

#### 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.

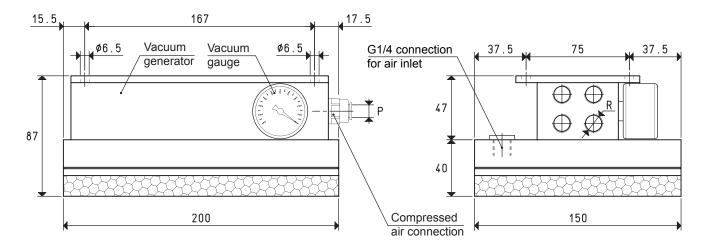
- An anodised aluminium box, open on one side, with a built-in micro-fine stainless steel mesh filtre on the suction inlet to protect the vacuum generator, very easy to inspect. On the outside of the box there are one or more connections for the possible installation of control devices or solenoid valves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

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.



A	rt.		SO 15 20 MX
Suct	tion plate	art.	PX 15 20
Grip	ping force	Kg	21.2
Vacu	uum generator	art.	PVP 25 MX
Max	a. supply pressure	bar (g)	6
Max	. vacuum level	-KPa	90
Air c	consumption at 6 bar (g)	NI/s	3.2
Quar	ntity of sucked air	cum/h	31.0
Worl	king temperature	°C	-20 / +80
Weig	ght	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.

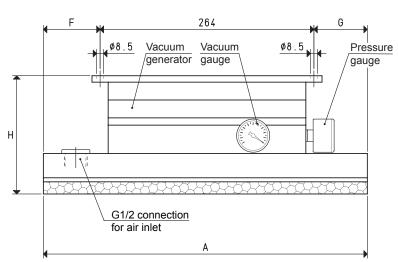
All the values shown in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

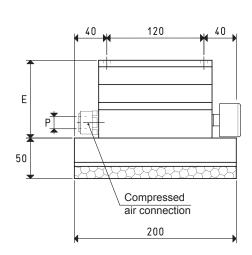
Conversion ratio: inch = 
$$\frac{mm}{25.4}$$
; pounds =  $\frac{g}{453.6}$  =  $\frac{Kg}{0.4536}$ 



#### **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
Norking 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
1		124	146	146
Compressed air pipe connection	ext. Ø	15	15	15

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

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

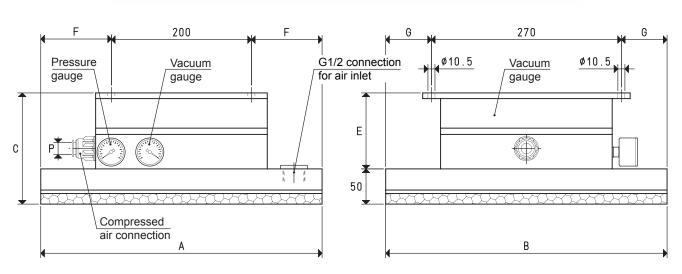
Conversion ratio: inch = 
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9.04



### **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
В		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	15

 $\textbf{Note:} \ \mathsf{The \ code} \ \mathsf{S0...X} \ \mathsf{exclusively} \ \mathsf{identifies \ the \ OCTOPUS} \ \mathsf{system \ base} \ \mathsf{box} \ \mathsf{with \ the \ associated \ suction \ plate \ PX.$ 

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.

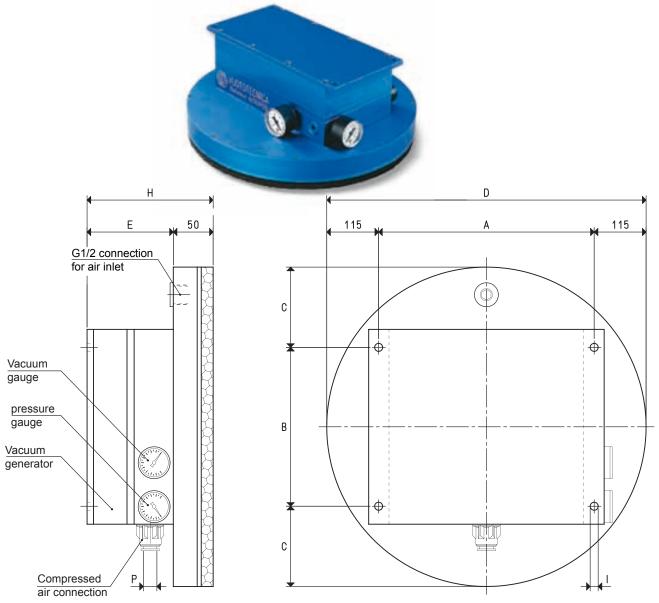
All the values shown in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

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

9.05



### **OCTOPUS GRIPPING SYSTEM**



Art.		SO DO 35 X	SO DO 50 X
Suction plate	art.	PX DO 35	PX D0 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
В		264	200
C		43	150
0	Ø	350	500
		96	108
H		146	158
	Ø	8.5	10.5
P Compressed air pipe connection	ext. Ø	15	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.

