# GVP
## Vacuum Pumps



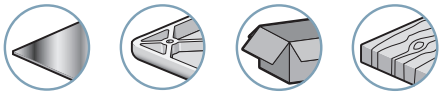
The GVP series vacuum pumps are the simplest in the range. They exist in 5 levels of power (suction rate) and 3 different levels of maximum vacuum:

- Version X (50% vacuum for very porous products).
- Version T (75% vacuum for porous products).
- Version N (85% vacuum for air-tight products).

For the same nozzle diameter, the suction flow rate increases proportionally to the decrease in the maximum vacuum level.

In addition to suction pads, they can also be used for dosing liquid, spraying and tank depressurization.

Industry-specific applications



### Characteristics

| Model | Ø Nozzle (mm) | Air consumed (Nl/min) | Max. vacuum (%) | | | Air drawn in (Nl/min) | | | At air pressure (bar) |
|---|---|---|---|---|---|---|---|---|---|
| | | | X | T | N | X | T | N | |
| **GVP 12** | 1.2 | 67 | 40 | 75 | 85 | 150 | 63 | 45 | 4 |
| **GVP 15** | 1.5 | 100 | 50 | 75 | 85 | 180 | 95 | 70 | 4 |
| **GVP 20** | 2 | 180 | 50 | 75 | 85 | 250 | 160 | 125 | 4 |
| **GVP 25** | 2.5 | 270 | 50 | 75 | 85 | 360 | 240 | 200 | 4 |
| **GVP 30** | 3 | 400 | 50 | 75 | 85 | 450 | 330 | 265 | 4 |

As standard, versions N and T are delivered with silencer S and version X with silencer K. Only exception, the GVP 30 is fitted with silencer K.

### Advantages

- Adaptable to all industries
- Optimized performance for handling all types of objects
- Options
- Light and compact
- Silent operation
- No clogging thanks to the through type silencer

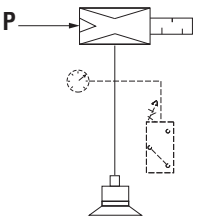
7 GVP

### Evacuation Time in Seconds per Liter

| % vacuum | 10 % | | | 20 % | | | 30 % | | | 40 % | | | 50 % | | | 60 % | | | 70 % | | | 80 % | | | 85 % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **versions** | **X** | **T** | **N** | **X** | **T** | **N** | **X** | **T** | **N** | **X** | **T** | **N** | **X** | **T** | **N** | **X** | **T** | **N** | **X** | **T** | **N** | **X** | **T** | **N** | **X** | **T** | **N** |
| **GVP12** | 0.05 | 0.10 | 0.14 | 0.11 | 0.22 | 0.30 | 0.22 | 0.37 | 0.49 | 0.62 | 0.55 | 0.71 | - | 0.78 | 0.97 | - | 1.16 | 1.33 | - | 1.92 | 1.81 | - | - | 2.66 | - | - | 3.42 |
| **GVP15** | 0.04 | 0.07 | 0.09 | 0.09 | 0.15 | 0.20 | 0.15 | 0.24 | 0.32 | 0.27 | 0.36 | 0.46 | - | 0.52 | 0.63 | - | 0.77 | 0.85 | - | 1.27 | 1.16 | - | - | 1.71 | - | - | 2.20 |
| **GVP20** | 0.03 | 0.04 | 0.06 | 0.06 | 0.09 | 0.12 | 0.11 | 0.14 | 0.19 | 0.19 | 0.22 | 0.28 | - | 0.31 | 0.38 | - | 0.46 | 0.52 | - | 0.76 | 0.71 | - | - | 1.04 | - | - | 2.13 |
| **GVP25** | 0.02 | 0.03 | 0.03 | 0.04 | 0.06 | 0.07 | 0.08 | 0.10 | 0.11 | 0.14 | 0.14 | 0.16 | - | 0.21 | 0.22 | - | 0.30 | 0.30 | - | 0.50 | 0.41 | - | - | 0.60 | - | - | 0.77 |
| **GVP30** | 0.01 | 0.02 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.11 | 0.10 | 0.12 | - | 0.15 | 0.17 | - | 0.22 | 0.23 | - | 0.37 | 0.31 | - | - | 0.45 | - | - | 0.58 |

