

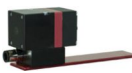





Vacuum pump accessories		Features and benefits
1	 <p>Vacuum switches</p>	Our line includes inductive universal, electro-mechanical and pneumatic vacuum switches that are pre-set or adjustable.
2	 <p>Valves</p>	Choose between solenoid, electrically or vacuum-controlled valves. The vacuum controlled valve (Vacustat) shuts off the flow of compressed air to the pump when the pre-set level is reached, and consequently the consumption of compressed air is minimised.
3	 <p>Regulators</p>	Different vacuum pumps need different feed pressure for optimum performance. A filter regulator can easily be manually set to a desired pressure level, and be used to eliminate particles from the compressed air. A pilot regulator can be used to automatically set the feed pressure according to your needs.
4	 <p>Silencers</p>	Reduce noise from exhaust with a flow-through design.
5	 <p>Vacuum filters</p>	To filter dust and other small particles from the vacuum flow. Reduces the risk of operation breakdown or stoppage in the pump.
6	 <p>Other</p>	Body for COAX® cartridges, vacuum gauge, manometer etc.

Vacuum Pump Accessories

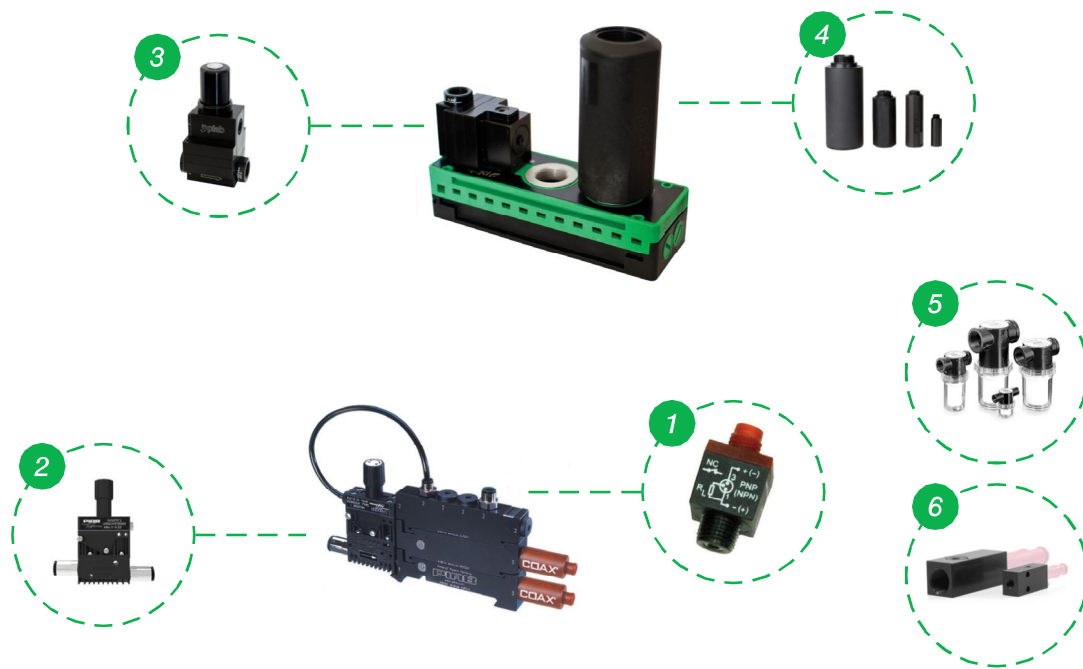


Image only to serve as an example.

1 Vacuum switches

2 Valves

3 Regulators

4 Silencers

5 Vacuum filters

6 Other

Vacuum switches, pneumatic



- ▶ Converts a vacuum level to a pneumatic signal.
- ▶ Vacuum-actuated membrane linked to a pneumatic switch.
- ▶ Available preset or with adjustable vacuum level.

Technical data

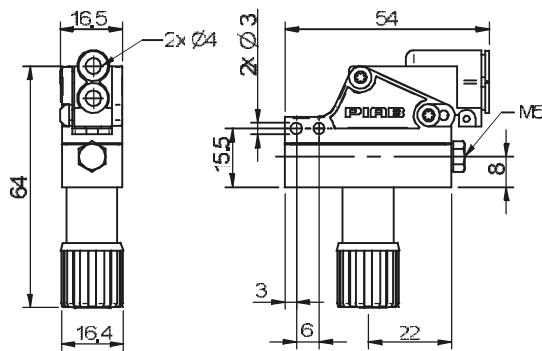
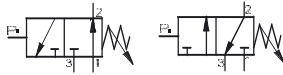
Description	Unit	Value
Feed pressure, range	MPa	0.15–0.8
Feed pressure, max @ vacuum connection	MPa	0.6
Material		PA, SS, NBR, POM, Al, CuZn
Temperature range	°C	-10-60
Weight	g	39
Connection, compressed air	mm	2 x Ø4
Connection, vacuum	mm	M5

Technical data, specific

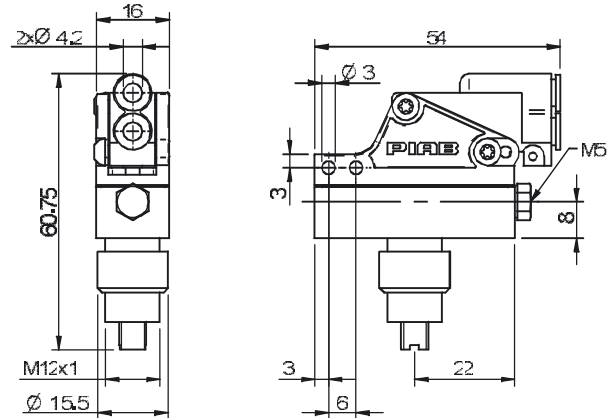
Description	Unit	Value						
		3116062	3116063	3116083	3116084	3116085	3116087	3116088
Vacuum, level setting		Screw/Knob	Screw/Knob	Preset	Preset	Preset	Preset	Preset
Signal range	-kPa	10–95	15–95	10±2	25±4	65±8	30±5	70±10
Function output		NO	NC	NO	NO	NO	NC	NC
Hysteresis	kPa	3	12	3	3	3	12	12

Ordering information

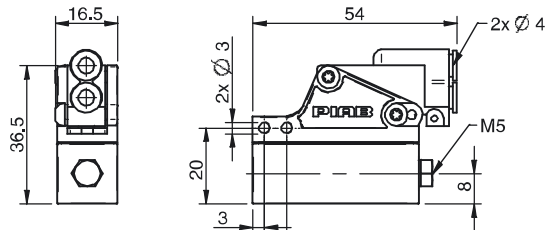
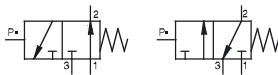
	Description	Art. No.
A	Vacuum switch, pneumatic, adjustable with screw and knob (NO)	3116062
B	Vacuum switch, pneumatic, adjustable with screw and knob (NC)	3116063
B	Vacuum switch, pneumatic, preset (NO 25 -kPa)	3116084
B	Vacuum switch, pneumatic, preset (NO 65 -kPa)	3116085
B	Vacuum switch, pneumatic, preset (NC 30 -kPa)	3116087
B	Vacuum switch, pneumatic, preset (NC 70 -kPa)	3116088



A Knob



A Screw



B

Ordering information, accessories

Description	Art. No.
Connection set for vacuum switch	0100488

Contents: Barrel nipple G1/8" M5 long, hose connector 4/2 M5. Material: Nickel-plated brass, SS, PA66, NBR, PA6. Fits: All pre-set and adjustable vacuum switches.

Vacuum switches VS4118/VS4128



- ▶ Pre-set vacuum switch with digital output.
- ▶ Durable and compact design with G1/8" 90° angle swivel connection for easy installation.
- ▶ VS4118 hardwired enables PNP NO/NC or NPN NO/NC functionality.
- ▶ VS4128 suitable for plug in I/Os. Available in PNP NO or NPN NO models.
- ▶ Possible to connect several units serially with T-connectors to provide a common output (VS4128 PNP).

Technical data

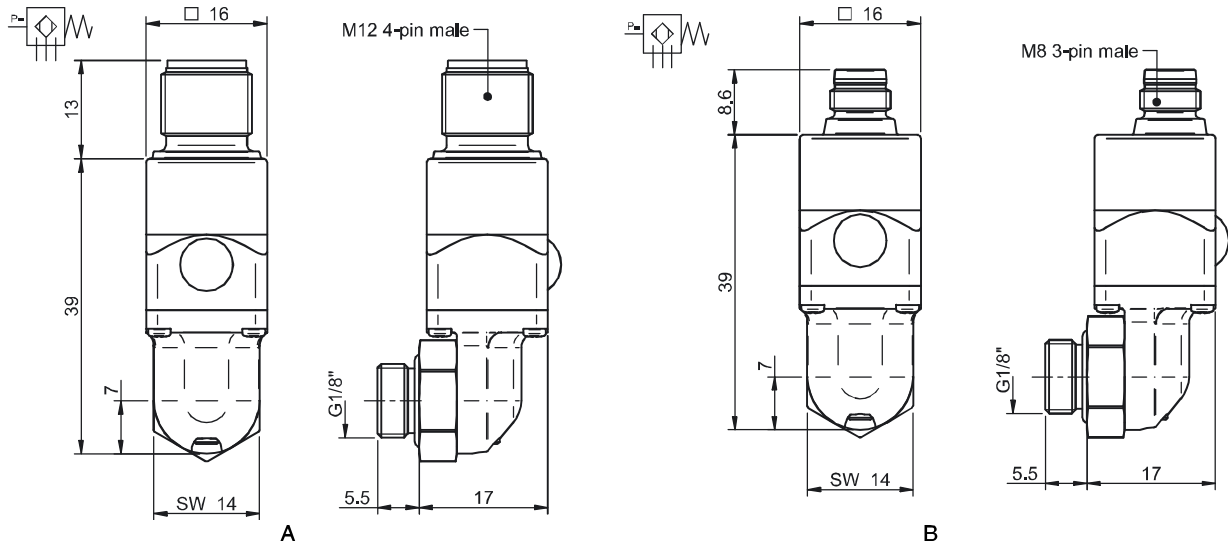
Description	Unit	Value
Feed pressure, max @ vacuum connection	MPa	0.6
Material		AL, SS, CuZn, PA
Temperature range	°C	-25 – 85
Weight	g	23
Connection, vacuum		G1/8"
Function		NO/NC
Hysteresis	kPa	8
Voltage	VDC	24 (12-30)
Safety classification		IP65
Current, max inductive	A	0,1
Current, max resistive	A	0,4
Voltage drop, max (100mA/24V inductive load)	VDC	0.055
Response time	ms	4
Display		LED indicator

Technical data, specific

Description	Unit	Value					
		0110630	0110631	0124450	0110730	0110731	0110732
Signal range	-kPa	30±4	50±4	50±4	30±4	50±4	70±4
Electric connection		M12 4-pin	M12 4-pin	M12 4-pin	M8 3-pin	M8 3-pin	M8 3-pin
Dimension, WxDxH	mm	52x16x17	52x16x17	52x16x17	47.6x16x17	47.6x16x17	47.6x16x17

Ordering information

	Description	Art. No.
A	Vacuum Switch VS4128 30 -kPa, M12 PNP NO	0110630
A	Vacuum Switch VS4128 50 -kPa, M12 PNP NO	0110631
A	Vacuum Switch VS4128 50 -kPa, M12 NPN NO	0124450
B	Vacuum Switch VS4118 30 -kPa, M8 PNP/NPN NO/NC	0110730
B	Vacuum Switch VS4118 50 -kPa, M8 PNP/NPN NO/NC	0110731
B	Vacuum Switch VS4118 70 -kPa, M8 PNP/NPN NO/NC	0110732



Ordering information, accessories

Description	Art. No.
Cable M8 3-pin female L=2m	0108141

T-connector M12



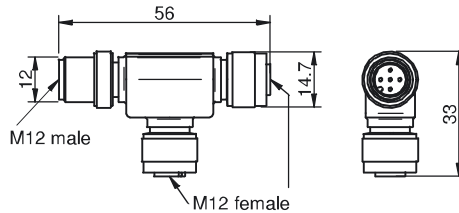
- ▶ Serially connects two or several vacuum switches, VS4128, into one common output to the PLC or BUS-I/O.
- ▶ Quick and simple installation with standard male to female M12 eurofast cable assemblies.
- ▶ Suitable if the PLC or BUS-I/O is limited to one or two input signals from a vacuum system with several vacuum switches.

Technical data

Description	Unit	Value
Material		TPU, Zn
Temperature range	°C	-25 – 90
Weight	g	25
Voltage, max	VDC	60
Safety classification		IP65
Current, max	A	4
Humidity	%RH	90
Electric connection		3x M12 4-pin
Dimension, WxDxH	mm	56x14,7x33

Ordering information

Description	Art. No.
T-connector M12 male, 2xM12 female	0119558



Ordering information, accessories

Description	Art. No.
Cable M12 4-pin female, M12 4-pin male, PUR, L=2m	0118322

Vacuum switches VS4015/VS4016



- ▶ Pre-set vacuum switch with digital output.
- ▶ Very low weight and small format, push-in or thread connections.
- ▶ PNP NO/NC or NPN NO/NC output functions.

Technical data

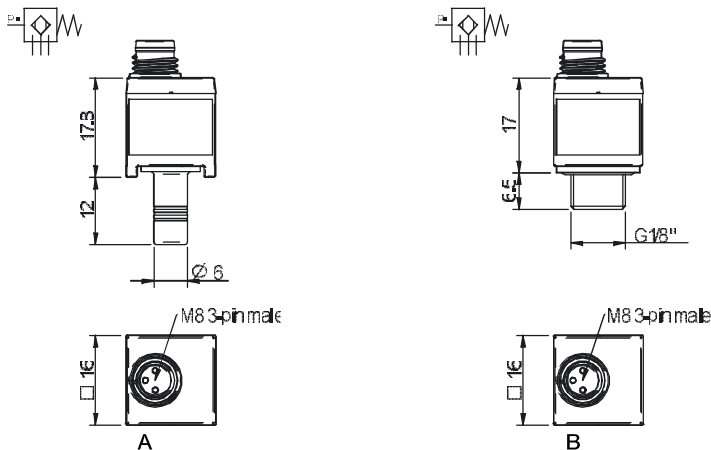
Description	Unit	Value
Feed pressure, max @ vacuum connection	MPa	0.2
Material		PA, TPU, SS, CuZn(Au)
Temperature range	°C	-25 – 85
Weight	g	5
Function		NO/NC
Hysteresis	kPa	6 ± 1
Voltage	VDC	24 (12-30)
Safety classification		IP40
Current, max inductive	A	0,1
Current, max resistive	A	0,4
Voltage drop, max (100mA/24V inductive load)	VDC	0.055
Response time	ms	4
Display		LED indicator
Electric connection		M8 3-pin

Technical data, specific

Description	Unit	Value					
		0110245	0110246	0110247	0110248	0110249	0110250
Connection, vacuum	mm / inch	Ø6	Ø6	Ø6	G1/8"	G1/8"	G1/8"
Signal range	-kPa	30 +5/-3	50 +5/-3	70 +5/-3	30 +5/-3	50 +5/-3	70 +5/-3
Dimension, WxDxH	mm	16x16x22.3	16x16x22.3	16x16x22.3	16x16x21.5	16x16x21.5	16x16x21.5

Ordering information

	Description	Art. No.
A	Vacuum switch VS4015, Ø6, 30 -kPa	0110245
A	Vacuum switch VS4015, Ø6, 50 -kPa	0110246
A	Vacuum switch VS4015, Ø6, 70 -kPa	0110247
B	Vacuum switch VS4016, G1/8" male, 30 -kPa	0110248
B	Vacuum switch VS4016, G1/8" male, 50 -kPa	0110249
B	Vacuum switch VS4016, G1/8" male, 70 -kPa	0110250



Ordering information, accessories

Description	Art. No.
Cable M8 3-pin female L=2m	0108141

Vacuum switches, electro-mechanical



- ▶ Converts a vacuum level to an electric signal, VAC or VDC.
- ▶ Vacuum-actuated membrane linked to an electro-mechanical switch.
- ▶ Integrated cable with open ends included.
- ▶ Available preset or with adjustable vacuum level.

