

OCTOPUS GRIPPING SYSTEM

The OCTOPUS system is our answer to the ever increasing requirements of operational flexibility for palletising robots and vacuum gripping systems in general. This system, in fact, it allows gripping objects of any shape and feature, provided that they do not have an excessive transpiration, without having to change or place vacuum cups, and even when their surface occupies only 5% of the whole suction plate. The maximum weight of the load to be lifted will obviously be proportional to the gripping system.

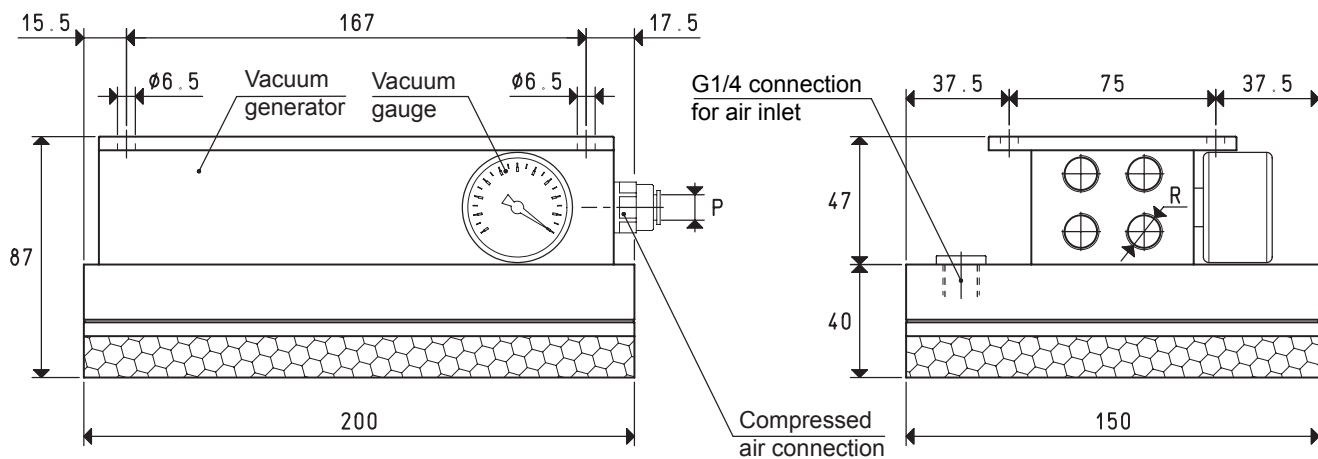
The standard OCTOPUS systems described in these pages are composed of:

- A compressed air-fed vacuum generator as shown in the picture and in the drawing, that has to be ordered separately, since it is not included in the code.
- An anodised aluminium box, open on one side, with a built-in micro-fine stainless steel mesh filtre on the suction inlet to protect the vacuum generator, very easy to inspect. On the outside of the box there are one or more connections for the possible installation of control devices or solenoid valves for a prompt restoration of the atmospheric pressure on its inside.
- A suction plate sealing the box also made with anodised aluminium and coated with a special perforated foam rubber.

This suction plate perfectly adapts itself to any surface, either smooth, rough or uneven.

With the same system, for instance, it is possible to grip and handle cardboard boxes and the wooden pallet that supports it.

These OCTOPUS systems can be supplied, upon request, with other dimensions, suction plates and vacuum generators than those indicated in the tables.



Art.		SO 15 20 MX
Suction plate	art.	PX 15 20
Gripping force	Kg	21.2
Vacuum generator	art.	VVP 25 MX
Max. supply pressure	bar (g)	6
Max. vacuum level	-KPa	90
Air consumption at 6 bar (g)	NI/s	3.2
Quantity of sucked air	cum/h	31.0
Working temperature	°C	-20 / +80
Weight	Kg	2.1
P Compressed air pipe connection	ext. Ø	8
R Exhaust connection	Ø	N° 4 x G1/4"

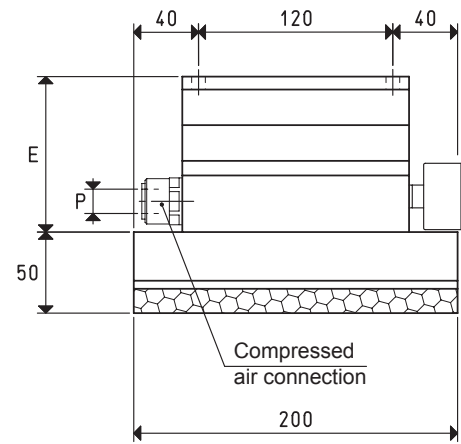
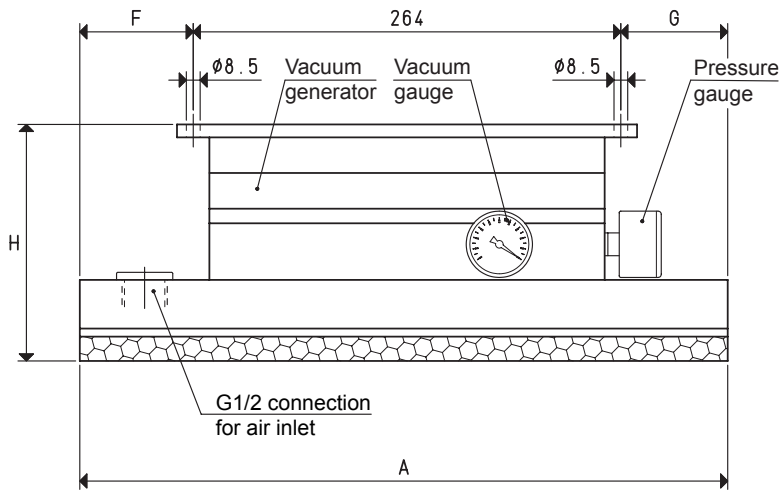
Note: The code SO 15 20 X exclusively identifies the OCTOPUS system base box with the associated suction plate PX.

The vacuum generator indicated in the table is not integral part of the OCTOPUS system and therefore, must be ordered separately with its proper code.

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

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

OCTOPUS GRIPPING SYSTEM



Art.		SO 20 30 X	SO 20 40 X	SO 20 60 X
Suction plate	art.	PX 20 30	PX 20 40	PX 20 60
Gripping force	Kg	42.4	56.6	84.8
Vacuum generator	art.	PVP 100 M	PVP 140 M	PVP 200 M
Max. supply pressure	bar (g)	6	6	6
Max. vacuum level	-KPa	90	90	90
Air consumption at 6 bar (g)	NI/s	9.8	13.0	19.4
Quantity of sucked air	cum/h	108.0	152.0	200.0
Working temperature	°C	-20 / +80	-20 / +80	-20 / +80
Weight	Kg	7.0	8.6	10.7
A		300	400	600
E		74	96	96
F		20	70	170
G		16	66	166
H		124	146	146
P	Compressed air pipe connection	ext. Ø	15	15

Note: The code SO... X exclusively identifies the OCTOPUS system base box with the associated suction plate PX.

The vacuum generator indicated in the table is not integral part of the OCTOPUS system and therefore, must be ordered separately with its proper code.

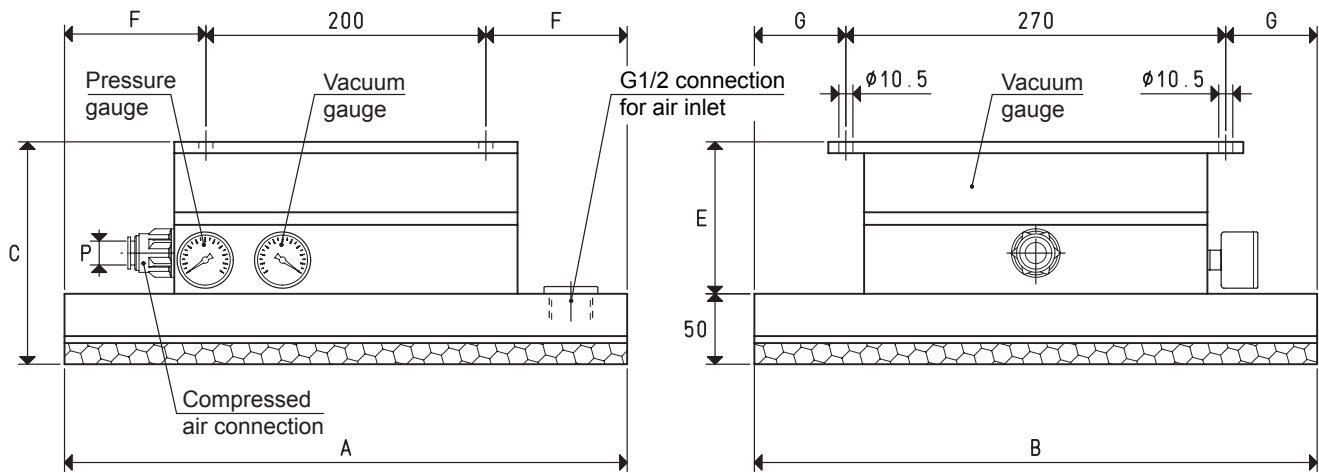
All the values shown in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

