

## DVA111.XXX vibration velocity sensors with current output



\* Only for SPTA

The appearance of the products may differ a little from those presented in the brochure

### Features

Designed to measure the vibration velocity amplitude in emergency shutdown (ESD) systems.

Consists of a sealed housing that comprises an integral acceleration sensor and a conversion board.

Depending on the version, the sensor is installed on the unit using the standard threaded stud M8 / M10 / M12, fastening with 3 screws or 1 screw.

A threaded stud with a different thread, including inch thread, can be supplied on special order.

For the .214 version, it is possible to use cable assemblies with the MIL connector of imported transducers.

### Metrological parameters

Conversion coefficient, mA*s/mm											
1.6	1.259	0.8	0.64	0.63	0.533	0.4	0.32	0.315	0.267	0.2	0.16
Measurement ranges for the RMS value of vibration velocity, mm/s:											
0-10	0-12.7	0-20	0-25	0-25.4	0-30	0-40	0-50	0-50.8	0-60	0-80	0-100

Operating frequency range, Hz . . . . . 2-1000;  
 3-1000;  
 5-1000;  
 10-1000

### Interface

Type of output signal . . . . . 4-20 mA current loop  
 Supply voltage of the sensor, V . . . . . 10-24  
 Connection polarity . . . . . random  
 Connection via the TIK-PLC controller\*\* or the TIK-BIS safety barrier

\*\* The controller operates as ESD, sensor power source, and a safety barrier

### Explosion protection

Marking. . . . . 0Ex ia IIC T6...T2 Ga X / PO Ex ia I Ma X  
 2Ex nA IIC T6...T2 Gc X

### Climatic version

Operating temperature range, °C  
 • H climatic version . . . . . -40...+80  
 • X climatic version . . . . . -60...+80  
 • K climatic version . . . . . -196...+80

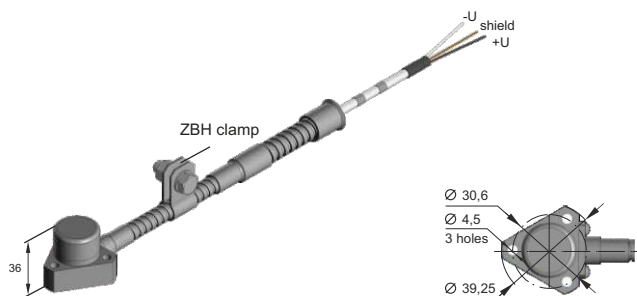
### Reliability parameters

MTBF, hours, not less than . . . . . 40 000  
 Design service life, hours, not less than . . . . . 80 000  
 Warranty service life, months . . . . . 24  
 Service life, years . . . . . 10  
 Verification interval, years . . . . . 2

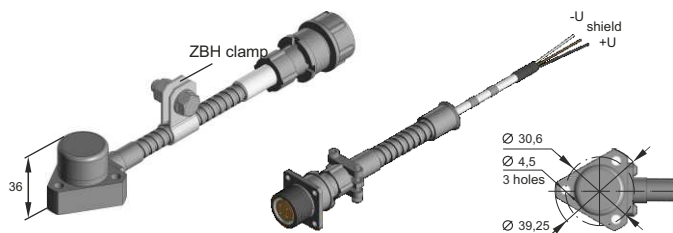


## Constructive versions

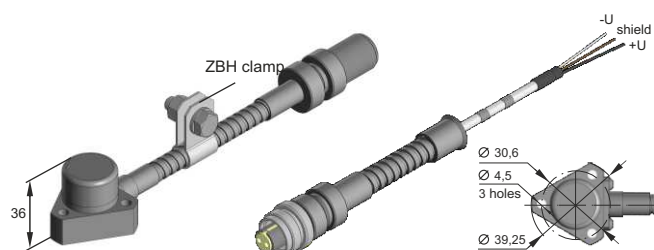
### DVA111.104



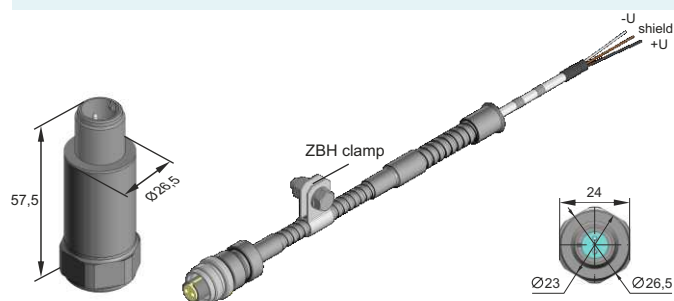
### DVA111.132



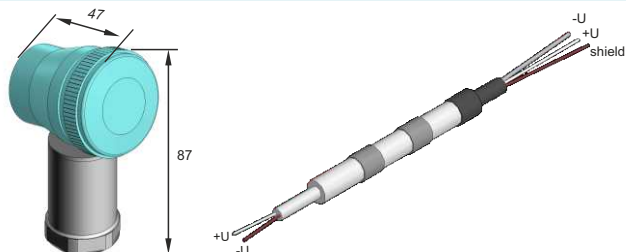
### DVA111.164



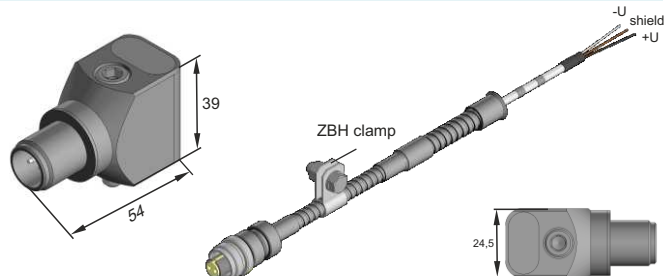
### DVA111.214



### DVA111.252



### DVA111.714



## Wiring diagram