Technical data

Description	Unit	Value
Feed pressure, max @ vacuum connection	MPa	0,6
Material		PBTP, PVC, PA, SS, NBR, POM, Al, CuZn
Temperature range	°C	-20 – 80
Weight	g	62
Connection, vacuum	mm	M5
Function		NO/NC
Hysteresis	kPa	10
Cable		3 x 0.75 mm ² x 0.5 m
Voltage, max	VAC/VDC	250/30
Safety classification		IP67
Current, max	A	5

Technical data, specific

Description	Unit	Value	
		3116061	3116095
Vacuum, level setting		Screw/Knob	Preset
Signal range	-kPa	15–95	25±5
Dimension, WxDxH	mm	48x16.5x64.5	48x16.5x44.5

Note:

NO, Normally Open, in electrical circuits corresponds to an open circuit breaker, which means that, if the gate is open, no current can pass through.

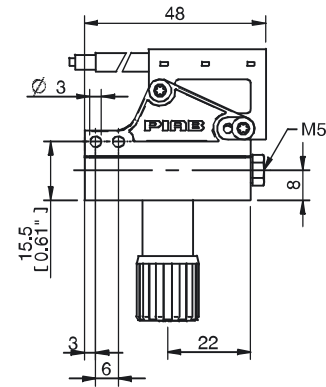
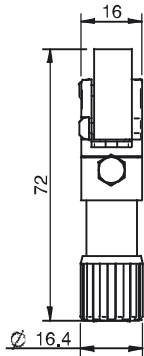
NO, Normally Open, in pneumatic circuits corresponds to an open valve, which means that, if the valve is open, compressed air passes through.

Optimizing controls Vacuum switches

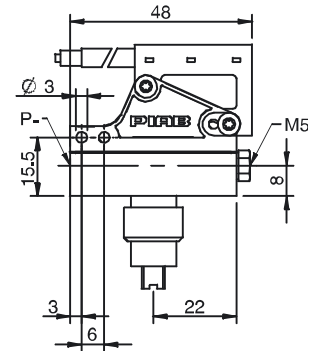
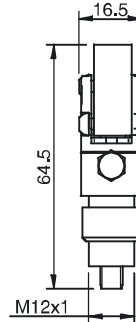


Ordering information

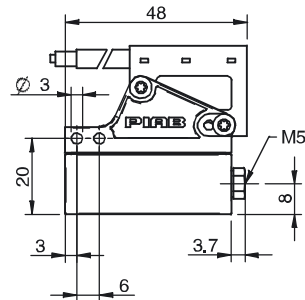
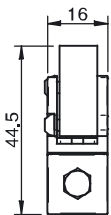
	Description	Art. No.
A	Vacuum switch, electro-mechanical, adjustable with screw and knob	3116061
B	Vacuum switch, electro-mechanical, preset (Signal range 25 -kPa)	3116095



A Knob



A Screw



B

Ordering information, accessories

Description	Art. No.
Connection set for vacuum switch	0100488

Contents: Barrel nipple G1/8" M5 long, hose connector 4/2 M5. Material: Nickel-plated brass, SS, PA66, NBR, PA6. Fits: All pre-set and adjustable vacuum switches.

Vacuum switches, inductive universal



- ▶ Converts a vacuum level to a digital signal, 24 VDC.
- ▶ Vacuum-actuated membrane linked to a proximity-inductive universal switch.
- ▶ Integrated cable with open ends included.
- ▶ PNP NO/NC or NPN NO/NC output functions.
- ▶ The switch must be connected in series with the load.

Technical data

Description	Unit	Value
Feed pressure, max @ vacuum connection	MPa	0.6
Material		PBTP, PVC, PA, SS, NBR, POM, Al, CuZn
Temperature range	°C	-25–80
Weight	g	71
Function		PNP NO/NC, NPN NO/NC
Hysteresis	kPa	2
Cable		2 x 0.14 mm ² x 2m
Voltage	VDC	24 (5–36)
Safety classification		IP67
Current, max	A	0.2
Voltage drop, max	VDC	4.6

Technical data, specific

Description	Unit	Value			
		0104350	3116064	3116089	3116090
Vacuum, level setting		Knob	Knob	Preset	Preset
Connection, vacuum	mm	Ø6	M5	M5	M5
Signal range	-kPa	10–95	10–95	10±1	30±3
Dimension, WxDxH	mm	48.5x16.5x63.8	47.5x16.5x63.8	47.5x16.5x36.5	47.5x16.5x36.5

Supplement

PNP NO = Normally Open, Positive logic. As the switch is activated, the gate at the feed current (+) closes and contact is established.

PNP NC = Normally Closed, Positive logic. As the switch is activated, the gate at the feed current (+) opens and contact is interrupted.

NPN NO = Normally Open, Negative logic. As the switch is activated, the gate at ground (-) closes and contact is established.

NPN NC = Normally Closed, Negative logic. As the switch is activated, the gate at ground (-) opens and contact is interrupted.

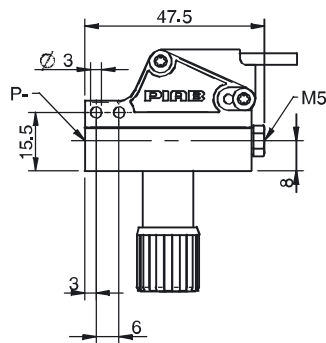
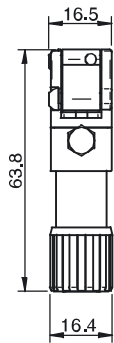
Note:

NO, Normally Open, in electrical circuits corresponds to an open circuit breaker, which means that, if the gate is open, no current can pass through.

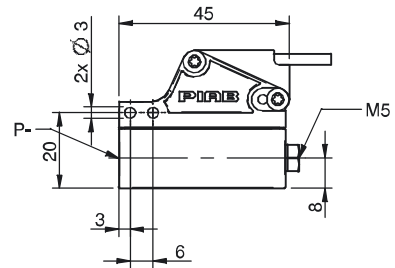
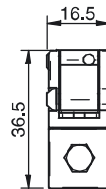
NO, Normally Open, in pneumatic circuits corresponds to an open valve, which means that, if the valve is open, compressed air passes through.

Ordering information

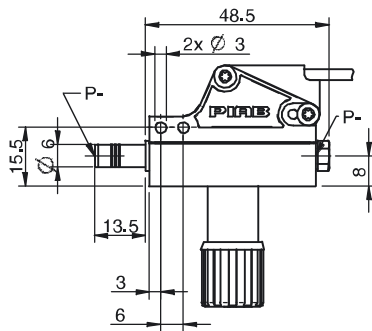
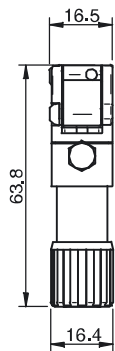
	Description	Art. No.
A	Vacuum switch, inductive universal, adjustable with knob	3116064
B	Vacuum switch, inductive universal, preset (Signal range 10 -kPa)	3116089
B	Vacuum switch, inductive universal, preset (Signal range 30 -kPa)	3116090
C	Vacuum switch, inductive universal, adjustable with knob Ø6	0104350



A



B



C

Ordering information, accessories

Description	Art. No.
Connection set for vacuum switch	0100488

Contents: Barrel nipple G1/8" M5 long, hose connector 4/2 M5. Material: Nickel-plated brass, SS, PA66, NBR, PA6. Fits: All pre-set and adjustable vacuum switches.

Vacuum switch 3-colour digital display M8



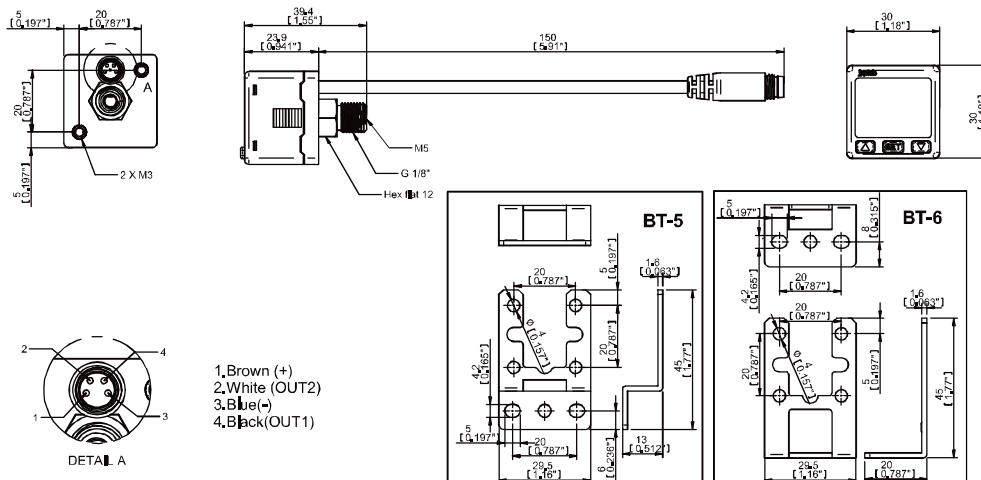
- ▶ 2 PNP outputs, NO or NC. Independently selectable for each output.
- ▶ 3-colour LCD display, easy readout.
- ▶ 7 programmable vacuum units, for example kPa, inHg, mmHg, etc.
- ▶ Dual display allows actual and set value to be displayed at the same time.
- ▶ Selectable "Key-Lock mode" with display indicator to avoid unauthorized changes.
- ▶ Selectable "Power-Save mode" with display indicator.
- ▶ Mounting brackets included.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.3
Vacuum range	-kPa	0.0 ~ 101.3
Temperature range	°C	0-50
Weight	kg	0.045
Function		2x PNP output NO/NC
Hysteresis	kPa	adjustable, 1-8
Cable with connector	mm	150
Voltage, supply	VDC	12-24
Safety classification		IP40
Current, max/ load (switch output)	A	0.125
Humidity	% RH	35-85
Response time, ≤	ms	2.5-1500 (adjustable)
Accuracy, at 25°C	% F.S.	±2
Current consumption, ≤	mA	40
High-voltage resistance/dielectric strength	VAC	1000
Insulation, at 500 VDC	MΩ/MW	50
Vibration resistant, 1.5mm or 10G, 2h in XYZ direction	Hz	10-150-10 scan for 1 min
Display		7 segment LCD 3 colour display (Red/Green/Orange)
Shock resistant, 3 x XYZ	G	10

Ordering information

Description	Art. No.
Vacuum switch 3-colour digital display M8	0126934



Ordering information, accessories

Description	Art. No.
Cable M8 4-pin female L=2m, straight connection	0107727

Vacuum switch, MM8



- ▶ Converts vacuum to an analogue output signal and an adjusted vacuum level to a digital output.
- ▶ Adjustable hysteresis.
- ▶ Separate cable with open ends included.

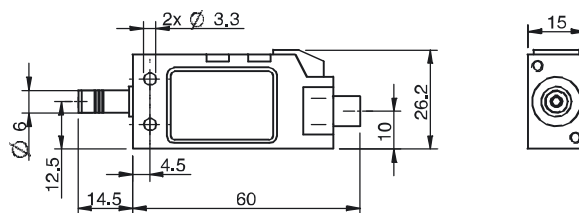
Technical data

Description	Unit	Value
Feed pressure, max @ vacuum connection	MPa	0.2
Material		PC, POM, NBR, SS
Temperature range	°C	-20–70
Weight	g	68
Connection vacuum	mm	Ø6/M5
Signal range	-kPa	0–100
Function		NO
Hysteresis	% F.S.	1–5
Voltage	VDC	24 (10.8–30)
Voltage, output	VDC	1–15
Safety classification		IP40
Current, max output	A	0.08
Current, max analogue output (load resistance min. 5kΩ)	A	0.001
Voltage drop, max	VDC	4.6
Humidity	% RH	35–85
Response time	ms	2
Accuracy, @ 25°C	% F.S.	±3
Current consumption	mA	17
High-voltage resistance	VAC	500
Insulation, resistance @ 500 VDC	MOhm	100
Vibration resistant, 1,5 mm, XYZ, 2 h	Hz	10–500
Electric connection		M8 4-pin
Dimension, WxDxH	mm	26x15x60

Non-lubricated air, non-corrosive gases, compatible with Polycarbonate and Polyacetal.

Ordering information

Description	Art. No.
Vacuum switch, adjustable, PNP NO MM8	0107729
Vacuum switch, adjustable, NPN NO MM8	0107730



Vacuum switch, DM8

- ▶ Converts adjusted vacuum levels to 2 separate digital outputs.
- ▶ Digital vacuum level display.
- ▶ Integrated cable with M8 connector included.



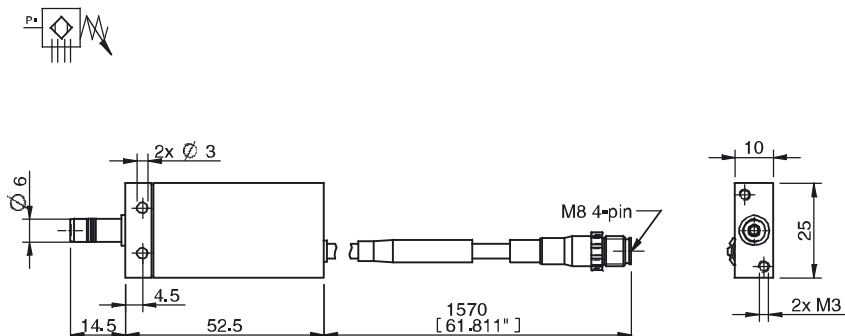
Technical data

Description	Unit	Value
Feed pressure, max @ vacuum connection	MPa	0.2
Material		PC, POM, NBR, Al
Temperature range	°C	-20–60
Weight	g	52
Connection vacuum	mm	Ø6/M5
Signal range	-kPa	0–100
Function		NO
Hysteresis	% F.S.	2
Cable	m	1.5
Voltage	VDC	12–24
Safety classification		IP40
Current, max output	A	0.08
Humidity	% RH	35–85
Response time	ms	2
Accuracy, @ 25°C	% F.S.	±3
Current consumption	mA	35
High-voltage resistance	VAC	500
Insulation, resistance @ 500 VDC	MOhm	100
Display		LED indicators, numeric
Electric connection		M8 4-pin
Dimension, WxDxH	mm	25x10x53

Non-lubricated air, non-corrosive gases, compatible with Polycarbonate and Polyacetal.

