

Series EMS



Series EMS

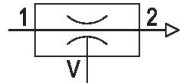
The AVENTICS Series EMS features an extremely compact design that can be installed flexibly near the suction points for quick response time and offers high energy efficiency due to its sophisticated nozzle geometry. With the Venturi nozzles connected in series, they offer an enormous suction capacity with maximum efficiency, covering a wide range of vacuum applications. Depending on the properties of the workpiece being moved, the ejectors are available in two basic versions and three performance categories. The Series EMS multistage injectors are ideal for applications requiring a high flow with a low vacuum.

- Multiple Venturi nozzles
- High suction capacity
- High-flow version (HF) for porous workpieces
- High-vacuum version (HV) for air-tight workpieces



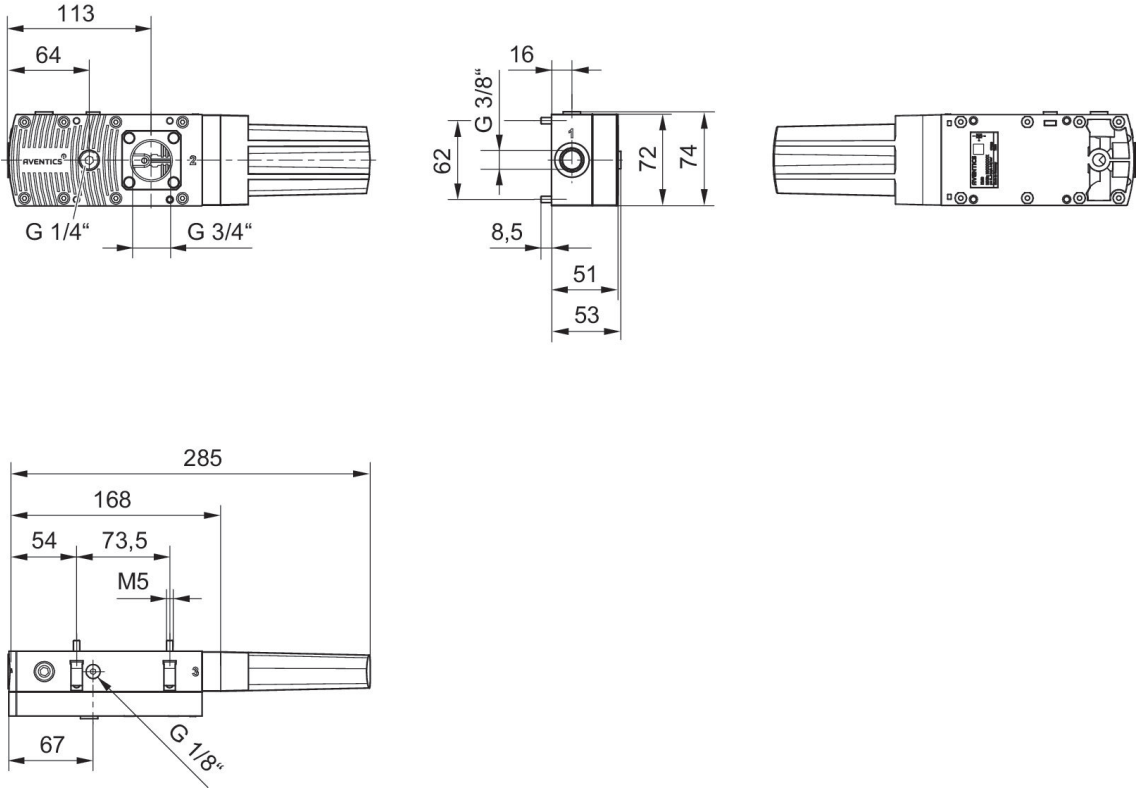
Multistage ejector, Series EMS

Polyurethane
Pneumatically



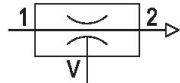
Activation	Max. vacuum level at p.opt [%]	Max. suction capacity [l/min]	Air consumption at p.opt. [l/min]	Part No.
Pneumatically	60	252	88	R412026097
Pneumatically	90	252	117	R412026098
Pneumatically	60	432	177	R412026099
Pneumatically	90	445	231	R412026100

