

# Vacuum and Pressure Sensors



## Vacuum Sensor VS-V-SA

Measuring range from -1 bar to 0 bar



### Suitable for Industry Specific Applications



Vacuum sensors VS-V-SA

### Applications

- Electronic vacuum sensor for measurement of vacuum values close to the suction cup
- Remote evaluation of the signals
- Processing of output signals for example a stored-program controller
- Ideal for monitoring the vacuum curve within a handling process
- For use in all areas of automated handling

### Design

- Mini-sensor with housing and connection cable
- Available with either screw connector or plug connector
- Analog output signal (voltage output)

### Our Highlights...

- Minimum size and low weight
- High measuring accuracy
- Vacuum connection with M3 or M5 thread or with diameter 4 or 6 mm plug-in tubes, according to version

### Your Benefits...

- > Optimum installation in vacuum systems, even those subject to high rates of acceleration
- > Precise output signals
- > Flexible mounting facilities

### Designation Code Vacuum sensor VS-V-SA

Abbreviated designation	Measuring range in bar	Principle of function	Vacuum connection
Example VS-V-SA-M5-AG:			
VS	V	SA	M5-AG
VS	V -1 to 0	SA sensor analogue	STR4 plug-in tube STR6 plug-in tube M3-AG(AG = male (M)) M5-AG

### Ordering Data Vacuum sensor VS-V-SA

Vacuum switch VS-V-SA is delivered as a ready to connect product.

### Vacuum sensor VS-V-SA

Type	Part Number
VS-V-SA M3-AG	10.06.02.00225
VS-V-SA M5-AG	10.06.02.00224
VS-V-SA STR4	10.06.02.00226
VS-V-SA STR6	10.06.02.00227

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# Vacuum and Pressure Sensors



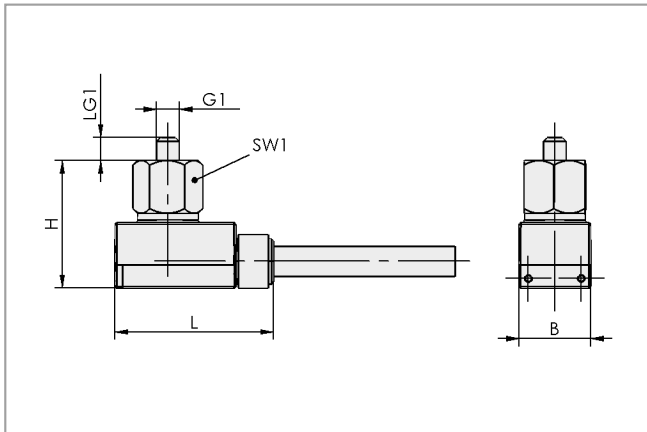
## Vacuum Sensor VS-V-SA

Measuring range from -1 bar to 0 bar

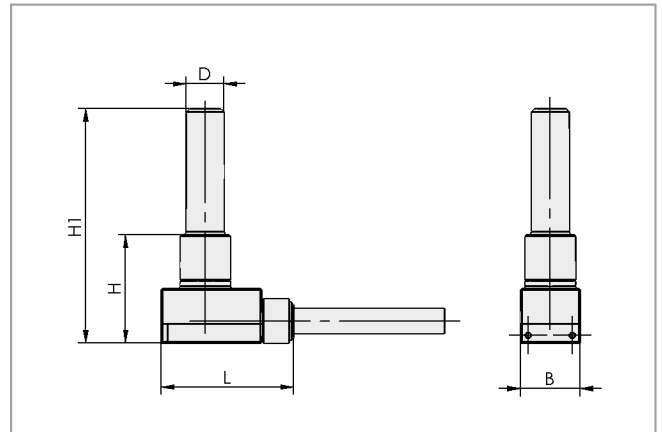
### Technical Data Vacuum sensor VS-V-SA

Type	VS-V-SA-M...	VS-V-SA-STR...
Measured medium	Non-aggressive gases; dry, oil-free air	Non-aggressive gases; dry, oil-free air
Measuring range [bar]	-1.00 ... 0.00	-1.00 ... 0.00
Max. overpressure resistance [bar]	5	5
Repeatability	± 1% of full-scale value	± 1% of full-scale value
Output signal	Analog: 1...5 V	Analog: 1...5 V
Electrical connection	Cable	Cable
Voltage	10-24V DC	10-24V DC
Protection IP	IP 40	IP 40
Temperature influence	± 3% of full-scale value	± 3% of full-scale value
Operating temperature [°C]	0 ... 50	0 ... 50
Lk (Length of cable [m])	3	3
Weight [g]	5	5

### Design Data Vacuum sensor VS-V-SA



VS-V-SA-M3 and M5



VS-V-SA-STR4 and STR6

Type	Dimensions in mm								
	B	D	G1	H	H1	L	LG1	SW1	
VS-V-SA M3-AG	9.5	-	M3-M	16.9	-	21	3	8	
VS-V-SA M5-AG	9.5	-	M5-M	16.9	-	21	5	8	
VS-V-SA STR4	9.5	4	-	17.2	32.2	21	-	-	
VS-V-SA STR6	9.5	6	-	17.2	37.2	21	-	-	

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# Electronic Vacuum/Pressure Switches