Ordering information

Description	Art. No.
Vacuum switch, adjustable, PNP NO DM8	0107732
Vacuum switch, adjustable, NPN NO DM8	0107733



Specifications subject to change without notice.

Vacuum switch, LM8



- ▶ Converts an adjusted vacuum level to a digital output.
- ▶ Very low weight and small format with push-in connection.
- ▶ Integrated cable with M8 connector included.

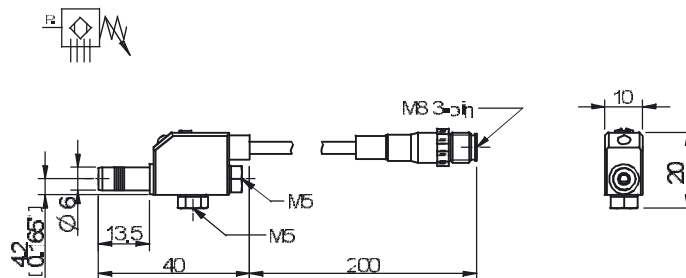
Technical data

Description	Unit	Value
Feed pressure, max @ vacuum connection	MPa	0.2
Material		PC, Al, SS
Temperature range	°C	-100– 60
Weight	g	47
Connection vacuum	mm	Ø6/M5
Signal range	-kPa	0–100
Function		NO PNP
Hysteresis	% F.S.	2
Cable	m	0.2
Voltage	VDC	24 (10.8–30)
Safety classification		IP40
Current, max output	A	0.08
Humidity	% RH	35–85
Response time	ms	1
Accuracy, @ 25°C	% F.S.	±3
Current consumption	mA	20
High-voltage resistance	VDC	500
Insulation, resistance @ 500 VDC	MOhm	100
Vibration resistance, 1.5 mm, XYZ, 2 h	Hz	10–55
Display		LED indicator
Electric connection		M8 3-pin
Dimension, WxDxH	mm	20x10x27

Non-lubricated air, non-corrosive gases, compatible with Polycarbonate and Polyacetal.

Ordering information

Description	Art. No.
Vacuum switch, adjustable, PNP NO LM8	0107731



Vacuum switch, M5



- ▶ Converts an adjusted vacuum level to a digital output signal for pressure or vacuum.
- ▶ NC in vacuum range 0–100 -kPa. NO in pressure range 0–300 kPa.
- ▶ Very low weight and small format with M5 90° angle swivel connection.
- ▶ Integrated cable with open ends included.

Technical data

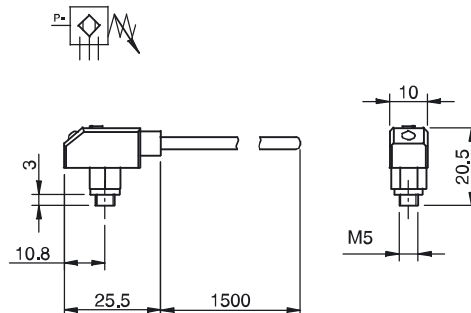
Description	Unit	Value
Feed pressure, max @ vacuum connection	MPa	0.6
Material		PC, SS
Temperature range	°C	-10–60
Weight	g	6
Connection vacuum	mm	M5
Signal range	kPa	-100–300
Function		NO, NC
Hysteresis	% F.S.	2
Cable		3 x 0.14 mm ² x 1.5 m
Voltage	VDC	24 (10.8–30)
Safety classification		IP40
Current, max output	A	0.08
Humidity	% RH	35–85
Response time	ms	1
Accuracy, @ 25°C	% F.S.	±3
Current consumption	mA	20
High-voltage resistance	VDC	500
Insulation, resistance @ 500 VDC	MOhm	100
Vibration resistance, 1.5 mm, XYZ, 2 h	Hz	10–55
Display		LED indicator
Dimension, WxDxH	mm	26x10x18

Non-lubricated air, non-corrosive gases, compatible with Polycarbonate and Polyacetal.

Note: Normally closed, opens at set value from -100~300 kPa.

Ordering information

Description	Art. No.
Vacuum switch PNP M5	0110358
Vacuum switch NPN M5	0110359



QR (Quick-Release valve)



- ▶ For vacuum pump P3010.
- ▶ Quick release by accumulating and utilising the feed-air pressure as a boost.
- ▶ ON/OFF activated simultaneously with the P3010
- ▶ Three sizes for optimising release volume with system volume.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Material		Al, SS,PPS, NBR, PA
Temperature range	°C	-10–50
Volume, Quick-Release	cm3	3

For dimensions, please go to data sheet for vacuum pump P3010.

Ordering information

Description
Available in product configuration, please go to data sheet for vacuum pump P3010.

Technical data, accessories

Description	Unit	Value	
		0104272	0104273
Weight	g	72	118
Volume, Quick-Release tank	cm3	30	60
Dimension, WxDxH	mm	57,5x16x52	120x16x52

Ordering information, accessories

Description	Art. No.
Quick-Release tank module P3010, 30 cm ³	0104272
Quick-Release tank module P3010, 60 cm ³	0104273

Blow-off Check valve G1/8"



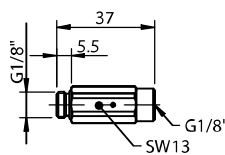
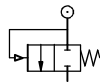
- ▶ Prevents vacuum from being pulled through the blow-off lines, which means faster response time and completely independent vacuum units.
- ▶ Reliable quick-release function even in larger systems with several units, due to the very low feed pressure required to break away for blow-off.
- ▶ Suitable in applications where cleaning of the suction cup filters or cooling of the object to be picked is important.

Technical data

Description	Unit	Value
Feed pressure, range	MPa	0.3–0.7
Feed pressure, minimum to break away for blow-off	MPa	0.1
Material		AL, CuZn, SS, NBR
Temperature range	°C	-10–80
Weight	g	12.4
Flow, rate @ 0.3–0.7 MPa	NI/s	1.5–2.8
Connection, compressed air		G1/8"
Connection, vacuum		G1/8"
Dimension, WxDxH	mm	14x14x31,5

Ordering information

Description	Art. No.
Blow-off Check valve G1/8"	0115314



Solenoid valve DS 23



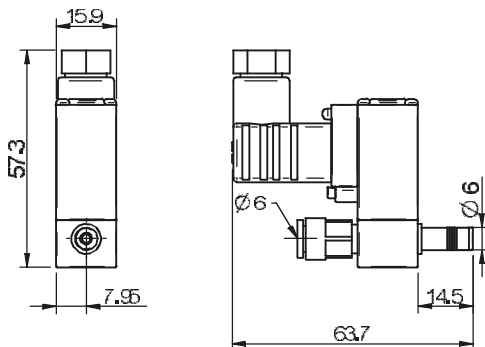
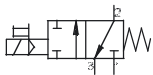
- ▶ Electric 3/2 valve with manual override.
- ▶ Quick and easy mounting with push-in connections.
- ▶ Body with 3 M5 ports.
- ▶ Suitable for compressed air, filtration 40µ.

Technical data

Description	Unit	Value
Feed pressure, range	MPa	0.2–0.6
Material		Ni, Al, SS, POM, CuZn, NBR
Temperature range	°C	-18–50
Weight	g	100
Connection, compressed air	mm	2 x Ø6
Voltage	VDC	24 (22-28)
Safety classification		IP65
Current consumption	mA	100
Display		LED indicator
Flow @ P ₁ =6 bar and Δp=1 bar	NI/s	1.3
Life span, mechanical	cycles	100,000,000
Ratings, load time	%	100
Electrical connection		DIN (c)
Dimension, WxDxH	mm	49,7x15,9x57,3

Ordering information

Description	Art. No.
Solenoid valve DS 23 for control ON/OFF	0104274



Electrically controlled 2/2 valves DIP 55



- ▶ On/off valve
- ▶ 1/8" NPSF ports
- ▶ 0.6 W solenoid
- ▶ Electrical connections: DIN (c)
- ▶ Suitable for Piab vacuum pumps up to Classic size.
- ▶ Manual override

Technical data

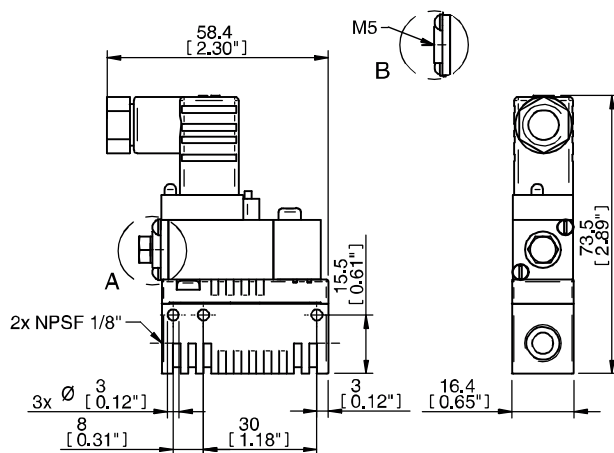
Description	Unit	Value
Feed pressure, range	MPa	0.4–0.7 MPa
Material		PPS, PA, TPU, AI, NBR, CuZn, PUR
Temperature range	°C	0–60
Weight	g	102
Connection compressed air		2 x NPSF 1/8"
Function		NC
Supply voltage	VDC	24
Display		LED
Flow, nominal	NI/s	8.6
Kv		7.8
Lifespan, mechanical	cycles	10,000,000
Power consumption	W	0.6
Load time rating	%	100
Bore-through diameter, nominal	mm	3.7
Electrical connection		DIN (c)
Safety specification		IP65

Electrical connections are included.

Compressed air, filtration 40µm, non-lubricated.

Ordering information

Description	Art. No.
Electrically controlled 2/2 valve DIP55 NC 2406 SD	0101071



Vacuum Check Valve VT1



- ▶ Check valve that traps vacuum in sealed applications for safe operation.
- ▶ Built-in blow off check valve for fast release of object.
- ▶ Optional two-stage COAX® cartridge MINI Pi12-2 integrated.
- ▶ Optional integrated energy-saving device, Vacustat results in virtually no air consumption in sealed applications.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Feed pressure, min. breakaway blow-off	MPa	0.25
Material		Al, Steel, Ceramic

Technical data, specific

Description	Unit	Value		
		0109233/0121236	0110456/0121237	0120323/0121238
Weight	g	272	390	650
Temperature range	°C	-30-70	-10-80	-10-80
Noise level	dBA	—	66-68	66-68
Signal	-kPa	—	—	65
Function		—	—	2/2 NO
Hysteresis	kPa	—	—	8
Vacuum flow, max.	NI/s	—	0.68	0.68

Vacuum flow

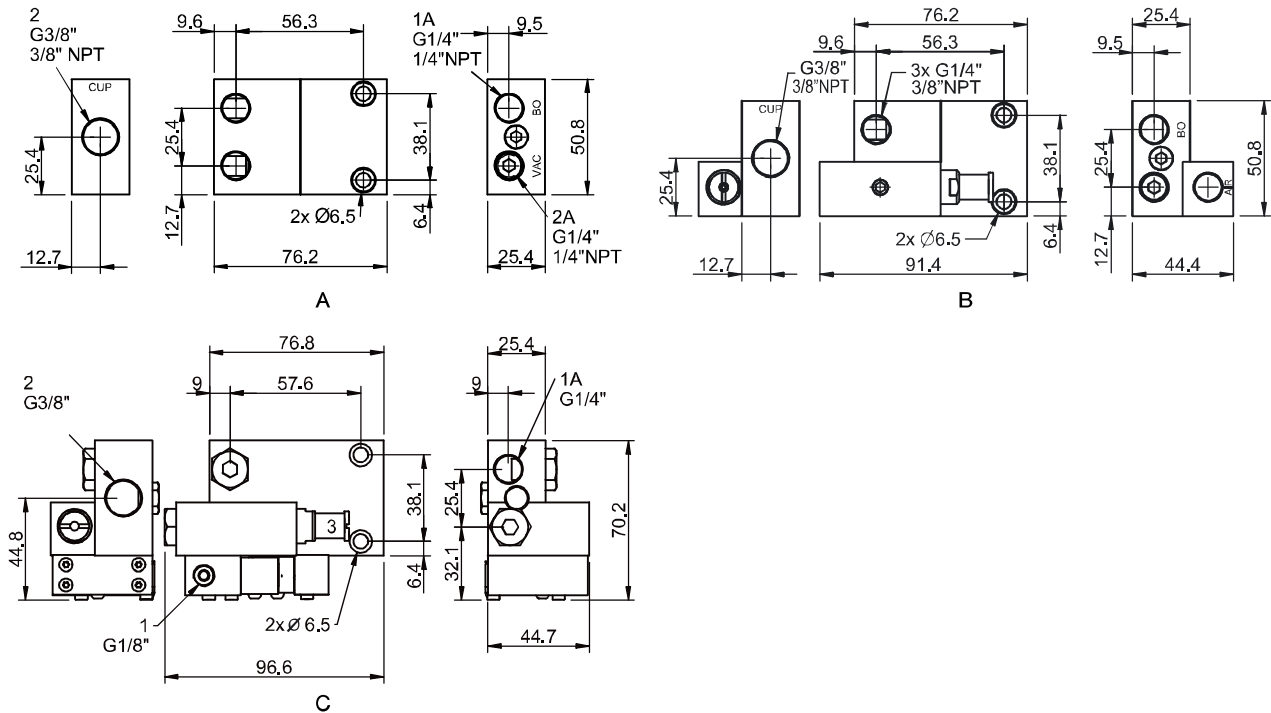
Feed pressure MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)										Max vacuum -kPa
		0	10	20	30	40	50	60	70	80		
0.17	0.29	0.57	0.40	0.22	0.15	0.070	—	—	—	—	—	49
0.22	0.34	0.64	0.48	0.29	0.20	0.14	0.080	0.020	—	—	—	64
0.314	0.44	0.68	0.60	0.44	0.27	0.19	0.14	0.10	0.060	0.030	—	90
0.40	0.53	0.66	0.60	0.52	0.39	0.24	0.12	0.10	0.060	0.020	—	84

Evacuation time

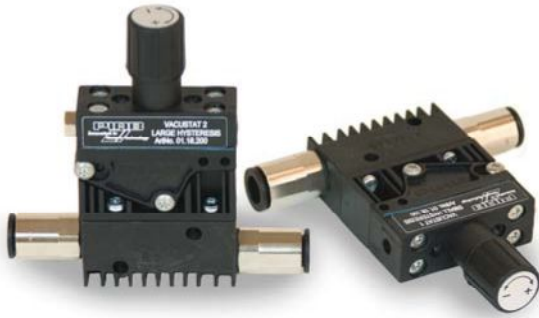
Feed pressure MPa	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)										Max vacuum -kPa
		10	20	30	40	50	60	70	80			
0.17	0.29	0.28	0.56	1.13	2.13	—	—	—	—	—	—	49
0.22	0.34	0.20	0.42	0.85	1.5	2.3	3.0	—	—	—	—	64
0.314	0.44	0.17	0.32	0.58	1.1	1.8	2.7	4.0	6.4	—	—	90
0.40	0.53	0.18	0.33	0.54	0.85	1.5	2.5	3.8	7.1	—	—	84

Ordering information

	Description	PMAT No.	Art. No.
A	Vacuum Check Valve VT1 G3/8"-G1/4"	X1000	0109233
A	Vacuum Check Valve VT1 3/8"NPT-1/4"NPT	1000	0121236
B	Vacuum Check Valve VT1 COAX® cartridge MINI Pi12-2, non-return valve G3/8"-G1/4"	X1041	0110456
B	Vacuum Check Valve VT1 COAX® cartridge MINI Pi12-2, 3/8"NPT-1/4"NPT	1041	0121237
C	Vacuum Check Valve VT1 Vacustat COAX® cartridge MINI Pi12-2, G3/8"-G1/4"	X2098	0120323



piSAVE onoff



- ▶ Independent pneumatic air-saving device for vacuum pumps.
- ▶ Adjustable vacuum controlled 2/2 NO valve.
- ▶ Available with large hysteresis for object handling and small hysteresis for process applications.
- ▶ The Vacustat is recommended for vacuum pumps in non-leaking systems.
- ▶ The vacuum pump must be fitted with a non-return valve.

