# SINGLE-STAGE AND MULTI-FUNCTION VACUUM GENERATORS SERIES AVG - GENERAL DESCRIPTION

These generators are independent vacuum units capable of driving a vacuum gripping system They have been specially designed for the AUTOMOTIVE sector and they are equipped with single ejectors that, given the same flow rate as the multi-ejector generators, allow for a quicker grip.
They are provided as standard with a built-in pneumatic energy-saving device.
They are composed of an anodised aluminium mono-block structure, inside of which are installed the ejectors, the servo-controlled slide valve for the compressed air supply and are contained the vacuum chambers as well as the various connections.
The following are instead installed on the outside:
- A bistable impulse solenoid valve for controlling the slide valve.
- A solenoid valve for blowing the ejected compressed air.
- A flow regulator for dosing the ejected compressed air.
- Two silencers for removing noise from the ejected air.
- An aluminium manifold provided with vacuum connections with built-in:
  - A pneumatic vacuum switch for managing the compressed air supply according to the set level of vacuum (energy saving).
  - A check valve for maintaining the vacuum in case of electricity or compressed air failure.
  - A suction filter, easy to inspect through the transparent polycarbonate lid.

## OPERATION

By providing an electric impulse to the two-position solenoid valve, the compressed air supply slide valve will be activated and vacuum will be created at the application. Once the preset maximum value has been reached, the pneumatic vacuum switch acts on the servo-controlled valve and interrupts the compressed air supply, restoring it when the value returns below the minimum value.
Besides maintaining the level of vacuum within preset safety values, this modulation also allows a considerable saving of compressed air and occurs even in the absence of electricity. Once the work cycle is completed, the power supply solenoid valve is deactivated by means of an electrical pulse while, at the same time, the ejection solenoid valve is activated for quick restoration of the atmospheric pressure of use.
AVG vacuum generators are fitted for the installation of a digital vacuum switch. Also these vacuum generators can be installed in any position.

## SECTORS OF USE

AVG vacuum generators are suitable for suction gripping systems, for the handling of metal sheets, glass, marble, ceramics, plastic, cardboard, wood, etc. and, in particular, for the AUTOMOTIVE sector, where equipment with excellent performance and limited size and weight are increasingly required.

