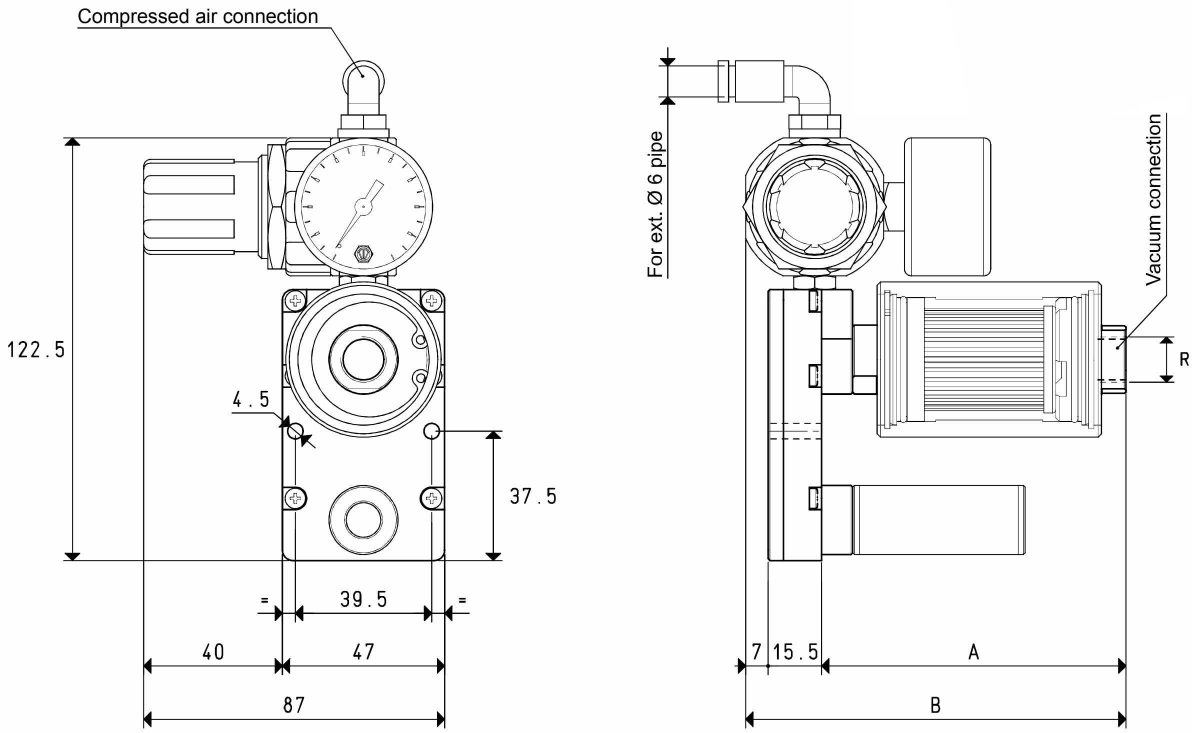
The assembly of a pressure adjuster equipped with pressure gauge and of an FCL filtre on the suction inlet connection of a vacuum generator of the M .. SSX range has allowed creating these small pneumatic suction pumps. Their main features include reduced overall dimensions compared to their technical performance.
The vacuum level and capacity can be adjusted according to the supply air pressure. These pumps are supplied by compressed air with a pressure ranging from 1 to 5 bar (g) and they can produce a maximum vacuum of 85% and a suction capacity between 2 and 18 cum/h, measured at a normal atmospheric pressure of 1013 mbar.
Being based on the Venturi principle, these pumps do not develop heat.
An SSX silencer screwed onto the pump exhaust ensures a silent operation. The filtre equipped with a microporous cartridge is located on the suction inlet connection and can keep the finest dust and impurities.
Thanks to their static operating principle, maintenance is reduced to a simple regular cleaning of the filtre.

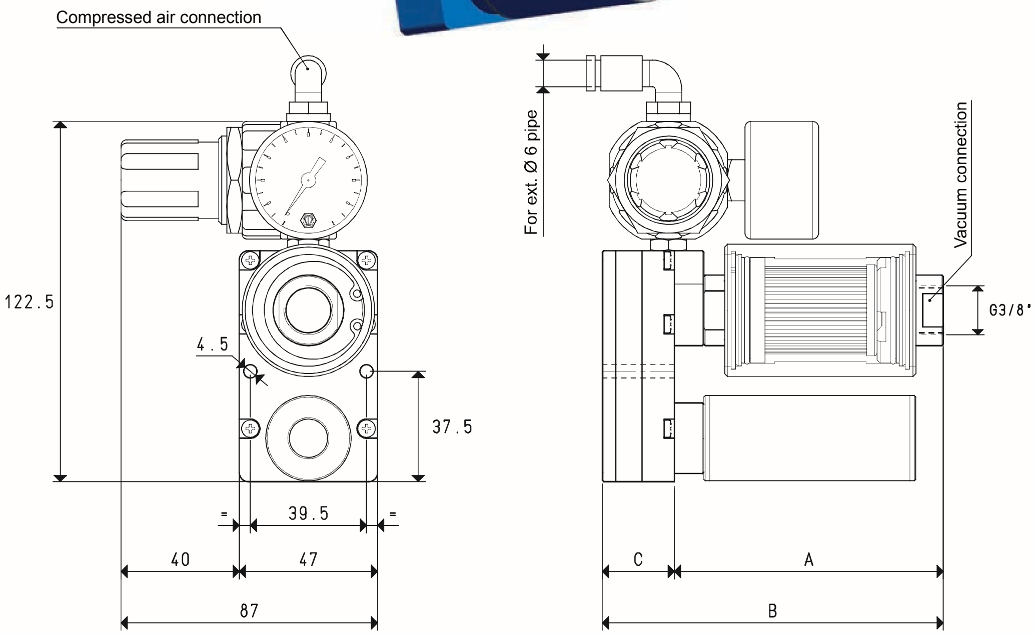


Art.		PA 3				
Supply pressure	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85
Air consumption	Nl/s	0.2	0.4	0.5	0.7	0.8
Quantity of sucked air	cum/h	2.0	2.5	3.0	3.4	3.6
A				88		
B				110.5		
R	Ø			G1/4"		
Weight	Kg			0.45		
Art.		PA 7				
Supply pressure	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85
Air consumption	Nl/s	0.4	0.6	0.8	1.2	1.4
Quantity of sucked air	cum/h	3.0	4.0	5.4	5.8	6.2
A				89		
B				111.5		
R				G3/8"		
Weight	Kg			0.46		
Working temperature	°C			-20 / +80		

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

3D drawings available at **www.vuototecnica.net**

SMALL PNEUMATIC SUCTION PUMPS PA 10, PA 14 and PA 18



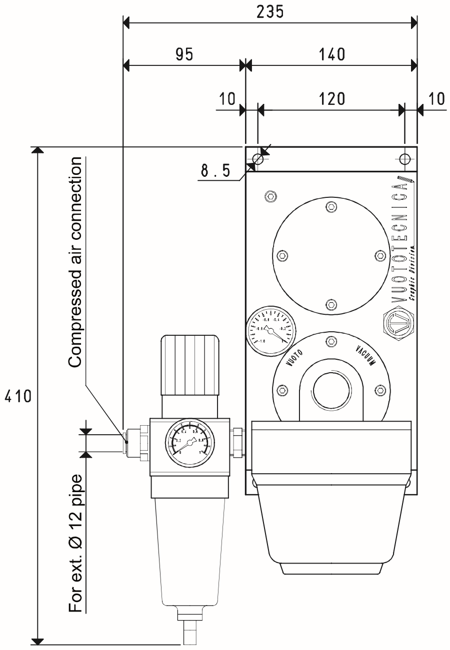
Art.		PA 10				
Supply pressure	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85
Air consumption	Nl/s	0.5	0.9	1.2	1.6	1.9
Quantity of sucked air	cum/h	4.0	6.0	7.7	8.5	9.4
A				94		
B				118.5		
C				24.5		
Weight	Kg			0.59		
Art.				**PA 14**		
Supply pressure	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85
Air consumption	Nl/s	0.9	1.3	1.7	2.1	2.5
Quantity of sucked air	cum/h	6.0	8.0	10.2	11.5	12.6
A				94		
B				118.5		
C				24.5		
Weight	Kg			0.60		
Working temperature				**PA 18**		
Supply pressure	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85
Air consumption	Nl/s	1.2	1.7	2.3	2.9	3.6
Quantity of sucked air	cum/h	8.0	11.5	14.8	16.5	18.0
A				102		
B				136.5		
C				34.5		
Weight	Kg			0.62		
Working temperature	°C			-20 / +80		