Technical data

Description	Unit	Value
Feed pressure, range	MPa	0.17–0.7
Feed pressure, max @ vacuum connection	MPa	0.6
Material		Al, NBR, PA, SS, CuZn
Temperature range	°C	0–60
Weight	g	89
Connection, compressed air		2x Ø8 mm / 2x 1/8"NPSF
Connection, vacuum		2 x M5
Signal range	-kPa	15–99
Function		2/2 NO
Flow @ P ₁ =6 bar and Δp=0.5 bar	NI/s	7.3
Life span	cycles	>10,000,000
Dimension, WxDxH	mm	44x16,5x89

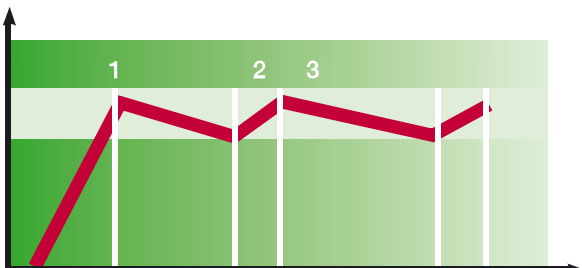
For dimensions, please go to data sheet for vacuum pumps P3010 and P5010.

Technical data, specific

Description	Unit	Value	
		0118100	0118200
Hysteresis	kPa	1–6	5–10

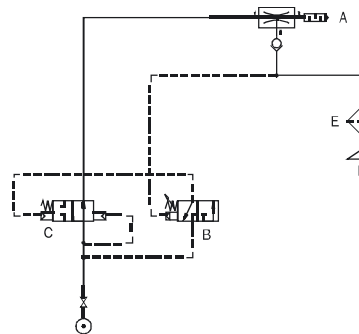
Function

A vacuum-controlled valve shuts off the flow of compressed air to the pump when the pre-set vacuum level is reached (1). The vacuum level is set by a knob. Because of minor leakage in a vacuum system the vacuum level drops, and after a while the start-up level of the valve is reached (2). Then the pump will start and work until the shut-off level is reached again (3), etc.



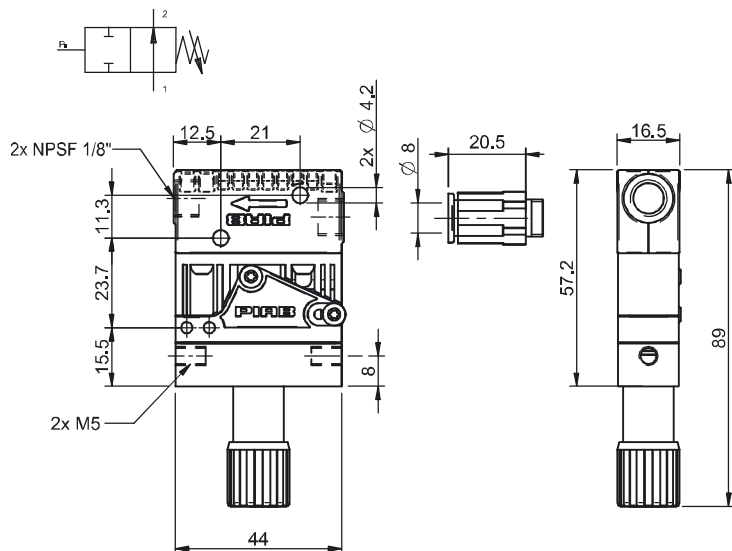
Connection

- A = Vacuum pump with non-return valve
- B = Vacuum switch
- C = Feed valve
- D = Suction cup
- E = Vacuum filter



Ordering information

Description	Art. No.
piSAVE onoff with small hysteresis	0118100
piSAVE onoff with large hysteresis	0118200



CU (Control Unit) P3010, P5010 & P6010



- ▶ For vacuum pumps P3010, P5010 and P6010.
- ▶ CU with electric valves for vacuum on/off and blow-off.
- ▶ Mechanical valve for blow-off flow adjustment.
- ▶ Special M12 4-pin cable assembly with LED for status of valve signal.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Material		PA, NBR, Al, SS, PMMA
Temperature range	°C	0–50
Function, on/off		NC
Voltage	VDC	24 (22–28)
Safety classification		IP65 [NEMA 4]
Humidity	%RH	90
Current consumption	mA	60
Ripple, max.	V _{rms}	1
Electric connection		M 12 4-pin

For dimensions, please go to data sheet for vacuum pumps P3010, P5010 and P6010.

Technical data, specific

Description	Unit	Value		
		P3010	P5010	P6010
Flow, blow-off @ P ₁ =6 bar and Δp=0.5 bar	NI/s	0–7.5	0–7.5	0–7.5

Ordering information

Description
Available in product configuration, please go to data sheet for vacuum pumps P3010, P5010 and P6010.

P6010 AVM™2



- ▶ COAX® P6010 multistage ejector with Pi, Si or Xi vacuum cartridge(s).
- ▶ AVM™2, Automatic Vacuum Management, unit with built-in control and monitoring functions.
- ▶ Valves for vacuum on/off and blow-off.
- ▶ Special safety feature for the version with normally closed on/off valve. It changes to an open valve if power is lost (E-stop).
- ▶ Analogue vacuum sensor with two digital outputs, 16 pre-set combinations of signal levels to choose from.
- ▶ Digital display with “-kPa” or “-inHg” as unit options.
- ▶ Integrated energy saving function (ES) that minimizes the air consumption in sealed systems. The ES function can be activated manually or via a signal (signal override).
- ▶ Three-colour LED status indicators for valves, signal outputs and ES.
- ▶ On AVM™2 units for P6010, there is an option to blow from a separate port to maximize blow-off efficiency in the vacuum system.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Noise level, range	dB(A)	50-70
Material		Al, PA, NBR, SS, PMMA, TPE
Temperature range	°C	0-50
Weight, range	g	2000-2100
Signal range, adjustable	-kPa	20-80
Hysteresis	kPa	7±1
Voltage	VDC	24 (22-28)
Safety classification		IP65 [NEMA 4]
Current, max. output load	mA	100
Humidity	%RH	90
Current consumption, nominal	mA	110
Ripple, max.	V _p	1 V _{rms}
Display		LED indicators, numeric
Flow, blow-off	l/s	0-7.5

Technical data, specific

Description	Value	
	LU, LW, MA, MC (P6010 Code)	LV, LX, MB, MD (P6010 Code)
Function, on/off	NO	NC

Performance tables

Depending upon choice of COAX® cartridge, applicable performance data of the P6010 AVM™2 can be found in the tables for vacuum flow and evacuation time for models P6010 Pi, Si and Xi.

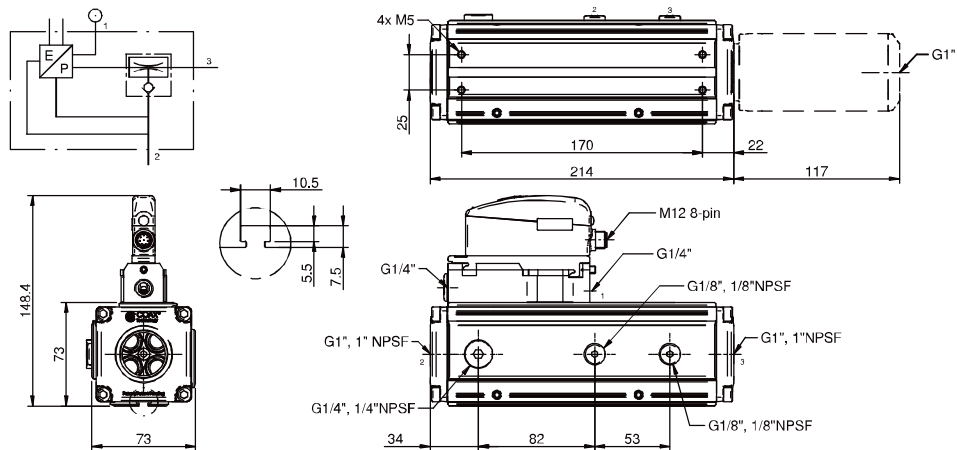
Ordering information

1. Housing	P6010 Code
Housing	P6010
2. COAX® cartridge modules	P6010 code
COAX® cartridge module Pi48-3X1, non-return valve	AN
COAX® cartridge module Pi48-3X2, non-return valve	AO
COAX® cartridge module Pi48-3X3, non-return valve	AP
COAX® cartridge module Pi48-3X4, non-return valve	AQ
COAX® cartridge module Si32-3X1, non-return valve	AF
COAX® cartridge module Si32-3X2, non-return valve	AG
COAX® cartridge module Si32-3X3, non-return valve	AH
COAX® cartridge module Si32-3X4, non-return valve	AI
COAX® cartridge module Xi40-3X1, non-return valve	AV
COAX® cartridge module Xi40-3X2, non-return valve	AW
COAX® cartridge module Xi40-3X3, non-return valve	AX
COAX® cartridge module Xi40-3X4, non-return valve	AY
3. Mounting	P6010 Code
Mounting T-slot, Cover plate with PIAB label	01
4. Cover plates	P6010 Code
Function AVM™2 NO, cover plate G thread connections	LU
Function AVM™2 NC, cover plate G thread connections	LV
Function AVM™2 NO, cover plate NPSF thread connections	LW
Function AVM™2 NC, cover plate NPSF thread connections	LX
Function AVM™2 NO, cover plate G thread connections, separated blow-off	MA
Function AVM™2 NC, cover plate G thread connections, separated blow-off	MB
Function AVM™2 NO, cover plate NPSF thread connections, separated blow-off	MC
Function AVM™2 NC, cover plate NPSF thread connections, separated blow-off	MD

NO = Normally open valve for vacuum on/off, NC = Normally closed valve for vacuum on/off.

5. Select Connections for vacuum and exhaust	P6010 Code
Connections 2x G1"	51
Connections 2x G1", silencer 1"	52
Connections 2x G3/4"	53
Connections 2x G3/4", silencer 3/4"	54
Connections 2x 1" NPSF	55
Connections 2x 1" NPSF, silencer 1"	56
Connections 2x 3/4" NPSF	57
Connections 2x 3/4" NPSF, silencer 3/4"	58

Example	Ordering number
P6010 Si32-3X2, non-return valve, Mounting T-slot, Cover plate with AVM™2 NO function and G-threads, Connections 2x G1" and silencer 1"	P6010 AG 01 LU 52



Ordering information, accessories

Description	Art. No.
Silencer G1"	0112499
Silencer 1" NPSF	0113003
Manometer 1 MPa	0112532
Cable M12 8-pin female, PUR, L=2m	0110238
Cable M12 8-pin female, PUR, L=5m	0117746
Y-cable M12 8-pin female, 2xM12 4-pin male, PNP, PUR, L=2m	0118407
Y-cable M12 8-pin female, 2xM12 5-pin male, NPN, PUR, L=2m	0120229

P6010 CU



- ▶ COAX® P6010 multistage ejector with Pi, Si or Xi vacuum cartridge(s).
- ▶ Integrated Control Unit (CU) with electric valves for vacuum on-off and blow-off control.
- ▶ Mechanical valve for blow-off flow adjustment.
- ▶ Configurable and modular design.
- ▶ On CU units for P6010, there is an option to blow from a separate port to maximize blow-off efficiency in the vacuum system.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Noise level, range	dBA	50–70
Material		Al, PA, NBR, SS, PMMA, TPE
Temperature range	°C	0–50
Weight, range	g	2000–2100
Function, on/off		NC
Voltage	VDC	24 (22–28)
Safety classification		IP65 [NEMA 4]
Humidity	%RH	90
Current consumption, nominal	mA	60
Ripple, max.	VP	1 V _{rms}
Flow, blow-off	NI/s	0–7.5

Performance tables

Depending upon choice of COAX® cartridge, applicable performance data of the P6010 CU can be found in the tables for vacuum flow, evacuation time and blow flow for models P6010 Pi, Si and Xi.