Dimensions



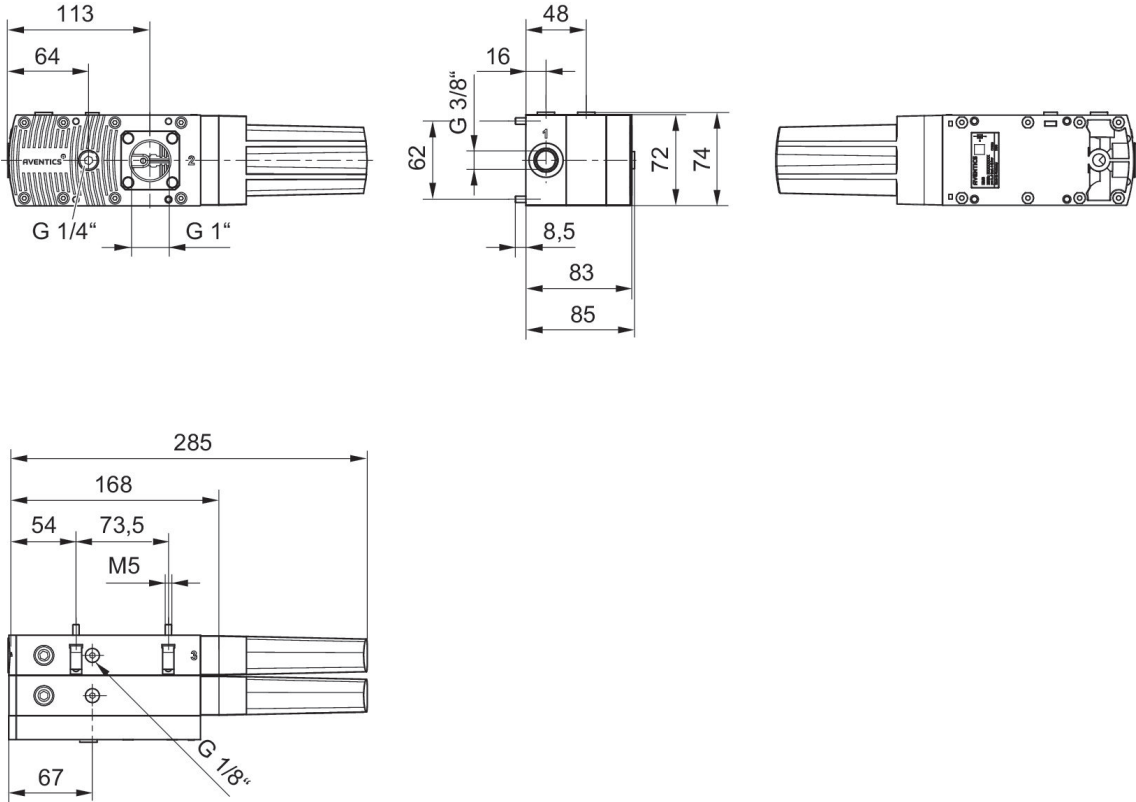
Multistage ejector, Series EMS

Polyurethane
Pneumatically



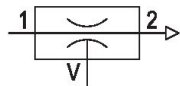
Activation	Max. vacuum level at p.opt [%]	Max. suction capacity [l/min]	Air consumption at p.opt. [l/min]	Part No.
Pneumatically	60	856	367	R412026101
Pneumatically	90	822	476	R412026102

Dimensions

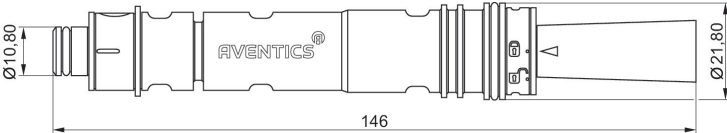


Vacuum nozzle

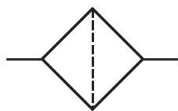
Polyurethane
Pneumatically



Activation	Nozzle Ø [mm]	Max. vacuum level at p.opt [%]	Max. suction capacity [l/min]	Air consumption at p.opt. [l/min]	Part No.
Pneumatically	1.3	82	297.6	74	R412026137
Pneumatically	1.6	82	308.8	103	R412026138

