

# WBJ Type LOAD CELL INSTRUCTION MANUAL NO. 44

●Cable connection methods.

Connection methods are shown in the <Fig1>  
If you have misconnecting, there might be troubles with zero balance and errors on output voltage under load condition.

●Maximum Admissible Excitation Voltage

Maximum Admissible Excitation Voltage (AC/DC)	10V
Nominal Range of Excitation Voltage (AC/DC)	7V

<Table 1>

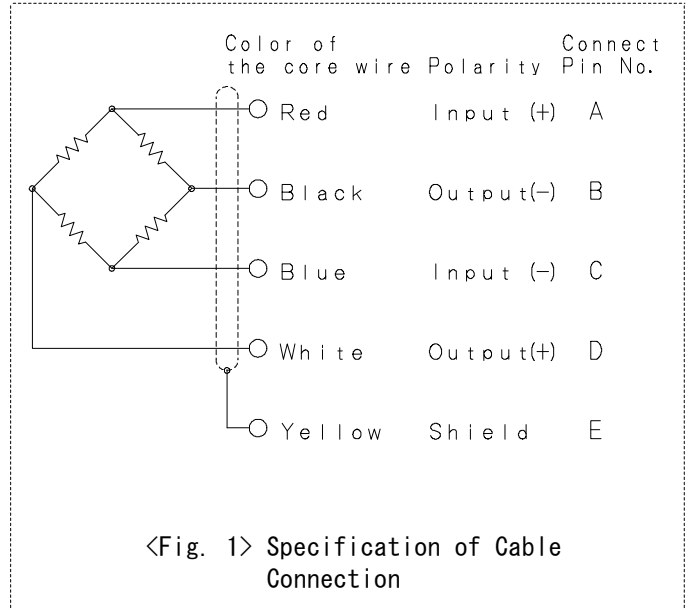
●Mounting method of Model WBJ and cautions to be taken when mounting Model WBJ

Model WBJ shall be mounted on position with reference to Figure. 2.  
For fixing the WBJ a screw hole positioned at the M3 mounting hole is used.  
Two protective pins are playing a role of preventing any damages from being made on the equipment when mounting jigs thereon or when transporting this equipment elsewhere. Protective pins are to be removed from the equipment when it being on actual use.

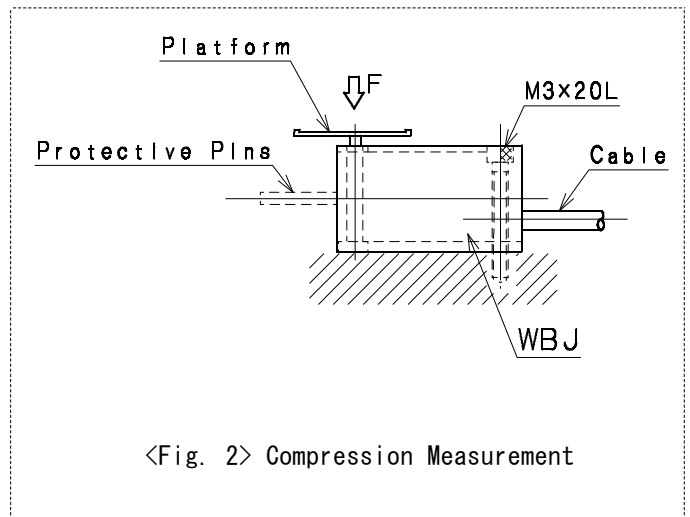
When mounting jigs like measuring plates or measuring pieces on the loading mounting screws, care should be exercised to prevent any side load or torque from being applied to these components because such factors may become a cause of breakage of the equipment.  
We recommend you to mount the jigs on the equipment while, if possible, monitoring outputs on a digital indicator or the like(\*2).

As shown on <Fig.3>, Model WBJ is used for the measurement of behaviors of the small coil springs or small plate springs.

