



ε BTMC-Series Bolt Strain Gauges

GENERAL USE

These gauges are used for measurement of tensile strain of bolt. They are simply inserted into pre-drilled hole in the bolt with exclusive adhesives. This method is recommendable when an ordinary strain gauges can not be mounted on the bolt surface. Accurate tensile force measurement is possible by calibrating the bolt after installing the bolt gauges.

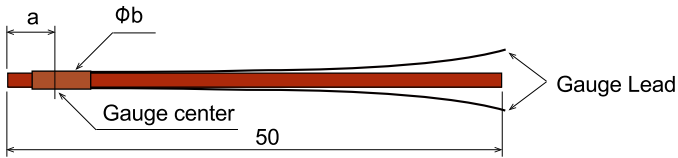
The BTMC gauges have a tube shape sensing element, and they are installed with fast-curing CN adhesive. The installation is easily made at room temperature.



Operating temperature range
-10 ~ +80°C

Applicable adhesives
CN - 10 ~ +80°C

BOLT AXIAL STRAIN MEASUREMENT

Gauge pattern	Type	Gauge Length (mm)	Gauge Center a(mm)	Backing diameter ϕb (mm)	Resistance Ω
<ul style="list-style-type: none"> Single axis 	BTMC-05-D10-003LE (Hole drilled : $\phi 1.0\text{mm}$)	0.5	5	$\phi 0.9$	120
	BTMC-1-D16-003LE (Hole drilled : $\phi 1.6\text{mm}$)	1	5	$\phi 1.5$	120
	BTMC-3-D20-006LE (Hole drilled : $\phi 2.0\text{mm}$)	3	10	$\phi 1.9$	120

Gauge Lead: $\phi 0.1\text{mm}$ Polyimide insulated of 30mm for BTMC-05 and BTMC-1, 60mm for BTMC-3

