

## DVA3X4.XXX vibration displacement sensors with digital output

**DVA3X4.214**  
version with the **TIK-KXX** connector on the housing

**DVA3X4.164**  
version with the **TIK-KXX** connector on the cable

**DVA3X4.104**  
version with the **non-detachable** cable connection

**DVA3X4.714**  
version with the **TIK-KXX** connector on the housing



*The appearance of the products may differ a little from those presented in the brochure*

### Features

Designed to measure vibration displacement (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 / M10 / M12, 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							
Ranges of indicated values of vibration displacement, $\mu\text{m}$ :								
0-100	0-125	0-160	0-200	0-250	0-300	0-500	0-1000	0-2000

Operating frequency range, Hz. . . . . 5-500;  
2-1000;  
3-1000;  
5-1000;  
10-1000

### Interface

Type of output signal . . . . . RS-485  
Supply voltage of the sensor, V . . . . . 10-24  
Protocol . . . . . Modbus RTU  
Connection via the TIK-PLC controller\* or the TIK-BIS safety barrier

*\*The controller operates as ESD, sensor power source, and a safety barrier*

### Explosion protection

Marking. . . . . 0Ex ia IIC T6...T2 Ga X / PO Ex ia I Ma X  
2Ex nA IIC T6...T2 Gc X

### Climatic version

Operating temperature range,  $^{\circ}\text{C}$   
• H climatic version . . . . . -40...+80  
• X climatic version . . . . . -60...+80  
• K climatic version . . . . . -196...+80

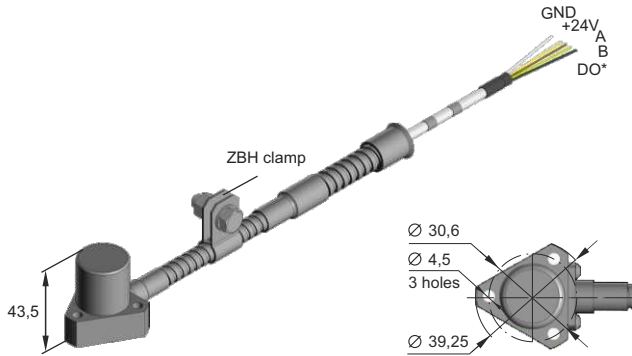
### Reliability parameters

MTBF, hours, not less than . . . . . 40 000  
Design service life, hours, not less than . . . . . 80 000  
Warranty service life, months . . . . . 24  
Service life, years . . . . . 10  
Verification interval, years . . . . . 2

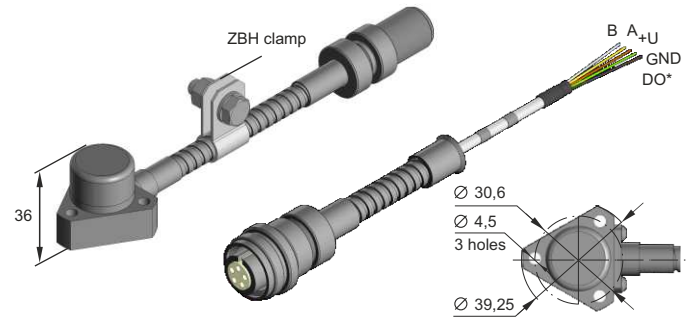


## Constructive versions

### DVA3X4.104



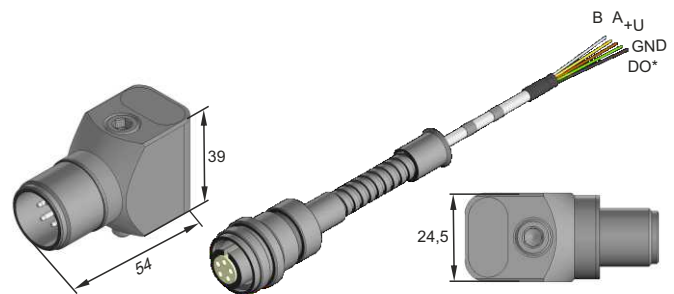
### DVA3X4.164



### DVA3X4.214



### DVA3X4.714



\*For version with discrete output

## Wiring diagram

