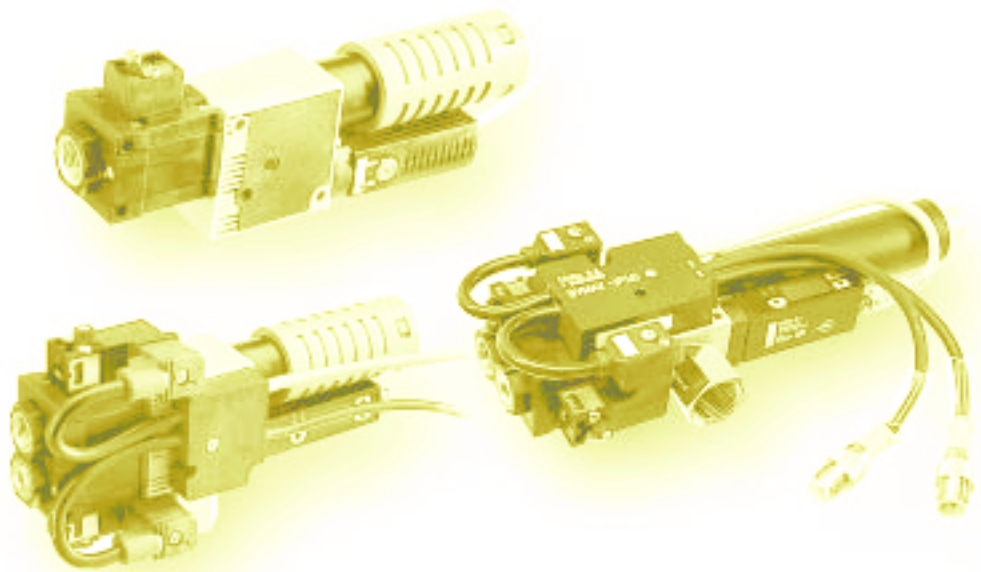
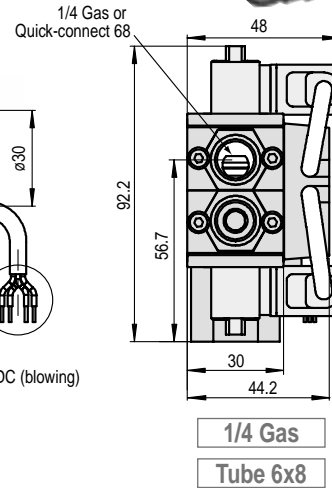
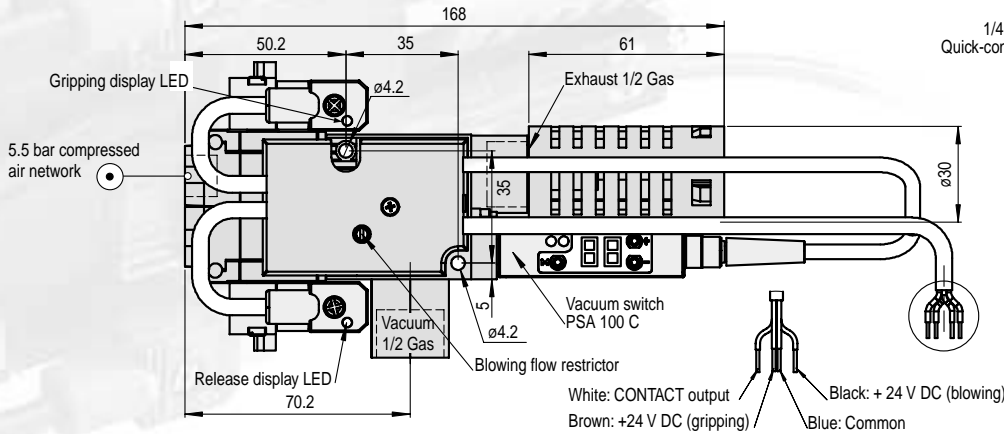
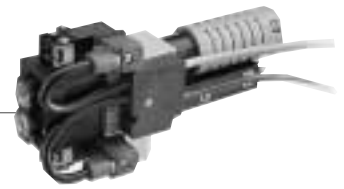


