

**DVA141.XXX vibration velocity sensors with current output**



**DVA141.164**  
version with TIK-KXX connector on the cable

**DVA141.252**  
terminal block version

**DVA141.104**  
version with fixed cable connection

**DVA141.214**  
version with TIK-KXX connector on the housing

**DVA141.714**  
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 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.

**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*

**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

**Protection parameters**

- Explosion protection
- PO Ex ia I Ma X  
 0Ex ia IIC T6...T2 Ga X  
 Ex ia IIIC T<sub>200</sub> 100°C ... T<sub>200</sub> 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 T<sub>200</sub> 100°C ... T<sub>200</sub> 280°C Da X
  - Ex ib IIIC T95°C ... T275°C Db X
- Protection class
- IP65/68 (DVA141.104/164/214/714)
  - IP65 (DVA141.252)

**Climatic version**

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

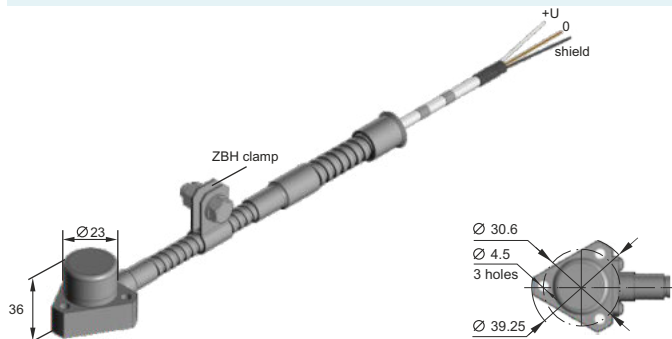
**Reliability parameters**

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

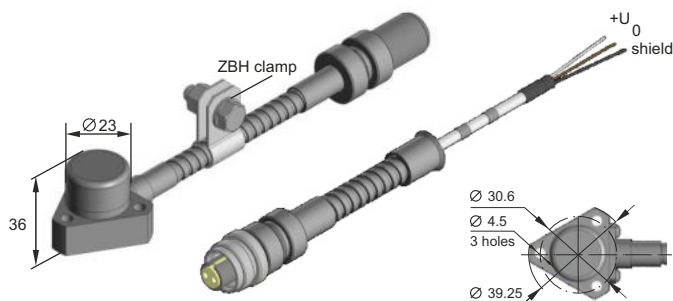


## Constructive versions

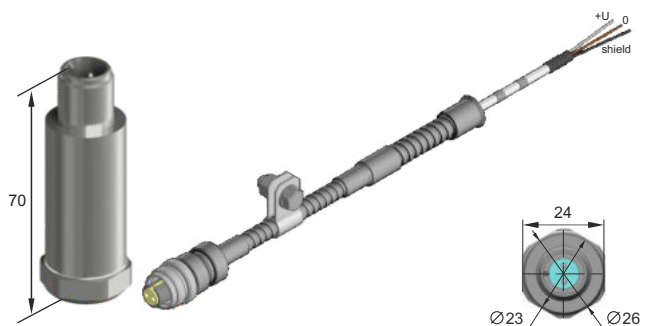
### DVA141.104



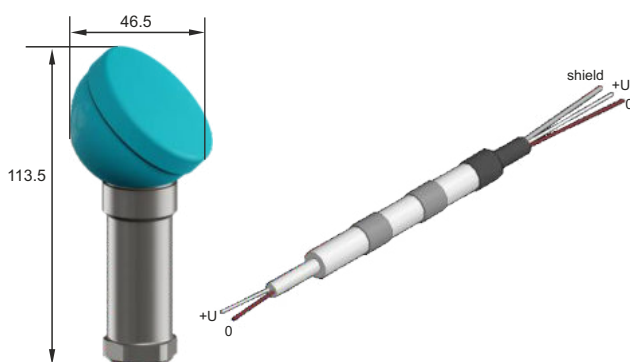
### DVA141.164



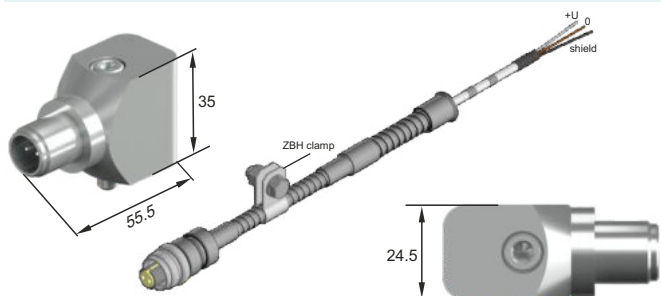
### DVA141.214



### DVA141.252



### DVA141.714



## Wiring diagrams