### Specifications

| | |
|---|---|
| **Supply** | Non-lubricated filtered air, pressure 2 to 6 bar |
| **Optimum pressure** | 4 bar |
| **Weight** | 100 to 265g |
| **Material** | POM - 2017A – Cu Zn |
| **Temperature** | 0 to 80 °C |




### For all orders, please specify:
### Model + Nozzle Ø + % vacuum + Silencer + C.A. fitting
### e.g.: GVP30NK14

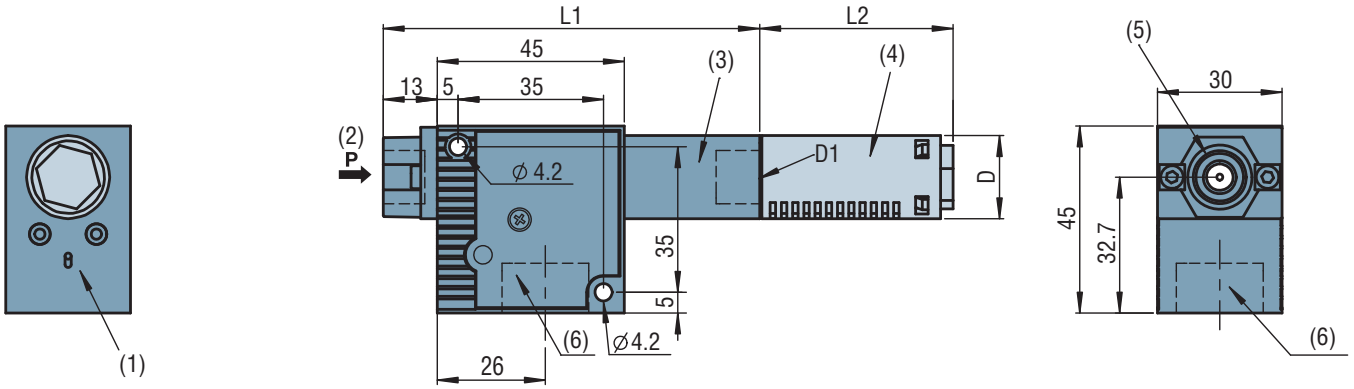
| 1: Model | 2: Nozzle diameter | | 3: % vacuum | | 4: Silencer | | 5: C.A. fitting | |
|---|---|---|---|---|---|---|---|---|
| **GVP** | **12** | 1.2 mm | **X** | 50 % vacuum | **-** | Without silencer | **14** | G1/4" Female |
| | **15** | 1.5 mm | **T** | 75 % vacuum | **S** (1) | Diffuser | | |
| | **20** | 2 mm | **N** | 85 % vacuum | **K** | Through-type | | |
| | **25** | 2.5 mm | | | | | | |
| | **30** | 3 mm | | | | | | |

(1) no silencer for nozzle Ø 30.

# GVP
## Vacuum Pumps
Dimensions



### Dimensions




| Models | L1 | | L2 | | | D | | D1 | |
|---|---|---|---|---|---|---|---|---|---|
| | X | N/T | S(N/T) | K(N/T) | K(X) | X | N/T | X | N/T |
| **GVP12** | 76 | 81 | 46 | 68 | 121 | 30 | 20 | G1/2 "-F | G1/4 "-F |
| **GVP15** | 76 | 91 | 46 | 68 | 121 | 30 | 20 | G1/2 "-F | G1/4 "-F |
| **GVP20** | 76 | 76 | 62 | 121 | 121 | 30 | 30 | G1/2 "-F | G1/2 "-F |
| **GVP25** | 76 | 76 | 62 | 121 | 121 | 30 | 30 | G1/2 "-F | G1/2 "-F |
| **GVP30** | 148 | 148 | - | 121 | 121 | 30 | 30 | G 1/2 "-F | G1/2 "-F |

(**1**) Vacuum switch option mounting zone
(**2**) 4 bar compressed air supply
(**3**) Exhaust
(**4**) Silencer model S or K
(**5**) G1/4"-F
(**6**) Vacuum G1/2"-F

