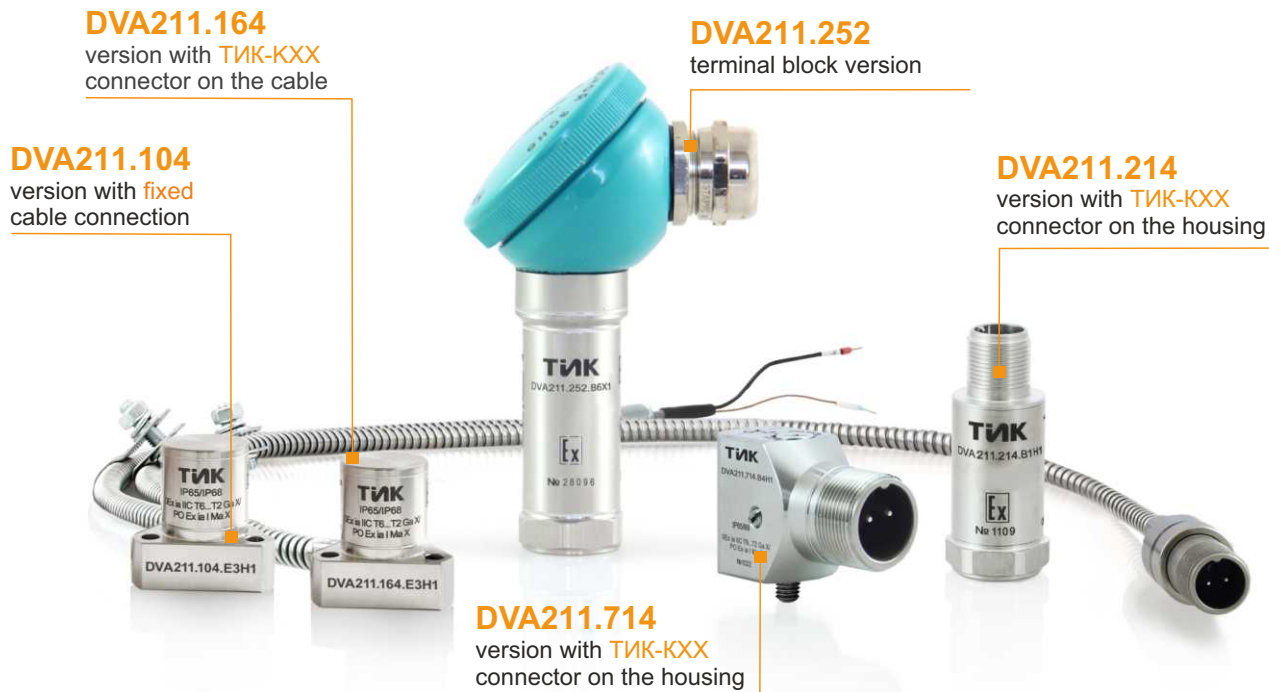


DVA211.XXX vibration acceleration sensors with current output



Product appearance may vary slightly from that shown in the brochure

Features

Designed to measure the amplitude of vibration acceleration 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 ² /m | | | | | | | | | | | |
|--|--------|------|------|--------|-------|------|------|--------|-------|------|-------|
| 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 acceleration, m/s ² | | | | | | | | | | | |
| 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 T_{6...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 T_{6...T2} Gc X
 - PO Ex ia I Ma X
 - 0Ex ia IIC T_{6...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)

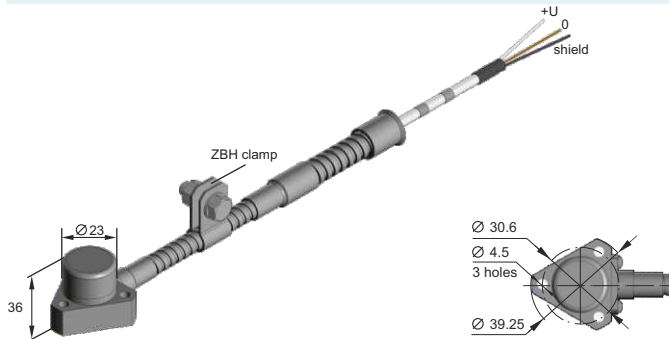
Reliability parameters

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

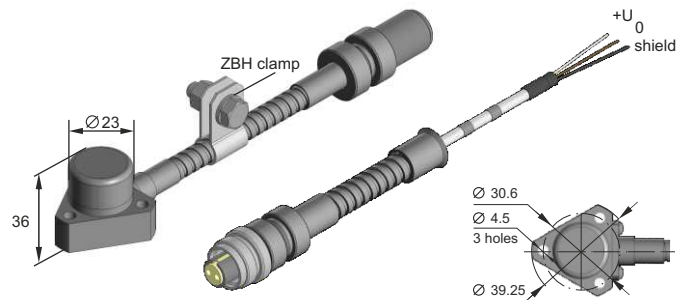


Constructive versions

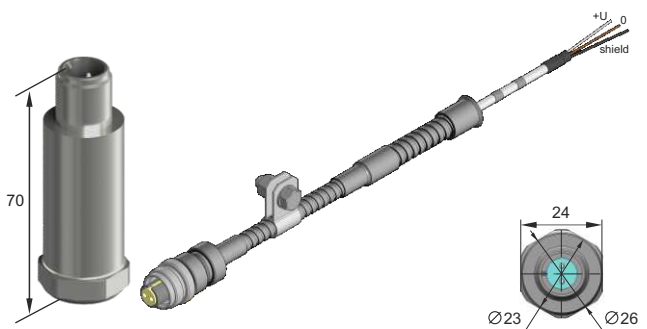
DVA211.104



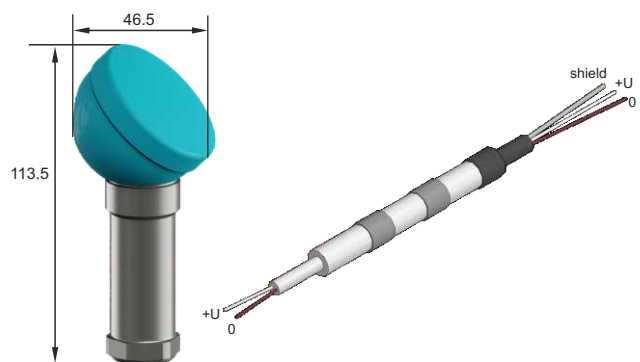
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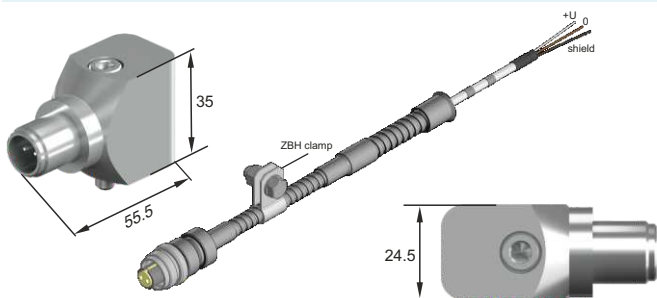
DVA211.214



DVA211.252



DVA211.714



Wiring diagrams

