

Absolute vibration monitor

type VC11

Application

Dedicated for use in on-line rotating machines bearing absolute vibration monitoring such as compressors, fans, pumps, motors, gear boxes, hydro machines.

It can be used for vibration data visualization and recording using standard dc output .

Description

The monitor circuit is placed in aluminium enclosure painted in RAL 7032 grey colour, with two cable glands and IP65. . The electronics is silicon-resin encapsulated . The monitor is mounted into a flat surface by two screws M4x16. The mounting holes spacing (52x110mm) are showed at the figure . The screw terminal block inside the enclosure has six screw connections .

The monitor is supplied from 24Vdc(two terminals), the sensor is connected with the monitor by two terminals and the last two terminals are for output signal 4-20 mA dc .

The unit cooperates with piezoelectric vibration sensor (accelerometer) with built-in two-wire current supply preamplifier (ICP® standard).

The RMS value of vibration velocity is measured in the frequency range of 10(5)Hz to 1 kHz. The 2Hz - 600Hz frequency range is suggested for hydro generators.

Performances

METROLOGICAL

Input: piezoelectric vibration transducer with built-in two-wire current supply preamplifier , powered from dc constant current source 2-10mA/18-30VDC.

Output: dc current 4...20mA, Rload <500Ω proportional to the measuring range with galvanic isolation to power source

Measuring Ranges :

0–10, 0–15, 0 –20, 0–30 mm/s according to order

Frequency Range :

10Hz to 1kHz , 5Hz to 1kHz, 2Hz-600Hz according to order.

ELECTRICAL

Power requirements: 18-36 V DC , <50mA

Galvanic isolation DC output/ power source:1,5kV

ENVIRONMENTAL

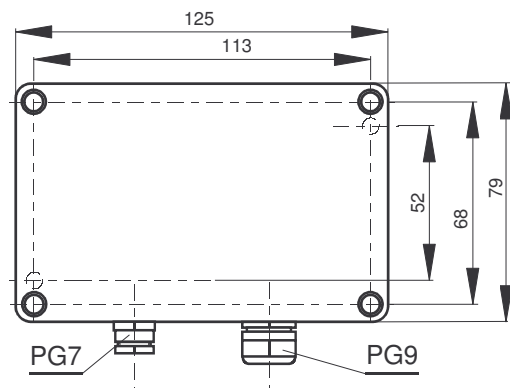
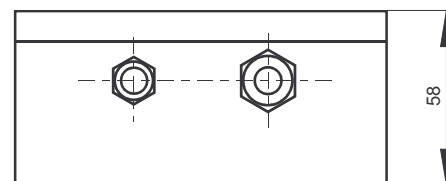
Operating temperature: -30°C do +70°C

Humidity: 95% without condensation

MECHANICAL

Weight: 600g

Housing material : aluminum alloy



Dimensions : 58x79x125mm

Protection : IP65

Monitor Ordering Information

A B C
VC11- □□□ - □□ - □□

A □□□ Input sensitivity in mV/g
(the sensitivity of cooperating vibration sensor)

eg.1 0 0 for sensitivity 100mV/g

B □□ Measuring range in mm/s

1 0 for range 0 – 10 mm/s

1 5 for range 0 – 15 mm/s

2 0 for range 0 – 20 mm/s

3 0 for range 0 – 30 mm/s

C □□ Frequency range

0 1 10Hz – 1kHz

0 2 5Hz – 1kHz

0 3 2Hz – 600Hz

