

DVA111.XXX vibration velocity sensors with current output



Product appearance may vary slightly from that shown in the brochure

Features

Designed to measure the amplitude of vibration velocity in emergency protection systems (EPS). They consist of a hermetically sealed enclosure containing an integral acceleration sensor and a conversion board.

Depending on the version, the standard M8 stud, 3 screws or 1 screw is used for mounting on the unit. On special order, studs with other threads, including inch threads, are available.

The .214 version allows the use of cable assemblies with a MIL connector from 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 amplitude 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

Climatic version

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

Interface

Output signal type (4-20) mA
 Sensor supply voltage, V 10-24
 Connection via the TIK-PLC controller* or the TIK-BIS safety barrier

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

Protection parameters

- Explosion protection
- PO Ex ia I Ma X
 0Ex ia IIC T6...T2 Ga X
 Ex ia IIIC T₂₀₀ 100°C ... T₂₀₀ 280°C Da X
 Ex ib IIIC T95°C ... T275°C Db X
 - 2Ex nA IIC T6...T2 Gc X
 - PO Ex ia I Ma X
 - 0Ex ia IIC T6...T2 Ga X
 - Ex ia IIIC T₂₀₀ 100°C ... T₂₀₀ 280°C Da X
 - Ex ib IIIC T95°C ... T275°C Db X

- Protection class
- IP65/68 (DVA111.104/164/214/714)
 - IP65 (DVA111.252)

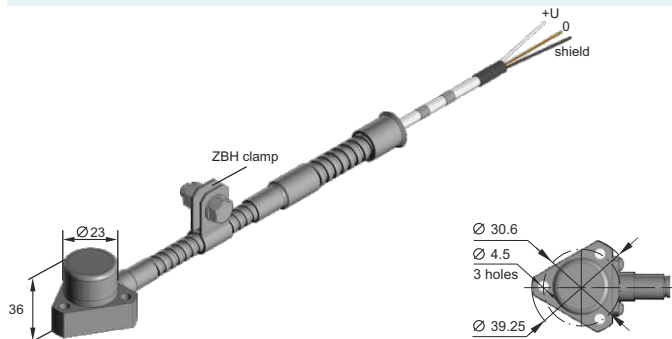
Reliability parameters

MTBF, hours, not less than 100 000
 Warranty service life, months 24
 Service life, years 20
 Verification interval, years 2

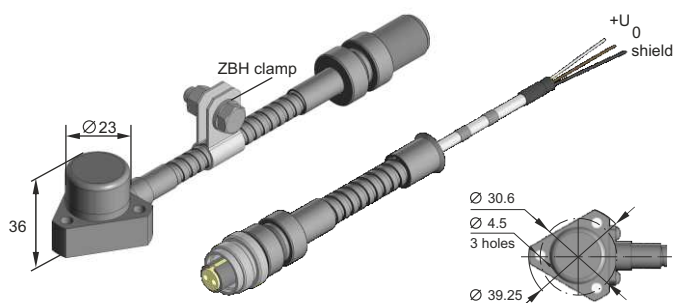


Constructive versions

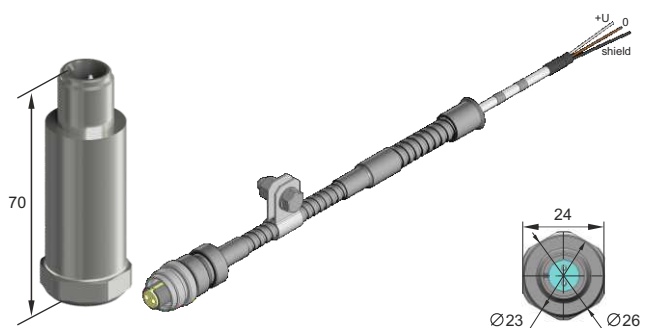
DVA111.104



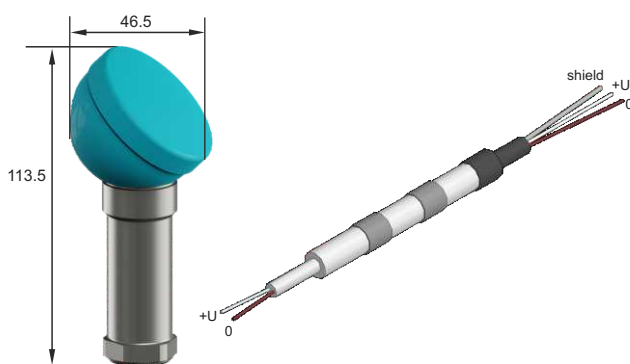
DVA111.164



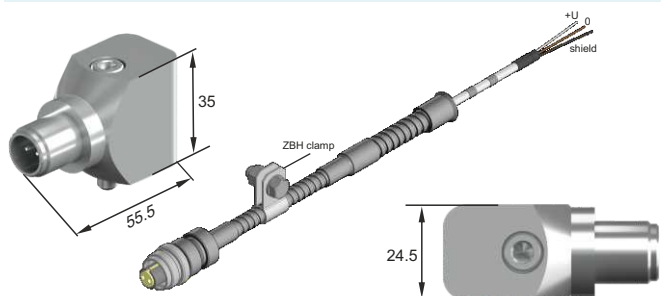
DVA111.214



DVA111.252



DVA111.714



Wiring diagrams