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



#### 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

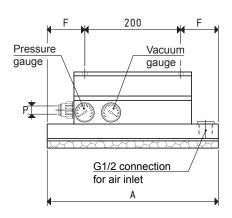
- An anodised aluminium box, open on one side, with two built-in microfine stainless steel mesh filtres on the suction inlet to protect the vacuum generator, very easy to inspect. On the outside of the box there are one or more connections for the possible installation of control devices o solenoid valves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

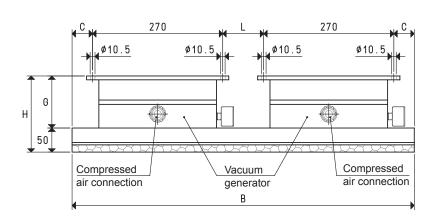
- Un suction plate sealing the box, also made with anodised aluminium and coated with a special perforated foam rubber.

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
В		1000	800	1200	1000
C		120	70	170	120
F		100	200	200	300
G		108	108	130	130
Н		158	158	180	180
L		220	120	320	220
P Compressed air pipe connection	ext. Ø	15	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.



## OCTOPUS GRIPPING SYSTEM SPECIAL EXECUTIONS



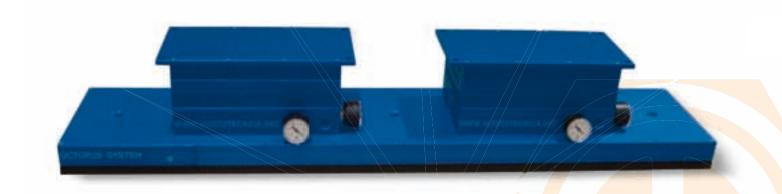
mm 270x420 - SO 27 42 2V

mm 330x550 - SO 33 55 2V



mm Ø 100 - SO DO 10 X

mm 70x200 - SO 07 20 X



mm 200x1000 - SO 20 100 X



## OCTOPUS GRIPPING SYSTEM SPECIAL EXECUTIONS



mm 300x360 with fixing support - SO 30 36 X

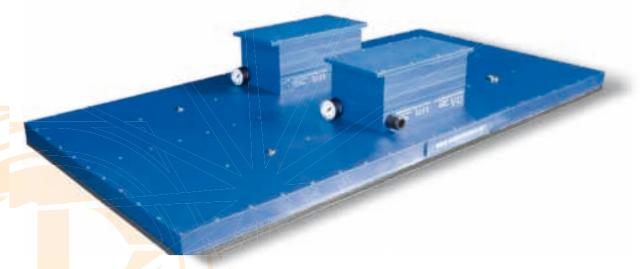
mm 70x140 with digital vacuum switch - SO 07 14 V



mm 210x360 SO 21 36 V with 3 independent chambers



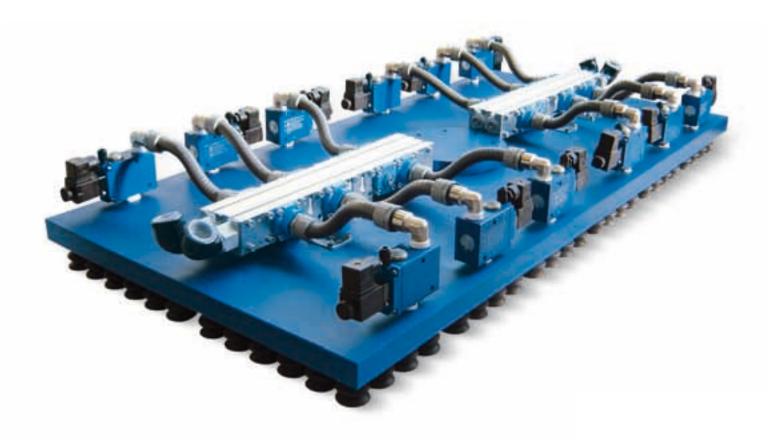
mm Ø400 with fixing support and vacuum interception solenoid valve - SO DO 40  $\rm V$ 



mm 600x1200 with 2 independent chambers - SO 60 120 X



## OCTOPUS GRIPPING SYSTEM SPECIAL EXECUTIONS



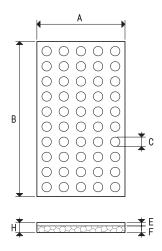
mm 620x1240 with 12 independent chambers - SO 62 127 2V

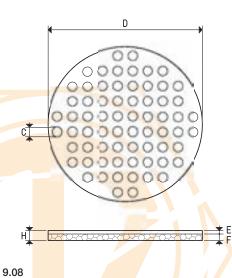


#### STANDARD SUCTION PLATES PX AND P2X FOR OCTOPUS SYSTEMS

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	Α	В	С	D	Е	F	Н	Weight
AI L	Kg			Ø	Ø				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 DO 35	65.4			15	350	5	15	20	1.30
PX DO 50	139.6			15	500	5	15	20	2.30
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



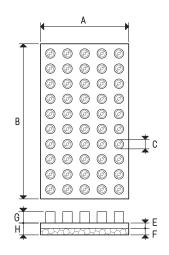
# STANDARD SUCTION PLATES WITH SHUT-OFF VALVES PXE AND P2XE, FOR OCTOPUS SYSTEMS

