



**DVA484.214**  
version with TIK-KXX  
connector on the case

**DVA484.164**  
version with TIK-KXX  
connector on the cable

**DVA484.104**  
version with all-in-one  
cable connection

**DVA484.714**  
version with TIK-KXX  
connector on the body



## DVA484.XXX multifunctional sensors with digital output

> three-axis

### Features

Sensors are designed for measuring vibration acceleration, vibration speed, vibration displacement using 3-dimensional method, and also angle of slope and temperature.

All calculations are performed in real-time mode with interval of data update in registers 10 ms;  
Measurement error of vibration parameters is not higher than 5 % in main frequency range;  
Additional error is not higher than 2,5 %;  
Integrated temperature sensor allows controlling temperature with accuracy of  $\pm 2^{\circ}\text{C}$ ;  
Determination of angles of slope for each axis with accuracy of  $1^{\circ}$ .

### Metrological data

Conversion coefficient		
1	1	1
Range of indications of amplitude of vibration velocity, mm/s:		
0-50	0-80	0-200
Range of indications of amplitude of vibration acceleration, m/s <sup>2</sup> :		
0-25	0-40	0-100
Range of indications of amplitude of vibration displacement, $\mu\text{m}$ :		
0-100	0-160	0-400

Operating frequency range – **10-1000 Hz**

\* Optional supply is possible with ranges 5-500, 2-1000, 3-1000, 5-1000 Hz

### Interface

Output signal type – **RS-485**

Power-supply voltage – **10-24 V**

Protocol – **Modbus RTU**

Connnection – through TIK-PLC.991.11 controller  
through TIK-BIS.414.XXXX or  
TIK-BIS.616.XXXX safety barrier

\* controller performs the functions of EPS, source power supply for sensors and safety barrier

### Operational data

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

### Reliability and manufacturer warranty

Average time operating time – **40 000 hours**

Metrological verification – **2 years**

Guarantee period – **2 years**

Life time – **10 years**

## Design options

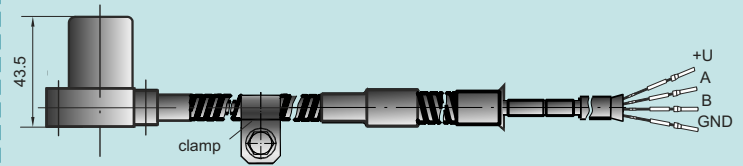
### DVA484.104

triangular case  
all-in-one cable connection

IP65/IP68     $\varnothing$  39.25x43.5 mm    100 g

screw M4x21 (M4x28) 3 pcs.

0Ex ia IIC T5...T6 Ga X or PO Ex ia I Ma X  
intrinsically safe circuit



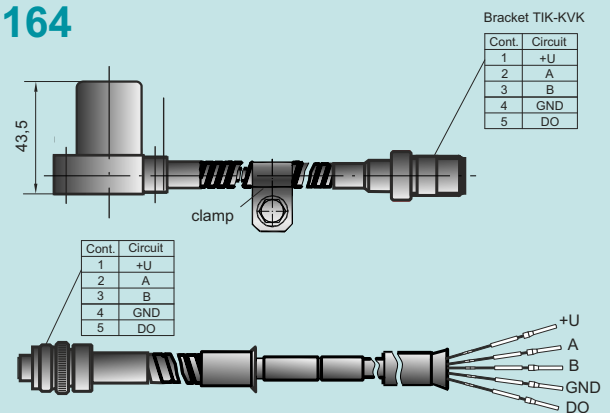
### DVA484.164

triangular case  
TIK-KXX connector on the cable

IP65/IP68     $\varnothing$  39.25x43.5 mm    100 g

screw M4x21 (M4x28) 3 pcs.

0Ex ia IIC T5...T6 Ga X or PO Ex ia I Ma X  
intrinsically safe circuit



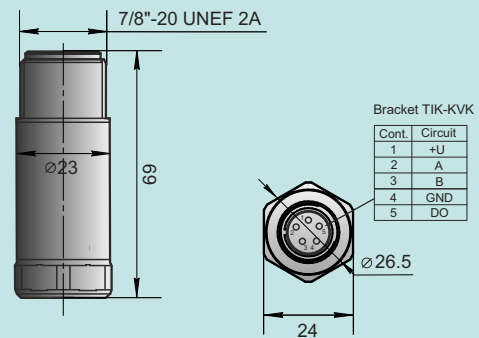
### DVA484.214

cylindrical small-sized case  
TIK-KXX connector on the body

IP65/IP68     $\varnothing$  23x69 mm    130 g

stud M8x1 / M10x1 / M12x1

0Ex ia IIC T5...T6 Ga X or PO Ex ia I Ma X  
intrinsically safe circuit



### DVA484.714

rectangular case  
TIK-KXX connector on the body

IP65/IP68    32x70x26 mm    250 g

screw M8 1 pcs.

0Ex ia IIC T5...T6 Ga X or PO Ex ia I Ma X  
intrinsically safe circuit

