SHOWA MEASURING INSTRUMENTS CO., LTD.
17-16, NISHI-HOKIMA 1-CHOME, ADACHI-KU, TOKYO, JAPAN
TEL: (03) 850 - 5431
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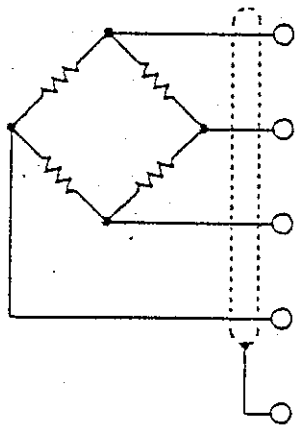
DIRECTIONS FOR USE OF MODEL 'SHE' SERIES LOAD CELLS

CABLE CONNECTIONS

Connections should be made in accordance with Fig. 1. Incorrect connections may cause a difficulty in getting an intial balance on the bridge or may produce an irregularity on the output voltage when a load is applied to the load cell.



Wire Colour	Polarity	Connector Pin Nos.
Red	Input (+)	A
Black	Output(-)	B
Blue	Input (-)	C
White	Output(+)	D
Yellow	Shield	E

Fig. 1 - Cable Connections

MAXIMUM EXCITATION VOLTAGE (AC/DC) : 20 V

RECOMMENDED EXCITATION VOLTAGE (AC/DC) : 12 V

INSTALLATION

Refer to Fig. 2 when this load cell is used for a measurement of compressive load. Refer to Fig. 3 when this load cell is used for a measurement of both tensile and compressive loads. With reference to Fig. 4, note that no output can be detected if a load is applied to a flange portion because this load cell is built to accept a load only applied to its centre portion.

- To be continued -

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Because both surfaces of Model SHE is finished by a parallel machining, there is a possibility of an output of this load cell being hurt if this load cell is not mounted correctly on an intended mounting surface in such a way as that its surface is exactly parallel with a mounting surface.