Ordering information

1. Housing		P6010 Code
Housing		P6010
2. COAX® cartridge modules		P6010 code
	COAX® cartridge module blind x4	AA
a	COAX® cartridge module Pi48-3X1	AJ
a	COAX® cartridge module Pi48-3X2	AK
a	COAX® cartridge module Pi48-3X3	AL
a	COAX® cartridge module Pi48-3X4	AM
b	COAX® cartridge module Pi48-3X1, non-return valve	AN
b	COAX® cartridge module Pi48-3X2, non-return valve	AO
b	COAX® cartridge module Pi48-3X3, non-return valve	AP
b	COAX® cartridge module Pi48-3X4, non-return valve	AQ
a	COAX® cartridge module Si32-3X1	AB
a	COAX® cartridge module Si32-3X2	AC
a	COAX® cartridge module Si32-3X3	AD
a	COAX® cartridge module Si32-3X4	AE
b	COAX® cartridge module Si32-3X1, non-return valve	AF
b	COAX® cartridge module Si32-3X2, non-return valve	AG
b	COAX® cartridge module Si32-3X3, non-return valve	AH
b	COAX® cartridge module Si32-3X4, non-return valve	AI
a	COAX® cartridge module Xi40-3X1	AR
a	COAX® cartridge module Xi40-3X2	AS
a	COAX® cartridge module Xi40-3X3	AT
a	COAX® cartridge module Xi40-3X4	AU

Vacuum pumps/generators Medium



2. COAX® cartridge modules		P6010 code
b	COAX® cartridge module Xi40-3X1, non-return valve	AV
b	COAX® cartridge module Xi40-3X2, non-return valve	AW
b	COAX® cartridge module Xi40-3X3, non-return valve	AX
b	COAX® cartridge module Xi40-3X4, non-return valve	AY

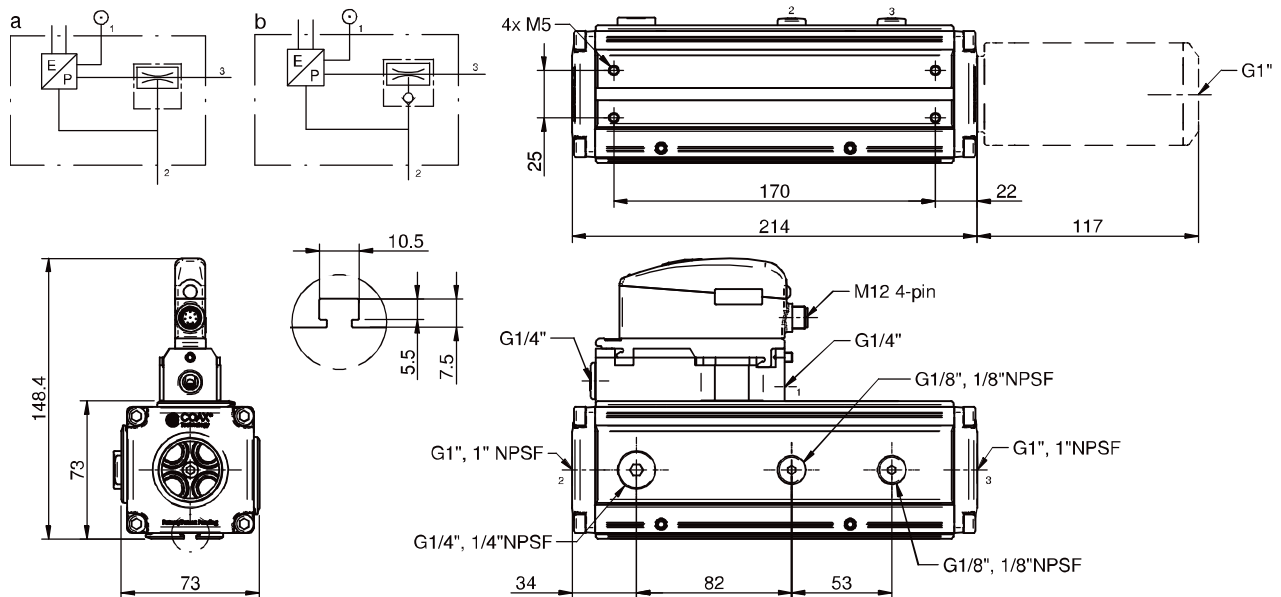
3. Mounting		P6010 Code
Mounting T-slot, Cover plate with PIAB label		01

4. Cover plates		P6010 Code
Function CU NC, cover plate G thread connections		LY
Function CU NC, cover plate NPSF thread connections		LZ
Function CU NC, cover plate G thread connections, separated blow-off		ME
Function CU NC, cover plate NPSF thread connections, separated blow-off		MF

NC = Normally closed valve for vacuum on/off.

5. Select Connections for vacuum and exhaust		P6010 Code
Connections 2x G1"		51
Connections 2x G1", silencer 1"		52
Connections 2x G3/4"		53
Connections 2x G3/4", silencer 3/4"		54
Connections 2x 1" NPSF		55
Connections 2x 1" NPSF, silencer 1"		56
Connections 2x 3/4" NPSF		57
Connections 2x 3/4" NPSF, silencer 3/4"		58

Example	Ordering number
P6010 Si32-3X2, non-return valve, Mounting T-slot, Cover plate with CU NC function and G-threads, Connections 2x G1" and silencer 1"	P6010 AG 01 LY 52



Ordering information, accessories

Description	Art. No.
Silencer G1"	0112499
Silencer 1" NPSF	0113003
Manometer 1 MPa	0112532
Cable M12 4-pin female, PUR, L=5m*	0121817
Cable M12 4-pin female, M12 4-pin male, PUR, L=2m	0118322

*) Pin No. 1 is not used.

P6010 PCC



- ▶ COAX® P6010 multistage ejector with Pi, Si or Xi vacuum cartridge(s).
- ▶ PPC , Piab Cruise Control, is programmable for constant vacuum level in the system
- ▶ Quick adjustment
- ▶ Easy to install in control systems
- ▶ Low power consumption, 24 VDC/120 mA
- ▶ Integrated analogue vacuum or blow-pressure sensor

Supplied with a vacuum gauge.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	1.0
Feed pressure, min.	MPa	0.12
Air consumption, internal	NI/s	0.04
Noise level	dBA	50-70
Material		Al, CuZn, PA, NBR, SS
Temperature range	°C	3-50
Connection, vacuum & exhaust		G1"/1"NPSF
Connection, compressed air		G1/4"
Connection, regulator/exhaust		G1/8"
Voltage supply	VDC	24 (21.8-26.4)
Voltage signal, input	VDC	0-10
Safety classification		IP65
Current consumption	mA	30
Electric connection		M12 5-pin male
Pressure drop	MPa	0.1
Linearity	%FS	<1.5
Hysteresis	%FS	<0.5
Repeatability	%FS	<0.5
Regulator operating range, vacuum level	-kPa	0-90
Input impedance, signal in	kΩ	55
Nominal flow rate (0.6 MPa in, 0.1 Mpa P)	NI/s	18.3
Outlet pressure, to vacuum pump	MPa	0.02-0.9
Particle size, max.	µm	20

The design of PCC requires that the inlet pressure is 0.1 MPa higher than the outlet pressure.

Performance tables

Depending upon choice of COAX® Cartridge, applicable performance data of the P6010 PCC can be found in the tables for vacuum flow and evacuation time for models P6010 Pi, Si and Xi.

Ordering information

1. Housing		P6010 Code
Housing		P6010
2. COAX® cartridge modules		P6010 code
	COAX® cartridge module blind x4	AA
a	COAX® cartridge module Pi48-3X1	AJ
a	COAX® cartridge module Pi48-3X2	AK
a	COAX® cartridge module Pi48-3X3	AL
a	COAX® cartridge module Pi48-3X4	AM
b	COAX® cartridge module Pi48-3X1, non-return valve	AN
b	COAX® cartridge module Pi48-3X2, non-return valve	AO
b	COAX® cartridge module Pi48-3X3, non-return valve	AP
b	COAX® cartridge module Pi48-3X4, non-return valve	AQ
a	COAX® cartridge module Si32-3X1	AB
a	COAX® cartridge module Si32-3X2	AC
a	COAX® cartridge module Si32-3X3	AD

Vacuum pumps/generators Medium



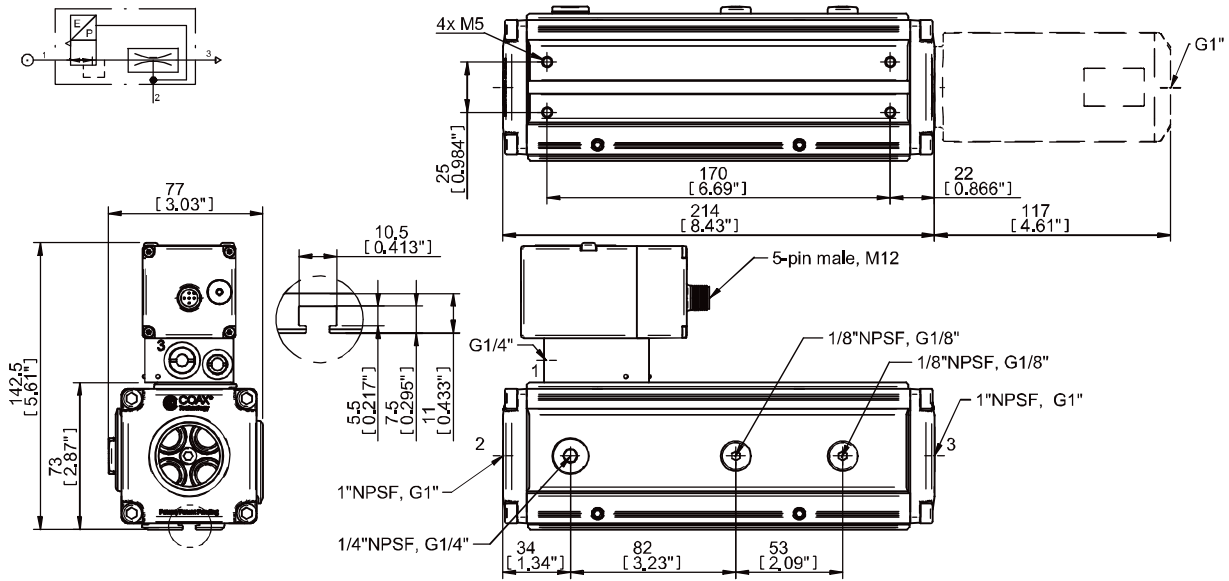
2. COAX® cartridge modules		P6010 code
a	COAX® cartridge module Si32-3X4	AE
b	COAX® cartridge module Si32-3X1, non-return valve	AF
b	COAX® cartridge module Si32-3X2, non-return valve	AG
b	COAX® cartridge module Si32-3X3, non-return valve	AH
b	COAX® cartridge module Si32-3X4, non-return valve	AI
a	COAX® cartridge module Xi40-3X1	AR
a	COAX® cartridge module Xi40-3X2	AS
a	COAX® cartridge module Xi40-3X3	AT
a	COAX® cartridge module Xi40-3X4	AU
b	COAX® cartridge module Xi40-3X1, non-return valve	AV
b	COAX® cartridge module Xi40-3X2, non-return valve	AW
b	COAX® cartridge module Xi40-3X3, non-return valve	AX
b	COAX® cartridge module Xi40-3X4, non-return valve	AY

3. Mounting		P6010 Code
Mounting T-slot, Cover plate with PIAB label		01

4. Cover plates		P6010 Code
Function PCC Vacuum, cover plate G thread connections		LB
Function PCC Vacuum, cover plate NPSF thread connections		LT

5. Select Connections for vacuum and exhaust		P6010 Code
Connections 2x G1"		51
Connections 2x G1", silencer 1"		52
Connections 2x G3/4"		53
Connections 2x G3/4", silencer 3/4"		54
Connections 2x 1" NPSF		55
Connections 2x 1" NPSF, silencer 1"		56
Connections 2x 3/4" NPSF		57
Connections 2x 3/4" NPSF, silencer 3/4"		58

Example	Ordering number
P6010 Si32-3X2, Mounting T-slot, Cover plate with PCC vacuum function and G-threads, Connections 2x G1" and silencer 1"	P6010 AC 01 LB 52



Ordering information, accessories

Description	Art. No.
Silencer G1"	0112499
Silencer 1" NPSF	0113003
Manometer 1 MPa	0112532
Cable M12 4-pin female PUR, 5m*	0121817

*) Pin no. 5 is not used. M12 4-pin cable will fit the M12 5-pin connector.

P6040 Function V30



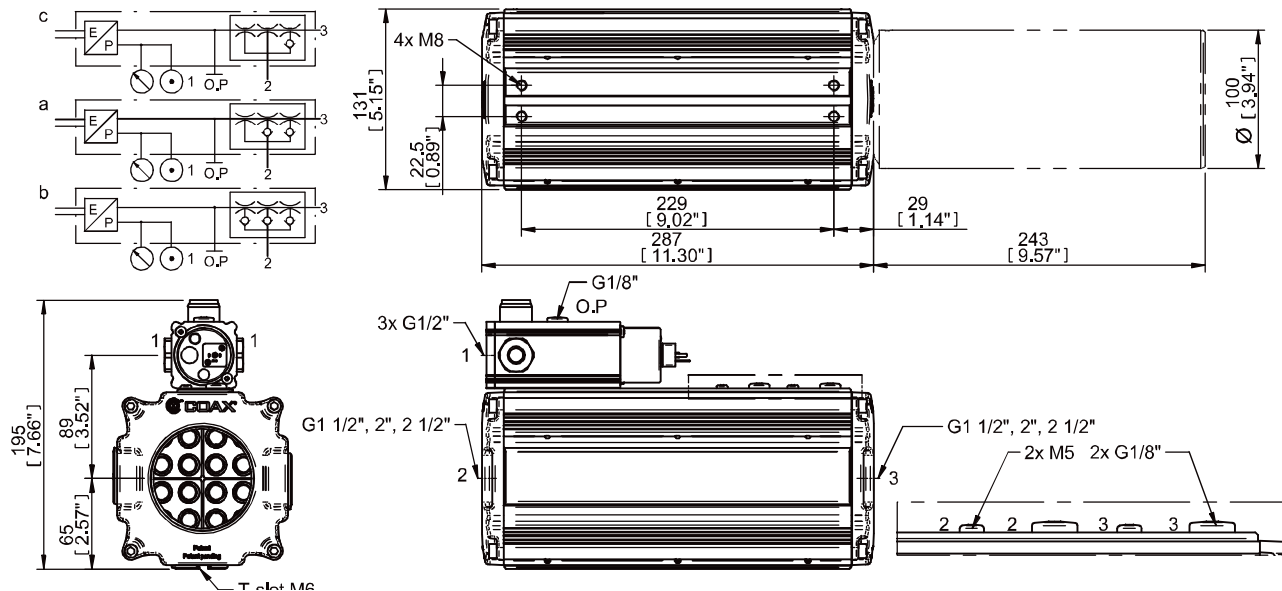
- ▶ Patented COAX® technology
- ▶ Substantially lower air consumption
- ▶ Modular design for flexible performance
- ▶ Compact and durable with no moving parts
- ▶ With its low energy consumption it can be controlled directly from the control system

Technical data

Description	Unit	Value
Feed pressure	MPa	0.7
Noise level	dBA	57-76
Temperature range	°C	0-50
Voltage	V	24
Voltage range	V	14-28
Current consumption	mA	40
Ripple	V _p	1 V _{rms}
Safety classification	IP	65
Display		LED
Weight	g	4900-5900
Material		Al, PA, NBR, SS, POM, HDPE, CuZn, PBT

Ordering information

Description	Art. No.
Function V30	0117783
Example	Ordering No.
P6040 Vacuum, Pi48-3X5, Mounting T-slot, Cover plate with function V30, Connection G 2 1/2" and silencer	P6040 V AA 00 AC 05



