

# VSA200 absolute switch

INFICON Vacuum Switches are designed for accurate and reliable pressure detection. These robust electronic switches are used in all vacuum applications, including pressure interlock. The switches are available in two versions, absolute (references vacuum) or differential (references ambient).



## BENEFITS

- Corrosion resistant all stainless steel design
- Robust design, cleanroom compliant
- Easy installation with setpoints factory preset or field-adjustable

## FEATURES

- IP 44 protection
- Relay output with potential free contacts
- High-accuracy temperature compensated sensor
- Pressure range  $1 \times 10^{-9}$  mbar ... 2 bar

## ORDER INFORMATION

### ORDERING INFORMATION VSA200 ABSOLUTE SWITCH

**3 S A 1 - F 5 1 - 9 7 0 0**

FS	Unit			Setpoint value		
1000	Torr	F	5	0	0	0
1100	mbar	G	6	1	1	1
				2	2	2
				3	3	3
				4	4	4
				5	5	5
				6	6	6
				7	7	7
				8	8	8
				9	9	9
				C <sup>1)</sup>		

<sup>1)</sup> C = 10

Example: Setpoint at 970 Torr absolute pressure, DN 16 ISO-KF: 3SA1-F51-9700  
Setpoint at 1080 mbar absolute pressure, 4 VCR male: 3SA1-G6C-C800

### ORDERING INFORMATION VSD200 DIFFERENTIAL SWITCH

**3 S D 1 - M 5 1 - B 2 0 0**

Unit			Setpoint value		
Torr	5		0	0	
mbar	6		1	1	
			2	2	
			3	3	
			4	4	
			5	5	
			6	6	
			7	7	
			8	8	
			9	9	

Sign  
A + (plus)  
B - (minus)

Example: 20 Torr below ambient pressure, DN 16 ISO-KF: 3SD1-M51-B200

## SPECIFICATIONS

Type		1000 Torr	1100 mbar
Full Scale (F.S.)	mbar (absolute)	–	1100
Full Scale (F.S.)	Torr (absolute)	1000	–
Setpoint range	mbar	–	30 ... 1060
Setpoint range	Torr	20 ... 970	–
Admissible pressure		5	
Admissible pressure	bar (absolute)		5
Setpoint relay			
Relay output		n.o., n.c., potential free	n.o., n.c., potential free
Setpoint relay			
Contact rating	V (dc)	30	30
Setpoint relay			
Contact rating	A (dc)	1	1
Setpoint relay			
Contact rating	V (ac)	125	125
Setpoint relay			
Contact rating	A (ac)	0.3	0.3
Setpoint accuracy	percent FS	0.5	0.5
Temperature effect on zero and span	percent FS/°C	≤±0.02	≤±0.02
Response time	ms	≤45	≤45
Hysteresis	percent FS	2	2
Electrical connection		D-Sub, 9-pin	D-Sub, 9-pin
Supply voltage	V (dc)	14 ... 30	14 ... 30
Power consumption	W	<0.5	<0.5
Admissible temperature			
Operation (ambient)	°C	0 ... 70	0 ... 70
Storage	°C	–40 ... 80	–40 ... 80
Materials exposed to vacuum		stainless steel	stainless steel
Mounting orientation		any	any
Internal volume			
DN 16 ISO-KF	cm <sup>3</sup> (in. <sup>3</sup> )	2.81 (0.17)	2.81 (0.17)
4 VCR	cm <sup>3</sup> (in. <sup>3</sup> )	0.93 (0.057)	0.93 (0.057)
Weight	g	140	140
Degree of protection		IP 40	IP 40

## SPECIFICATIONS

Type	1000 Torr	1100 mbar
Sensor protection	Short circuit protection and reverse polarity protection	Short circuit protection and reverse polarity protection

(1) References to ambient pressure.

## DIMENSIONS