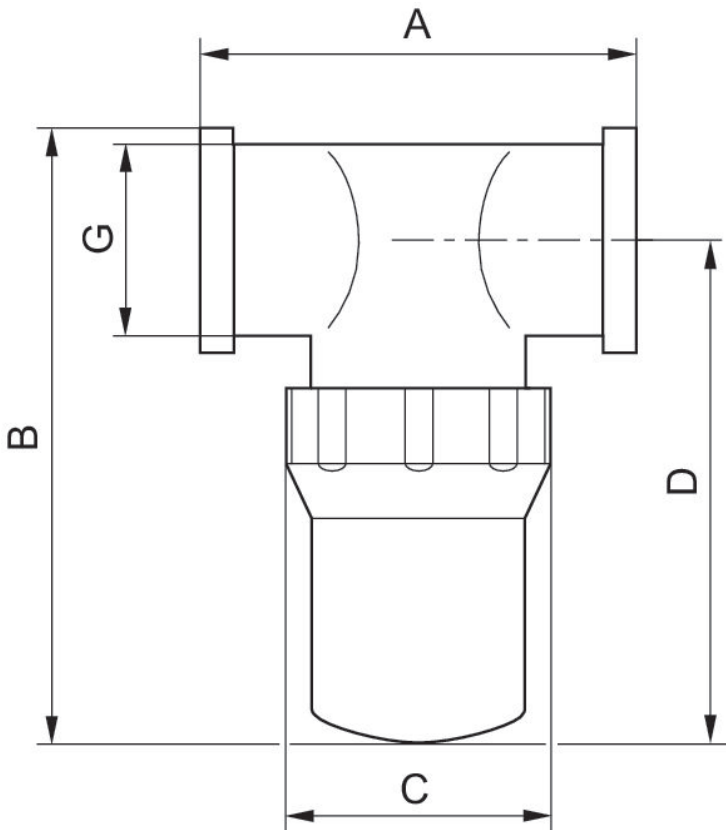


Vacuum filter, cup version, Series VFC



Port	Nominal flow [l/min]	Filter porosity [µm]	Filter insert	Part No.
G 1/8	45	80	Polyethylene	0821305181
G 1/4	110	80	Polyethylene	0821305182
G 3/8	245	80	Polyethylene	0821305183
G 1/2	300	80	Polyethylene	0821305184
G 3/4	600	80	Polyethylene	0821305185

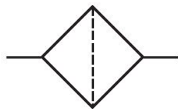
Dimensions



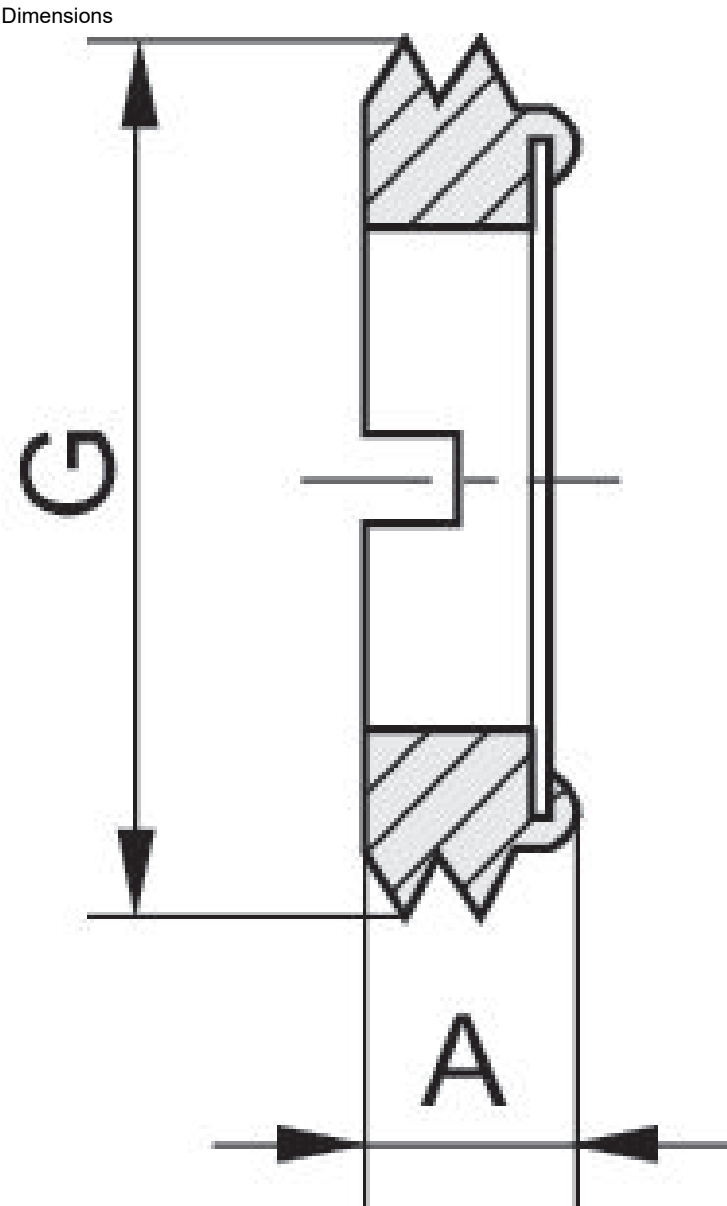
Part No.	Port G	G	A	B	C	D
0821305181	G 1/8	G 1/8	76	60	48	50

