

MULTI-STAGE AND MULTI-FUNCTION VACUUM GENERATORS SERIES MVG

These generators are true independent vacuum units that can control an entire vacuum gripping system. Their distinctive features are their compact size and great suction capacity.

They are composed of a monobloc anodised aluminium structure onto which are assembled:

- *A modular and silenced multi-stage vacuum generator.*
- *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 unidirectional check valve, located on the suction inlet, for maintaining the vacuum in case of electricity failure.*
- *A digital vacuum switch provided with display and commutation LEDs, for managing the compressed air supply and for signalling the safety cycle start-up.*
- *An anodised aluminium manifold provided with vacuum connections and a built-in filter easy to inspect.*

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.

MVG 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 with size and weight reduced to the minimum.

