

### Overview of Types

VS-35-A-X, VS-35-A-Y  
 VS-35-PNP-X, VS-35-PNP-Y  
 VS-35-NPN-X, VS-35-NPN-Y

### General description / utilization

The ACE V-sensors serve for the recording of vibrations in automation applications. As a result of continuous control of the vibration level in the process, faults can be identified at an early stage in case of deviations, and the output signal can be linked to the emergency power-off switch, where appropriate.

### Installation of the V-sensor

Before installation of the sensor, check whether the type designation on the delivery note agrees with the type designation on the sensor and/or on the seal on the connecting cable. Attach the sensor form-fitting, directly in the C-slot of the linear unit, of the rotation module, of the grippers, of the cylinder or of another handling module. The sensor can also be fixed in a T-slot or dovetail slot by employing the respective adapters. By means of the securing clamps LB-SD and LBX-SD, the sensor can be mounted on the outside diameters as listed in the table. Then the wiring system of the sensor is implemented according to the circuit diagram of the respective type (see circuit diagram to the right) in each case. Color code of the wires:  
 Plus (+) = brown  
 Minus (-) = blue  
 Output = black

### Operational startup and setting-adjustment process

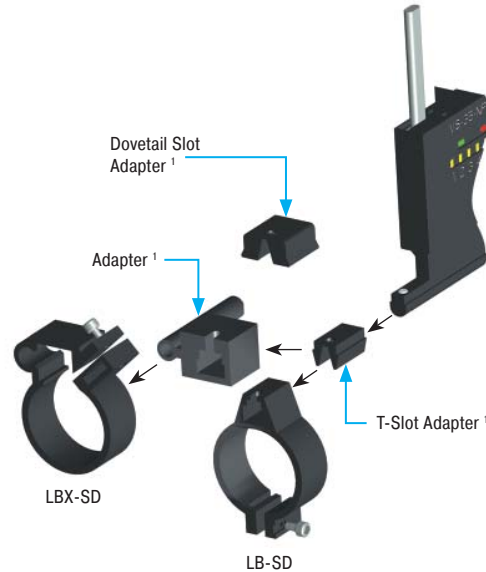
Switch on power supply to the sensor. The sensor switches into self-test mode until the red LED display goes out. Now bring the automation component into normal, dynamic, continuous operation. The four digital sensors are provided with a 10-stage adjustable vibration level range. This can be changed by pressing the setting-adjustment pushbutton for approx. 0.5 seconds. The setting range is displayed by one to five yellow LED's. For the ranges six to ten, an additional LED lights up and the second setting-adjustment level is displayed. Change the setting-adjustment down (Direction 1) for so long until the red LED for the output signal goes out in normal operation. For permanent process monitoring, we recommend a setting-adjustment higher by two setting-adjustment stages. If the vibration level now increases to the set-adjusted value during operation of the unit, the sensor outputs a signal. In case of analog implementation, a corresponding output signal is outputted following a delay (approx. 270 mV/g).

### Packaging waste disposal

Dispose of the transport packaging with as little pollution as possible. The recycling of the packing materials into the material circuit saves raw material and reduces the amount of garbage produced. The packing materials employed do not include any prohibited materials.

### Securing Clamps

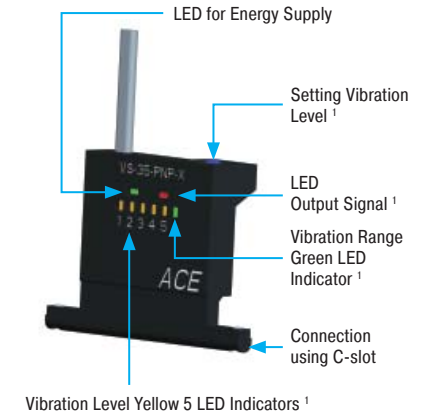
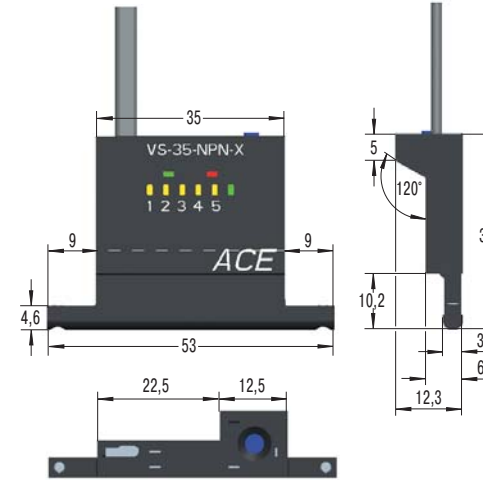
Type/Part Number	Nominal Diameter
LB-SD10	10
LB-SD12	12
LBX-SD14	14
LB-SD16	16
LB-SD20	20
LB-SD25	25
LBX-SD33	33
LBX-SD45	45
LBX-SD65	65



<sup>1</sup> Included with the sensor.

### CAUTION !

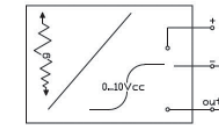
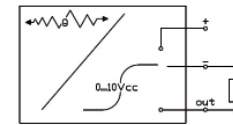
- The definitive suitability of the sensor is the responsibility of the user.
- Function in action-direction of the sensor only, with form-fitting connection with the component to be monitored.
- Maintain the range of the permissible power supply.
- Consider the polarity of the sensor.
- Maintain permissible temperature range.
- Secure the unit against unintentional startup during installation of the sensor.



<sup>1</sup> Not applicable for analogue version.

### Type: VS-35-A-X

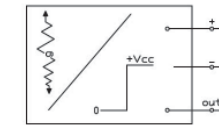
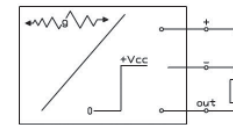
### Type: VS-35-A-Y



Analogue 0 – 35 g (~270 mV/g)  
 Measuring range: 35 g  
 Power supply: 15 – 30 VDC  
 Max switching current: 0,2 A  
 Voltage drop: max. 2 V  
 Environmental protection degree: IP 67  
 Polarity reversal protection: yes  
 Operating temperature range:  
 -10° C to +60° C  
 Cable length: approx. 2500 mm

### Type: VS-35-PNP-X

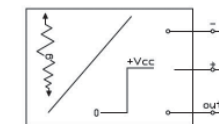
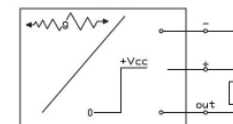
### Type: VS-35-PNP-Y



PNP switching (ten-stage adjustable)  
 Measuring range: 35 g  
 Power supply: 12 – 30 VDC  
 Max switching current: 0,2 A  
 Voltage drop: max. 2 V  
 Environmental protection degree: IP 67  
 Polarity reversal protection: yes  
 Operating temperature range:  
 -10° C to +60° C  
 Cable length: approx. 2500 mm

### Type: VS-35-NPN-X

### Type: VS-35-NPN-Y



NPN switching (ten-stage adjustable)  
 Measuring range: 35 g  
 Power supply: 12 – 30 VDC  
 Max switching current: 0,2 A  
 Voltage drop: max. 2 V  
 Environmental protection degree: IP 67  
 Polarity reversal protection: yes  
 Operating temperature range:  
 -10° C to +60° C  
 Cable length: approx. 2500 mm