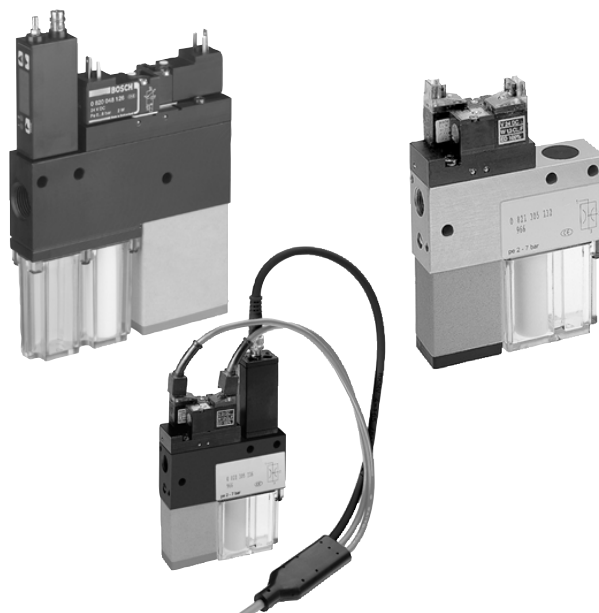


Gripper and vacuum technology ► Vacuum generators

Serie ECS

Brochure



Serie ECS

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Gripper and vacuum technology ▶ Vacuum generators

compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter



00103612

Ambient temperature min./max.	+32 °F / +122 °F
Medium temperature min./max.	+32 °F / +140 °F
Working pressure min./max.	37 psi / 87 psi
Medium	Compressed air

Oil content of compressed air	0 mg/m³ - 1 mg/m³
Protection class:, with electrical connector	See table below
Duty cycle according to DIN VDE 0580 standard	100 %

DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%

Materials:	
Housing	Aluminum, anodized
Seal	Acrylonitrile Butadiene Rubber
Silencers	Polyethylene

Technical Remarks

- Note: All data refers to an ambient pressure of 1013 mbar and an ambient temperature of 20 °C.
- The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 37 °F.
- The oil content of compressed air must remain constant during the life cycle.

	Type	Nozzle Ø	Power consumption Solenoid valve	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Part No.
			DC				
		[inch]	[W]	[%]	[l/min]	[l/min]	
	ECS-EC-10-NO	0.04	1.3	84	0.04	0.05	0821305132
	ECS-EC-15-NO	0.06	1.3	85	0.07	0.12	0821305137
	ECS-EC-20-NO	0.08	2.5	83	0.12	0.19	0821305142
	ECS-EC-30-NO	0.12	2.5	87	0.2	0.42	0821305147
	ECS-EC-10-NC	0.04	1.3	84	0.04	0.05	0821305133
	ECS-EC-15-NC	0.06	1.3	85	0.07	0.12	0821305138
	ECS-EC-20-NC	0.08	2.5	83	0.12	0.19	0821305143
	ECS-EC-30-NC	0.12	2.5	87	0.2	0.42	0821305148

Part No.	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Note
	[dBA]	[dBA]	[lbs]	
0821305132	66	68	0.6062	1); 3); 5)
0821305137	68	68	0.6062	1); 3); 5)
0821305142	76	78	1.03	2); 4); 6)
0821305147	82	82	1.07	2); 4); 6)
0821305133	66	68	0.6062	1); 3); 5)
0821305138	68	68	0.6062	1); 3); 5)
0821305143	76	78	1.03	2); 4); 6)
0821305148	82	82	1.07	2); 4); 6)

- 1) Nozzle material: Brass
 - 2) Nozzle material: Aluminum
 - 3) Protection class : , with electrical connector: IP40
 - 4) Protection class : , with electrical connector: IP65
 - 5) Electr. connection: Plug; Industrial plug connector; 2-pin
 - 6) Electr. connection: Plug; EN 175301-803, form C
- p.opt. = optimum working pressure

All dimensions in mm, unless specified otherwise.

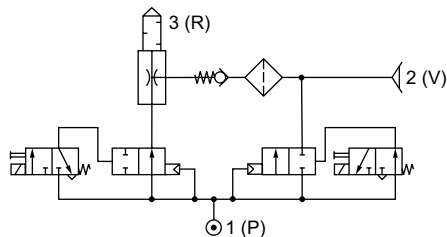
Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter

ECS-EC-...NO-C-S



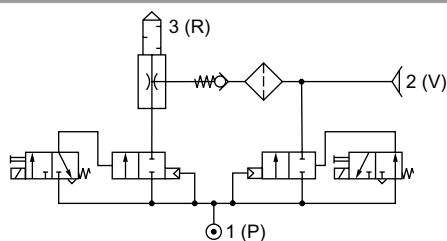
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NO = ejector suction line open without current

C = Solenoid valve for release pulse

S = integrated non-return valve

ECS-EC-...NC-C-S



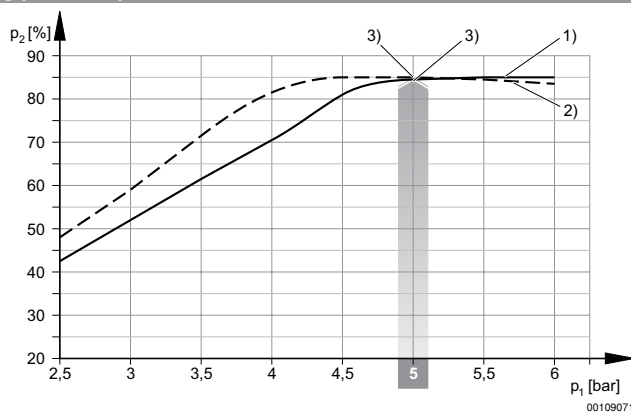
00112386

NC = ejector line closed without current

C = Solenoid valve for release pulse

S = integrated non-return valve

Vacuum p₂ depending on working pressure p₁



00109071

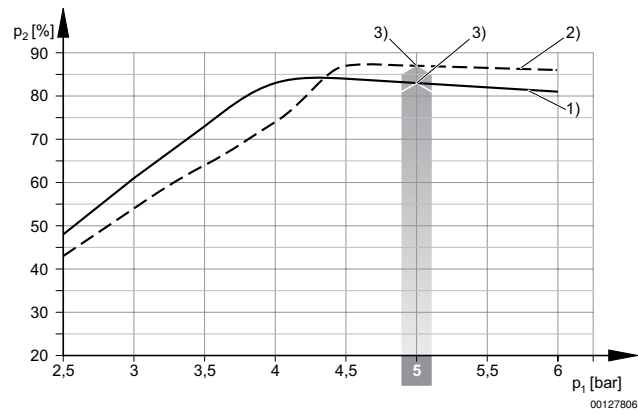
1) Ø nozzle 1.0 mm

2) Ø nozzle 1.5 mm

3) optimum working pressure

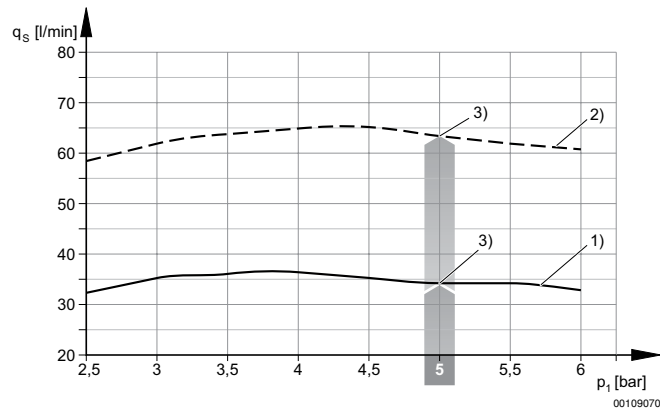
compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter

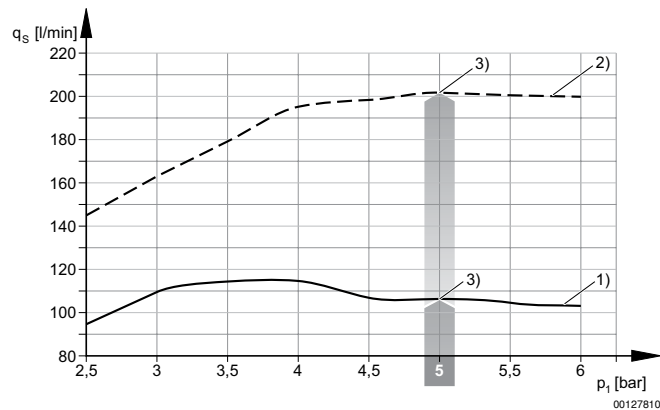


- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm
- 3) optimum working pressure

Suction capacity q_s depending on working pressure p_1



- 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 3.0 mm
- 3) optimum working pressure

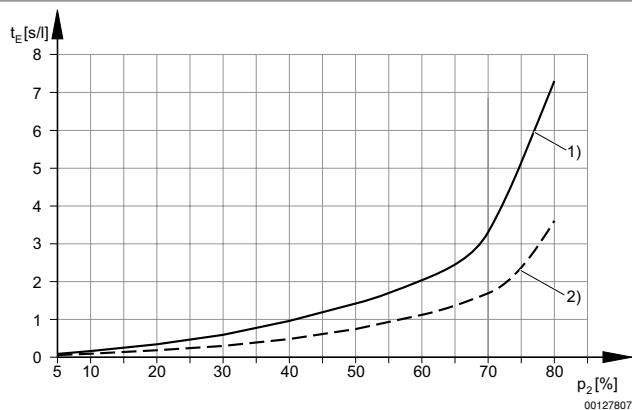
All dimensions in mm, unless specified otherwise.

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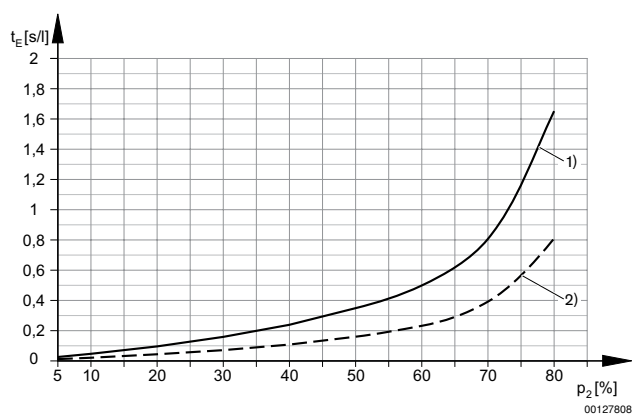
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compact ejector, Series ECS

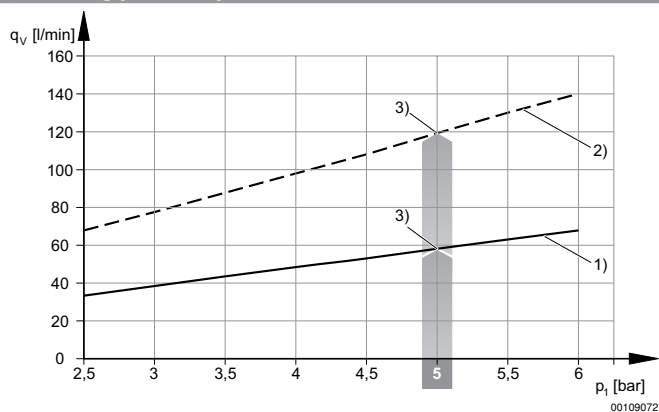
► with release valve ► with silencer ► with non-return valve, With filter

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


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



- 1) Ø nozzle 2.0 mm
2) Ø nozzle 3.0 mm

Air consumption q_v depending on working pressure p_1


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

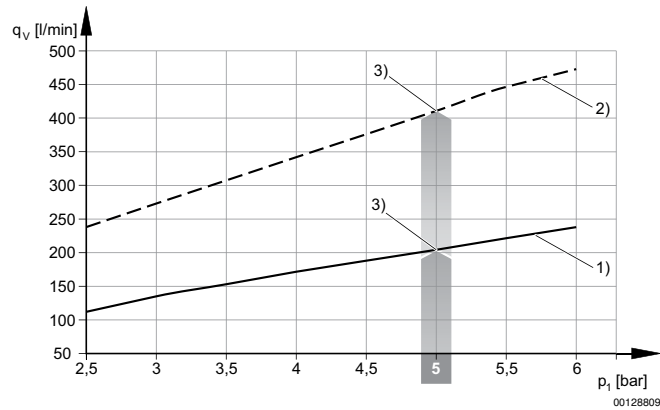
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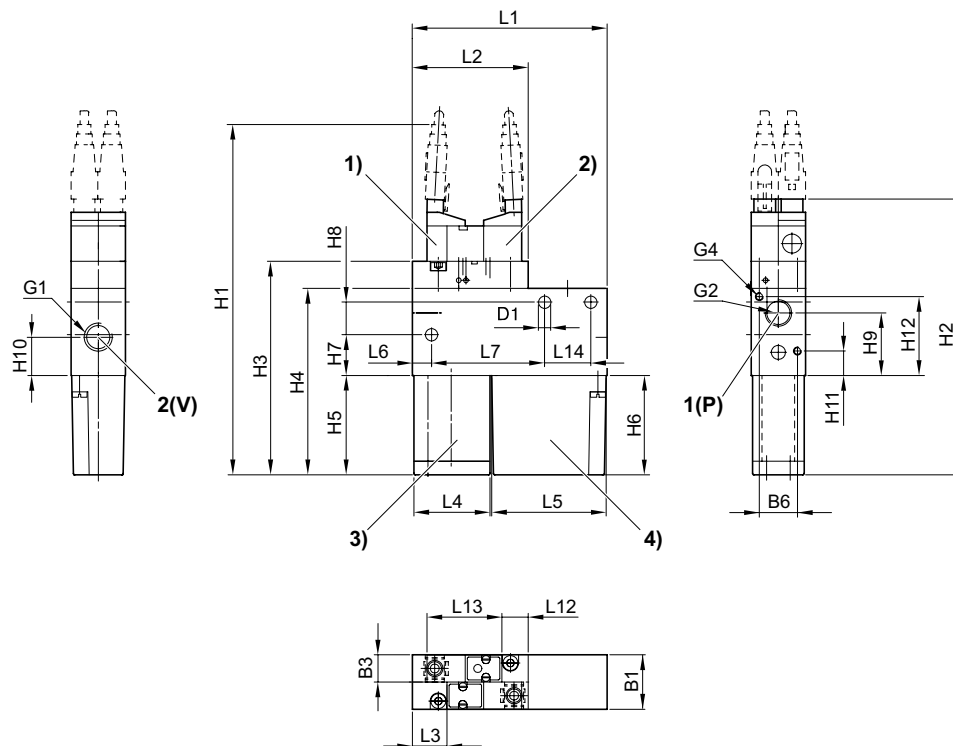
compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter



- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm
- 3) optimum working pressure

ECS-EC-10/-15



00109019

- 1) Solenoid valve for vacuum ON/OFF
- 2) Solenoid valve for release pulse
- 3) Silencers
- 4) Filter

Part No.	B1	B3	B6	D1	G1	G2	G4	H1	H2	H3	H4	H5
0821305132	20	10	15	4.5	G 1/8	G 1/8	M3	129	104,5	78.5	68.5	36.5
0821305137	20	10	15	4.5	G 1/8	G 1/8	M3	129	104,5	78.5	68.5	36.5
0821305133	20	10	15	4.5	G 1/8	G 1/8	M3	129	104,5	78.5	68.5	36.5

All dimensions in mm, unless specified otherwise.

