Serie ECD

AVENTICS™ Serie ECD-BV

EMERSON™

Serie ECD

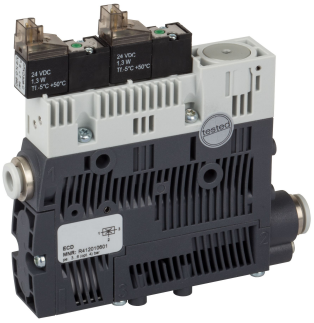
The AVENTICS Series ECD is an all-inclusive solution that combines vacuum generators, pilot valves, filters, silencers and pressure switches. Simplify installation and optimize your energy footprint by opting for the air economizer function, and increase your degree of status monitoring with the condition monitoring function.

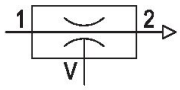
- Straightforward operation and adjustment
- Easy-to-read LED or illuminated display
- Tailored integral functions
- Simple installation
- Easy connection via IO-Link
- Comprehensive condition monitoring
- Compressed air energy saving

Product overview

compact ejector, Series ECD-BV

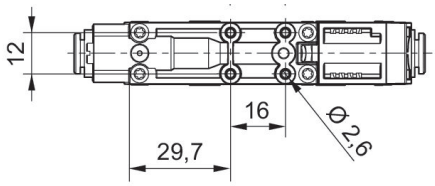
Activation: Electrically
Silencer material: Polyethylene
Duty cycle: 100 %
Min. ambient temperature: 0 °C
Max. ambient temperature: 50 °C
Min. working pressure: 2 bar
Max. working pressure: 6 bar

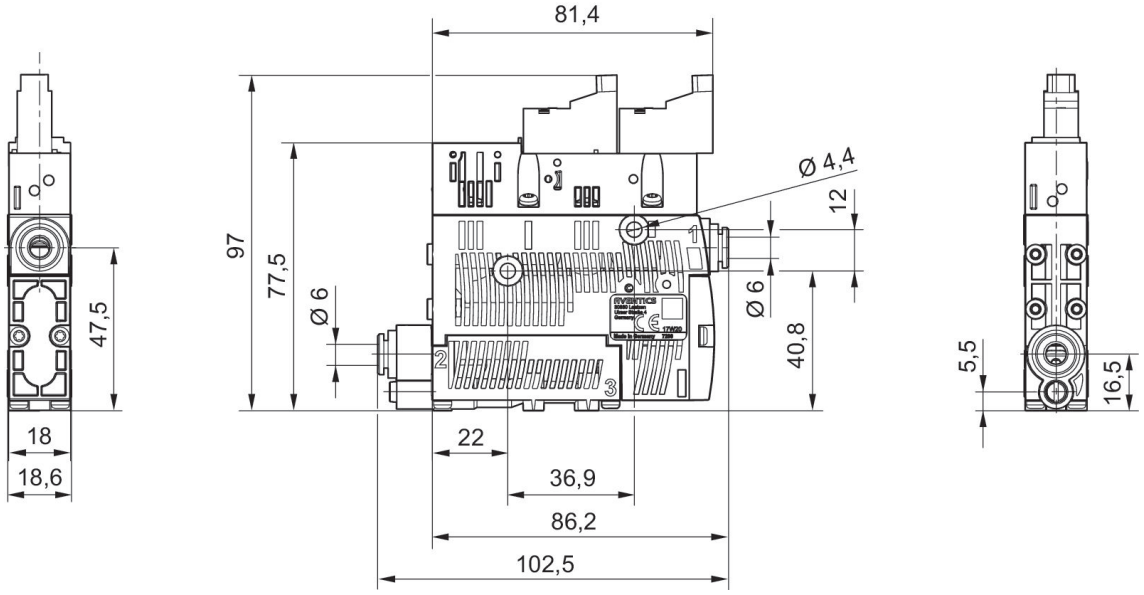




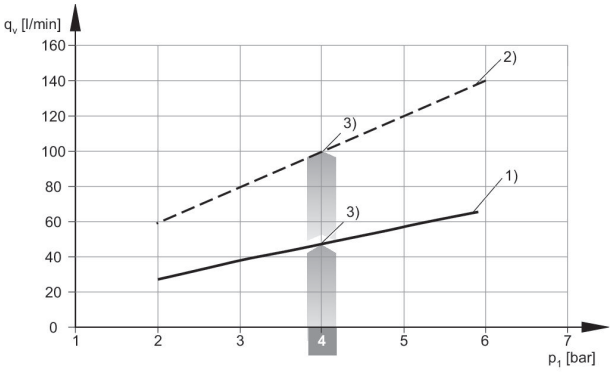
Activation	Type	Switching logic	Nozzle Ø [mm]	Max. vacuum level at p.opt [%]	Max. suction capacity [l/min]	Air consumption at p.opt. [l/min]	Part No.
Electrically	ECD-BV-EC-10-NO	NO (make contact)	1	81.5	35.4	46.2	R412010601
Electrically	ECD-BV-EC-10-NC	NC (break contact)	1	81.5	35.4	46.2	R412010602
Electrically	ECD-BV-EC-15-NO	NO (make contact)	1.5	81.5	64.3	98.9	R412010603
Electrically	ECD-BV-EC-15-NC	NC (break contact)	1.5	81.5	64.3	98.9	R412010604

