

**"WBFJ" / High Accuracy and "G" Non-Sensitivity**

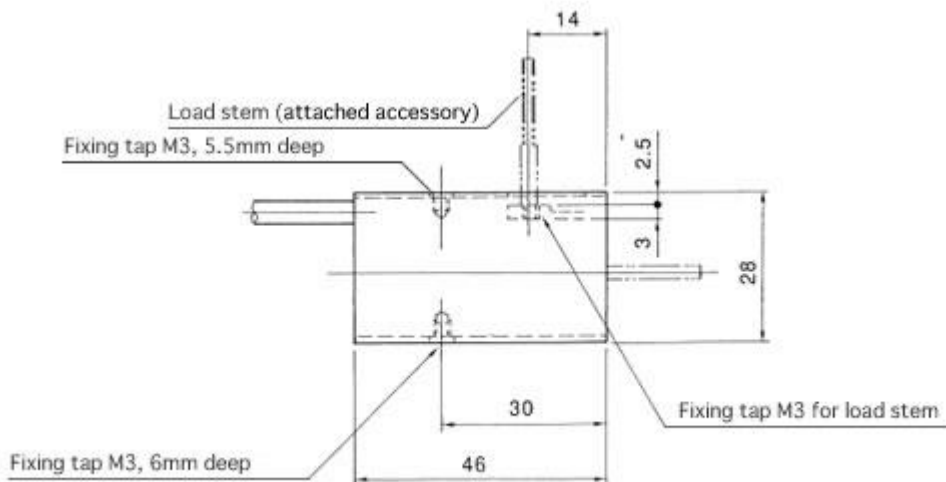
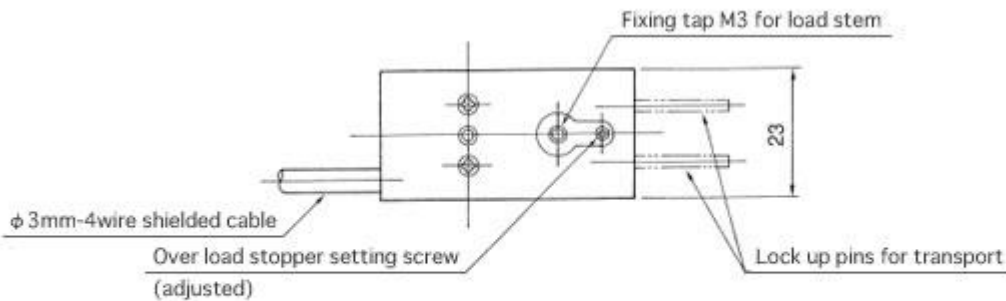


**Features**

- Covering the minute capacity range 0.3N to 1N.
- Built-in mechanisms that are hard to receive any effects from acceleration or inclination caused by vertical movements of load cell.
- Using special designed 350Ω strain gages for the detection of load, thereby, an excellent linearity or thermal coefficient of 0.035%RO can be attained.
- Attractive load characteristics in maximum overload (200%RO) and in side load (30%).
- Guaranteeing the load leaving off coefficient up to 2.5 cm maximum.
- A specially designed mounting table (Optionally supplied) can be utilized as a measuring unit.

Related products : [WBJ](#) / [DBJ](#)...

**Appearance Dimensions**



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

Model	Capacity	Deflection	Natural frequency	Frequency response	Weight
WBFJ-03N	300mN	0.12mm	70Hz	38Hz	37g
WBFJ-05N	500mN	0.09mm	100Hz	48Hz	38g
WBFJ-1N	1N	0.06mm	190Hz	64Hz	40g

- \* 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.

## Specifications

Safe Overload	200%RC
Maximum permissible overload	300%RC
Acceptable overload of stopper	500%RC
Maximum side load	30%RC
Fatigue life	excess of 10 <sup>9</sup> cycles
Rated Output	1.0 mV/V±10%
Nonlinearity	0.035%RO
Hysteresis	0.040%RO
Load leaving off coefficient	0.05%/cm
Excitation Voltage	7V (or less)
Safe Excitation Voltage	10V
Input Resistance	390Ω
Output Resistance	350Ω
Compensated Temp.Range	-10 to 45°C
Safe Temp.Range	-20 to 60°C
Temp.Effect on Zero	0.008%RO/°C
Temp.Effect on Output	0.005%/°C
Cable	Φ3mm-4wire shielded cable, length : 3m(tip peeled off)

- 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 17.5 degrees if expressed by a slant angle against the loading point. Its sensitivity varies in proportion with "cosθ" 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 WBFJ is guaranteed to be 2.5 cm in the maximum.

*Strain Gages  
& Load Cells*



*Micro Sensor Technology*

*SHOWA MEASURING INSTRUMENTS INC.*

*Tokyo Japan*

- Non-sensible characteristics in vertical movements: In the standard practice of this company, the non-sensible characteristics in vertical movements of Model WBFJ should be compensated individually from unit to another. However, a specific load cell to be supplied to the user can be adjusted in accordance with the special nature of the rod which may be used at the user for the purpose of measurement with WBFJ (Option).