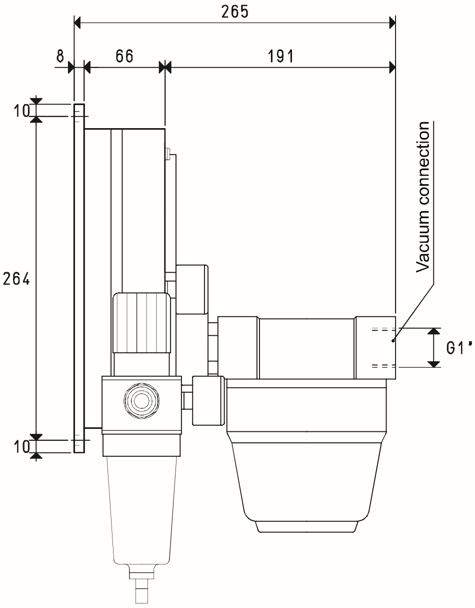
Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117

A state of the art range of ejectors has allowed creating this range of pneumatic suction pumps featuring an excellent ratio between the amount of consumed air and sucked air, as well as the ability to adjust the vacuum level and capacity according to the supply air pressure.
These pumps are supplied by compressed air with a pressure ranging from 1 to 6 bar (g), and they can produce a maximum vacuum of 90% and a suction capacity between 15 and 320 cum/h, measured at a normal atmospheric pressure of 1013 mbar.
When designing these pumps our attention was focused on noise. In fact, they are perfectly soundproofed and there are no moving parts subject to wear and vibrations. All this results in an extremely silent operation.
Moreover, being based on the Venturi principle, they do not develop heat.
As a standard, they are equipped with a filtre/pressure reducer unit for the supply air and a filtre with microporous cartridge located on the suction inlet connection which can keep the finest dust and impurities.
The excellent compressed air and sucked filtration allows blowing air free from oil vapours, water condensation and impurities in the work environment, causing no pollution.
The use of light alloys for making these pumps has allowed a considerable reduction of their weight thus allowing them to be directly installed onto the machine. Thanks to their static operating principle, maintenance is reduced to a simple regular cleaning of the filtres.





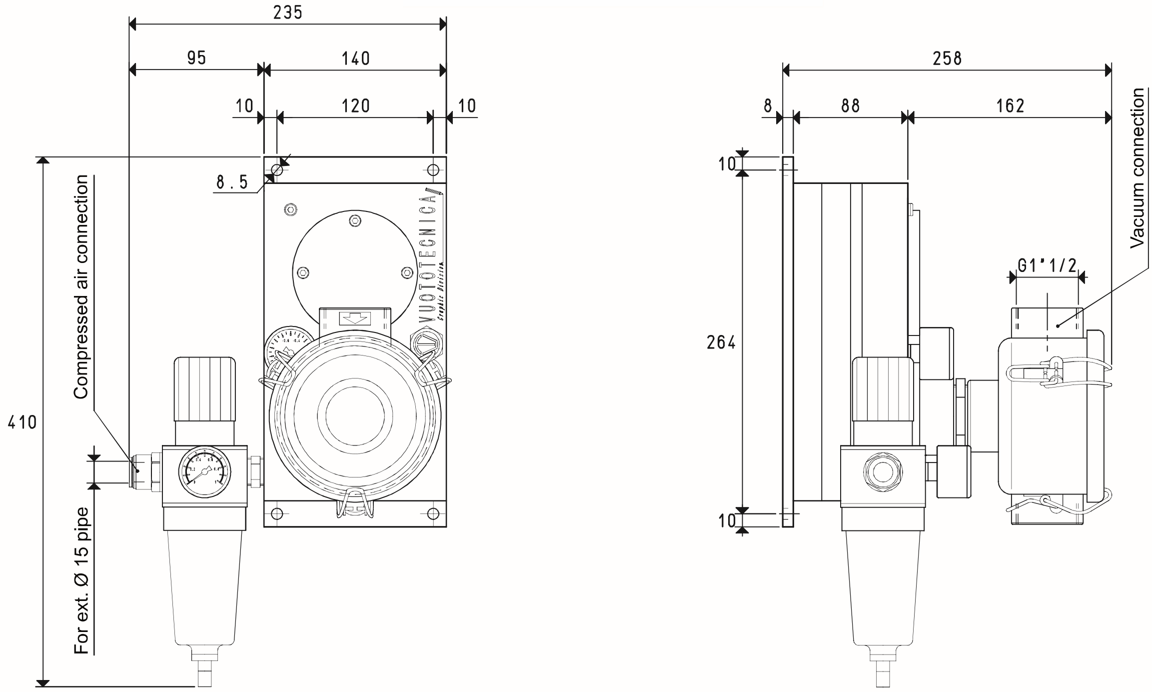
Art.		PA 40					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	14	30	46	65	82	90
Air consumption	Nl/s	1.0	1.5	2.0	2.3	2.7	3.2
Quantity of sucked air	cum/h	15	23	30	36	39	42
Weight	Kg	6.2					
Art.		PA 70					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	14	30	46	65	82	90
Air consumption	Nl/s	2.0	3.0	4.1	4.9	5.7	6.6
Quantity of sucked air	cum/h	29	47	58	65	73	80
Weight	Kg	6.2					
Art.		PA 100					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	11	28	45	65	82	90
Air consumption	Nl/s	3.0	4.6	6.2	7.2	8.5	9.8
Quantity of sucked air	cum/h	28	57	75	88	98	108
Weight	Kg	6.2					
Working temperature	°C	-20 / +80					