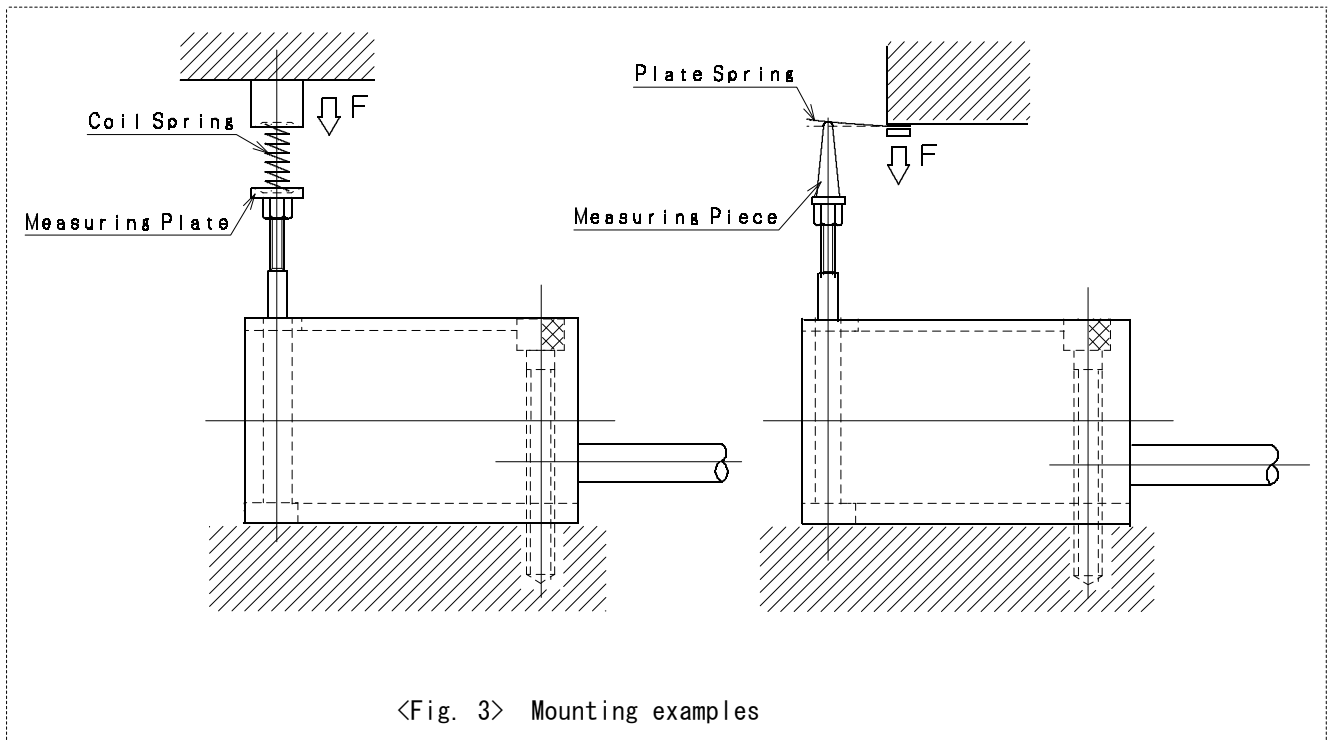
- \*1. Contact our main or local sales offices whenever detailed explanations such as jig mounting procedures are required.
- \*2. Note that there might be a possibility that a digital display does not follow an actual movement of output if the sampling speed of indicators does not sufficiently swift.



<Fig. 1> Specification of Cable Connection



<Fig. 2> Compression Measurement



● Use Environment and Caution

1. This unit is not waterproof.  
Please avoid from water and moisture.
2. Compensated temperature range is  
-10 ~ 45 °C