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

3D drawings available at www.vuototecnica.net

OCTOPUS VACUUM GRIPPING SYSTEM



Art.		SO 30 30 X	SO 30 40 X	SO 30 50 X	SO 40 40 X	SO 40 60 X
Suction plate	art.	PX 30 30	PX 30 40	PX 30 50	PX 40 40	PX 40 60
Gripping force	Kg	63.6	84.8	106.0	113.1	169.6
Vacuum generator	art.	PVP 150 MD	PVP 150 MD	PVP 300 MD	PVP 300 MD	PVP 300 MD
Max. supply pressure	bar (g)	6	6	6	6	6
Max. vacuum level	-KPa	90	90	90	90	90
Air consumption at 6 bar (g)	NI/s	16.0	16.0	32.0	32.0	32.0
Quantity of sucked air	cum/h	200.0	200.0	400.0	400.0	400.0
Working temperature	°C	-20 / +80	-20 / +80	-20 / +80	-20 / +80	-20 / +80
Weight	Kg	11.5	12.5	15.0	17.0	19.0
A		300	400	500	400	600
B		300	300	300	400	400
C		138	138	158	158	158
E		88	88	108	108	108
F		50	100	150	100	200
G		15	15	15	65	65
P	Compressed air pipe connection	ext. Ø	15	15	15	15

Note: The code SO... X exclusively identifies the OCTOPUS system base box with the associated suction plate PX.

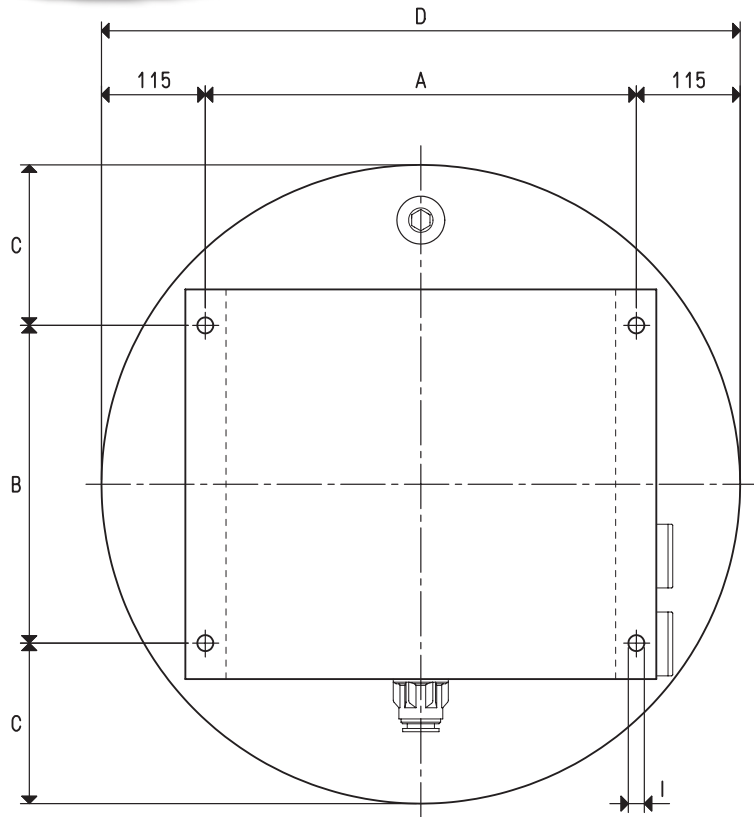
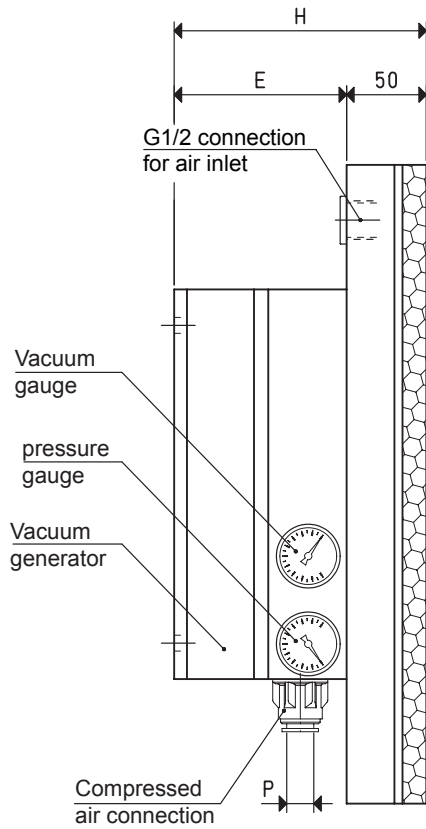
The vacuum generator indicated in the table is not integral part of the OCTOPUS system and therefore, must be ordered separately with its proper code.

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

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

3D drawings available at www.vuototecnica.net

OCTOPUS GRIPPING SYSTEM



Art.		SO DO 35 X	SO DO 50 X
Suction plate	art.	PX DO 35	PX DO 50
Gripping force	Kg	65.4	139.6
Vacuum generator	art.	PVP 170 M	PVP 300 MD
Max. supply pressure	bar (g)	6	6
Max. vacuum level	-kPa	90	90
Air consumption at 6 bar (g)	NI/s	16.3	32.0
Quantity of sucked air	cum/h	182.0	400.0
Working temperature	°C	-20 / +80	-20 / +80
Weight	Kg	9.5	17.0
A		120	270
B		264	200
C		43	150
D	∅	350	500
E		96	108
H		146	158
I	∅	8.5	10.5
P	Compressed air pipe connection	ext. ∅	15

Note: The code SO DO .. X exclusively identifies the OCTOPUS system base box with the associated suction plate PX.

The vacuum generator indicated in the table is not integral part of the OCTOPUS system and therefore, must be ordered separately with its proper code.

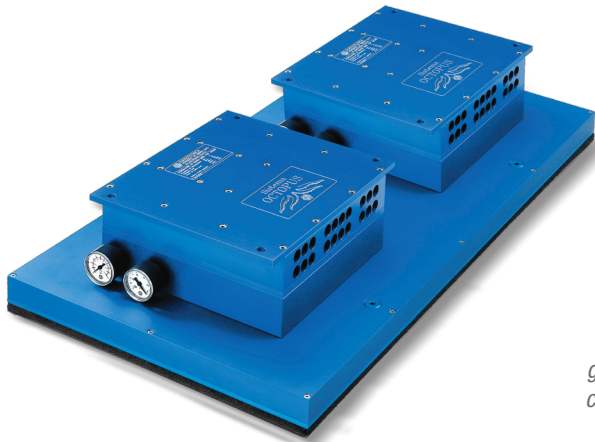
All the values shown in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

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

GAS-NPT thread adapters available at page 1.117

OCTOPUS VACUUM GRIPPING SYSTEM



The OCTOPUS system is our answer to the ever increasing requirements of operational flexibility for palletising robots and vacuum gripping systems in general. This system, in fact, it allows gripping objects of any shape and feature, provided that they do not have an excessive transpiration, without having to change or place vacuum cups, and even when their surface occupies only 5% of the whole suction plate. The maximum weight of the load to be lifted will obviously be proportional to the gripping system.

The standard OCTOPUS systems described in this page are composed of:

- Two compressed air-fed vacuum generators, as shown in the picture and in the drawing, that has to be ordered separately, since they are not included in the code.

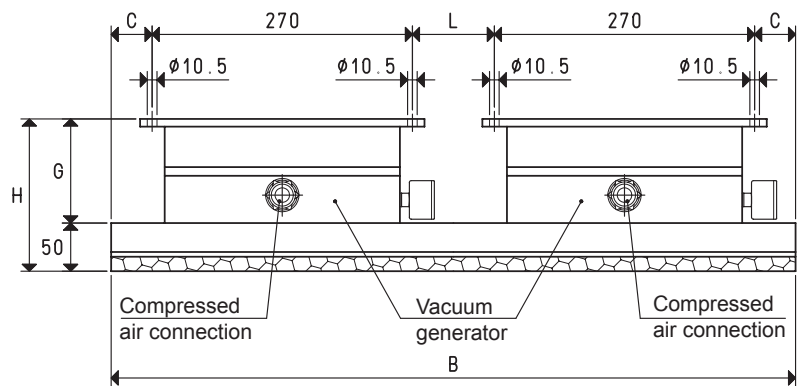
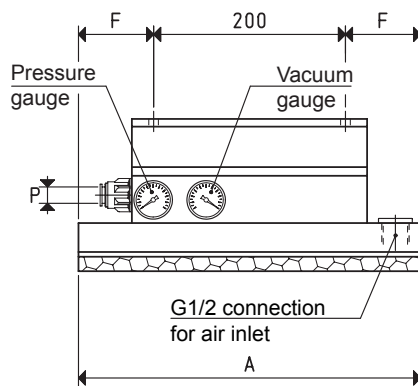
- An anodised aluminium box, open on one side, with two built-in micro-fine stainless steel mesh filters on the suction inlet to protect the vacuum generator, very easy to inspect. On the outside of the box there are one or more connections for the possible installation of control devices or solenoid valves for a prompt restoration of the atmospheric pressure on its inside.

