

23	Ground terminal	1	Brass (C3604BD)
22	Sensitivity setting switch	1	
21	Fail-safe mode setting switch	1	
20	Alarm indicator	1	
19	Test point 1	1	
18	Test point 2	1	
17	Sensitivity setting volume	1	
16	Test point 3	1	
15	Terminals	1	
14	Plug	1	304 stainless steel
13	Detection rod	1	304 stainless steel
12	Cap	1	304 stainless steel
11	Extention pipe	1	304 stainless steel
10	Gasket	1	Silicone
9	Screw	1	Aluminium Alloy Die Casting
8	Nut	1	Brass (C3604BD)
7	Washer	1	Brass (C3710P)
6	Packing	1	Acrylonitrile-Butadiene Rubber
5	Cable gland	1	Brass (C3604BD)
4	Housing	1	Aluminium Alloy Die Casting
3	Cover gasket	1	Chloroprene Rubber
2	Cover bolt	2	Stainless steel
1	Cover	1	Acrylonitrile-Butadiene Styrene
P.No.	Name	Qty.	Material

Specifications  
 Detection : Bulk density as low as 0.2  
 sensitivity : 133mm  
 Length : 133mm  
 Mounting plug : G 3/4  
 Cable inlet : JIS F20a(G 3/4)  
 Power supply : 90 to 132 V AC 50/60Hz

△		DATE JUN.28, 1993	DR. BY	TITLE
△		SCALE 1:2.5	CH. BY	OUTLINE DRAWING OF MODEL VM VIBRATING LEVEL SENSOR
△		UNITS mm	APP. BY	MODEL VM 31 SHEET NO.
REV	DATE	DESCRIPTION	BY	APP. BY
		REVISIONS		
				DRAWING NO. CA 107003

**NOHKEN INC**  
 OSAKA, JAPAN

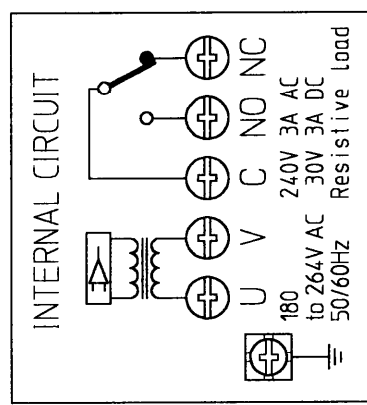
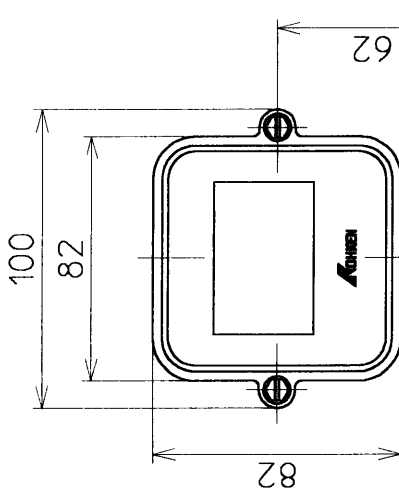
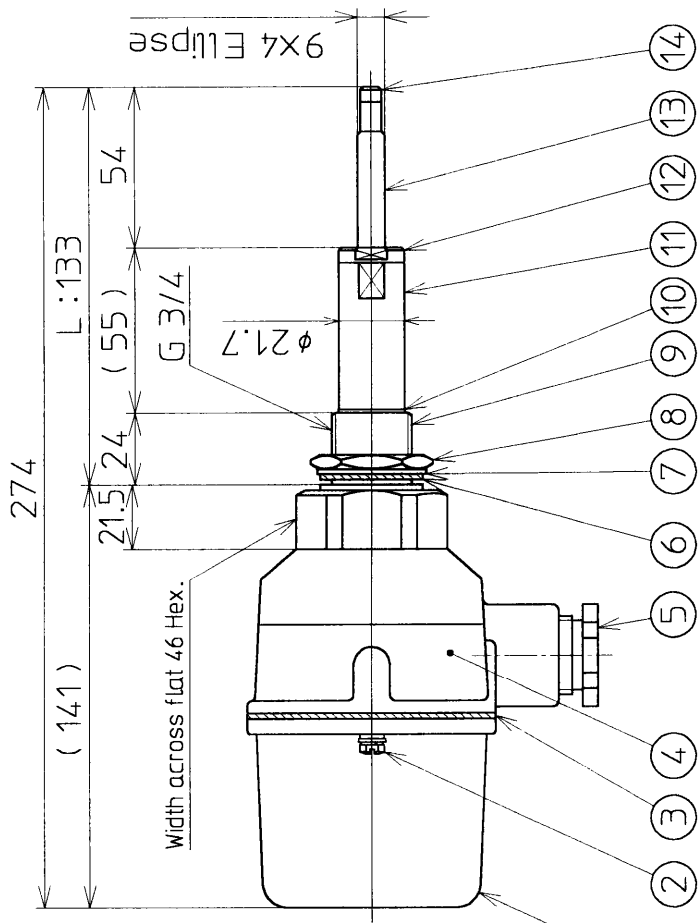