Part No.	Port G	G	A	B	C	D
0821305182	G 1/4	G 1/4	76	60	48	50
0821305183	G 3/8	G 3/8	76	102	48	88
0821305184	G 1/2	G 1/2	76	102	48	88
0821305185	G 3/4	G 3/4	90.5	136.5	74.2	118

Vacuum filter Inline, Series VFI



Port		Filter insert		Part No.
	G 1/8		tin bronze	2737000180
	G 1/4		tin bronze	2737000140
	G 3/8		tin bronze	2737000380
	G 1/2		tin bronze	2737000120



Part No.	Port G	A
2737000180	G 1/8	3.5
2737000140	G 1/4	5
2737000380	G 3/8	5
2737000120	G 1/2	5

plugs

EMS

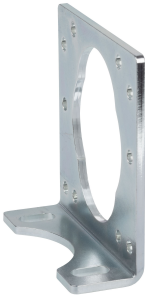


Delivery unit [piece]	Part No.
1	R412026139

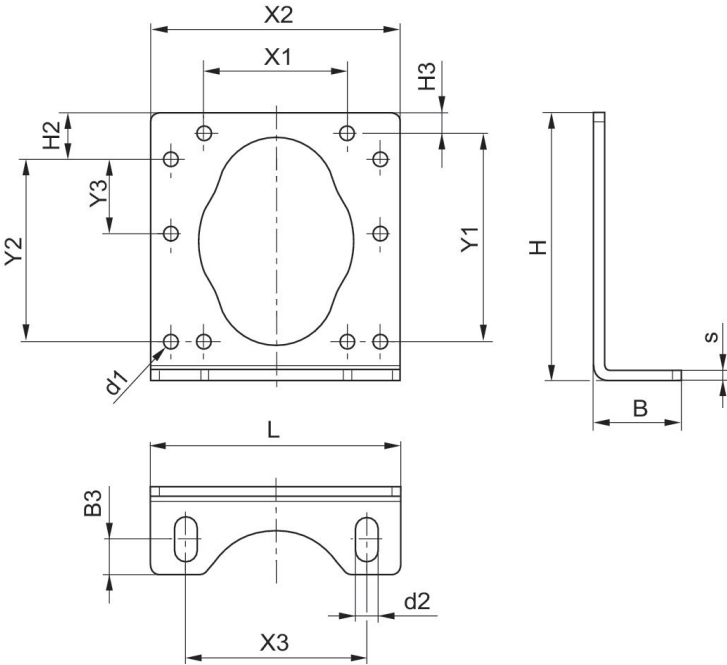


Mounting bracket

EMS



Delivery unit [piece]	Part No.
1	R412026103

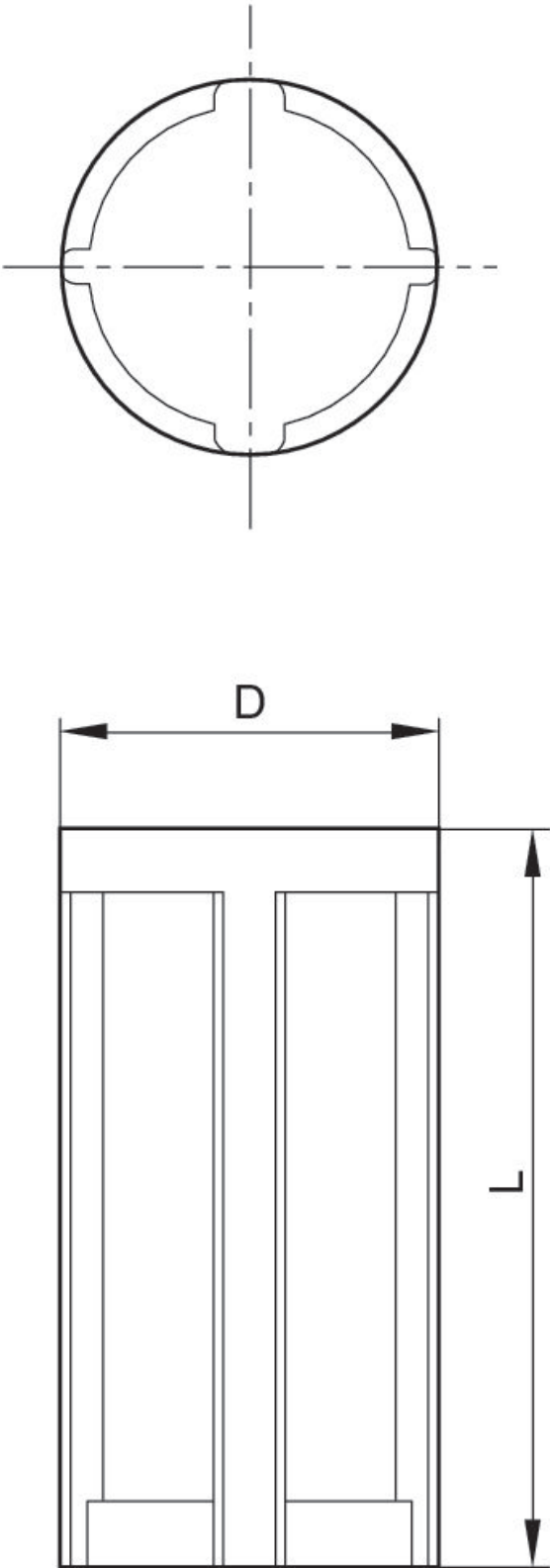


replacement filter, Series VFI



Filter porosity [μm]	Filter insert	Part No.
50	Polypropylene, Polyamide	R412010114
50	Polypropylene, Polyamide	R412010115

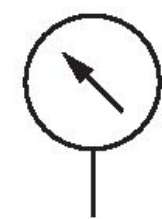
Dimensions



Part No.	Type	D	L
R412010114	VFI-6/4	10.4	20.5