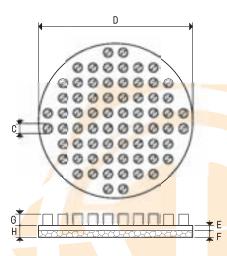
The suction plates described in this page are the same as the previously described ones. Their distinctive features are the shut-off valves inserted in each hole. In absence of an object to grip or in case of a defective grip of the foam rubber, the shut-off valves automatically close the suction inlet thus proventing the vacuum level from decreasing on the other feature allows reducing the vacuum generator consists.

feature allows reducing the vacuum generator capacity tandard OCTOPUS systems, all to the benefit of energy saving.



Art.	Force	Α	В	С	D	Е	F	G	Н	Nr. of	Weight
7	Kg			Ø	Ø					Valves	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 D0 35	65.4			15	350	10	30	18	40	148	2.97
P2XE D0 50	139.6			15	500	10	30	18	40	308	5.56







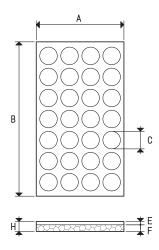
## SPECIAL SUCTION PLATES PY AND P2Y FOR OCTOPUS SYSTEMS

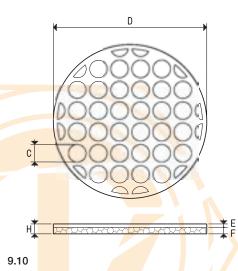
Compared to the standard ones, these suction plates, given the same gripping surface, develop a greater force (art. PY) and can grip even very rough and uneven surfaces (art. P2Y).

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.

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.







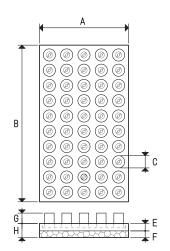
Art.	Force	Α	В	С	D	Е	F	Н	Weight
AI L	Kg			Ø	Ø				Kg
PY 15 20	37.7	150	200	40		5	15	20	0.39
PY 20 30	75.4	200	300	40		5	15	20	0.78
PY 20 40	100.5	200	400	40		5	15	20	1.07
PY 20 60	150.8	200	600	40		5	15	20	1.66
PY 30 30	113.0	300	300	40		5	15	20	1.27
PY 30 40	150.8	300	400	40		5	15	20	1.65
PY 30 50	188.4	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 D0 35	100.5			40	350	5	30	35	1.39
P2Y D0 50	213.5			40	500	5	30	35	2.36

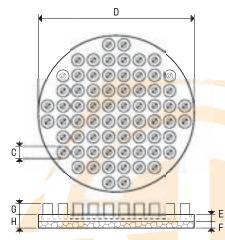


# SPECIAL SUCTION PLATES WITH SHUT-OFF VALVES PY2E AND P2Y2E, FOR OCTOPUS SYSTEMS



Art.	Force	Α	В	С	D	Е	F	G	Н	Nr. of	Weight
ALL	Kg			Ø	Ø					Valves	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 DO 35	100.5			40	350	17	15	18	32	32	1.89
PY2E DO 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







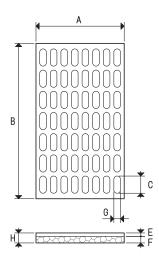
#### SPECIAL SUCTION PLATES PZ AND P2Z, FOR OCTOPUS SYSTEMS

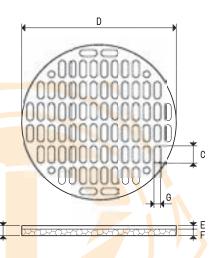
Among all the suction plates described up to now, these are the ones which develop the greatest lifting force given the same gripping surface and vacuum level. Moreover, the P2Z version is also able to grip very rough and uneven surfaces.

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.