Dimensions



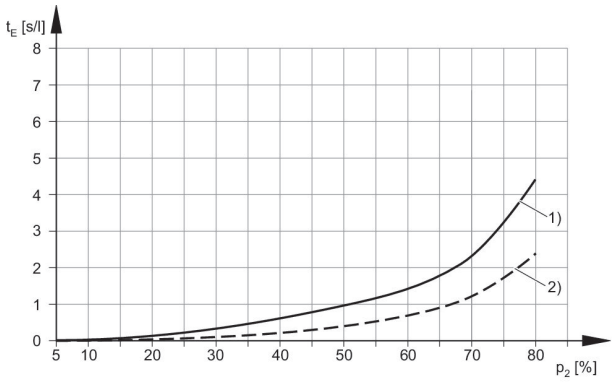


Air consumption qv depending on working pressure p1



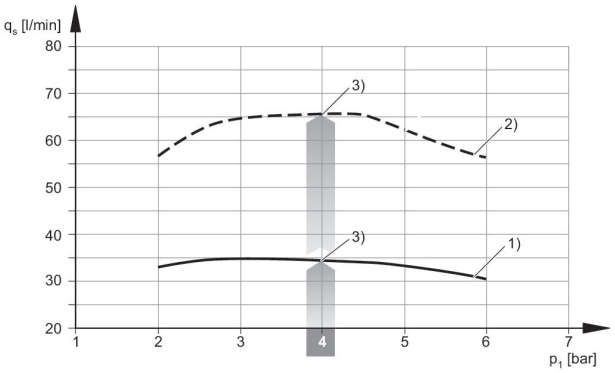
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm
3) optimum working pressure

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



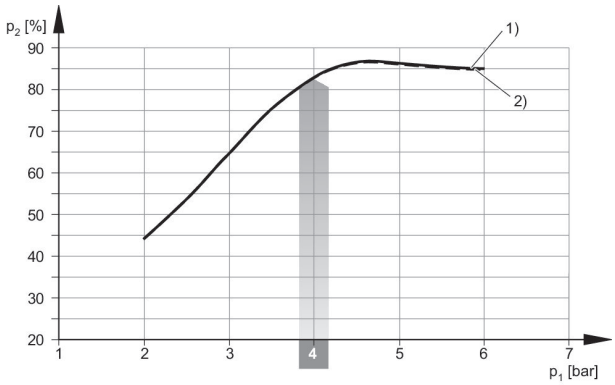
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm

Suction capacity qs depending on working pressure p1



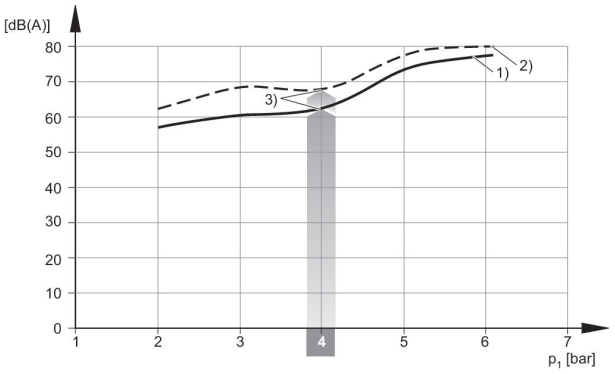
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm
3) optimum working pressure

Vacuum p2 depending on working pressure p1



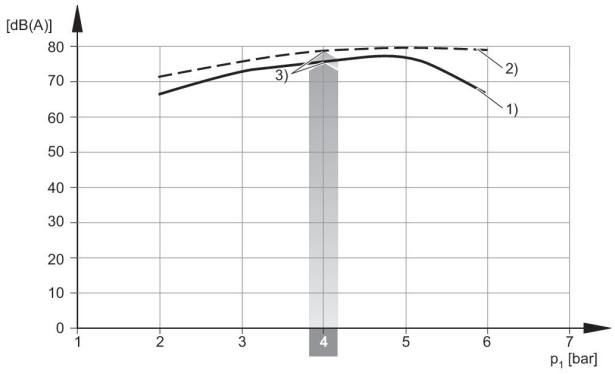
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm

Noise level, suctioned



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

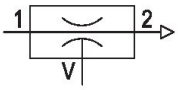
Noise level at free suctioning



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

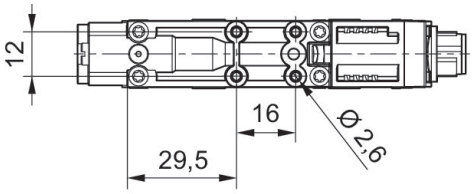
compact ejector, Series ECD-SV

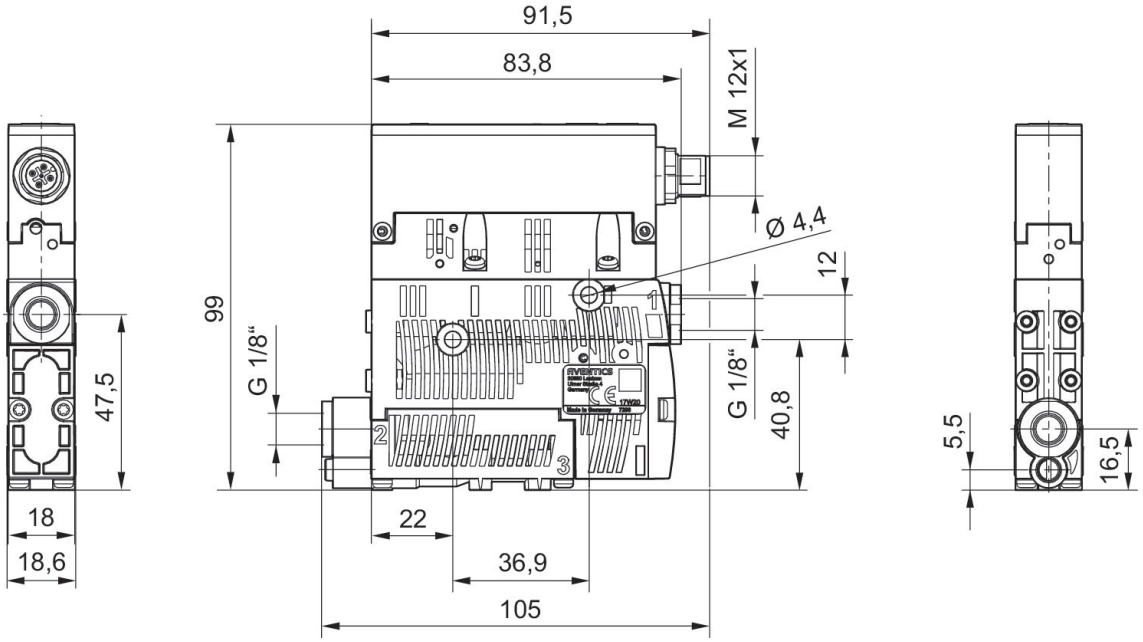
Activation: Electrically
Silencer material: Polyethylene
Duty cycle: 100 %
Min. ambient temperature: 0 °C
Max. ambient temperature: 50 °C
Min. working pressure: 2 bar
Max. working pressure: 6 bar



