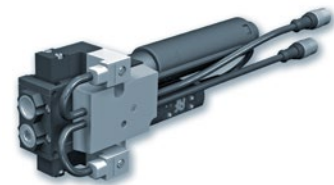


GVMAX V2-2/V2-2R

Self-Regulating Vacuum Pumps

(Electric Vacuum and Blow-off Control)



Industry-specific applications



With GVMAXV2-2 and GVMAXV2-2R, COVAL offers two types of solutions based on a standard GVMAX electric vacuum pump.

These vacuum pumps provide an "all in one" solution by integrating all necessary functions, controls, valves, vacuum regulation, blow-off, product gripping control from an integrated vacuum switch, and silencer into a single, light and compact module.

The M12 connections dramatically simplify installation and use. They are available in two versions and are compatible with PLC safety:

- GVMAXV2-2: non-adjustable vacuum switch (factory configured)
- GVMAXV2-2R: adjustable vacuum switch

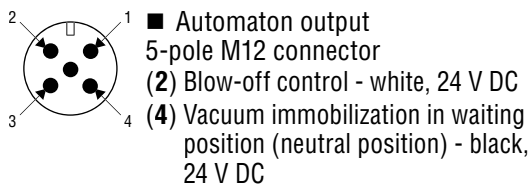
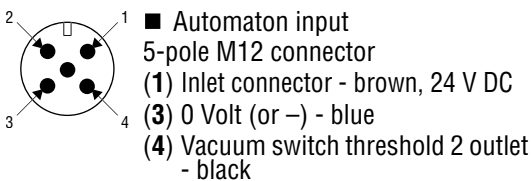
Characteristics

model	Ø nozzle (mm)	max. vacuum (%)	flow consumed at 4 bar (SCFM)	max. suction power (SCFM)	dynamic supply pressure	operating pressure	weight (g)
GVMAX V2-2	2.5	90	10.59	7.06	4.5 bar relative pressure	4.5 to 6 bar	550
GVMAX V2-2R	2.5	90	10.59	7.06	4.5 bar relative pressure	4.5 to 6 bar	550

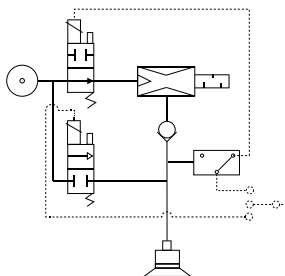
Applications

The two solutions, GVMAX V2-2 and GVMAX V2-2R are used for gripping airtight objects in the stamping, sheet-metal/bodywork and mounting industries for handling, transfer and holding operations. The GVMAX V2-2/V2-2R is designed for the Automotive sector.

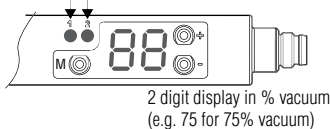
Electrical connections



- Pneumatic supply maintained on the "compressed air" input of the vacuum pump.
- Electric power supply
Suction: 24 V DC NO solenoid valve. From rest to suction (must be powered to stop suction).
Blow-off: 24V DC NC solenoid valve



Red LED Green LED



Evacuation Time in Seconds per Liter

% vacuum	10	20	30	40	50	60	70	80	85
GVMAX V2-2/V2-2R	0.03	0.07	0.11	0.16	0.22	0.30	0.41	0.60	0.77

Advantages

In relation to the standard GVMAX the GVMAX V2-2 and GVMAX V2-2R solutions offer the following advantages:

- Safety: vacuum generation in case of power failure by air inlet solenoid valve in normally open operation (24 V DC).
- Powerful, controllable blow-off.
- Data processing circuit (connection cable).
- Connection by 2 male 5 pin M12 connectors, (Input/ Output).
- Non-adjustable vacuum switch (factory-set) with the GVMAX V2-2 and adjustable vacuum switch with the GVMAX V2-2R.
- Compatible with safety PLCs and other safety systems.

Specifications

Base body	Aluminium (AU 4 PB)
Valve body	POM (black polyacetal)
Silencer	Black PC with felt internal element
Vacuum switch	PA66, PC, brass, NBR seal
Electric wiring	PA66
Screw	Zinc-plated steel
Inside parts	Brass; Aluminum; Desmopan
Seals	NBR
Membrane	NBR with nylon substrate

Vacuum switch display legibility

The GVMAX is fitted with an indexable vacuum switch (45°, 90°, 180°). This vacuum switch is set to the following values (values used in the automotive industry):

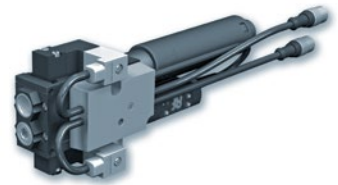
GVMAX V2-2 or V2-2R	Function	Threshold	Hysteresis
Threshold 1: vacuum regulation	NO	H1: 75 %	h1: 10 %
Threshold 2: object detected	NO	H2: 65 %	h2: 10 %

For all orders, please specify: **GVMAX V2-2** (Non-adjustable vacuum switch)
GVMAX V2-2R (Adjustable vacuum switch)