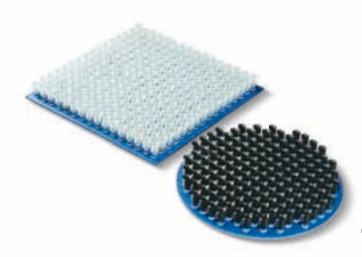




Art.  PZ 15 20  PZ 20 30  PZ 20 40  PZ 20 60  PZ 30 30  PZ 30 50  PZ 30 50  PZ 40 40  PZ 40 60  PZ 40 100  PZ 60 80	Kg 41.0 82.4 109.8 164.7 123.5 164.7	150 200 200 200	200 300 400	Ø 42 42 42	Ø 	5 5	15 15	18	20	Weight Kg 0.40
PZ 20 30 PZ 20 40 PZ 20 60 PZ 30 30 PZ 30 40 PZ 30 50 PZ 40 40 PZ 40 60 PZ 40 100	82.4 109.8 164.7 123.5	200 200	300 400	42						
PZ 20 40 PZ 20 60 PZ 30 30 PZ 30 40 PZ 30 50 PZ 40 40 PZ 40 60 PZ 40 100	109.8 164.7 123.5	200	400			5	15	10		
PZ 20 60 PZ 30 30 PZ 30 40 PZ 30 50 PZ 40 40 PZ 40 60 PZ 40 100	164.7 123.5			12		~	10	18	20	0.80
PZ 30 30 PZ 30 40 PZ 30 50 PZ 40 40 PZ 40 60 PZ 40 100	123.5	200		74		5	15	18	20	1.09
PZ 30 40 PZ 30 50 PZ 40 40 PZ 40 60 PZ 40 100			600	42		5	15	18	20	1.68
PZ 30 50 PZ 40 40 PZ 40 60 PZ 40 100	164.7	300	300	42		5	15	18	20	1.28
PZ 40 40 PZ 40 60 PZ 40 100		300	400	42		5	15	18	20	1.67
PZ 40 60 PZ 40 100	206.0	300	500	42		5	15	18	20	2.06
PZ 40 100	219.6	400	400	42		5	15	18	20	2.17
	329.4	400	600	42		5	15	18	20	3.38
PZ 60 80	549.0	400	1000	42		5	15	18	20	5.54
	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 DO 35	126.9			42	350	5	15	18	20	1.26
PZ DO 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								10		44.05
P2Z D0 35	1143.1	800	1000	42		5	30	18	35	11.85
P2Z D0 50	1143.1 126.9	800	1000	42 42	350	5 5	30 30	18 18	35 35	11.85 1.42



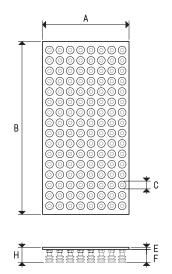
#### VACUUM CUP SUCTION PLATES PV and P2V, FOR OCTOPUS SYSTEMS

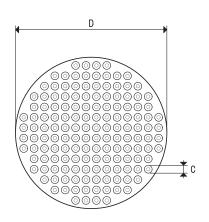


These suction plates provided with vacuum cups have been designed to ensure a better grip on uneven and very flexible surfaces (pasta or candy bags, blister or skin-film packs, thin cardboard boxes, etc.), which are difficult to grip with suction plates coated with foam rubber. We recommend using bellow 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	Α	В	С	D	Е	F	Н	Example	Nr. of	Weight
AI G	Kg			Ø	Ø				Vacuum cup art.	cups	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 DO 35	93.2			18	350	5	36	41	01 18 29	148	1.81
PV DO 50	194.0			18	500	5	36	41	01 18 29	308	3.37

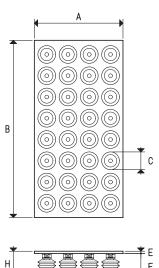
 $\textbf{Note:} \ \text{The code PV.} \ .. \ \text{exclusively indicates the suction plate with the vacuum cup supports screwed on it.}$ 

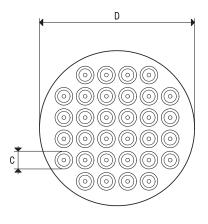
The vacuum cups indicated in the table or freely chosen are not integral part of the suction plate and therefore, must be ordered separately.

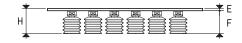


# VACUUM CUP SUCTION PLATES P2V, FOR OCTOPUS SYSTEMS









Art.	Force	Α	В	С	D	Е	F	Н	Example	Nr. of	Weight
AIL.	Kg			Ø	Ø				Vacuum cup art.	cups	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 D0 35	100.5			40	350	5	51.5	56.5	01 40 42	32	1.67
P2V D0 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.

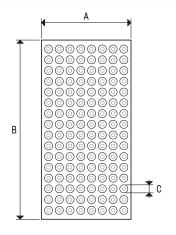
Conversion ratio: inch =  $\frac{mm}{25.4}$ ; pounds =  $\frac{g}{453.6}$ =  $\frac{Kg}{0.4536}$ 

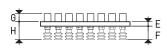
9.14

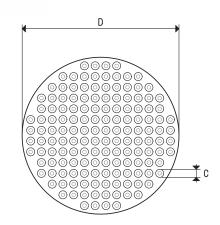


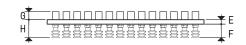
# VACUUM CUP SUCTION PLATES WITH SHUT-OFF VALVES PVE and P2V2E, FOR OCTOPUS SYSTEMS