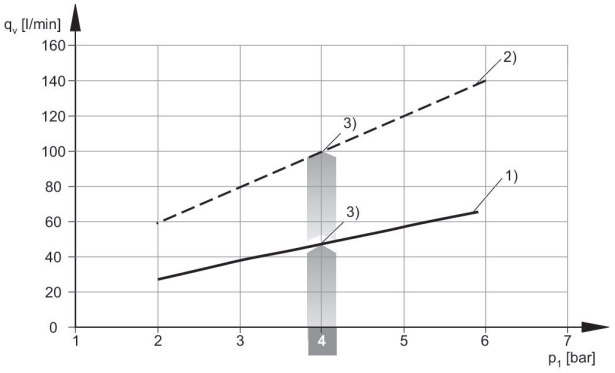
Activation	Type	Switching logic	Nozzle Ø [mm]	Max. vacuum level at p.opt [%]	Max. suction capacity [l/min]	Air consumption at p.opt. [l/min]	Part No.
Electrically	ECD-SV-EC-10-NO	NO (make contact)	1	81.5	35.4	46.2	R412010607
Electrically	ECD-SV-EC-10-NC	NC (break contact)	1	81.5	35.4	46.2	R412010608
Electrically	ECD-SV-EC-15-NO	NO (make contact)	1.5	81.5	64.3	98.9	R412010609
Electrically	ECD-SV-EC-15-NC	NC (break contact)	1.5	81.5	64.3	98.9	R412010610

Dimensions



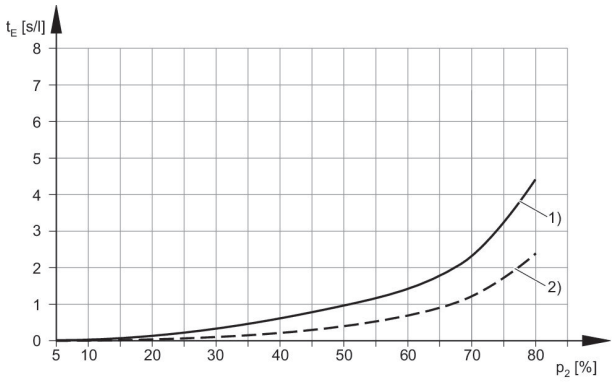


Air consumption qv depending on working pressure p1



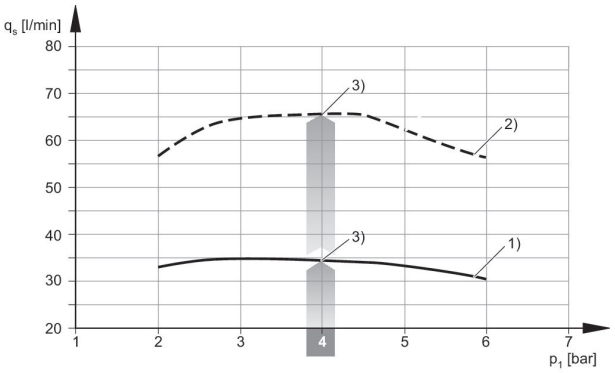
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm
3) optimum working pressure

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



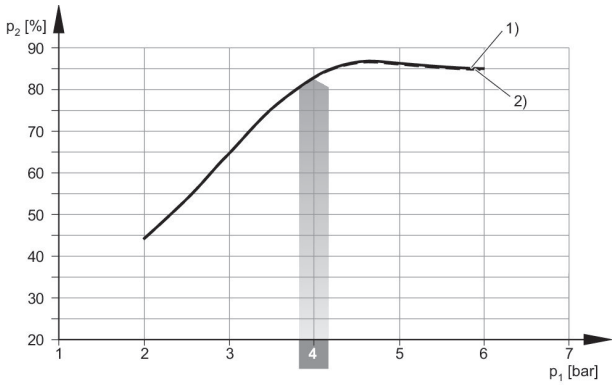
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm

Suction capacity qs depending on working pressure p1



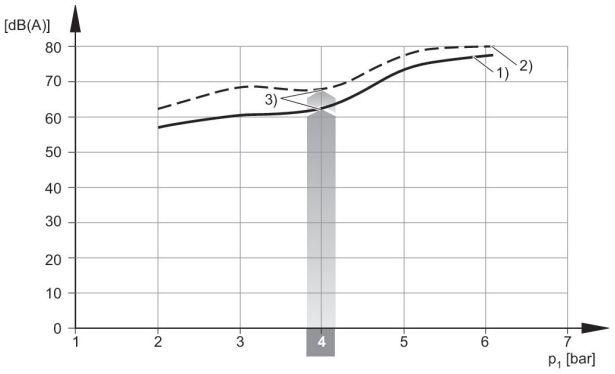
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm
3) optimum working pressure

