Appendix D: ATEX (optional)

Optionally, the instrument can be in Ex implementation.

Number of certificate

FTZÚ 21 ATEX 0040X

Specification according to 94/9/EC (ATEX) directive

II 3G Ex ic op is IIC T3 Gc

II	Non-mining
3	Zone 2
G	Gas atmosphere
Ex ic	Principe of protection – Intrinsic Safety EN 60079-11, Zone 2
op is	The optical beam of the LED will not cause ignition
IIC	All gasses with temperature classes T1 to T3, see IEC 80079-20-1
T3	Max. surface temperature (during failure) 200°C.
Gc	EPL (Equipment protection level) – Zone 2

Zone 2 – the occurrence of an explosive atmosphere is unlikely, but cannot be ruled out. If it occurs, then only for a short time. this is a probability of less than 0.1% of operating time or less than 10 hours per year in the case of continuous operation.

The instrument is certificated for Zone 2 hazardous areas and must not be used in Zones 0 and 1.

Ambient temperature (operation and storage)

Ta = -10 to +50°C.

When using the recommended speed probe Mini VLS 210/ia, the maximum permitted ambient temperature is +40°C

Certificated accessories

Accelerometers

CTC AC90X, AC91X, AC95X or AC905.
Use only with original cable.

Speed probe

Mini VLS 210/ia.
Use only with original cable.
Maximum ambient temperature, Ta max = +40°C.

Antistatic cover

For carrying the device on the shoulder or behind the waist, a cover is supplied as an optional accessory, which is made of antistatic VINYTOL 752 DUO NV leather. The case is equipped with a removable strap made of the same material and a belt clip. The device is inserted into the package and secured with Velcro.

Attention! The cover is a universal accessory that covers the production label with the device specification. To access the data on the label, the device must be removed from the packaging.
Unapproved standard packaging that comes with a different type of device cannot be used for potentially explosive atmospheres!

Signal specifications

IN1, IN2 connectors for accelerometer

Quantity	Description	max. value	standard value
Uo	Output voltage	<25.2V	21.5V
Io	Output current	<58mA	3.8mA
Co	Sensor capacity	<100nF	70nF
Lo	Sensor inductance	<60uH	51uH

TRIG connector for speed probe

Quantity	Description	max. value	standard value
Uo	Output voltage	<6.0V	5.0V
Io	Output current	<425mA	100mA
Lo	Sensor capacity	<100uH	0uH
Co	Sensor inductance	<10uF	0uF

Using the instrument

Grounding

The operator must be grounded and the instrument is thus grounded through the operator.

Charging

Charge only with the supplied FRIWO FW7290 GPP18Li/8.4V/1.5A charger. Charge only in indoor areas with a non-explosive environment. The ambient temperature during charging must not exceed 0-35°C.

Data transfer into PC

The instrument can only be connected to the host PC in a non-explosive environment. The power supply of the connected PC must comply with IEC60950, IEC61010-1 or must be powered by a battery.

Warning

Only certificated sensors, cables and other accessories such as a protective cover can be connected to the instrument. Disassembling the instrument, any repairs or replacement of the battery by the user, sticking labels and foil on the antistatic surfaces of the instrument, cleaning the instrument with aggressive cleaning agents (alcohol, gasoline, etc.) or any other intervention that could cause a violation of the intrinsic safety of the device is prohibited.

Instrument sticker