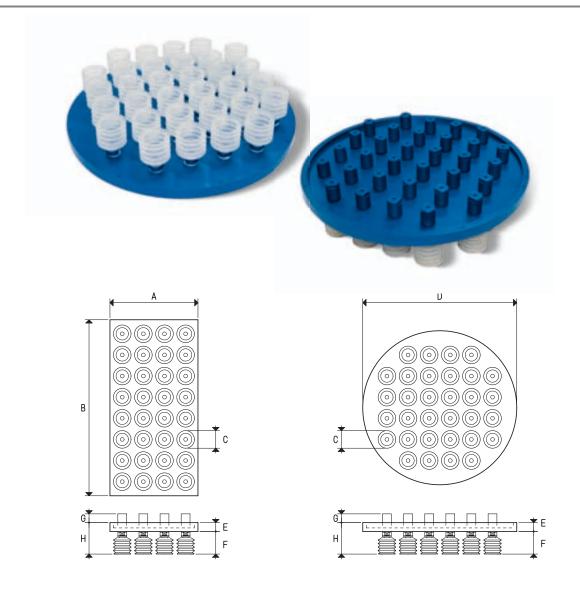
Art.	Force	Α	В	С	D	E	F	G	Н	Example	Nr. of	Weight
Aiti											Valves and	
	Kg			Ø	Ø					Vacuum cup art.	cups	Kg
PVE 20 30	60.5	200	300	18		10	36	18	46	01 18 29	96	2.09
PVE 20 40	80.6	200	400	18		10	36	18	46	01 18 29	128	2.82
PVE 20 60	121.0	200	600	18		10	36	18	46	01 18 29	192	4.18
PVE 30 30	90.7	300	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.



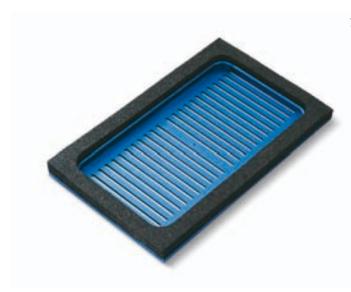
# VACUUM CUP SUCTION PLATES WITH SHUT-OFF VALVES P2V2E, FOR OCTOPUS SYSTEMS



Art.	Force	Α	В	С	D	E	F	G	Н	Example	Nr. of	Weight
											Valves and	
	Kg			Ø	Ø					Vacuum cup art.	cups	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.



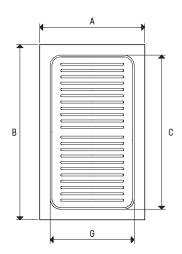
These suction plates have been designed to allow gripping paper or plastic bags containing powders, granulated products, bulk products or liquids.

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	А	В	С	E	F	G	Н	Weight
ALL	Kg								Kg
PJ 15 20	24.6	150	200	160	10	15	110	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



#### **OCTOPUS VACUUM GRIPPING BARS**

OCTOPUS vacuum gripping bars are our answer to the ever increasing requirements of palletisation robots operational flexibility.

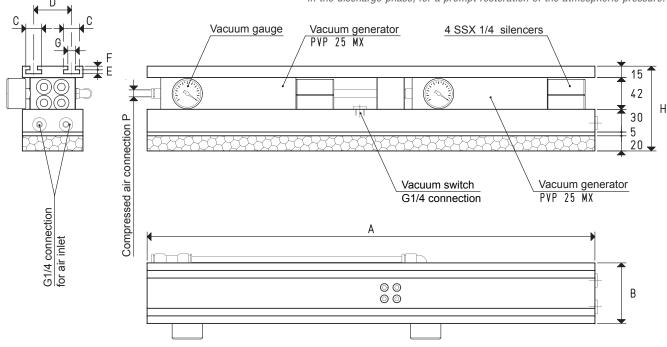
They are composed of:

- A slotted fixing plate, to allow a quick installation onto the machine and an easy placement with respect to the load to be lifted;

Two or three compressed air-fed vacuum generators, according to their size;
 A box made with light alloy, sealed by a suction plate coated with special perforated foam rubber.

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

These bars allow 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 does not occupy the entire suction plate. The maximum weight of the load to be lifted will obviously be proportional with the gripping surface. The connections provided for are four: one provided with quick coupler, for supplying compressed air to the vacuum generator; one for the possible installation of a vacuum switch, and two, closed by a threaded cap, for the air inlet inside the OCTOPUS bar in the discharge phase, for a prompt restoration of the atmospheric pressure.



Art.		BO 08 60 X	BO 08 80 X
Suction plate	art.	PX 08 60	PX 08 80
Gripping force	Kg	31.7	42.2
N° 2 vacuum generators	art.	PVP 25 MX	PVP 25 MX
Max. supply pressure	bar (g)	6	6
Max. vacuum level	-KPa	90	90
Air consumption at 6 bar (g)	NI/s	6.4	6.4
Quantity of sucked air	cum/h	62	62
Working temperature	°C	-20 / +80	-20 / +80
Weight	Kg	6	8
A		600	800
В		80	80
C		21	21
D		50	50
E		5.2	5.2
F		4.8	4.8
G		10	10
Н		112	112
P Compressed air pipe connection	ext. Ø	8	8

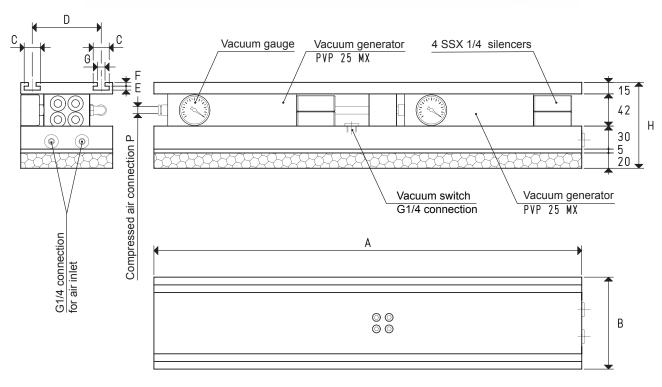
Note: The code BO 08 .. X, identifies the OCTOPUS bar (g) base box with the associated suction plate PX, the slotted support plate and the vacuum generators indicated in the table.