Vacuum p2 depending on working pressure p1



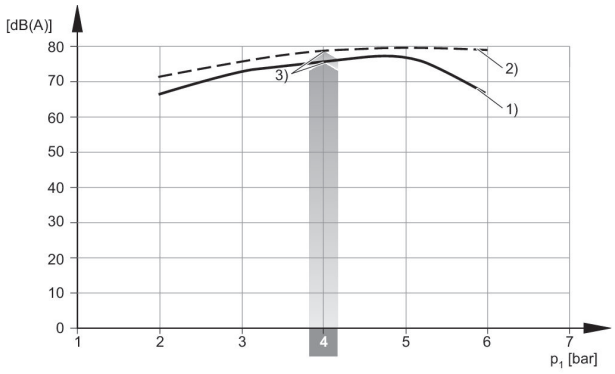
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm

Noise level, suctioned



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

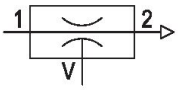
Noise level at free suctioning



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

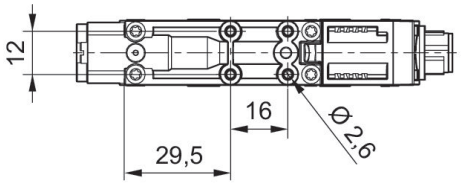
compact ejector, Series ECD-IV

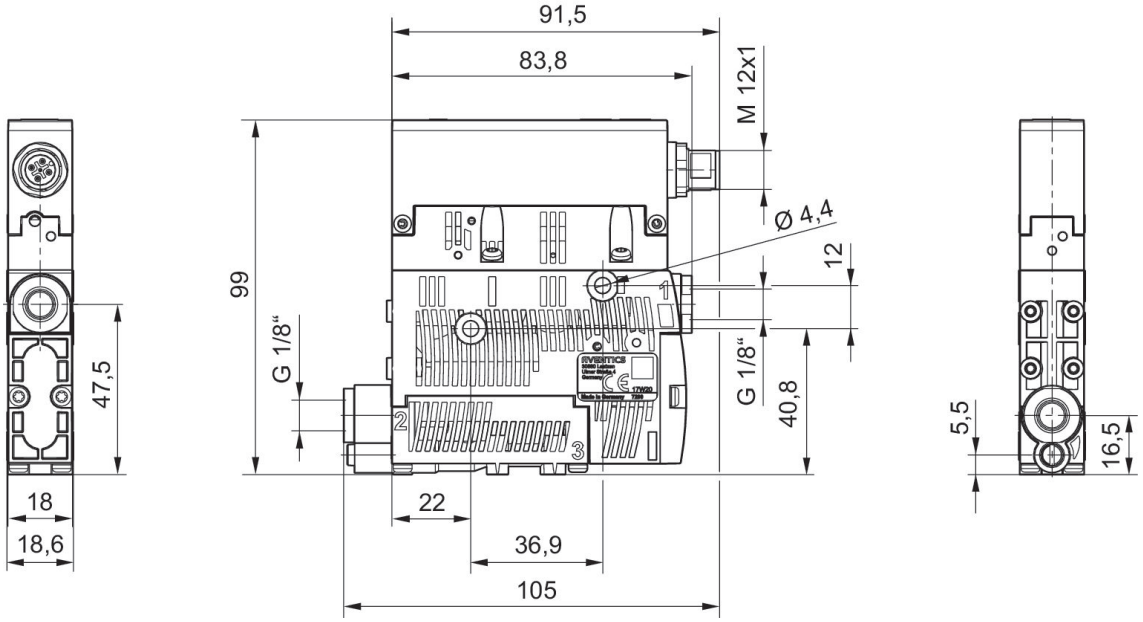
Activation: Electrically
Silencer material: Polyethylene
Duty cycle: 100 %
Min. ambient temperature: 0 °C
Max. ambient temperature: 50 °C
Min. working pressure: 2 bar
Max. working pressure: 6 bar



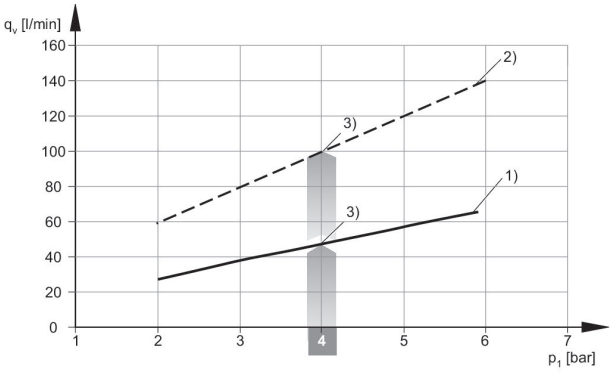
Activation	Type	Switching logic	Nozzle Ø [mm]	Max. vacuum level at p.opt [%]	Max. suction capacity [l/min]	Air consumption at p.opt. [l/min]	Part No.
Electrically	ECD-IV-EC-10-NO	NO (make contact)	1	81.5	35.4	46.2	R412010613
Electrically	ECD-IV-EC-10-NC	NC (break contact)	1	81.5	35.4	46.2	R412010614
Electrically	ECD-IV-EC-15-NO	NO (make contact)	1.5	81.5	64.3	98.9	R412010615
Electrically	ECD-IV-EC-15-NC	NC (break contact)	1.5	81.5	64.3	98.9	R412010616

