

## DVA16(7)1.XXX vibration velocity sensors with current output

**DVA1X1.164**  
version with TIK-KXX  
connector on the cable

**DVA1X1.104**  
version with fixed  
cable connection

**DVA1X1.252**  
terminal block version

**DVA1X1.214**  
version with TIK-KXX  
connector on the housing

**DVA1X1.714**  
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 two axes simultaneously.

**DVA161.XXX** - compares measured values and outputs the highest of them;

**DVA171.XXX** - performs vector addition of measured values and outputs the sum obtained.

Depending on the version, the standard studs M8.XXX and M8.XXX are used for mounting on the unit. 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 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 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

### 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 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 (DVA16(7)1.104/164/214/714)
- IP65 (DVA16(7)1.252)

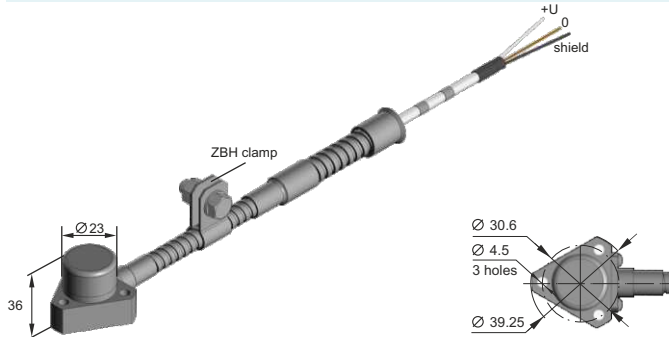
### Reliability parameters

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

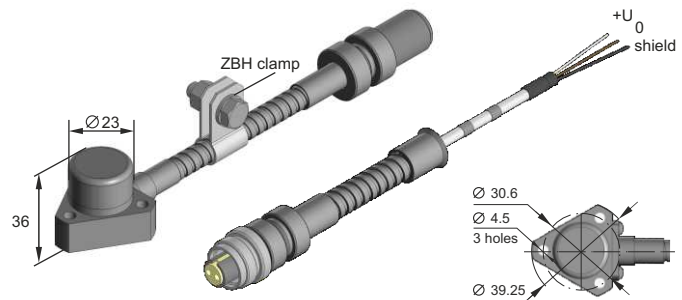


## Constructive versions

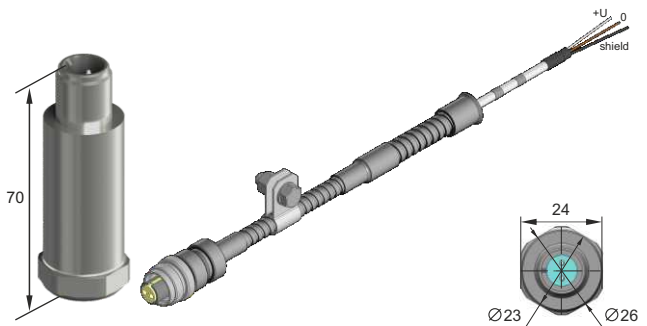
### DVA16(7)1.104



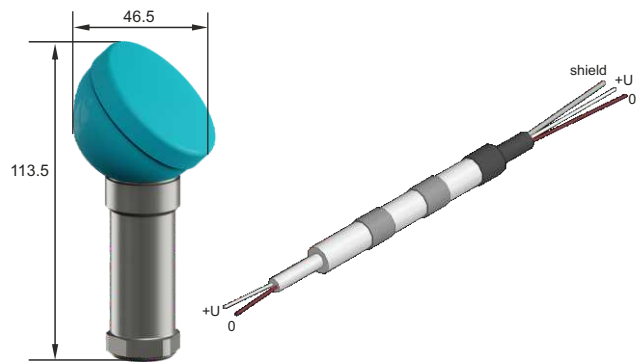
### DVA16(7)1.164



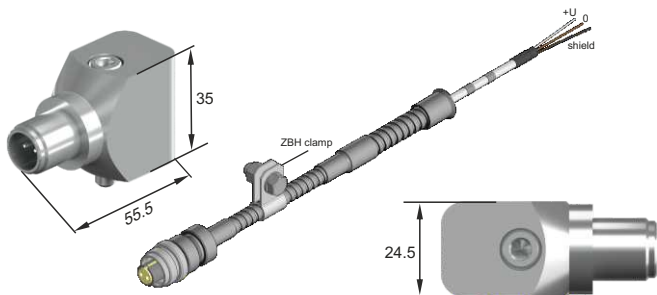
### DVA16(7)1.214



### DVA16(7)1.252



### DVA16(7)1.714



## Wiring diagrams

