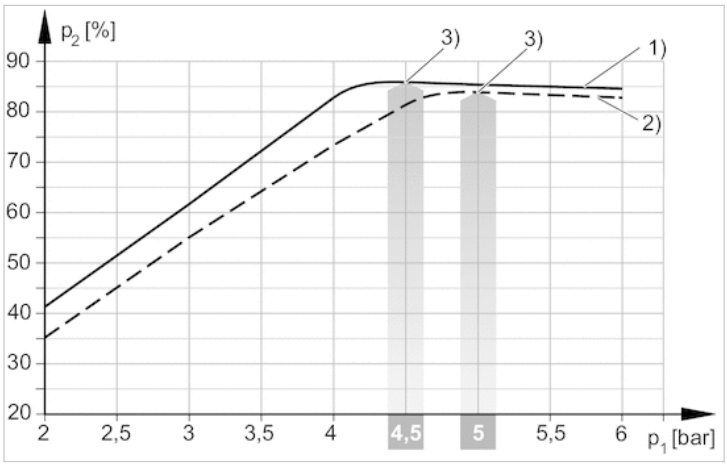
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



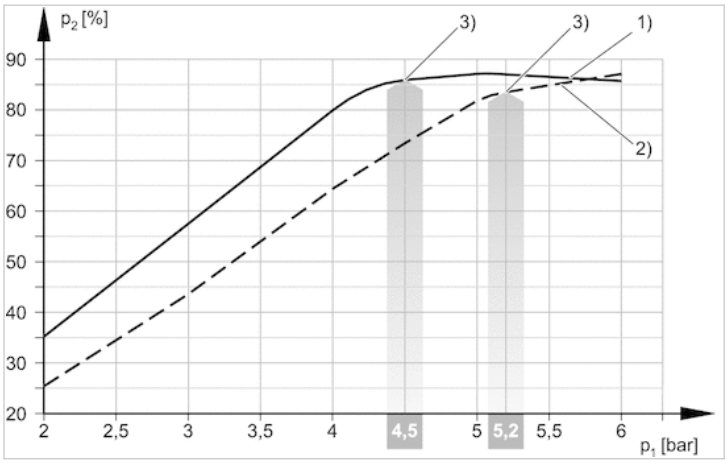
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure



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

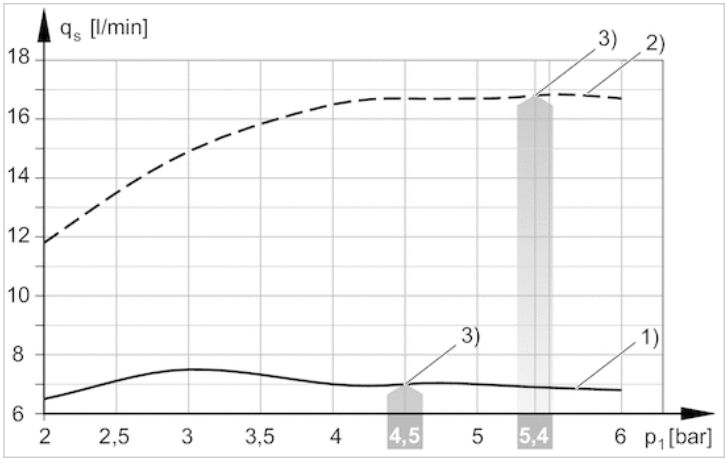


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

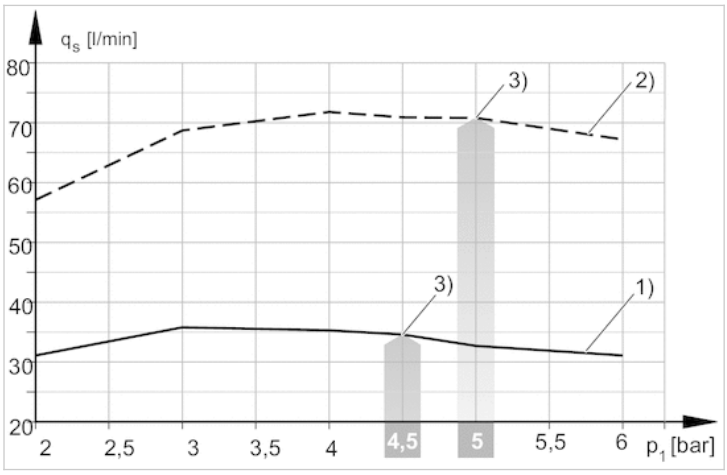


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

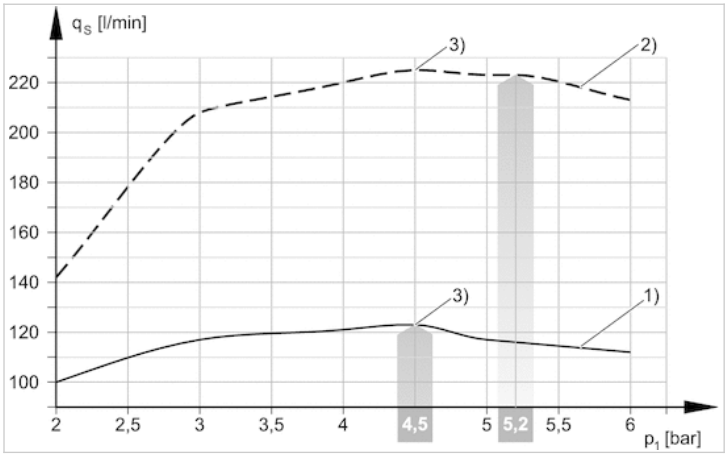
Suction capacity qs depending on working pressure p1



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

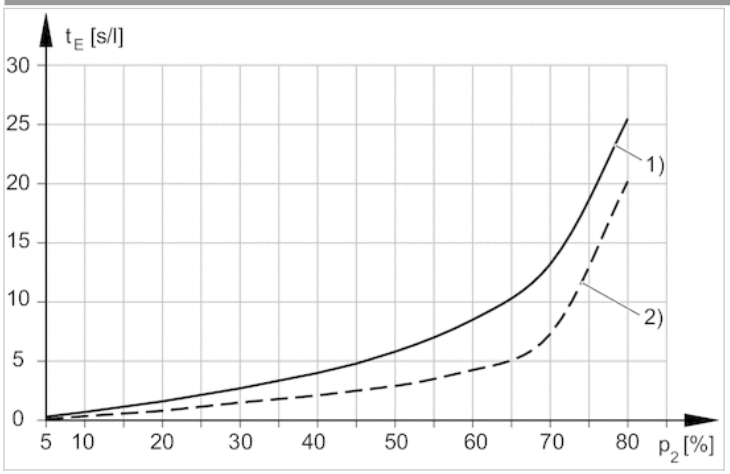


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

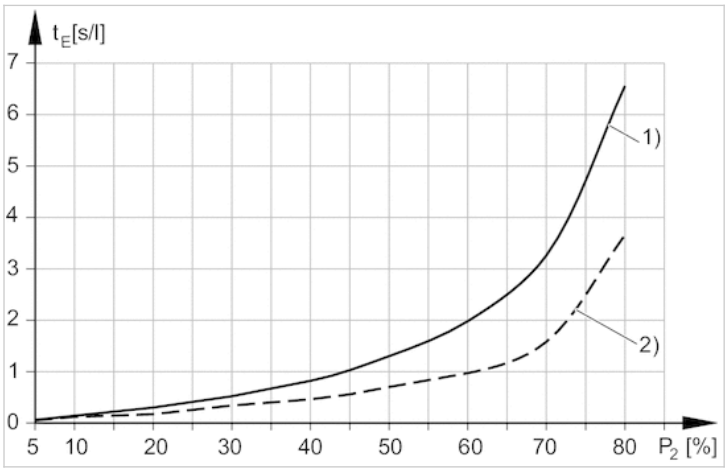


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

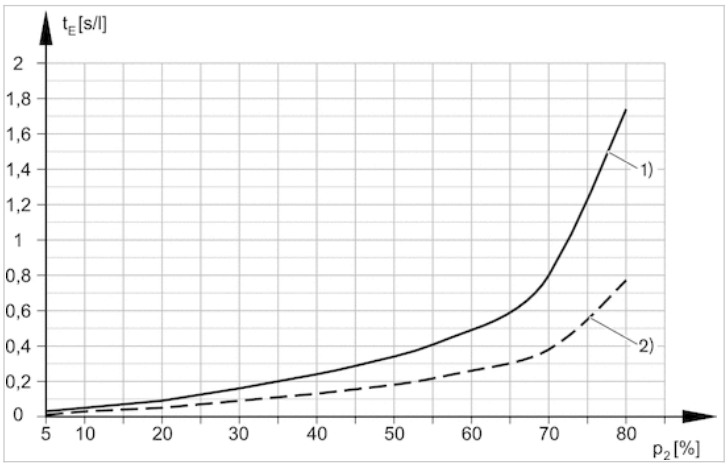
Evacuation time tE depending on vacuum p2 for 1 l volume (with optimal operating pressure p1opt)



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
- electrical control, T-design
- with release valve
- with silencer

Type	Ejector
Version	electrical control, T-design
Activation	Electrically
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 50 °C
Medium temperature min./max.	0 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Protection class With valve plug connector	IP40
Display	LED
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Power consumption Solenoid valve	1.3 W
Weight	See table below

Technical data

Part No.		Type	Nozzle Ø	Compressed air connection
R412007485		EBS-ET-05-NC	0.5 mm	M5
R412007486		EBS-ET-07-NC	0.7 mm	M5
R412007487		EBS-ET-10-NO	1 mm	G 1/8
R412007488		EBS-ET-15-NO	1.5 mm	G 1/8
R412007489		EBS-ET-20-NO	2 mm	G 1/4
R412007490		EBS-ET-25-NO	2.5 mm	G 1/4

Part No.	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity
R412007485	M5	84 %	7.5 l/min
R412007486	M5	85 %	16.8 l/min
R412007487	G 1/8	86 %	35 l/min
R412007488	G 1/8	84 %	71 l/min
R412007489	G 3/8	86 %	123 l/min
R412007490	G 3/8	84 %	223 l/min

Part No.	Air consumption at p.opt.	Sound pressure level intake effect
R412007485	14 l/min	53 dB
R412007486	24 l/min	59 dB
R412007487	48 l/min	59 dB
R412007488	118 l/min	71 dB

Part No.	Air consumption at p.opt.	Sound pressure level intake effect
R412007489	208 l/min	68 dB
R412007490	320 l/min	70 dB

Part No.	Sound pressure level intake effect	Weight	Fig.
R412007485	58 dB	0.035 kg	Fig. 1
R412007486	65 dB	0.035 kg	Fig. 1
R412007487	65 dB	0.07 kg	Fig. 2
R412007488	71 dB	0.07 kg	Fig. 2
R412007489	77 dB	0.144 kg	Fig. 3
R412007490	78 dB	0.144 kg	Fig. 3

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

Technical information

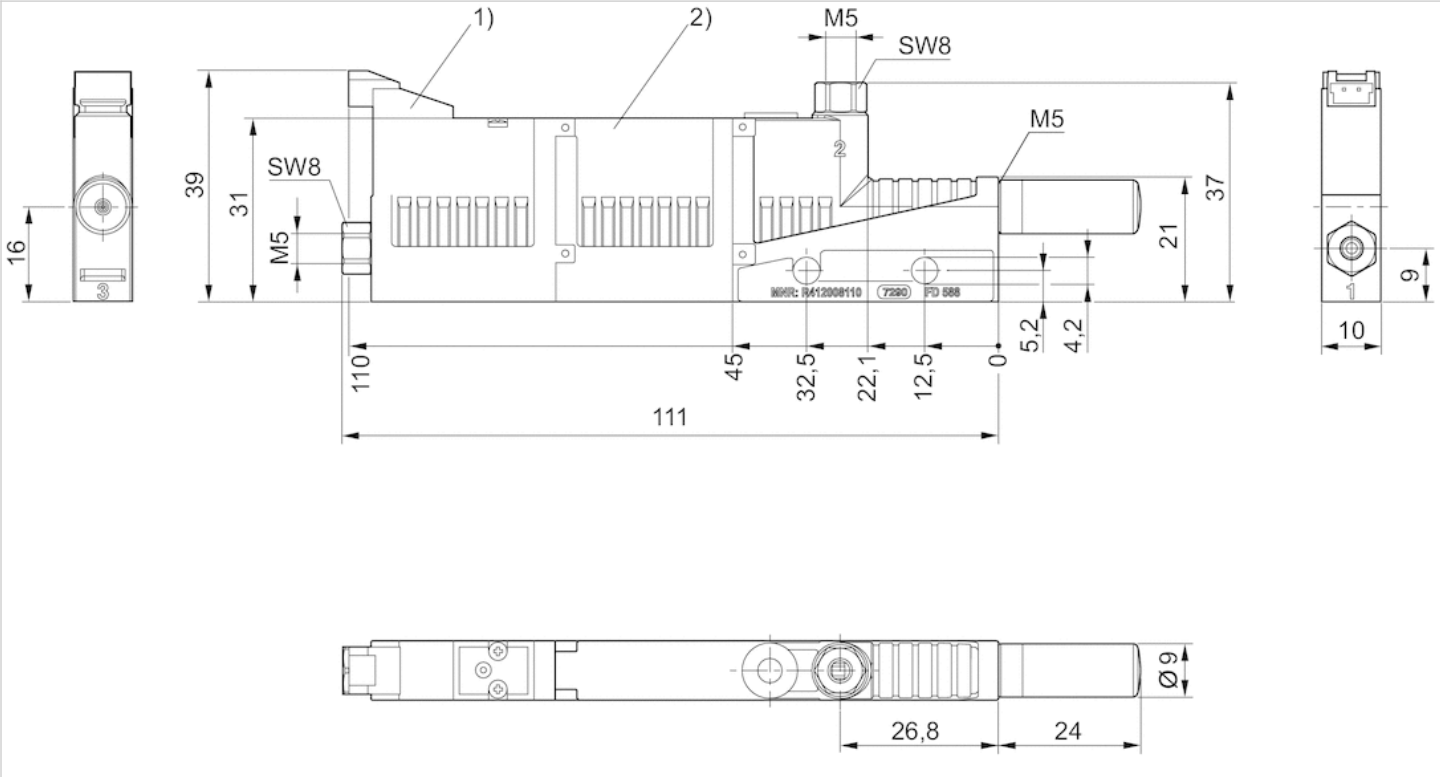
Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Threaded bushing	Aluminum, anodized
Silencer	Polyethylene