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117

PNEUMATIC SUCTION PUMPS PA 140, PA 170 e PA 200

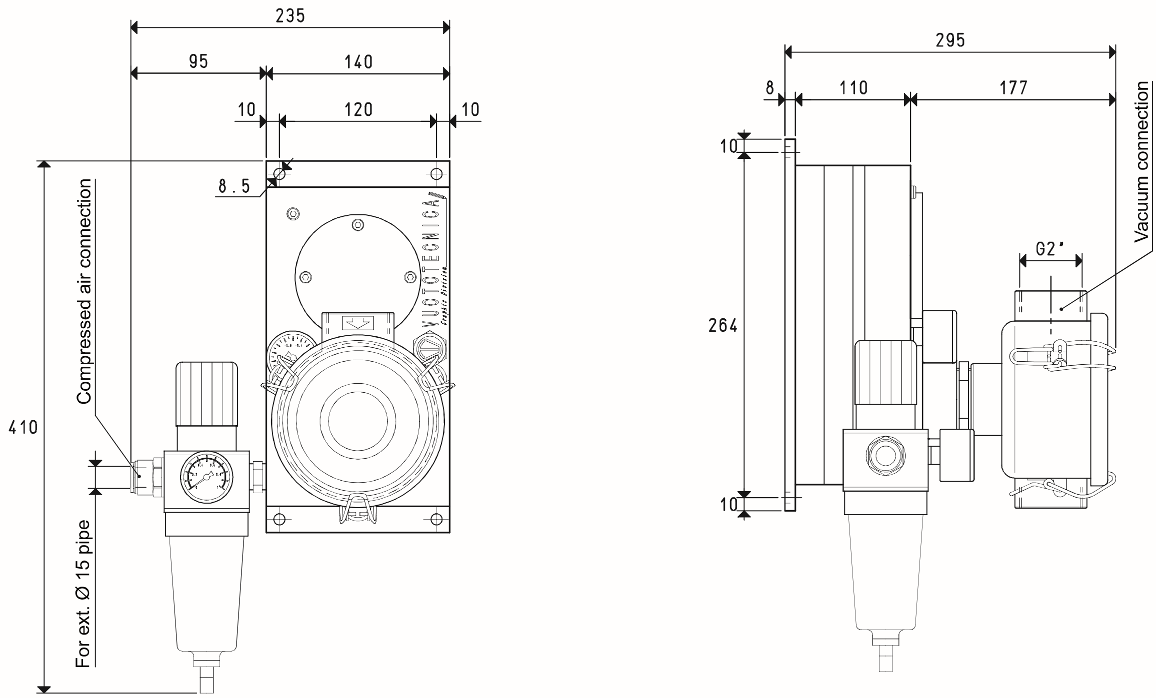


Art.		PA 140					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90
Air consumption	Nl/s	4.1	6.2	8.3	9.6	11.4	13.0
Quantity of sucked air	cum/h	45	80	106	125	140	152
Weight	Kg	7.2					
Art.		PA 170					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90
Air consumption	Nl/s	5.1	7.7	10.3	12.1	14.2	16.3
Quantity of sucked air	cum/h	53	98	128	150	168	182
Weight	Kg	7.2					
Art.		PA 200					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90
Air consumption	Nl/s	6.0	9.1	12.2	14.2	16.9	19.4
Quantity of sucked air	cum/h	60	110	142	170	188	200
Weight	Kg	7.2					
Working temperature	°C	-20 / +80					

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar (g) and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117



Art.		PA 250					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90
Air consumption	Nl/s	7.5	11.2	15.0	17.3	20.7	24.0
Quantity of sucked air	cum/h	100	145	190	224	252	280
Weight	Kg	8.1					
Art.		PA 300					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90
Air consumption	Nl/s	9.0	13.5	18.1	20.4	24.8	29.0
Quantity of sucked air	cum/h	106	160	213	240	290	320
Weight	Kg	8.1					
Working temperature	°C	-20 / +80					

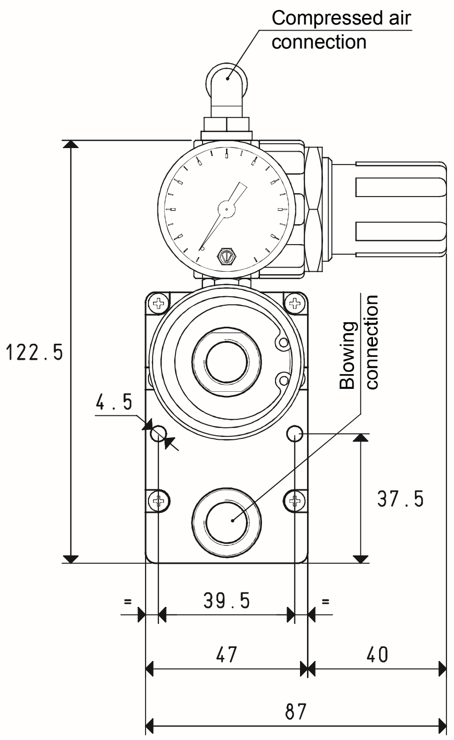
Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar (g) and obtained with a constant supply pressure.

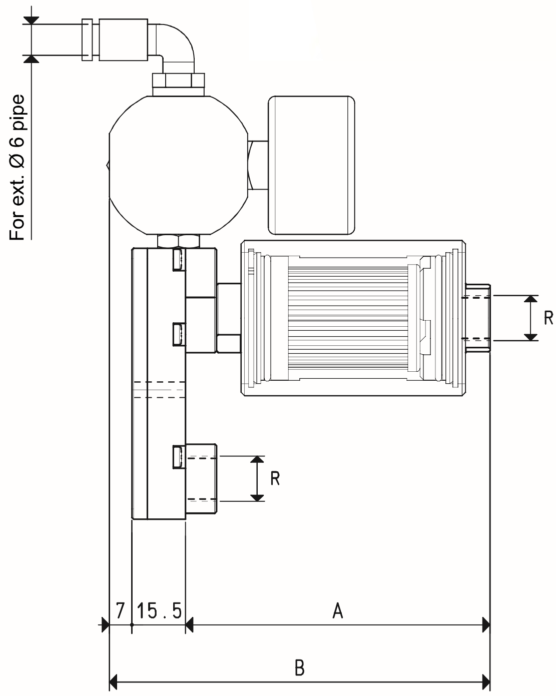
Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117

SMALL PNEUMATIC BLOWING PUMPS PS

The assembly of a pressure adjuster equipped with pressure gauge and of an FCL filtre on the suction inlet connection of a vacuum generator of the M .. SSX range has allowed creating these small pneumatic suction pumps. Their main features include reduced overall dimensions compared to their technical performance.
The vacuum level and capacity can be adjusted according to the supply air pressure.
These pumps are supplied by compressed air with a pressure ranging from 1 to 5 bar (g) and they can produce a maximum pressure of 0.7 bar (g) and a blowing capacity between 2.7 and 31 cum/h, measured at a normal atmospheric pressure of 1013 mbar.
Being based on the Venturi principle, they do not develop heat.
The filtre equipped with microporous cartridge located on the air inlet connection can keep the finest dust and impurities.
Thanks to their static operating principle, maintenance is reduced to a simple regular cleaning of the filtre.



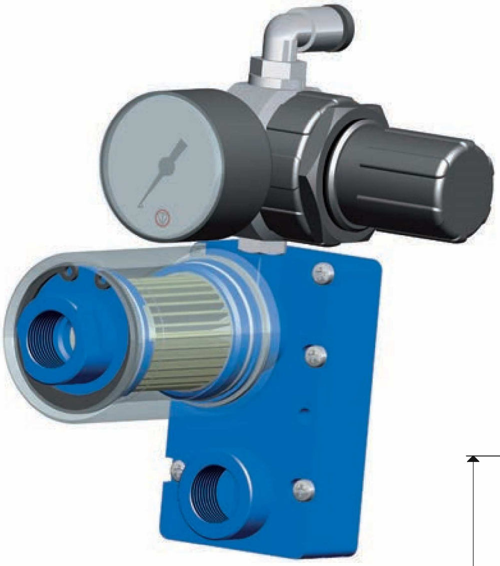


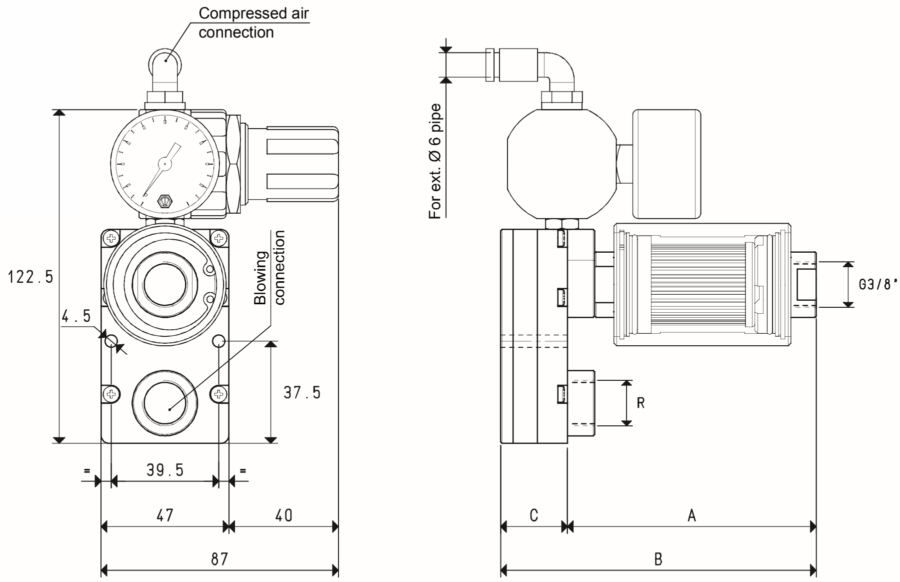
Art.		PS 3				
Supply pressure	bar (g)	1	2	3	4	5
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	0.2	0.4	0.5	0.7	0.8
Quantity of blown air	cum/h	2.7	3.9	4.8	5.9	6.5
A				88		
B				110.5		
R	Ø			G1/4"		
Weight	Kg			0.44		
Art.				**PS 7**		
Supply pressure	bar (g)	1	2	3	4	5
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	0.4	0.6	0.8	1.2	1.4
Quantity of blown air	cum/h	4.4	6.1	8.2	10.1	11.2
A				89		
B				111.5		
R				G3/8"		
Weight	Kg			0.45		
Working temperature	°C			-20 / +80		

