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3D drawing available at www.vuototecnica.net

OCTOPUS VACUUM GRIPPING SYSTEM

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OCTOPUS GRIPPING SYSTEM COMPOSITION AND RELATIVE IDENTIFICATION CODES

The OCTOPUS systems described in the following pages are equipped, as a standard, with suction plates PX. Should you want to replace these plates with others with different features you will have to modify the identification codes as described below.

Example regarding a composition of a standard OCTOPUS system with a 300x400 mm gripping surface:

	Vacuum generator (to be ordered separately)	art. PVP 150 MD
300x400	OCTUPUS system base box	art. SO 30 40
	With suction plate PX With suction plate P2X	art. SO 30 40 X art. SO 30 40 2X
	With suction plate PX and shut-off valves With suction plate P2X and shut-off valves	art. SO 30 40 XE art. SO 30 40 2XE
	With suction plate PY With suction plate P2Y	art. SO 30 40 Y art. SO 30 40 2Y
	With suction plate PY and shut-off valves With suction plate PZ With suction plate PZ With suction plate PZ PZ	art. SO 30 40 Y2E art. SO 30 40 2Y2E art. SO 30 40 Z art. SO 30 40 Z
	With suction plate PV (1/8" vacuum cup supports included; vacuum cups not included) With suction plate PV and shut-off valves (1/8" vacuum cup supports included; vacuum cups not included)	art. SO 30 40 V art. SO 30 40 VE
	With suction plate P2V (1/4" vacuum cup supports included; vacuum cups not included) With suction plate P2V and shut-off valves (1/4" vacuum cup supports included; vacuum cups not included)	art. SO 30 40 2V art. SO 30 40 2V2E

With suction plate PJ

art. SO 30 40 J

OCTOPUS GRIPPING SYSTEM COMPOSITION AND RELATIVE IDENTIFICATION CODES

Example regarding a composition of an OCTOPUS system with a suction plate P2Y equipped with vacuum generator: n° 1 PVP 150 MD n° 1 SO 30 40 2Y

Example regarding a composition of an OCTOPUS system with suction plate P2V equipped with silicon vacuum cups and a vacuum: generator:

n° 1 PVP 150 MD n° 1 SO 30 40 2V n° 36 01 40 42 S

Example regarding a composition of an OCTOPUS system with suction plate PX and shut-off valves equipped with vacuum generator: n° 1 PVP 150 MD n° 1 SO 30 40 XE

VACUUM GENERATORS USED ON OCTOPUS SYSTEMS

The standard OCTOPUS gripping system generators indicated in the tables, despite not being built-in the system, have been carefully selected following the assessment the best ratio between performance and compressed air consumption; To replace them with others with different features, please contact our technical department.

FIXING AND CONNECTION ALTERNATIVES

The OCTOPUS system can be connected to a remotely installed vacuum generator or to an alternative vacuum source by fixing one of the special flanged support described in the following pages instead of the generator.



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:

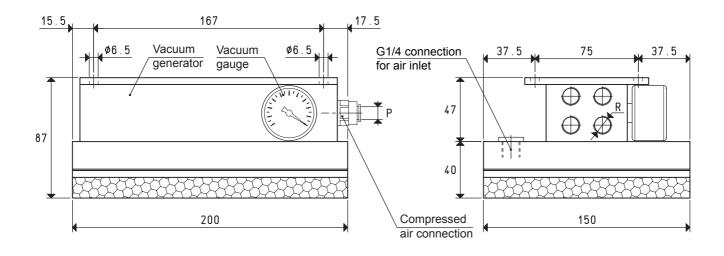
- A compressed air-fed vacuum generator as shown in the picture and in the drawing, that has to be ordered separately, since it is not included in the code.

- 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.



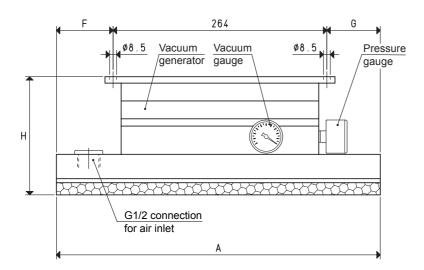
Art.		SO 15 20 MX			
Suct	ion plate	art.	PX 15 20		
Grip	ping force	Kg	21.2		
Vacu	ium generator	art.	PVP 25 MX		
Max	. supply pressure	bar (g)	6		
Max	. vacuum level	-KPa	90		
Air c	onsumption at 6 bar (g)	NI/s	3.2		
Quar	ntity of sucked air	cum/h	31.0		
Work	king temperature	°C	-20 / +80		
Weig	pht	Kg	2.1		
P	Compressed air pipe connection	ext. Ø	8		
R	Exhaust connection	Ø	N° 4 x G1/4"		

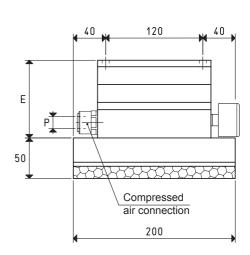
Note: The code SO 15 20 X exclusively identifies the OCTOPUS system base box with the associated suction plate PX.