- Un suction plate sealing the box, also made with anodised aluminium and coated with a special perforated foam rubber.

The suction plate perfectly adapts itself to any surface, either smooth, rough or uneven.

With the same system, for instance, it is possible to grip and handle cardboard boxes and the wooden pallet that supports it.

These OCTOPUS systems can be supplied, upon request, with other dimensions, suction plates and vacuum generators than those indicated in the tables.



Art.		SO 40 100 X	SO 60 80 X	SO 60 120 X	SO 80 100 X
Suction plate	art.	PX 40 100	PX 60 80	PX 60 120	PX 80 100
Gripping force	Kg	282.6	339.2	508.7	597.4
N° 2 vacuum generators	art.	PVP 300 MD	PVP 300 MD	PVP 450 MD	PVP 450 MD
Max. supply pressure	bar (g)	6	6	6	6
Max. vacuum level	-KPa	90	90	90	90
Air consumption at 6 bar (g)	NI/s	64.0	64.0	95.6	95.6
Quantity of sucked air	cum/h	800.0	800.0	1160	1160
Working temperature	°C	-20 / +80	-20 / +80	-20 / +80	-20 / +80
Weight	Kg	34.0	37.5	50.0	53.5
A		400	600	600	800
B		1000	800	1200	1000
C		120	70	170	120
F		100	200	200	300
G		108	108	130	130
H		158	158	180	180
L		220	120	320	220
P	Compressed air pipe connection	ext. Ø	15	22	22

Note: The code SO... X exclusively identifies the OCTOPUS system base box with the associated suction plate PX.

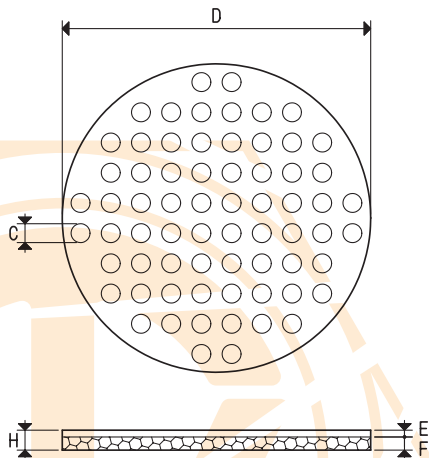
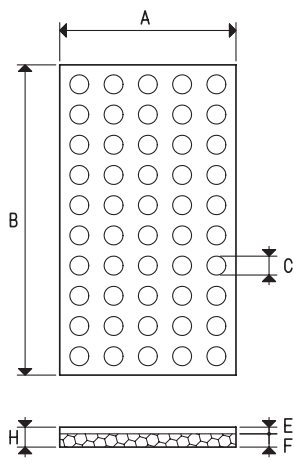
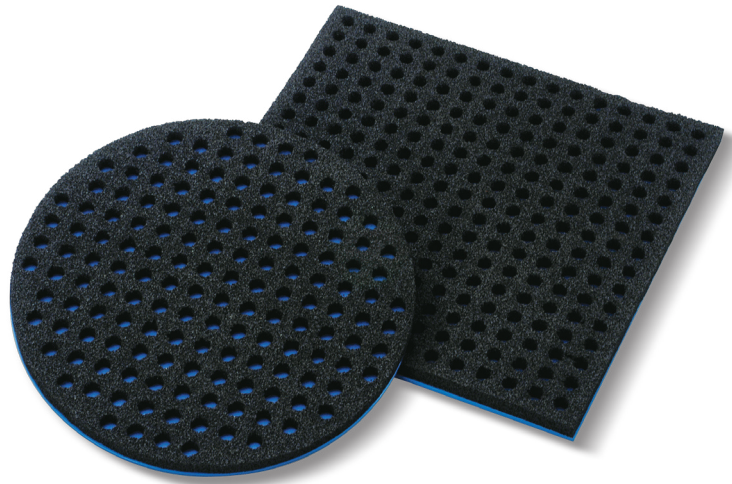
The vacuum generator indicated in the table is not integral part of the OCTOPUS system and therefore, must be ordered separately with its proper code.

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

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STANDARD SUCTION PLATES PX AND P2X FOR OCTOPUS SYSTEMS

The suction plates PX described in this page are installed, as a standard, on all OCTOPUS systems and, therefore, can be supplied as a spare part. They are made with anodised aluminium and coated with special perforated foam rubber with two types of thickness: 15 mm, for suction plates of the PX range; 30 mm, for special suction plates of the P2X range. Their lifting force has been calculated considering a minimum vacuum level of -75 Kpa, the overall perforated surface on the foam rubber and a safety factor 3.



Art.	Force Kg	A	B	C Ø	D Ø	E	F	H	Weight Kg
PX 15 20	21.2	150	200	15	---	5	15	20	0.40
PX 20 30	42.4	200	300	15	---	5	15	20	0.80
PX 20 40	56.6	200	400	15	---	5	15	20	1.10
PX 20 60	84.8	200	600	15	---	5	15	20	1.70
PX 30 30	63.6	300	300	15	---	5	15	20	1.30
PX 30 40	84.8	300	400	15	---	5	15	20	1.70
PX 30 50	106.0	300	500	15	---	5	15	20	2.10
PX 40 40	113.1	400	400	15	---	5	15	20	2.20
PX 40 60	169.6	400	600	15	---	5	15	20	3.40
PX 40 100	282.6	400	1000	15	---	5	15	20	5.60
PX 60 80	339.2	600	800	15	---	5	15	20	6.70
PX 60 120	508.7	600	1200	15	---	5	15	20	10.10
PX 80 100	597.4	800	1000	15	---	5	15	20	11.30
PX D0 35	65.4	---	---	15	350	5	15	20	1.30
PX D0 50	139.6	---	---	15	500	5	15	20	2.30
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P2X 15 20	21.2	150	200	15	---	5	30	35	0.44
P2X 20 30	42.4	200	300	15	---	5	30	35	0.89
P2X 20 40	56.6	200	400	15	---	5	30	35	1.21
P2X 20 60	84.8	200	600	15	---	5	30	35	1.77
P2X 30 30	63.6	300	300	15	---	5	30	35	1.36
P2X 30 40	84.8	300	400	15	---	5	30	35	1.78
P2X 30 50	106.0	300	500	15	---	5	30	35	2.22
P2X 40 40	113.1	400	400	15	---	5	30	35	2.41
P2X 40 60	169.6	400	600	15	---	5	30	35	3.55
P2X 40 100	282.6	400	1000	15	---	5	30	35	5.96
P2X 60 80	339.2	600	800	15	---	5	30	35	7.18
P2X 60 120	508.7	600	1200	15	---	5	30	35	10.73
P2X 80 100	597.4	800	1000	15	---	5	30	35	11.93
P2X D0 35	65.4	---	---	15	350	5	30	35	1.49
P2X D0 50	139.6	---	---	15	500	5	30	35	2.48

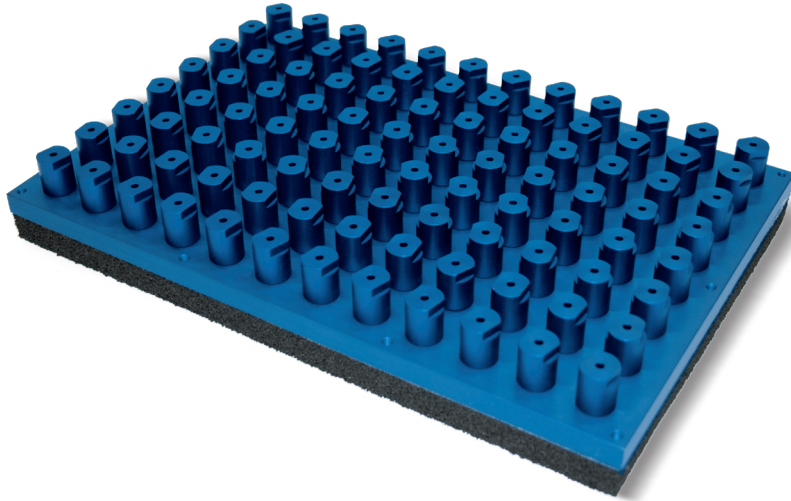
3D drawings available at www.vuototecnica.net

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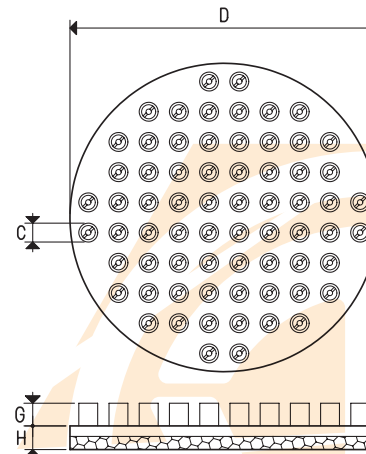
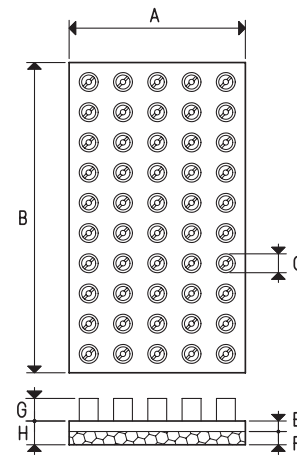
Conversion ratio: inch = $\frac{\text{mm}}{25.4}$; pounds = $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

STANDARD SUCTION PLATES WITH SHUT-OFF VALVES PXE AND P2XE, FOR OCTOPUS SYSTEMS

The suction plates described in this page are the same as the previously described ones. Their distinctive features are the shut-off valves inserted in each hole. In absence of an object to grip or in case of a defective grip of the foam rubber, the shut-off valves automatically close the suction inlet, thus preventing the vacuum level from decreasing on the other gripping holes. This feature allows reducing the vacuum generator capacity compared to the standard OCTOPUS systems, all to the benefit of energy saving.