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



#### **OCTOPUS GRIPPING BAR**





Art.		BO 12 60 X	BO 12 80 X
Suction plate	art.	PX 12 60	PX 12 80
Gripping force	Kg	42.2	56.3
N° 2 vacuum generators	art.	PVP 25 MX	PVP 25 MX
Max. supply pressure	bar (g)	6	6
Max. vacuum level	-KPa	90	90
Air consumption at 6 bar (g)	NI/s	6.4	6.4
Quantity of sucked air	cum/h	62	62
Working temperature	°C	-20 / +80	-20 / +80
Weight	Kg	8.1	10.8
A		600	800
В		120	120
C		21	21
D		90	90
E		5.2	5.2
F		4.8	4.8
G		10	10
Н		112	112
P Compressed air pipe connection	ext. Ø	8	8

Note: The code BO 12 .. X, identifies the OCTOPUS bar (g) base box with the associated suction plate PX, the slotted support plate and the vacuum generators indicated in the table.

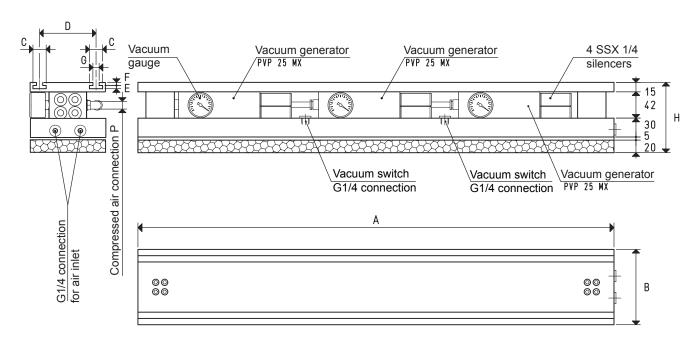
All the values shown in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

9.20



#### **OCTOPUS GRIPPING BARS**





Art.		BO 12 100 X	BO 12 120 X
Suction plate	art.	PX 12 100	PX 12 120
Gripping force	Kg	72.2	86.2
N° 3 vacuum generators	art.	PVP 25 MX	PVP 25 MX
Max. supply pressure	bar (g)	6	6
Max. vacuum level	-KPa	90	90
Air consumption at 6 bar (g)	NI/s	9.6	9.6
Quantity of sucked air	cum/h	93	93
Working temperature	°C	-20 / +80	-20 / +80
Weight	Kg	14.5	17.4
A		1000	1200
В		120	120
C		21	21
D		90	90
E		5.2	5.2
F		4.8	4.8
G		10	10
H		112	112
P Compressed air pipe connection	ext. Ø	8	8

**Note:** The code B0 12 .. X, identifies the OCTOPUS bar base box with the associated suction plate PX, the slotted support plate and the vacuum generators indicated in the table. All the values shown in the table are valid at a normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

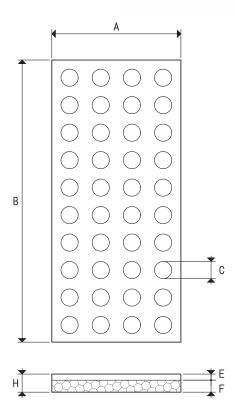


#### STANDARD SUCTION PLATES PX E P2X, FOR OCTOPUS GRIPPING BARS

The suction plates PX described in this page are installed, as a standard, on all OCTOPUS gripping bars and, therefore, they 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: 20 mm with 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	Α	В	С	E	F	Н	Weight
AI L	Kg			Ø				Kg
PX 08 60	31.7	80	600	15	5	20	25	0.70
PX 08 80	42.2	80	800	15	5	20	25	0.94
PX 12 60	42.2	120	600	15	5	20	25	1.06
PX 12 80	56.3	120	800	15	5	20	25	1.41
PX 12 100	70.4	120	1000	15	5	20	25	1.76
PX 12 120	86.2	120	1200	15	5	20	25	2.11
P2X 08 60	31.7	80	600	15	5	30	35	0.72
P2X 08 80	42.2	80	800	15	5	30	35	0.96
P2X 12 60	42.2	120	600	15	5	30	35	1.08
P2X 12 80	56.3	120	800	15	5	30	35	1.44
P2X 12 100	70.4	120	1000	15	5	30	35	1.80
P2X 12 120	86.2	120	1200	15	5	30	35	2.17

9.22



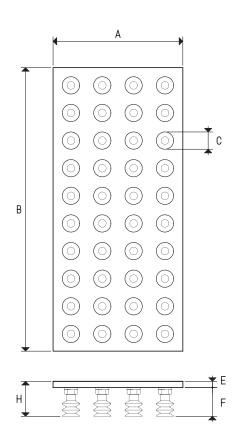
### **VACUUM CUP SUCTION PLATES PV FOR OCTOPUS GRIPPING BARS**



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 bellow 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 1/8" vacuum cup supports screwed onto them.