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117





Art.		PS 10				
Supply pressure	bar (g)	1	2	3	4	5
Max. blowing pressure	-KPa	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	0.5	0.9	1.2	1.6	1.9
Quantity of blown air	cum/h	5.8	9.2	12.0	14.2	16.2
A				94		
B				118.5		
C				24.5		
R				G3/8"		
Weight	Kg			0.49		
Art.				**PS 14**		
Supply pressure	bar (g)	1	2	3	4	5
Max. blowing pressure	-KPa	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	0.9	1.3	1.7	2.1	2.5
Quantity of blown air	cum/h	9.2	12.6	16.3	19.0	21.6
A				94		
B				118.5		
C				24.5		
R				G3/8"		
Weight	Kg			0.50		
Working temperature				**PS 18**		
Supply pressure	bar (g)	1	2	3	4	5
Max. blowing pressure	-KPa	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	1.2	1.7	2.3	2.9	3.6
Quantity of blown air	cum/h	12.3	17.6	23.0	26.9	31.0
A				94		
B				128.5		
C				34.5		
R				G1/2"		
Weight	Kg			0.52		
Working temperature	°C			-20 / +80		

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

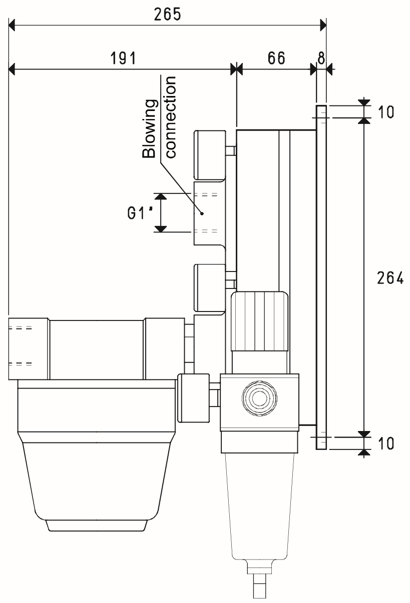
Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

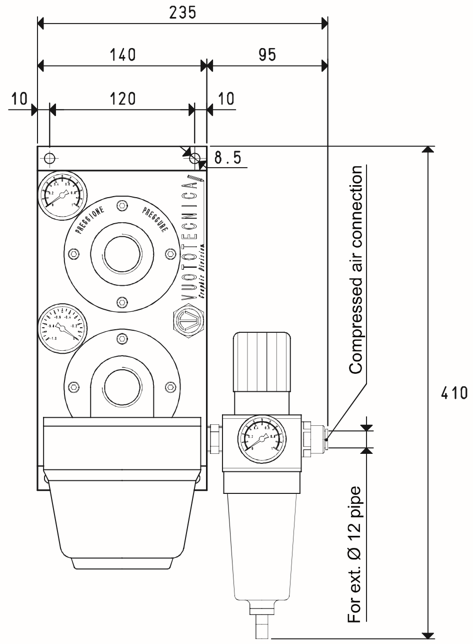
GAS-NPT thread adapters available at page 1.117

3D drawings available at **www.vuototecnica.net**

PNEUMATIC BLOWING PUMPS PS

A state of the art range of ejectors has allowed creating this range of pneumatic blowing pumps featuring an excellent ratio between the amount of consumed air and sucked air, as well as the ability to adjust the vacuum level and capacity according to the supply air pressure.
These pumps are supplied by compressed air with a pressure ranging from 1 to 6 bar (g) and can produce a maximum pressure of 0.8 bar (g) and a blowing capacity between 18 and 425 cum/h, measured at a normal atmospheric pressure of 1013 mbar.
When designing these pumps our attention was focused on noise. In fact, they are perfectly soundproofed and there are no moving parts subject to wear and vibrations. All this results in an extremely silent operation.
Moreover, being based on the Venturi principle, they do not develop heat.
As a standard, they are equipped with a filtre-pressure reducer unit for the supply air and a filtre with microporous cartridge located on the air inlet connection, which can keep the finest dust and impurities.
The excellent compressed air and sucked filtration allows blowing air free from oil vapours, water condensation and impurities in the work environment, causing no pollution.
The use of light alloys for making these pumps has allowed a considerable reduction of their weight thus allowing them to be directly installed onto the machine.
Thanks to their static operating principle, maintenance is reduced to a simple regular cleaning of the filtres.



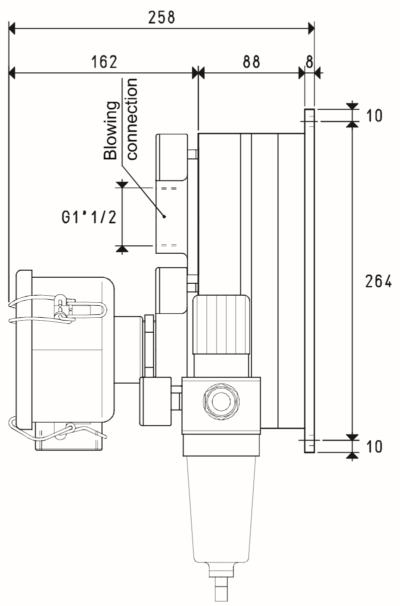


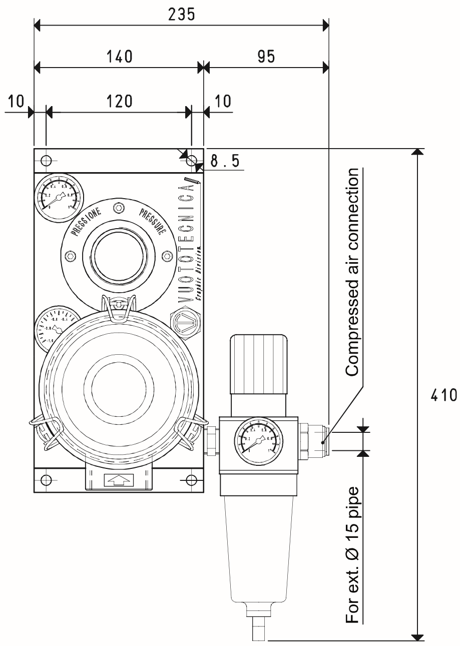
Art.							
		PS 40					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	1.0	1.5	2.0	2.3	2.7	3.2
Quantity of blown air	cum/h	18	28	37	44	48	53
Weight	Kg	6.3					
Art.		**PS 70**					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	2.0	3.0	4.1	4.9	5.7	6.6
Quantity of blown air	cum/h	36	57	72	83	93	104
Weight	Kg	6.3					
Art.		**PS 100**					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	3.0	4.6	6.2	7.2	8.5	9.8
Quantity of blown air	cum/h	38	73	97	114	129	144
Weight	Kg	6.3					
Working temperature	°C	-20 / +80					