## Vacuum Switches VS-V-SD

Measuring range from -1 bar to 0 bar



### Suitable for Industry Specific Applications



Vacuum switch VS-V-SD

### Applications

- Electronic vacuum switch for measurement of vacuum values close to the suction cup
- Remote evaluation of the signals
- Processing of output signals for example a stored-program controller
- Ideal for outputting part-presence signals
- For use in all areas of automated handling

### Design

- Mini switch with housing and firmly attached connection cable (3 m)
- Available with either screw connector or plug connector
- Digital output signal (permanently set to -600 mbar)

### Our Highlights...

- Minimum size and low weight
- High measuring accuracy
- Vacuum connection with M3 or M5 thread or with diameter 4 or 6 mm plug-in tubes, according to version

### Your Benefits...

- > Optimum installation in vacuum systems, even those subject to high rates of acceleration
- > Precise output signals
- > Flexible mounting facilities

### Designation Code Vacuum Switches VS-V-SD

Abbreviated designation	Measuring range in bar	Principle of function	Switching point in mbar	Vacuum connection
Example VS-V-SD-60-STR6:				
VS	V	SD	60	STR6
VS	V -1 to 0	SD sensor digital	60 switching point -600	STR4 plug-in tube STR6 plug-in tube M3-AG (AG = male (M)) M5-AG

### Ordering Data Vacuum Switches VS-V-SD

Vacuum switch VS-V-SD is delivered as a ready to connect product.

### Vacuum Switches VS-V-SD

Type	Part Number
VS-V-SD 60 M3-AG	10.06.02.00258
VS-V-SD 60 M5-AG	10.06.02.00257
VS-V-SD 60 STR4	10.06.02.00259
VS-V-SD 60 STR6	10.06.02.00260

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# Electronic Vacuum/Pressure Switches



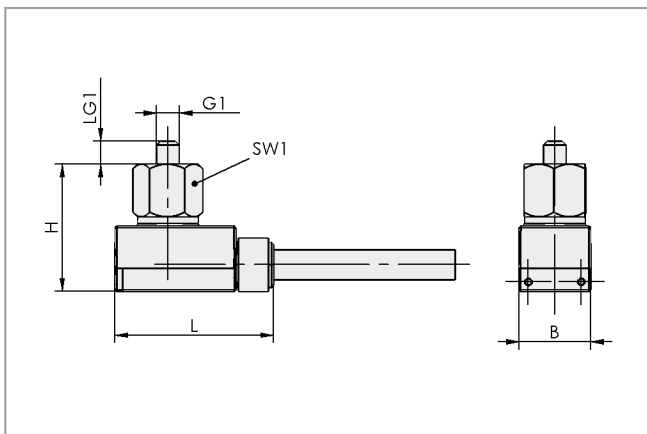
## Vacuum Switches VS-V-SD

Measuring range from -1 bar to 0 bar

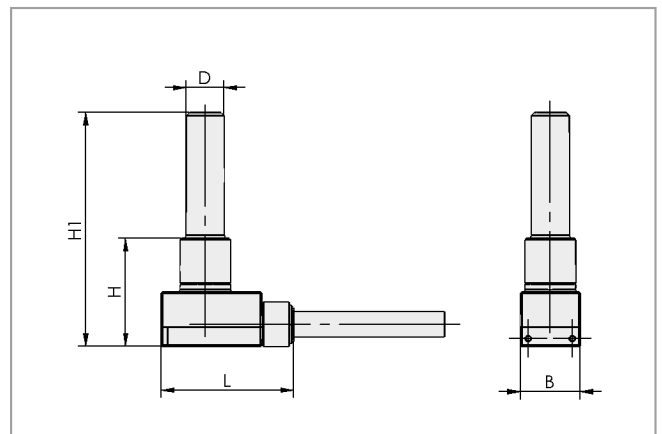
### Technical Data Vacuum Switches VS-V-SD

Type	VS-V-SD-60-M...	VS-V-SD-60-STR...
Measured medium	Non-aggressive gases; dry, oil-free air	Non-aggressive gases; dry, oil-free air
Measuring range [bar]	-1.0 ... 0.0	-1.0 ... 0.0
Max. overpressure resistance [bar]	5	5
Repeatability	± 1% of full-scale value	± 1% of full-scale value
Hysteresis	Fixed: approx. 20 mbar	Fixed: approx. 20 mbar
Output signal	1 digital	1 digital
Switching capacity [mA]	60	60
Point attitude	- 600 mbar	- 600 mbar
Indication	LED	LED
Electrical connection	Cable	Cable
Voltage	10-24V DC	10-24V DC
Protection IP	IP 40	IP 40
Temperature influence	± 3% of full-scale value	± 3% of full-scale value
Operating temperature [°C]	0 ... 50	0 ... 50
Lk (Length of cable [m])	3	3
Weight [g]	5	5

### Design Data Vacuum Switches VS-V-SD



VS-V-SD-M3 and M5



VS-V-SD-STR4 and STR6

Type	Dimensions in mm							
	B	D	G1	H	H1	L	LG1	SW1
VS-V-SD 60 M3-AG	9.5	-	M3-M	16.9	-	21	3	8
VS-V-SD 60 M5-AG	9.5	-	M5-M	16.9	-	21	5	8
VS-V-SD 60 STR4	9.5	4	-	17.2	32.2	21	-	-
VS-V-SD 60 STR6	9.5	6	-	17.2	37.2	21	-	-