P6040 Function ES Vacuum



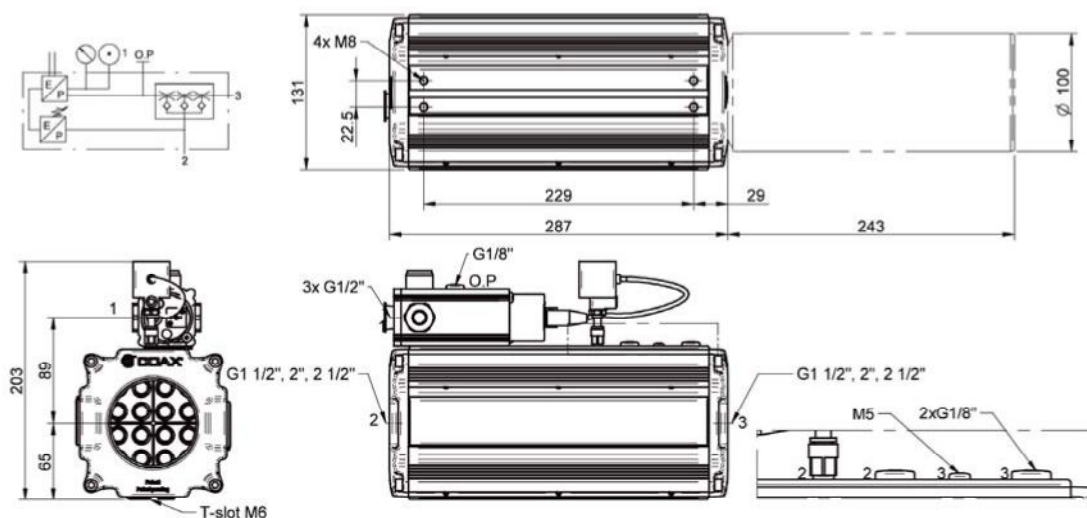
- ▶ Patented COAX® technology
- ▶ Substantially lower air consumption
- ▶ Modular design for flexible performance
- ▶ Compact and durable with no moving parts
- ▶ Saves energy when the vacuum requirement varies

Technical data

Description	Unit	Value
Feed pressure	MPa	0.7
Noise level	dBA	57-76
Temperature range	°C	0-50
Signal range	-kPa	15-95
Hysteresis	kPa	1-79
Voltage	V	24
Voltage range	V	14-28
Current consumption	mA	60
Ripple	V _p	1 V _{rms}
Safety classification	IP	40
Display		LED
Weight	g	5000-6000
Material		Al, PA, NBR, SS, POM, HDPE, PC, CuZn, PBT

Ordering information

Description	Art. No.
Function ES Vacuum	0117784
Example	Ordering No.
P6040 Vacuum, Si32-3X5 with non-return valve, Mounting T-slot, Cover plate with function ES vacuum, Connection G 2 1/2" with silencer	P6040 V BW 00 AD 05



piSAVE release



- ▶ Equalises pressure in the suction cups to provide fast release of the product.
- ▶ Extra fast release by accumulating and utilising the feed-air pressure as a boost.
- ▶ ON/OFF activated simultaneously with the ejector.
- ▶ No additional controls required — use a single 3/2 control valve for the ejector and piSAVE release.

Technical data

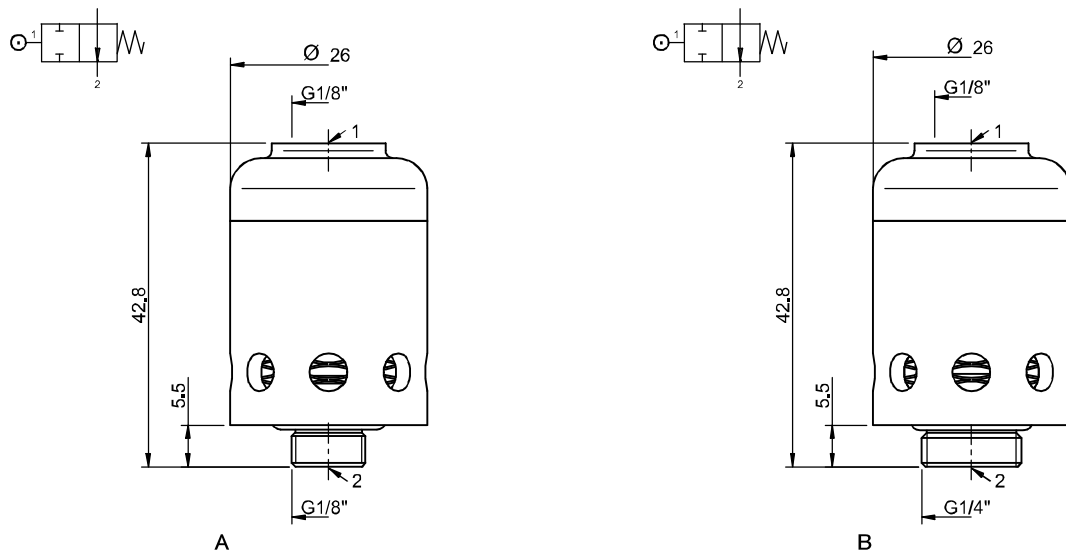
Description	Unit	Value
Feed pressure, range	MPa	0.3–0.7
Material		Al, SS, NBR
Temperature range	°C	0–50
Weight	g	47
Connection, compressed air		G1/8"
Dimension, WxDxH	mm	26x26x37,3

Technical data, specific

Description	Unit	Value	
		0119721	0119720
Connection, vacuum		G1/8"	G1/4"
Flow, atmospheric	NI/s	3.85	7.85

Ordering information

	Description	Art. No.
A	piSAVE release G1/8"	0119721
B	piSAVE release G1/4"	0119720



AQR (Atmospheric Quick-Release Valve)



- ▶ Equalises pressure in vacuum gripper systems to provide fast release of product.
- ▶ Consumes no additional compressed air.
- ▶ ON/OFF activated simultaneously with the ejector.
- ▶ No additional controls required — use a single 3/2 control valve for the ejector and AQR.
- ▶ Optional with fitting kit containing straight connector G1/8" and nylon tube.

Technical data

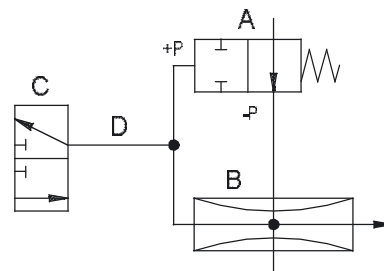
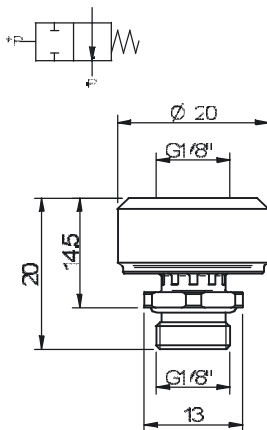
Description	Unit	Value
Feed pressure, range	MPa	0.3–0.7
Temperature range	°C	10–50
Connection, compressed air		G1/8"
Connection, vacuum		G1/8"
Flow, atmospheric	NI/s	3.3
Dimension, WxDxH	mm	20x22x16,5

Technical data, specific

Description	Unit	Value
		0111236
Material		CuZn, PUR, NBR
Weight	g	24

Ordering information

Description	Art. No.
Atmospheric quick-release valve – AQR	0111236



A=AQR, B=Vacuum pump, C=Control valve, D=Rec. max. 1.5m

piSAVE optimize



- ▶ Vacuum controlled proportional pressure regulator, a fully pneumatic device suitable for air-driven ejectors/pumps.
- ▶ The feed pressure to the vacuum pump/ejector is automatically regulated and controlled to maintain the set vacuum level. Air/energy usage is kept to a minimum for the application (optimized).
- ▶ Recommended for leaking and sealed applications to save energy and secure the right vacuum level.
- ▶ Extra port for Vacuum gauge
- ▶ Air ventilation port with filter
- ▶ Swivel compressed air connections
- ▶ piSAVE optimize gives maximum feed pressure/flow to vacuum pump/ejector until vacuum level starts to build up .
- ▶ Separate mounting bracket kit
- ▶ Upgrade kit - available as an integrated module for piCLASSIC and Classic vacuum pumps

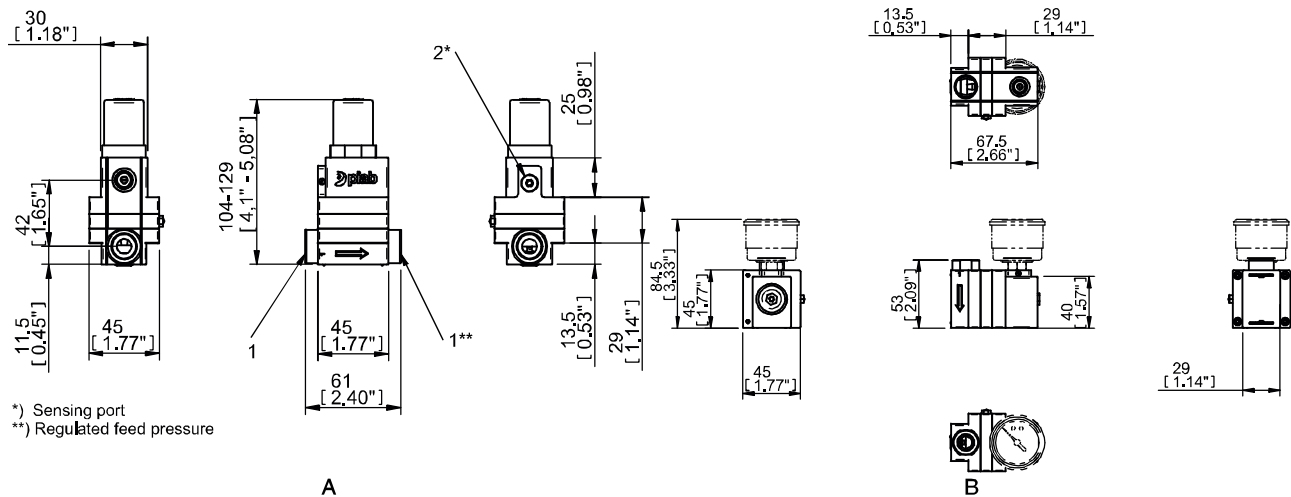
Technical data

Description	Unit	Value
Feed pressure max.	MPa	0,7
Feed pressure min.	MPa	0,4
Feed pressure	Pressure drop	0,05 MPa @ 0,7 MPa and 15 NI/s
Material		Al, CuZn, HNBR, NBR, SS, PA66
Temperature range	°C	-10-60
Weight	g	324 (268)*
Operation range	-kPa	25-70 (30-60)*
Accuracy	kPa	±3
Min. Flow	NI/s	1.67 @ recommended ejector/pump feed pressure
Max. Flow	NI/s	15
Life span	years	5 or 5 million cycles
Min particle size	µm	5
Max distance to vacuum system**	m	3

*) piCLASSIC/Classic integrated version. **) Vacuum sensing hose.

Ordering information

	Description	Art. No.
A	piSAVE optimize stand-alone 25-70 -kPa G3/8"	0128999
A	piSAVE optimize standalone 25-70 -kPa 3/8" NPT	0129000
B	piSAVE optimize upgrade kit piCLASSIC/Classic	0129002



Ordering information accessories

Description	Art. No
Mounting kit piSAVE optimize	0129003
Vacuum gauge 100 -kPa, with nut / -30 inHg	3101602

PCC (Piab Cruise Control)



- ▶ For vacuum pump P6010.
- ▶ Programmable for constant vacuum level.
- ▶ The signal input regulates the feed pressure to maintain a constant vacuum level.
- ▶ Integrated analogue vacuum sensor.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	1.0
Vacuum, scale factor signal input	-kPa	0–90
Material		Al, PA, NBR, SS, AiSi302
Temperature range	°C	3–50
Voltage	VDC	24 (21.8–26.4)
Voltage, signal input	VDC	0–10
Safety classification		IP65
Current consumption	mA	<120
Electric connection		M12 5-pin male

The design of PCC requires that the inlet pressure is 0.1 MPa higher than the outlet pressure.

For dimensions, please go to data sheet for vacuum pump P6010.

Ordering information

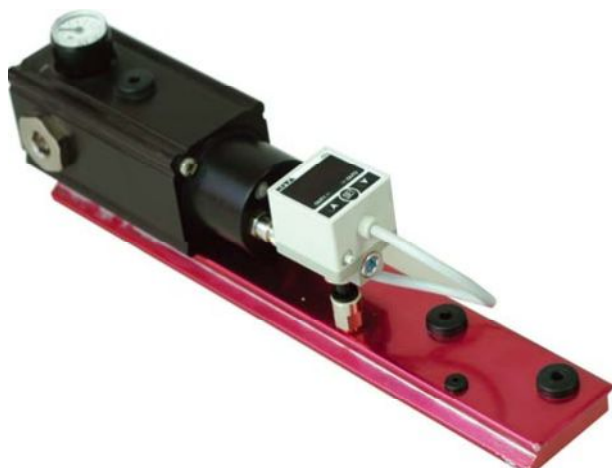
Description
Available in product configuration, please go to data sheet for vacuum pump P6010.

Ordering information, accessories

Description	Art. No.
Cable M12 4-pin female, PUR, L=5m*	0121817

**) Pin no. 5 is not used. M12 4-pin cable will fit the M12 5-pin connector.*

Function ES vacuum



- ▶ Electrically operated air-saving device for P6040 vacuum pump.
- ▶ Adjustable vacuum controlled 2/2 NO valve.
- ▶ Manometer for feed pressure control.
- ▶ Recommended for P6040 vacuum pump in non-leaking systems.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Material		Al, PA, NBR, SS, POM, HDPE, PC, CuZn, PBT
Temperature range	°C	0–50
Signal range	-kPa	15–95
Hysteresis	kpa	1.5
Voltage	VDC	24 (14–28)
Safety classification		IP40
Current consumption	mA	60
Ripple	V _{rms}	1
Display		LED indicator
Electric connection		DIN (c)

For dimensions, please go to data sheet for vacuum pump P6040.

Ordering information

Description
Available in product configuration, please go to data sheet for vacuum pump P6040.

AVM™2 (Automatic Vacuum Management)



- ▶ For vacuum pumps P3010, P5010 and P6010.
- ▶ AVM™2 unit with built-in control and monitoring functions.
- ▶ Integrated energy saving function (ES) minimises the air consumption in sealed systems.
- ▶ Valves for vacuum on/off and blow-off with electrical power failsafe function.
- ▶ Two digital outputs, 16 pre-set combinations of vacuum levels.
- ▶ Digital vacuum level display.
- ▶ Mechanical valve for blow-off flow adjustment.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Material		PA, NBR, Al, SS, PMMA
Temperature range	°C	0–50
Signal range, adjustable	-kPa	20–80
Function, on/off		NO/NC
Hysteresis	kPa	7±1
Voltage	VDC	24 (22–28)
Safety classification		IP65 [NEMA 4]
Current, max. output load	mA	100
Humidity	%RH	90
Current consumption	mA	110
Ripple, max.	V _{rms}	1
Display		LED indicators, numeric
Electric connection		M12 8-pin

For dimensions, please go to data sheet for vacuum pumps P3010, P5010 and P6010.

Technical data, specific

Description	Unit	Value		
		P3010	P5010	P6010
Flow, blow-off @ P _i =6 bar and Δp=0.5 bar	l/s	0–7.5	0–7.5	0–7.5

Ordering information

Description
Available in product configuration, please go to data sheet for vacuum pumps P3010, P5010 and P6010.