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117



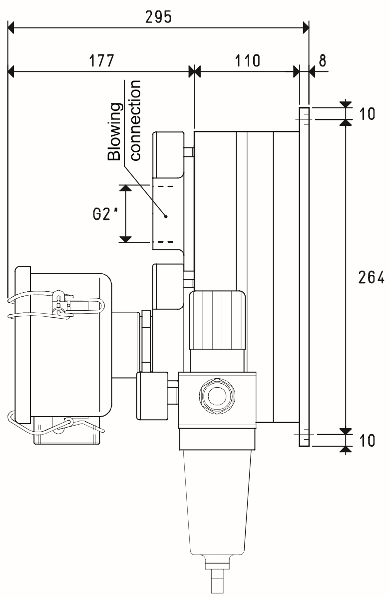


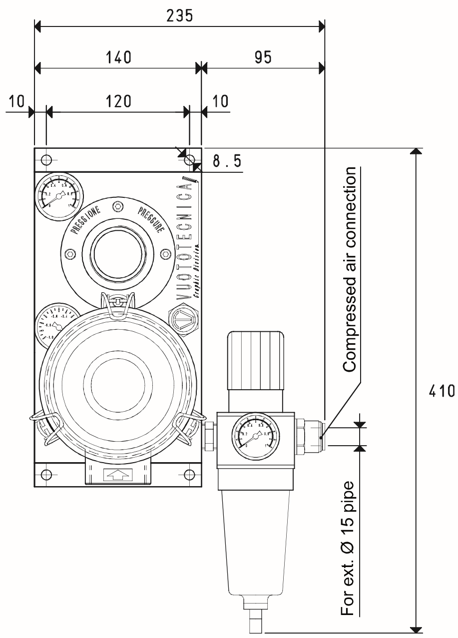
Art.		PS 140					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	4.1	6.2	8.3	9.6	11.4	13.0
Quantity of blown air	cum/h	59	102	135	160	181	199
Weight	Kg	7.3					
Art.		PS 170					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	5.1	7.7	10.3	12.1	14.2	16.3
Quantity of blown air	cum/h	71	125	165	194	219	240
Weight	Kg	7.3					
Art.		PS 200					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	6.0	9.1	12.2	14.2	16.9	19.4
Quantity of blown air	cum/h	81	142	185	221	249	270
Weight	Kg	7.3					
Working temperature	°C	-20 / +80					

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117





Art.		PS 250					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	7.5	11.2	15.0	17.3	20.7	24.0
Quantity of blown air	cum/h	127	185	244	286	327	366
Weight	Kg	8.2					
Art.		**PS 300**					
Supply pressure	bar (g)	1	2	3	4	5	6
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	9.0	13.5	18.1	20.4	24.8	29.0
Quantity of blown air	cum/h	138	208	278	313	379	424
Weight	Kg	8.2					
Working temperature	°C	-20 / +80					

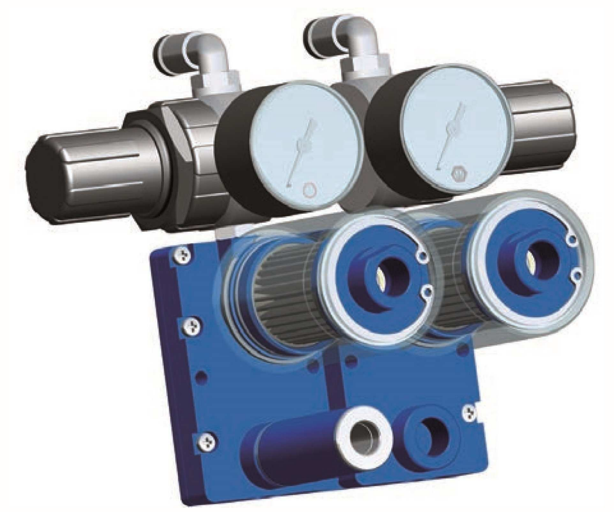
Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

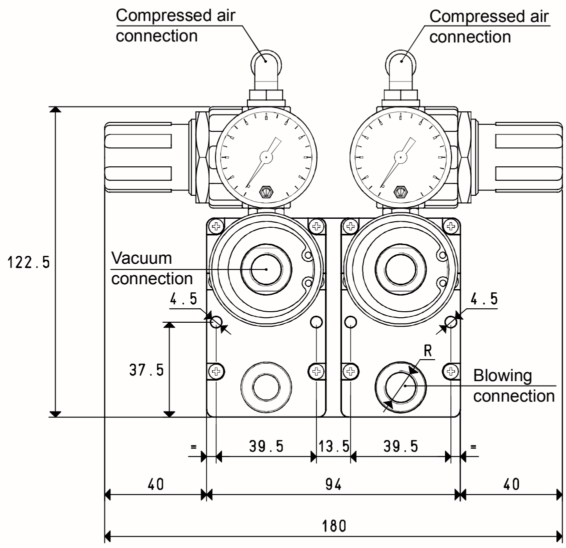
3D drawings available at **www.vuototecnica.net**

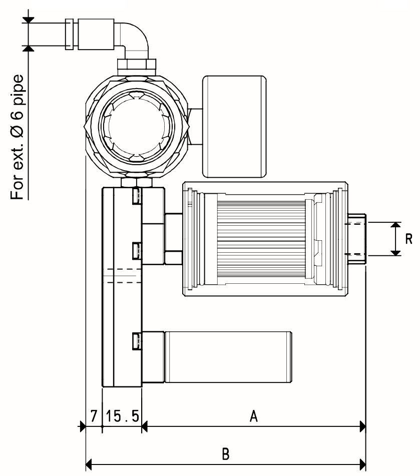
Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117

All the small pneumatic suction and blowing pumps previously described can be combined regardless of their suction or blowing capacity. Given the enormous number of possible combinations, for space reasons, this catalogue only describes combinations of pumps with the same size.







Art.				PA 3		
Supply pressure	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85
Air consumption	Nl/s	0.2	0.4	0.5	0.7	0.8
Quantity of sucked air	cum/h	2.0	2.5	3.0	3.4	3.6
A				88		
B				110.5		
R	Ø			G1/4"		
Weight	Kg			0.45		

Art.				PS 3		
Supply pressure	bar (g)	1	2	3	4	5
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	0.2	0.4	0.5	0.7	0.8
Quantity of blown air	cum/h	2.7	3.9	4.8	5.9	6.5
A				88		
B				110.5		
R	Ø			G1/4"		
Weight	Kg			0.44		

Art.				PA 7		
Supply pressure	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85
Air consumption	Nl/s	0.4	0.6	0.8	1.2	1.4
Quantity of sucked air	cum/h	3.0	4.0	5.4	5.8	6.2
A				88		
B				110.5		
R	Ø			G3/8"		
Weight	Kg			0.46		
Working temperature	°C			-20 / +80		

Art.				PS 7		
Supply pressure	bar (g)	1	2	3	4	5
Max. blowing pressure	bar (g)	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	0.4	0.6	0.8	1.2	1.4
Quantity of blown air	cum/h	4.4	6.1	8.2	10.1	11.2
A				88		
B				110.5		
R	Ø			G3/8"		
Weight	Kg			0.45		
Working temperature	°C			-20 / +80		