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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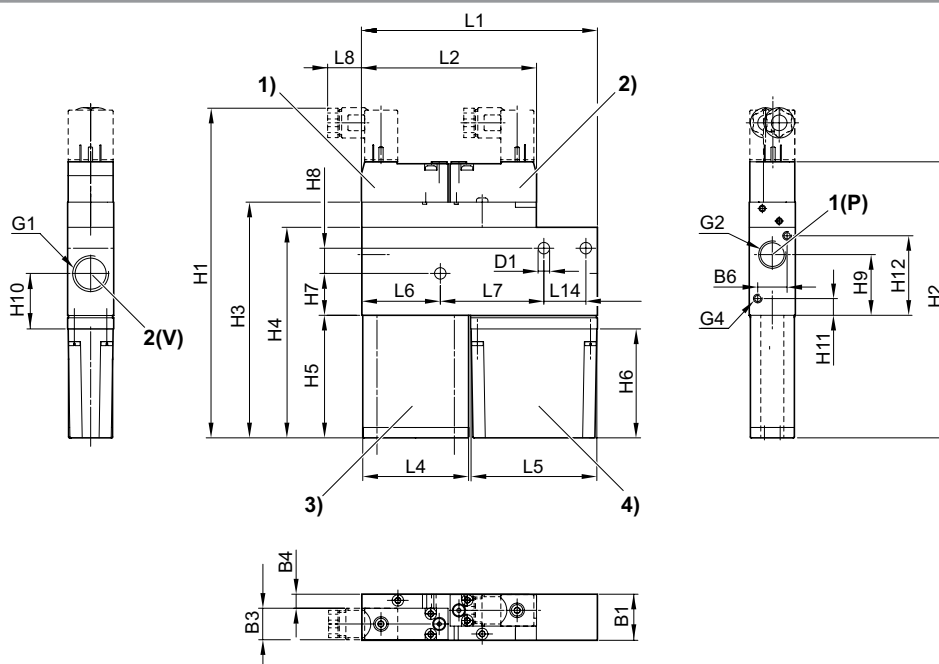
compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter

Part No.	B1	B3	B6	D1	G1	G2	G4	H1	H2	H3	H4	H5
0821305138	20	10	15	4.5	G 1/8	G 1/8	M3	129	104,5	78.5	68.5	36.5

Part No.	H6	H7	H8	H9	H10	H11	H12	L1	L2	L3	L4	L5
0821305132	36.5	15	12	23	14	9	29	71.5	42.5	12.6	28	42
0821305137	36.5	15	12	23	14	9	29	71.5	42.5	12.6	28	42
0821305133	36.5	15	12	23	14	9	29	71.5	42.5	12.6	28	42
0821305138	36.5	15	12	23	14	9	29	71.5	42.5	12.6	28	42

Part No.	L6	L7	L12	L13	L14							
0821305132	7	41.5	9.6	27.5	17							
0821305137	7	41.5	9.6	27.5	17							
0821305133	7	41.5	9.6	27.5	17							
0821305138	7	41.5	9.6	27.5	17							

ECS-EC-20/-30


- 1) Solenoid valve for vacuum ON/OFF
 2) Solenoid valve for release pulse
 3) Silencers
 4) Filter

00109020

Part No.	B1	B3	B4	B6	D1	G1	G2	G4	H1	H2	H3	H4
0821305142	22	15	6.8	14	5.5	G 3/8	G 1/4	M4	157.5	132.5	112.5	100.5
0821305147	22	15	6.8	14	5.5	G 3/8	G 1/4	M4	157.5	147.5	112.5	100.5
0821305143	22	15	6.8	14	5.5	G 3/8	G 1/4	M4	157.5	132.5	112.5	100.5
0821305148	22	15	6.8	14	5.5	G 3/8	G 1/4	M4	157.5	147.5	112.5	100.5

Part No.	H5	H6	H7	H8	H9	H10	H11	H12	L1	L2	L4	L5
0821305142	58.5	52	20	12	29	26.5	8	38	112.5	83.4	50.5	60
0821305147	73.5	52	20	12	29	26.5	8	38	112.5	83.4	50.5	60
0821305143	58.5	52	20	12	29	26.5	8	38	112.5	83.4	50.5	60
0821305148	73.5	52	20	12	29	26.5	8	38	112.5	83.4	50.5	60

All dimensions in mm, unless specified otherwise.

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Gripper and vacuum technology ► Vacuum generators
compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter

Part No.	L6	L7	L8	L14								
0821305142	37.5	49.5	16.5	20								
0821305147	37.5	49.5	16.5	20								
0821305143	37.5	49.5	16.5	20								
0821305148	37.5	49.5	16.5	20								

compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► 1x PNP and 1x analog



00103614

Ambient temperature min./max.	+32°F / +122°F
Medium temperature min./max.	+32°F / +140°F
Working pressure min./max.	37 psi / 87 psi
Medium	Compressed air

Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class:, with electrical connector	See table below
Duty cycle according to DIN VDE 0580 standard	100 %

Hysteresis	adjustable
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Switch output current Max.	125 mA

Materials:	
Housing	Aluminum, anodized
Seal	Acrylonitrile Butadiene Rubber
Silencers	Polyethylene

Technical Remarks

- Note: All data refers to an ambient pressure of 1013 mbar and an ambient temperature of 20°C.
- The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 37 °F.
- The oil content of compressed air must remain constant during the life cycle.

	Type	Nozzle Ø	Power consumption Solenoid valve	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Part No.
			DC				
		[inch]	[W]	[%]	[l/min]	[l/min]	
	ECS-EC-10-NO	0.04	1.3	84	0.04	0.05	0821305134
	ECS-EC-15-NO	0.06	1.3	85	0.07	0.12	0821305139
	ECS-EC-20-NO	0.08	2.5	83	0.12	0.19	0821305144
	ECS-EC-30-NO	0.12	2.5	87	0.2	0.42	0821305149
	ECS-EC-10-NC	0.04	1.3	84	0.04	0.05	0821305135
	ECS-EC-15-NC	0.06	1.3	85	0.07	0.12	0821305140
	ECS-EC-20-NC	0.08	2.5	83	0.12	0.19	0821305145
	ECS-EC-30-NC	0.12	2.5	87	0.2	0.42	0821305150

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Gripper and vacuum technology ▶ Vacuum generators

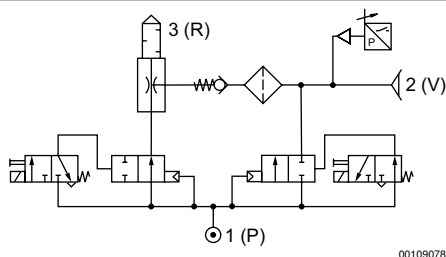
compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ 1x PNP and 1x analog

Part No.	Sound pressure level intake effect	Sound pressure level intake effect	Protection against overpressure (max.)	Weight	Note
	[dBA]	[dBA]	[psi]	[lbs]	
0821305134	66	68	72	0.6062	1); 3); 5)
0821305139	68	68		0.6062	1); 3); 5)
0821305144	76	78		1.03	2); 4); 6)
0821305149	82	82		1.07	2); 4); 6)
0821305135	66	68		0.6062	1); 3); 5)
0821305140	68	68		0.6062	1); 3); 5)
0821305145	76	78		1.03	2); 4); 6)
0821305150	82	82		1.07	2); 4); 6)

- 1) Nozzle material: Brass
2) Nozzle material: Aluminum
3) Protection class : , with electrical connector: IP40
4) Protection class : , with electrical connector: IP65
5) Electr. connection: Plug; Industrial plug connector; 2-pin
6) Electr. connection: Plug; EN 175301-803, form C
p.opt. = optimum working pressure

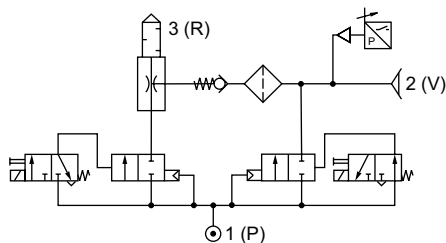
ECS-EC-...NO-C-S-VE



00109078

NO = ejector suction line open without current
C = Solenoid valve for release pulse
S = integrated non-return valve
VE = electronic vacuum switch

ECS-EC-...NC-C-S-VE

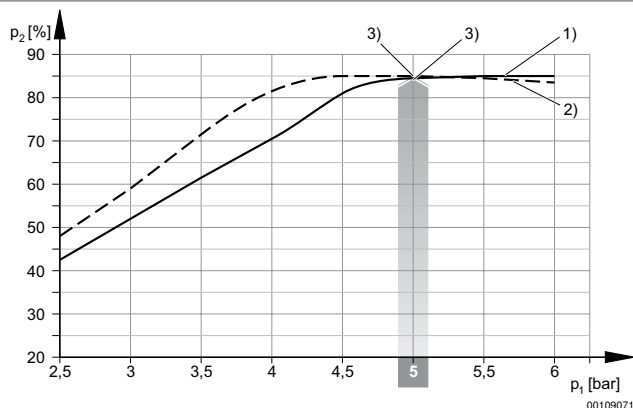


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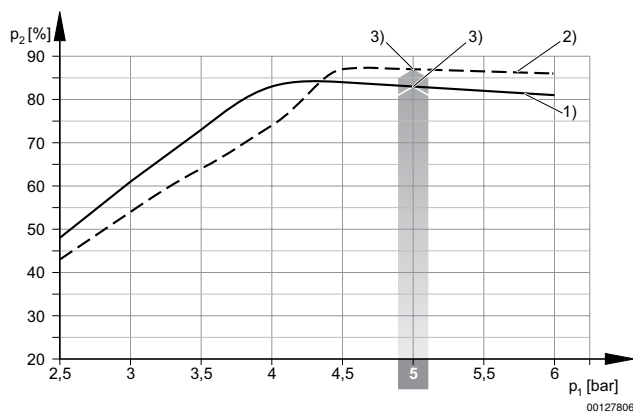
NC = ejector line closed without current
C = Solenoid valve for release pulse
S = integrated non-return valve
VE = electronic vacuum switch

compact ejector, Series ECS

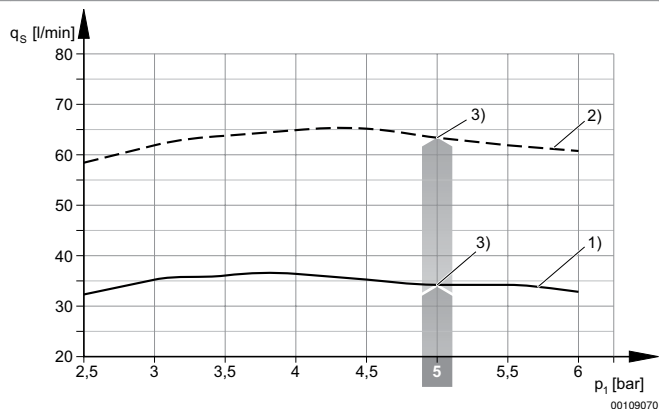
► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► 1x PNP and 1x analog

Vacuum p_2 depending on working pressure p_1


- 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 3.0 mm
- 3) optimum working pressure

Suction capacity q_s depending on working pressure p_1


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

All dimensions in mm, unless specified otherwise.