R412010115	VFI-8/6	16.2	22.5

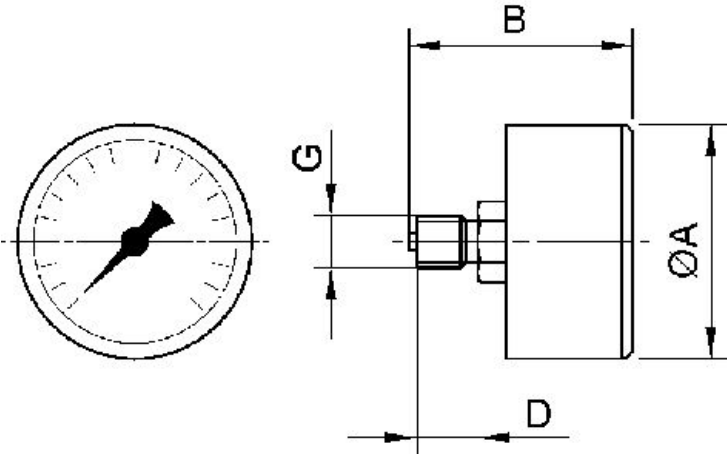
Pressure gauge, Series PG1-SNL

EN 837-1



Type	Nominal diameter [mm]	Port	Min. main scale display range [bar]	Max. main scale display range [bar]	Min. main scale display range [bar]	Max. main scale display range [bar]	Part No.
Bourdon tube pressure gauge	40	G 1/8	-0.8	0	-1	0	1827231053

Dimensions



Dimensions in mm

Part No.	G	Nominal diameter	Ø A	B	D
1827231053	G 1/8	40 mm	39	44	10
1827231048	G 1/8	40 mm	39	44	10
1827231024	G 1/8	40 mm	39	44	10
1827231009	G 1/4	40 mm	39	44	10
1827231057	G 1/4	40 mm	41	41.5	10
1827231047	G 1/4	40 mm	41	41.5	10
1827231059	G 1/4	40 mm	41	41.5	10
1827231060	G 1/4	40 mm	41	41.5	10
1827231054	G 1/4	40 mm	49	47.5	13
1827231023	G 1/4	50 mm	49	47.5	13
1827231012	G 1/4	50 mm	49	47.5	13

Part No.	G	Nominal diameter	Ø A	B	D
1827231016	G 1/4	50 mm	49	47.5	13
1827231015	G 1/4	50 mm	49	47.5	13
1827231010	G 1/4	50 mm	49	47.5	13
1827231055	G 1/4	60 mm	63	48.3	13
1827231011	G 1/4	63 mm	63	48.3	13