**Options**
- Vacuum switches see pages 7/5 and 7/6.
- Other options see pages 7/6 and 7/7.
- Silencer see page 11/11.

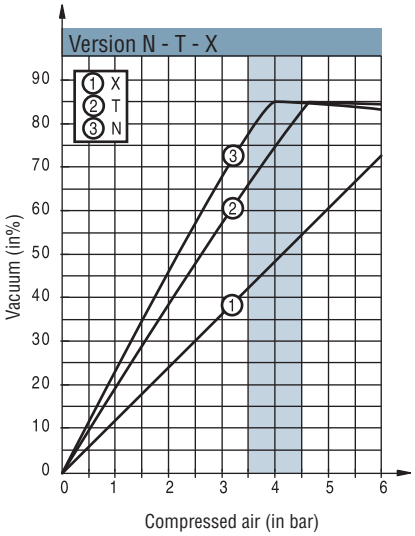
**Curves**
See page 7/4.

Note: all dimensions are in mm

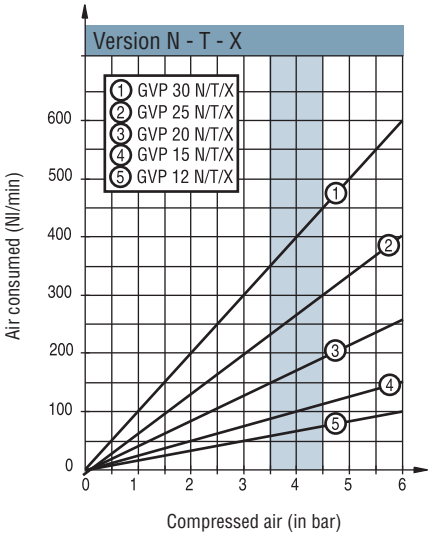
# GVP
## Vacuum Pumps
Performance Curves



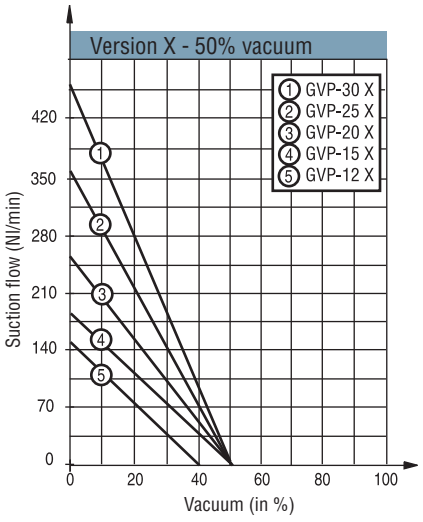
### Vacuum Generated - Supply pressure 4 bar

