

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, 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.

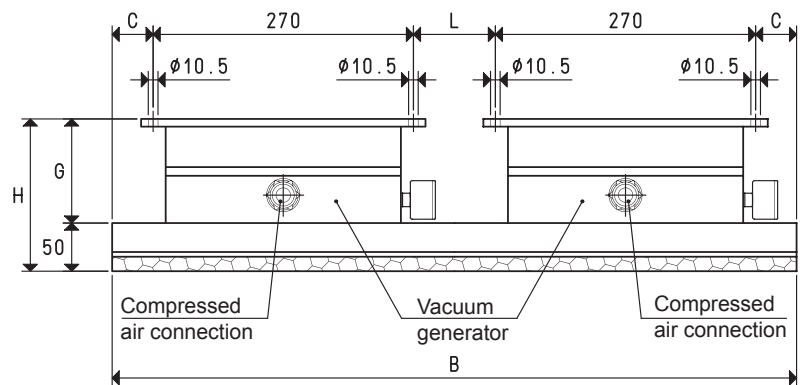
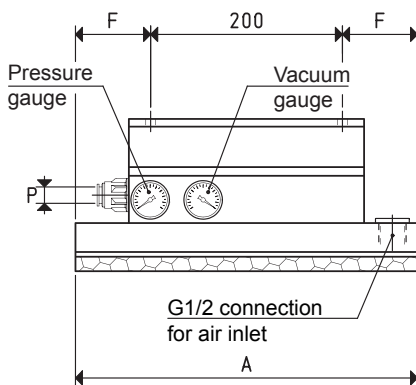
- An anodised aluminium box, open on one side, with two built-in micro-fine stainless steel mesh filters on the suction inlet to protect the vacuum generator, very easy to inspect. On the outside of the box there are one or more connections for the possible installation of control devices or solenoid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

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