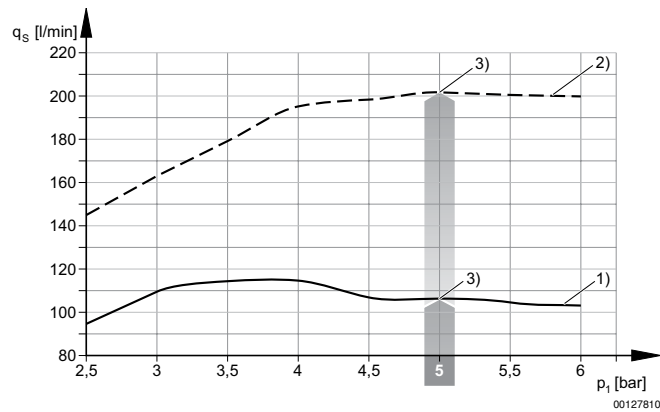
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Gripper and vacuum technology ▶ Vacuum generators

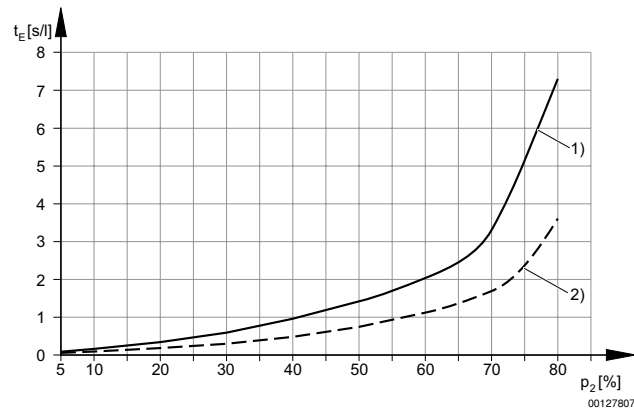
compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ 1x PNP and 1x analog

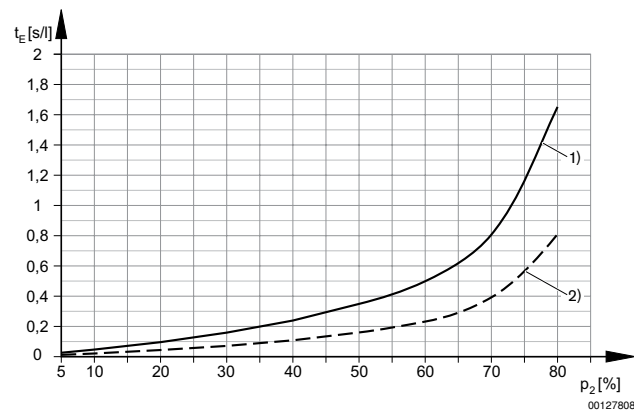


- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm
- 3) optimum working pressure

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



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



- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm

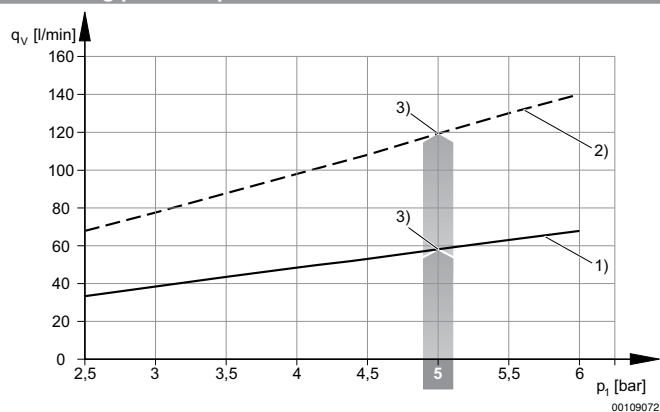
All dimensions in mm, unless specified otherwise.

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

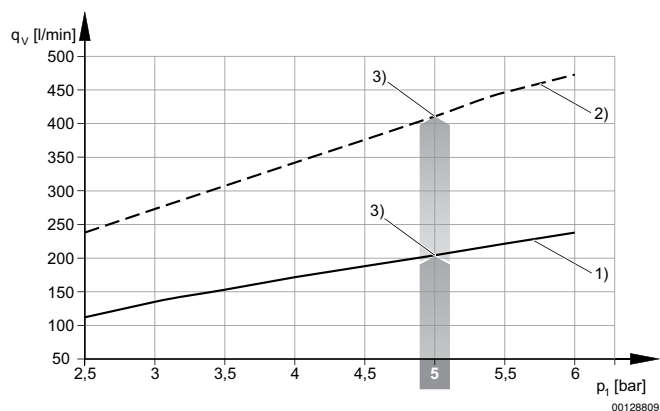
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compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► 1x PNP and 1x analog

 Air consumption q_v depending on working pressure p_1


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

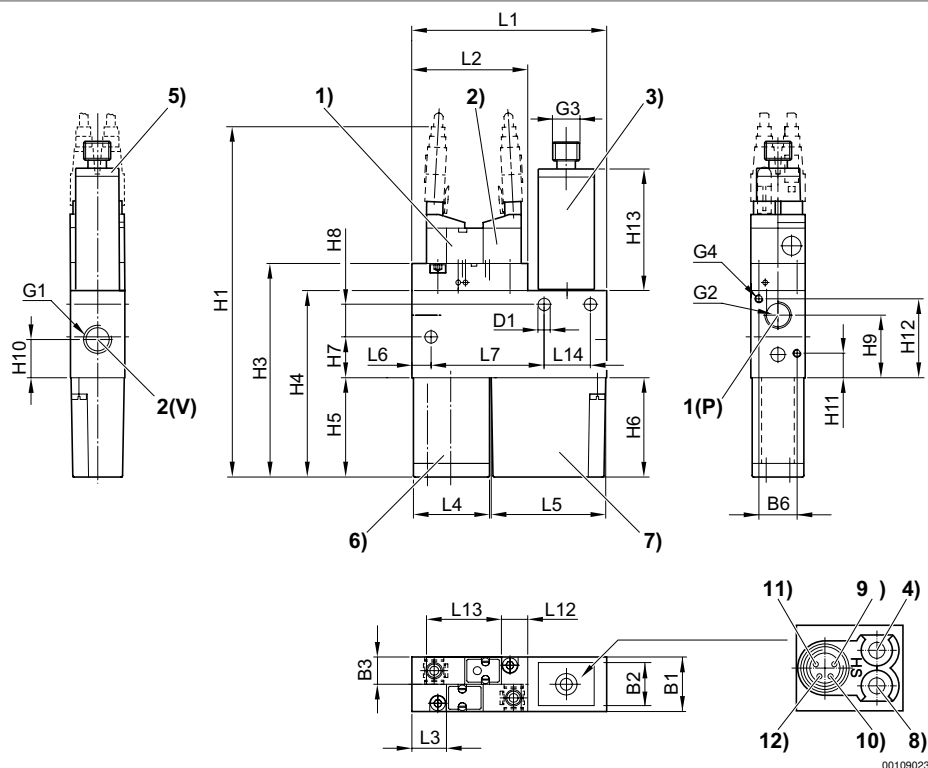


- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm
- 3) optimum working pressure

compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ 1x PNP and 1x analog

ECS-EC-10/-15



1) Vacuum ON/OFF solenoid valve; 2) Release pulse solenoid valve; 3) Vacuum switch; 4) Switching point setting for vacuum switch; 5) LED switching point indicator for vacuum switch; 6) Silencer; 7) Filter

8) Hysteresis setting; 9) + UB (pin 1); 10) analog output (pin 2); 11) switch output (pin 4); 12) 0 V (pin 3)

Part No.	B1	B2	B3	B6	D1	G1	G2	G3	G4	H1	H3	H4
0821305134	20	16	10	14	4.5	G 1/8	G 1/8	M8x1	M3	129	78.5	68.5
0821305139	20	16	10	14	4.5	G 1/8	G 1/8	M8x1	M3	129	78.5	68.5
0821305135	20	16	10	14	4.5	G 1/8	G 1/8	M8x1	M3	129	78.5	68.5
0821305140	20	16	10	14	4.5	G 1/8	G 1/8	M8x1	M3	129	78.5	68.5

Part No.	H5	H6	H7	H8	H9	H10	H11	H12	H13	L1	L2	L3
0821305134	36.5	36.5	15	12	23	14	9	29	45	71.5	42.5	12.6
0821305139	36.5	36.5	15	12	23	14	9	29	45	71.5	42.5	12.6
0821305135	36.5	36.5	15	12	23	14	9	29	45	71.5	42.5	12.6
0821305140	36.5	36.5	15	12	23	14	9	29	45	71.5	42.5	12.6

Part No.	L4	L5	L6	L7	L12	L13	L14					
0821305134	28	42	7	41.5	9,6	27,5	17					
0821305139	28	42	7	41.5	9,6	27,5	17					
0821305135	28	42	7	41.5	9,6	27,5	17					
0821305140	28	42	7	41.5	9,6	27,5	17					

All dimensions in mm, unless specified otherwise.

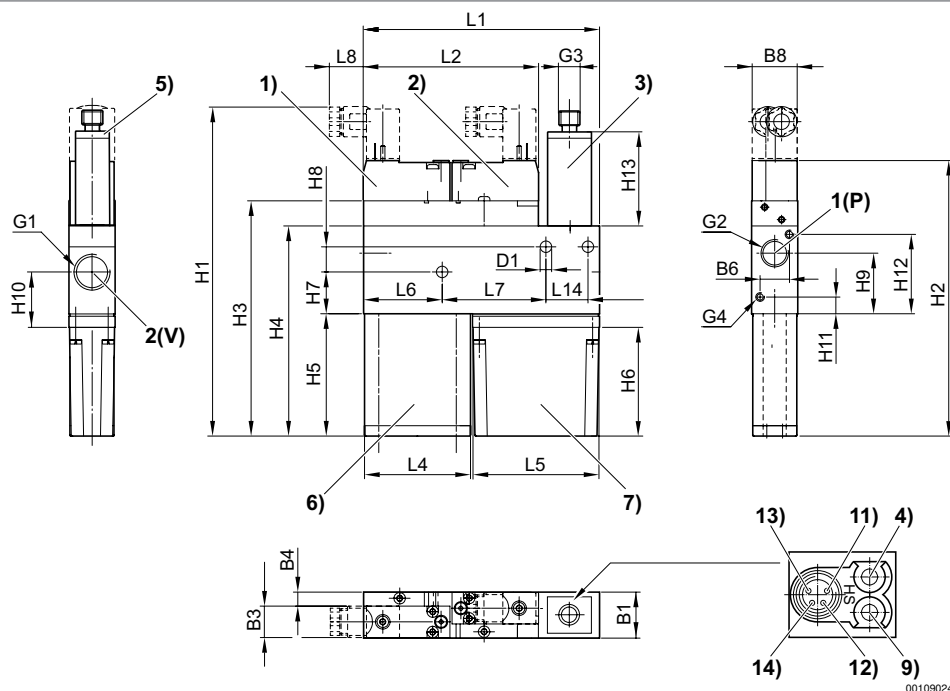
Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► 1x PNP and 1x analog

ECS-EC-20/-30



1) Vacuum ON/OFF solenoid valve; 2) Release pulse solenoid valve; 3) Vacuum switch; 4) Switching point setting for vacuum switch; 5) LED switching point indicator for vacuum switch; 6) Silencer; 7) Filter

8) Hysteresis setting; 9) + UB (pin 1); 10) analog output (pin 2); 11) switch output (pin 4); 12) 0 V (pin 3)

Part No.	B1	B3	B4	B6	B8	D1	G1	G2	G3	G4	H1	H2
0821305144	22	M8x1	6.8	18	22	5.5	G 3/8	G 1/4	M8x1	M4	157.5	132.5
0821305149	22	M8x1	6.8	18	22	5.5	G 3/8	G 1/4	M8x1	M4	157.5	147.5
0821305145	22	M8x1	6.8	18	22	5.5	G 3/8	G 1/4	M8x1	M4	157.5	132.5
0821305150	22	M8x1	6.8	18	22	5.5	G 3/8	G 1/4	M8x1	M4	157.5	147.5

Part No.	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	L1
0821305144	112.5	100.5	58.5	52	20	12	29	26.5	8	38	45	112.5
0821305149	112.5	100.5	73.5	52	20	12	29	26.5	8	38	45	112.5
0821305145	112.5	100.5	58.5	52	20	12	29	26.5	8	38	45	112.5
0821305150	112.5	100.5	73.5	52	20	12	29	26.5	8	38	45	112.5

Part No.	L2	L4	L5	L6	L7	L8	L14					
0821305144	83.5	50.5	60	37.5	49.5	16.5	20					
0821305149	83.5	50.5	60	37.5	49.5	16.5	20					
0821305145	83.5	50.5	60	37.5	49.5	16.5	20					
0821305150	83.5	50.5	60	37.5	49.5	16.5	20					

All dimensions in mm, unless specified otherwise.

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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Gripper and vacuum technology ▶ Vacuum generators

compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic



00116290

Ambient temperature min./max. +32 °F / +122 °F
Medium temperature min./max. +32 °F / +140 °F
Working pressure min./max. 37 psi / 87 psi
Medium Compressed air

Oil content of compressed air 0 mg/m³ - 1 mg/m³
Protection class:, with electrical connector See table below
Duty cycle according to DIN VDE 0580 standard 100 %

Hysteresis adjustable
Repeatability (% of full scale value) ± 1 %
DC operating voltage 24 V
Voltage tolerance DC - 5% / +10%
Switch output current Max. 180 mA

Materials:
Housing Aluminum, anodized
Seal Acrylonitrile Butadiene Rubber
Silencers Polyethylene

Technical Remarks

- Note: All data refers to an ambient pressure of 1013 mbar and an ambient temperature of 20 °C.
- The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 37 °F.
- The oil content of compressed air must remain constant during the life cycle.

	Type	Nozzle Ø	Power consumption	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Part No.
			Solenoid valve				
			DC				
		[inch]	[W]	[%]	[l/min]	[l/min]	
	ECS-EC-10-NO	0.04	1.3	84	0.04	0.05	0821305196
	ECS-EC-15-NO	0.06	1.3	85	0.07	0.12	0821305197
	ECS-EC-20-NO	0.08	2.5	83	0.12	0.19	0821305198
	ECS-EC-30-NO	0.12	2.5	87	0.2	0.42	0821305199
	ECS-EC-10-NC	0.04	1.3	84	0.04	0.05	0821305192
	ECS-EC-15-NC	0.06	1.3	85	0.07	0.12	0821305193
	ECS-EC-20-NC	0.08	2.5	83	0.12	0.19	0821305194
	ECS-EC-30-NC	0.12	2.5	87	0.2	0.42	0821305195

All dimensions in mm, unless specified otherwise.

