ТИК Research and production enterprise

4-20 Ex XY ESD

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

*Only for SPTA

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

Features

Designed to measure the root-mean-square (RMS) value of vibration velocity along two axles simultaneously.

DVA161.XXX - compares the measured values and returns a greater one;

DVA171.XXX - performs vector addition of the measured values and returns the resulting sum.

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.

For the .214 version, it is possible to use cable assemblies with the MIL connector of 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

Interface

Type of output signal . . . . . 4-20 mA current loop
Supply voltage of the sensor, V 10-24
Connection polarity . . . . . random
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

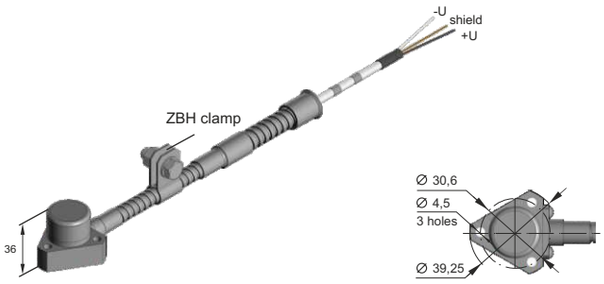
- H climatic version . . . . . -40...+80
- X climatic version . . . . . -60...+80
- K climatic version . . . . . -196...+80

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

DVA16(7)1.104



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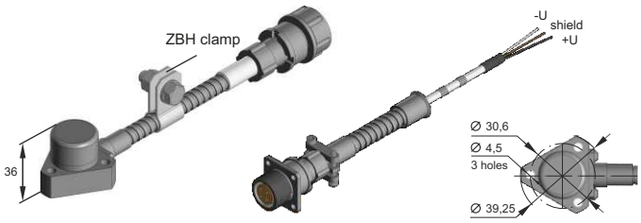

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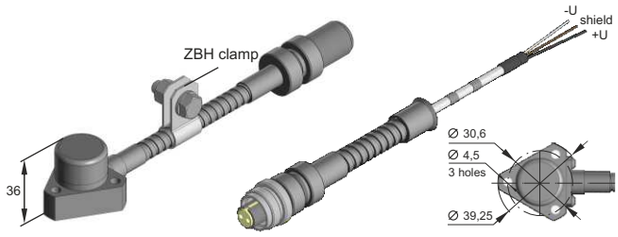

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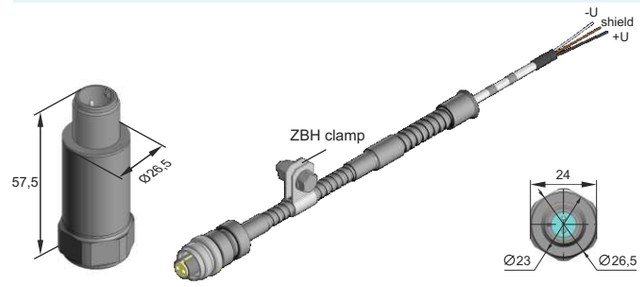

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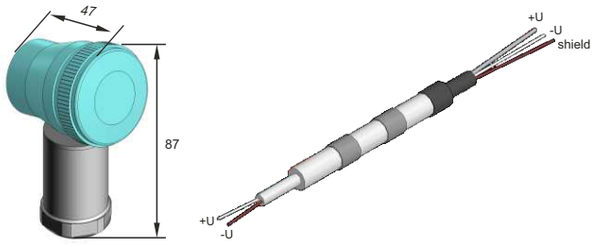
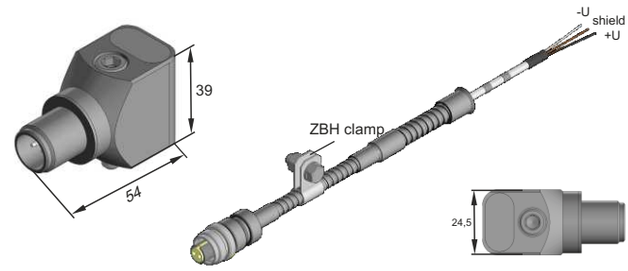
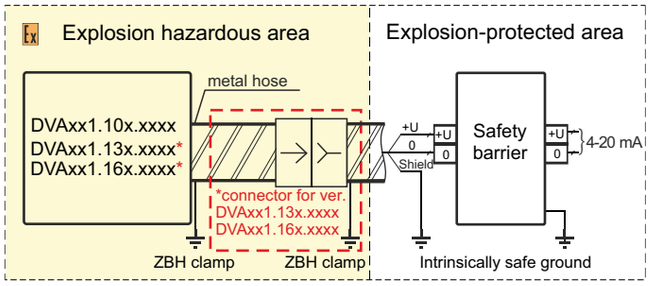
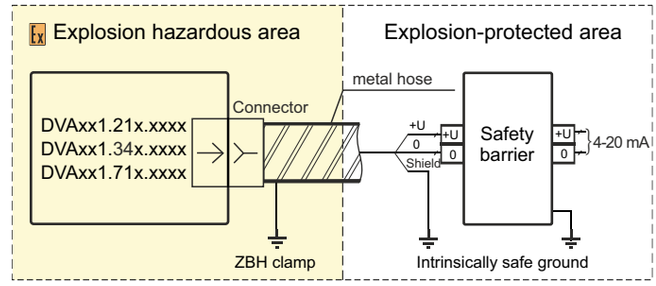
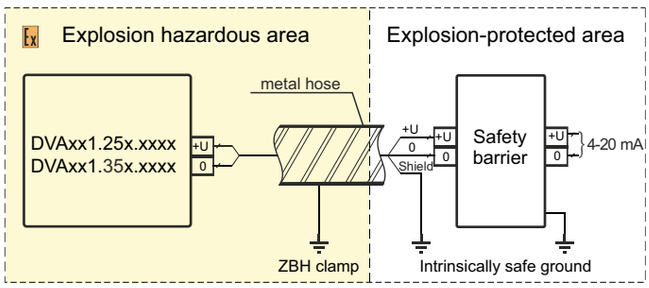


DVA16(7)1.714



Wiring diagram