Art.	Force Kg	A	B	C Ø	D Ø	E	F	G	H	Nr. of Valves	Weight Kg
PXE 20 30	42.4	200	300	15	---	10	15	18	25	96	1.76
PXE 20 40	56.6	200	400	15	---	10	15	18	25	128	2.38
PXE 20 60	84.8	200	600	15	---	10	15	18	25	192	3.62
PXE 30 30	63.6	300	300	15	---	10	15	18	25	144	2.74
PXE 30 40	84.8	300	400	15	---	10	15	18	25	192	3.62
PXE 30 50	106.0	300	500	15	---	10	15	18	25	240	4.50
PXE 40 40	113.1	400	400	15	---	10	15	18	25	256	4.76
PXE 40 60	169.6	400	600	15	---	10	15	18	25	384	7.24
PXE 40 100	282.6	400	1000	15	---	10	15	18	25	656	12.16
PXE 60 80	339.2	600	800	15	---	10	15	18	25	768	14.38
PXE 60 120	508.7	600	1200	15	---	10	15	18	25	1176	21.86
PXE 80 100	597.4	800	1000	15	---	10	15	18	25	1353	24.83
PXE DO 35	65.4	---	---	15	350	10	15	18	25	148	2.78
PXE DO 50	139.6	---	---	15	500	10	15	18	25	308	5.38
P2XE 20 30	42.4	200	300	15	---	10	30	18	40	96	1.85
P2XE 20 40	56.6	200	400	15	---	10	30	18	40	128	2.49
P2XE 20 60	84.8	200	600	15	---	10	30	18	40	192	3.69
P2XE 30 30	63.6	300	300	15	---	10	30	18	40	144	2.80
P2XE 30 40	84.8	300	400	15	---	10	30	18	40	192	3.70
P2XE 30 50	106.0	300	500	15	---	10	30	18	40	240	4.62
P2XE 40 40	113.1	400	400	15	---	10	30	18	40	256	4.97
P2XE 40 60	169.6	400	600	15	---	10	30	18	40	384	7.24
P2XE 40 100	282.6	400	1000	15	---	10	30	18	40	656	12.52
P2XE 60 80	339.2	600	800	15	---	10	30	18	40	768	14.86
P2XE 60 120	508.7	600	1200	15	---	10	30	18	40	1176	22.49
P2XE 80 100	597.4	800	1000	15	---	10	30	18	40	1353	25.46
P2XE DO 35	65.4	---	---	15	350	10	30	18	40	148	2.97
P2XE DO 50	139.6	---	---	15	500	10	30	18	40	308	5.56



3D drawings available at www.vuotecnica.net

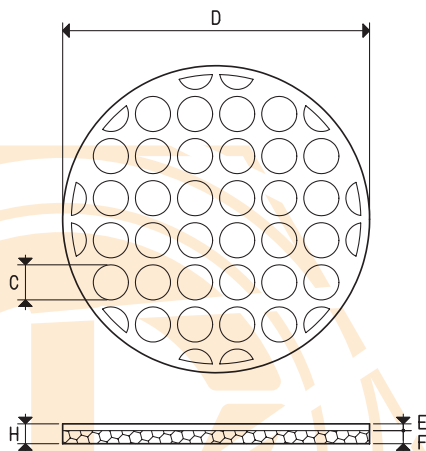
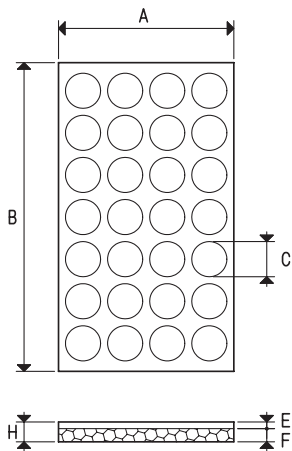
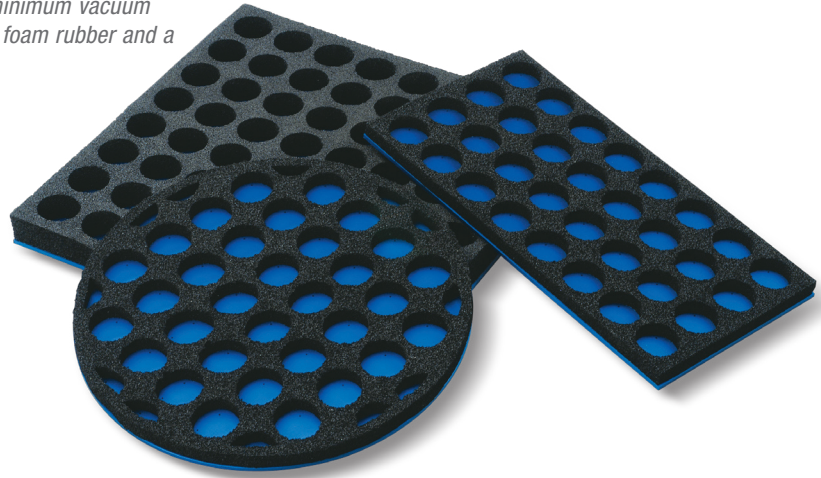
SPECIAL SUCTION PLATES PY AND P2Y FOR OCTOPUS SYSTEMS

Compared to the standard ones, these suction plates, given the same gripping surface, develop a greater force (art. PY) and can grip even very rough and uneven surfaces (art. P2Y).

They are made with anodised aluminium and coated with special perforated foam rubber, with two types of thickness, upon request.

They are perfectly interchangeable with the standard suction plates.

Their lifting force has been calculated considering a minimum vacuum level of -75 Kpa, the overall perforated surface on the foam rubber and a safety factor 3.



Art.	Force Kg	A	B	C	D	E	F	H	Weight Kg
PY 15 20	37.7	150	200	40	---	5	15	20	0.39
PY 20 30	75.4	200	300	40	---	5	15	20	0.78
PY 20 40	100.5	200	400	40	---	5	15	20	1.07
PY 20 60	150.8	200	600	40	---	5	15	20	1.66
PY 30 30	113.0	300	300	40	---	5	15	20	1.27
PY 30 40	150.8	300	400	40	---	5	15	20	1.65
PY 30 50	188.4	300	500	40	---	5	15	20	2.04
PY 40 40	201.0	400	400	40	---	5	15	20	2.14
PY 40 60	301.5	400	600	40	---	5	15	20	3.35
PY 40 100	502.4	400	1000	40	---	5	15	20	5.50
PY 60 80	602.9	600	800	40	---	5	15	20	6.61
PY 60 120	904.4	600	1200	40	---	5	15	20	10.01
PY 80 100	1037.3	800	1000	40	---	5	15	20	11.24
PY DO 35	100.5	---	---	40	350	5	15	20	1.25
PY DO 50	213.5	---	---	40	500	5	15	20	2.24
P2Y 15 20	37.7	200	200	40	---	5	30	35	0.42
P2Y 20 30	75.4	200	300	40	---	5	30	35	0.85
P2Y 20 40	100.5	200	400	40	---	5	30	35	1.15
P2Y 20 60	150.8	200	600	40	---	5	30	35	1.69
P2Y 30 30	113.0	300	300	40	---	5	30	35	1.30
P2Y 30 40	150.8	300	400	40	---	5	30	35	1.68
P2Y 30 50	188.4	300	500	40	---	5	30	35	2.10
P2Y 40 40	201.0	400	400	40	---	5	30	35	2.29
P2Y 40 60	301.5	400	600	40	---	5	30	35	3.45
P2Y 40 100	502.4	400	1000	40	---	5	30	35	5.80
P2Y 60 80	602.9	600	800	40	---	5	30	35	7.01
P2Y 60 120	904.4	600	1200	40	---	5	30	35	10.60
P2Y 80 100	1037.3	800	1000	40	---	5	30	35	11.81
P2Y DO 35	100.5	---	---	40	350	5	30	35	1.39
P2Y DO 50	213.5	---	---	40	500	5	30	35	2.36