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

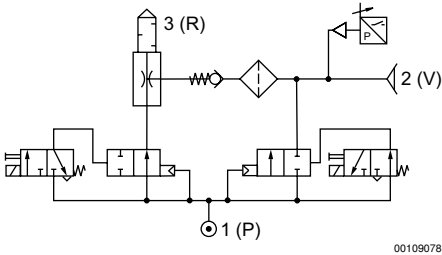
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compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic

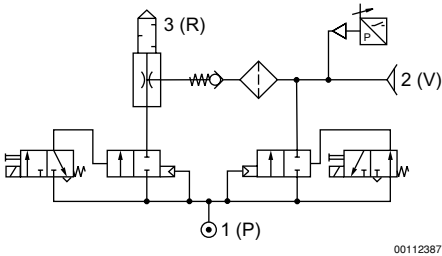
Part No.	Sound pressure level intake effect	Sound pressure level intake effect	Protection against overpressure (max.)	Weight	Note
	[dBA]	[dBA]	[psi]	[lbs]	
0821305196	66	68	72	0.6062	1); 3); 5)
0821305197	68	68		0.6062	1); 3); 5)
0821305198	76	76		1.03	2); 4); 6)
0821305199	82	82		1.07	2); 4); 6)
0821305192	66	68		0.6062	1); 3); 5)
0821305193	68	68		0.6062	1); 3); 5)
0821305194	76	76		1.03	2); 4); 6)
0821305195	82	82		1.07	2); 4); 6)
1) Nozzle material: Brass 2) Nozzle material: Aluminum 3) Protection class : , with electrical connector: IP40 4) Protection class : , with electrical connector: IP65 5) Electr. connection: Plug; Industrial plug connector; 2-pin 6) Electr. connection: Plug; EN 175301-803, form C p.opt. = optimum working pressure					

ECS-EC-...NO-C-S-VD



NO = ejector suction line open without current
C = Solenoid valve for release pulse
S = integrated non-return valve
VD = digital vacuum switch

ECS-EC-...NC-C-S-VD

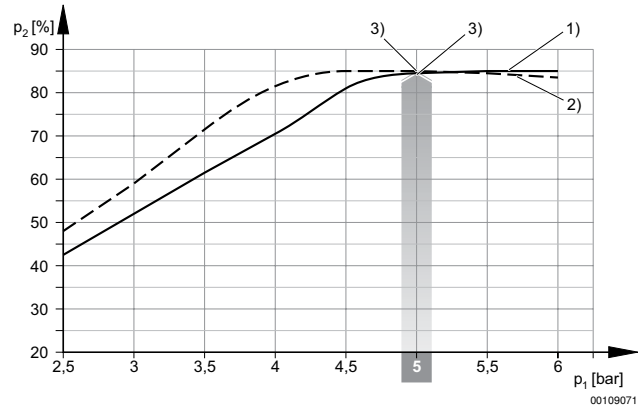


NC = ejector line closed without current
C = Solenoid valve for release pulse
S = integrated non-return valve
VD = digital vacuum switch

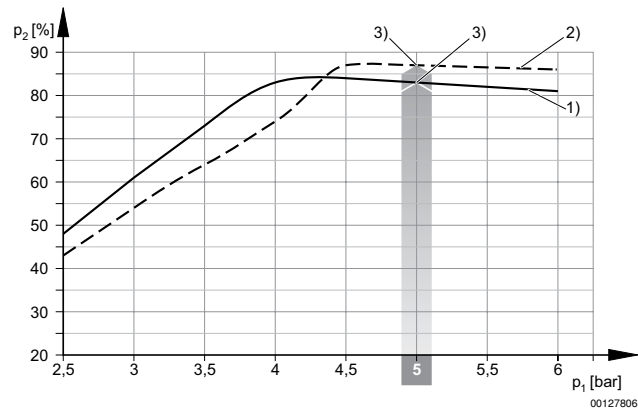
compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic

Vacuum p_2 depending on working pressure p_1

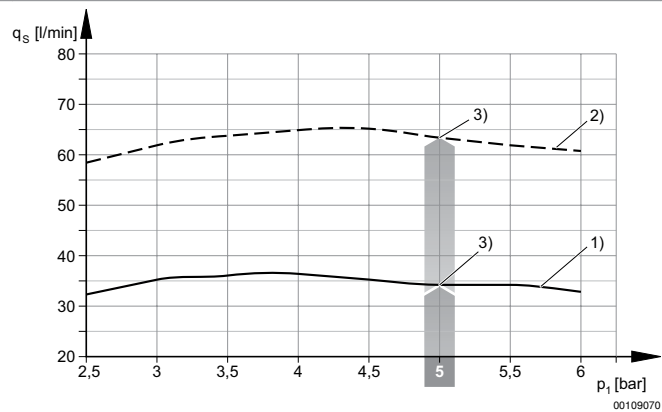


- 1) $\varnothing$ nozzle 1.0 mm
- 2) $\varnothing$ nozzle 1.5 mm
- 3) optimum working pressure



- 1) $\varnothing$ nozzle 2.0 mm
- 2) $\varnothing$ nozzle 3.0 mm
- 3) optimum working pressure

Suction capacity q_s depending on working pressure p_1



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

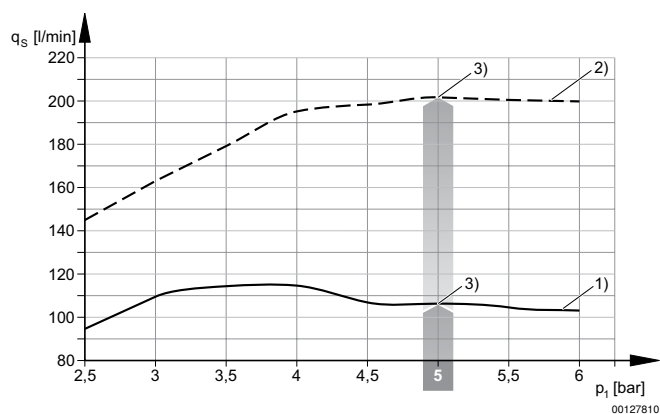
All dimensions in mm, unless specified otherwise.

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

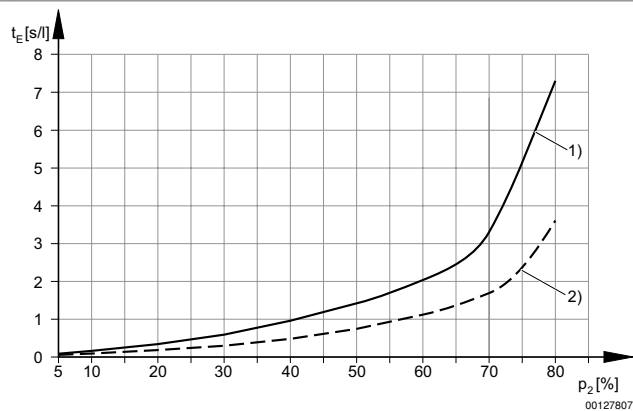
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compact ejector, Series ECS

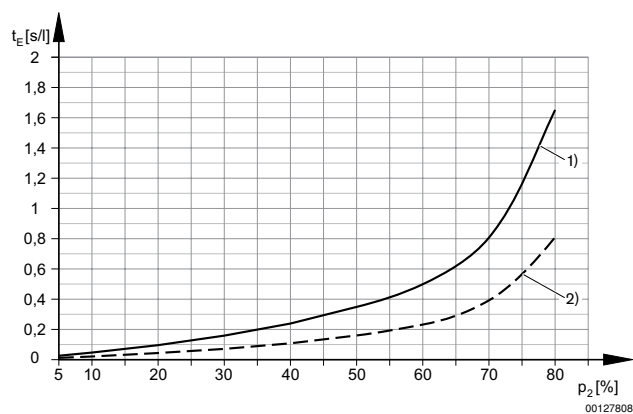
► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic



- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 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 1.0 mm
- 2) Ø nozzle 1.5 mm



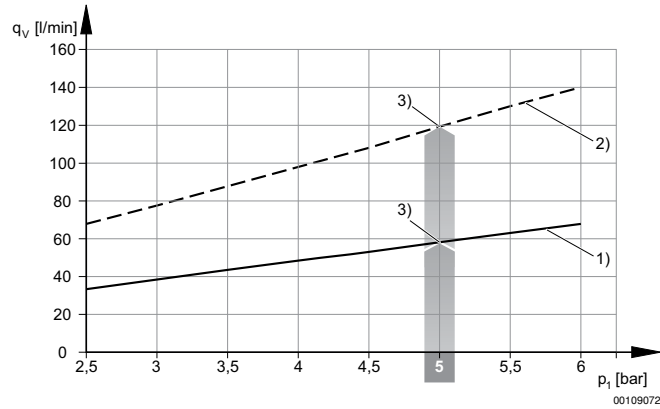
- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm

Gripper and vacuum technology ▶ Vacuum generators

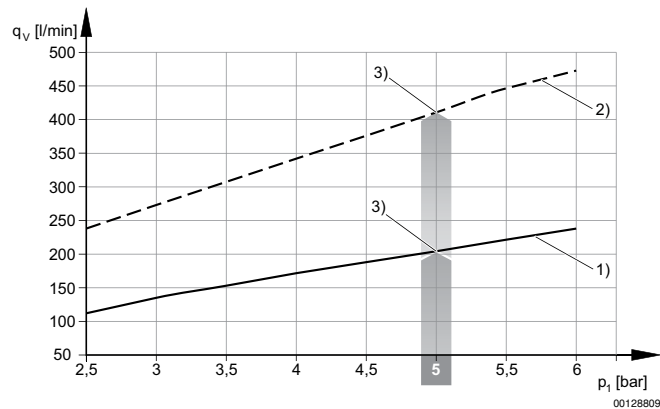
compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic

Air consumption q_v depending on working pressure p_1



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

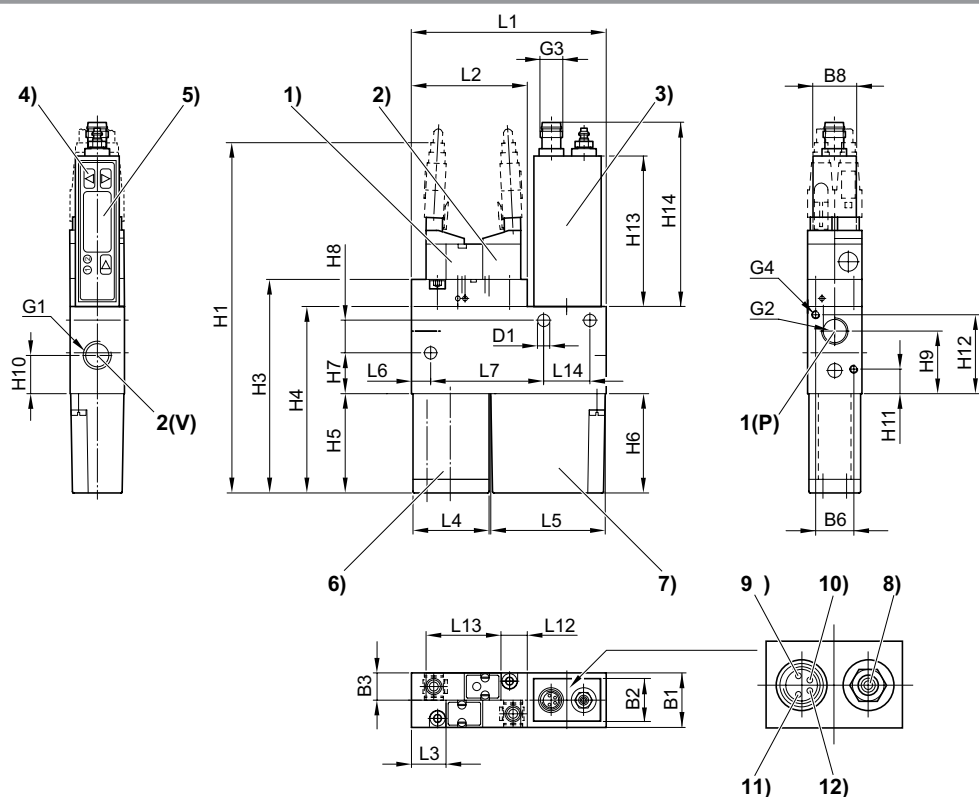


- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm
- 3) optimum working pressure

compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic

ECS-EC-10/-15



00132527

- 1) Vacuum ON/OFF solenoid valve; 2) Release pulse solenoid valve; 3) Vacuum switch; 4) Switching point setting for vacuum switch; 5) Vacuum switch display; 6) Silencer; 7) Filter
- 8) Vacuum switch ventilation port; 9) + UB (pin 1); 10) Switch output 2 (pin 2); 11) Switch output 1 (pin 4); 12) 0 V (pin 3)

Part No.	B1	B2	B3	B6	B8	D1	G1	G2	G3	G4	H1	H3
0821305196	20	16	10	14	20,2	4.5	G 1/8	G 1/8	M8x1	M3	129	78.5
0821305197	20	16	10	14	20,2	4.5	G 1/8	G 1/8	M8x1	M3	129	78.5
0821305192	20	16	10	14	20,2	4.5	G 1/8	G 1/8	M8x1	M3	129	78.5
0821305193	20	16	10	14	20,2	4.5	G 1/8	G 1/8	M8x1	M3	129	78.5

Part No.	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	L1
0821305196	68.5	36.5	36.5	15	12	23	14	9	29	56	68	71.5
0821305197	68.5	36.5	36.5	15	12	23	14	9	29	56	68	71.5
0821305192	68.5	36.5	36.5	15	12	23	14	9	29	56	68	71.5
0821305193	68.5	36.5	36.5	15	12	23	14	9	29	56	68	71.5

Part No.	L2	L3	L4	L5	L6	L7	L12	L13	L14			
0821305196	42.5	12.6	28	42	7	41.5	9,6	27,5	17			
0821305197	42.5	12.6	28	42	7	41.5	9,6	27,5	17			
0821305192	42.5	12.6	28	42	7	41.5	9,6	27,5	17			
0821305193	42.5	12.6	28	42	7	41.5	9,6	27,5	17			

All dimensions in mm, unless specified otherwise.