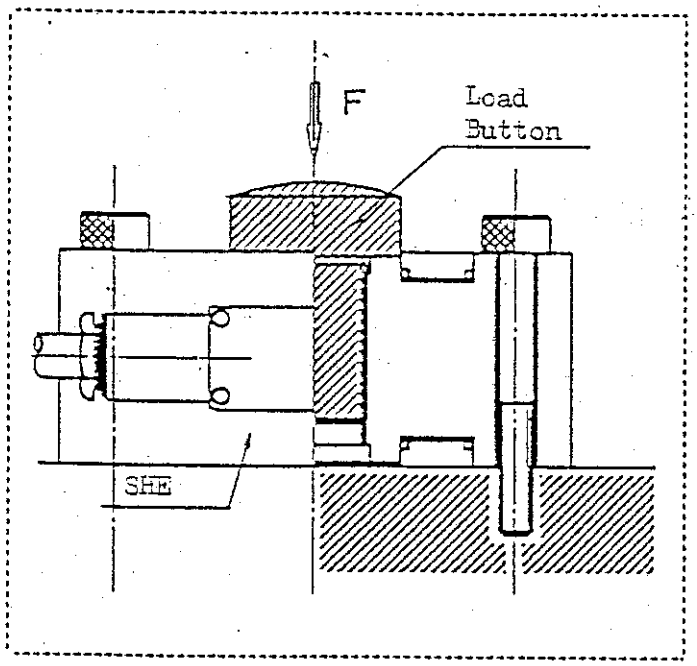

Fig. 2 - Compression Measurement

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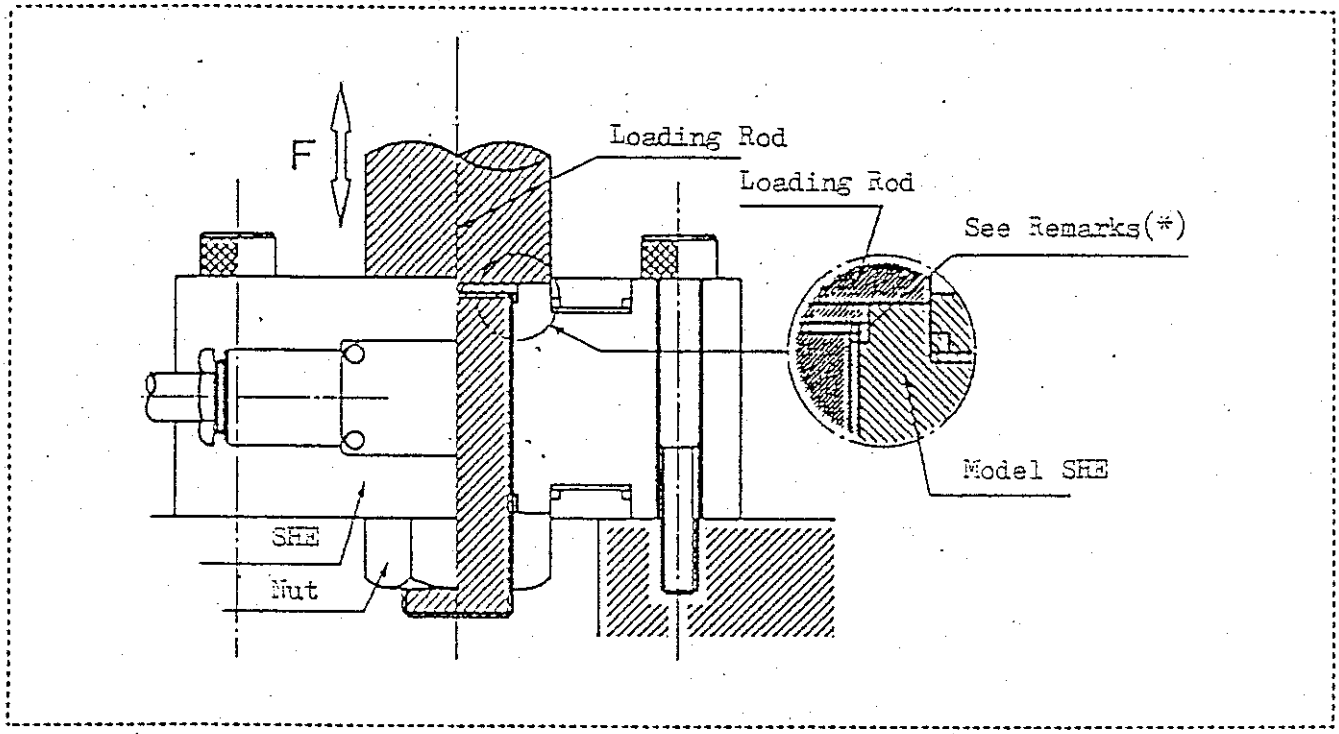


Remarks: An aperture should be prepared without fail (*).

Fig. 3 - Tension/Compression Measurement

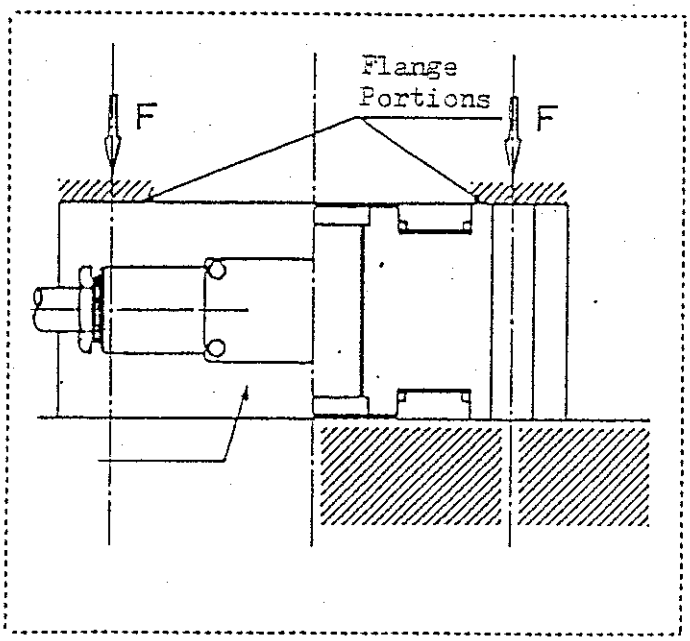
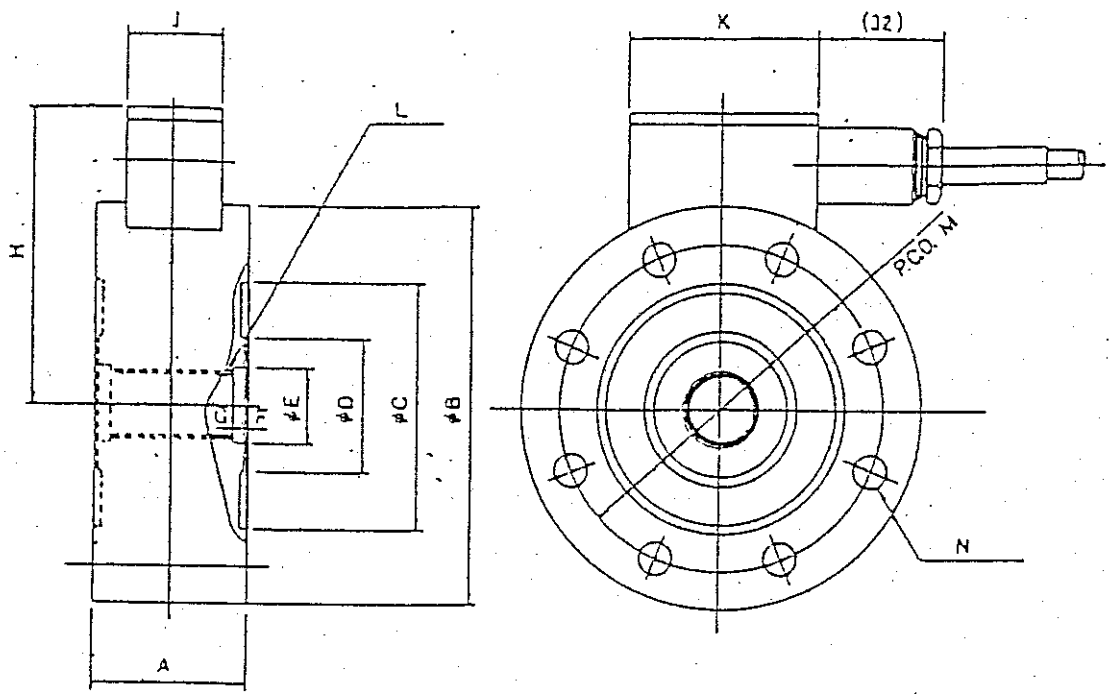


