

**DVA2X4.XXX vibration acceleration sensors with digital output**

**DVA2X4.214**  
version with TIK-KXX connector on the housing

**DVA2X4.164**  
version with TIK-KXX connector on the cable

**DVA2X4.104**  
version with fixed cable connection

**DVA2X4.714**  
version with TIK-KXX connector on the housing



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

**Features**

Designed to measure vibration acceleration (amplitude, RMS value, range, instantaneous value, along 1 or 2 coordinate(s)).

All calculations are performed in a real-time mode with the register data refresh interval of 10 ms. The measurement error for vibration parameters is not more than 5% in the basic frequency range.

Depending on the version, the sensor is installed on the unit using the standard threaded stud M8, fastening with 3 screws or 1 screw. A threaded stud with a different thread, including inch thread, can be supplied on special order.

**Metrological parameters**

Conversion coefficient	1	
Measurement ranges for 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 . . . . . RS-485 or RS-485 + discrete output

Sensor supply voltage, V . . . . . 10-24

Protocol . . . . . Modbus RTU

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

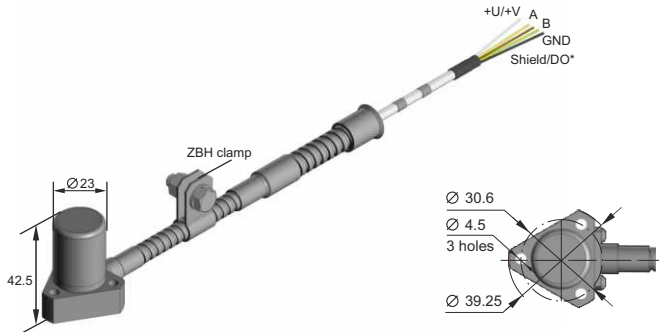
**Reliability parameters**

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



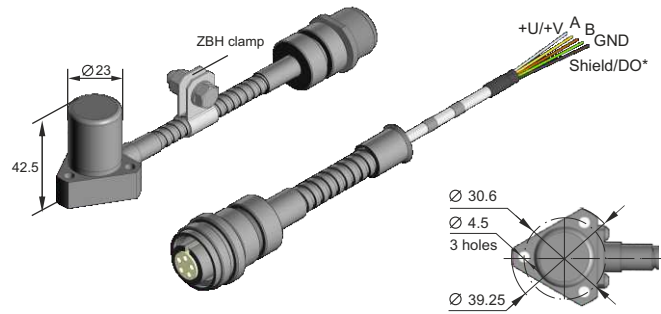
## Constructive versions

### DVA2X4.104



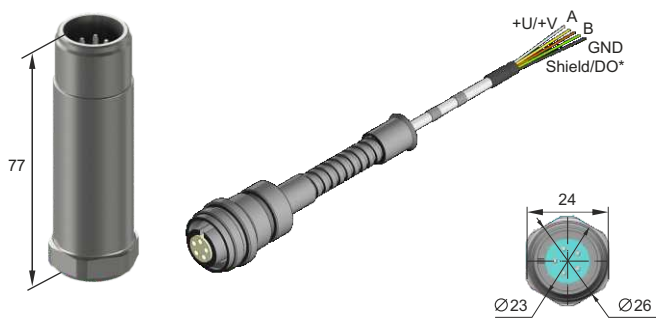
\*For version with discrete output

### DVA2X4.164



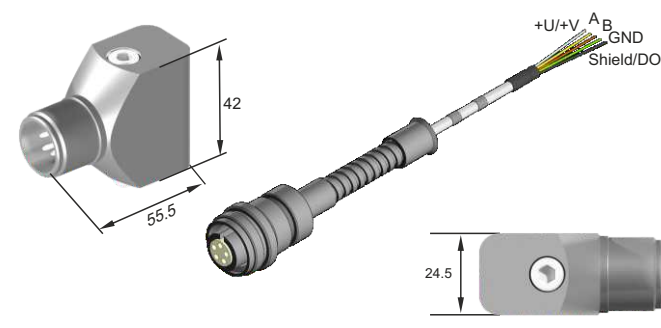
\*For version with discrete output

### DVA2X4.214



\*For version with discrete output

### DVA2X4.714



\*For version with discrete output

## Wiring diagrams

