

## IKV-1-2-1 ver. B vibration measuring channel with current output

### DV-1 ver. 05 / AV 121

version with the connector on the cable and electronics in the remote unit



The picture shows one of the possible designs  
IKV-1-2-1 ver. B consists of the DV-1 ver. 04 (DV-1 ver. 05) sensor and the AV 121 remote unit

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

### Features

It is designed to measure the root-mean-square (RMS) value of vibration velocity in emergency shutdown (ESD) systems.

They consist of a sensitive element and a remote unit.

Connection boxes are optionally supplied for the installation of vibration transducers and remote units.

A connection box can comprise up to 6 remote units.

### Metrological parameters

Conversion coefficient, mA*s/mm						
16	5.333	1.6	0.8	0.533	0.32	0.16
Measurement ranges for the RMS value of vibration velocity, mm/s:						
0-1	0-3	0-10	0-20	0-30	0-50	0-100

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

### Explosion protection

Marking . . . . . 0Ex ia IIC T6...T1 Ga X

### Interface

Type of output signal . . . . . 4-20 mA current loop  
Supply voltage of the sensor, V . . . . . 10-24  
(The minimum voltage of a power source is 10V.  
+1V for every 50 Ohms of load)

Connection via the TIK-PLC controller\* or the TIK-BIS safety barrier

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

### Climatic version

- Operating temperature range, °C
- DV-1 ver. 04 . . . . . -40...+70
  - DV-1 ver. 04 (cold) . . . . . -60...+70
  - DV-1 ver. 05 . . . . . -40...+90
  - DV-1 ver. 05 (cold) . . . . . -60...+90
  - AV121 remote unit . . . . . -60...+70

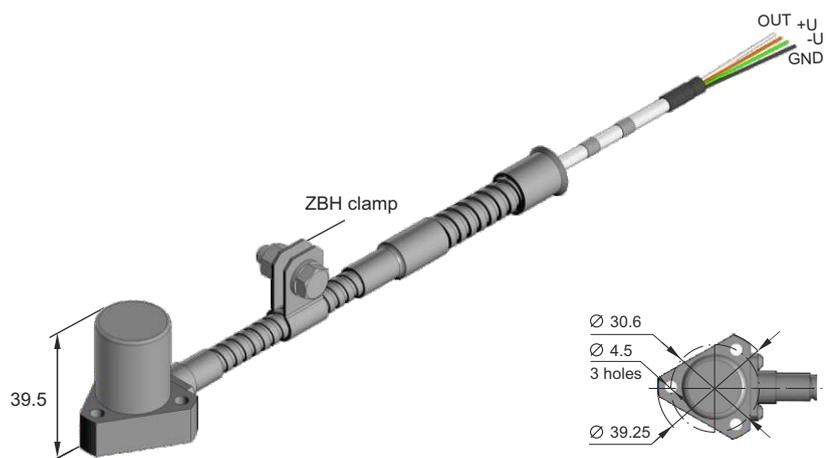
### Reliability parameters

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 . . . . . 1



## Constructive versions

### DV-1 ver. 04



### DV-1 ver. 05 + connection cable



## Wiring diagram