# Low air consumption vacuum generators



# Regulated venturis, series GVMAX Electric



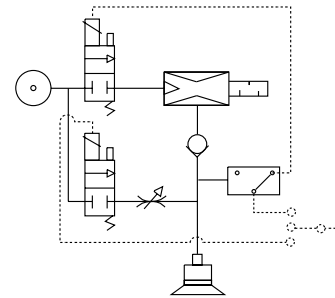
## Applications:

Dialogue between two components, the electronic vacuum switch and the gripping valve controller, allows the **consumption of compressed air** to be regulated and, above all, **considerably reduced**. This range of venturis is strongly recommended for the **gripping and holding of non-porous materials**, and for medium or long cycles. An **electrically controlled blowing device** is built in for the release function.

## Characteristics:

Characteristics	Max. vacuum as %			Drawn-in air NI/min			L2 mm		Weight g
	X	T	N	X	T	N	S	K*	
Models									
GVMAX E1	50	75	90	360	240	200	60	121	510

(\* Supplied with version X on standard basis  
See page 45 for air consumption.



## Specifications:

Compressed air	<b>Filtered, non-lubricated</b> 2 to 6 bars, optimal 5 bars
Temperature	0 to 60°C
Contact output	PNP on-off, NO or NC, adjustable hysteresis
Anti-interference	Integrated with display LED
Gripping flow rate	Adjustment by flow rate reducer

## Operating principle:

When the selected vacuum level is reached, the compressed air supply is shut off.

This shutoff has no effect as the non-return function of the check valve maintains the negative pressure generated and thus gripping of the object. The vacuum switch ensures continuous analysis of vacuum requirements. As soon as the minimum threshold is reached, it opens the venturi and the preselected vacuum level is restored.

## Safety:

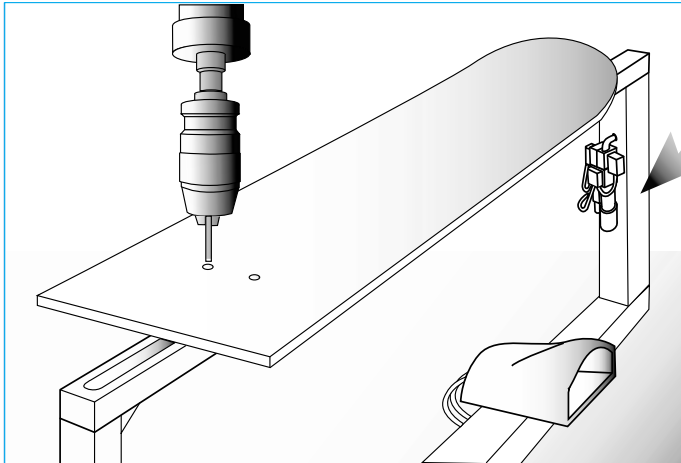
The GVMAX E1 is equipped, on a standard basis, with a non-return valve enabling it to maintain the vacuum in the system in the event of electric power failure. This feature provides the operator with maximum safety during handling operations.

GVMAX	1	2	3	E1
	<b>1: Characteristics</b>	<b>2: Silencer</b>	<b>3: C.A. coupling</b>	
	X 50% vacuum	- Without silencer	14 1/4 G BSPP	
	T 75% vacuum	S Large reduction in dB	68 Tube 6x8	
	N 90% vacuum	K Through		

Dimensions and characteristics may be modified without notice.

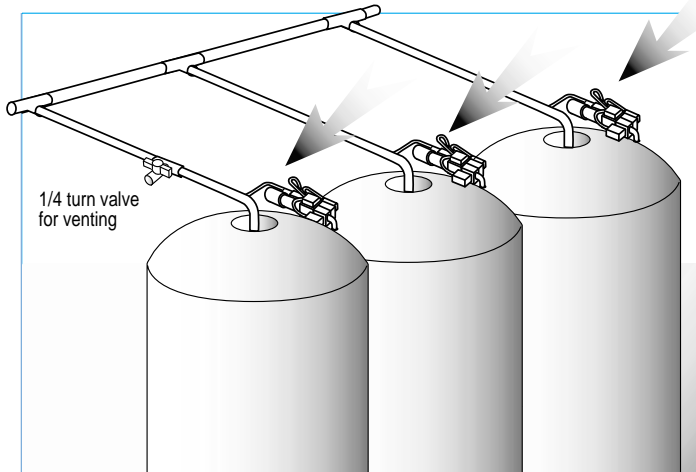
# Applications with air economy venturis

## ► Clamping:



During the finishing stage, a snowboard must be held in position for several minutes. Using venturis with the air economy device results in **considerable energy savings**.