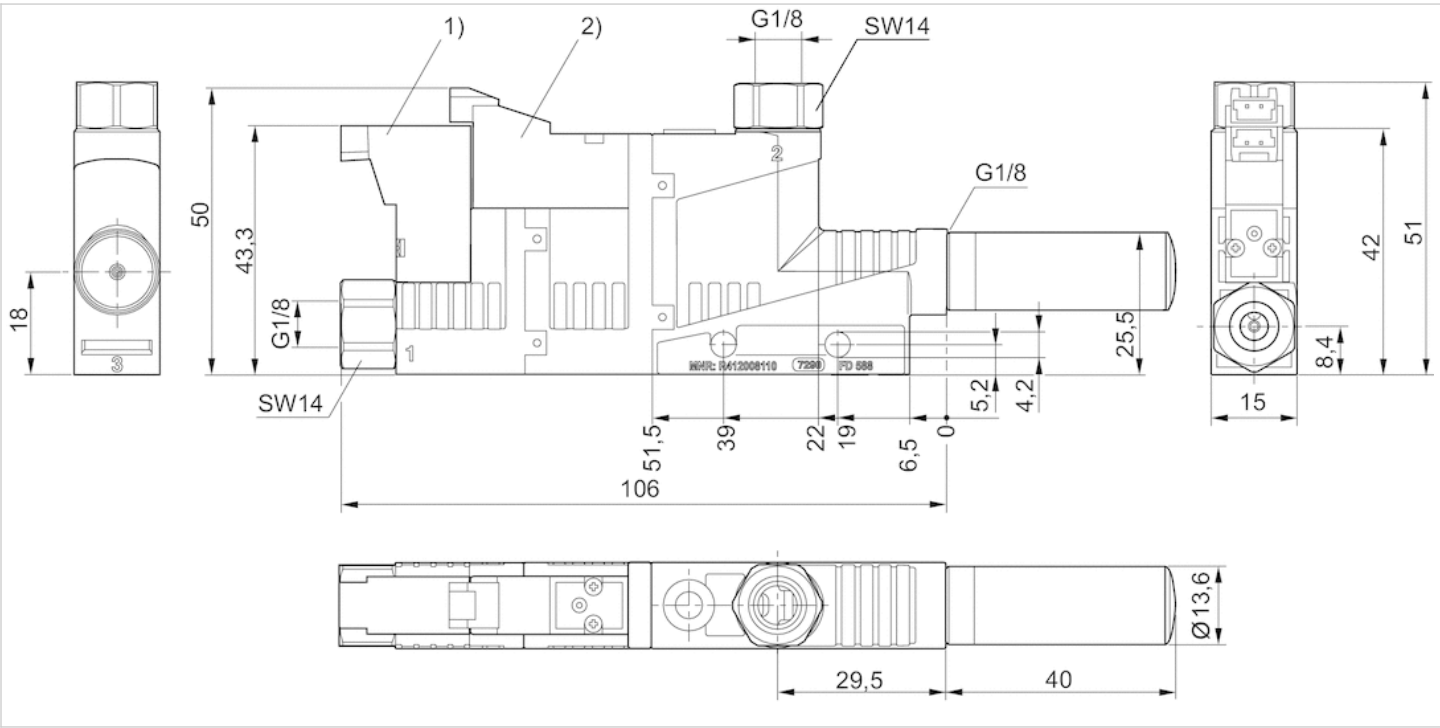
Dimensions

Fig. 1



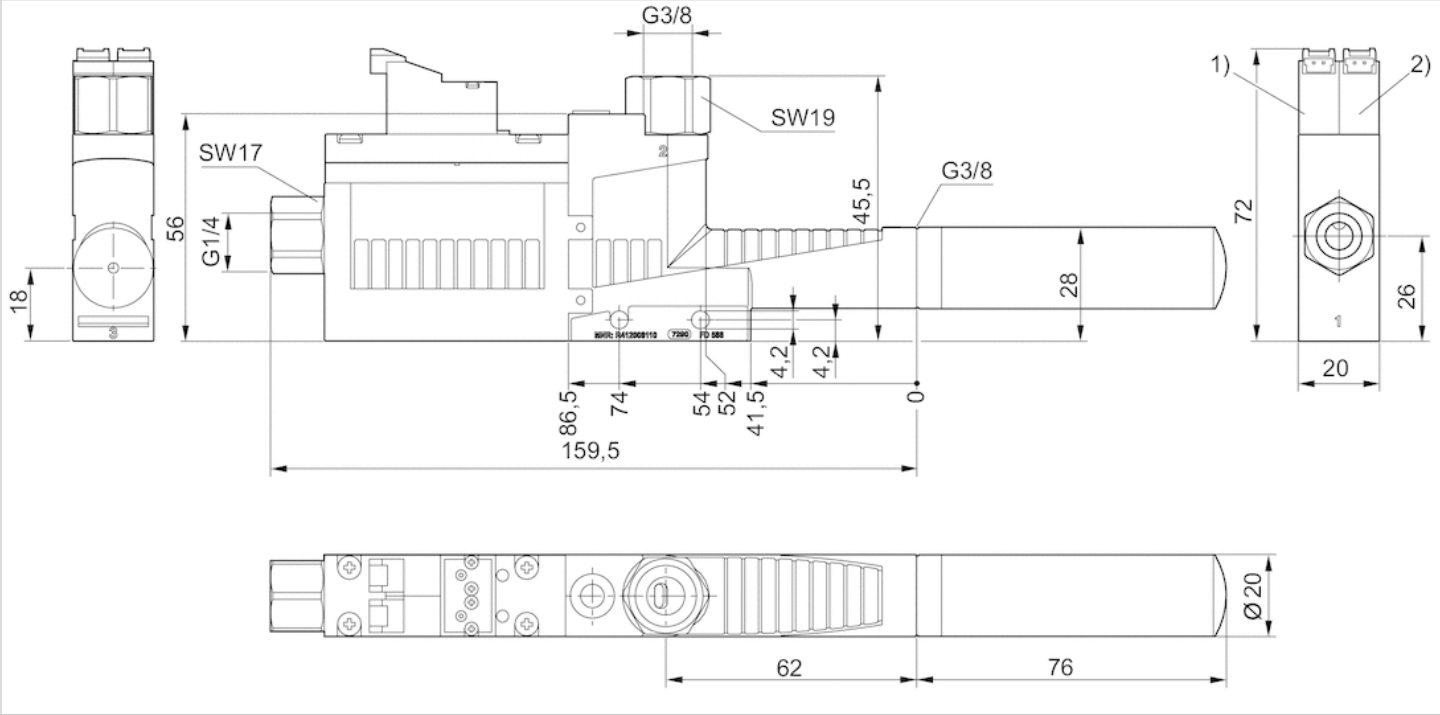
1) Solenoid valve for vacuum ON/OFF
2) Release valve from memory

Fig. 2



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

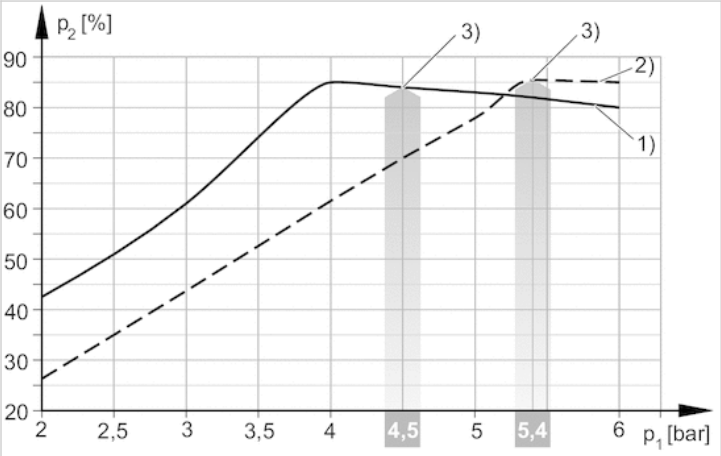
Fig. 3



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

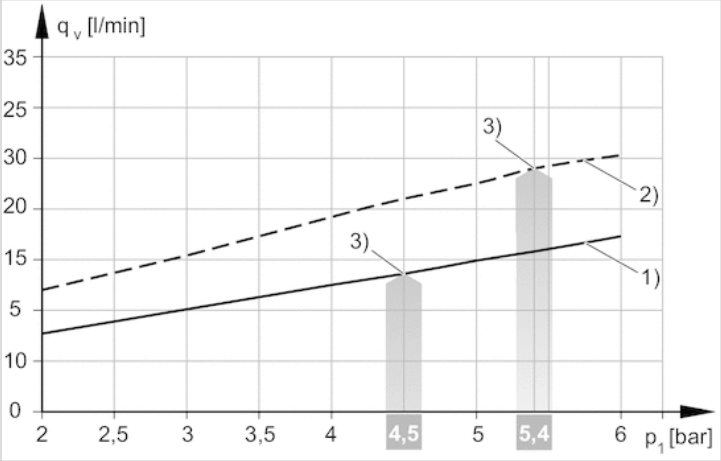
Diagrams

Vacuum p2 depending on working pressure p1

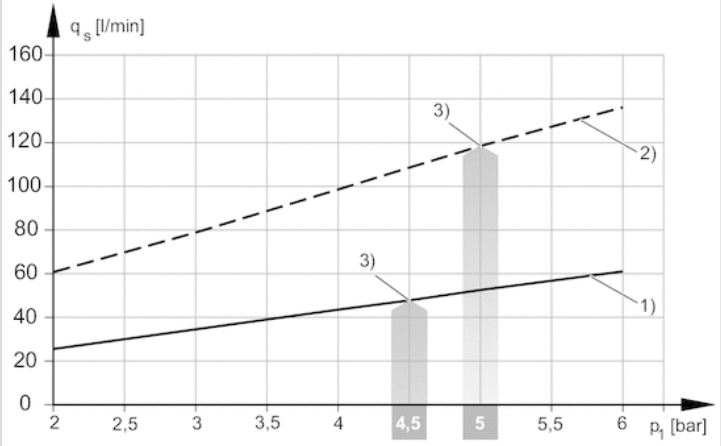


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

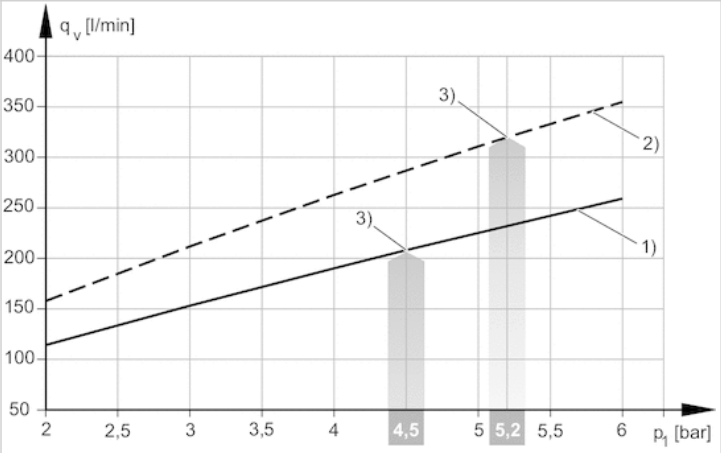
Air consumption qv depending on working pressure p1



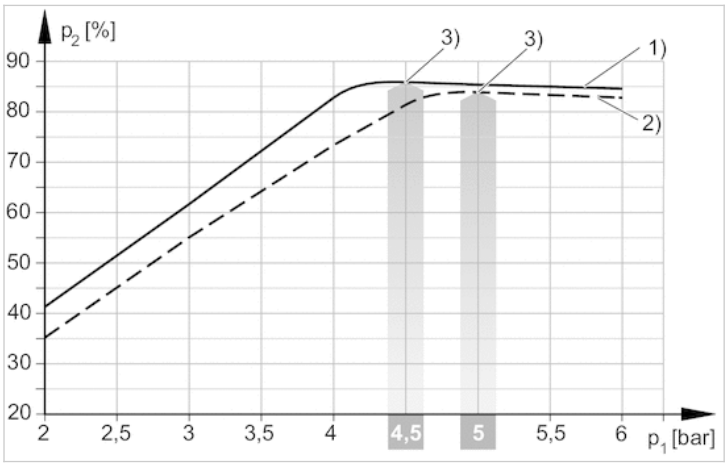
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



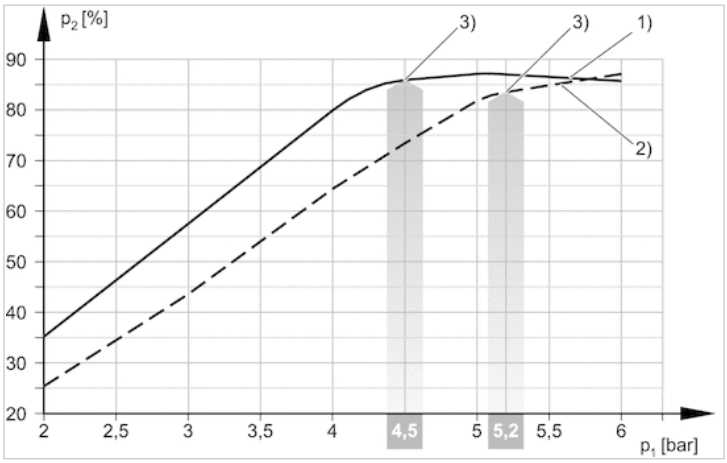
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure



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

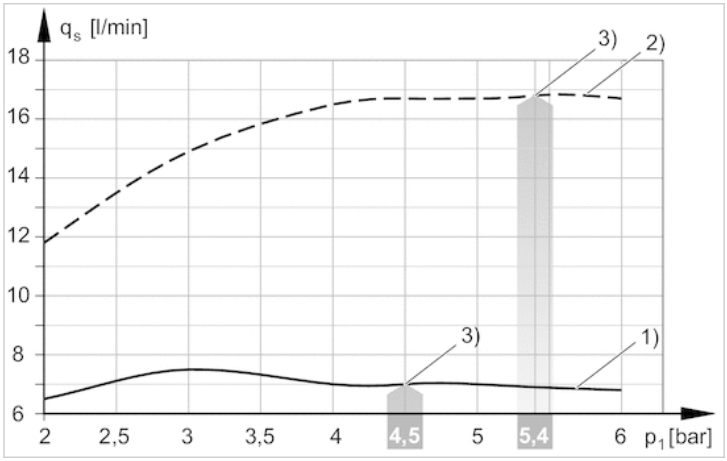


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

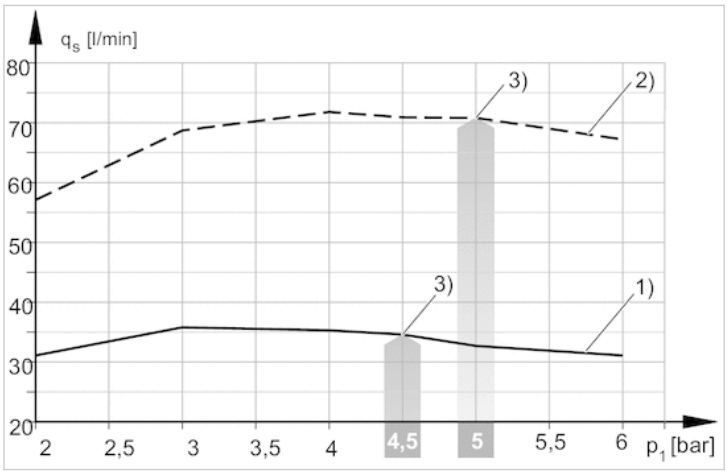


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

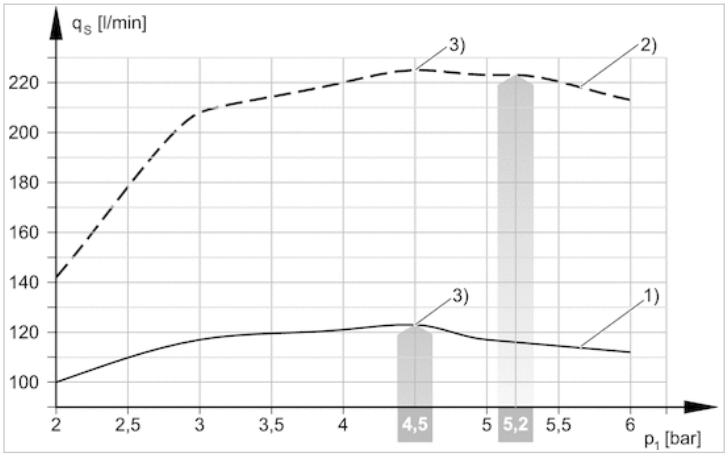
Suction capacity qs depending on working pressure p1