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

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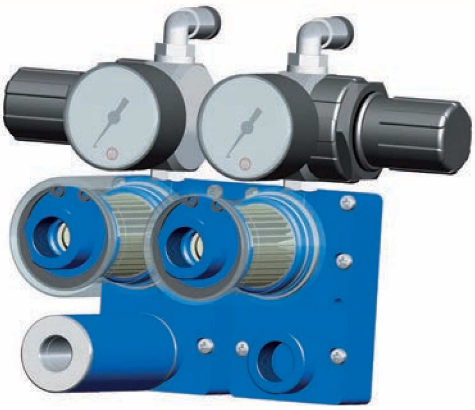
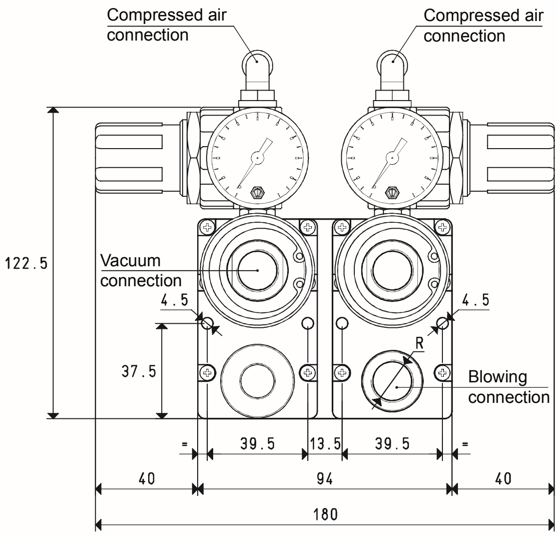
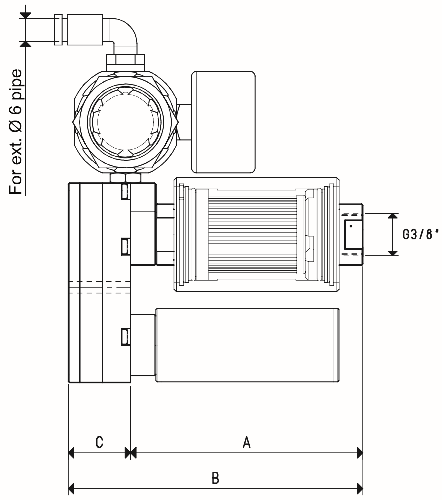
SMALL PNEUMATIC COMBINED SUCTION PUMPS PA and BLOWING PUMPS PS







Art.				PA 10			Art.				PS 10		
Supply pressure	bar (g)	1	2	3	4	5	**Supply pressure**	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	0.5	0.9	1.2	1.6	1.9	**Air consumption**	Nl/s	0.5	0.9	1.2	1.6	1.9
Quantity of sucked air	cum/h	4.0	6.0	7.7	8.5	9.4	**Quantity of blown air**	cum/h	5.8	9.2	12.0	14.2	16.2
A				94			**A**				94		
B				118.5			**B**				118.5		
C				24.5			**C**				24.5		
							R	Ø			G3/8"		
Weight	Kg			0.59			**Weight**	Kg			0.49		
Art.				**PA 14**			**Art.**				**PS 14**		
Supply pressure	bar (g)	1	2	3	4	5	**Supply pressure**	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	0.9	1.3	1.7	2.1	2.5	**Air consumption**	Nl/s	0.9	1.3	1.7	2.1	2.5
Quantity of sucked air	cum/h	6.0	8.0	10.2	11.5	12.6	**Quantity of blown air**	cum/h	9.2	12.6	16.3	19.0	21.6
A				94			**A**				94		
B				118.5			**B**				118.5		
C				24.5			**C**				24.5		
							R	Ø			G3/8"		
Weight	Kg			0.60			**Weight**	Kg			0.50		
Art.				**PA 18**			**Art.**				**PS 18**		
Supply pressure	bar (g)	1	2	3	4	5	**Supply pressure**	bar (g)	1	2	3	4	5
Max. vacuum level	-KPa	20	42	62	80	85	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7
Air consumption	Nl/s	1.2	1.7	2.3	2.9	3.6	**Air consumption**	Nl/s	1.2	1.7	2.3	2.9	3.6
Quantity of sucked air	cum/h	8.0	11.5	14.8	16.5	18.0	**Quantity of blown air**	cum/h	12.3	17.6	23.0	26.9	31.0
A				94			**A**				94		
B				128.5			**B**				128.5		
C				34.5			**C**				34.5		
							R	Ø			G1/2"		
Weight	Kg			0.62			**Weight**	Kg			0.52		
Working temperature	°C			-20 / +80			**Working temperature**	°C			-20 / +80		

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

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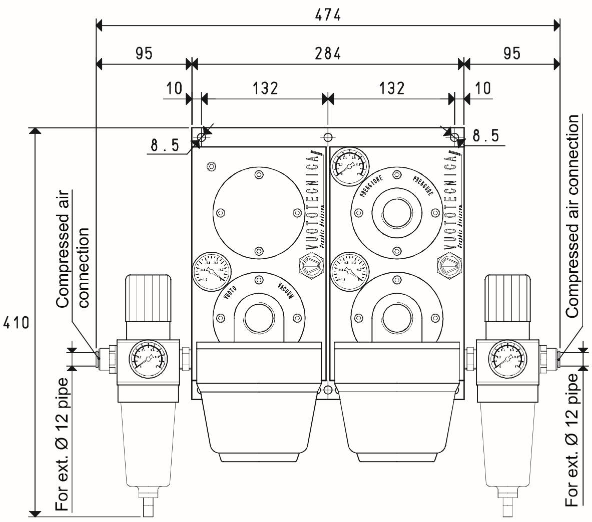
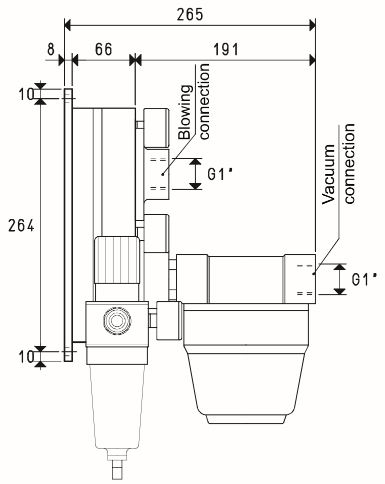
All the small pneumatic suction and blowing pumps previously described can be combined regardless of their suction or blowing capacity. Given the enormous number of possible combinations, for space reasons, this catalogue only describes combinations of pumps with the same size.





Art.		PA 40						Art.		PS 40					
Supply pressure	bar (g)	1	2	3	4	5	6	**Supply pressure**	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	14	30	46	65	82	90	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	1.0	1.5	2.0	2.3	2.7	3.2	**Air consumption**	Nl/s	1.0	1.5	2.0	2.3	2.7	3.2
Quantity of sucked air	cum/h	15	23	30	36	39	42	**Quantity of blown air**	cum/h	18	28	37	44	48	53
Weight	Kg	6.2						**Weight**	Kg	6.3					
Art.		PA 70						**Art.**		PS 70					
Supply pressure	bar (g)	1	2	3	4	5	6	**Supply pressure**	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	14	30	46	65	82	90	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	2.0	3.0	4.1	4.9	5.7	6.6	**Air consumption**	Nl/s	2.0	3.0	4.1	4.9	5.7	6.6
Quantity of sucked air	cum/h	29	47	58	65	73	80	**Quantity of blown air**	cum/h	36	57	72	83	93	104
Weight	Kg	6.2						**Weight**	Kg	6.3					
Art.		PA 100						**Art.**		PS 100					
Supply pressure	bar (g)	1	2	3	4	5	6	**Supply pressure**	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	11	28	45	65	82	90	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	3.0	4.6	6.2	7.2	8.5	9.8	**Air consumption**	Nl/s	3.0	4.6	6.2	7.2	8.5	9.8
Quantity of sucked air	cum/h	28	57	75	88	98	108	**Quantity of blown air**	cum/h	38	73	97	114	129	144
Weight	Kg	6.2						**Weight**	Kg	6.3					
Working temperature	°C	-20 / +80						**Working temperature**	°C	-20 / +80					