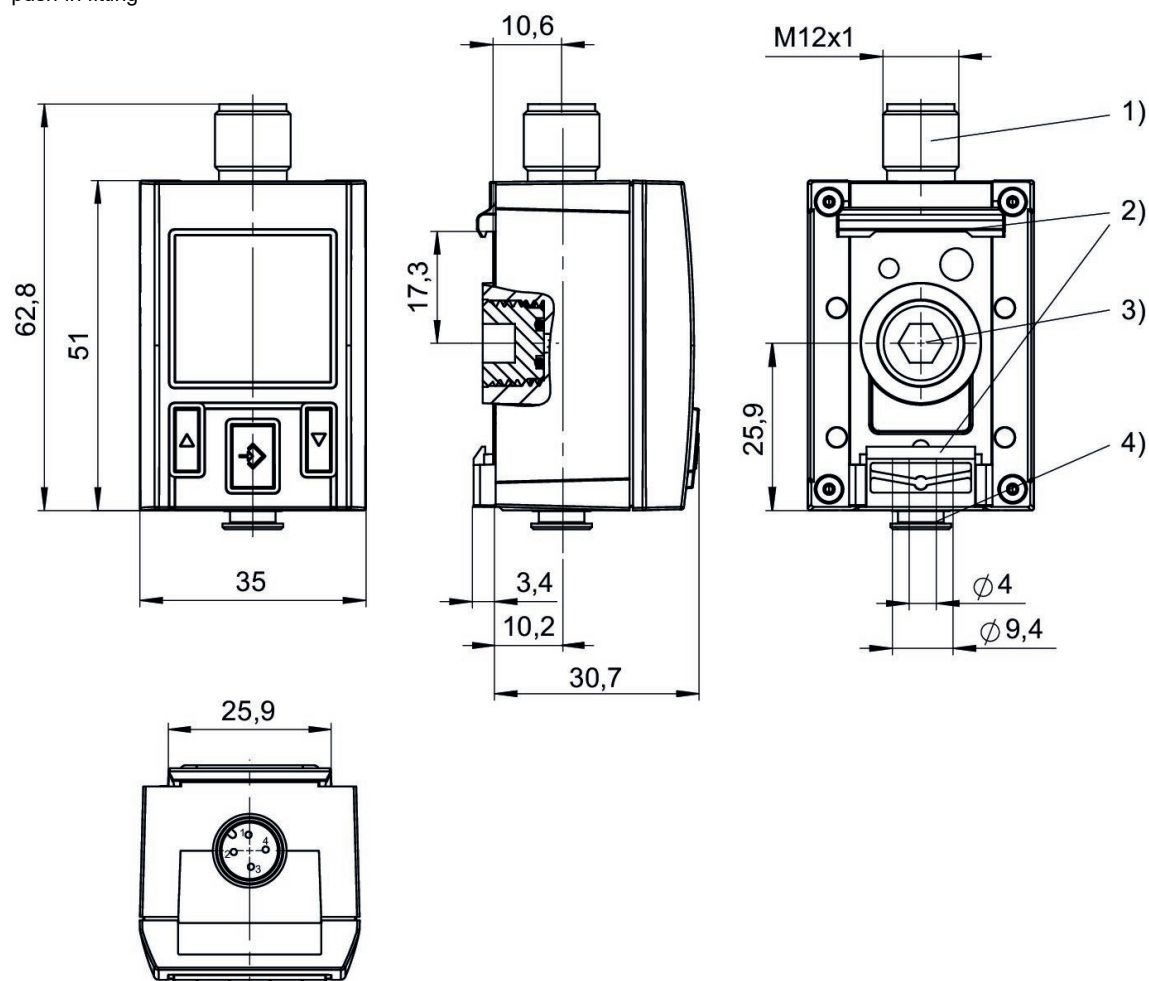
Pressure sensor, Series PE5

Plug
M12x1
CE declaration of conformity
cULus
RoHS
Conforms with REACH
Free of substances that impair surface wetting in the coating process
4-pin