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

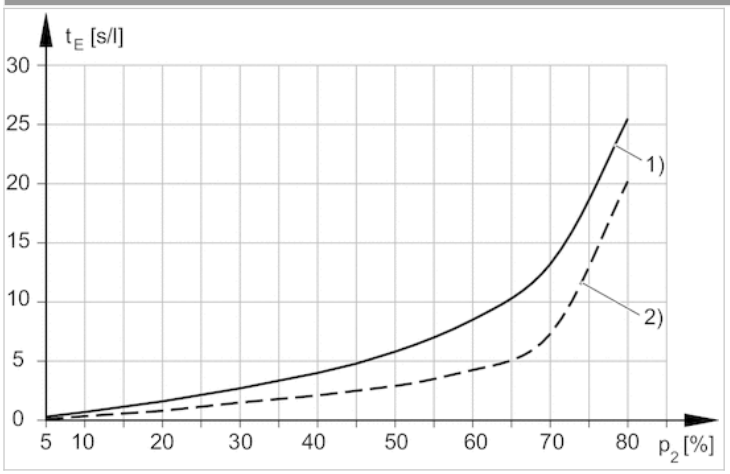


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

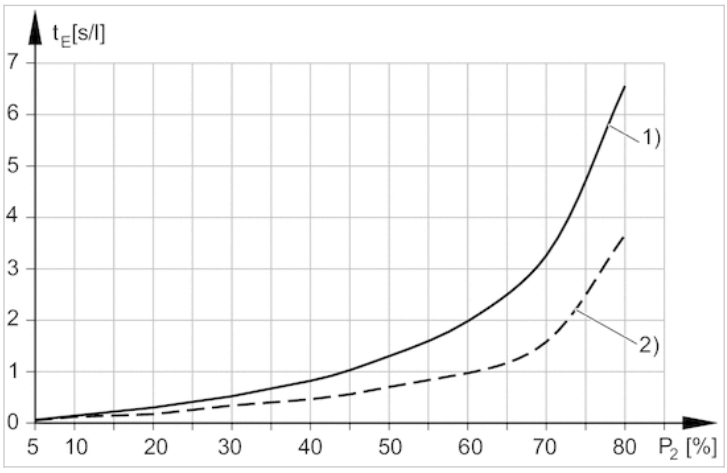


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

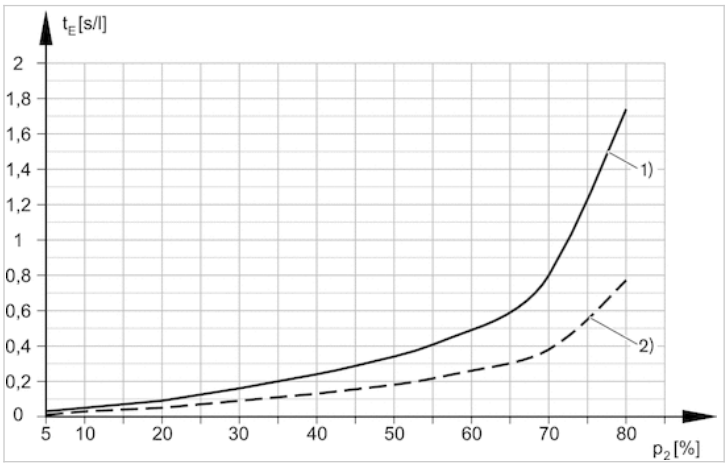
Evacuation time tE depending on vacuum p2 for 1 l volume (with optimal operating pressure p1opt)



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
- electrical control, T-design
- with silencer
- vacuum switch electronic, adjustable

Type	Ejector
Version	electrical control, T-design
Activation	Electrically
vacuum switch	electronic, adjustable
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 50 °C
Medium temperature min./max.	0 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
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%
Weight	0.033 kg

Technical data

Part No.	Type	Nozzle Ø	Compressed air connection	Vacuum connection+
R412010166	EBS-ET-05-NC	0.5 mm	Ø 4	Ø 4
R412010167	EBS-ET-07-NC	0.7 mm	Ø 4	Ø 4

Part No.	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.
R412010166	84 %	7.5 l/min	14 l/min
R412010167	85 %	16.8 l/min	24 l/min

Part No.	Sound pressure level intake effect	Sound pressure level intake effect
R412010166	53 dB	58 dB
R412010167	59 dB	65 dB

Part No.	Protection against overpressure (max.)
R412010166	5 bar
R412010167	5 bar

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

Technical information

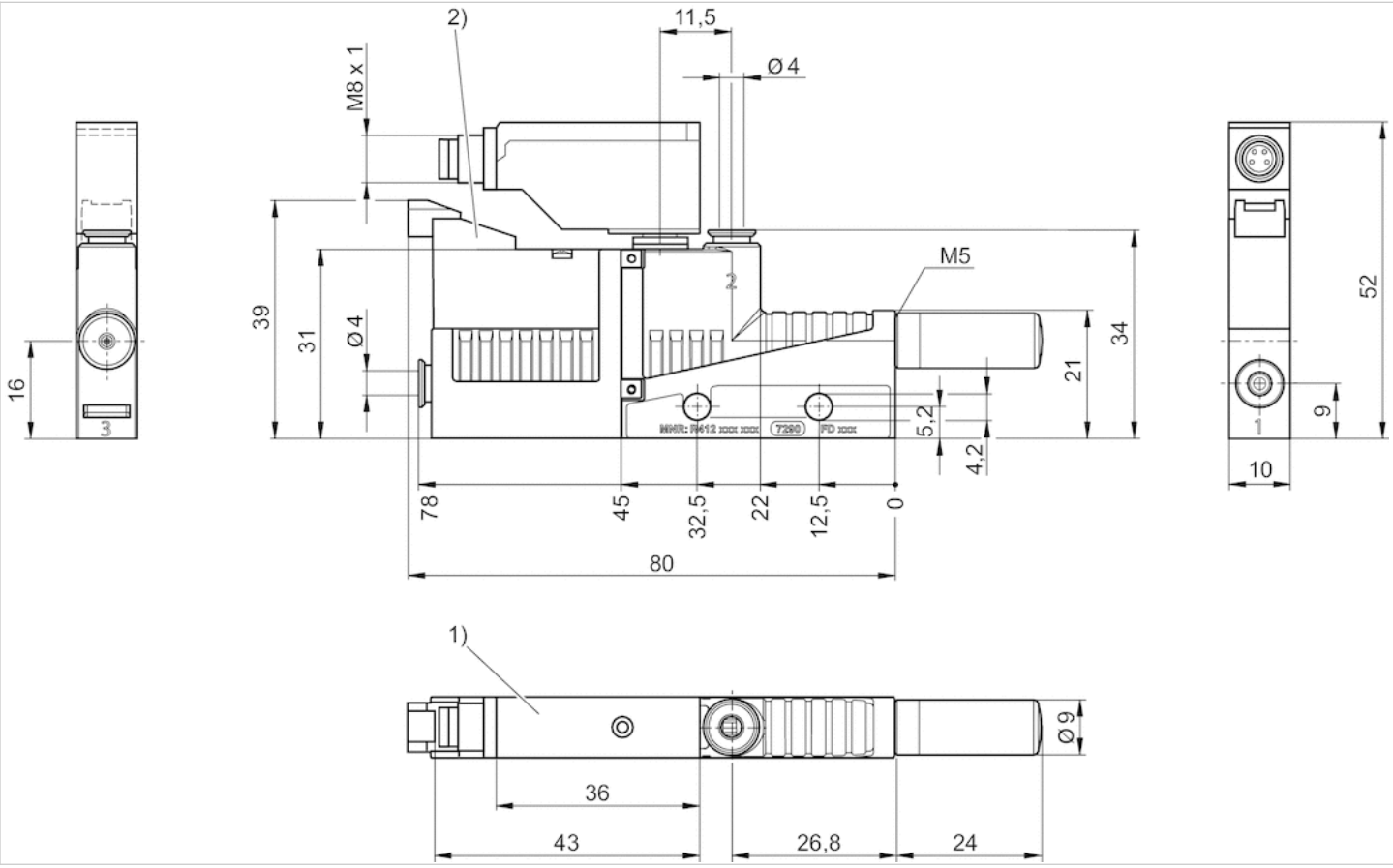
Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Silencer	Polyethylene
Pressure sensor	Polycarbonate

Dimensions

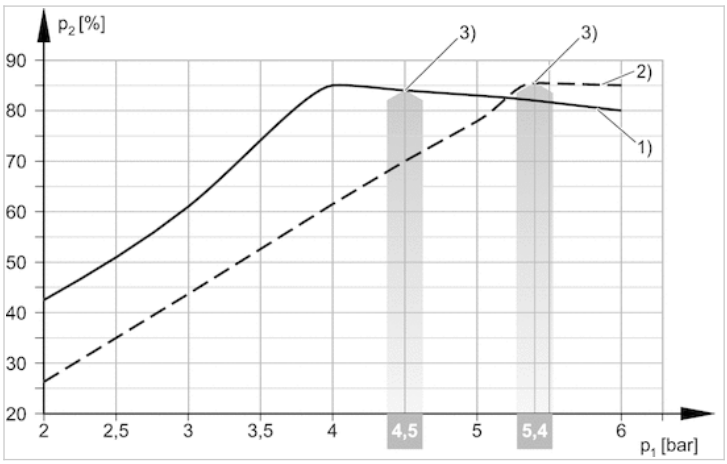
Dimensions



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

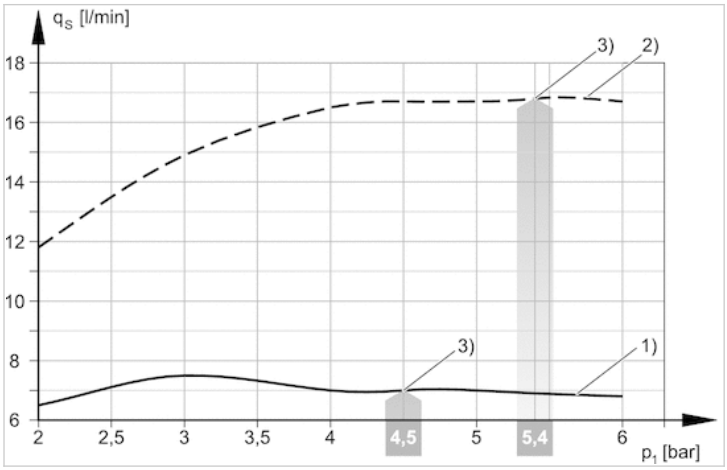
Diagrams

Vacuum p2 depending on working pressure p1



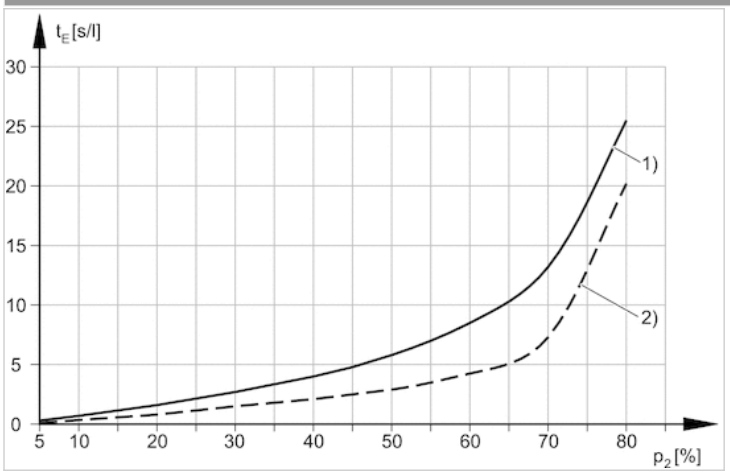
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

Suction capacity qs depending on working pressure p1



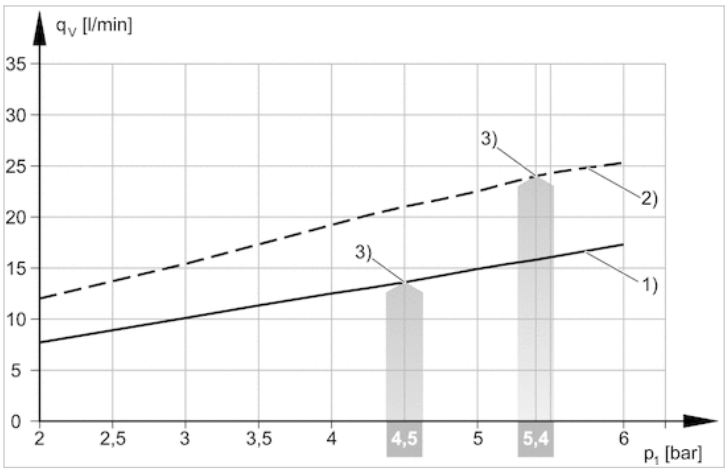
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

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



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

Air consumption qv depending on working pressure p1



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

Ejector, Series EBS

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

Type	Ejector
Version	electrical control, T-design
Activation	Electrically
vacuum switch	electronic, adjustable
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 50 °C
Medium temperature min./max.	0 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
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%
Weight	0.034 kg

Technical data

Part No.	Type	Nozzle Ø	Compressed air connection	Vacuum connection+
R412010174	EBS-ET-05-NC	0.5 mm	M5	M5
R412010175	EBS-ET-07-NC	0.7 mm	M5	M5

Part No.	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.
R412010174	84 %	7.5 l/min	14 l/min
R412010175	85 %	16.8 l/min	24 l/min

Part No.	Sound pressure level intake effect	Sound pressure level intake effect
R412010174	53 dB	58 dB
R412010175	59 dB	65 dB

Part No.	Protection against overpressure (max.)
R412010174	5 bar
R412010175	5 bar

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

Technical information

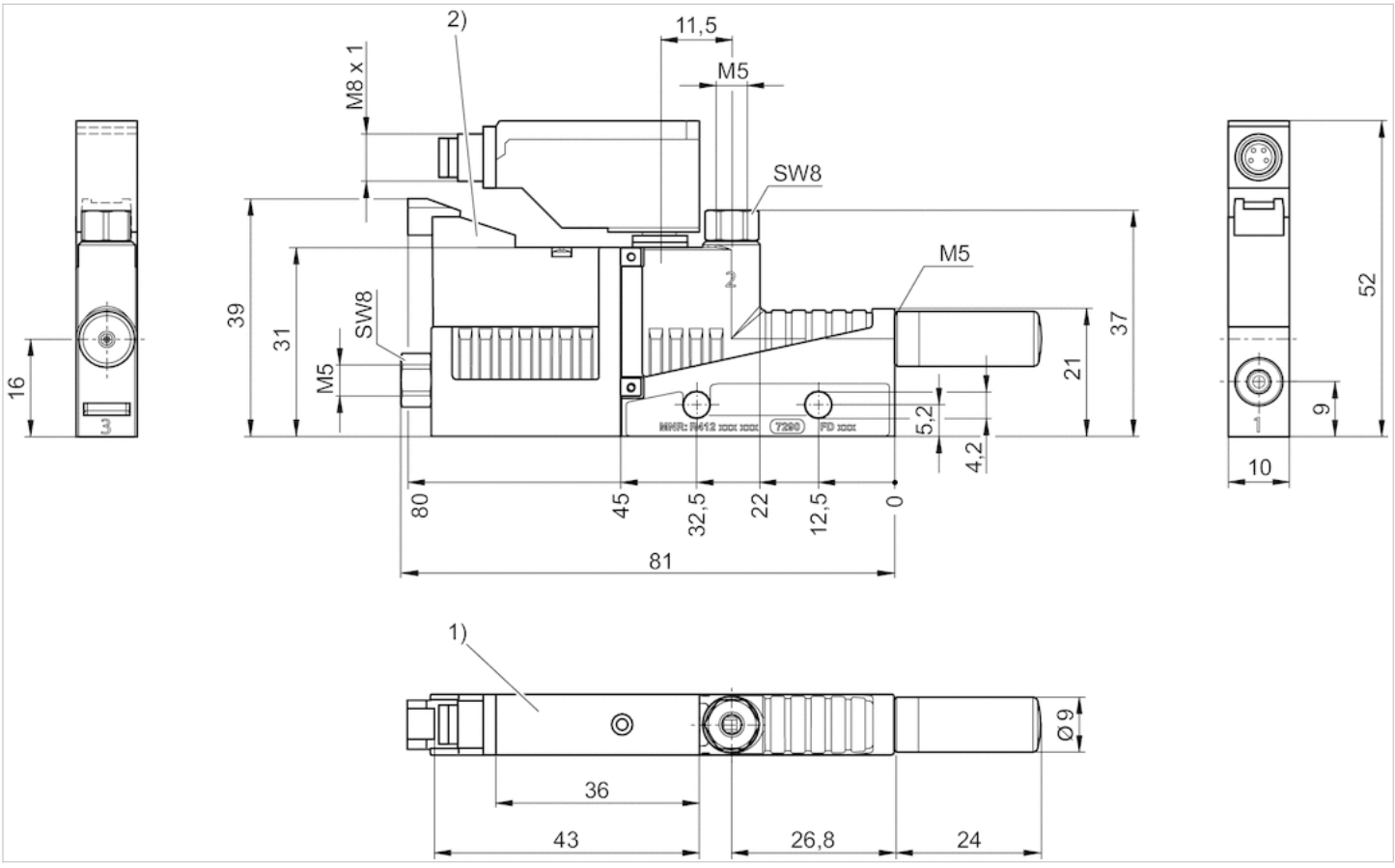
Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Silencer	Polyethylene
Pressure sensor	Polycarbonate