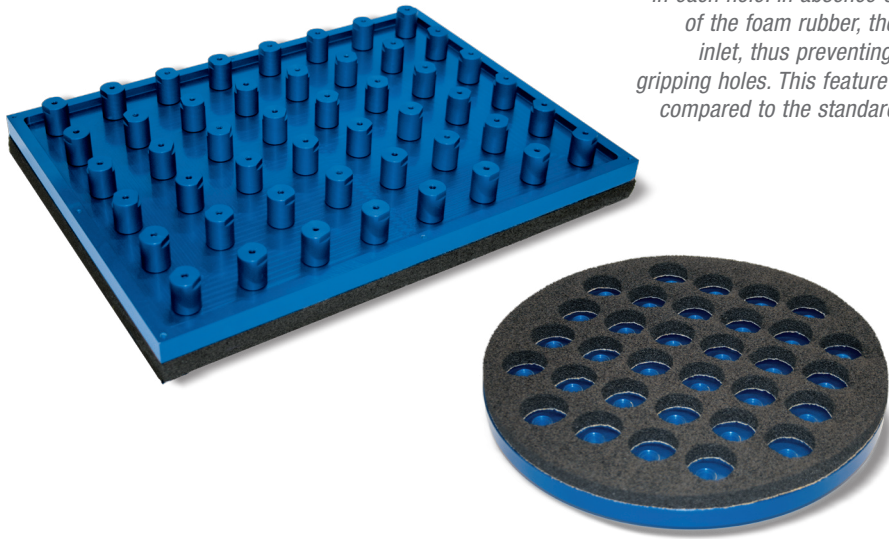
3D drawings available at www.vuototecnica.net

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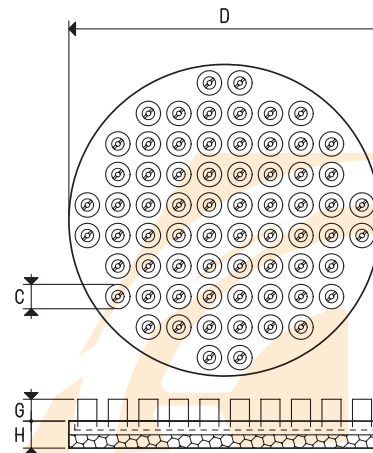
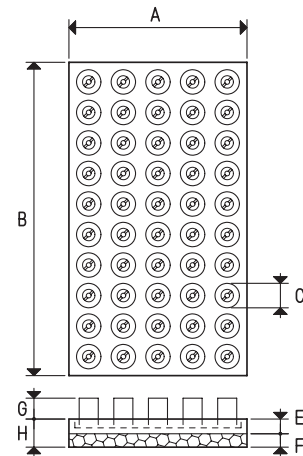
Conversion ratio: inch = $\frac{\text{mm}}{25.4}$; pounds = $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

SPECIAL SUCTION PLATES WITH SHUT-OFF VALVES PY2E AND P2Y2E, FOR OCTOPUS SYSTEMS

The suction plates described in this page are the same as the previously described ones. Their distinctive features are the shut-off valves inserted in each hole. In absence of an object to grip or in case of a defective grip of the foam rubber, the shut-off valves automatically close the suction inlet, thus preventing the vacuum level from decreasing on the other gripping holes. This feature allows reducing the vacuum generator capacity compared to the standard OCTOPUS systems, all to the benefit of energy saving.



Art.	Force Kg	A	B	C ∅	D ∅	E	F	G	H	Nr. of Valves	Weight Kg
PY2E 20 30	75.4	200	300	40	---	17	15	18	32	24	1.26
PY2E 20 40	100.5	200	400	40	---	17	15	18	32	32	1.71
PY2E 20 60	150.8	200	600	40	---	17	15	18	32	48	2.62
PY2E 30 30	113.0	300	300	40	---	17	15	18	32	36	1.99
PY2E 30 40	150.8	300	400	40	---	17	15	18	32	48	2.61
PY2E 30 50	188.4	300	500	40	---	17	15	18	32	60	3.24
PY2E 40 40	201.0	400	400	40	---	17	15	18	32	64	3.42
PY2E 40 60	301.5	400	600	40	---	17	15	18	32	96	5.27
PY2E 40 100	502.4	400	1000	40	---	17	15	18	32	160	8.70
PY2E 60 80	602.9	600	800	40	---	17	15	18	32	192	10.45
PY2E 60 120	904.4	600	1200	40	---	17	15	18	32	288	15.77
PY2E 80 100	1037.3	800	1000	40	---	17	15	18	32	320	17.64
PY2E D0 35	100.5	---	---	40	350	17	15	18	32	32	1.89
PY2E D0 50	213.5	---	---	40	500	17	15	18	32	76	3.76
P2Y2E 20 30	75.4	200	300	40	---	17	30	18	47	24	1.33
P2Y2E 20 40	100.5	200	400	40	---	17	30	18	47	32	1.79
P2Y2E 20 60	150.8	200	600	40	---	17	30	18	47	48	2.65
P2Y2E 30 30	113.0	300	300	40	---	17	30	18	47	36	2.02
P2Y2E 30 40	150.8	300	400	40	---	17	30	18	47	48	2.64
P2Y2E 30 50	188.4	300	500	40	---	17	30	18	47	60	3.30
P2Y2E 40 40	201.0	400	400	40	---	17	30	18	47	64	3.57
P2Y2E 40 60	301.5	400	600	40	---	17	30	18	47	96	5.37
P2Y2E 40 100	502.4	400	1000	40	---	17	30	18	47	160	9.00
P2Y2E 60 80	602.9	600	800	40	---	17	30	18	47	192	10.85
P2Y2E 60 120	904.4	600	1200	40	---	17	30	18	47	288	16.36
P2Y2E 80 100	1037.3	800	1000	40	---	17	30	18	47	320	18.21
P2Y2E D0 35	100.5	---	---	40	350	17	30	18	47	32	2.03
P2Y2E D0 50	213.5	---	---	40	500	17	30	18	47	76	3.88



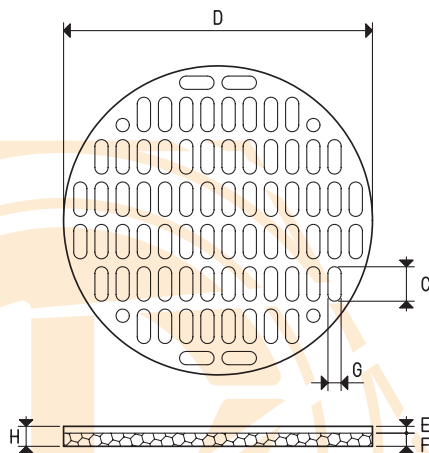
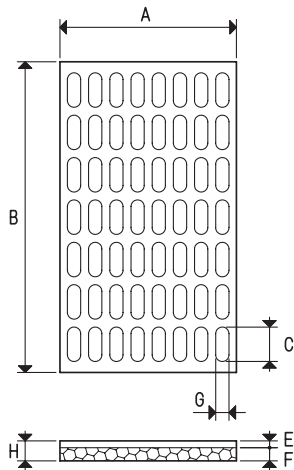
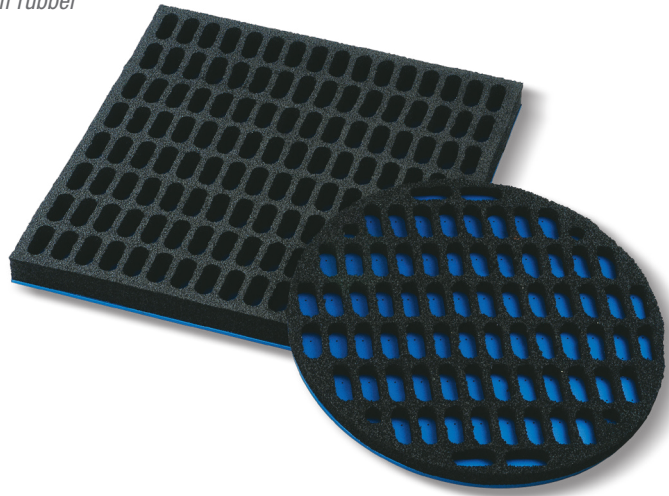
3D drawings available at www.vuototecnica.net

SPECIAL SUCTION PLATES PZ AND P2Z, FOR OCTOPUS SYSTEMS

Among all the suction plates described up to now, these are the ones which develop the greatest lifting force given the same gripping surface and vacuum level. Moreover, the P2Z version is also able to grip very rough and uneven surfaces.

They are made with light alloys and coated with special foam rubber with slot holes, with two types of thickness. They are perfectly interchangeable with the standard suction plates.

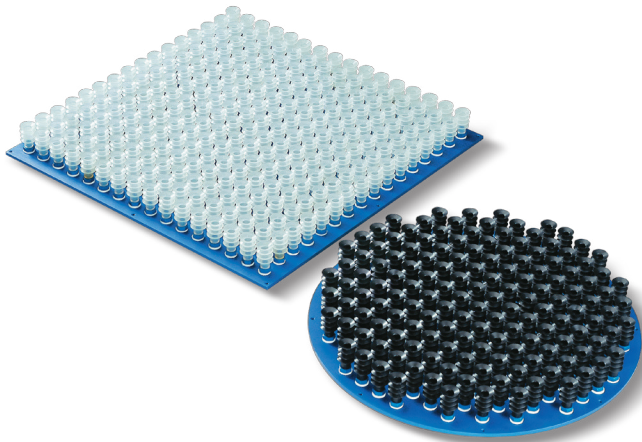
Their lifting force has been calculated considering a minimum vacuum level of -75 Kpa, The overall surface of the slot holes on the foam rubber and a safety factor 3.