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.



Art.	Force	Α	В	С	E	F	Н	Example	Nr. of	Weight
Aiti	Kg Ø							cups	Kg	
PV 08 60	45.4	80	600	18	5	36	41	01 18 29	72	0.83
PV 08 80	60.5	80	800	18	5	36	41	01 18 29	96	1.26
PV 12 60	60.5	120	600	18	5	36	41	01 18 29	96	1.42
PV 12 80	80.6	120	800	18	5	36	41	01 18 29	128	1.90
PV 12 100	100.8	120	1000	18	5	36	41	01 18 29	160	2.37
PV 12 120	121.0	120	1200	18	5	36	41	01 18 29	192	2.84

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

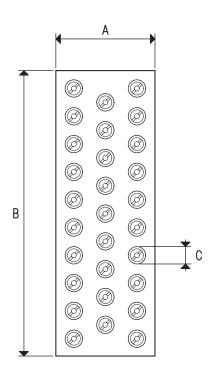
The vacuum cups indicated in the table or freely chosen are not integral part of the suction plate and therefore, must be ordered separately.

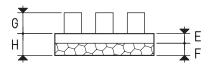


# SUCTION PLATES WITH SHUT-OFF VALVES PXE and P2XE, FOR OCTOPUS GRIPPING BARS

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 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	Α	В	С	E	F	G	Н	Nr. of	Weight
AI L	Kg			Ø					Valves	Kg
PXE 08 60	43.7	80	600	20	10	20	18	30	56	1.69
PXE 08 80	60.0	80	800	20	10	20	18	30	77	2.25
PXE 12 60	42.1	120	600	20	10	20	18	30	54	2.53
PXE 12 80	57.7	120	800	20	10	20	18	30	74	3.38
PXE 12 100	73.3	120	1000	20	10	20	18	30	94	4.22
PXE 12 120	88.9	120	1200	20	10	20	18	30	114	5.07
P2XE 08 60	43.7	80	600	20	10	30	18	40	56	1.72
P2XE 08 80	60.0	80	800	20	10	30	18	40	77	2.29
P2XE 12 60	42.1	120	600	20	10	30	18	40	54	2.58
P2XE 12 80	57.7	120	800	20	10	30	18	40	74	3.44
P2XE 12 100	73.3	120	1000	20	10	30	18	40	94	4.30
P2XE 12 120	88.9	120	1200	20	10	30	18	40	114	5.16



#### LOCKING PLATES, FOR OCTOPUS GRIPPING BARS WITHOUT VACUUM GENERATOR

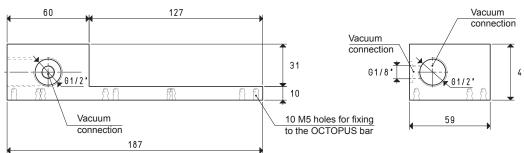
The locking plate with manifold described in this page has been designed to connect an OCTOPUS gripping bar to a remotely installed vacuum generator or to an alternative vacuum source.

This anodised aluminium plate is fixed with screws to the body of the OCTOPUS bar, instead of the generator. The manifold is equipped with connectors for a direct connection to the OCTOPUS bar, to the generator or to the alternative vacuum source, as well as to vacuum level reading and control devices. The unused connections can be closed with special metal caps which they are equipped with.

The locking plate with manifold is suited for any kind of OCTOPUS gripping bar that uses PVP 12 MX and PVP 25 MX vacuum generators.



Art.	For OCTOPUS gripping bars
00 B0 07	BO 08 60 X
	BO 08 80 X
	BO 12 60 X
	BO 12 80 X
	BO 12 100 X
	BO 12 120 X



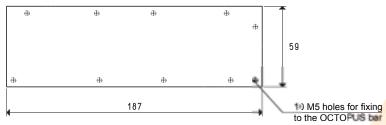
# LOCKING PLATES FOR, OCTOPUS GRIPPING BARS WITHOUT VACUUM GENERATOR

The locking plate described in this page has been created to close the suction holes on the OCTOPUS bar body and left free by the removal of the vacuum generator.

This anodised aluminium plate is fixed with screws to the OCTOPUS bar instead of the generator. The gasket provides perfect seal. The locking plate with manifold is suited for any kind of OCTOPUS gripping bar that uses PVP 12 MX and PVP 25 MX vacuum generators.



Art.	For OCTOPUS gripping bars
00 B0 06	BO 08 60 X
	BO 08 80 X
	BO 12 60 X
	BO 12 80 X
	BO 12 100 X
	BO 12 120 X



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# 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.

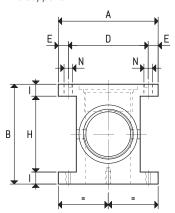
They are also equipped with connectors for direct connection to the OCTOPUS system, to the generator or to the alternative vacuum source, as well as to the vacuum level reading and control devices. The unused connections may be closed with special metal caps which they are equipped with.