Dimensions

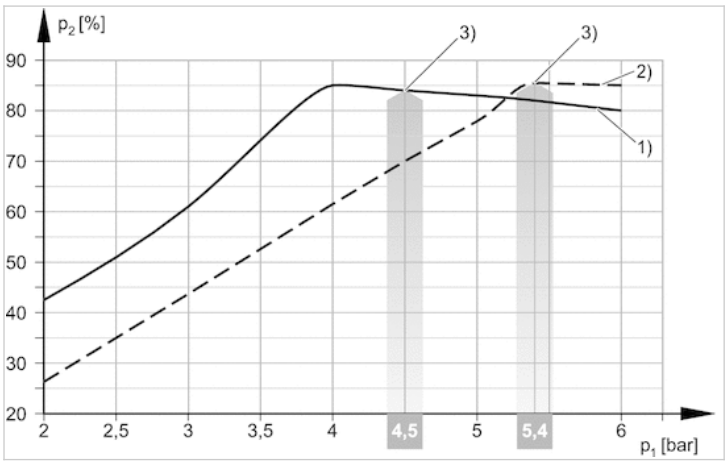
Dimensions



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

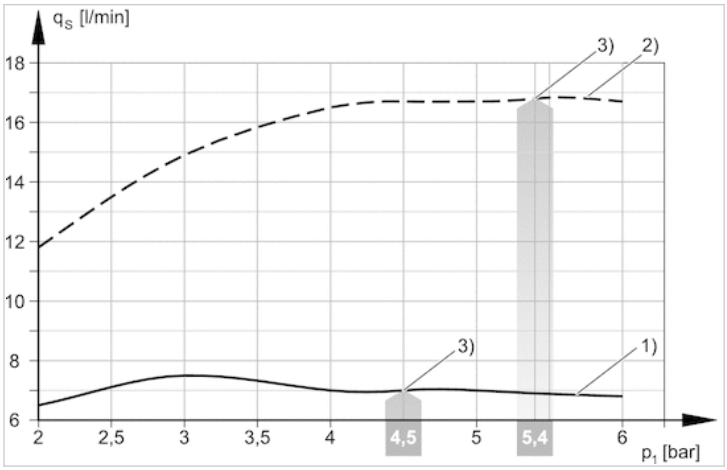
Diagrams

Vacuum p2 depending on working pressure p1



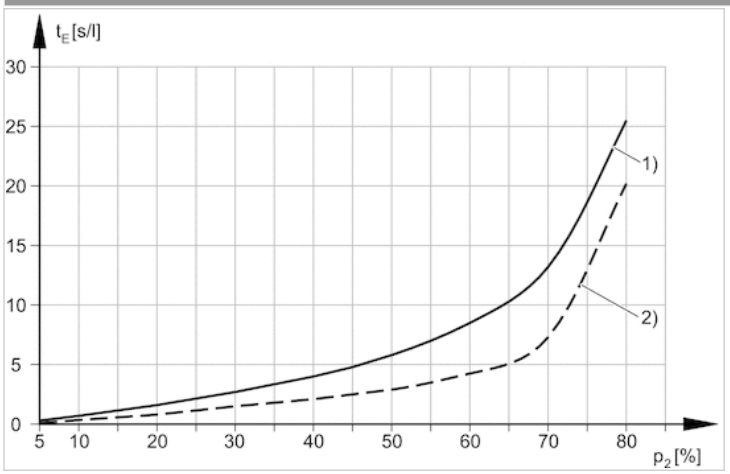
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

Suction capacity qs depending on working pressure p1



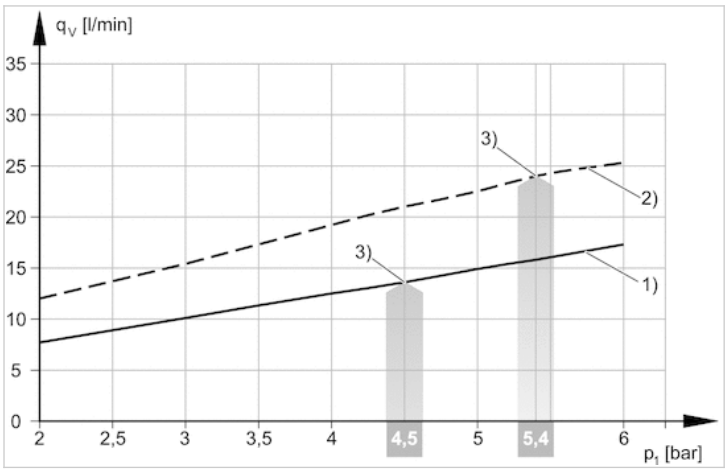
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

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



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

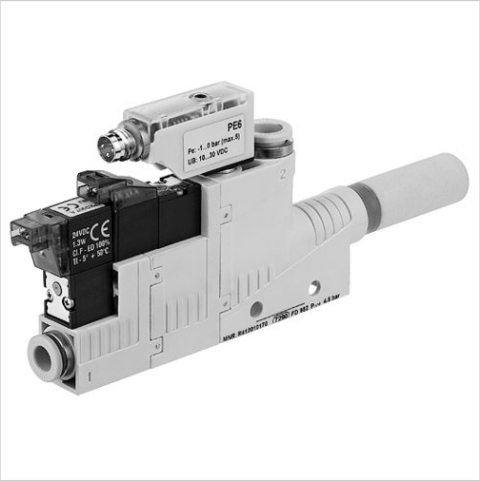
Air consumption qv depending on working pressure p1



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

Ejector, Series EBS

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



Type	Ejector
Version	electrical control, T-design
Activation	Electrically
vacuum switch	electronic, adjustable
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 50 °C
Medium temperature min./max.	0 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
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%
Weight	See table below

Technical data

Part No.		Type	Nozzle Ø	Compressed air connection
R412010168		EBS-ET-05-NC	0.5 mm	Ø 4
R412010169		EBS-ET-07-NC	0.7 mm	Ø 4
R412010170		EBS-ET-10-NO	1 mm	Ø 6
R412010171		EBS-ET-15-NO	1.5 mm	Ø 6
R412010172		EBS-ET-20-NO	2 mm	Ø 8
R412010173		EBS-ET-25-NO	2.5 mm	Ø 8

Part No.	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity
R412010168	Ø 4	84 %	7.5 l/min
R412010169	Ø 4	85 %	16.8 l/min
R412010170	Ø 8	86 %	35 l/min
R412010171	Ø 8	84 %	71 l/min
R412010172	Ø 8	86 %	123 l/min
R412010173	Ø 8	84 %	223 l/min

Part No.	Air consumption at p.opt.	Sound pressure level intake effect
R412010168	14 l/min	53 dB
R412010169	24 l/min	65 dB
R412010170	48 l/min	59 dB
R412010171	118 l/min	71 dB
R412010172	208 l/min	68 dB
R412010173	320 l/min	70 dB

Part No.	Sound pressure level intake effect	Protection against overpressure (max.)	Weight	Fig.
R412010168	58 dB	5 bar	0.041 kg	Fig. 1
R412010169	68 dB	5 bar	0.041 kg	Fig. 1
R412010170	65 dB	5 bar	0.07 kg	Fig. 2
R412010171	71 dB	5 bar	0.07 kg	Fig. 2
R412010172	77 dB	5 bar	0.154 kg	Fig. 3
R412010173	78 dB	5 bar	0.154 kg	Fig. 3

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

Technical information

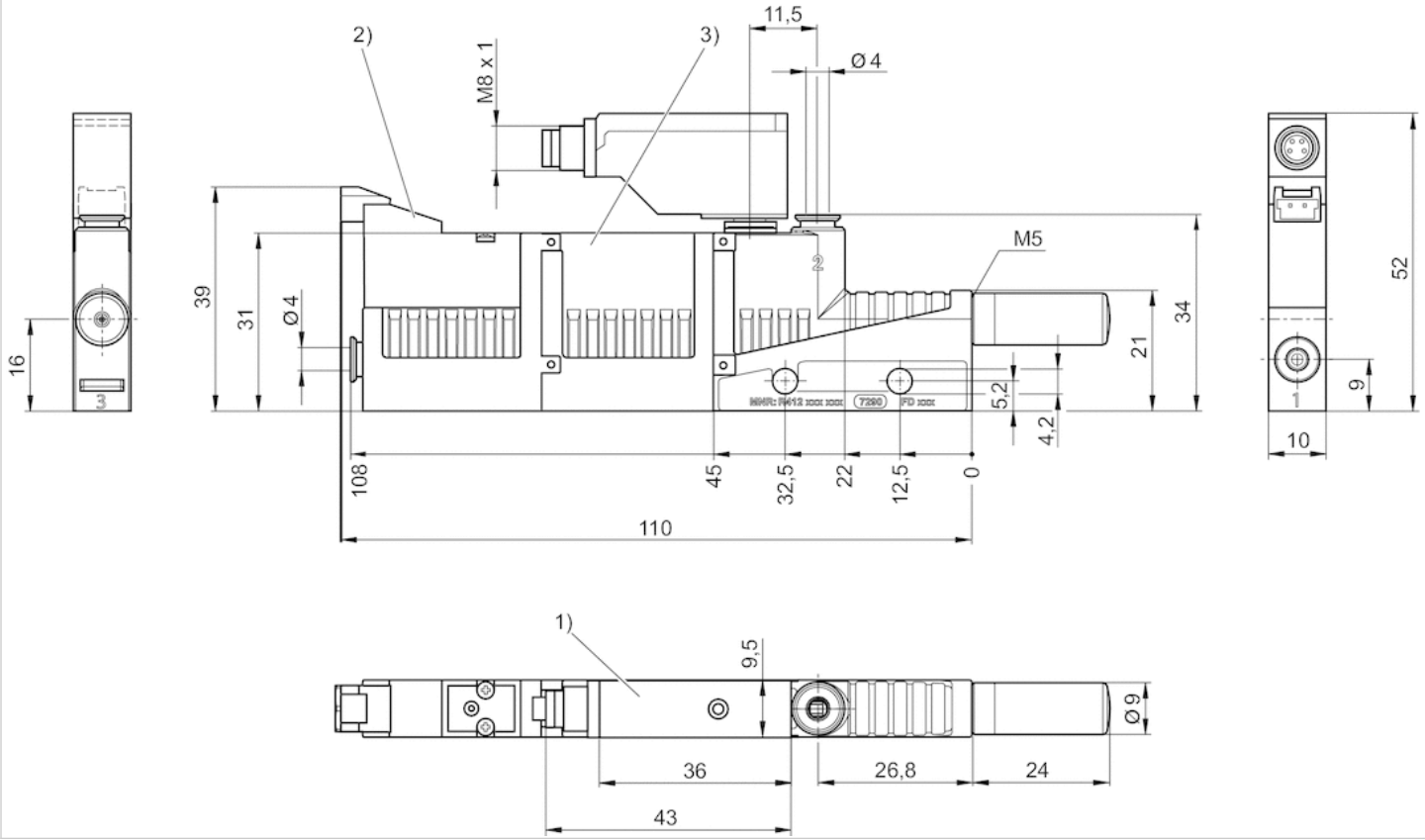
Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Silencer	Polyethylene
Pressure sensor	Polycarbonate

