# **GVMAX** Self-Regulating Vacuum Pumps (Pneumatic Vacuum and Blow-off Control)

The communication between both elements, pneumatic vacuum switch and gripping valve control, enables the consumption of compressed air to be regulated and in particular significantly reduced. This range of vacuum pumps is strongly recommended for gripping airtight objects, clamping, and for medium or long cycles in explosive environments. Pneumatically controllable blow-off is integrated for release.

Note: The volume of the piping must not exceed 10 liters. For higher volumes, please consult us.

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Industry-specific applications



Cuum manager

#### Materials

PA 6-6 15% FV, POM, PC 15% FV, brass, aluminum, NBR.

### Safety

The GVMAX P1 has two non-return valve functions installed as standard which enables it to maintain the vacuum within the circuit if the pneumatic power is interrupted. This function guarantees maximum safety conditions for operators during handling.

model	Ø nozzle	max. vacuum (%)			<b>air d</b> ı (NI/m	r <b>awn iı</b> nin)	n	<b>L2</b> (mm	)	O (g)	
	(mm)	X	Т	Ν	X	T	Ν	S	<b>K</b> <sup>(1)</sup>		
<b>GVMAX P1</b>	2.5	50	75	90	360	240	200	60	121	440	

Evacuation Time in Seconds per Liter																							
% vacuum	Ø nozzle	10			20			30			35	40			45	50		60		70		80	85
versions	(mm)	X	Т	Ν	X	Т	Ν	X	Т	Ν	X	Х	Т	Ν	X	Т	Ν	Т	Ν	Т	Ν	Ν	Ν
<b>GVMAX P1</b>	2.5	0.02	0.03	0.03	0.04	0.06	0.07	0.08	0.10	0.11	0.01	0.14	0.14	0.16	0.19	0.21	0.22	0.30	0.30	0.50	0.41	0.60	0.77

**Characteristics** 

## **Operating Principle**

When the selected vacuum level is reached, the compressed air supply stops. This interruption does not have any effect on the operation in progress as the no-return valve maintains the vacuum and thus the grip. The vacuum switch continually analyzes the vacuum requirements. As soon as the minimum threshold is reached, it activates the vacuum generation valve. The chosen level of vacuum is immediately re-established. See page 8/39.

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Specifications
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Supply	Non-lubricated filtered air, 2 to 6 bar, optimum at 4 bar	
Temperature	0 to 60 °C	
Vacuum switch	PSE100PKNO	
Pressure at the vacuum switch	Equal to or greater than vacuum pumps supply pressure	
Hysteresis	100 mbar max.	

Curves: see page 8/43

Note: to ensure optimum operation, we advise you to ensure the vacuum network is airtight. For this purpose we recommend using NVS vacuum feeders and screwed vacuum fittings with O-rings (RDV, RCOV).

#### Dimensions

167.2 (1) 5.5 bar compressed air input Fast 2.7x4 blow-off control L2 (2) 49.2 35 (3) (3) (4) G1/2"-F Gas Exhaust (7) Regulation threshold adjustment PSE100PKNO vacuum switch (5) Ξ (1)(6) Hollow shaft for vacuum control vacuum  $(\bullet)$ switch pressurization ø4.2 G1/4"-Ė 35.4 0 22 IQ. ŝ (4) (6) ø4.2 (5) (2) 30 70.2 For all orders, please specify: Ŀ Model + Characteristic + Silencer + C.A. fitting + Pilot Example: GVMAXNK14P1 1: Model 5: Pilot 2: Characteristic 3: Silencer 4: C.A. fitting **GVMAX** X 50 % vacuum Without silencer G1/4"-F **P1** 14 Т 75 % vacuum S Diffuser Ν 90 % vacuum K Through-type

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