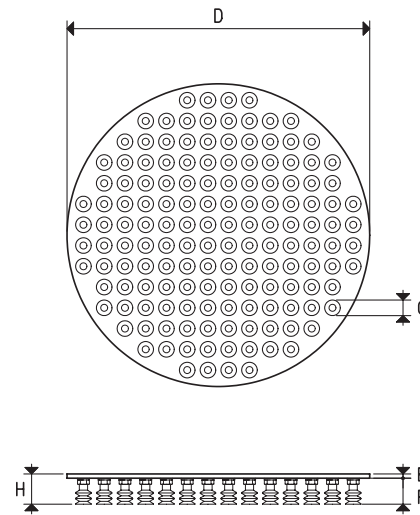
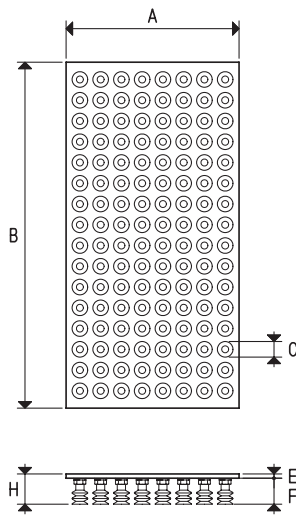
Art.	Force Kg	A	B	C Ø	D Ø	E	F	G	H	Weight Kg
PZ 15 20	41.0	150	200	42	---	5	15	18	20	0.40
PZ 20 30	82.4	200	300	42	---	5	15	18	20	0.80
PZ 20 40	109.8	200	400	42	---	5	15	18	20	1.09
PZ 20 60	164.7	200	600	42	---	5	15	18	20	1.68
PZ 30 30	123.5	300	300	42	---	5	15	18	20	1.28
PZ 30 40	164.7	300	400	42	---	5	15	18	20	1.67
PZ 30 50	206.0	300	500	42	---	5	15	18	20	2.06
PZ 40 40	219.6	400	400	42	---	5	15	18	20	2.17
PZ 40 60	329.4	400	600	42	---	5	15	18	20	3.38
PZ 40 100	549.0	400	1000	42	---	5	15	18	20	5.54
PZ 60 80	658.8	600	800	42	---	5	15	18	20	6.64
PZ 60 120	988.3	600	1200	42	---	5	15	18	20	10.05
PZ 80 100	1143.1	800	1000	42	---	5	15	18	20	11.30
PZ D0 35	126.9	---	---	42	350	5	15	18	20	1.26
PZ D0 50	271.1	---	---	42	500	5	15	18	20	2.26
P2Z 15 20	41.0	200	200	42	---	5	30	18	35	0.44
P2Z 20 30	82.4	200	300	42	---	5	30	18	35	0.88
P2Z 20 40	109.8	200	400	42	---	5	30	18	35	1.18
P2Z 20 60	164.7	200	600	42	---	5	30	18	35	1.72
P2Z 30 30	123.5	300	300	42	---	5	30	18	35	1.33
P2Z 30 40	164.7	300	400	42	---	5	30	18	35	1.71
P2Z 30 50	206.0	300	500	42	---	5	30	18	35	2.14
P2Z 40 40	219.6	400	400	42	---	5	30	18	35	2.32
P2Z 40 60	329.4	400	600	42	---	5	30	18	35	3.48
P2Z 40 100	549.0	400	1000	42	---	5	30	18	35	5.84
P2Z 60 80	658.8	600	800	42	---	5	30	18	35	7.05
P2Z 60 120	988.3	600	1200	42	---	5	30	18	35	10.64
P2Z 80 100	1143.1	800	1000	42	---	5	30	18	35	11.85
P2Z D0 35	126.9	---	---	42	350	5	30	18	35	1.42
P2Z D0 50	271.1	---	---	42	500	5	30	18	35	2.39

3D drawings available at www.vuototecnica.net

VACUUM CUP SUCTION PLATES PV and P2V, FOR OCTOPUS SYSTEMS



These suction plates provided with vacuum cups have been designed to ensure a better grip on uneven and very flexible surfaces (pasta or candy bags, blister or skin-film packs, thin cardboard boxes, etc.), which are difficult to grip with suction plates coated with foam rubber. We recommend using bellows cups. Thanks to their great flexibility, they adapt themselves to any gripping surface, following its profiles and movements during the lifting phase, guaranteeing a firm and safe grip. They are made with anodised aluminium, as are the vacuum cup supports screwed onto them, which are 1/8" gas supports for the PV version and 1/4" gas for the P2V version. The cups are cold assembled onto the supports with no adhesives and can be provided in other compounds. Also these suction plates are perfectly interchangeable with the standard ones. Their lifting force has been calculated considering a minimum vacuum level of -75 Kpa, the overall vacuum cup surface and a safety factor 3. Upon request, they can be provided with different cups, as long as the diameter does not exceed 22 mm for the PV suction plates and 45 mm for the P2V ones.



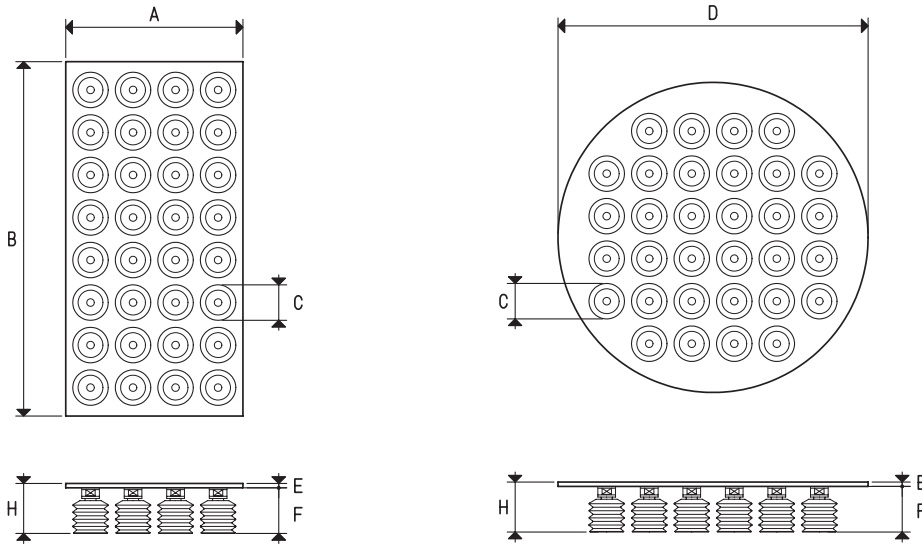
Art.	Force Kg	A	B	C Ø	D Ø	E	F	H	Example Vacuum cup art.	Nr. of cups	Weight Kg
PV 15 20	30.2	150	200	18	---	5	36	41	01 18 29	48	0.54
PV 20 30	60.5	200	300	18	---	5	36	41	01 18 29	96	1.13
PV 20 40	80.6	200	400	18	---	5	36	41	01 18 29	128	1.54
PV 20 60	121.0	200	600	18	---	5	36	41	01 18 29	192	2.37
PV 30 30	90.7	300	300	18	---	5	36	41	01 18 29	144	1.80
PV 30 40	121.0	300	400	18	---	5	36	41	01 18 29	192	2.37
PV 30 50	151.2	300	500	18	---	5	36	41	01 18 29	240	2.94
PV 40 40	167.0	400	400	18	---	5	36	41	01 18 29	256	3.09
PV 40 60	242.0	400	600	18	---	5	36	41	01 18 29	384	4.74
PV 40 100	413.3	400	1000	18	---	5	36	41	01 18 29	656	7.89
PV 60 80	483.9	600	800	18	---	5	36	41	01 18 29	768	9.38
PV 60 120	740.8	600	1200	18	---	5	36	41	01 18 29	1176	14.21
PV 80 100	852.4	800	1000	18	---	5	36	41	01 18 29	1353	16.03
PV D0 35	93.2	---	---	18	350	5	36	41	01 18 29	148	1.81
PV D0 50	194.0	---	---	18	500	5	36	41	01 18 29	308	3.37

Note: The code PV... exclusively indicates the suction plate with the vacuum cup supports screwed on it.

The vacuum cups indicated in the table or freely chosen are not integral part of the suction plate and therefore, must be ordered separately.