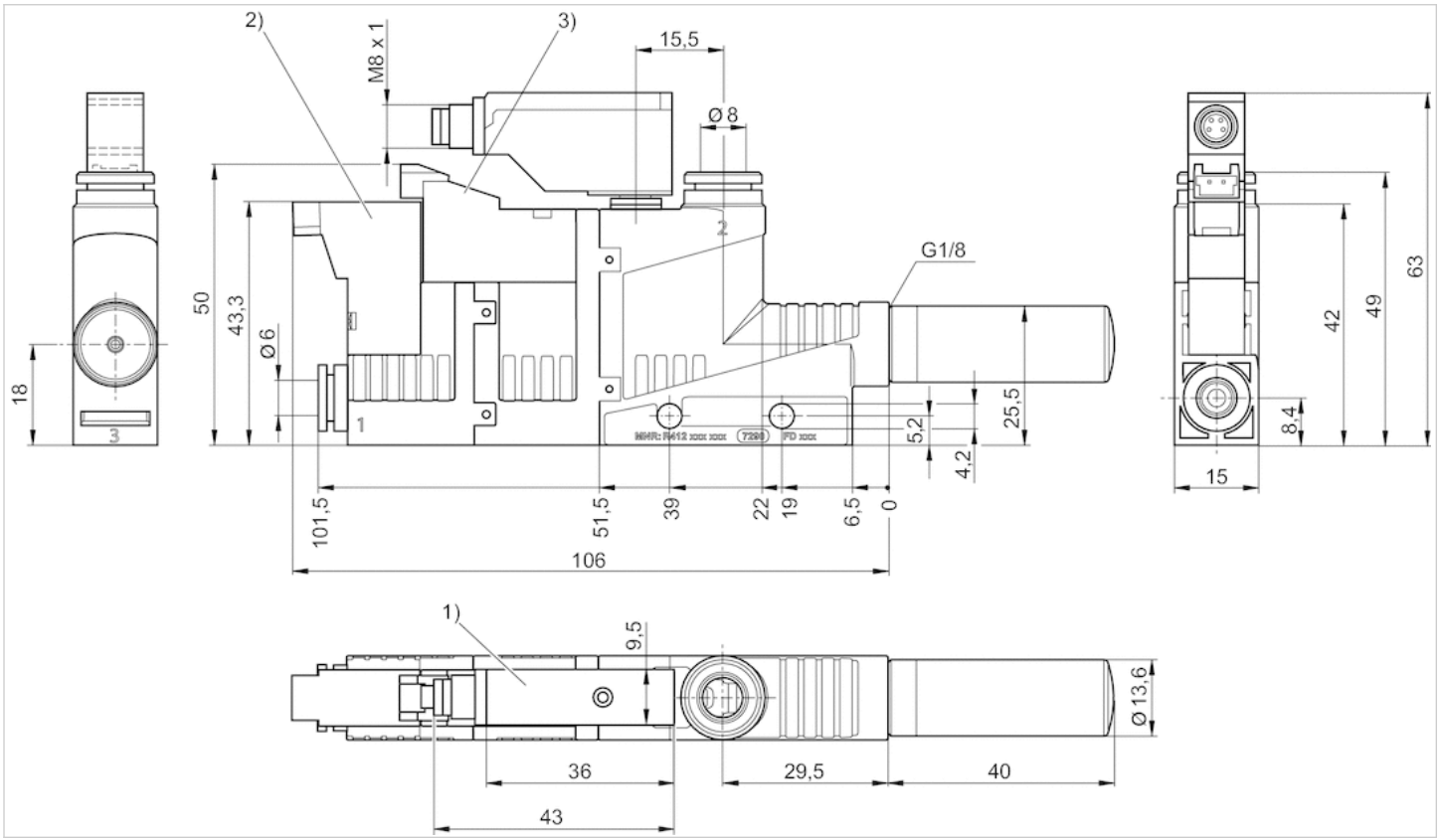
Dimensions

Fig. 1



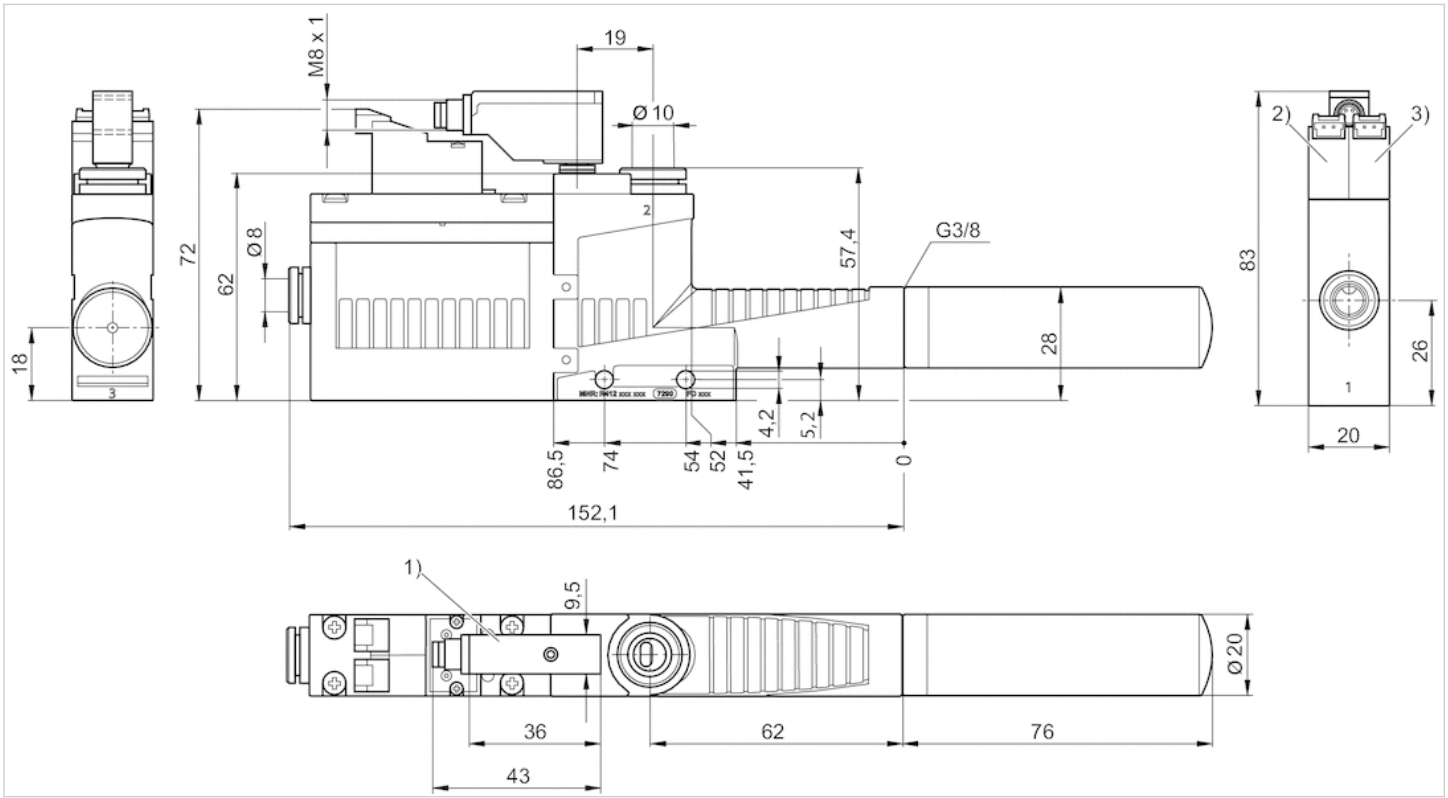
1) vacuum switch is rotatable and exchangeable
2) Solenoid valve for vacuum ON/OFF
3) Release valve from memory

Fig. 2



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

Fig. 3

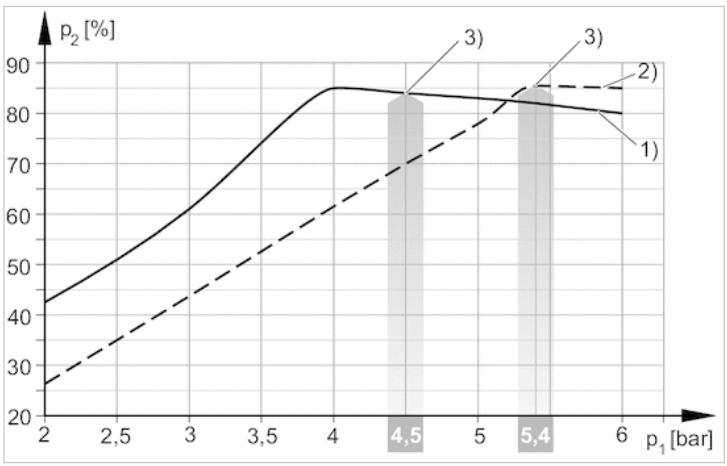


1) vacuum switch is rotatable and exchangeable

2) Solenoid valve for vacuum ON/OFF
3) Solenoid valve for release pulse

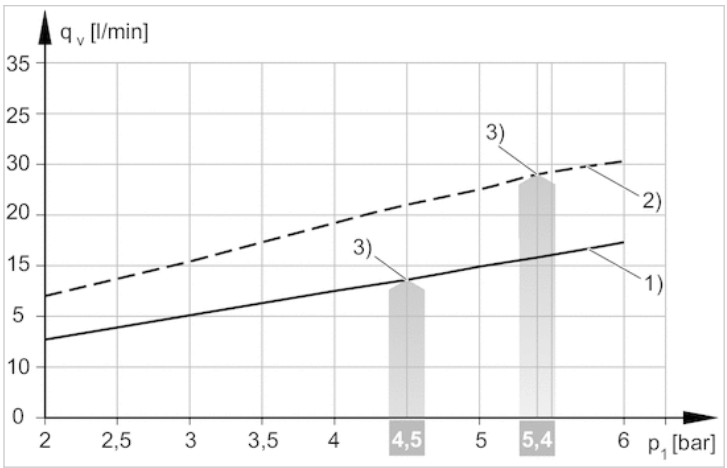
Diagrams

Vacuum p2 depending on working pressure p1

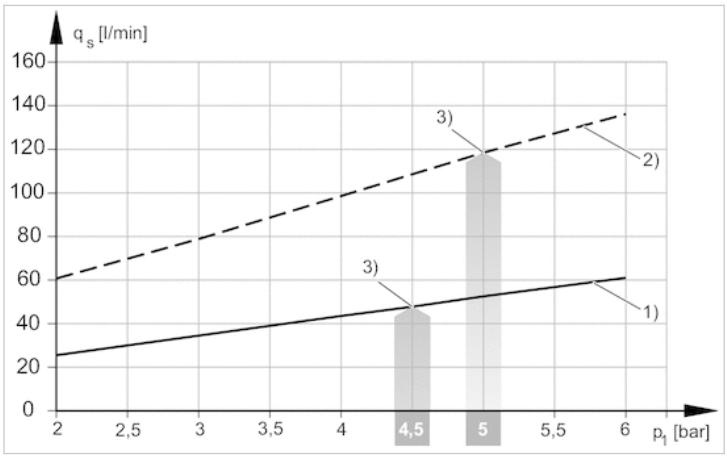


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

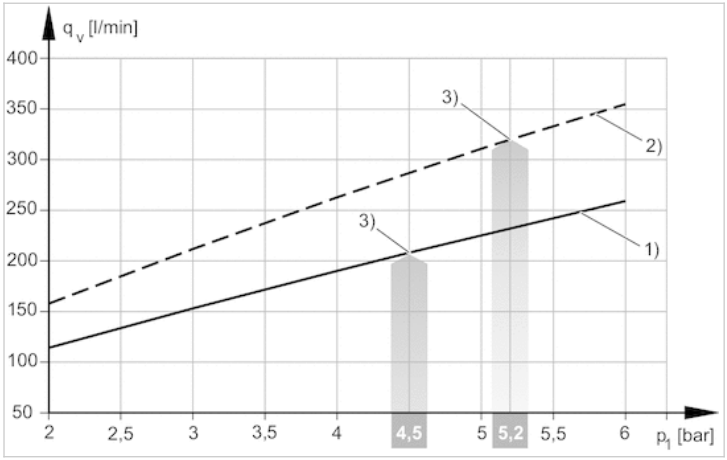
Air consumption qv depending on working pressure p1



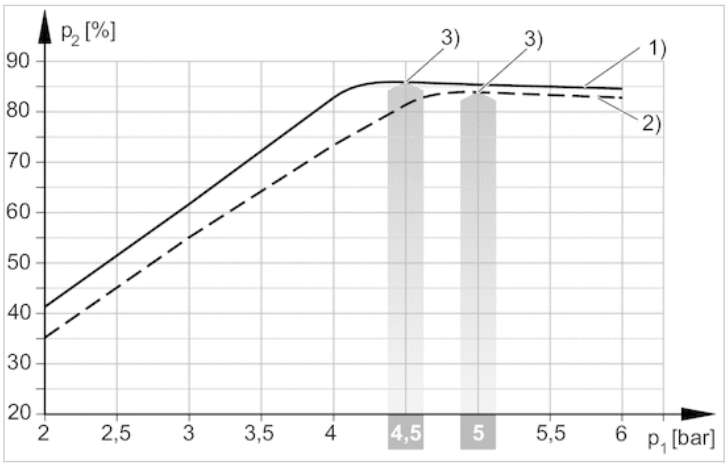
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



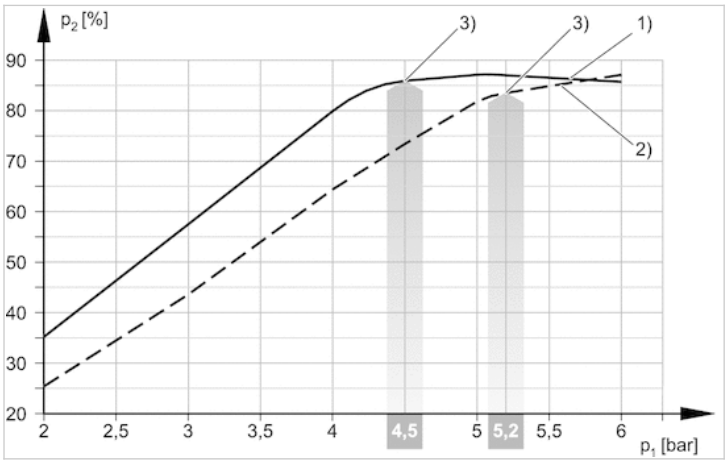
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure



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

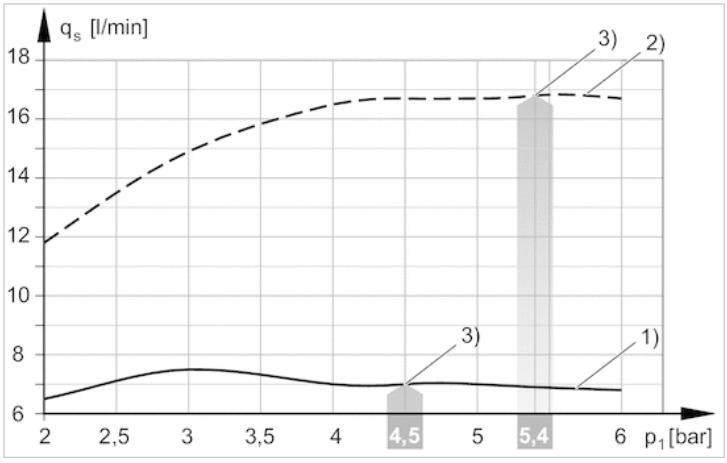


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

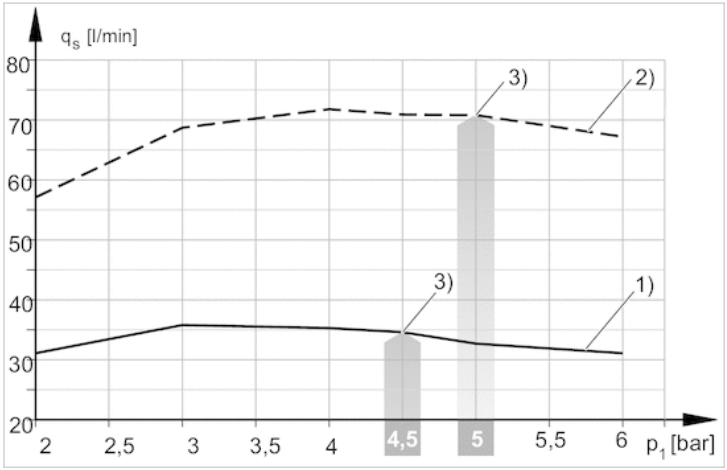


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

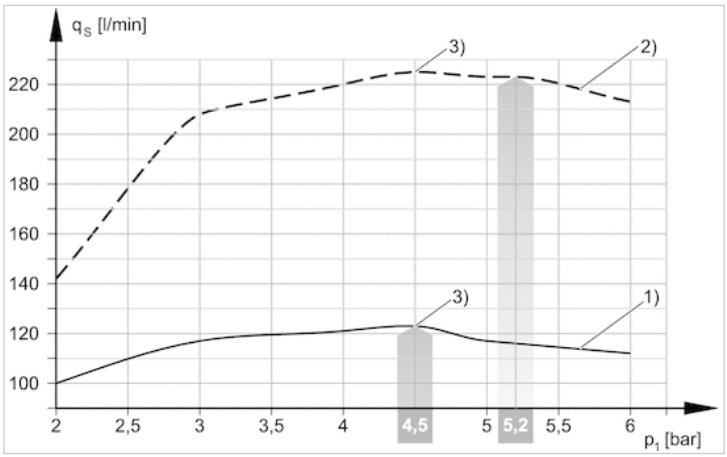
Suction capacity qs depending on working pressure p1