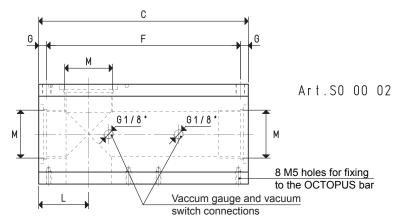
The flanged fixing supports are currently available in the versions described in this page and are suited for OCTOPUS systems that use the vacuum generators indicates next to the article:

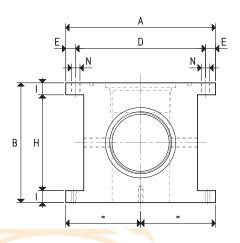
- Art. SO 00 02 PVP 100 ÷ 200M - Art. SO 00 05 PVP 150 ÷ 300MD - Art. SO 00 06 PVP 450 ÷ 600MD

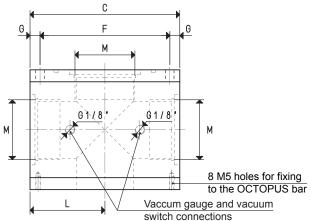


**Note:** The vacuum gauges and switches in the picture are not integral part of the supports.









Art.SO 00 05 Art.SO 00 06

_	Art.		Α	В	С	D	E	F	G	Н	I	L	М	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

9.18



## ACCESSORIES AND SPARE PARTS FOR OCTOPUS GRIPPING SYSTEMS AND BARS

## Digital vacuum switch with 1/8" axial gas coupler



Art.		Description
12 10 10	[	Digital vacuum switch

#### Electric cable with axial connector



Art.	Description
00 12 20	Digital vacuum switch electric connection cable with axial connector

#### Electric cable with radial connector



Art.	Description
00 12 21	Digital vacuum switch electric connection cable with radial connector

## Vacuum gauge Ø 40 mm with 1/8" axial gas coupler



Art.		Description
09 03 15	I	Vacuum gauge

# Pressure gauge Ø 40 mm with 1/8" axial gas coupler



Art.	Description
09 03 25	Pressure gauge

9.26



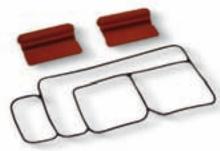
## SPARE PARTS FOR OCTOPUS GRIPPING SYSTEMS AND BARS

#### Silencer



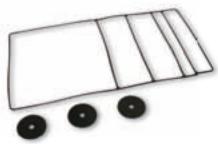
Art.	For generator art.
SSX 1/4"	PVP 25 MX

## Sealing kit and reed valves

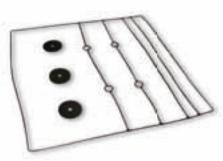


Art.	For generator art.
00 KIT PVP 25 MX	PVP 25 MX

## Sealing kit and disc valves



Art.	For generator art.
00 KIT PVP 100 M	PVP 100 M
00 KIT PVP 140 M	PVP 140 M
00 KIT PVP 170 M	PVP 170 M
00 KIT PVP 200 M	PVP 200 M



Art.	For generator art.	
00 KIT PVP 150 MD	PVP 150 MD	
00 KIT PVP 300 MD	PVP 300 MD	
00 KIT PVP 450 MD	PVP 450 MD	



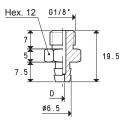
#### SPARE PARTS FOR OCTOPUS GRIPPING SYSTEMS AND BARS

### Stainless steel disc filtre

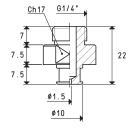


Art.	D	For OCTOPUS system
ALL	Ø	Ø
00 S0 05	25	SO 15 20 - BO 08 60 - BO 08 80
		BO 12 60 - BO 12 80 - BO 12 100 - BO 12 120
00 S0 10	50	S0 20 30 - S0 20 40 - S0 20 60 - S0 D0 35
00 S0 14	80	SO 30 30 - SO 30 40 - SO 30 50 - SO 40 40
		SO 40 60 - SO DO 50 - SO 40 100 - SO 60 80
		S0 60 120 - S0 80 100

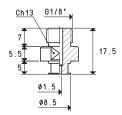
### **Cup supports**



Art.	D	Weight	Support	For cup	_
	Ø	g	material	art.	
00 08 157	1.5	4	aluminium	01 18 29	_
00 08 178	2.5	4	aluminium	01 18 29	

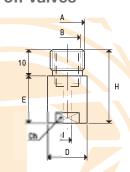


Art.	Weight	Support	For cup		
	g	material	art.		
00 08 158	8	aluminium	01 40 42		



Art.	Weight	Support	For cup		
711 61	g	material	art.		
00 08 170	4	aluminium	01 20 23		

#### **Shut-off valves**



Art.	Α	В	d	D	E	Н	Ch	Weight	Support
AIL	Ø	Ø	Ø	Ø				g	material
14 01 06	G1/4"	G1/8"	3.25	15	18	28	12	10	aluminium
14 01 07	G3/8"	G1/4"	4.50	20	25	35	17	24	aluminium

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

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