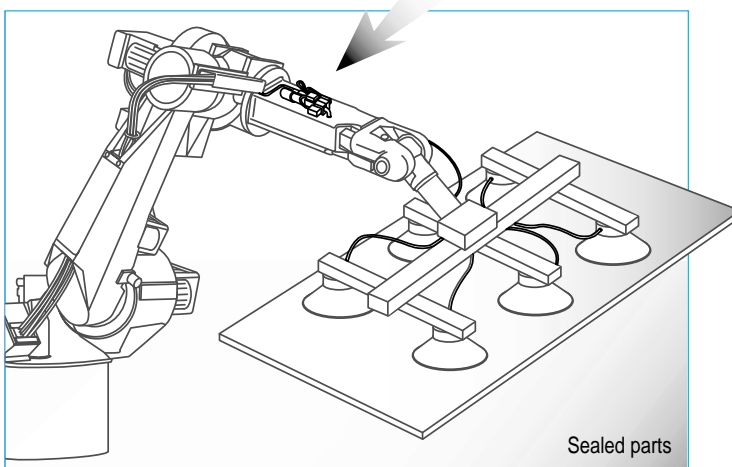
## ► Emptying a container:



For this type of application, we use **venturi regulation** capabilities. The hysteresis of the on-off regulating control can be adjusted to between 1 and 25% vacuum on electric models.

Caution: For the regulation of vacuum levels in a tank with a capacity of more than 10 litres: consult us for pneumatic versions.

## ► Safe holding:



The **safety** functions on both the electric and compressed air power supplies ensure that, in the event of failure of one of the two power sources (or both of them), the sealed parts being handled are held while the operator makes the machine completely safe.

Holding in case of failure of electric power supply or compressed air supply.

Dimensions and characteristics may be modified without notice.

# Curves for low air consumption venturis

## ► Characteristics:

Air consumption volume and evacuation time to place a 5-litre container under negative pressure with a venturi GVE NS 14 E1 at 5.5 bars.

Vacuum %	Evacuation time in seconds	Air consumption in NI
10	0.2	0.9
20	0.3	1.8
30	0.6	2.9
40	0.8	4.2
50	1.1	5.9
60	1.5	7.8
70	2.1	10.9
80	3.0	15.7
85	4.0	21.0

## ► Characteristics:

Air consumption volume and evacuation time to place a 5-litre container under negative pressure with a venturi GVEMAX TS 68 E1 at 5.5 bars.

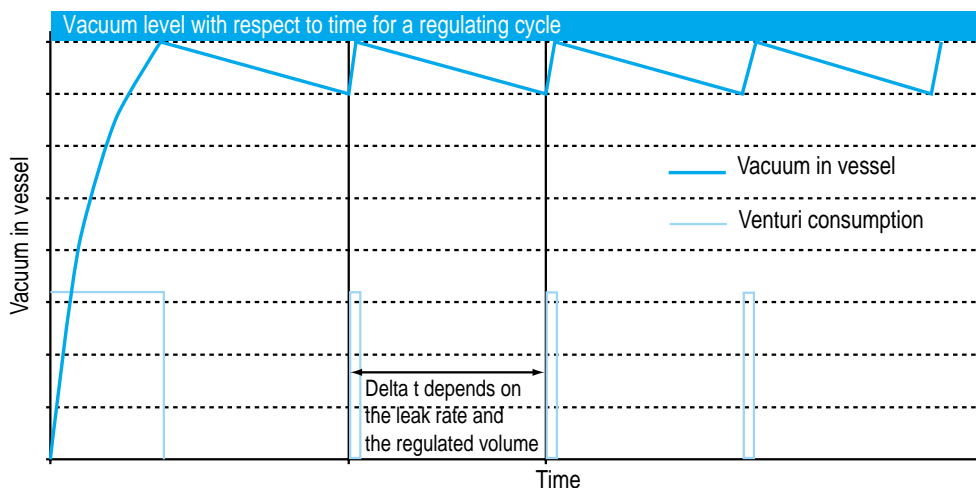
Vacuum %	Evacuation time in seconds	Air consumption in NI
10	0.2	0.9
20	0.4	1.8
30	0.6	3.1
40	0.9	4.5
50	1.3	6.6
60	1.8	9.6
70	3.2	16.7

## ► Characteristics:

Air consumption volume and evacuation time to place a 5-litre container under negative pressure with a venturi GVEMAX XK 14 P1 at 5.5 bars.