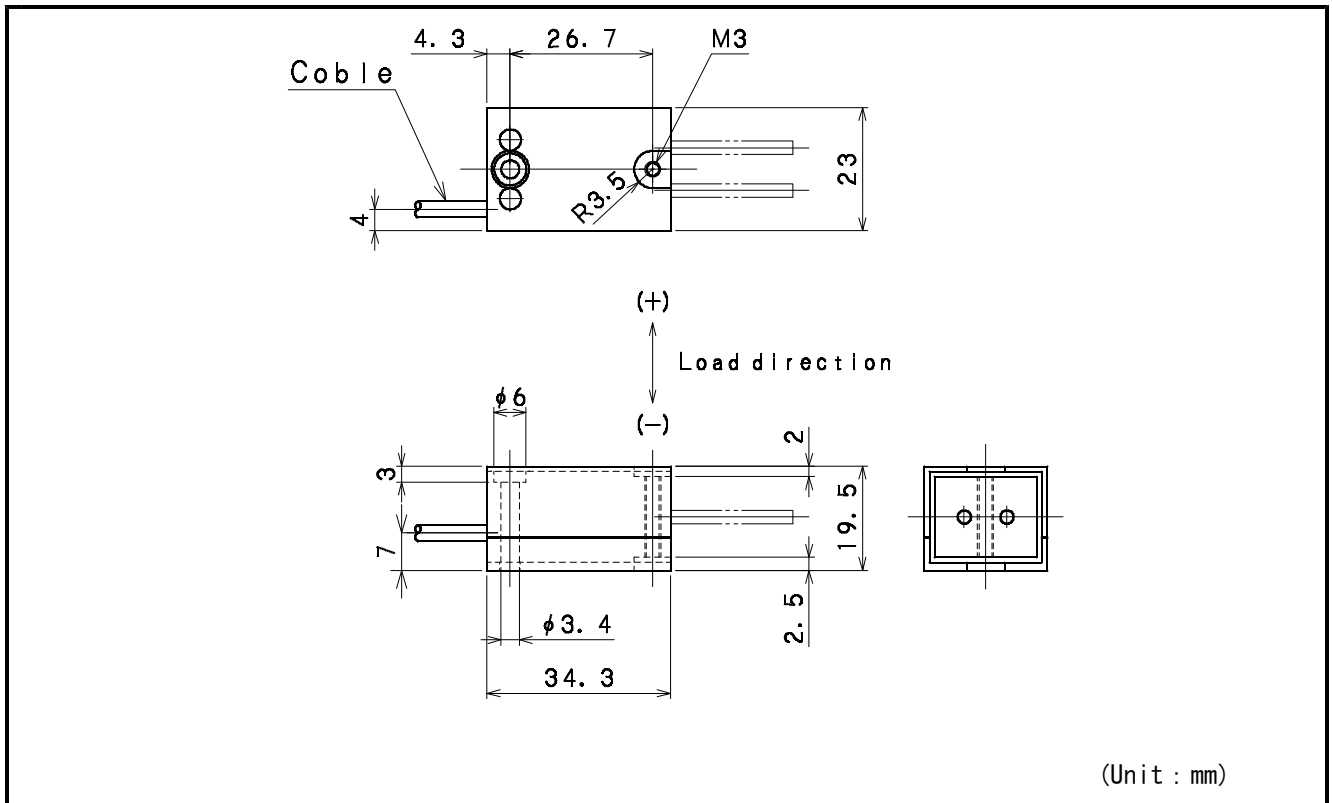
● Maintenance

We suggest you to have a yearly maintenance and calibration (both with the extra charge) to maintain the quality of this product.

● Warranty

This product has a warranty of one year after purchase. When there is any troubles or machine break down, we will repair the machine without any additional charges. But for your misuse or disassembly, then we are not responsible for the guarantee. Please understand the situation that sometimes the machine is beyond repair due to the unlimited overload and voltage.

● Dimensional Drawing



● Dimensional Chart

Model	Rated Capacity	Displacement
WBJ-02N	200 mN	0.2 mm
WBJ-03N	300 mN	0.2 mm
WBJ-05N	500 mN	0.2 mm
WBJ- 1N	1 N	0.1 mm
WBJ- 2N	2 N	0.1 mm

## SPECIFICATIONS

TYPE	WBJ
Rated Capacity	200 mN ~ 2 N
Safe Overload Rating	200%
Safe Over Rating by Stopper	500%
Rated Output	1 mV/V $\pm$ 10%
Linearity	0.035% R.O.
Hysteresis	0.040% R.O.
Error by eccentric load	0.2 %/cm
Admissible Excitation Voltage	10 V, Nominal Range 7 V
Input Resistance	390 $\Omega$
Output Resistance	350 $\Omega$
Compensated Temperature Range	-10 ~ 45 $^{\circ}$ C
Safe Temperature Range	-20 ~ 60 $^{\circ}$ C
Temperature Effect on Zero Balance	0.008% R.O. / $^{\circ}$ C
Temperature Effect on Output	0.005% / $^{\circ}$ C
Cable	$\phi$ 3 mm Four Conductor Shielded Cable 3 m
Remarks	

**SHOWA MEASURING INSTRUMENTS CO., LTD.**

Head Office 1-17-16, Nishi Hokima, Adachi-ku, Tokyo, 121-0812 JAPAN