Dimensions



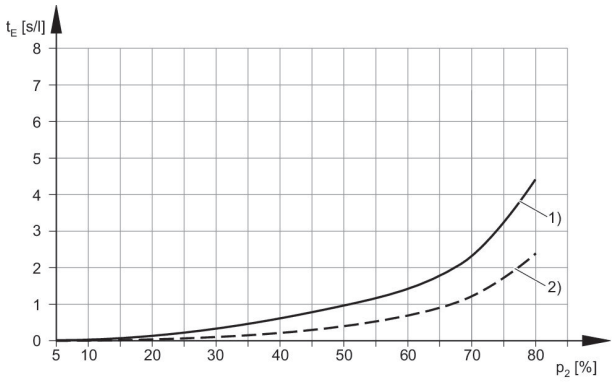


Air consumption qv depending on working pressure p1



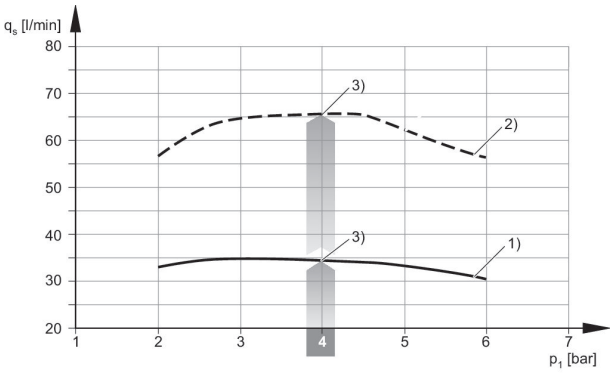
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm
3) optimum working pressure

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



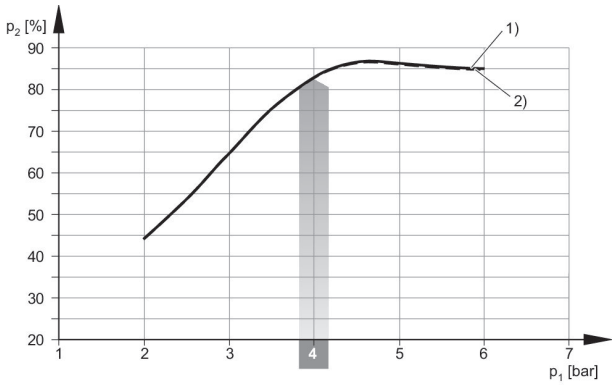
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm

Suction capacity qs depending on working pressure p1



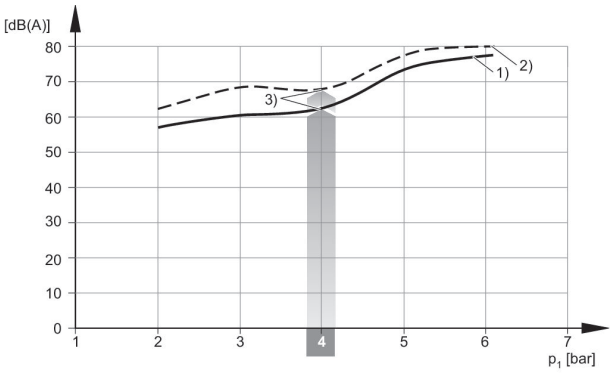
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm
3) optimum working pressure