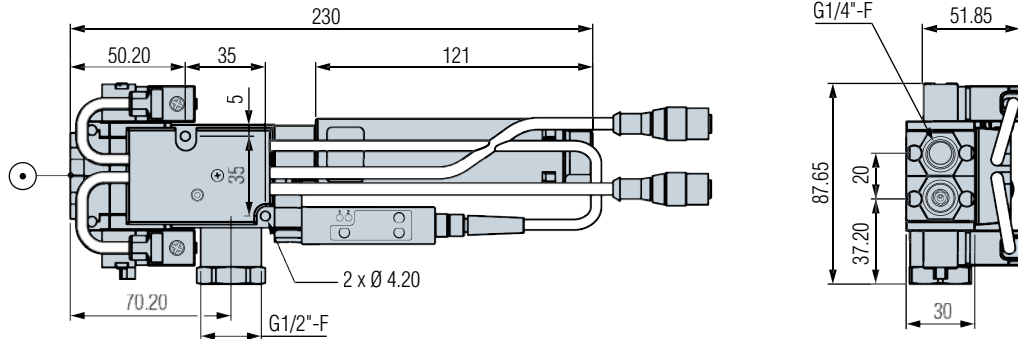
GVMAX V2-2/V2-2R

Self-Regulating Vacuum Pumps

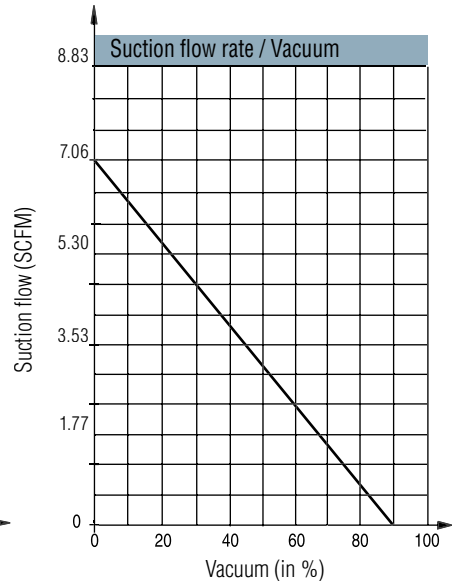
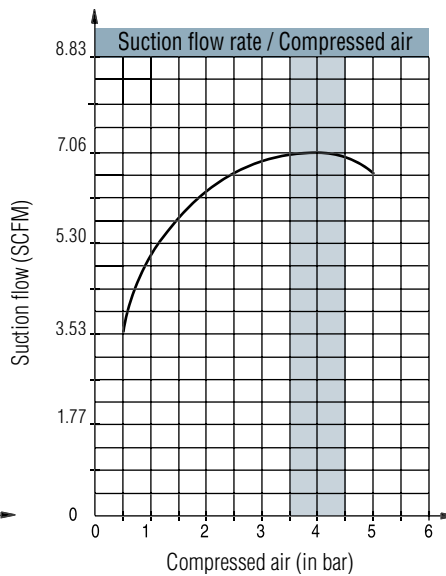
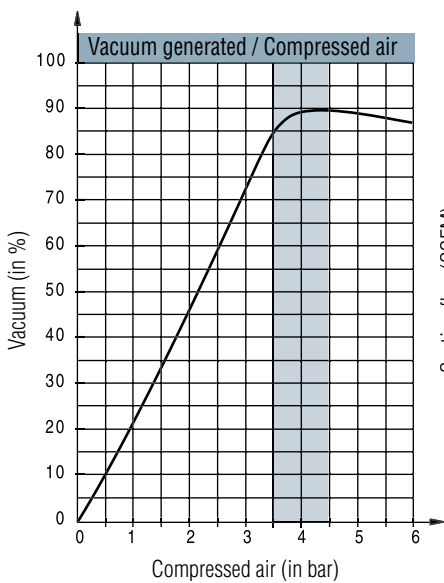
Dimensions, Curves, Options



Dimensions



Curves



Options

Manifold mounting

The GVMAX V2-2 and V2-2R can also be manifold-mounted.

Up to 4 vacuum pumps can be installed on one base.

Manifold references (example with GVMAX V2-2)

GVMAX V2-2 B1 (Base + 1 x GVMAX V2-2)

GVMAX V2-2 B2 (Base + 2 x GVMAX V2-2)

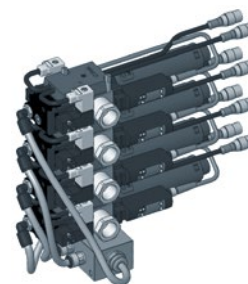
GVMAX V2-2 B3 (Base + 3 x GVMAX V2-2)

GVMAX V2-2 B4 (Base + 4 x GVMAX V2-2)

Protective housing for GVMAX, Part No. GVOMAXV2

The protective housing for the GVMAX is transparent and removable.

Coval recommends using a protective housing to protect the vacuum pump.



GVMAX V2-2 B4



GVOMAXV2

8 GVMAX V2