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

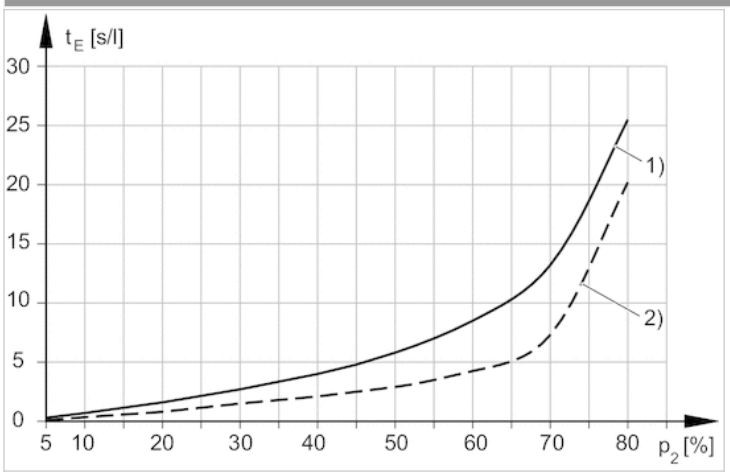


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

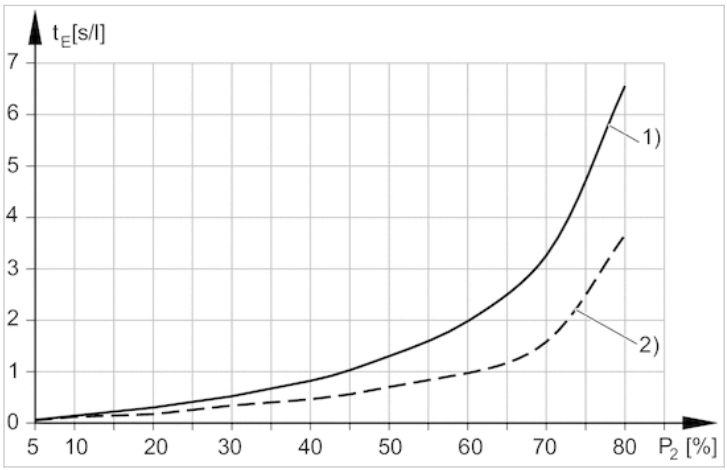


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

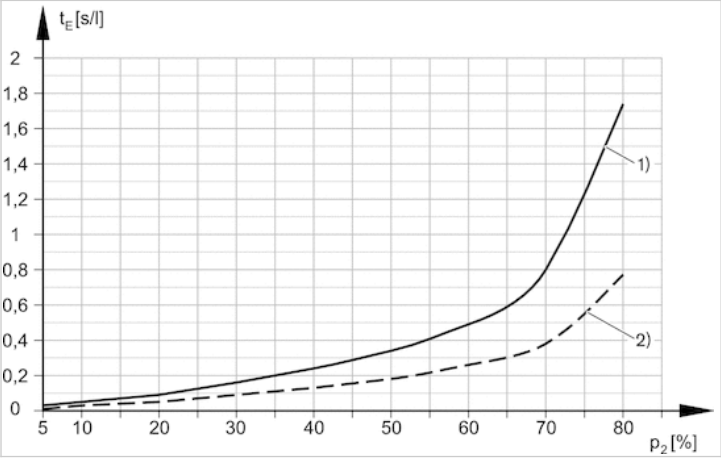
Evacuation time tE depending on vacuum p2 for 1 l volume (with optimal operating pressure p1opt)



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



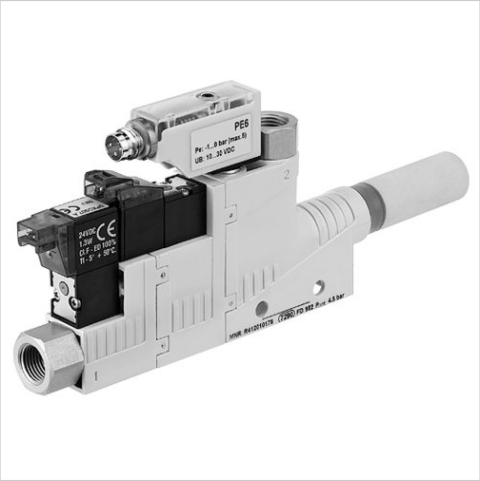
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm



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

Ejector, Series EBS

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



Type	Ejector
Version	electrical control, T-design
Activation	Electrically
vacuum switch	electronic, adjustable
Working pressure min./max.	3 ... 6 bar
Ambient temperature min./max.	0 ... 50 °C
Medium temperature min./max.	0 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
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%
Weight	See table below

Technical data

Part No.		Type	Nozzle Ø	Compressed air connection
R412010176		EBS-ET-05-NC	0.5 mm	M5
R412010177		EBS-ET-07-NC	0.7 mm	M5
R412010178		EBS-ET-10-NO	1 mm	G 1/8
R412010179		EBS-ET-15-NO	1.5 mm	G 1/8
R412010180		EBS-ET-20-NO	2 mm	G 1/4
R412010181		EBS-ET-25-NO	2.5 mm	G 1/4

Part No.	Vacuum connection+	Max. vacuum level at p.opt	Max. suction capacity
R412010176	M5	84 %	7.5 l/min
R412010177	M5	85 %	16.8 l/min
R412010178	G 1/8	86 %	35 l/min
R412010179	G 1/8	84 %	71 l/min
R412010180	G 3/8	86 %	123 l/min
R412010181	G 3/8	84 %	223 l/min

Part No.	Air consumption at p.opt.	Sound pressure level intake effect
R412010176	14 l/min	53 dB
R412010177	24 l/min	65 dB
R412010178	48 l/min	59 dB
R412010179	118 l/min	71 dB
R412010180	208 l/min	68 dB
R412010181	320 l/min	70 dB

Part No.	Sound pressure level intake effect	Protection against overpressure (max.)	Weight	Fig.
R412010176	58 dB	5 bar	0.042 kg	Fig. 1
R412010177	68 dB	5 bar	0.042 kg	Fig. 1
R412010178	65 dB	5 bar	0.075 kg	Fig. 2
R412010179	71 dB	5 bar	0.075 kg	Fig. 2
R412010180	77 dB	5 bar	0.152 kg	Fig. 3
R412010181	78 dB	5 bar	0.152 kg	Fig. 3

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

Technical information

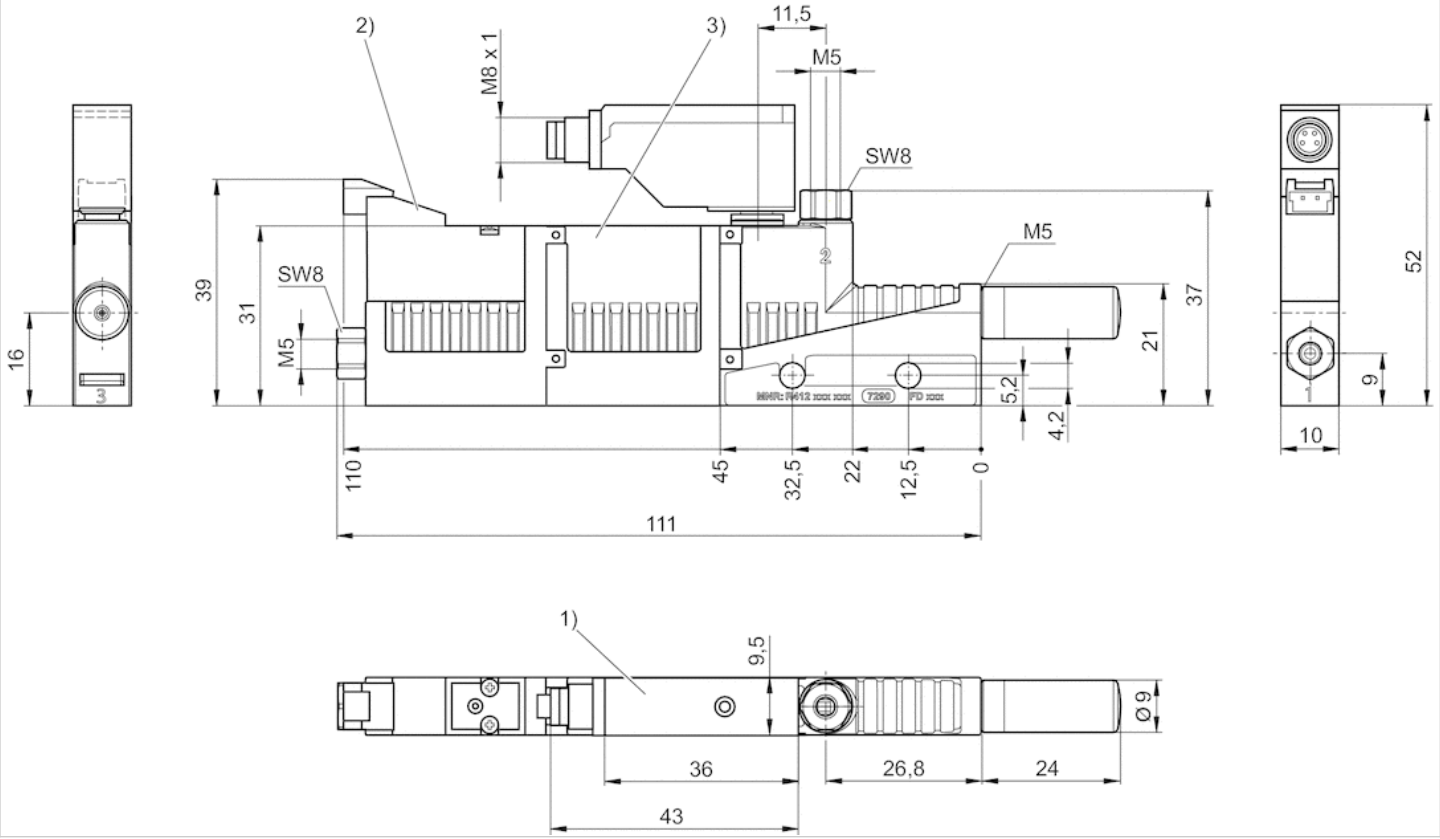
Note: All data refers to an ambient pressure of 1.013 bar and an ambient temperature of 20 °C .
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Aluminum
Silencer	Polyethylene
Pressure sensor	Polycarbonate

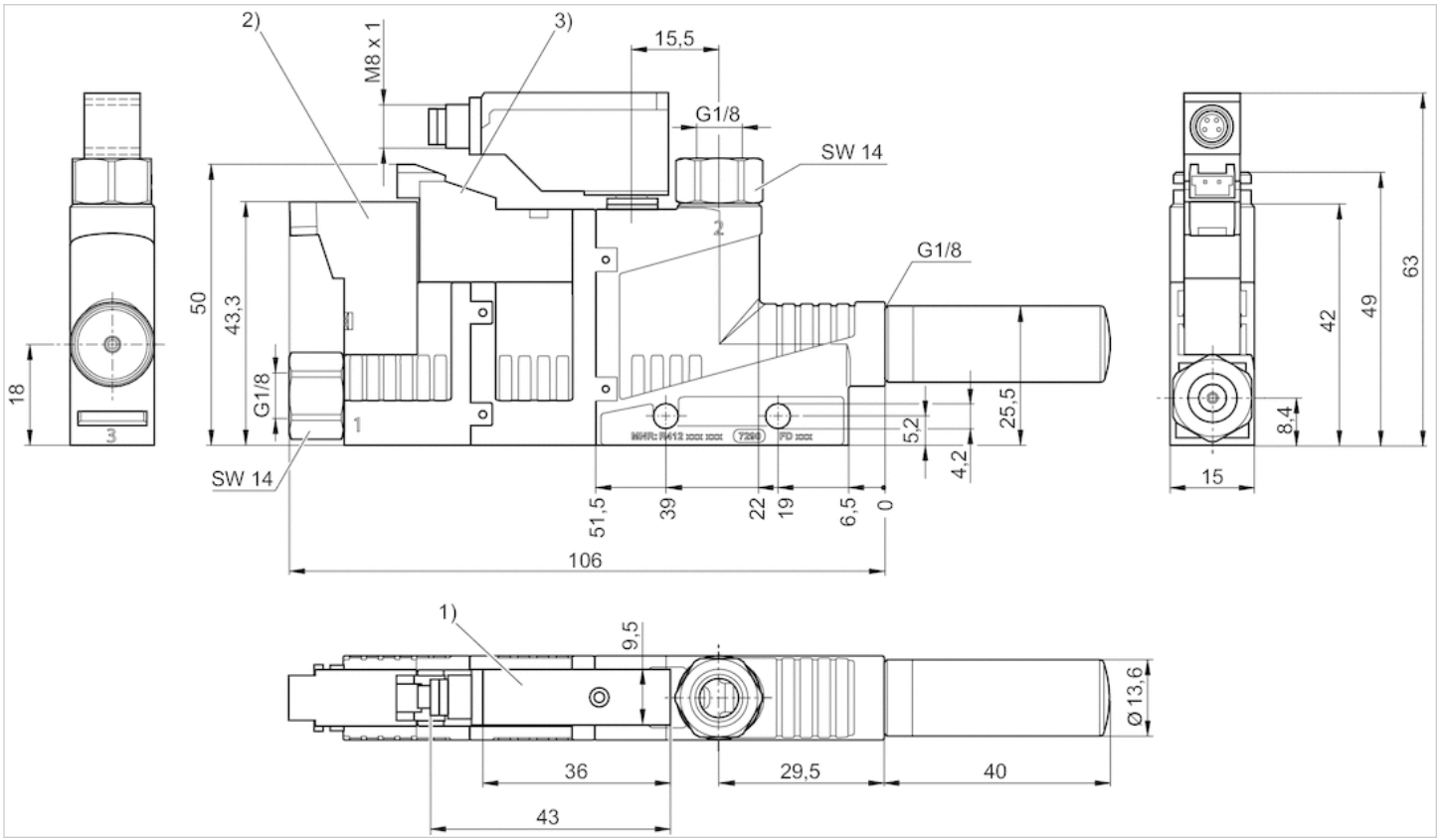
Dimensions

Fig. 1



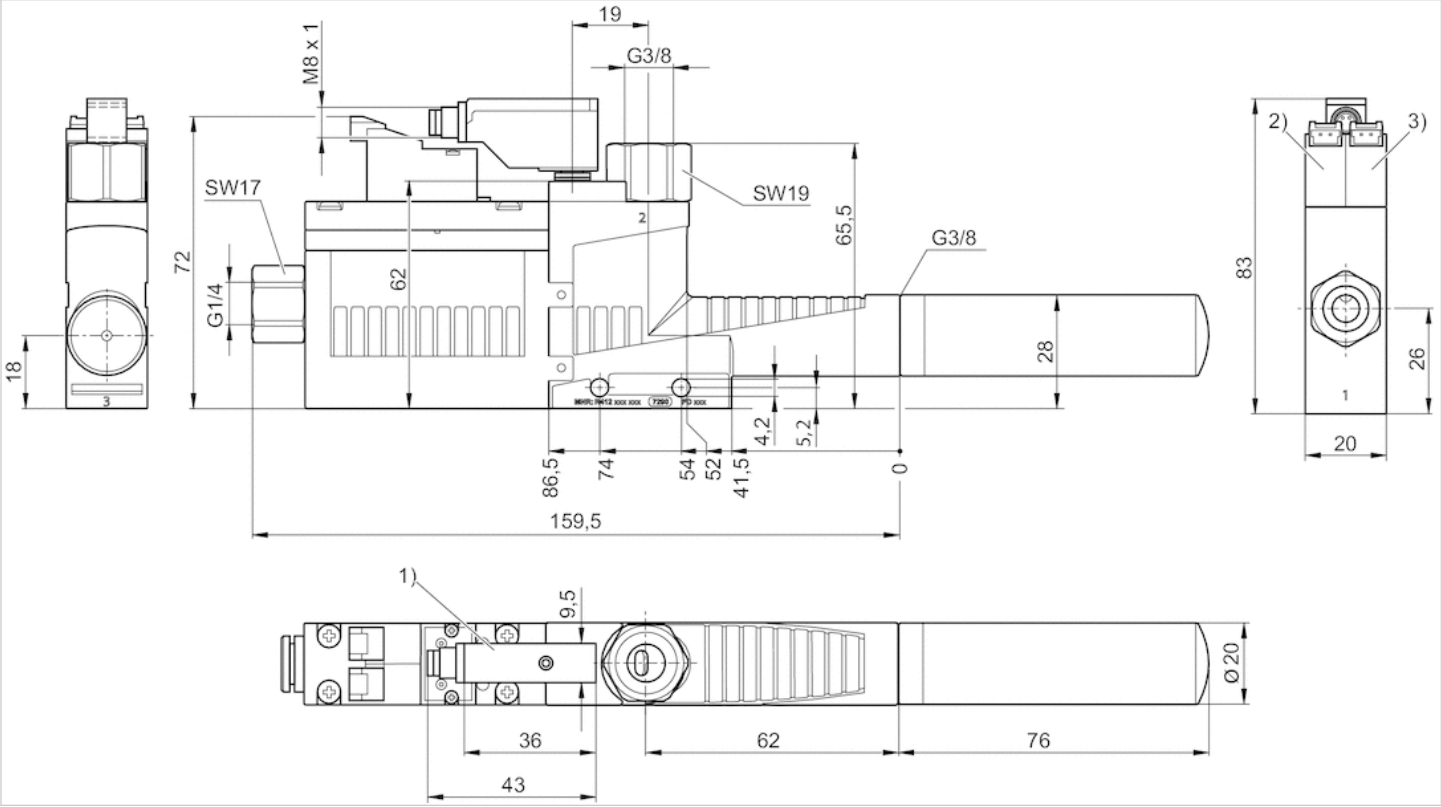
1) vacuum switch is rotatable and exchangeable
2) Solenoid valve for vacuum ON/OFF
3) Release valve from memory