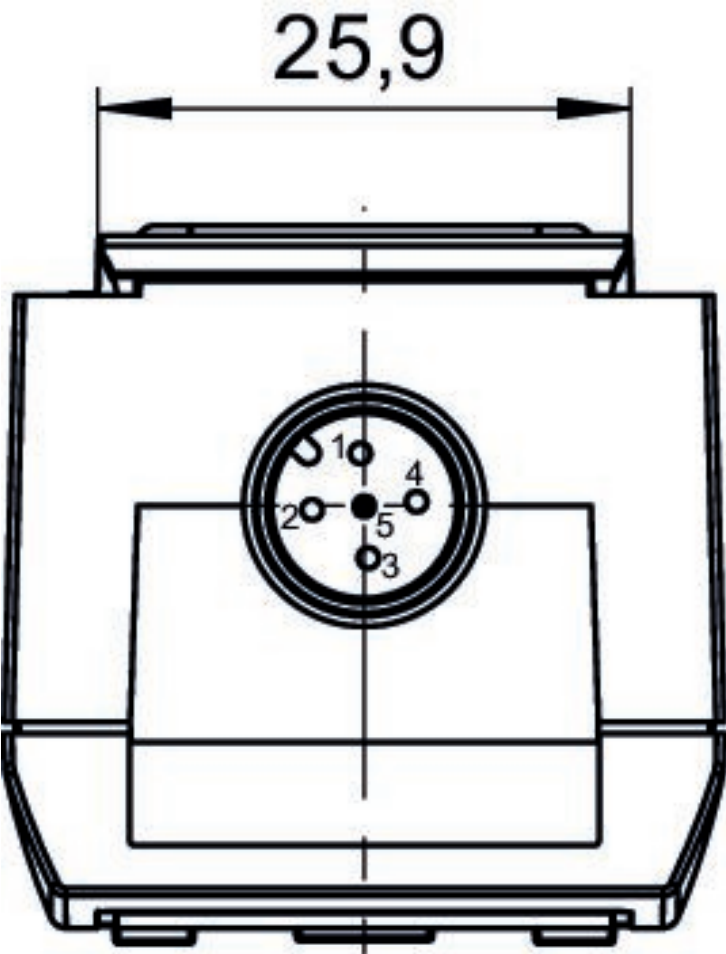
Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Part No.
G 1/4	-1	0	17	30	R412010761
Ø 4	-1	0	17	30	R412010760
G 1/4	-1	0	17	30	R412010769
Ø 4	-1	0	17	30	R412010768
G 1/4	-1	0	17	30	R412010775
Ø 4	-1	0	17	30	R412010774

push-in fitting



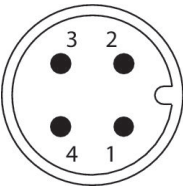
- 1) M12x1 electrical connection
- 2) Mounting for hat rail and wall mounting
- 3) Alternative pressure connection (G1/4) closed with plug
- 4) Pressure connection, tubing $\varnothing$ 4 mm