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

VACUUM CUP SUCTION PLATES P2V, FOR OCTOPUS SYSTEMS



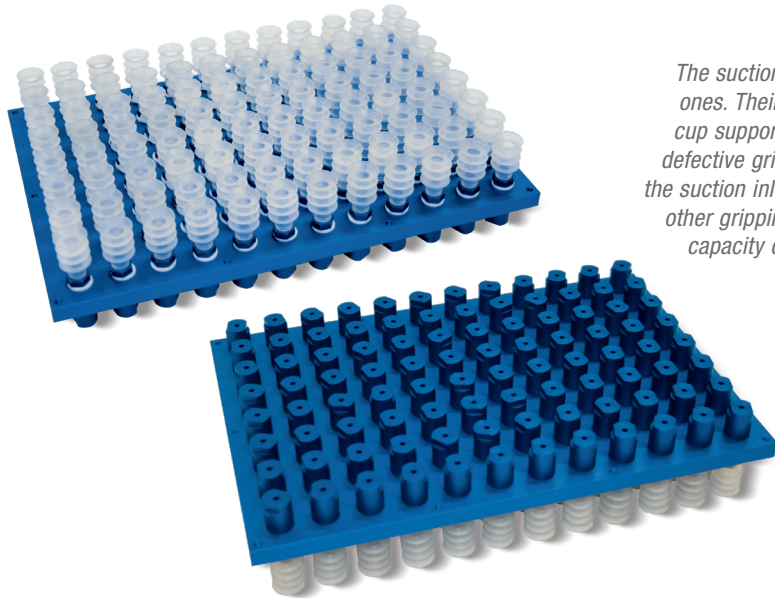
Art.	Force Kg	A	B	C Ø	D Ø	E	F	H	Example Vacuum cup art.	Nr. of cups	Weight Kg
P2V 15 20	37.7	150	200	40	---	5	51.5	56.5	01 40 42	12	0.56
P2V 20 30	75.4	200	300	40	---	5	51.5	56.5	01 40 42	24	1.12
P2V 20 40	100.5	200	400	40	---	5	51.5	56.5	01 40 42	32	1.67
P2V 20 60	150.8	200	600	40	---	5	51.5	56.5	01 40 42	48	2.24
P2V 30 30	113.0	300	300	40	---	5	51.5	56.5	01 40 42	36	1.68
P2V 30 40	150.8	300	400	40	---	5	51.5	56.5	01 40 42	48	2.24
P2V 30 50	188.4	300	500	40	---	5	51.5	56.5	01 40 42	60	2.80
P2V 40 40	201.0	400	400	40	---	5	51.5	56.5	01 40 42	64	3.34
P2V 40 60	301.5	400	600	40	---	5	51.5	56.5	01 40 42	96	4.48
P2V 40 100	502.4	400	1000	40	---	5	51.5	56.5	01 40 42	160	8.35
P2V 60 80	602.9	600	800	40	---	5	51.5	56.5	01 40 42	192	8.96
P2V 60 120	904.3	600	1200	40	---	5	51.5	56.5	01 40 42	288	13.44
P2V 80 100	1004.8	800	1000	40	---	5	51.5	56.5	01 40 42	320	16.70
P2V DO 35	100.5	---	---	40	350	5	51.5	56.5	01 40 42	32	1.67
P2V DO 50	213.5	---	---	40	500	5	51.5	56.5	01 40 42	76	3.17

Note: The code P2V... exclusively indicates the suction plate with the vacuum cup supports screwed on it.

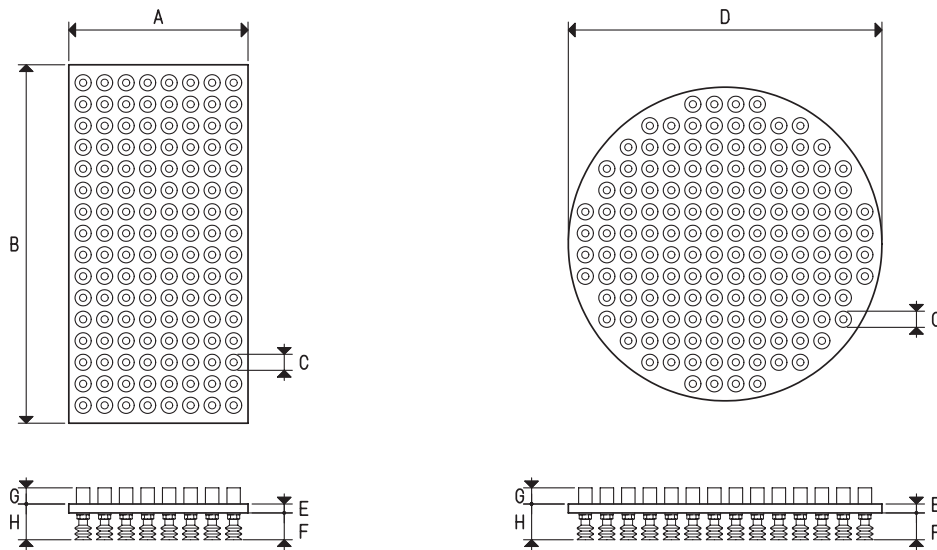
The vacuum cups indicated in the table or freely chosen are not integral part of the suction plate and therefore, must be ordered separately.

3D drawings available at www.vuototecnica.net

VACUUM CUP SUCTION PLATES WITH SHUT-OFF VALVES PVE and P2V2E, FOR OCTOPUS SYSTEMS



The suction plates described in this page are the same as the previous ones. Their distinctive features are the shut-off valves inserted in each cup support connection. In absence of an object to grip or in case of a defective grip of the foam rubber, the shut-off valves automatically close the suction inlet, thus preventing the vacuum level from decreasing on the other gripping holes. This feature allows reducing the vacuum generator capacity compared to the OCTOPUS systems without valves, all to the benefit of energy saving.



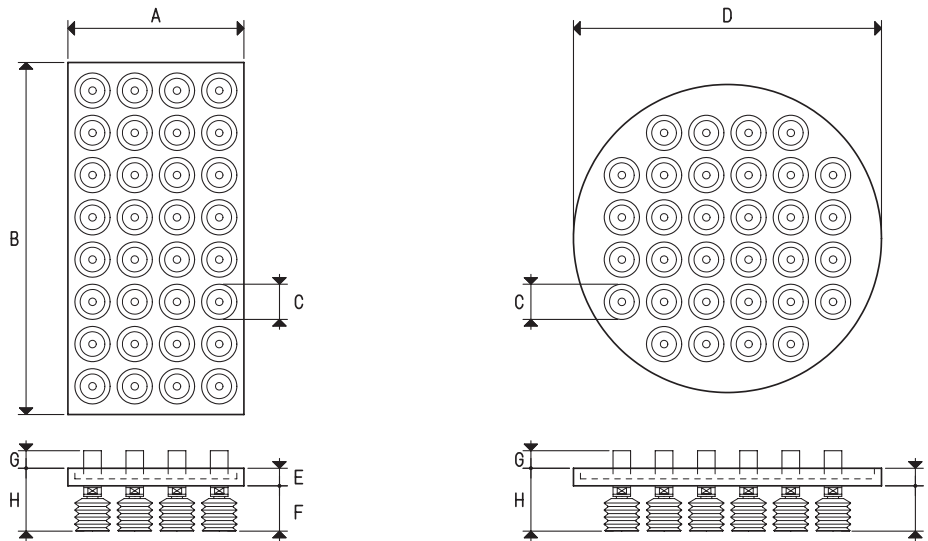
Art.	Force Kg	A	B	C Ø	D Ø	E	F	G	H	Example Vacuum cup art.	Nr. of Valves and cups	Weight Kg
PVE 20 30	60.5	200	300	18	---	10	36	18	46	01 18 29	96	2.09
PVE 20 40	80.6	200	400	18	---	10	36	18	46	01 18 29	128	2.82
PVE 20 60	121.0	200	600	18	---	10	36	18	46	01 18 29	192	4.18
PVE 30 30	90.7	300	300	18	---	10	36	18	46	01 18 29	144	3.24
PVE 30 40	121.0	300	400	18	---	10	36	18	46	01 18 29	192	4.18
PVE 30 50	151.2	300	500	18	---	10	36	18	46	01 18 29	240	6.27
PVE 40 40	167.0	400	400	18	---	10	36	18	46	01 18 29	256	5.64
PVE 40 60	242.0	400	600	18	---	10	36	18	46	01 18 29	384	8.36
PVE 40 100	413.3	400	1000	18	---	10	36	18	46	01 18 29	656	14.45
PVE 60 80	483.9	600	800	18	---	10	36	18	46	01 18 29	768	17.06
PVE 60 120	740.8	600	1200	18	---	10	36	18	46	01 18 29	1176	25.97
PVE 80 100	852.4	800	1000	18	---	10	36	18	46	01 18 29	1353	29.56
PVE DO 35	93.2	---	---	18	350	10	36	18	46	01 18 29	148	3.29
PVE DO 50	194.0	---	---	18	500	10	36	18	46	01 18 29	308	6.45

Note: The code PVE... exclusively indicates the suction plate with the vacuum cup supports screwed on it and the built-in shut-off valves.
The vacuum cups indicated in the table or freely chosen are not integral part of the suction plate and therefore, must be ordered separately.