Fig. 2



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

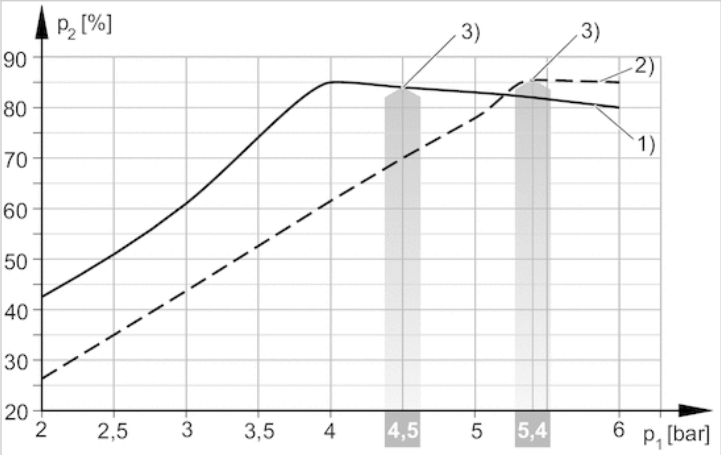
Fig. 3



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

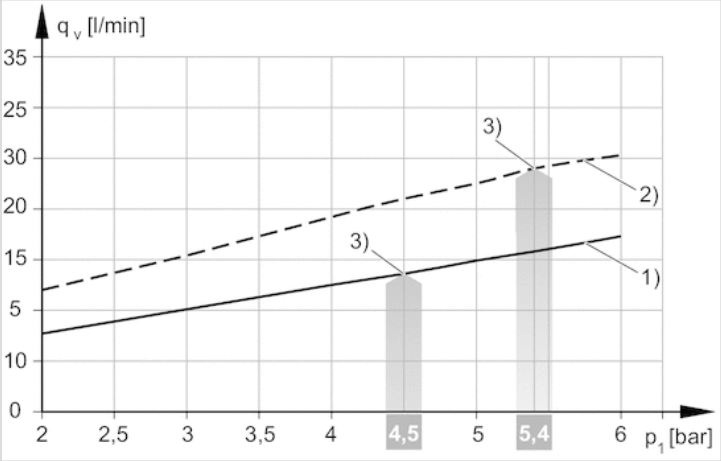
Diagrams

Vacuum p2 depending on working pressure p1

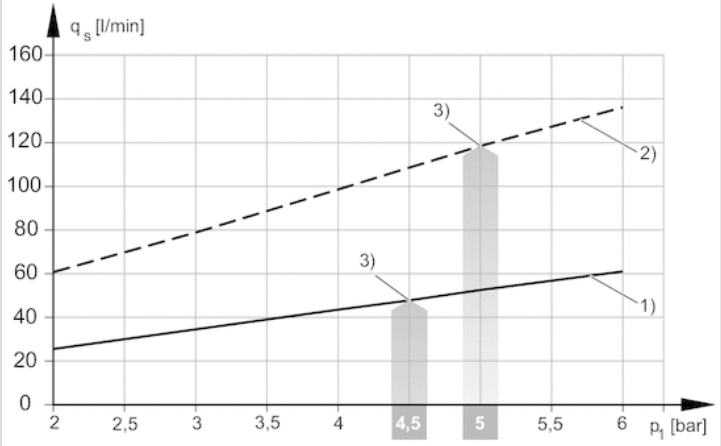


1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure

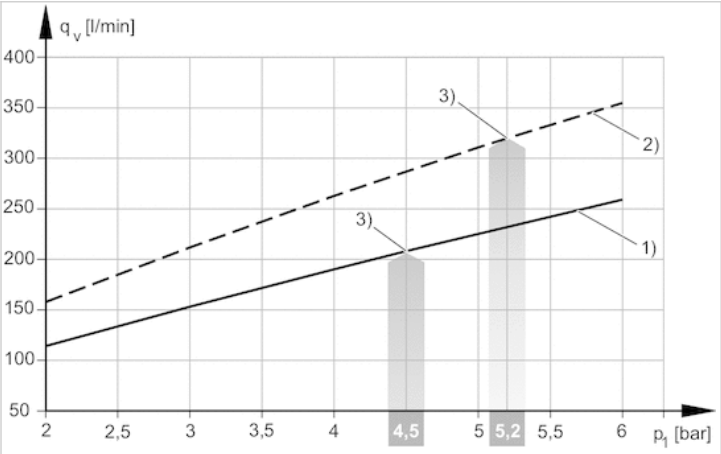
Air consumption qv depending on working pressure p1



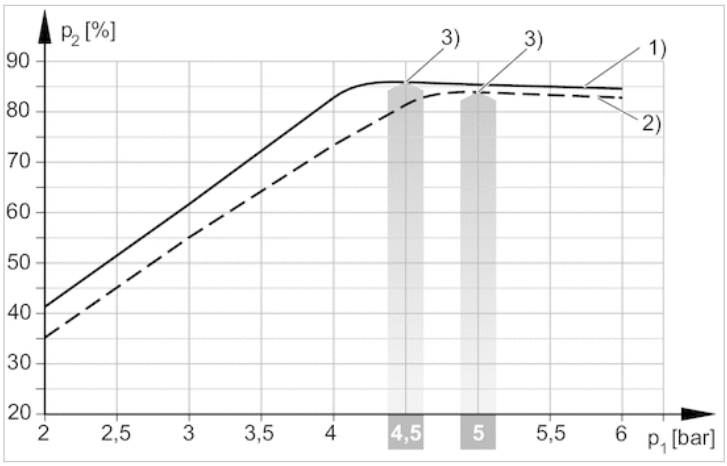
1) = Ø nozzle 0.5 mm 2) = Ø nozzle 0.7 mm
3) optimum working pressure



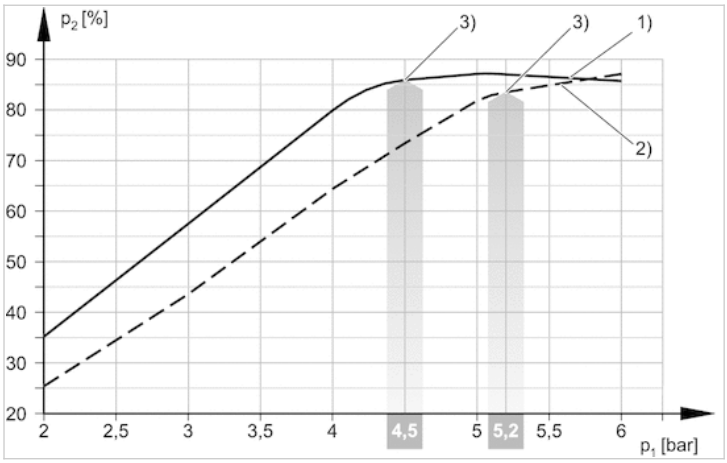
1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure



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

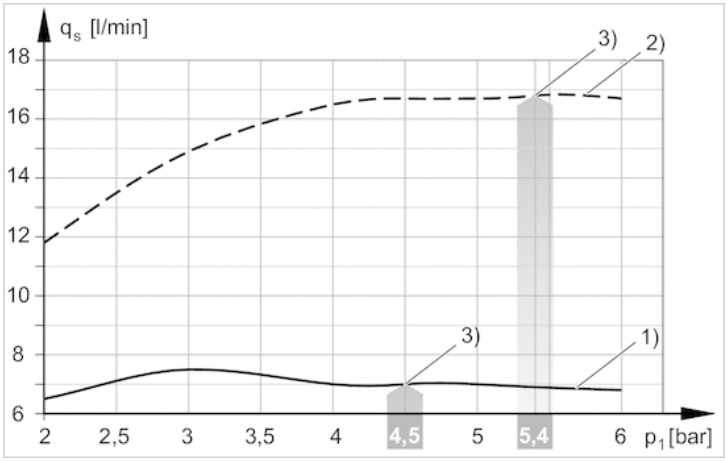


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

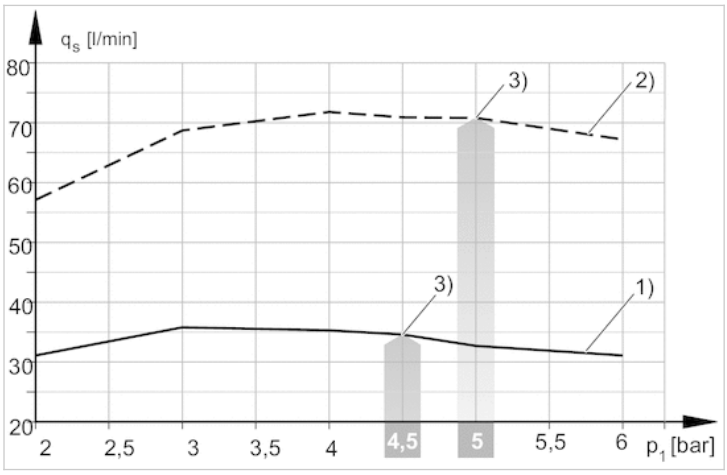


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

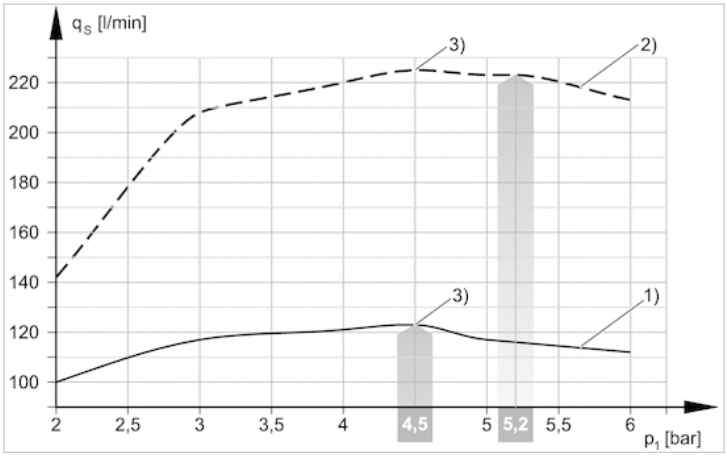
Suction capacity qs depending on working pressure p1



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

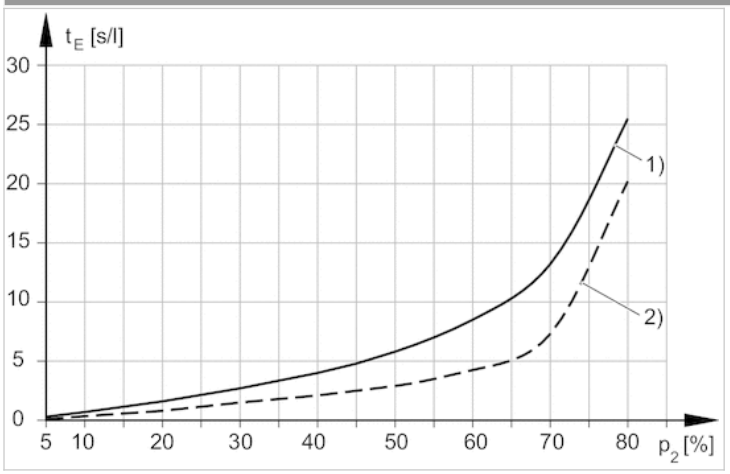


1) = Ø nozzle 1.0 mm 2) = Ø nozzle 1.5 mm
3) optimum working pressure

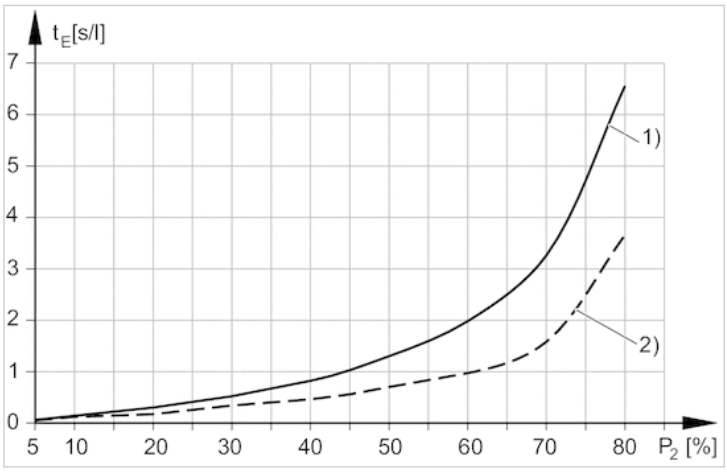


1) = Ø nozzle 2.0 mm 2) = Ø nozzle 2.5 mm
3) optimum working pressure

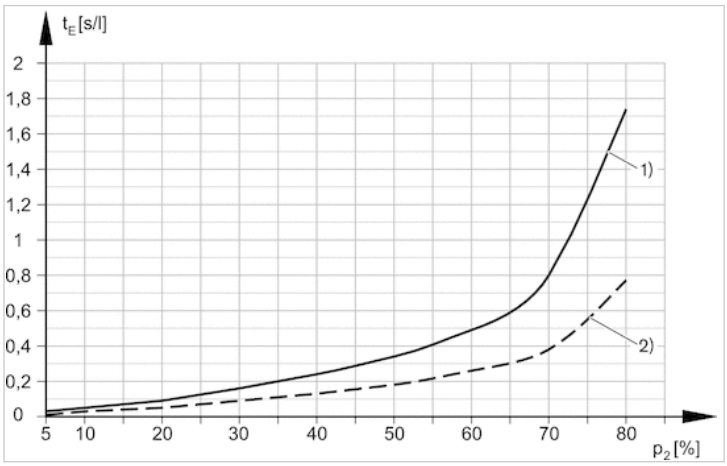
Evacuation time tE depending on vacuum p2 for 1 l volume (with optimal operating pressure p1opt)



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

Valve plug connector, series CON-VP

- Socket RJ 2-pin straight 180°
- open cable ends
- with cable
- unshielded

Ambient temperature min./max.	0 ... 50 °C
Operational voltage	30 / 36 V AC/DC
Protection class	IP40
Protection class	IP40
Wire cross-section	0.25 mm²
Weight	0.05 kg