Ordering information, accessories

Description	Art. No.
Cable M12 8-pin female, PUR, L=2m	0110238
Cable M12 8-pin female, PUR, L=5m	0117746
Y-cable M12 8-pin female, 2xM12 4-pin male, PNP, PUR, L=2m	0118407
Y-cable M12 8-pin female, 2xM12 5-pin male, NPN, PUR, L=2m	0120229

Pilot regulator



- ▶ Pilot-operated pressure regulator with secondary pressure relief and flow compensation.
- ▶ Suitable for remote control.

Technical data

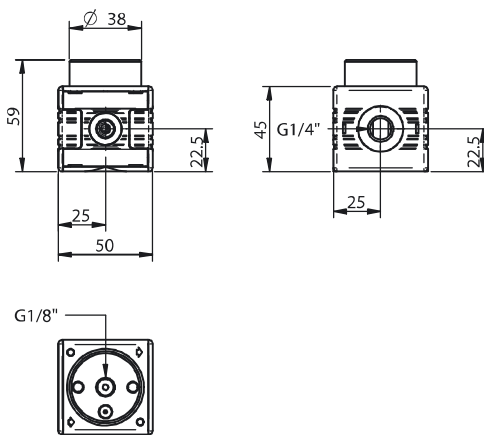
Description	Unit	Value
Feed pressure, max	MPa	1.6
Air consumption, internal	NI/s	$0.8 \times P_2 / 60$
Temperature range	°C	0–60
Pressure, outlet P_2	MPa	0.05–0.8

Technical data, specific

Description	Unit	Value
		0114283
Weight	g	400
Connection, P_1/P_2		G1/4"
Connection, pilot		G1/8"
Connection, gauge		G1/8"
Flow, @ $P_1=0.7$ & $P_2=0.6$ MPa	NI/s	9

Ordering information

Description	Art. No.
Pressure regulator, pilot operated, G1/4"	0114283



A

Silencer MINI

► Reduces noise from exhaust on piINLINE® MINI.

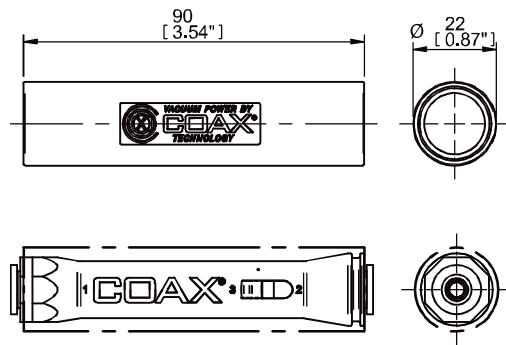


Technical data

Description	Unit	Value
Noise level, max. reduction	dBA	10
Material		Al
Weight	g	20

Ordering information

Description	Art. No.
Silencer piINLINE® MINI	0125466



Ordering information, accessories

Description	Art. No.
Snap-in piINLINE® 1x MINI mounting bracket for silencer	0126009

Silencer MIDI

► Reduces noise from exhaust on MIDI piINLINE®.

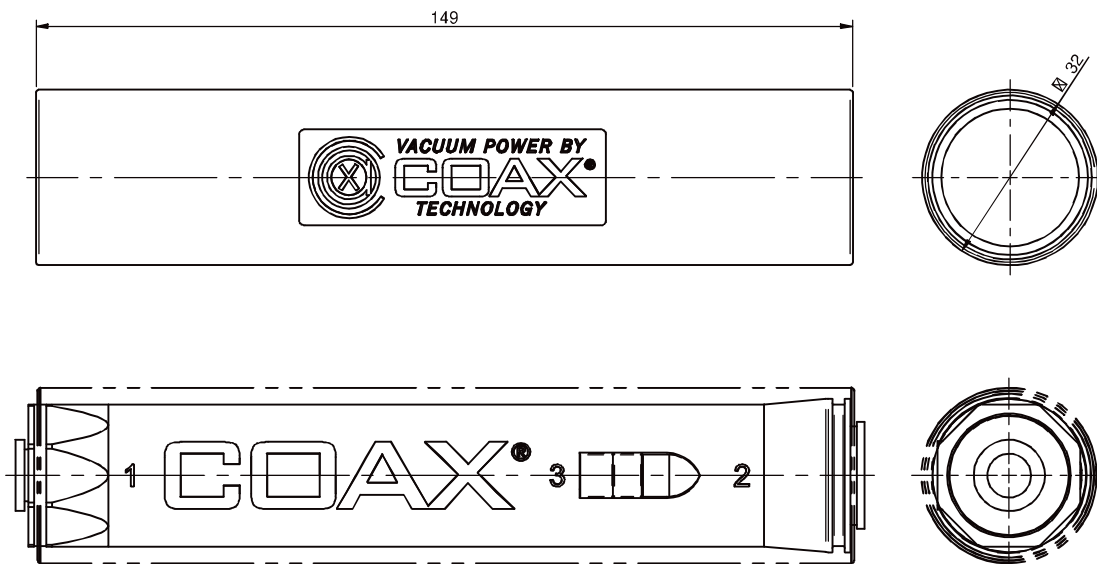


Technical data

Description	Unit	Value
Noise level, max. reduction	dBA	15
Material		Al
Weight	g	70

Ordering information

Description	Art. No.
Silencer piINLINE® MIDI	0123031



Ordering information, accessories

Description	Art. No.
Snap-in piINLINE® 1x MIDI mounting bracket for silencer	0123096

Silencers



- ▶ Reduce noise from exhaust
- ▶ Flow-through design

Technical data

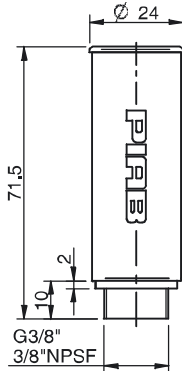
Description	Unit	Value	
			0117605
Noise level reduction, approximately	dB(A)	-10	-10
Temperature range	°C	-20-100	-20-100
Material		PA, HDPE	Al, POM, HDPE, SS

Technical data, specific

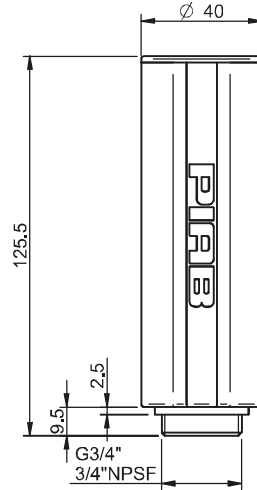
Description	Unit	Value				
		3216009	3216002	0112499/0113003	0103224	0117782
Weight	g	14	61	120	425	893

Ordering information

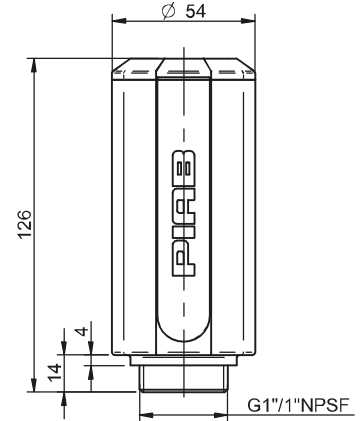
	Description	Art. No.
A	Silencer G3/8"	3216009
B	Silencer G3/4"	3216002
C	Silencer G1"	0112499
D	Silencer 1" NPSF	0113003
D	Silencer G1½"	0103224
E	Silencer G2½"	0117782



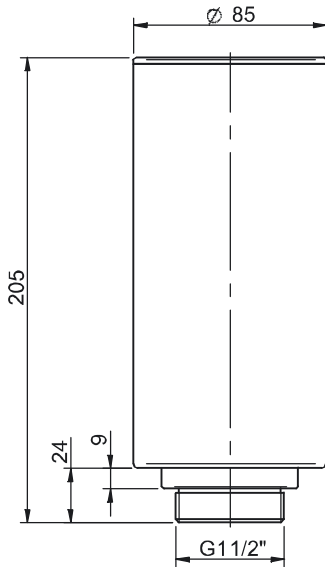
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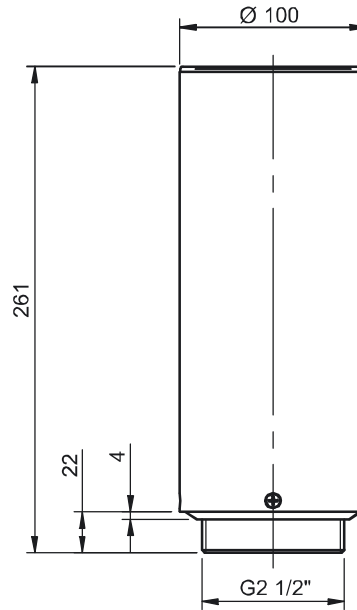
B



C



D



E

Silencer COAX®



- ▶ Reduces noise from the exhaust
- ▶ Compatible with aluminium holders for COAX® MINI and COAX® MIDI cartridges
- ▶ Simple snap locking when mounting
- ▶ Through-flow design that eliminates the risk of impaired performance due to clogging of the silencer

Technical data

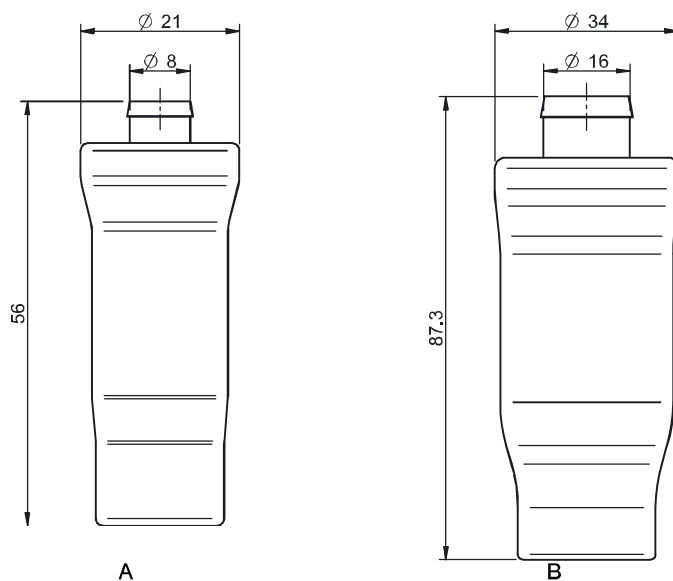
Description	Unit	Value
Material		PA, TPU, PE
Temperature range	°C	-20-80
Noise level reduction	dB(A)	≥10

Technical data, specific

Description	Unit	Value	
		0111977	0111976
Weight	g	8.64	36.56

Ordering information

	Description	Art. No.
A	Silencer COAX® MINI	0111977
B	Silencer COAX® MIDI	0111976



Vacuum filters



- ▶ To filter dust and other small particles from the vacuum flow.
- ▶ Reduces the risk of operation breakdown or stoppage in the pump.
- ▶ Replaceable filter element.
- ▶ Available with special filter element with increased filter area.

Technical data

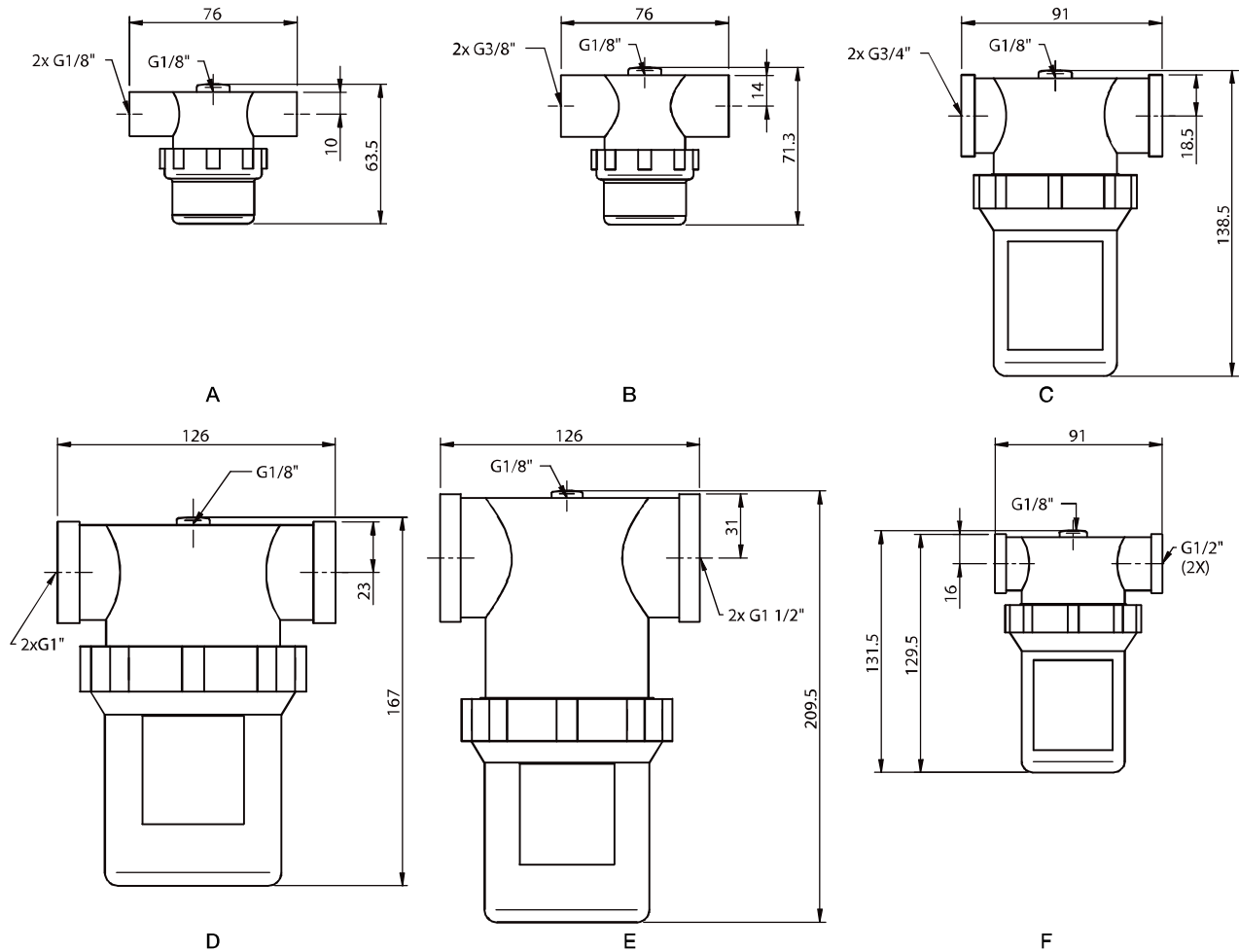
Description	Unit	Value
Pressure range	MPa	-0.1-0
Temperature range	°C	-20-80

Technical data, specific

Description	Unit	Value								
		3116670	3116671	3116651	3116652	3116672	3116653	0110521	0110522	0110523
Material		PP, PA, PE	PP, PA, PE	PP, PA, PE	PP, PA, PE	PP, PA, PE	PP, PA, PE	PP, PA, SS, Polyester	PP, PA, SS, Polyester	PP, PA, SS, Polyester
Removal efficiency	µm	10	10	10	10	10	10	5	5	5
Weight	g	53	73	184	193	440	560	240	246	658
Flow nominal	NI/s	1.4	2.5	15	15	42	85	5.8	5.8	9
Volume internal	cm ³	35	45	195	205	495	675	195	205	675
Filter area	m ²	0.003	0.003	0.010	0.010	0.019	0.023	0.032	0.032	0.051

