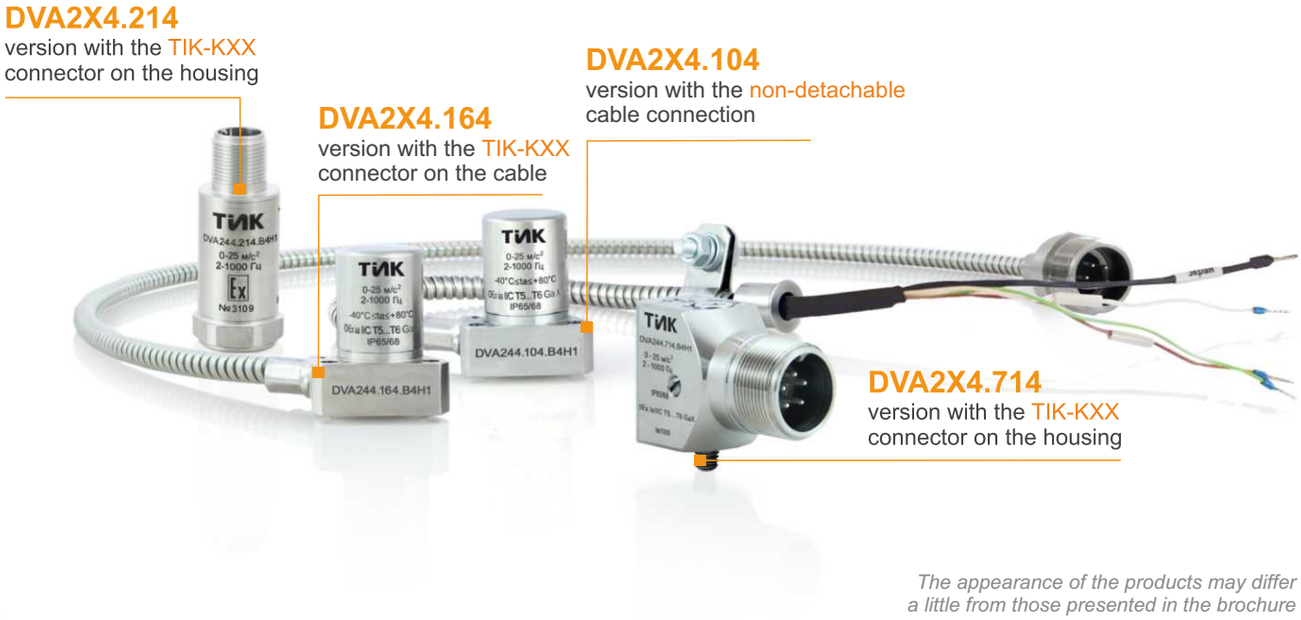
ТИК Research and production enterprise

RS-485

DVA2X4.XXX vibration acceleration sensors with digital output



The appearance of the products may differ a little from those presented 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 / 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	
Measurement ranges for vibration acceleration, m/s^2:		
0-25	0-40	0-100

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

Interface

Type of output signal . . . . . RS-485 or RS-485 + discrete output

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, °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

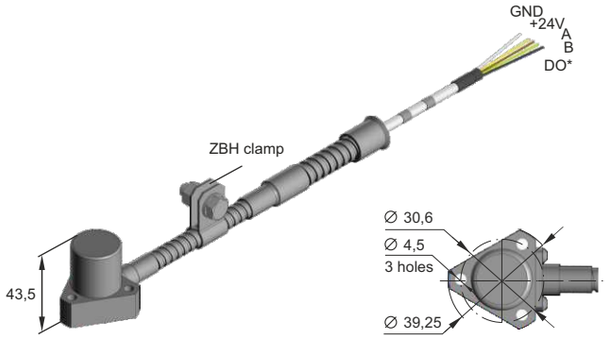
Warranty service life, months 24

Service life, years 10

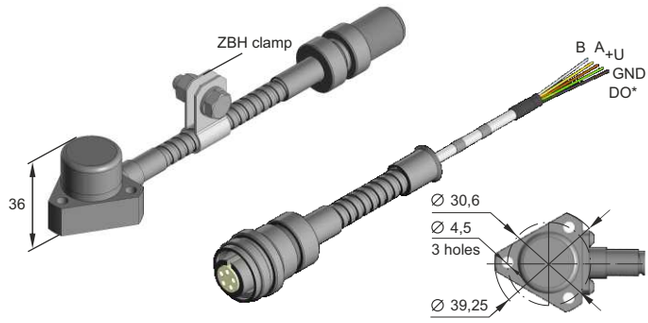
Verification interval, years 2

Constructive versions

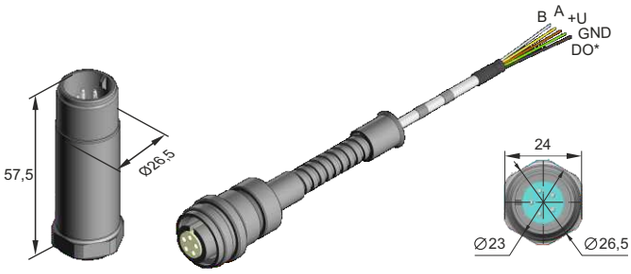
DVA2X4.104



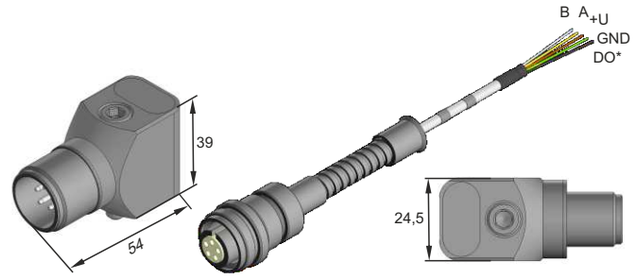
DVA2X4.164



DVA2X4.214



DVA2X4.714



*For version with discrete output

Wiring diagram