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

3D drawings available at www.vuototecnica.net

VACUUM CUP SUCTION PLATES WITH SHUT-OFF VALVES P2V2E, FOR OCTOPUS SYSTEMS

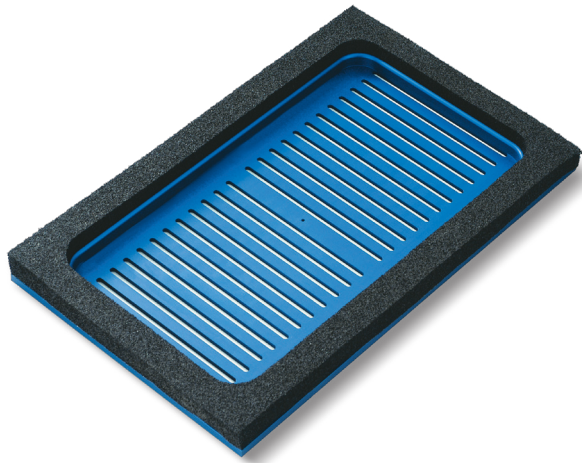


Art.	Force Kg	A	B	C Ø	D Ø	E	F	G	H	Example Vacuum cup art.	Nr. of Valves and cups	Weight Kg
P2V2E 20 30	75.4	200	300	40	---	17	51.5	18	68.5	01 40 42	24	1.60
P2V2E 20 40	100.5	200	400	40	---	17	51.5	18	68.5	01 40 42	32	2.31
P2V2E 20 60	150.8	200	600	40	---	17	51.5	18	68.5	01 40 42	48	3.20
P2V2E 30 30	113.0	300	300	40	---	17	51.5	18	68.5	01 40 42	36	2.40
P2V2E 30 40	150.8	300	400	40	---	17	51.5	18	68.5	01 40 42	48	3.20
P2V2E 30 50	188.4	300	500	40	---	17	51.5	18	68.5	01 40 42	60	4.00
P2V2E 40 40	201.0	400	400	40	---	17	51.5	18	68.5	01 40 42	64	4.62
P2V2E 40 60	301.5	400	600	40	---	17	51.5	18	68.5	01 40 42	96	6.40
P2V2E 40 100	502.4	400	1000	40	---	17	51.5	18	68.5	01 40 42	160	11.55
P2V2E 60 80	602.9	600	800	40	---	17	51.5	18	68.5	01 40 42	192	12.80
P2V2E 60 120	904.3	600	1200	40	---	17	51.5	18	68.5	01 40 42	288	19.20
P2V2E 80 100	1004.8	800	1000	40	---	17	51.5	18	68.5	01 40 42	320	23.10
P2V2E D0 35	100.5	---	---	40	350	17	51.5	18	68.5	01 40 42	32	2.31
P2V2E D0 50	213.5	---	---	40	500	17	51.5	18	68.5	01 40 42	76	4.53

Note: The code P2V2E... exclusively indicates the suction plate with the vacuum cup supports screwed on it and the built-in shut-off valves.
The vacuum cups indicated in the table or freely chosen are not integral part of the suction plate and therefore, must be ordered separately.

3D drawings available at www.vuototecnica.net

BAG GRIPPING SUCTION PLATES PJ, FOR OCTOPUS SYSTEMS



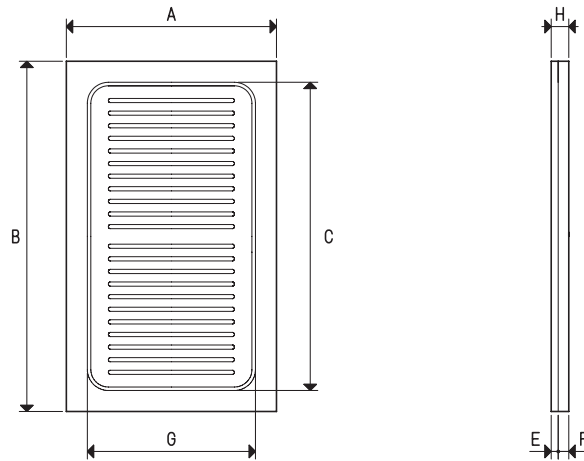
These suction plates have been designed to allow gripping paper or plastic bags containing powders, granulated products, bulk products or liquids.

These suction plates are associated with OCTOPUS systems that fully exploit their performance.

They are made with anodised aluminium and are provided with a special foam rubber seal. They are perfectly interchangeable with the OCTOPUS system standard suction plates.

The shapes of the seal and the face allow reducing bag deformation in the gripping phase, reducing vacuum loss to the minimum and guaranteeing the largest gripping surface possible.

Their lifting force has been calculated considering a minimum vacuum level of -75 Kpa, the overall gripping surface enclosed in the seal and a safety factor 3.



Art.	Force Kg	A	B	C	E	F	G	H	Weight Kg
PJ 15 20	24.6	150	200	130	10	15	80	40	0.46
PJ 20 30	73.4	200	300	230	10	30	130	40	0.92
PJ 20 40	106.0	200	400	330	10	30	130	40	1.25
PJ 20 60	171.0	200	600	530	10	30	130	40	1.84
PJ 30 40	188.4	300	400	330	10	30	230	40	1.84
PJ 30 50	246.0	300	500	430	10	30	230	40	2.30
PJ 40 60	436.0	400	600	530	10	30	330	40	3.68

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

3D drawings available at www.vuototecnica.net

FLANGED FIXING SUPPORT, FOR OCTOPUS SYSTEMS WITHOUT VACUUM GENERATOR

The fixing supports described in this page have been designed to connect an OCTOPUS system to a remotely installed vacuum generator or to an alternative vacuum source.

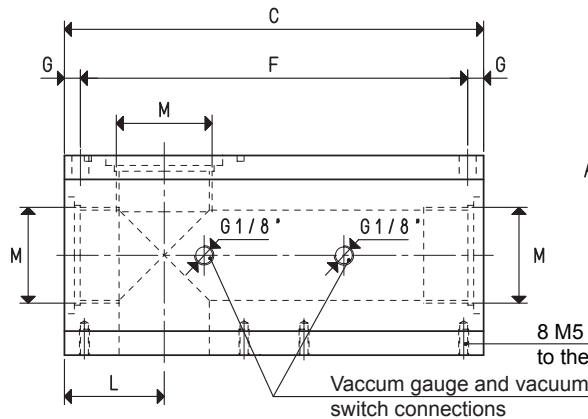
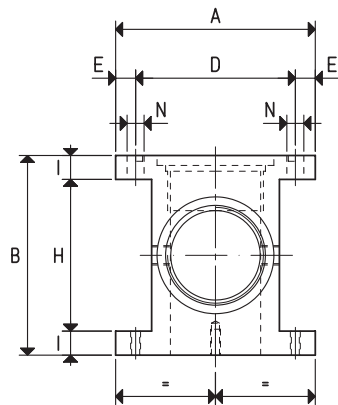
The anodised aluminium supports are provided with two flanges: one to fix the OCTOPUS system instead of the vacuum generator and the other to connect it to the machine.

They are also equipped with connectors for direct connection to the OCTOPUS system, to the generator or to the alternative vacuum source, as well as to the vacuum level reading and control devices. The unused connections may be closed with special metal caps which they are equipped with.

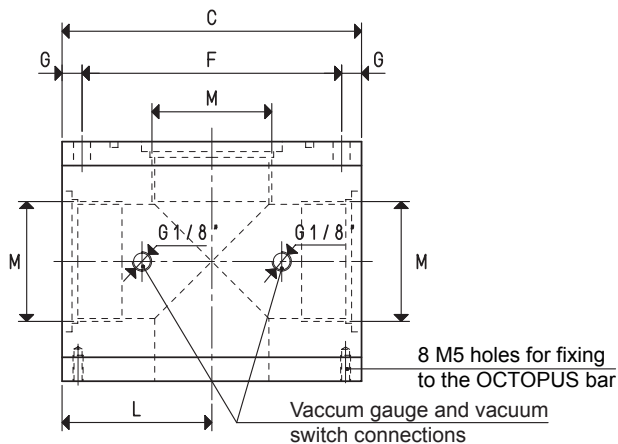
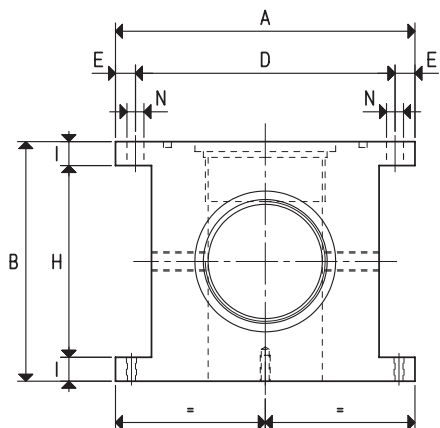
The flanged fixing supports are currently available in the versions described in this page and are suited for OCTOPUS systems that use the vacuum generators indicates next to the article:

- Art. SO 00 02 PVP 100 ÷ 200M
- Art. SO 00 05 PVP 150 ÷ 300MD
- Art. SO 00 06 PVP 450 ÷ 600MD

Note: The vacuum gauges and switches in the picture are not integral part of the supports.



Art. SO 00 02



Art. SO 00 05
Art. SO 00 06

3D drawings available at www.vuototecnica.net

Art.	A	B	C	D	E	F	G	H	I	L	M	N	Weight
											Ø	Ø	Kg
SO 00 02	100	100	210	80	10	194	8	76	12	50	G1" 1/2	8.5	2.8
SO 00 05	150	120	150	130	10	134	8	96	12	75	G2"	8.5	4.2
SO 00 06	150	145	150	130	10	134	8	121	12	75	G2" 1/2	8.5	4.3