Fig. 4

DIMENSIONAL DRAWING



UNIT : MM

DIMENSIONAL TABLE (UNIT : MM)

MODELS	Rated Capacities	A	B	C	D	E	F	G	H	J	K	L	M	φN
SHE- 5KN	5kN	40	105	65	35	20	1	3	77	25	50	M 18×1.5	85	9
SHE- 10KN	10kN	40	105	65	35	20	1	3	77	25	50	M 18×1.5	85	9
SHE- 20KN	20kN	40	105	65	35	20	1	3	77	25	50	M 18×1.5	85	9
SHE- 50KN	50kN	50	120	74	40	26	1	4	86	25	50	M 24×1.5	95	11
SHE-100KN	100kN	65	160	100	60	40	1	5	108.5	30	55	M 36×2	130	18
SHE-200KN	200kN	80	220	140	80	55	1	5	140.5	30	55	M 50×2	180	26
SHE-500KN	500kN	100	330	200	135	90	2	7	203.5	40	70	M 85×2	265	33
SHE- 1MN	1MN	140	460	280	190	115	2	7	270	40	70	M110×3	370	33

NOTES: 1. Model SHE-1MN alone has a 16-ØN. All other Models will have an 8-ØN.
2. The tolerance of Column "E" above is H7.

REV1999

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STANDARD SPECIFICATIONS

Description	: Model 'SHE' SERIES LOAD CELLS
Rated Capacitities	: 5 KN to 1 MN
Acceptable Overload	: 150% against the rated capacity.
Maximum Overload	: 200% against the rated capacity.
Rated Output	: 2.0 mV/V ± 1%
Linearity	: 0.05%R.O. in rated capacities from 5KN to 200KN. 0.1%R.O. in rated capacities of 500KN and 1MN.
Hysteresis	: 0.1 %R.O. in rated capacities from 5KN to 200KN. 0.1%R.O. in rated capacities of 500KN and 1MN.
Repeatability	: 0.03%R.O. in rated capacities from 5KN to 200KN. 0.1 %R.O. in rated capacities of 500KN and 1MN.
Excitation Voltage	: 20 V (Maximum) 12 V (Recommended)
Input Resistance	: 350 Ohms
Output Resistance	: 350 Ohms
Compensated Temp. Range	: - 10 to + 60°C
Maximum Temp. Range	: - 30 to + 80°C
Thermal Zero Shift	: 0.005% R.O./°C
Thermal Sensitivity Shift	: 0.01%/°C
Cable	: 4-Cond. Shielded Cable, 8 mm dia., 5 m. long.
Connector	: PRC03-12A10-7M

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NOTES

1) This load cell is not waterproofed. Avoid using this load cell in a humid or water-splashing environment.

2) Avoid disassembling this load cell unless authorized by us.

3) Do not drop a solid body on the load cell nor apply an impulsive load to the load cell.

4) It is recommended that a recalibration is made to the load cell once a year or thereabouts.

5) In case when a load or a moment exceeding the rated capacity was applied to the load cell, be certain to effect a recalibration to it in order to confirm that the load cell still operates properly and normally.

WARRANTY

Our warranty period shall be one year from the date of shipment. All units can be repaired free of charge within this period against any failures provided however that such failures took place during their proper use. All repairs should otherwise be paid for by the user. Note that there is a possibility of the unit being unable to be repaired if the unit has already lost its restoring force due to excessive load, moment or supply voltage applied thereto. Periodic inspection or calibration of the unit shall also be paid for.