



This is I.T. Co., Ltd.

1878 Moo 1 Soi Bearing 44 Sukhumvit 107 Rd.

T.Samrongnua A.Muang Samutprakarn Thailand 10270

Hot Line: 091-095-8123 Site: www.thisisit.co.th E-mail: sales@thisisit.co.th

DBJ – ULTRALOW CAPACITY and HIGH ACCURACY LOAD CELL

Features

- Covering the minute wide capacity range 1 to 20N.
- Using special designed 350Ω strain gages for the detection of load, thereby, an excellent linearity or thermal coefficient of 0.025%RO can be attained.
- Attractive load characteristics in maximum overload (200%RO) and in side load (40%).
- Guaranteeing the load leaving off coefficient up to 5 cm maximum and within 0.005%/cm.
- A specially designed mounting table (Optionally supplied) can be utilized as a measuring unit.



Specifications

Safe Overload	200%RC
Maximum permissible overload	300%RC
Acceptable overload of stopper	500%RC
Maximum side load	40%RC
Rated Output	2mV/V±5%
Nonlinearity	0.025% RO
Hysteresis	0.025% RO
Load leaving off coefficient	0.005%/cm
Excitation Voltage	7V (or less)
Safe Excitation Voltage	10V
Input Resistance	350Ω
Output Resistance	350Ω
Compensated Temp.Range	-10 to 45°C
Safe Temp.Range	-20 to 60°C
Temp.Effect on Zero	0.004%RO/°C
Temp.Effect on Output	0.003%/°C
Connector (on body)	Φ4mm-4wire shielded cable, length: 2m (tip peeled off)



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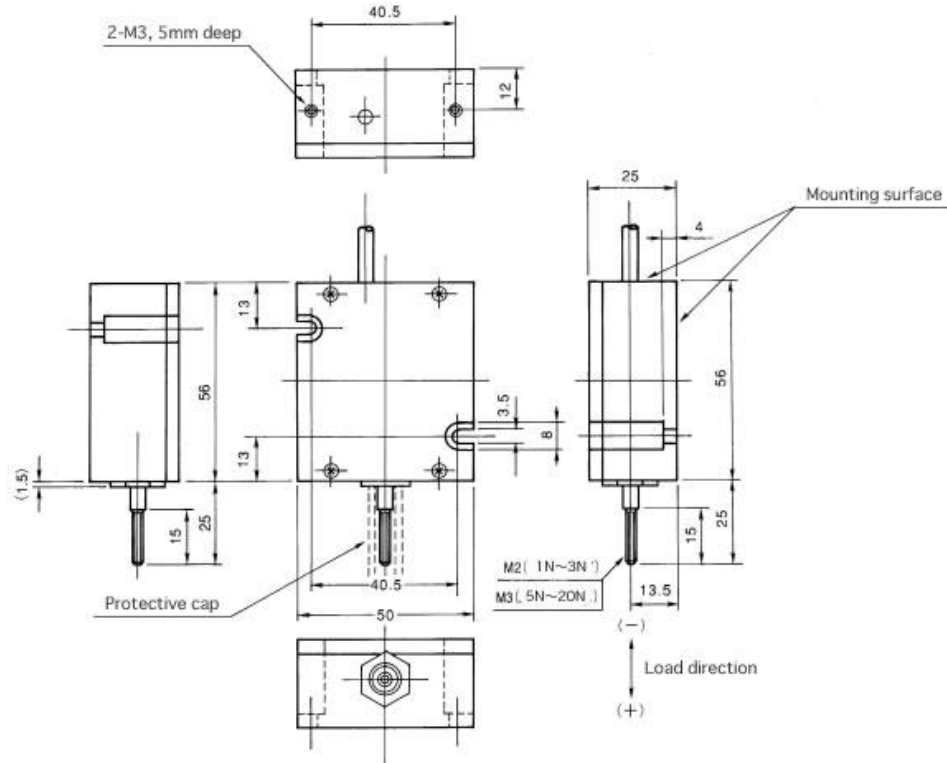
SHOWA MEASURING INSTRUMENTS INC.

Tokyo Japan



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Appearance Dimensions



Model and Capacity / Dimension / etc. (unit : mm)

Model	Capacity	Deflection	Natural frequency	Weight
DBJ-1N	1N	0.42mm	82Hz	125g
DBJ-1.5N	1.5N	0.36mm	110Hz	125g
DBJ-2N	2N	0.35mm	130Hz	125g
DBJ-3N	3N	0.30mm	170Hz	125g
DBJ-5N	5N	0.24mm	180Hz	125g
DBJ-10N	10N	0.20mm	360Hz	125g
DBJ-20N	20N	0.16mm	570Hz	125g

- Weight shown in the above list does not include weight of the cables.
- In the above list, the values of response frequency are represented as the values of natural frequency at the full load.



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- Acceptable overload of stopper: The acceptable overload coefficient of stopper represents the maximum permissible overload value exceeding which the load cell in question can still retain its status as a load cell. In other words, any influences may not be produced in that load cell even in case when internal mechanisms might be damaged within this overload range.
- Maximum Side Load: The maximum side load coefficient represents the permissible load by which a load cell can endure at 90 degree angles with the loading axis of that load cell and it corresponds to 23.5 degrees if expressed by a slant angle against the loading point. Its sensitivity varies in proportion with "cos θ " but its varying accuracy is guaranteed.
- Load Leaving Off Coefficient: The load leaving off coefficient indicates the amount of variations in the output taking place when the load center leaves off from the axial center of the load cell. The leaving off distance of Model DBJ is guaranteed to be 5 cm in the maximum.



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