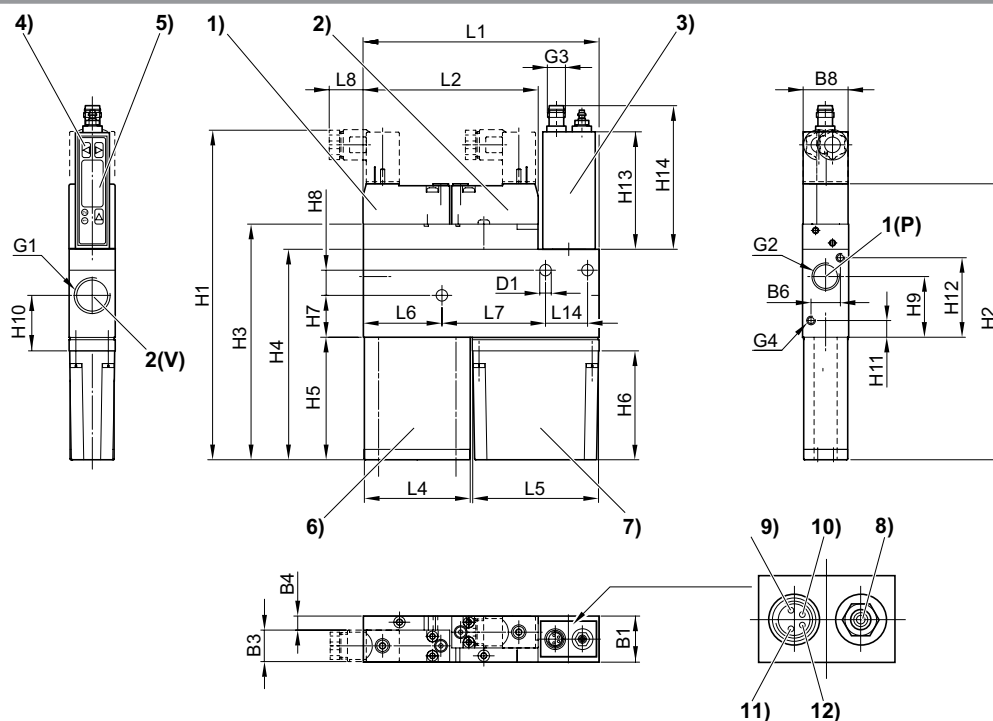
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compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic

ECS-EC-20/-30



00132528

1) Vacuum ON/OFF solenoid valve; 2) Release pulse solenoid valve; 3) Vacuum switch; 4) Switching point setting for vacuum switch; 5) Vacuum switch display; 6) Silencer; 7) Filter

8) Vacuum switch ventilation port; 9) + UB (pin 1); 10) Switch output 2 (pin 2); 11) Switch output 1 (pin 4); 12) 0 V (pin 3)

Part No.	B1	B3	B4	B6	B8	D1	G1	G2	G3	G4	H1	H2
0821305198	22	M8x1	6.8	18	22	5.5	G 3/8	G 1/4	M8x1	M4	157.5	132.5
0821305199	22	M8x1	6.8	18	22	5.5	G 3/8	G 1/4	M8x1	M4	157.5	132.5
0821305194	22	M8x1	6.8	18	22	5.5	G 3/8	G 1/4	M8x1	M4	157.5	147.5
0821305195	22	M8x1	6.8	18	22	5.5	G 3/8	G 1/4	M8x1	M4	157.5	147.5

Part No.	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14
0821305198	112.5	100.5	58.5	52	20	12	29	26.5	8	38	56	68
0821305199	112.5	100.5	58.5	52	20	12	29	26.5	8	38	56	68
0821305194	112.5	100.5	73.5	52	20	12	29	26.5	8	38	56	68
0821305195	112.5	100.5	73.5	52	20	12	29	26.5	8	38	56	68

Part No.	L1	L2	L4	L5	L6	L7	L8	L14				
0821305198	112.5	83.5	50.5	60	37.5	49.5	16.5	20				
0821305199	112.5	83.5	50.5	60	37.5	49.5	16.5	20				
0821305194	112.5	83.5	50.5	60	37.5	49.5	16.5	20				
0821305195	112.5	83.5	50.5	60	37.5	49.5	16.5	20				

All dimensions in mm, unless specified otherwise.

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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compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► 1x PNP and 1x analog ► with air economizer



00103615

Ambient temperature min./max.	+32°F / +122°F
Medium temperature min./max.	+32°F / +140°F
Working pressure min./max.	37 psi / 87 psi
Medium	Compressed air

Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Protection class:, with electrical connector	See table below
Duty cycle according to DIN VDE 0580 standard	100 %

Hysteresis	adjustable
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Switch output current Max.	125 mA

Materials:	
Housing	Aluminum, anodized
Seal	Acrylonitrile Butadiene Rubber
Silencers	Polyethylene

Technical Remarks

- Note: All data refers to an ambient pressure of 1013 mbar and an ambient temperature of 20°C.
- The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 37 °F.
- The oil content of compressed air must remain constant during the life cycle.

	Type	Nozzle Ø	Power consumption	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Part No.
			Solenoid valve				
			DC				
		[inch]	[W]	[%]	[l/min]	[l/min]	
	ECS-EC-10-NO	0.04	1.3	84	0.04	0.05	0821305136
	ECS-EC-15-NO	0.06	1.3	85	0.07	0.12	0821305141
	ECS-EC-20-NO	0.08	2.5	83	0.12	0.19	0821305146
	ECS-EC-30-NO	0.12	2.5	87	0.2	0.42	0821305151
	ECS-EC-10-NC	0.04	1.3	84	0.04	0.05	0821305188
	ECS-EC-15-NC	0.06	1.3	85	0.07	0.12	0821305189
	ECS-EC-20-NC	0.08	2.5	83	0.12	0.19	0821305190
	ECS-EC-30-NC	0.12	2.5	87	0.2	0.42	0821305191

All dimensions in mm, unless specified otherwise.

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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Gripper and vacuum technology ▶ Vacuum generators

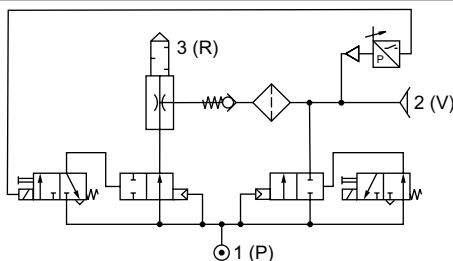
compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ 1x PNP and 1x analog ▶ with air economizer

Part No.	Sound pressure level intake effect	Sound pressure level intake effect	Protection against overpressure (max.)	Weight	Note
	[dBA]	[dBA]	[psi]	[lbs]	
0821305136	66	68	72	0.6062	1); 3); 5)
0821305141	68	68		0.6062	1); 3); 5)
0821305146	76	78		1.03	2); 4); 6)
0821305151	82	82		1.07	2); 4); 6)
0821305188	66	68		0.6062	1); 3); 5)
0821305189	68	68		0.6062	1); 3); 5)
0821305190	76	78		1.03	2); 4); 6)
0821305191	82	82		1.07	2); 4); 6)

- 1) Nozzle material: Brass
2) Nozzle material: Aluminum
3) Protection class : , with electrical connector: IP40
4) Protection class : , with electrical connector: IP65
5) Electr. connection: Plug; Industrial plug connector; 2-pin
6) Electr. connection: Plug; EN 175301-803, form C
p.opt. = optimum working pressure

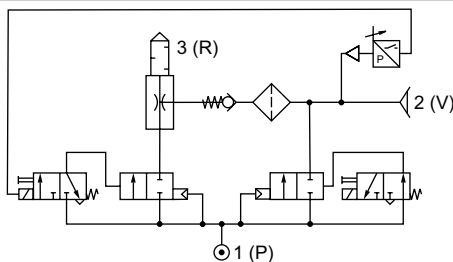
ECS-EC-...NO-C-S-RE



00109082

NO = ejector suction line open without current
C = Solenoid valve for release pulse
S = integrated non-return valve
RE = electronic vacuum switch with regulation (air economizer)

ECS-EC-...NC-C-S-RE



00112388

NC = ejector line closed without current
C = Solenoid valve for release pulse
S = integrated non-return valve
RE = electronic vacuum switch with regulation (air economizer)

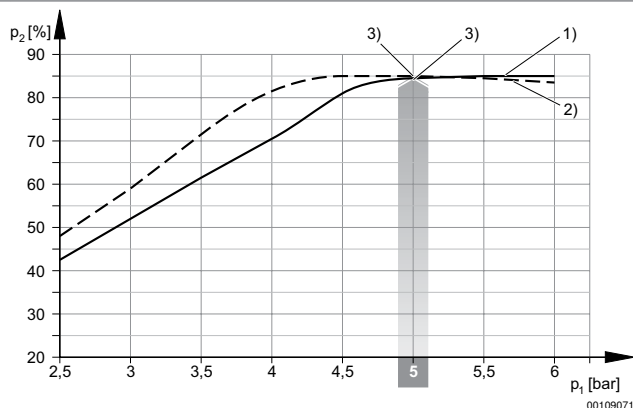
All dimensions in mm, unless specified otherwise.

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

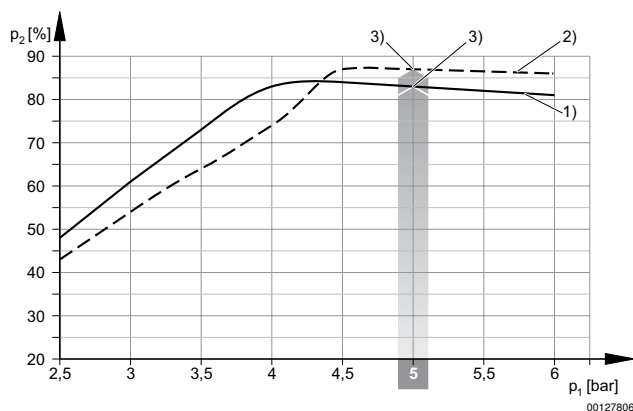
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compact ejector, Series ECS

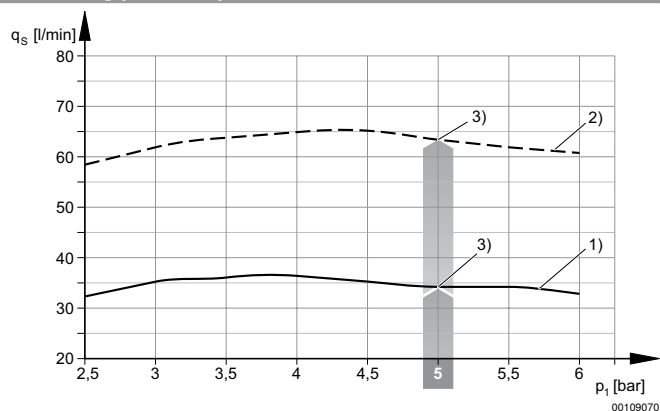
► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► 1x PNP and 1x analog ► with air economizer

Vacuum p_2 depending on working pressure p_1


- 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 3.0 mm
- 3) optimum working pressure

Suction capacity q_s depending on working pressure p_1


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

All dimensions in mm, unless specified otherwise.

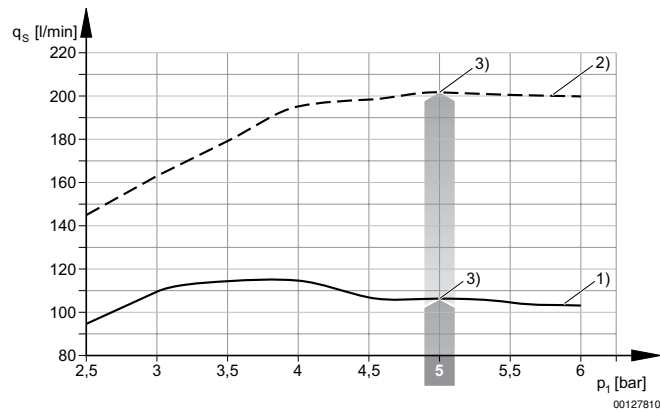
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Gripper and vacuum technology ▶ Vacuum generators

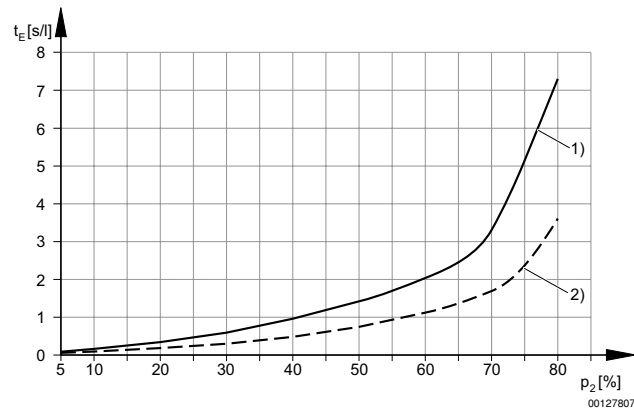
compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ 1x PNP and 1x analog ▶ with air economizer

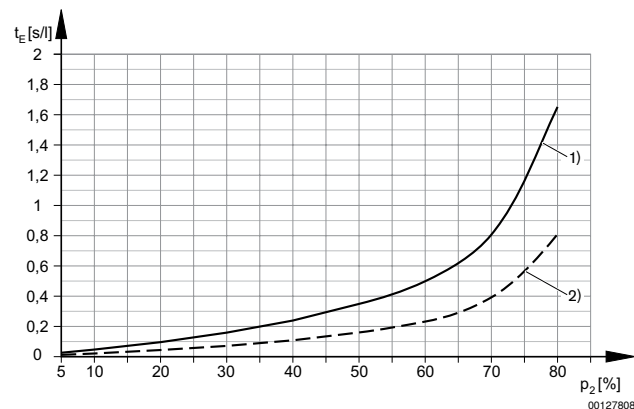


- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm
- 3) optimum working pressure

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



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



- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm

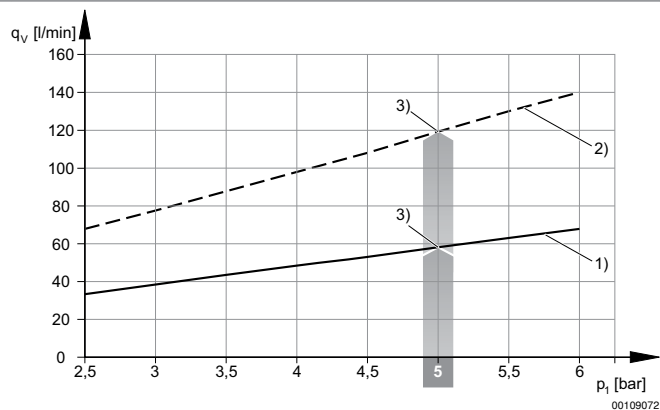
All dimensions in mm, unless specified otherwise.

