

MODULAR MULTI-STAGE AND MULTI-FUNCTION VACUUM GENERATORS SERIES GVMM

Modular multi-function vacuum generators are true independent vacuum units that offer an entire vacuum control system.

They feature a reduced thickness and weight compared to their suction capacity and they have been designed to be assembled with screws to one or more intermediate modules MI. The original internal connection system for the compressed air supply allows communication with no need for external manifolds.

This modular system allows increasing the number of independent vacuum units according to the requirements. In fact, you can order a multi-function vacuum generator and the intermediate modules with the desired capacities, already assembled, or you can assemble one or more intermediate modules to the GVMM generator that has already been installed on the machine, without having to make particular modifications. GVMM vacuum generators are composed of an anodised aluminium monobloc with lid, inside of which the silenced multiple ejectors are installed and the vacuum chamber and the compressed air supply connection are contained.

The following items are assembled externally:

- A micro solenoid valve for supplying compressed air to the generator.
- A micro solenoid valve for blowing the exhaust compressed air.
- An adjustable flow regulator for dosing the exhaust air.
- A digital vacuum switch with display and commutation LEDs for managing the compressed air supply and for signalling the safety cycle start-up.
- An anodised aluminium or transparent plexiglas manifold provided with vacuum connections with built-in suction filtre, easy to inspect, and a check valve for maintaining the vacuum in case of electricity or compressed air failure.

By activating the compressed air solenoid valve, the generator creates vacuum at the service. Once the preset maximum value is reached, the vacuum switch acts on the solenoid valve electric coil and interrupts the air supply, restoring it when the vacuum value returns below the minimum value.

Along with maintaining the vacuum level within preset safety values (hysteresis), this modulation allows saving a considerable amount of compressed air.

A second vacuum switch signal, also adjustable and independent from the first, can be used to start up the cycle when the vacuum level is suitable for the application. Once the working cycle is completed, the compressed air supply is deactivated and, at the same time, the ejection micro solenoid valve is activated for a quick restoration of the atmospheric pressure at the application.

GVMM multi-function vacuum generators can be installed in any position and are suited for interconnecting vacuum gripping systems for handling sheet steel, glass, marble, ceramic, plastic, cardboard, wood, etc., and, in particular, for the industrial robotics sector which requires equipment with excellent performance and several independent vacuum units for controlling several applications but with reduced size and weight.

