

## DVA241.XXX vibration acceleration sensors with current output



**DVA241.164**  
version with TIK-KXX connector on the cable

**DVA241.104**  
version with fixed cable connection

**DVA241.214**  
version with TIK-KXX connector on the housing

**DVA241.252**  
terminal block version

**DVA241.714**  
version with TIK-KXX connector on the housing

*Product appearance may vary slightly from that shown in the brochure*

### Features

Designed for measuring the RMS value 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 <sup>2</sup> /m		
0.64	0.4	0.16
Measurement ranges for the RMS value of vibration acceleration, m/s <sup>2</sup> :		
0-25	0-40	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<sub>200</sub> 100°C ... T<sub>200</sub> 280°C Da X  
Ex ia IIIC T<sub>95</sub>°C ... T<sub>275</sub>°C Db X
  - 2Ex nA IIC T<sub>6</sub>...T<sub>2</sub> Gc X
  - PO Ex ia I Ma X
  - 0Ex ia IIC T<sub>6</sub>...T<sub>2</sub> Ga X
  - Ex ia IIIC T<sub>200</sub> 100°C ... T<sub>200</sub> 280°C Da X
  - Ex ib IIIC T<sub>95</sub>°C ... T<sub>275</sub>°C Db X

- Protection class
- IP65/68 (DVA241.104/164/214/714)
  - IP65 (DVA241.252)

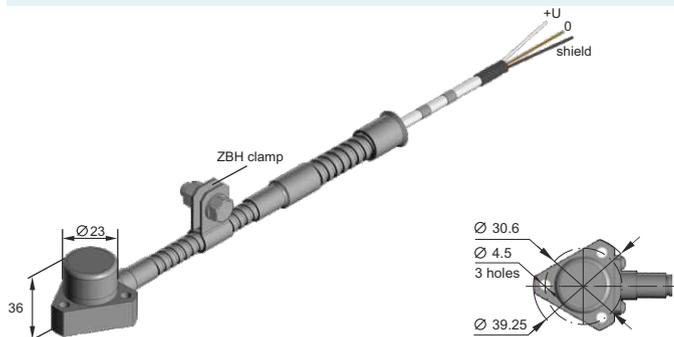
### Reliability parameters

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

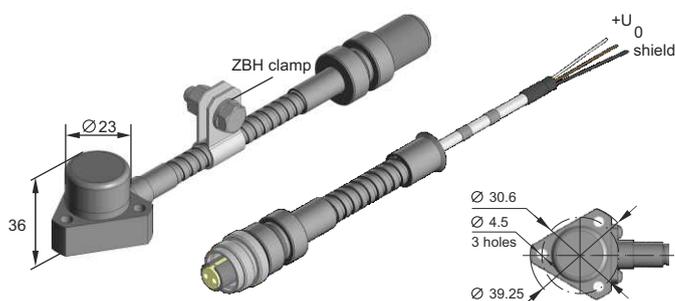


## Constructive versions

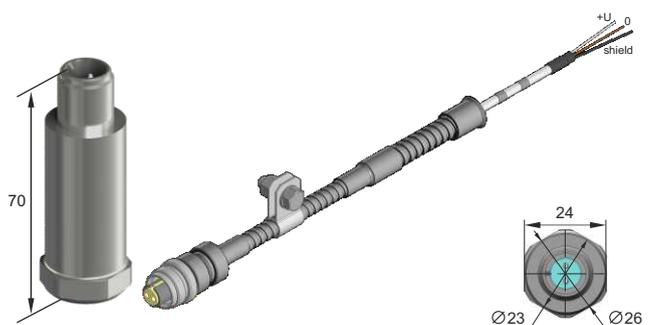
### DVA241.104



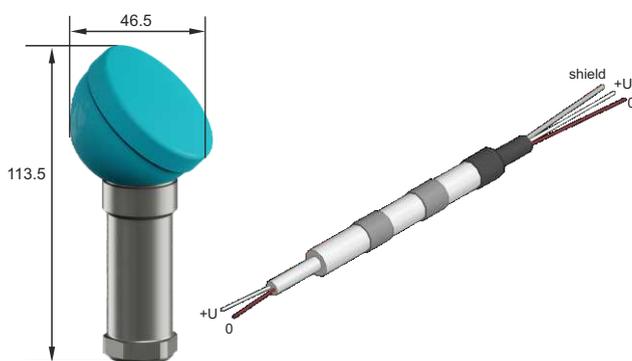
### DVA241.164



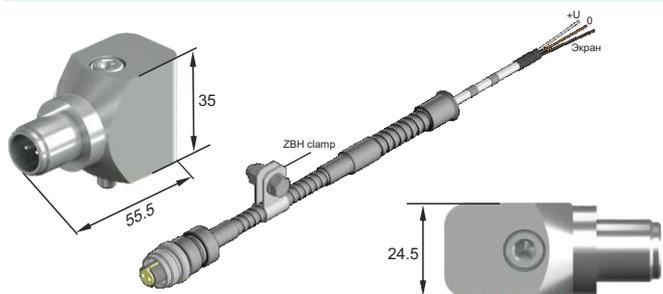
### DVA241.214



### DVA241.252



### DVA241.714



## Wiring diagrams

