



## CVS 100 M2

### Vibro-Meter Vibration Switch

#### CHARACTERISTICS

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- Low cost vibration control
- Vibration velocity
- Simple version
- Easy installation
- 2 Adjustable level detector
- Analog output 0/4 ... 20 mA
- Aluminum casing



#### GENERAL

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The vibration switch CVS 100 M2 allows a low-priced realisation of vibration control for stand-alone machines and auxiliary aggregates (e.g. fans, pumps, centrifuges, mills, gears, etc.), on whose functions important big-installations or process-bounds are depending. Among other things it allows observation according to VDI 2056 and ISO 2372.

Utilized for this are the vibrations of important machine parts (pillow blocks, foundations, casings) covered by rugged velocity feeders in electrical signals and processed and assessed with integrated electronics.

This signal- and adjust electronics is fitted together with the velocity feeder into an aluminum casing, fitted directly onto the machine to be observed.

Two independent adjustable level switches with eligible response delay are allowing the volt free signalizing of „warning“ and „alarm“ via appropriate assigned relays.

#### FUNCTIONAL DISRIPTION

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The signal of the velocity feeder is passed via a Band-Pass filter (10-1000 Hz) and is amplified in an amplifier up to the utilizing required level. An additional integrator enables displacement controlling alternative.

The measuring ranges and measuring units selection is made by jumper. The DC-output signal available after the rectifying is calibrated in RMS. It has an effect on two adjustable level switches, whose response time is set by jumpers either to 1sec. or to 5sec. The assigned relays' change-over contacts enable the signal-circuit assembly (warning/alarm).

## TECHNICAL DATA

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Measuring direction:	vertical or horizontal (please take into account when ordering)
Amplifier:	AC-amplifier with rectifier and filter
Measuring range:	Velocity: 2, 5, 10, 20, 50 [mm/s] (RMS) Displacement: 20, 50, 100, 200, 500 [ $\mu\text{m p}$ ]
Frequency range:	10 Hz ... 1000 Hz
Output signal::	0/4 ... +20 mA $R_{\text{Last}} \leq 500 \Omega$  proportional velocity or Displacement, calibrated in RMS [mm/s] or peak value [ $\mu\text{m p}$ ]
Level detector:	2 piece, limit adjustable in range of 5 ... 100 % of measuring range end (Fail-Safe function, relay normally energized)
Time delay:	Adjustable 1 sec. or 5 sec.

### Relay contact safe load (change-over contact):

Turn-on voltage max.:	150 V <sub>DC</sub> / 125 V <sub>AC</sub>
Switching current max.:	1 A
Constant limited current max.:	1 A
Rupturing capacity max.:	30 W / 60 VA

### Device data:

Supply:	Voltage: 24 V <sub>DC</sub> +/-20 % approx. 30 mA no galvanic separation
Temperature range:	-20 ... +70 °C working temperature -30 ... +70 °C storage range
Casing dimensions:	135 x 90 mm (height x diameter)
Material:	Aluminum AL Si 12/Cu
Mounting:	M12, 15 mm deep, wrench 27, starting torque 10 Nm
Screwed cable gland:	1 pc. M20 x 1,5
Protection class:	IP 55
Weight::	Approx. 0,62 kg

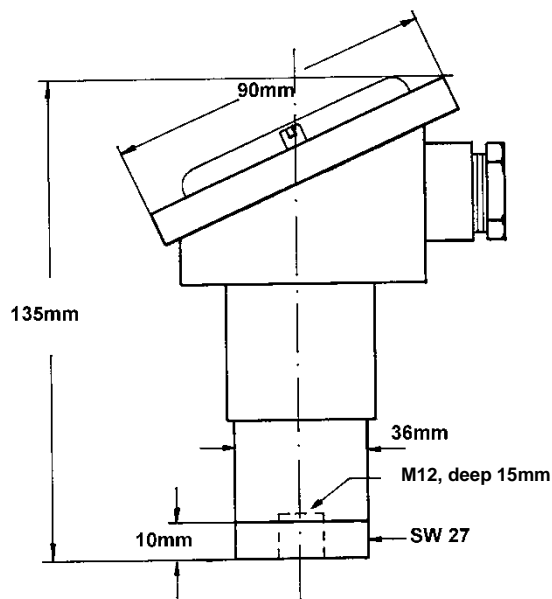
## ORDERING INFORMATION

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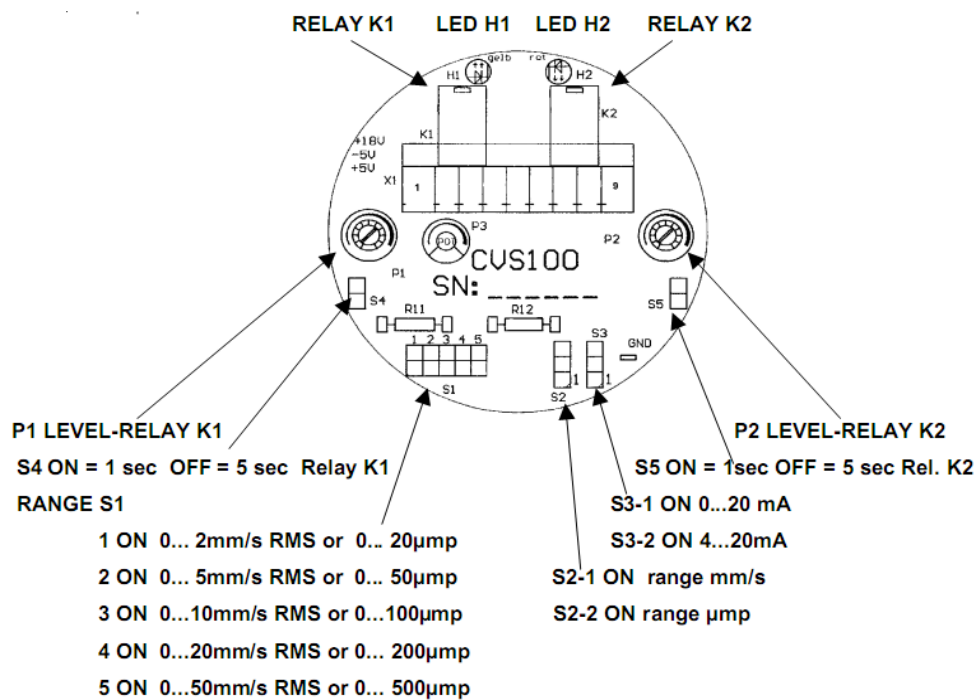
### VMD - CVS100- M2 – X1

<b>Measuring Direction (X1)</b>	
Horizontal	H
Vertical	V

## DRAWING



1	+24 V <sub>DC</sub>
2	0 V <sub>DC</sub>
3	Relay K1 NC
4	Relay K1 COM
5	Relay K1 NO
6	Relay K2 NC
7	Relay K2 COM
8	Relay K2 NO
9	Analoge Output 0/4...20 mA



Subject to change without prior notice.

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