Ordering information

	Description	Art. No.
A	Vacuum filter G1/8" (10 µm)	3116670
B	Vacuum filter G3/8" (10 µm)	3116671
C	Vacuum filter G3/4" (10 µm)	3116652
D	Vacuum filter G1" (10 µm)	3116672
E	Vacuum filter G1½" (10 µm)	3116653
F	Vacuum filter G1/2" (10 µm)	3116651
F	Vacuum filter G1/2" (5 µm)	0110521
C	Vacuum filter G3/4" (5 µm)	0110522
E	Vacuum filter G1½" (5 µm)	0110523

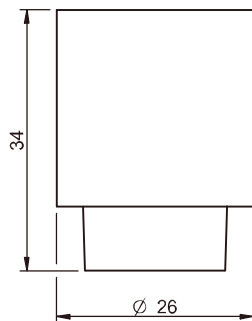


Technical data, accessories

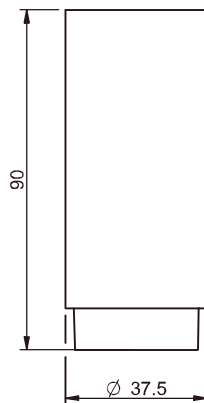
Description	Unit	Value						
		3116673	3116674	3116675	3116676	3116223	3116224	0116640
Material		PE	PE	PE	PE	SS, Polyester	SS, Polyester	PE
Weight	g	5	22	47	64	80	166	5
Filter area	m ²	0.003	0.010	0.019	0.023	0.032	0.051	0.003
Removal efficiency	µm	10	10	10	10	5	5	120

Ordering information, accessories

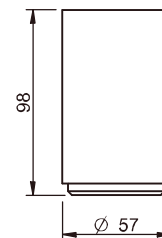
	Description	Art. No.
A	Filter element 1/8" & 3/8" (10 µm)	3116673
B	Filter element 1/2" & 3/4" (10 µm)	3116674
C	Filter element 1" (10 µm)	3116675
D	Filter element 1 1/2" (10 µm)	3116676
E	Filter element 1/2" & 3/4" (5 µm)	3116223
F	Filter element 1 1/2" (5 µm)	3116224
A	Filter element 1/8" & 3/8" (120 µm)	0116640



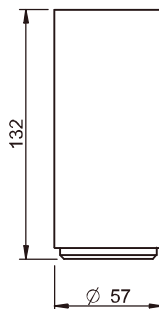
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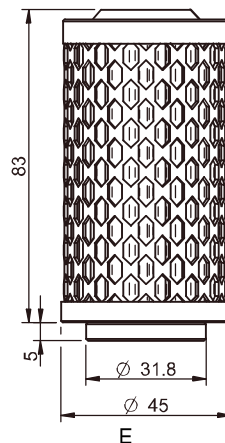
B



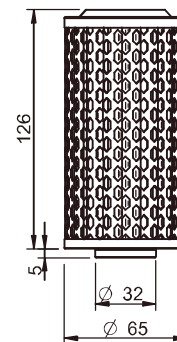
C



D



E



F

Vacuum filter S



- ▶ To filter dust and other small particles from the vacuum flow.
- ▶ Reduces the risk of operation breakdown or stoppage in the pump.

Technical data

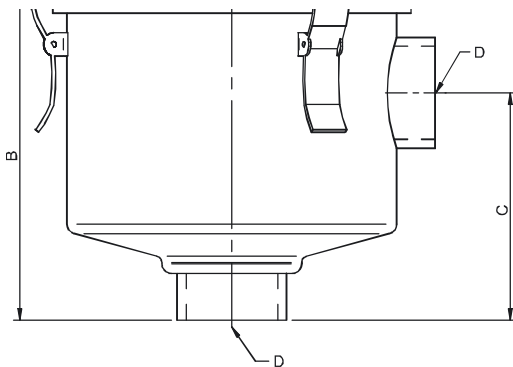
Description	Unit	Value
Pressure range	MPa	-0.1-0
Material		Baked enamel steel, SS, NBR, Polyester
Temperature range	°C	-30-90
Removal efficiency	µm	5

Technical data, specific

Description	Unit	Value			
		3116709	3116654	3116710	0111311
Weight	kg	1.0	2.1	4.9	4.2
Flow	NI/s	16.5	37.7	82.6	100
Volume, internal	cm	810	2560	5830	7000
Filter area	cm	600	1900	4200	7500

Ordering information

Description	Art. No.
Vacuum filter 1", steel	3116709
Vacuum filter 1 1/2", steel	3116654
Vacuum filter 2", steel	3116710
Vacuum filter 2 1/2", steel	0111311



Measures

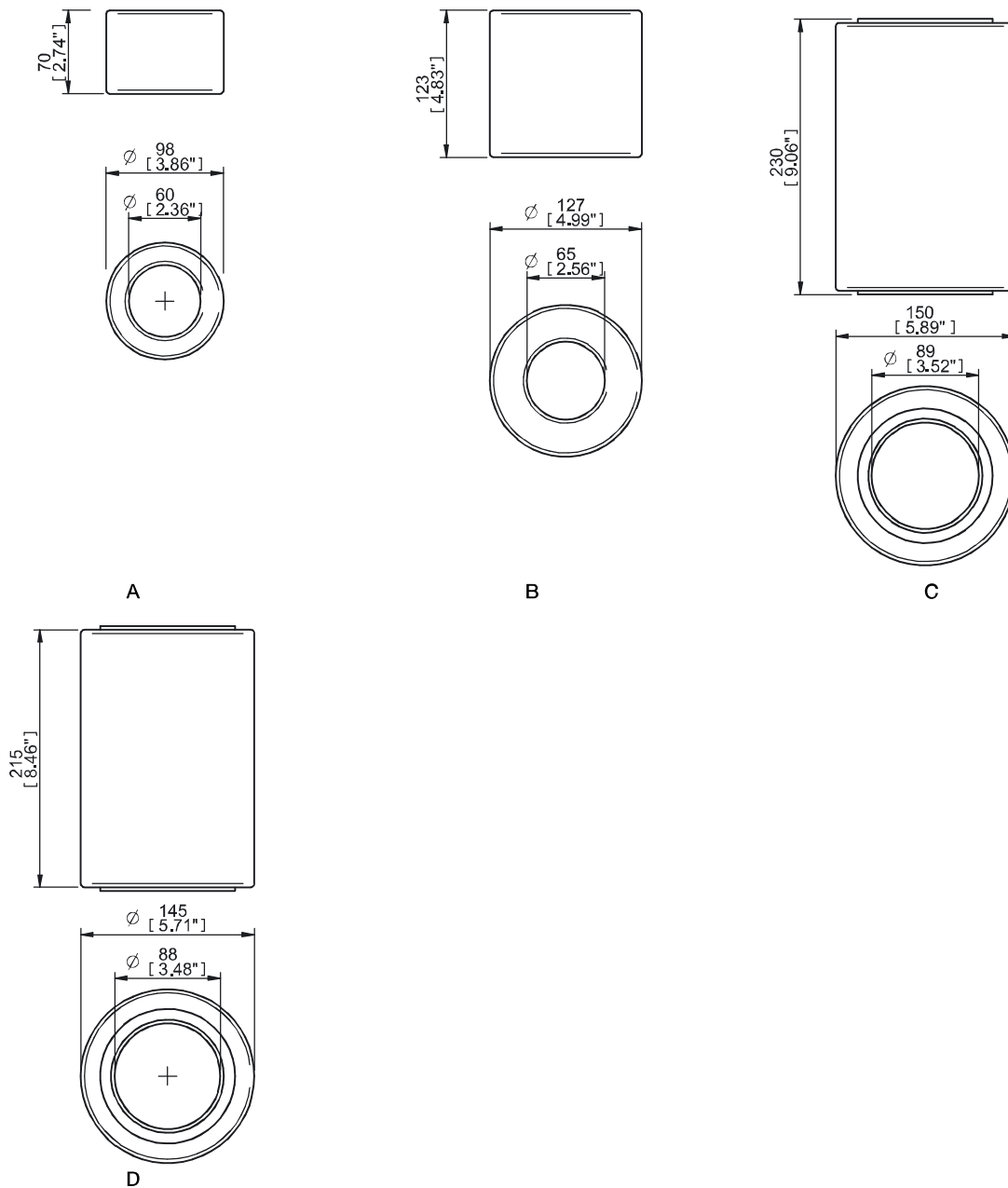
Description	Art. No.	A [Ø mm]	B [mm]	C [mm]	D
Vacuum filter 1", steel	3116709	150	111	67	G 1"
Vacuum filter 1 1/2", steel	3116654	185	170	115	G 1 1/2"
Vacuum filter 2", steel	3116710	220	260	130	G 2"
Vacuum filter 2 1/2", steel	0111311	200	260	134	G 2 1/2"

Technical data, accessories

Description	Unit	Value			
		3116711	3116658	3116712	0111558
Weight	kg	0.18	0.53	1.00	0.50
Material		Polyester	Polyester	Polyester	Polyester
For Vacuum Filter		3116709	3116654	3116710	0111311

Ordering information, accessories

	Description	Art. No.
A	Filter element 1"	3116711
B	Filter element 1 1/2"	3116658
C	Filter element 2"	3116712
D	Filter element 2 1/2"	0111558



Filter fittings



- ▶ Adjustable mounting angle due to the use of locking nut.
- ▶ No need for seal with Teflon tape or glue due to the use of O-ring seals.

Technical data

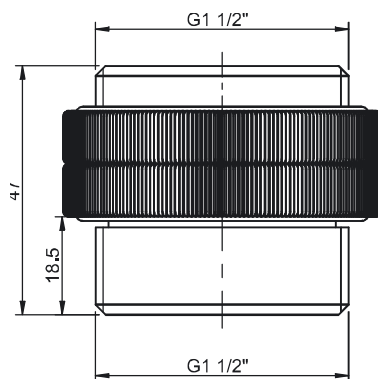
Description	Unit	Value
Material		Al, NBR
Temperature range	°C	-20-80

Technical data, specific

Description	Unit	Value
		3330051
Weight	g	110
Connection		2 x G1 1/2"

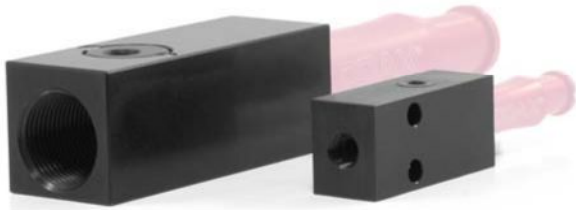
Ordering information

Description	Art. No.
A Filter fitting 1 1/2"	3330051



A

Body for COAX® cartridge



- ▶ Aluminium bodies for COAX® MINI and MIDI cartridges.
- ▶ All 2-stage and 3-stage cartridges, equipped with a red aluminium holder, will fit.
- ▶ The mini body has a stackable design with extra port for sensing or blow-off.
- ▶ The midi body has a special vacuum-exhaust inline design, which minimizes the influence of dust on the cartridge.
- ▶ Cartridge has to be ordered separately.

Technical data

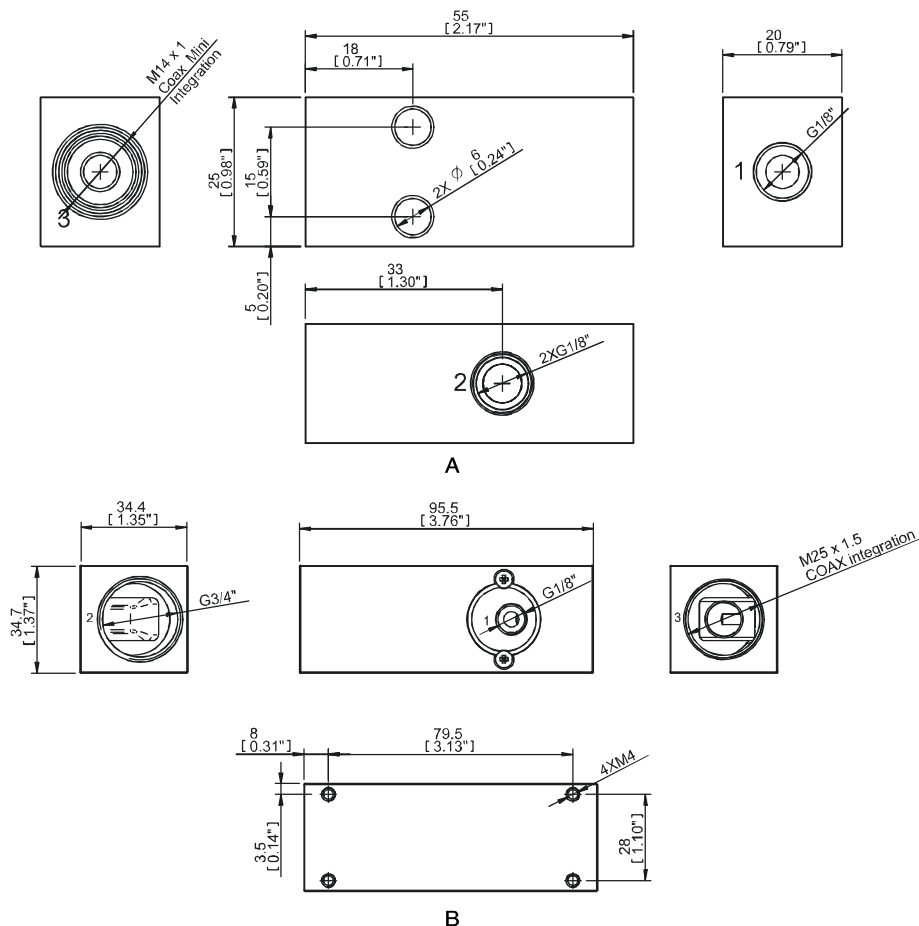
Description	Unit	Value
Temperature range	°C	-10-80

Technical data, specific

Description	Unit	Value	
		0129473	0119309
Material		Al, PA, NBR	Al, SS, NBR
Weight	g	82	200

Ordering information

	Description	Art. No.
A	Body for COAX® MINI cartridge 2x1/8" V	0129473
B	Body for COAX® MIDI cartridge Inline	0119309



Vacuum gauge and manometers



- ▶ Analogue indicator, springjoint – lever system
- ▶ The instruments include nut for installation on a panel

Technical data

Description	Unit	Value
Accuracy, of full scale	%	2.5
Material		CuZn, ABS, PMMA

Technical data, specific

Description	Unit	Value		
		3101602	3101603	3101626
Weight	g	90	55	50
Signal range	MPa	0–0.1	0–1	0–0.25
Medium		Vacuum	Over pressure	

Ordering information

	Description	Art. No.
B	Vacuum gauge 100 -kPa, with nut	3101602
A	Manometer 1 MPa	3101603
A	Manometer 250 kPa	3101626