Electr. connection for leak test



R412010761, R412010760, R412010769, R412010768, R412010775, R412010774

Pin assignments



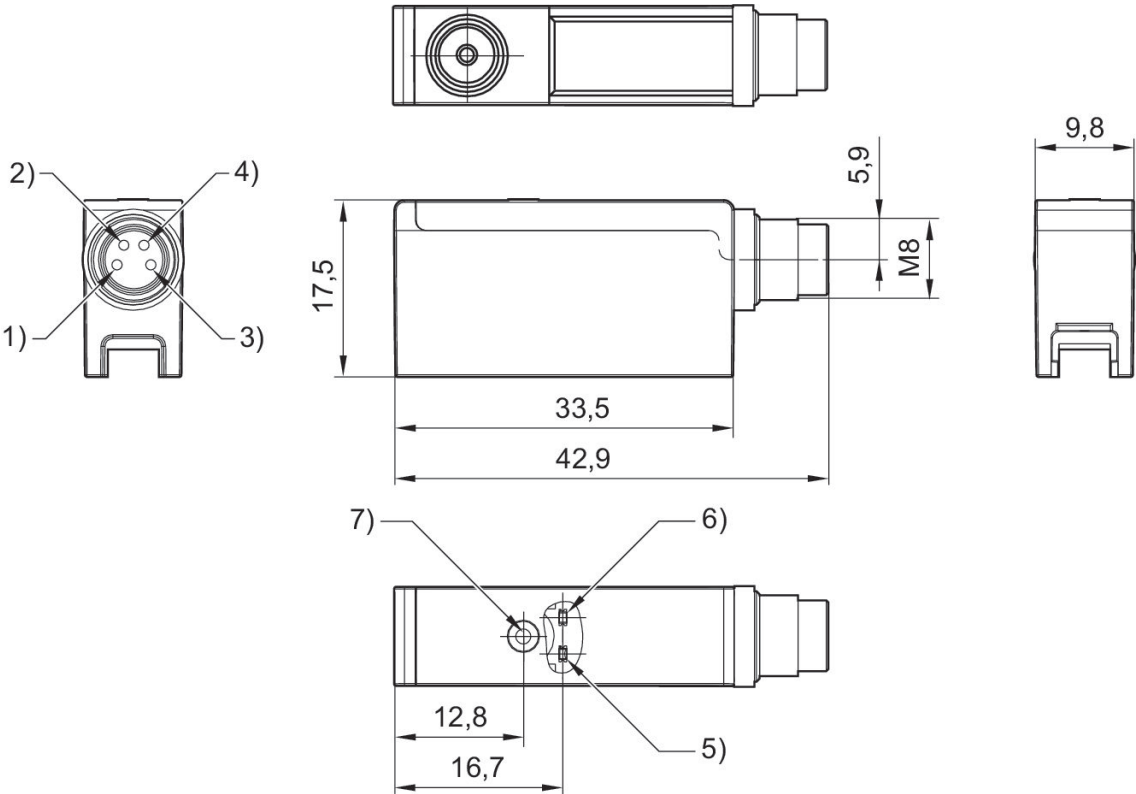
Pressure sensor, Series PE6

Plug
M8x1
Flange with O-ring
4-pin

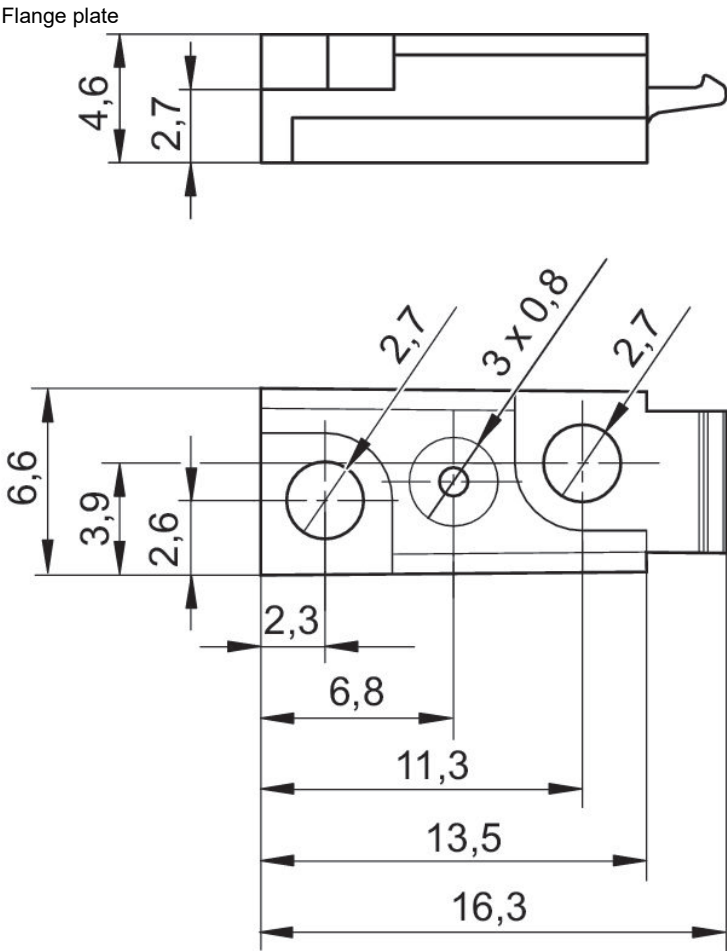


Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Part No.
Ø 1,2x1	-1	0	R412007880
Ø 1,2x1	-1	0	R412007881
Ø 1,2x1	-1	0	R412007882

PE6...-L

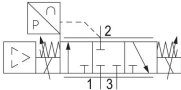


- 1) +UB
- 2) Switch output 2
- 3) GND
- 4) Switch output 1
- 5) LED for switch output 2 6) LED for switch output 1 7) setting knob



E/P pressure regulator, Series ED02

120 l/min
via signal connection
Internal thread
CE declaration of conformity
G 1/8
1/8 NPT



Function	Actual out-put value	Nominal in-put value	Max. current consumption [mA]	Flow [l/min]	Min. regula-tion range [bar]	Max. regu-lation range [bar]	Part No.
Air exhaust	0 ... 10 V	0 ... 10 V	300	120	0	-1	R414001197

[illegible]

- 2) Universal threaded connection, suitable for G1/8 according to ISO 228/1:2000 and 1/8-27 NPTF

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