Vacuum p2 depending on working pressure p1



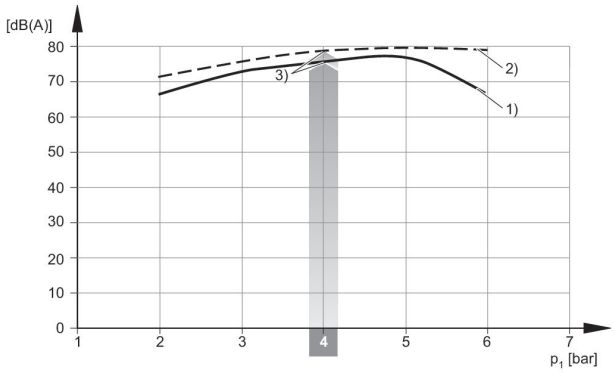
1) Ø nozzle 1.0 mm
2) Ø nozzle 1.5 mm

Noise level, suctioned



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

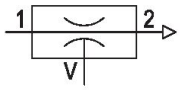
Noise level at free suctioning



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

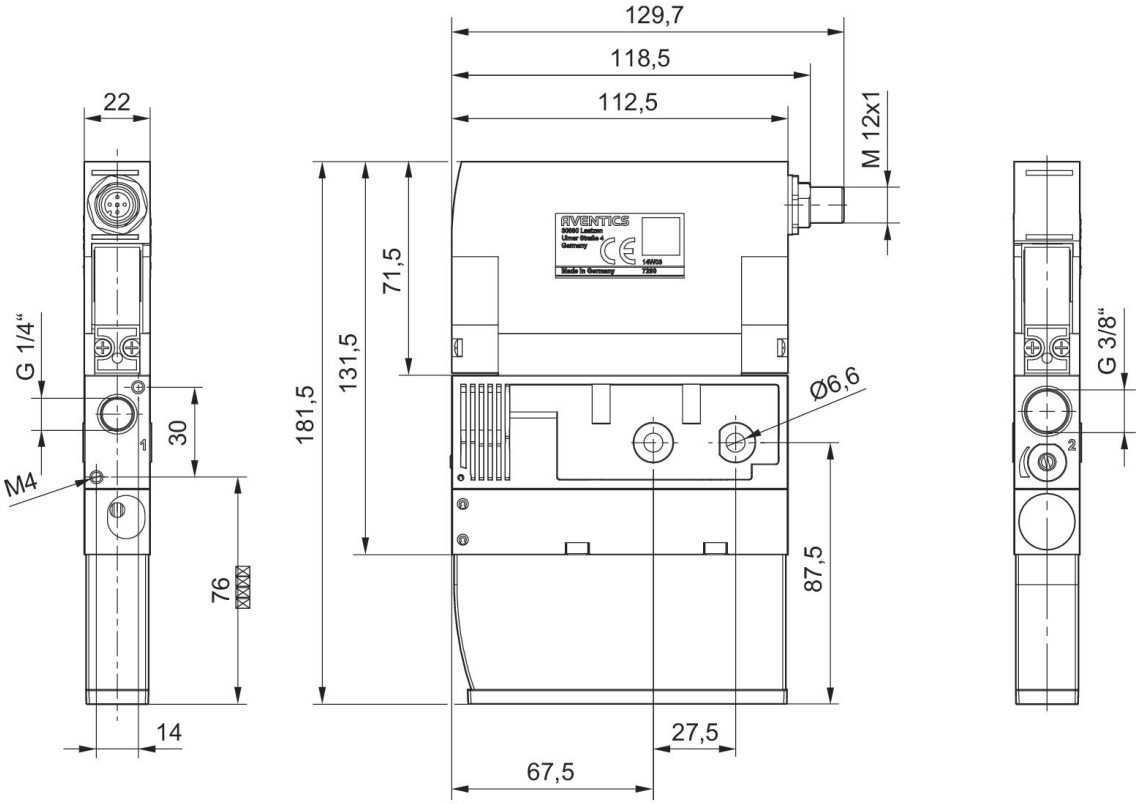
compact ejector, Series ECD-LV

Activation: Electrically
Silencer material: Polyethylene
Duty cycle: 100 %
Min. ambient temperature: 0 °C
Max. ambient temperature: 50 °C
Min. working pressure: 4 bar
Max. working pressure: 7 bar

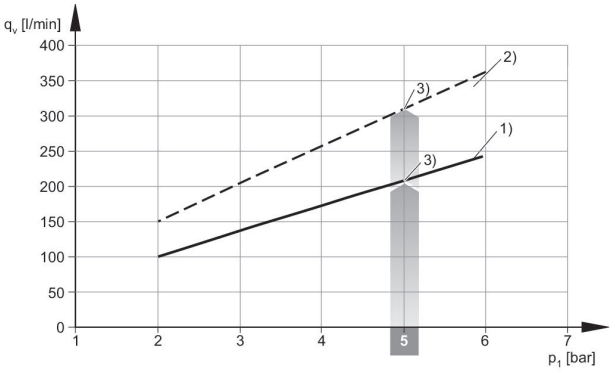


Activation	Type	Switching logic	Nozzle Ø [mm]	Max. vacuum level at p.opt [%]	Max. suction capacity [l/min]	Air consumption at p.opt. [l/min]	Part No.
Electrically	ECD-LV-EC-20-NO	NO (make contact)	2	82	117	207	R412026115
Electrically	ECD-LV-EC-20-NC	NC (break contact)	2	83	117	207	R412026116
Electrically	ECD-LV-EC-25-NO	NO (make contact)	2.5	87	170	308	R412026117
Electrically	ECD-LV-EC-25-NC	NC (break contact)	2.5	87	170	308	R412026118

Dimensions

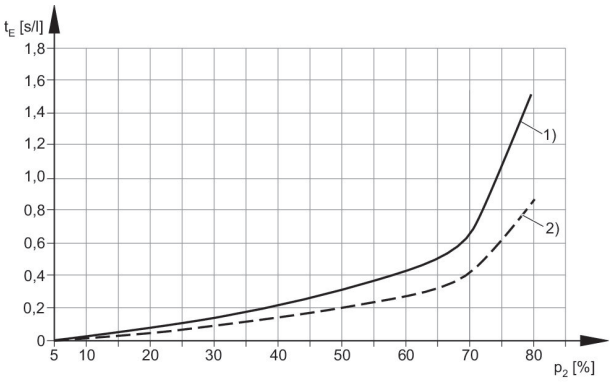


Air consumption qv depending on working pressure p1



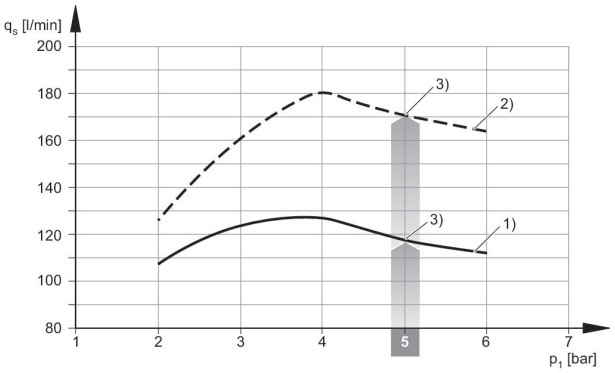
1) Ø nozzle [[2.0] mm]
2) Ø nozzle [[2.5] mm]

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



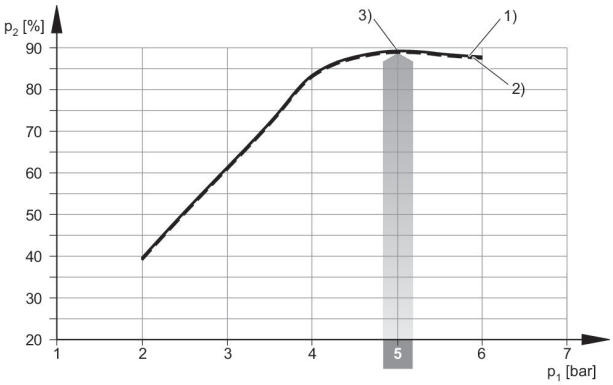
1) Ø nozzle [[2.0] mm]
2) Ø nozzle [[2.5] mm]

