

VSA100A

Vacuum Switch

The pressure switch VSA100A is used as a safety switch in rough vacuum systems. For example, to automatically interrupt the gas supply when venting vacuum systems with a purge gas at a pressure of 6 mbar below atmospheric pressure.

At a differential pressure of 6 mbar resp. return switching pressure of 3 mbar below atmospheric pressure, an elastic diaphragm actuates a changeover contact which in turn may be used to switch directly any ancillary equipment.

The electrical connections are protected by a plastic cover.



ADVANTAGES

- Reliable and budget-priced vacuum switch
- Long service life
- Rugged design
- Easy to integrate
- IP 44 protection
- Can be connected to a programmable control

APPLICATIONS

- Control of load lock chambers
- Safety shutdown of vacuum systems

VSA100A

ORDERING INFORMATION

Type	VSA100A
DN 16 ISO-KF, complete with 3 m (9.9 ft.) cable	399-001

SPECIFICATIONS

VSA100A	
Switching pressure	6 ± 2 mbar (below atmosphere)
Back switching	3 ± 2 mbar (below atmosphere)
Operating pressure (absolute)	<2 bar
Helium permeation	5×10^{-5} mbar l/s
Temperature	
Operation	0 ... +85 °C
Storage	-20 ... +85 °C
Switching contacts (gold plated)	Change over contact
Voltage max.	24 V (dc) / 24 V (ac)
Current max.	30 mA (24 V (dc)) / 100 mA (24 V (ac))
Load min.	1 mA
Electrical connector	Cable, bare wire
Cable length, standard	3 m (9.9 ft.)
Vacuum connection	DN 16 ISO-KF
Protective type	IP 44
Mounting orientation	Vertical (standing)
Internal volume	2 cm ³ (0.122 in. ³)
Materials exposed to vacuum	Stainless steel 1.4305, EPDM, PTFE (Teflon)
Weight	315 g

Technical Note: Due to the diaphragm material used (EPDM), the Vacuum Switch VSA100A is not suited for applications in which the process gas contains large quantities of helium. The leak rate of the diaphragm for helium is 5×10^{-5} mbar l/s.

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DIMENSIONS