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

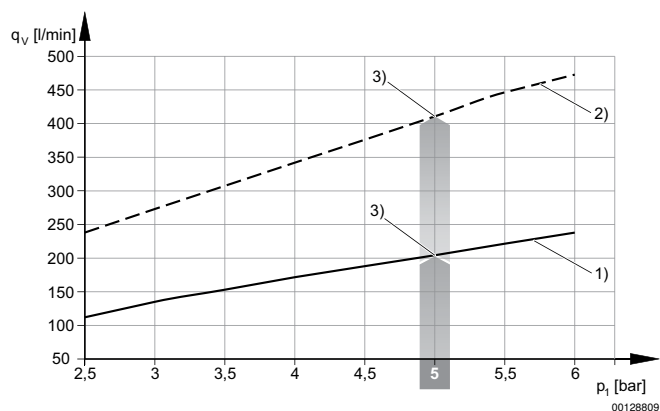
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compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► 1x PNP and 1x analog ► with air economizer

 Air consumption q_v depending on working pressure p_1


- 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 3.0 mm
- 3) optimum working pressure

00109025

- 1) Vacuum ON/OFF solenoid valve; 2) Release pulse solenoid valve; 3) Vacuum switch; 4) Switching point setting for vacuum switch; 5) LED switching point indicator for vacuum switch; 6) Silencer; 7) Filter
8) Hysteresis setting; 9) + UB (pin 1); 10) Analog output (pin 2); 11) Switch output (pin 4); 12) 0 V (pin 3); 13) Cable set for air economizer (included in scope of delivery)

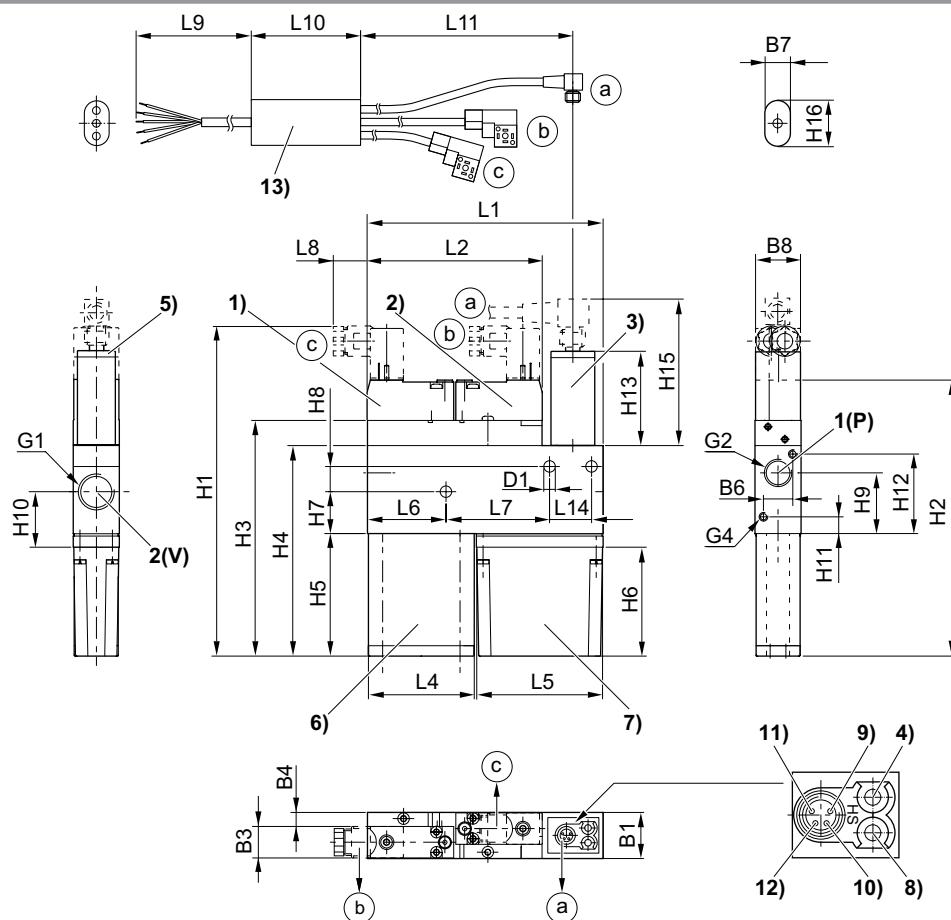
Part No.	L2	L3	L4	L5	L6	L7	L9	L10	L11	L12	L13	L14
0821305136	42.5	12.6	28	42	7	41.5	~5000	75	~280	9.6	27.5	17
0821305141	42.5	12.6	28	42	7	41.5	~5000	75	~280	9.6	27.5	17
0821305188	42.5	12.6	28	42	7	41.5	~5000	75	~280	9.6	27.5	17
0821305189	42.5	12.6	28	42	7	41.5	~5000	75	~280	9.6	27.5	17

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compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► 1x PNP and 1x analog ► with air economizer

ECS-EC-20/-30



00109026

- 1) Vacuum ON/OFF solenoid valve; 2) Release pulse solenoid valve; 3) Vacuum switch; 4) Switching point setting for vacuum switch; 5) LED switching point indicator for vacuum switch; 6) Silencer; 7) Filter
8) Hysteresis setting; 9) + UB (pin 1); 10) Analog output (pin 2); 11) Switch output (pin 4); 12) 0 V (pin 3); 13) Cable set for air economizer (included in scope of delivery)

Part No.	B1	B3	B4	B6	B7	B8	D1	G1	G2	G4	H1	H2
0821305146	22	15	6.8	14	17	21	5.5	G 3/8	G 1/4	M4	157.5	132,5
0821305151	22	15	6.8	14	17	21	5.5	G 3/8	G 1/4	M4	157.5	132,5
0821305190	22	15	6.8	14	17	21	5.5	G 3/8	G 1/4	M4	157.5	147,5
0821305191	22	15	6.8	14	17	21	5.5	G 3/8	G 1/4	M4	157.5	147,5

Part No.	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H15
0821305146	112.5	100.5	58,5	52	20	12	29	26.5	8	38	45	67
0821305151	112.5	100.5	58,5	52	20	12	29	26.5	8	38	45	67
0821305190	112.5	100.5	73.5	52	20	12	29	26.5	8	38	45	67
0821305191	112.5	100.5	73.5	52	20	12	29	26.5	8	38	45	67

Part No.	H16	L1	L2	L4	L5	L6	L7	L8	L9	L10	L11	L14
0821305146	31	112.5	83,4	50.5	60	37.5	49.5	16,5	~5000	75	~350	20
0821305151	31	112.5	83,4	50.5	60	37.5	49.5	16,5	~5000	75	~350	20
0821305190	31	112.5	83,4	50.5	60	37.5	49.5	16,5	~5000	75	~350	20
0821305191	31	112.5	83,4	50.5	60	37.5	49.5	16,5	~5000	75	~350	20

All dimensions in mm, unless specified otherwise.

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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Gripper and vacuum technology ▶ Vacuum generators

compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ with air economizer



00103615

Ambient temperature min./max.	+32 °F / +122 °F
Medium temperature min./max.	+32 °F / +140 °F
Working pressure min./max.	37 psi / 87 psi
Medium	Compressed air

Oil content of compressed air	0 mg/m³ - 1 mg/m³
Protection class:, with electrical connector	See table below
Duty cycle according to DIN VDE 0580 standard	100 %

Hysteresis	adjustable
Repeatability (% of full scale value)	± 1 %
DC operating voltage	24 V
Voltage tolerance DC	- 5% / +10%
Switch output current Max.	180 mA

Materials:	
Housing	Aluminum, anodized
Seal	Acrylonitrile Butadiene Rubber
Silencers	Polyethylene

Technical Remarks

- Note: All data refers to an ambient pressure of 1013 mbar and an ambient temperature of 20 °C.
- The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 37 °F.
- The oil content of compressed air must remain constant during the life cycle.

	Type	Nozzle Ø	Power consumption Solenoid valve	Max. vacuum level at p.opt	Max. suction capacity	Air consumption at p.opt.	Part No.
			DC				
		[inch]	[W]	[%]	[l/min]	[l/min]	
	ECS-EC-10-NO	0.04	1.3	84	0.04	0.05	0821305209
	ECS-EC-15-NO	0.06	1.3	85	0.07	0.12	0821305210
	ECS-EC-20-NO	0.08	2.5	83	0.12	0.19	0821305211
	ECS-EC-30-NO	0.12	2.5	87	0.2	0.42	0821305212
	ECS-EC-10-NC	0.04	1.3	84	0.04	0.05	0821305213
	ECS-EC-15-NC	0.06	1.3	85	0.07	0.12	0821305214
	ECS-EC-20-NC	0.08	2.5	83	0.12	0.19	0821305215
	ECS-EC-30-NC	0.12	2.5	87	0.2	0.42	0821305216

All dimensions in mm, unless specified otherwise.

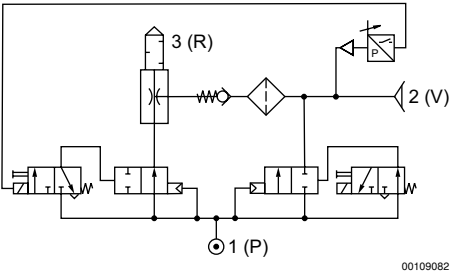
Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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compact ejector, Series ECS
▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ with air economizer

Part No.	Sound pressure level intake effect	Sound pressure level intake effect	Protection against overpressure (max.)	Weight	Note
	[dBA]	[dBA]	[psi]	[lbs]	
0821305209	66	68	72	0.6062	1); 3); 5)
0821305210	68	68		0.6062	1); 3); 5)
0821305211	76	76		1.03	2); 4); 6)
0821305212	82	82		1.07	2); 4); 6)
0821305213	66	68		0.6062	1); 3); 5)
0821305214	68	68		0.6062	1); 3); 5)
0821305215	76	76		1.03	2); 4); 6)
0821305216	82	82		1.07	2); 4); 6)
1) Nozzle material: Brass 2) Nozzle material: Aluminum 3) Protection class : , with electrical connector: IP40 4) Protection class : , with electrical connector: IP65 5) Electr. connection: Plug; Industrial plug connector; 2-pin 6) Electr. connection: Plug; EN 175301-803, form C p.opt. = optimum working pressure					

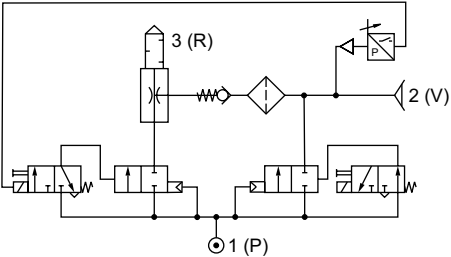
ECS-EC-...NO-C-S-RD



00109082

NO = ejector suction line open without current
C = Solenoid valve for release pulse
S = integrated non-return valve
RD = digital vacuum switch with regulation (air economizer)

ECS-EC-...NC-C-S-RD



00112388

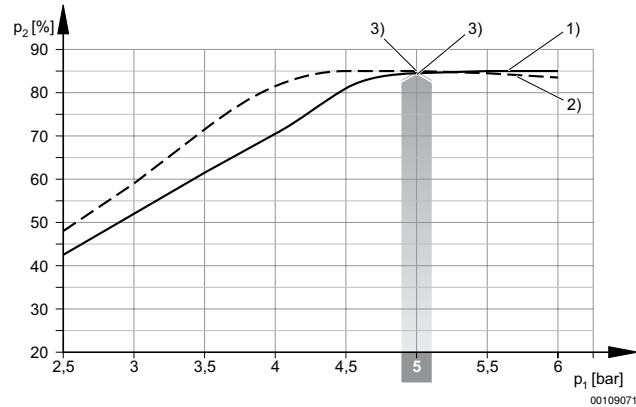
NC = ejector line closed without current
C = Solenoid valve for release pulse
S = integrated non-return valve
RD = digital vacuum switch with regulation (air economizer)

Gripper and vacuum technology ▶ Vacuum generators

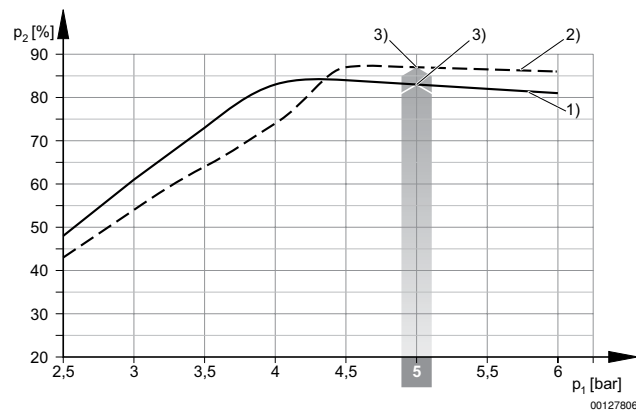
compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ with air economizer

Vacuum p_2 depending on working pressure p_1

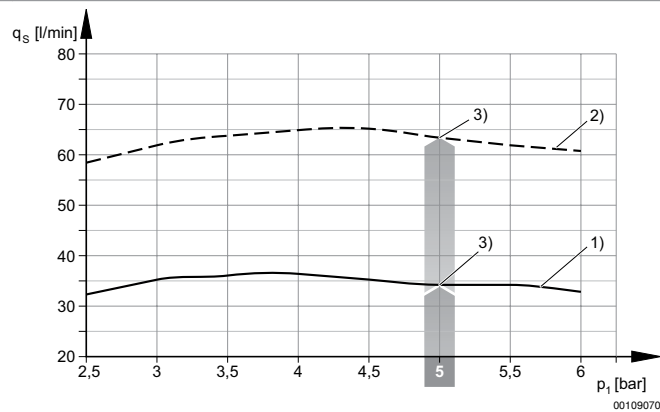


- 1) $\varnothing$ nozzle 1.0 mm
- 2) $\varnothing$ nozzle 1.5 mm
- 3) optimum working pressure



- 1) $\varnothing$ nozzle 2.0 mm
- 2) $\varnothing$ nozzle 3.0 mm
- 3) optimum working pressure

Suction capacity q_s depending on working pressure p_1



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

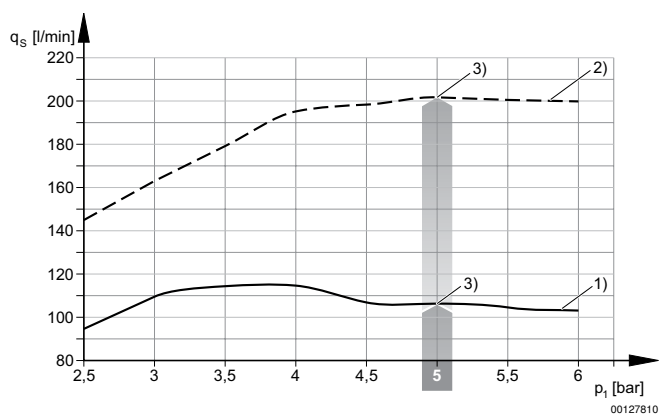
All dimensions in mm, unless specified otherwise.