## S P E C I F I C A T I O N S

1. NAME : VIBRATING LEVEL SENSOR
2. MODEL : VM31, VM32
3. MEASURING OBJECT: Powder, Granular materials.
4. OPERATION CHARACTERISTICS
  - 4.1 Sensitivity : Bulk density : 0.2 g/cm<sup>3</sup> Min.
  - 4.2 Indication : By Red LED for Relay status
  - 4.3 Vibration Frequency : Approx. 500 Hz
5. ELECTRICAL CHARACTERISTICS
  - 5.1 Power Supply : VM31 ; 90 to 132 V AC 50/60 Hz  
VM32 ; 180 to 264 V AC 50/60 Hz
  - 5.2 Power Consumption : Approx. 2.5 VA Max.
  - 5.3 Output : Relay contact (1 SPDT)  
Fail-safe mode is selected for turn-on or turn-off at detection.  
Switching delay time: Turn-on, approx. 3 sec.  
Turn-off, approx. 3 sec.
  - 5.4 Contact Rating : 240 V 3 A AC , 30 V 3 A DC (Resistive load)
  - 5.5 Withstand Voltage : 1500 V AC , 1 minute.  
Between housing and each terminal except "E" terminal.
  - 5.6 Insulation Resistance: 500 V DC more than 100 MΩ  
Between housing and each terminal except "E" terminal.
6. MECHANICAL CHARACTERISTICS
  - 6.1 Withstand Pressure : 1 MPa Max.
  - 6.2 Concentrated Load : Horizontal ; 0.12 kN Max.(at the tip of the detection rod)  
Vertical ; 0.23 kN Max.(at the tip of the detection rod)
7. ENVIRONMENT
  - 7.1 Working Temperature : Detecting part ; -20 to +80 °C (Get rid of dew.)  
Housing ; -20 to +60 °C (Get rid of dew.)
  - 7.2 Working Humidity : 5 to 85 % RH
8. CONSTRUCTION : Detecting part ; waterproof construction (IP68)  
Housing ; drip-proof construction (IP65)
9. PHYSICAL
  - 9.1 Materials : Detecting part ; 304 Stainless steel, Brass, Silicon rubber  
Housing ; Aluminium die-casting (Silver hammeron coating.)
  - 9.2 Mounting : G 3/4 (Screw thread)
  - 9.3 Cable Inlet : JIS F 20a (G 3/4)
  - 9.4 Mass : Approx. 1.1 kg

## W A R R A N T Y

NOHKEN INC. products are warranted for a period of 1(one) year from date of original factory shipment, provided that handling, operation and maintenance of products shall be subjected to " NOHKEN's INSTRUCTION MANUAL ".



Specifications : Bulk density as low as 0.2  
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△		DATE JUN.28, 1993	DR. BY	TITLE	
△		SCALE 1:2.5	CH. BY	OUTLINE DRAWING OF	
△		UNITS mm	APP. BY	MODEL VM 32	
REV	DATE	DESCRIPTION	BY	APP. BY	SHEET NO.
		REVISIONS			DRAWING NO. CA 107004

**NOHKEN INC**  
OSAKA, JAPAN

