

# Vacuum Switch

## VSA100A

The pressure switch VSA100A is used as a safety switch in 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

### Ordering Information

#### Type

DN 16 ISO-KF, complete with 3 m (9.9 ft) cable

#### VSA100A

399-001

## VSA100A - continued

### Specifications

Switching pressure	mbar	6 ±2 (below atmosphere)
Back switching	mbar	3 ±2 (below atmosphere)
Operating pressure (absolute)	bar	<2
Helium permeation	mbar l/s	<10 <sup>-6</sup>
Leak rate	mbar l/s	<5 x 10 <sup>-8</sup>
Temperature		
Operation	°C	0 ... +85
Storage	°C	-20 ... +85
Switching contacts (gold plated)		Change over contact
Voltage max.	VDC/VAC	24/24
Current max.	mA	30 (24 VDC) / 100 (24 VAC)
Load min.	mA	1
Electrical connector		Cable, bare wire
Cable length, standard	m (ft)	3 (9.9)
Vacuum connection		DN 16 ISO-KF
Protective type		IP 44
Mounting orientation		vertical (standing)
Internal volume	cm <sup>3</sup> (inch <sup>3</sup> )	2 (0.122)
Materials exposed to vacuum		Stainless steel 1.4305, EPDM, PTFE (Teflon)
Weight	g	315

**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 <10<sup>-6</sup> mbar l/s.

### Dimensions