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

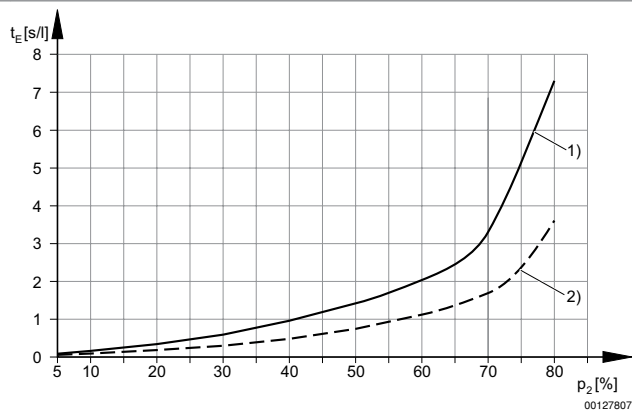
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compact ejector, Series ECS

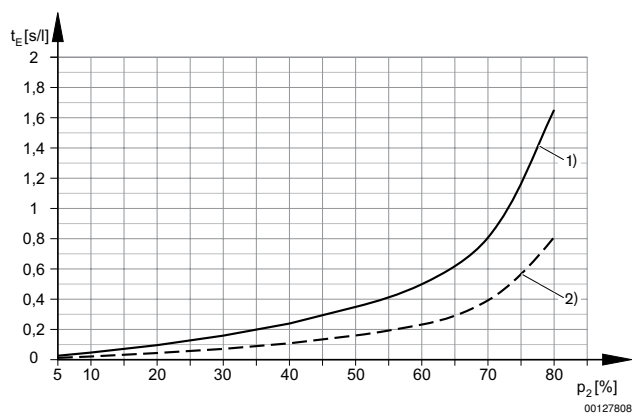
► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► with air economizer



- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 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 1.0 mm
- 2) Ø nozzle 1.5 mm



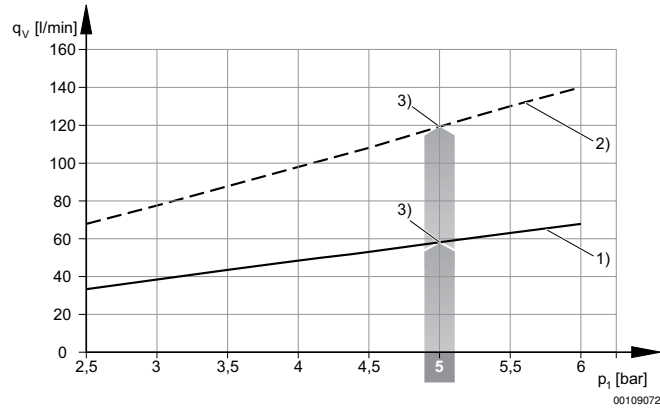
- 1) Ø nozzle 2.0 mm
- 2) Ø nozzle 3.0 mm

Gripper and vacuum technology ▶ Vacuum generators

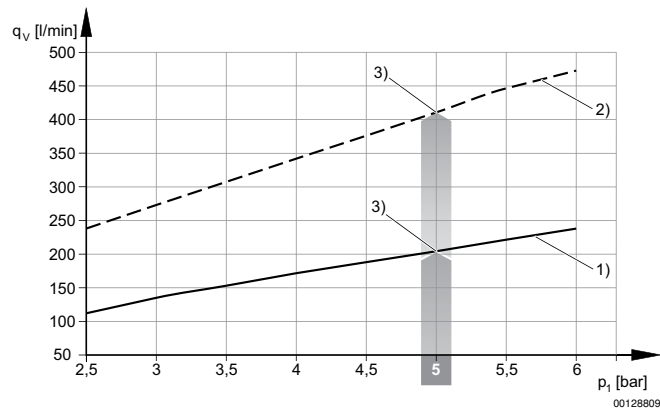
compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ with air economizer

Air consumption q_v depending on working pressure p_1



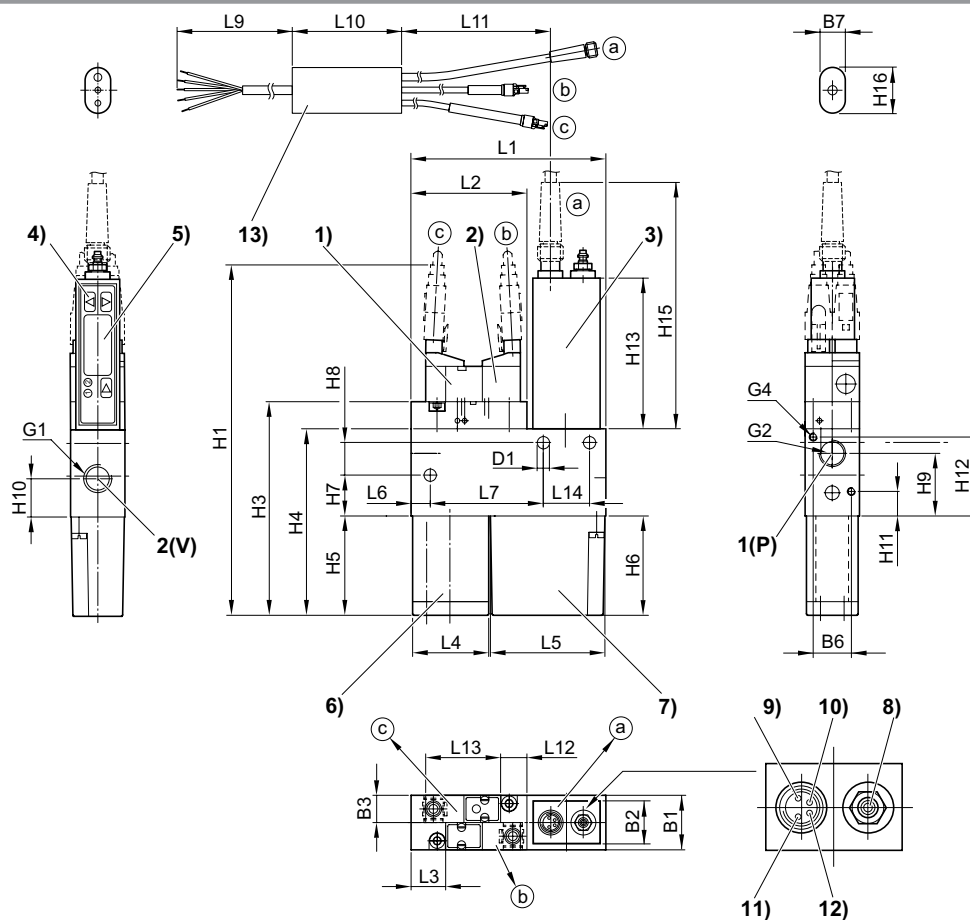
- 1) $\varnothing$ nozzle 1.0 mm
- 2) $\varnothing$ nozzle 1.5 mm
- 3) optimum working pressure



- 1) $\varnothing$ nozzle 2.0 mm
- 2) $\varnothing$ nozzle 3.0 mm
- 3) optimum working pressure

compact ejector, Series ECS

► with release valve ► with silencer ► with non-return valve, With filter ► vacuum switch: electronic ► with air economizer

ECS-EC-10/-15


00132529

- 1) Vacuum ON/OFF solenoid valve; 2) Release pulse solenoid valve; 3) Vacuum switch; 4) Switching point setting for vacuum switch; 5) Vacuum switch display; 6) Silencer; 7) Filter
 8) Vacuum switch ventilation port; 9) + UB (pin 1); 10) Switch output 2 (pin 2); 11) 0 V (pin 3); 12) Switch output 1 (pin 4); 13) Cable set for air economizer (included in scope of delivery)

Part No.	B1	B2	B3	B6	B7	D1	G1	G2	G4	H1	H3	H4
0821305209	20	16	10	14	17	4.5	G 1/8	G 1/8	M3	129	78.5	68.5
0821305210	20	16	10	14	17	4.5	G 1/8	G 1/8	M3	129	78.5	68.5
0821305213	20	16	10	14	17	4.5	G 1/8	G 1/8	M3	129	78.5	68.5
0821305214	20	16	10	14	17	4.5	G 1/8	G 1/8	M3	129	78.5	68.5

Part No.	H5	H6	H7	H8	H9	H10	H11	H12	H13	H15	H16	L1
0821305209	36.5	36.5	15	12	23	14	9	29	56	92	31	71.5
0821305210	36.5	36.5	15	12	23	14	9	29	56	92	31	71.5
0821305213	36.5	36.5	15	12	23	14	9	29	56	92	31	71.5
0821305214	36.5	36.5	15	12	23	14	9	29	56	92	31	71.5

Part No.	L2	L3	L4	L5	L6	L7	L9	L10	L11	L12	L13	L14
0821305209	42.5	12.6	28	42	7	41.5	~5000	75	~280	9.6	27.5	17
0821305210	42.5	12.6	28	42	7	41.5	~5000	75	~280	9.6	27.5	17
0821305213	42.5	12.6	28	42	7	41.5	~5000	75	~280	9.6	27.5	17
0821305214	42.5	12.6	28	42	7	41.5	~5000	75	~280	9.6	27.5	17

All dimensions in mm, unless specified otherwise.

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

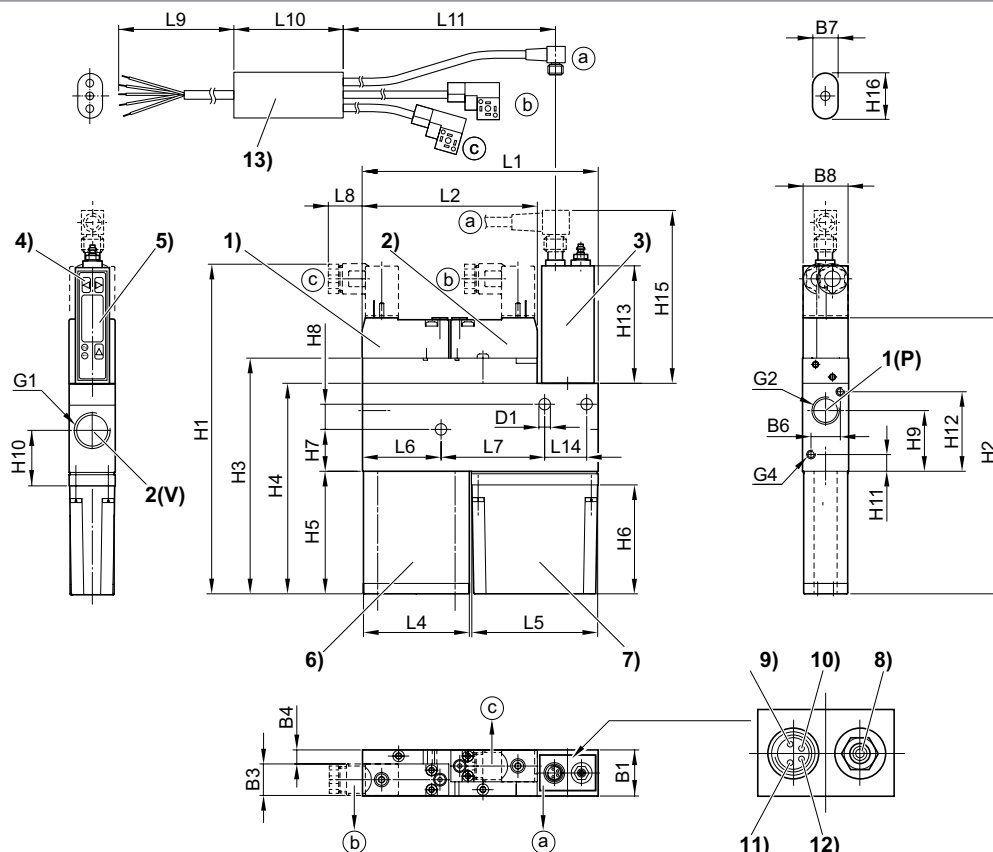
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Gripper and vacuum technology ▶ Vacuum generators

compact ejector, Series ECS

▶ with release valve ▶ with silencer ▶ with non-return valve, With filter ▶ vacuum switch: electronic ▶ with air economizer

ECS-EC-20/-30



00132530

- 1) Vacuum ON/OFF solenoid valve; 2) Release pulse solenoid valve; 3) Vacuum switch; 4) Switching point setting for vacuum switch; 5) Vacuum switch display; 6) Silencer; 7) Filter
8) Vacuum switch ventilation port; 9) + UB (pin 1); 10) Switch output 2 (pin 2); 11) 0 V (pin 3); 12) Switch output 1 (pin 4); 13) Cable set for air economizer (included in scope of delivery)

Part No.	B1	B3	B4	B6	B7	B8	D1	G1	G2	G4	H1	H2
0821305211	22	15	6.8	14	17	21	5.5	G 3/8	G 1/4	M4	157.5	132.5
0821305212	22	15	6.8	14	17	21	5.5	G 3/8	G 1/4	M4	157.5	132.5
0821305215	22	15	6.8	14	17	21	5.5	G 3/8	G 1/4	M4	157.5	147.5
0821305216	22	15	6.8	14	17	21	5.5	G 3/8	G 1/4	M4	157.5	147.5

Part No.	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H15
0821305211	112.5	100.5	58.5	52	20	12	29	26.5	8	38	56	78
0821305212	112.5	100.5	58.5	52	20	12	29	26.5	8	38	56	78
0821305215	112.5	100.5	73.5	52	20	12	29	26.5	8	38	56	78
0821305216	112.5	100.5	73.5	52	20	12	29	26.5	8	38	56	78

Part No.	H16	L1	L2	L4	L5	L6	L7	L8	L9	L10	L11	L14
0821305211	31	112.5	83.4	50.5	60	37.5	49.5	16.5	~5000	75	~350	20
0821305212	31	112.5	83.4	50.5	60	37.5	49.5	16.5	~5000	75	~350	20
0821305215	31	112.5	83.4	50.5	60	37.5	49.5	16.5	~5000	75	~350	20
0821305216	31	112.5	83.4	50.5	60	37.5	49.5	16.5	~5000	75	~350	20

All dimensions in mm, unless specified otherwise.