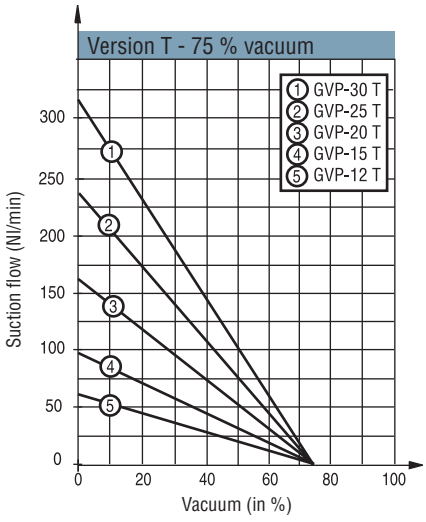


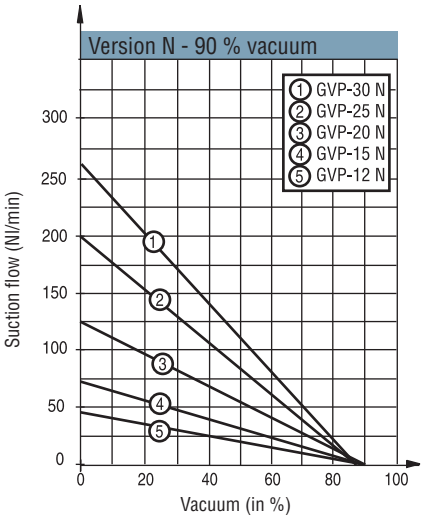

### Air Consumed - Supply pressure 4 bar



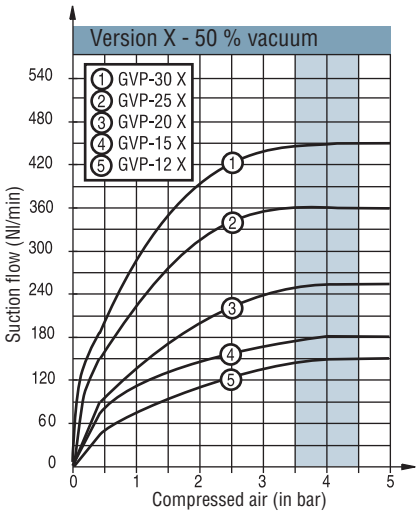

### Suction Flow Rate/Vacuum Curves - Supply pressure 4 bar

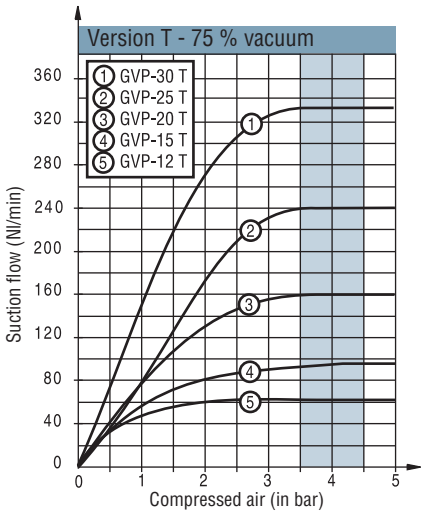


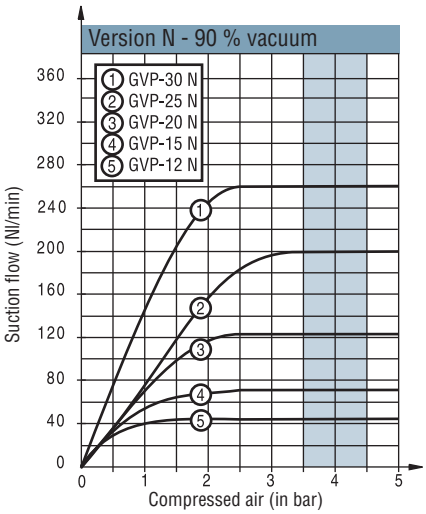




### Suction Flow Rate Generated - Supply pressure 4 bar



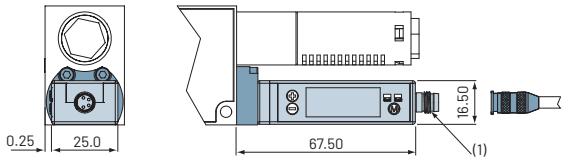



# Customer-mounted
Vacuum Pump Options

## Electronic Vacuum Switch with Display

**GVO PSA 100 C option**

(See exact characteristics page 12/4)




Delivered with M8 cable (2 meters)
(1) M8 connector

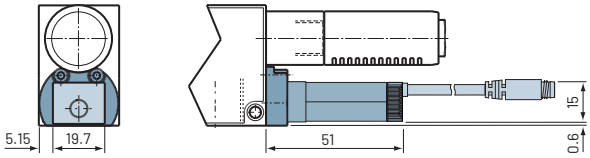
Our top-of-the-range electronic vacuum switch, the PSA 100C has an LED display showing the vacuum value in different units. It also has two separate outputs with independently regulated hysteresis, NO or NC

- PNP as standard
- M8 connector.
- Connection cable, see page 11/12.

## Electronic Vacuum Switch

**GVOPSP100CX option**

(See characteristics page 12/7)




Delivered with M8 cable (2 meters)
(1) M8 4 pole connector

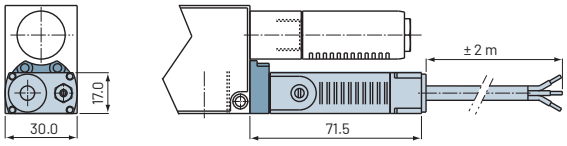
The vacuum data collected is always very reliable even with a large number of suction pads, thanks to the precision of the PSP100CX. It has one output with hysteresis adjustment.