Suction capacity qs depending on working pressure p1



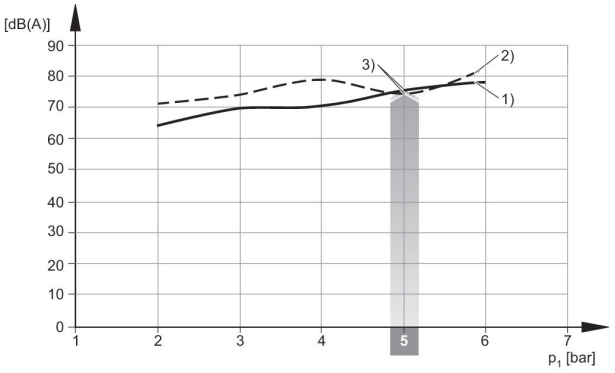
1) Ø nozzle [[2.0] mm]
2) Ø nozzle [[2.5] mm]
3) optimum working pressure

Vacuum p2 depending on working pressure p1



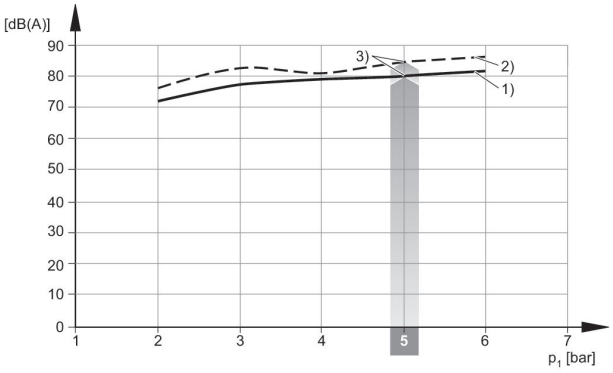
1) Ø nozzle [[2.0] mm]
2) Ø nozzle [[2.5] mm]
3) optimum working pressure

Noise level, suctioned



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

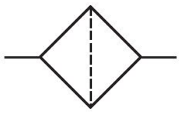
Noise level at free suctioning



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

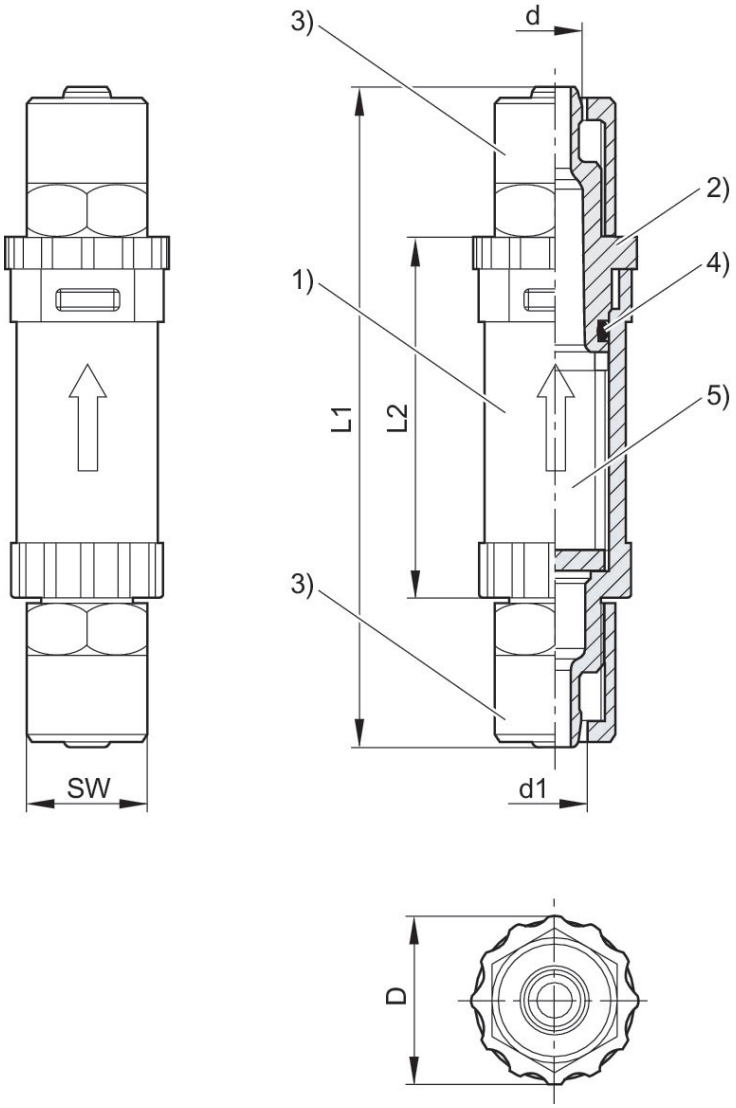
Vacuum filter Inline, Series VFI

Min. ambient temperature: 0 °C
Max. ambient temperature: 50 °C



Type	Nominal flow [l/min]	Filter porosity [µm]	Filter insert	Part No.
VFI-6/4	32	50	Polypropylene, Polyamide	R412010112
VFI-8/6	66	50	Polypropylene, Polyamide	R412010113

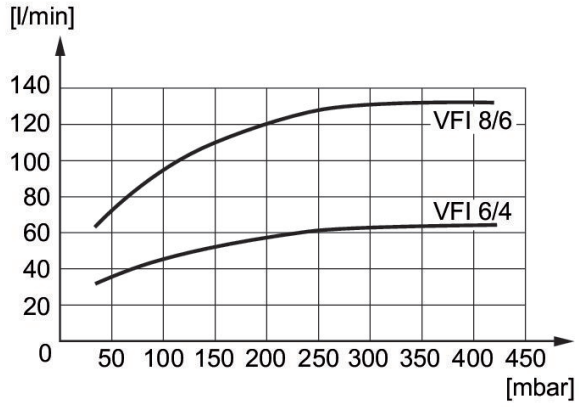
Dimensions



1) "transparent inline filter housing "
2) filter cover with bayonet catch
3) tube nut
4) O-ring
5) Filter

