Vacuum generator OVEH



Highlights

- Compact vacuum generator/valve combination with integrated sensors
- Suitable for many different cobots and robots thanks to the mechanical robot interface to ISO 9409-1-50-4-M6
- Vacuum level monitoring with integrated pressure sensor SPAE
- Versatile control via digital I/O (PNP/NPN) or IO-Link®
- Valve-controlled ejector pulse for safe handling
- For applications with either high vacuum or high suction volume flow
- Adapter plate for different applications
- For safe human-robot collaboration

The compact vacuum generator OVEH with integrated sensors and valve control has been specially developed for human-robot collaboration (HRC); with its universal robot interface it can be combined with many cobots and robots. The low overall height together with the low dead weight ensure a high dynamic response.

For all-round and reliable use
The compact vacuum generator OVEH can be used for human-robot collaboration (HRC) as well as for other handling or robotic applications. There is a choice between a high vacuum version or a one with a large suction volume, depending on the application and the density of the workpiece. It can be used with single suction cups or with up to nine suction cups on an adapter plate, thus offering a wide range of possible gripping positions. In addition, the suction cups are easy to change, speeding up retooling and enabling customised gripper units for adaptable processes to be created. The integrated pressure sensor SPAE continuously monitors the vacuum level and ensures the process is reliable.

Plug & work via robot interface
Thanks to the mechanical robot interface, it can also be quickly and easily integrated in many different cobots. The control is then carried out via digital I/O or IO-Link®. Clearly designed interfaces make it easy to connect pneumatic tubing and electrical cables.

Low height and weight
Thanks to the flat design and low weight, the vacuum generator provides a high dynamic response in the application.

Additional information:

Product page
> www.festo.com/catalogue/oveh

Suitable suction cup combinations for every application

Single suction cup



Suction cup with adapter plate
OAMC
4 cups



5 cups



9 cups



General technical data

Ejector characteristics	High suction rate, standard	High vacuum, standard	
Nominal width of Laval nozzle	0.95 mm	0.7 mm	0.95 mm
Integrated function	Ejector pulse, electrical Pressure sensor On/off valve, electric Filter Silencer, closed		
Pneumatic connection 1	For tubing ∅ 6 mm		
Vacuum connection	G1/8		
Switching function	Freely programmable		
Switching element function	NC or NO, switchable		
Setting options	IO-Link® Teach-in Via display and buttons		
Protocol	IO-Link®		
Protection against tampering	PIN code		
Product weight	415 g		

Operating and environmental conditions

Operating pressure	2 ... 7 bar
Nominal operating pressure:	4 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating/pilot medium	Lubricated operation not possible
Ambient temperature	0 ... 50 °C
Degree of protection	IP40

Electrical data

Electrical connection 1, connection technology	M8x1, A-coded to EN 61076-2-104
Electrical connection 1, number of pins/cores	8
Electrical connection 1, assigned pins/cores	5
Electrical connection, input, function	Ejector pulse, power supply, vacuum generation
Electrical connection, output, function	Digital output
Cable characteristic	Suitable for robot applications
Switching output	PNP, NPN switchable
Coil characteristics	24 V DC: 1.0 W