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

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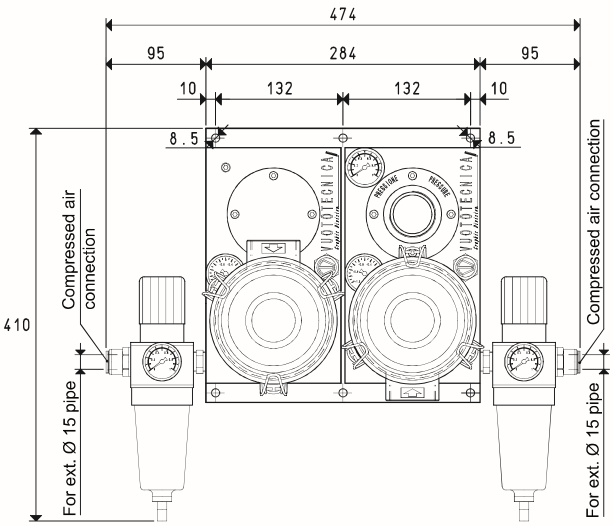
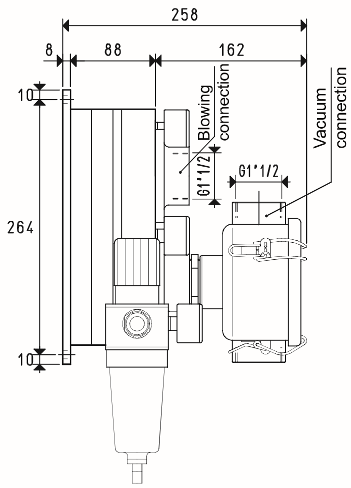
PNEUMATIC COMBINED SUCTION AND BLOWING PUMPS
PA 140 ÷ 200 WITH PS 140 ÷ 200





Art.		PA 140						Art.		PS 140					
Supply pressure	bar (g)	1	2	3	4	5	6	**Supply pressure**	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	4.1	6.2	8.3	9.6	11.4	13.0	**Air consumption**	Nl/s	4.1	6.2	8.3	9.6	11.4	13.0
Quantity of sucked air	cum/h	45	80	106	125	140	152	**Quantity of blown air**	cum/h	59	102	135	160	181	199
Weight	Kg	7.2						**Weight**	Kg	7.3					
Art.		PA 170						**Art.**		PS 170					
Supply pressure	bar (g)	1	2	3	4	5	6	**Supply pressure**	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	5.1	7.7	10.3	12.1	14.2	16.3	**Air consumption**	Nl/s	5.1	7.7	10.3	12.1	14.2	16.3
Quantity of sucked air	cum/h	53	98	128	150	168	182	**Quantity of blown air**	cum/h	71	125	165	194	219	240
Weight	Kg	7.2						**Weight**	Kg	7.3					
Art.		PA 200						**Art.**		PS 200					
Supply pressure	bar (g)	1	2	3	4	5	6	**Supply pressure**	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	6.0	9.1	12.2	14.2	16.9	19.4	**Air consumption**	Nl/s	6.0	9.1	12.2	14.2	16.9	19.4
Quantity of sucked air	cum/h	60	110	142	170	188	200	**Quantity of blown air**	cum/h	81	142	185	221	249	270
Weight	Kg	7.2						**Weight**	Kg	7.3					
Working temperature	°C	-20 / +80						**Working temperature**	°C	-20 / +80					

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

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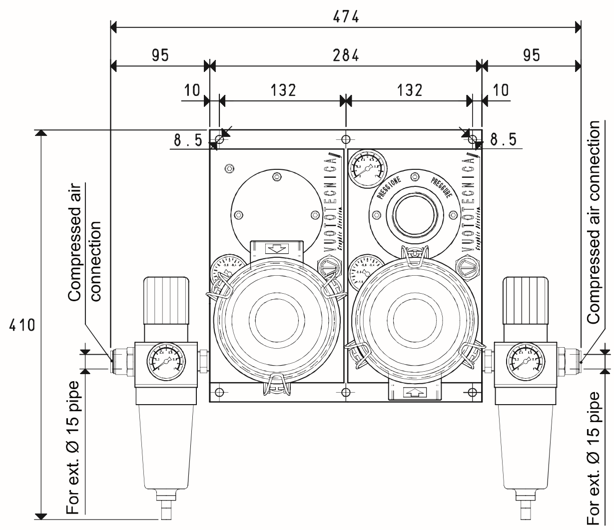

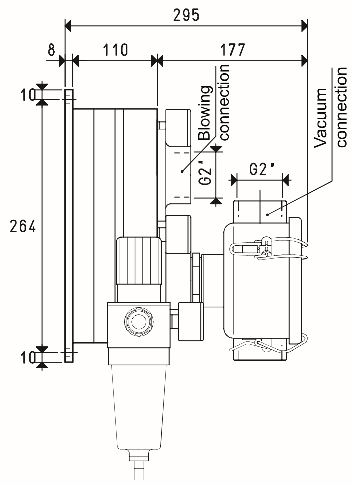

Art.		PA 250						Art.		PS 250					
Supply pressure	bar (g)	1	2	3	4	5	6	**Supply pressure**	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	7.5	11.2	15.0	17.3	20.7	24.0	**Air consumption**	Nl/s	7.5	11.2	15.0	17.3	20.7	24.0
Quantity of sucked air	cum/h	100	145	190	224	252	280	**Quantity of blown air**	cum/h	127	185	244	286	327	366
Weight	Kg	8.1						**Weight**	Kg	8.2					
Art.		**PA 300**						**Art.**		**PS 300**					
Supply pressure	bar (g)	1	2	3	4	5	6	**Supply pressure**	bar (g)	1	2	3	4	5	6
Max. vacuum level	-KPa	15	35	55	70	85	90	**Max. blowing pressure**	bar (g)	0.1	0.2	0.3	0.5	0.7	0.8
Air consumption	Nl/s	9.0	13.5	18.1	20.4	24.8	29.0	**Air consumption**	Nl/s	9.0	13.5	18.1	20.4	24.8	29.0
Quantity of sucked air	cum/h	106	160	213	240	290	320	**Quantity of blown air**	cum/h	138	208	278	313	379	424
Weight	Kg	8.1						**Weight**	Kg	8.2					
Working temperature	°C	-20 / +80						**Working temperature**	°C	-20 / +80					

Note: All the values in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

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SUCTION AND BLOWING SYSTEM AS

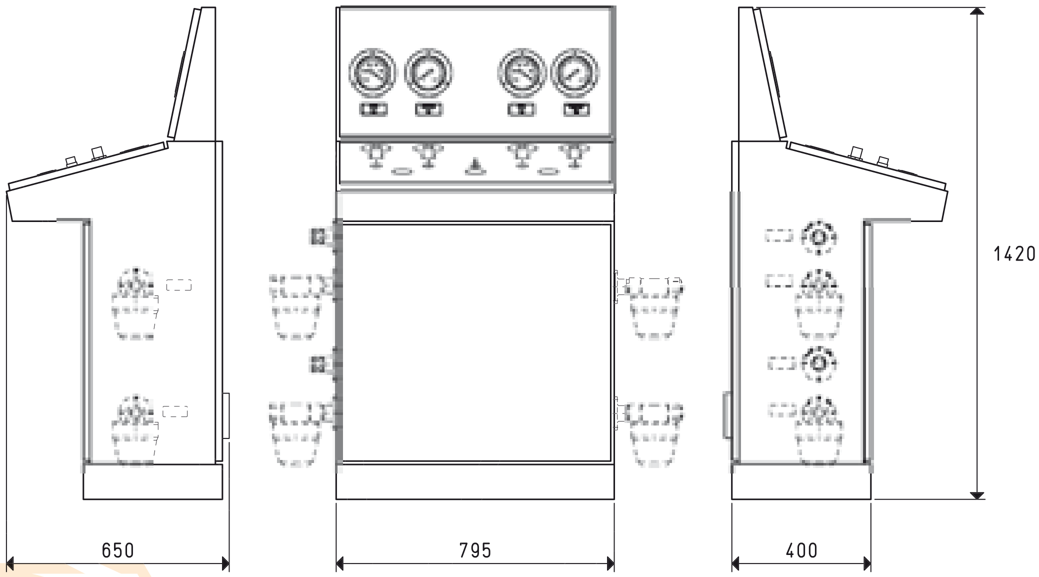
With the suction and blowing system AS we have tried to provide the printing industry with an answer to most of their requirements regarding the management of paper during the printing process, i.e.:

- *The concentration of all the necessary pumps and commands on one single piece.*
- *An ever increasing printing quality thanks to individually controlled pumps.*
- *An increase of productivity resulting from the configuration and use of individual pumps.*
- *Reduced machine idle state due to the pneumatic pumps based on the Venturi principle.*
- *An improvement of the work environment thanks to the noise reduction, absence of heat and the emission of air free of oil vapours, water condensation and impurities between the sheets of paper to be separated and in the work environment.*
- *Energy saving due to a low compressed air consumption compared to the amount of sucked (or generated) air.*
- *Maintenance reduced to a regular cleaning of the filtres.*

The suction and blowing system AS is composed of a metal, easy-to-place cabinet, inside of which the combined pneumatic pumps PA and PS are located with the supply compressed air interception and adjustment valves.
The suction and blowing capacities of the pumps are determined according to the client's requirements or to technical specifications of the machine manufacturer.
At the sides of the cabinet are located the blowing and suction connectors for the connection to the application, as well as the filtres equipped with microporous cartridge against fine dust..
On the control panel are installed:

- *The pneumatic main switch for supply compressed air interception with a pressure gauge for a direct reading of the line pressure.*
- *The pneumatic switches for supply compressed air interception of every single pump.*
- *The pressure reducers with relative pressure gauges for adjusting the compressed air of every single pump. The vacuum (or pressure) level as well as the pump capacity can be adjusted according to the supply air pressure.*
- *Vacuum gauges and pressure gauges for a direct reading of the vacuum and pressure at the application.*
- *Vacuum gauges for controlling the clogging level of the PS pump filtres.*

All our pneumatic suction and blowing pumps can be combined regardless of their suction and blowing capacity and can be installed inside the system cabinet.
Given the enormous number of possible combinations, this catalogue only describes combinations of pumps with the same size.

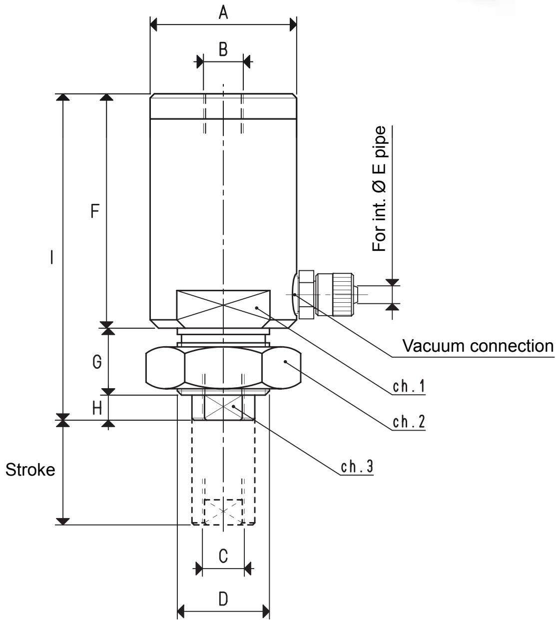


Art.	Set for:	Weight Kg
AS 4	4 pumps PA / PS	120

Note: The filtres are not integral part of the system, but they are the same filtres installed on PA/PS pumps on the outside of the cabinet.
To order the complete system, all you have to do is ad the art. of the chosen PA and PS pumps to the art. AS 4.
E.g.: n°1 AS 4
n°1 PA 100 n°1 PS 140
n°1 PA 170 n°1 PS 200
You can install up to 4 pumps on the AS 4 system, regardless of their size and suction or blowing function.

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

The cylinders described in this page are vacuum operated. By creating vacuum in the cylinder front chamber, the stem, which is solidly connected to the piston, comes out overcoming the opposing spring force.
The piston is pushed by the air at atmospheric pressure that gets into the cylinder's rear chamber through the hollow stem.
The greater the pressure differential between the front chamber under vacuum and the rear chamber at atmospheric pressure, and the larger the piston thrust force will be.
The stem returns into position in two ways:
1) By preventing the atmospheric air from entering through the stem hole and with the vacuum inserted, the pressure differential inside the cylinder is removed. Under this condition, the thrust spring and the atmospheric pressure forces prevail on the stem which is thus pushed into its initial position.
2) By excluding the vacuum, the atmospheric pressure is restored in both the cylinder chambers. Also in this case, being the pressure differential removed, the stem returns to its initial position pushed by the thrust spring.
The first of these two methods is the true operating principle for which this cylinder has been designed. In fact, by assembling a vacuum cup on the cylinder hollow stem and creating a vacuum, the cup will rapidly come into contact with the object to be handled and it will automatically lift it keeping the grip until the vacuum is excluded.
For this feature, vacuum cylinders associated with vacuum cups are recommended for gripping and handling machined, moulded or thermoformed objects, as well as for separating sheets of paper or plastic, sheet steel, etc. and lifting printed circuits or thin plastic panels.
The advantages offered by these vacuum cylinders include: brief and quick cycles controlled by only one valve for vacuum interception; automatic compensation of the height of the objects to be gripped with no compression on them; non-rotating piston and an extremely easy fixing. They are fully made with anodised aluminium and are equipped with a special self-lubricating technopolymer bush which guarantees long duration.



Art.		25 05 10	25 10 10	25 15 10
Stroke	mm	17	25	30
Thrusting force at -KPa 80	Kg	2.0	4.3	12.0
Lifting force at -KPa 80	Kg	0.45	1.0	2.5
Minimum cycle time	sec	0.3	0.4	0.6
Min. vacuum level	-KPa	60	60	60
Min. capacity necessary	Nl/1'	15	30	90
Working temperature	°C	5 ÷ 80	5 ÷ 80	5 ÷ 80
Weight	g	55	145	515
A	Ø	24	35	59
B	Ø	M 6	G1/8"	M 10
C	Ø	M 5	G1/8"	G1/4"
D	Ø	M 16 x 1.5	M 22 x 1.5	M 40 x 1.5
E Pipe vacuum connection	Ø int.	4	4	4
F		39.5	56	66
G		12	16	17
H		4	6	9
I		55.5	78	92
Ch. 1		19	27	50
Ch. 2		24	32	55
Ch. 3		8	12	17

Note: By adding the letters PZ to the code, the cylinder will be supplied with technopolymer piston (E.g.: 25 05 10 PZ).

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

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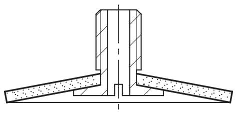
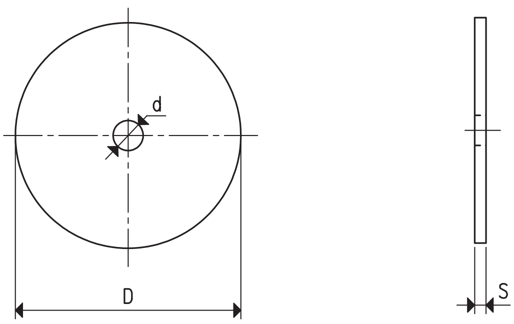
DISC CUPS

Apart from some standard rubber discs, these articles are generally produced upon specific request by the client and for a minimum amount to be specified in the offer phase.
They can be die-cut from sheets or moulded in nitrile rubber, in natural para rubber, silicon or special compounds. They can also be made with reinforced rubber or polyurethane.
The discs described above are used in the printing industry, as an alternative to vacuum cups, for gripping and handling sheets of paper, cardboard or plastic.





Art.	D Ø	d Ø	S
01 17 31	17	3.5	0.8
01 30 41	30	4.0	1.5
01 57 81	57	8.5	1.3

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$