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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Series ECS
 Accessories

Connector with cable, Series CN1
 ► 8 mm ► ISO 15217, form C ► with cable


24154

Ambient temperature min./max.

-4 °F / +176 °F

Protection class

IP67

Tightening torque for mounting screws

0.3 ft./lbs.

Materials:

Seals

caoutchouc/butadiene caoutchouc

Technical Remarks

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

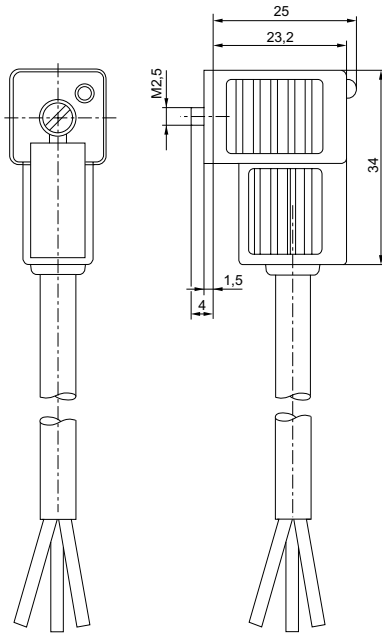
	Operational voltage		Max. current	Protective circuit	Contact assignment	LED status display	Cable length L	Part No.
	[V AC]	[V DC]	[A]				[ft.]	
	24	24	6	Z-diode	2+E	Yellow	9.84	1834484204
							9.84	1834484205
							16.4	1834484206
							16.4	1834484207

Part No.	Weight	Fig.	Note
	[lbs]		
1834484204	0.4078	Fig. 1	1)
1834484205	0.4078	Fig. 2	
1834484206	0.6437	Fig. 1	
1834484207	0.6569	Fig. 2	

1) Scope of delivery incl. flat gasket

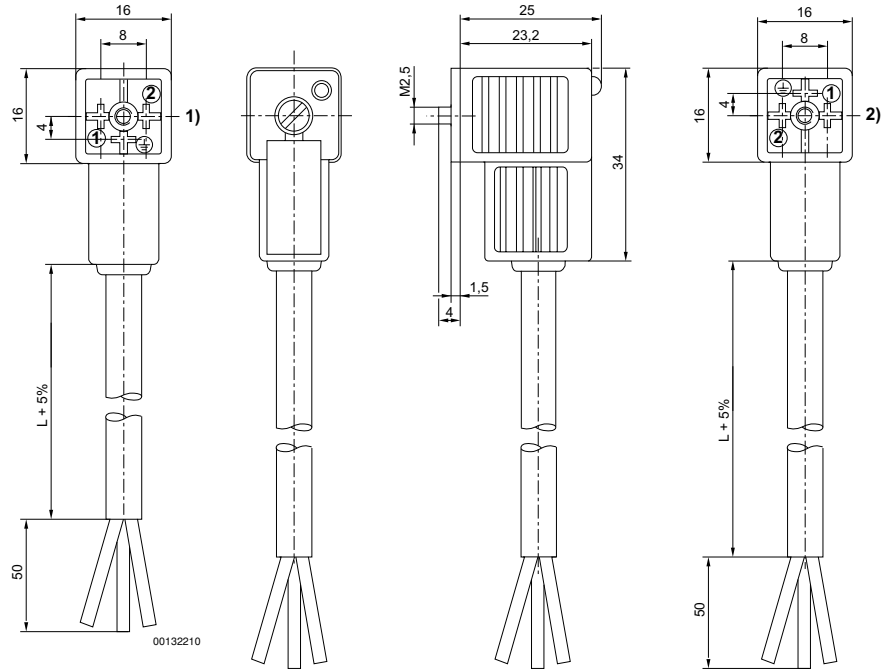
Series ECS Accessories

Fig. 1



1) 0° female insert

Fig. 2



2) 180° female insert

Connecting cable, Series CN2

► open cable ends, 4-pin



00107009_c

Ambient temperature min./max.

-40°F / +185°F

Protection class

IP65

Wire cross-section

0 in²

Materials:

Cable sheath

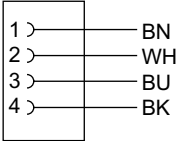
Polyurethane

Technical Remarks

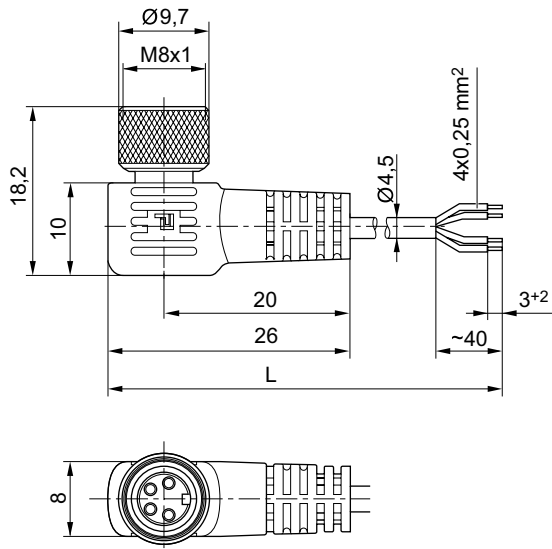
- The specified protection class is only valid in assembled and tested state.

Series ECS

Accessories

	Electrical interface	Operational voltage	Number of wires	Cable-Ø	Cable length L	Part No.
	[Port 1]	[V DC]		[inch]	[ft.]	
	Socket, M8x1, 4-pin, straight	24	4	0.18	9.84	1834484144
	Socket, M8x1, 4-pin, straight				16.4	1834484146
	Socket, M8x1, 4-pin, angled				9.84	1834484145
	Socket, M8x1, 4-pin, angled				16.4	1834484147

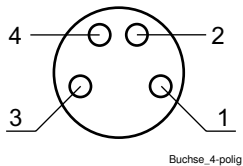
Dimensions



00127634_2

L = length

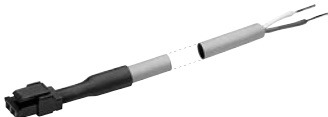
Pin assignment



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

Series ECS
Accessories

Connecting cable, Series CN2
▶ RJ plug connector, Halogen-free ▶ Socket, 2-pin, straight ▶ without wire end ferrule, tin-plated, 2-pin



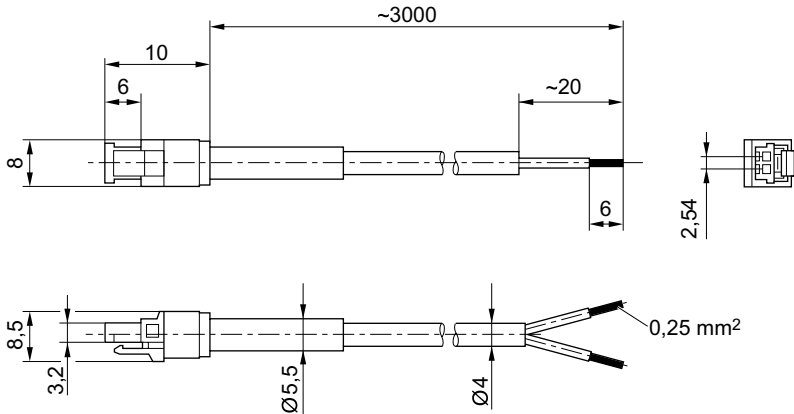
00130630

Ambient temperature min./max.	+32 °F / +122 °F
Protection class	IP40
Wire cross-section	0 in²
Materials:	
Housing	Polyoxymethylene
Cable sheath	Polyurethane

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

Number of wires	Cable-Ø [inch]	Cable length L [ft.]	Weight [lbs]	Note	Part No.
2	0.16	9.84	0.1102	1)	1834484253
1) Halogen-free					

Dimensions



00128286

Series ECS

Accessories

Connecting cable, Series CN2

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



Ambient temperature min./max.

Protection class

Wire cross-section

Materials:

Cable sheath

-40°F / +185°F

IP65

0 in²

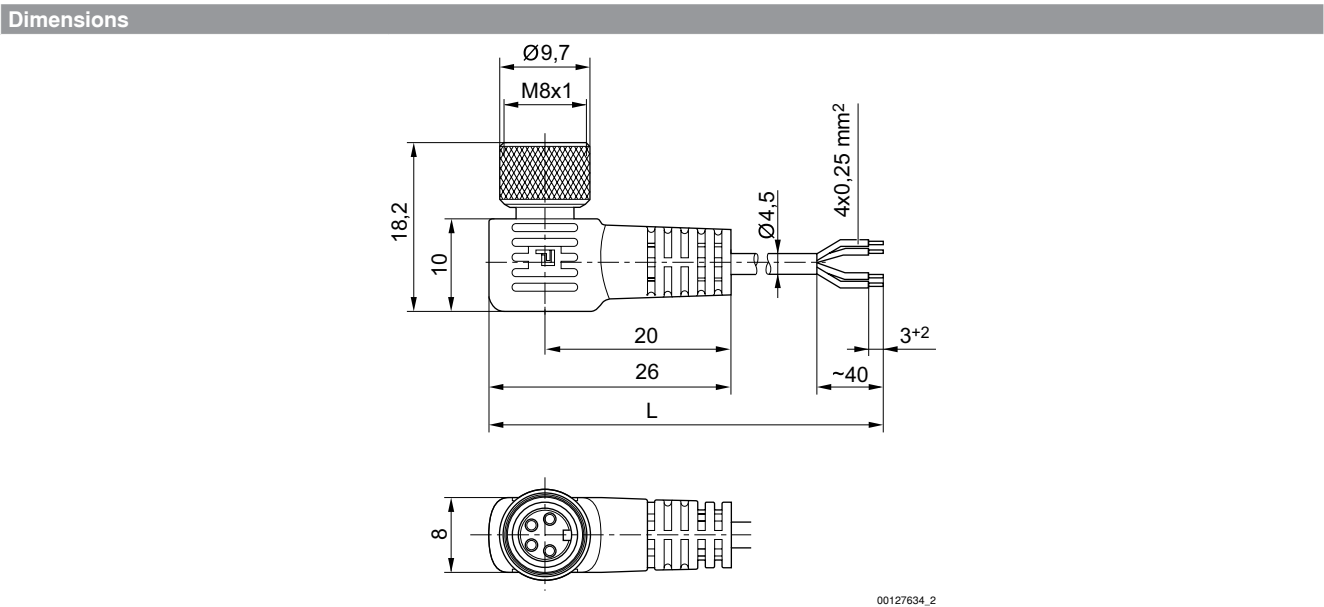
Polyurethane

00107009_c

Technical Remarks

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

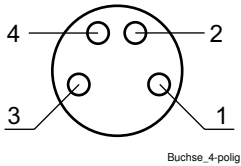
	Operational voltage	Number of wires	Cable-Ø	Cable length L	Part No.
	[V DC]		[inch]	[ft.]	
1) ——— BN 2) ——— WH 3) ——— BU 4) ——— BK	24	4	0.18	9.84	1834484145
				16.4	1834484147



L = length

Series ECS
Accessories

Pin assignment



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

Connecting cable, Series CN2

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

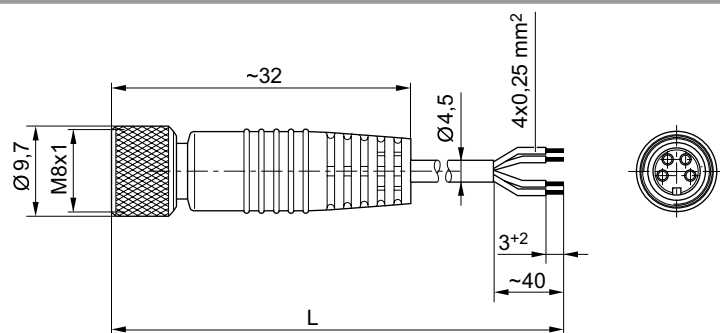


00107009_b

Ambient temperature min./max.	-40 °F / +185 °F
Protection class	IP65
Wire cross-section	0 in²
Materials:	
Cable sheath	Polyurethane

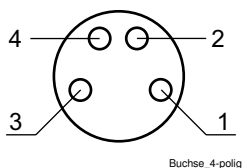
Technical Remarks
■ The specified protection class is only valid in assembled and tested state.

	Operational voltage	Number of wires	Cable-Ø	Cable length L	Part No.
	[V DC]		[inch]	[ft.]	
1) — BN 2) — WH 3) — BU 4) — BK	24	4	0.18	9.84	1834484144
				16.4	1834484146

Series ECS
Accessories
Dimensions


00127634_1

L = length

Pin assignment


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

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