- PNP as standard
- M8 connector.
- Connection cable, see page 11/12.

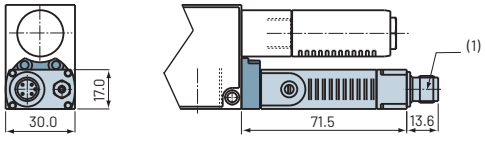
## Vacuum Switch with Electrical Signal

**GVO PSE 100 E or EC option**

(See characteristics page 12/9)




GVO PSE 100 E with cable (length 2 metres)

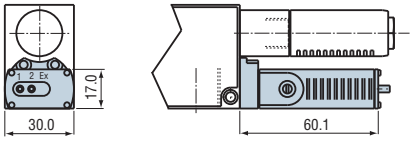



GVO PSE 100 EC with M12 connector (delivered without connection cable)
(1) M12 male connector

The PSE 100 E or EC vacuum switch indicates the level of vacuum in the suction pad circuit. For a small number of suction pads (5 to 10 maximum). This indication is enough to prove an object is gripped. Hysteresis (125mbar) must also be taken into account according to the use of the vacuum switch data.
Check that the vacuum pump supply pressure generates a level of pressure equal to the threshold setting.
For connection cable, see page 11/12.

## Vacuum Switch with Pneumatic Signal

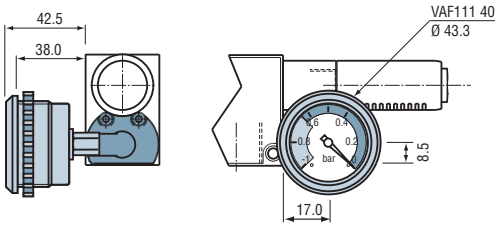
**GVO PSE 100 P NO or NC option** (see characteristics page 12/10)




For use in fully pneumatic applications or explosive environments. The vacuum switch enables a pressure data message to be given when a vacuum threshold is reached.

## Vacuum Gauge

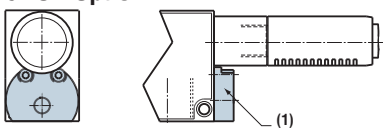
**GVO VAF 111 40 option** (See characteristics page 12/12)




The vacuum gauge displays the level of vacuum in the suction pad circuit. This option makes it simple to keep the status of the vacuum circuit under constant surveillance.

## Plug to Shut off Vacuum Data

**GVOB Option**



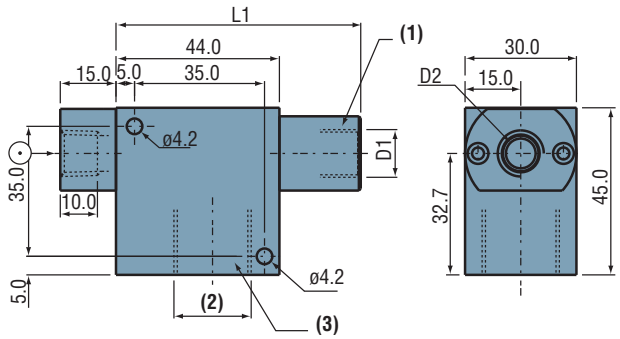

(1) Plug

This plug option makes it possible to shut off the vacuum signal to avoid affecting operation of the vacuum pump if a GVO option is removed.

## GVO AL and GVO AL NPT option (for GVP vacuum pump)

Body and flange G1/4"-F Gas in aluminum (on request).

■ Note: It is no longer possible to mount vacuum gauge options.




**L1** = L1 GVP (plastic) - 1mm
**D1** = D1 (GVP N, T and X)
**D2** = G1/4"-F
1/4 NPT (on request)

(**1**) Exhaust
(**2**) G1/2"-F
(**3**) Vacuum

## GVO P Option

With G1/2"-F protective extension.

The G1/2"-F extension is recommended for double valve models or with pneumatic vacuum switch to protect components during mounting or installation.

The extension is fitted with a 400 micron stainless steel filtration grid as standard.