Vacuum %	Evacuation time in seconds	Air consumption in NI
10	0.1	0.5
20	0.3	1.1
30	0.4	2.1
40	0.7	3.5
45	1.0	5.1

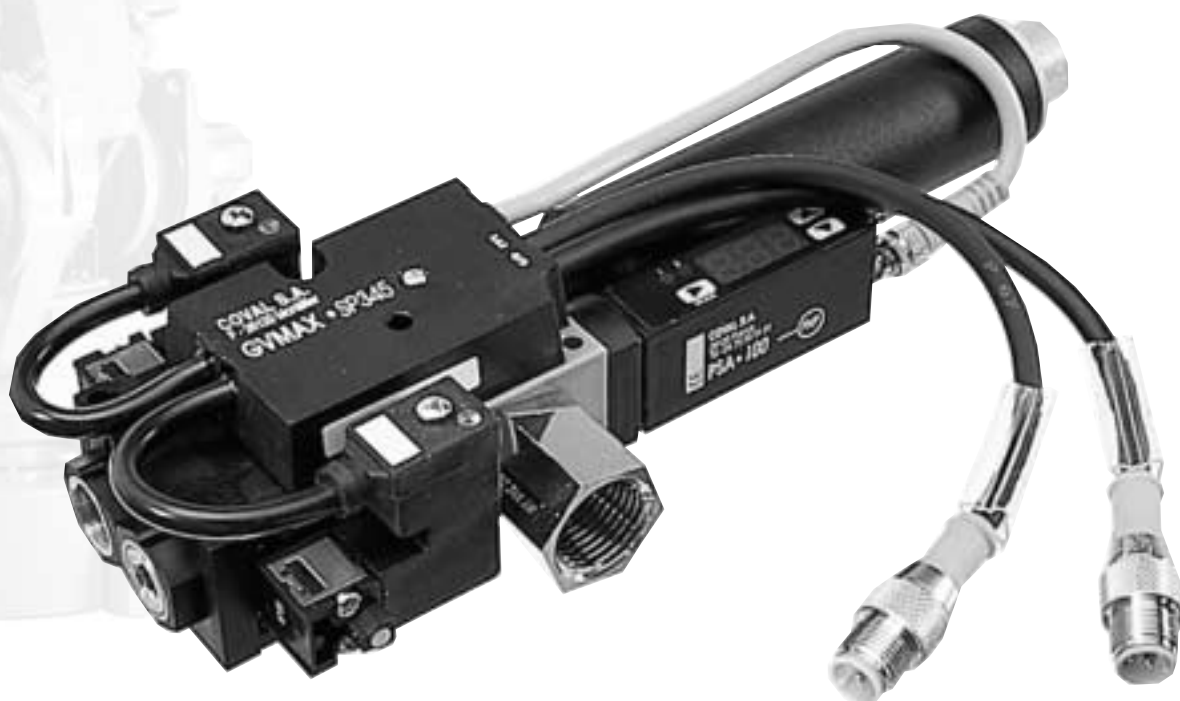
## ► Curves:



Dimensions and characteristics may be modified without notice.

# The intelligent venturi GVMAX SP 345

4



The regulated venturi GVMAX SP 345 has a number of integrated functions which meet the demand of automatic devices in industry : security, energy-saving and high performance.

The compactness of this venturi simplifies its integration to all production lines.

Its easy installation and maintenance allows the reduction of operation costs. This venturi is highly requested by the main European car manufacturers and in other fields as aeronautics, robotics etc.

*On request, special literature available in French, English, Spanish, Italian and German.*

Dimensions and characteristics may be modified without notice.