

DVA143.XXX vibration velocity sensors with voltage output

DVA143.104
version with **fixed**
cable connection



DVA143.164
version with **TIK-KXX**
connector on the cable



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

Features

Designed for measuring the RMS value of vibration velocity in emergency protection systems (EPS). They consist of a sealed enclosure containing an integral acceleration sensor and a conversion board.

For installation on the unit, a 3 screw mounting is used.

Interface

Output signal type voltage with separate power supply
 Sensor supply voltage, V -2.5; +3.6
 Connection via the TIK-PLC controller* or the TIK-BIS safety barrier

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

Metrological parameters

Conversion coefficient, mV*s/mm	100
Measurement ranges for the RMS vibration velocity, mm/s:	0-125

Operating frequency range, Hz 2-1000

Reliability parameters

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

Protection parameters

- Explosion protection
- PO Ex ia I Ma X
 0Ex ia IIC T6...T2 Ga X
 Ex ia IIIC T₂₀₀ 100°C ... T₂₀₀ 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 T₂₀₀ 100°C ... T₂₀₀ 280°C Da X
 - Ex ib IIIC T95°C ... T275°C Db X

Protection class
 • IP65/68

Climatic version

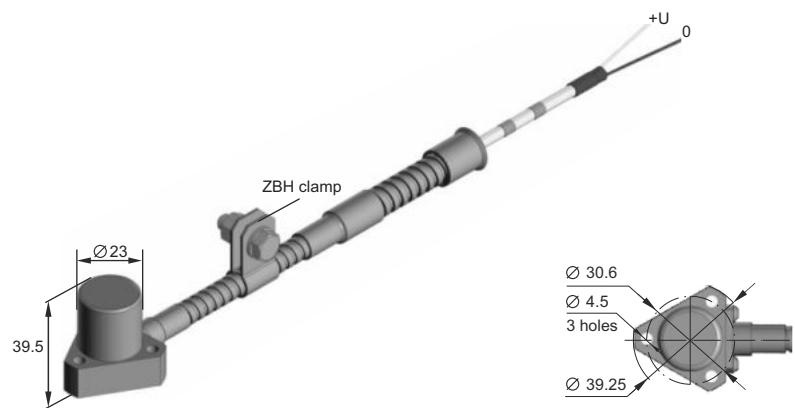
Operating temperature range, °C

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



Constructive versions

DVA143.104



DVA143.164



Wiring diagram