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.

OCTOPUS GRIPPING SYSTEM





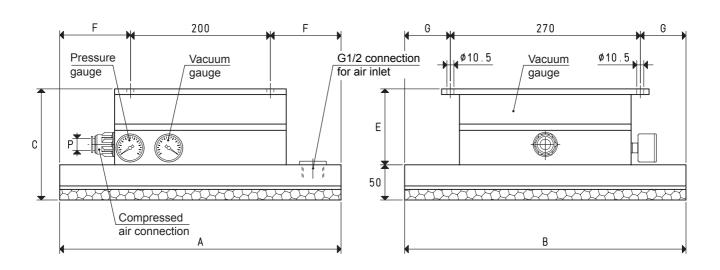


Art.		SO 20 30 X	SO 20 40 X	SO 20 60 X
Suction plate	art.	PX 20 30	PX 20 40	PX 20 60
Gripping force	Kg	42.4	56.6	84.8
Vacuum generator	art.	PVP 100 M	PVP 140 M	PVP 200 M
Max. supply pressure	bar (g)	6	6	6
Max. vacuum level	-KPa	90	90	90
Air consumption at 6 bar (g)	NI/s	9.8	13.0	19.4
Quantity of sucked 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	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.

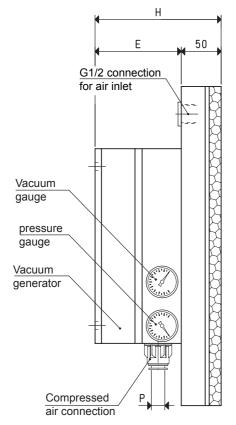


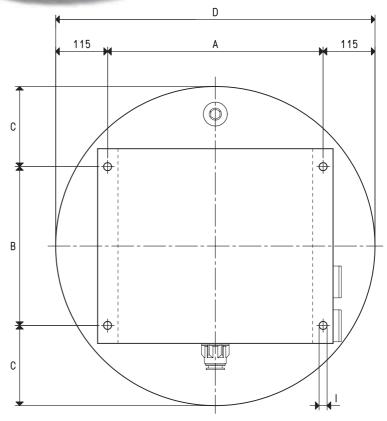


Art.		SO 30 30 X	SO 30 40 X	SO 30 50 X	SO 40 40 X	SO 40 60 X
Suction plate	art.	PX 30 30	PX 30 40	PX 30 50	PX 40 40	PX 40 60
Gripping force	Kg	63.6	84.8	106.0	113.1	169.6
Vacuum generator	art.	PVP 150 MD	PVP 150 MD	PVP 300 MD	PVP 300 MD	PVP 300 MD
Max. supply pressure	bar (g)	6	6	6	6	6
Max. vacuum level	-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

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.

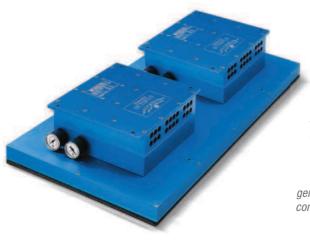




Art.		SO DO 35 X	SO DO 50 X
Suction plate	art.	PX DO 35	PX D0 50
Gripping force	Kg	65.4	139.6
Vacuum generator	art.	PVP 170 M	PVP 300 MD
Max. supply pressure	bar (g)	6	6
Max. vacuum level	-KPa	90	90
Air consumption at 6 bar (g)	NI/s	16.3	32.0
Quantity of sucked air	cum/h	182.0	400.0
Norking temperature	°C	-20 / +80	-20 / +80
<i>N</i> eight	Kg	9.5	17.0
A .		120	270
3		264	200
		43	150
	Ø	350	500
		96	108
1		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.



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.

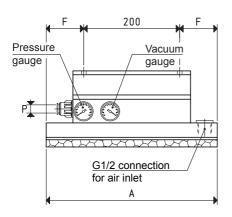
- An anodised aluminium box, open on one side, with two built-in microfine stainless steel mesh filtres on the suction inlet to protect the vacuum generator, very easy to inspect. On the outside of the box there are one or more connections for the possible installation of control devices o solenoid valves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

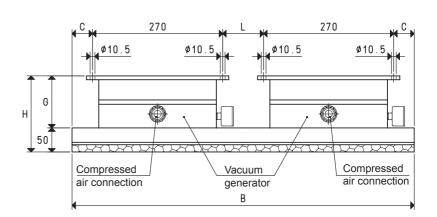
 - Un suction plate sealing the box, also made with anodised aluminium and coated with a special perforated foam rubber.

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.