Technical data

Part No.	Number of wires	Cable-Ø	Cable length
1834484253	2	4 mm	3 m

Halogen-free

Technical information

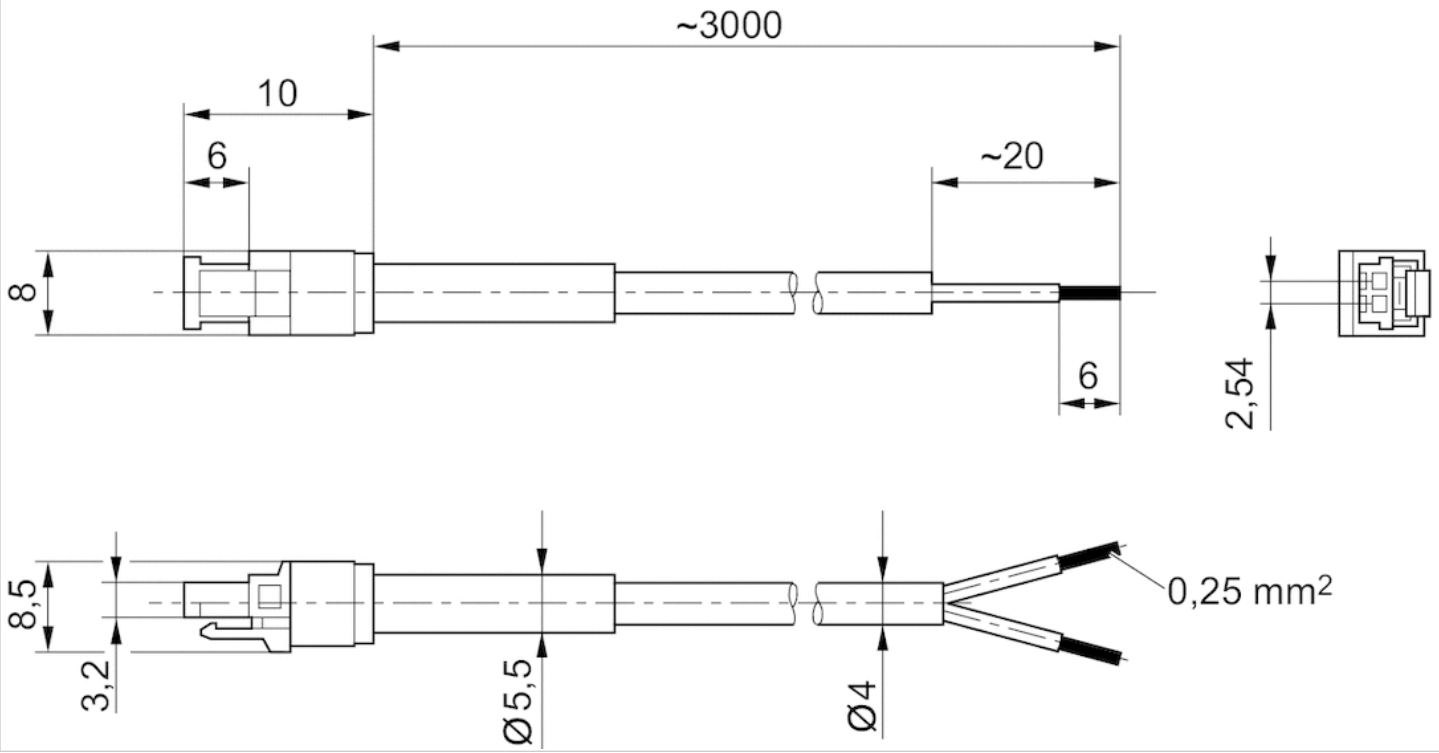
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyoxymethylene
Cable sheath	Polyurethane

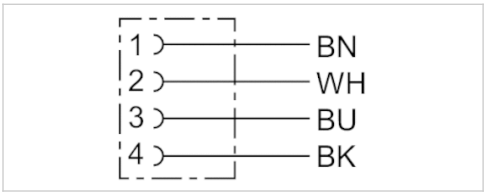
Dimensions

Dimensions



Round plug connector, Series CON-RD

- Socket M8x1 4-pin A-coded straight 180°
- open cable ends
- with cable
- UL (Underwriters Laboratories)
- unshielded



Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.25 mm²
Weight	See table below

Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Certification	Weight
1834484144	4 A	4	4.5 mm	3 m	UL (Underwriters Laboratories)	0.087 kg
1834484146	4 A	4	4.5 mm	5 m	UL (Underwriters Laboratories)	0.14 kg

Technical information

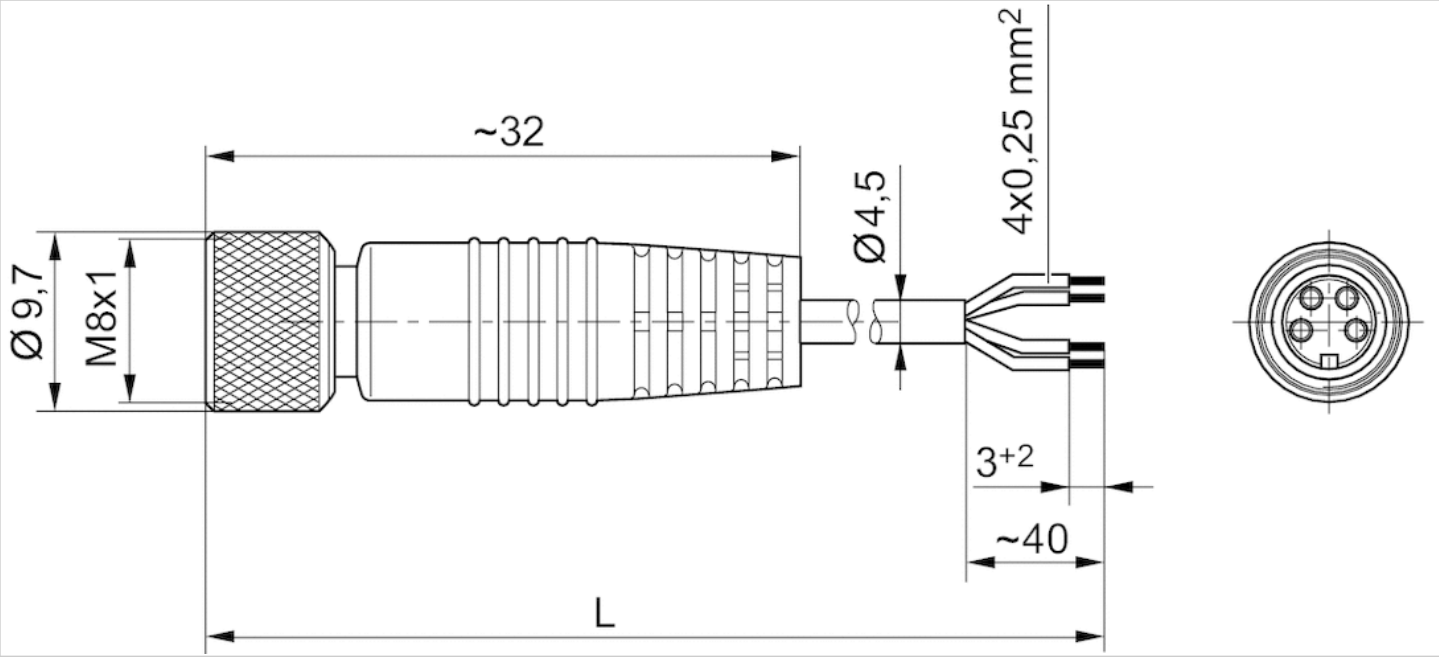
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

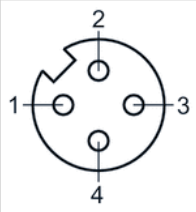
Dimensions



L = length

Pin assignments

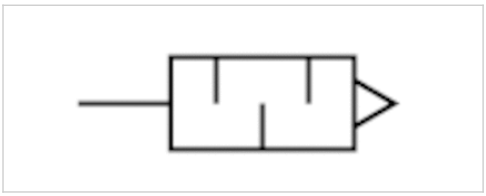
Pin assignment, socket



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

Silencers, Series EBS

- M5 G 1/8 G 3/8
- Polyethylene



Working pressure min./max.	0 ... 6 bar
Ambient temperature min./max.	0 ... 50 °C
Medium	Compressed air
Weight	See table below

Technical data

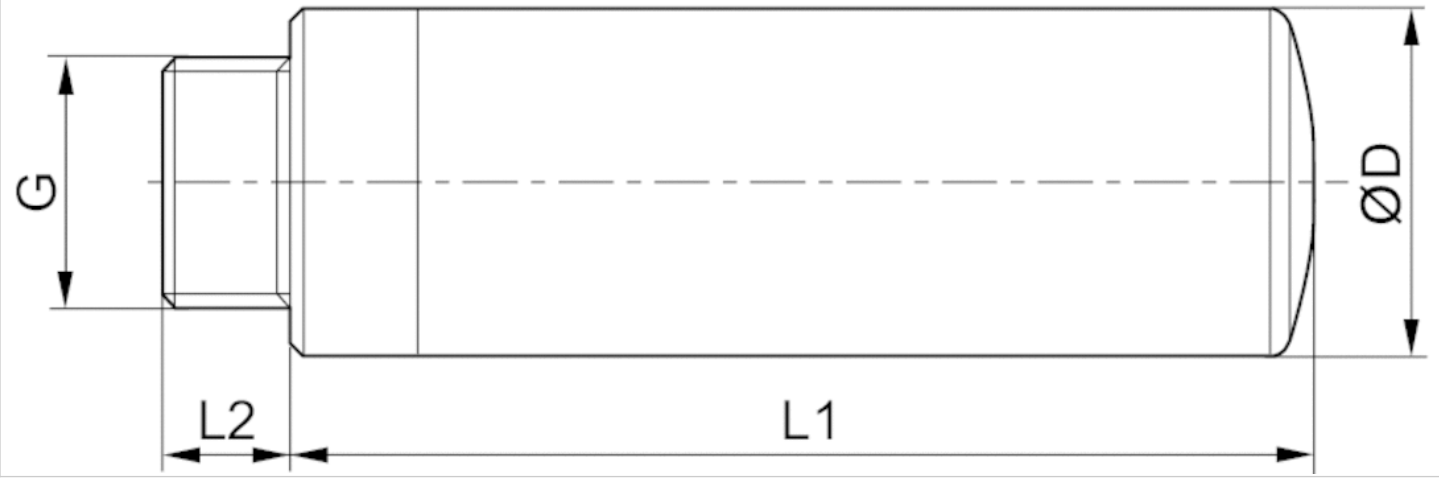
Part No.	Compressed air connection	Delivery unit	Weight
R412007592	M5	5 piece	0.001 kg
R412007593	G 1/8	5 piece	0.005 kg
R412007594	G 3/8	5 piece	0.014 kg

Technical information

Material	
Silencer	Polyethylene
Thread	Polyethylene

Dimensions

Dimensions



Dimensions

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

Mounting strip, Series EBS

- for EBS-PT/-ET

Ambient temperature min./max.	0 ... 50 °C
Weight	0.015 kg

Technical data

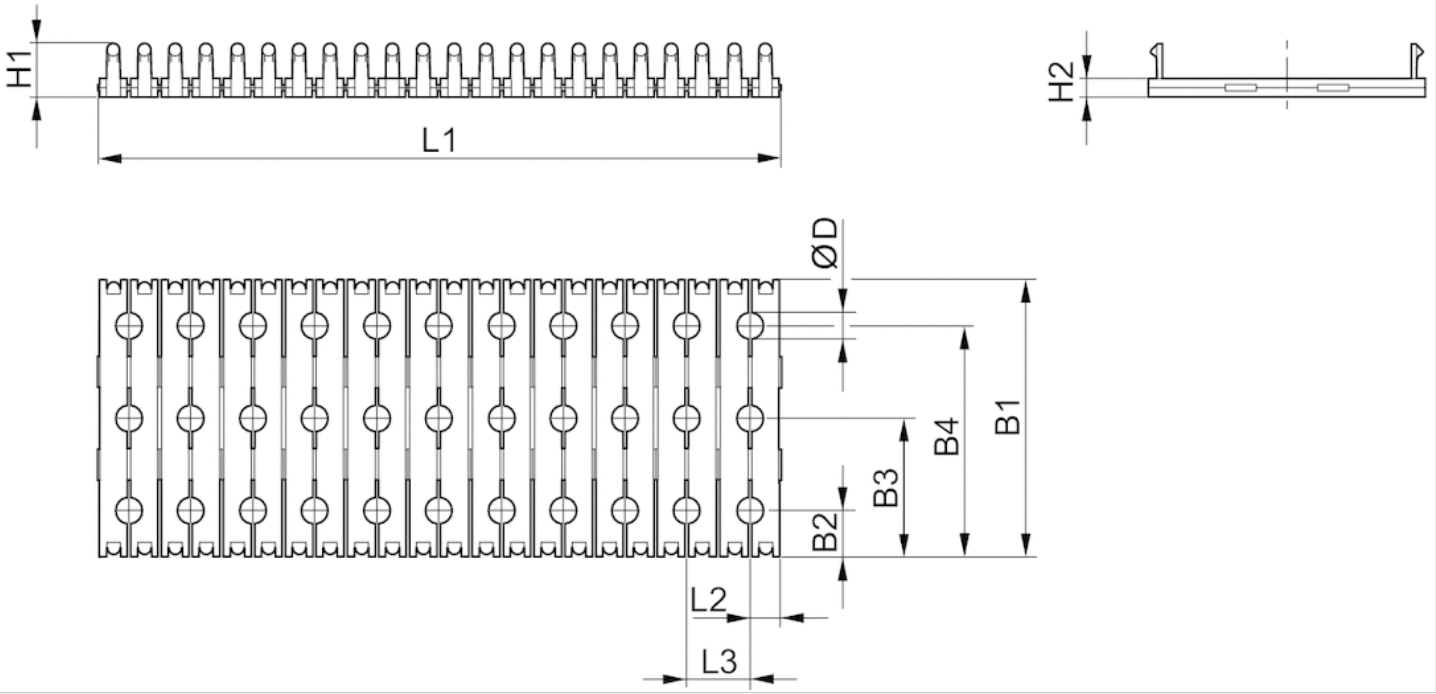
Part No.	Delivery unit
R412007595	5 piece

Technical information

Material	
Housing	Polyoxymethylene

Dimensions

Dimensions



Dimensions

Part No.	B1	B2	B3	B4	Ø D	H1	H2	L1	L2	L3
R412007595	45	7.5	22.5	37.5	4.2	8.6	3	110	4.7	10

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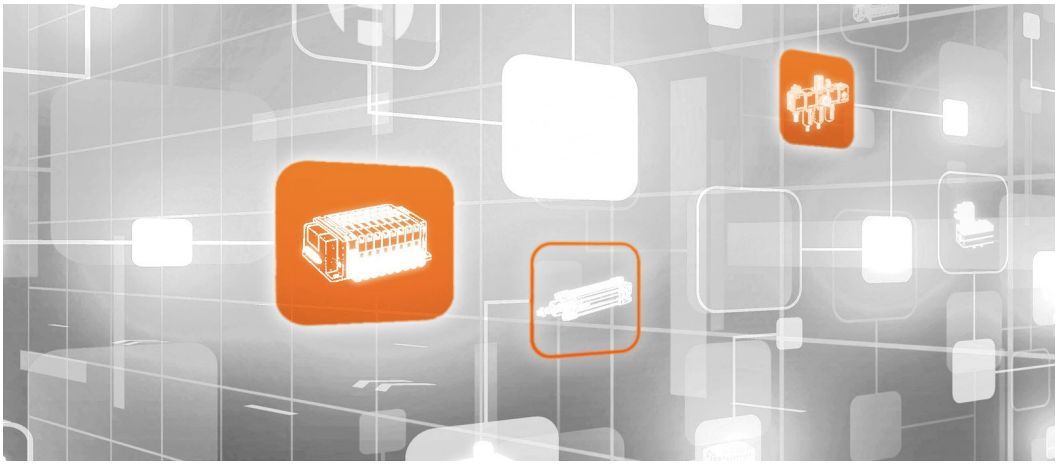

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