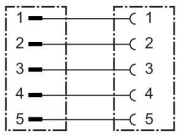
Part No.	Type	External Ø	Internal Ø	d	d1	D	L1	L2	SW
R412010112	VFI-6/4	6 mm	4 mm	4	6.2	16	62	34	12
R412010113	VFI-8/6	8 mm	6 mm	6	8.2	23	70	41	14

characteristics (flow volume)



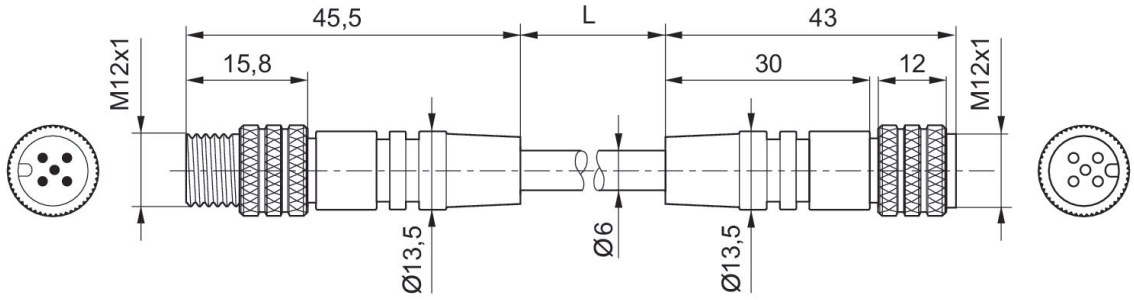
Round plug connector, Series CON-RD

Electrical connection 1, type: Plug
Electrical connection 1, thread size: M12x1
Electrical connection 2, thread size: M12x1
Electrical connection 1, number of poles: 5-pin
Electrical connection 2, number of poles: 5-pin
Min. ambient temperature: -25 °C
Max. ambient temperature: 80 °C



Operational voltage	Current [A]	Shielding	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, coding	Electrical connection 2, type	Electrical connection 2, thread size	Electrical connection 2, coding	Cable length [m]	Cable-Ø [mm]	Wire cross-section [mm²]	Min. ambient temperature [°C]	Max. ambient temperature [°C]	Part No.
36 V DC / 30 V AC	4	shielded	Socket	M12x1	A-coded	Plug	M12x1	A-coded	0.3	6	0.34	-25	80	8946054662
36 V DC / 30 V AC	4	shielded	Socket	M12x1	A-coded	Plug	M12x1	A-coded	0.5	6	0.34	-25	80	8946054672
36 V DC / 30 V AC	4	shielded	Socket	M12x1	A-coded	Plug	M12x1	A-coded	1	6	0.34	-25	80	8946054682
36 V DC / 30 V AC	4	shielded	Socket	M12x1	A-coded	Plug	M12x1	A-coded	2	6	0.34	-25	80	8946054692
36 V DC / 30 V AC	4	shielded	Socket	M12x1	A-coded	Plug	M12x1	A-coded	5	6	0.34	-25	80	8946054702
36 V DC / 30 V AC	4	shielded	Socket	M12x1	A-coded	Plug	M12x1	A-coded	10	6	0.34	-25	80	8946054712

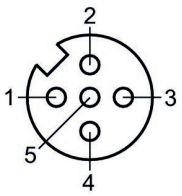
Dimensions



L = cable length

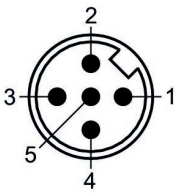
8946054662, 8946054672, 8946054682, 8946054692, 8946054702, 8946054712

Pin assignment, socket

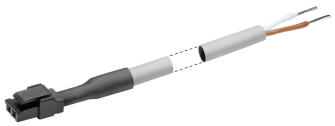


8946054662, 8946054672, 8946054682, 8946054692, 8946054702, 8946054712

Plug pin assignment

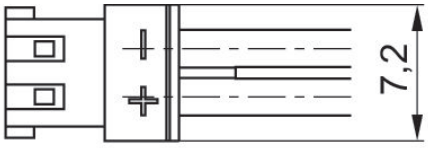


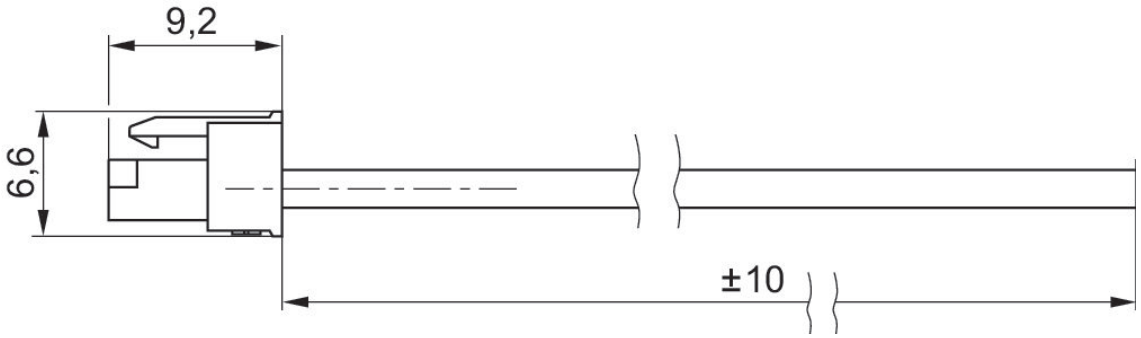
Valve plug connector, series CON-VP



Operational voltage	Shielding	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 2, type	Cable length [m]	Cable-Ø [mm]	Wire cross-section [mm²]	Min. ambient temperature [°C]	Max. ambient temperature [°C]	Part No.
48 V AC/DC	unshielded	Socket	Industrial plug connector	open cable ends	3	1.5	0.25	-40	80	R422003278

Dimensions





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