



Brüel & Kjær Vibro



VIBROCONTROL 800

Single-Channel Vibration Monitor for Machine Protection
according to DIN ISO 10816

VIBROCONTROL 800

The Task

Vibrations can be costly

Vibrations occur in every machine. Blowers fans, mills, centrifuges, wire coilers, etc. generate noticeable mechanical vibrations during operation. As long as the vibrations remain within permissible limits they are not dangerous and require no special attention. If, however, they exceed the permissible limits of DIN ISO 10816-3, then the safety of the machine, the foundation and operating personnel is threatened. There are many causes for the increase of vibrations. The fouling of fan blades, wear of rotating parts, bearing wear and coupling offset due to foundation movement can cause dangerous operating conditions. These can lead to costly machine repairs, to production outage, to the reduction of the machine life cycle and higher vibratory stress.

The Solution

Online Vibration Monitoring

Vibrational damage can effectively be prevented by using vibration monitors. Monitoring units report all excessively high vibration by actioning an alarm or shutting off the machine when the danger point is reached.

Ordering information

The following variants are available. Please specify when ordering:

VIBROCONTROL 868 –

horizontal mounting direction
Power supply

VC-868/0; 230/115 V AC, +10%,-15%
50/60 Hz, 10 VA
VC-868/1; +24 V DC
+23.5 V to +28.5 V 10 W

VIBROCONTROL 869 –
vertical mounting direction
Power supply

VC-869/0; 230 /115 V AC, +10%,-15%
50/60 Hz, 10 VA
VC-869/1; +24 V DC
+23.5 V to +28.5 V approx. 10 W

Technical Data

Measured values

1. RMS value of the vibration velocity
0 ...10/20/50 mm/s
2. Peak value of the vibration displacement
0 ...100/200/500 μm

Operating speed range

480 – 60,000 rpm

Measurement accuracy

$\pm 10\%$

Limit value

Adjustable by potentiometer with scale:
0-100% of full scale value.

Limit relay time delay

1 s or 5 s, set with jumpers

Limit relay

1 power relay with 1 changeover contact for alarm or shutdown of monitored machine. Relay normally energised, non-latching.

Switching capacity

AC max. 250 VA, 1A
DC by 150 V: P < 70W
by 48 V: P < 72W
by 24 V: P < 192W

Functional Check

With integral check button

Housing

Heavy duty coated cast aluminium housing. IP65 vibration sensor and monitoring electronics embedded in epoxy.

Weight

1.6 kg

Connecting cable

7 x 1.5 mm², length 4 m with free cable ends, oil resistant.

Ambient conditions

Unless explicitly stated, the specified data apply at the following standard conditions:

Humidity up to 95%, non-condensing
Operating temperature range
-30 °C ... +65 °C
Storage temperature range:
-40 °C ... +90 °C
Temperature range for compliance of the specified data
0 ... + 65 °C

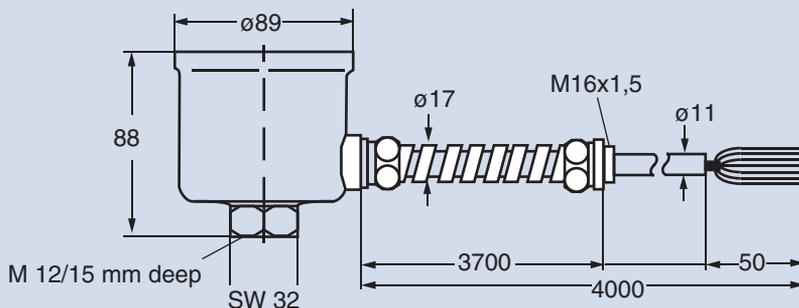


Illustration: VC-86x with option 01

Option 01

Protective metal conduit for connecting cable 3.7 m (12 ft) long, 17 mm (0.67 inch) dia., oil resistant and oil tight.

Optional

AC-2104/0 terminal protective housing to extend the connecting cable length (suitable for 2 x VC-86x)
Dimensions:
122 x 120 x 91 mm
(4.80 x 4.72 x 3.58 inch)

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