

BOLT STRAIN series BTM/BTMC GAUGES

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.

Operating temperature range

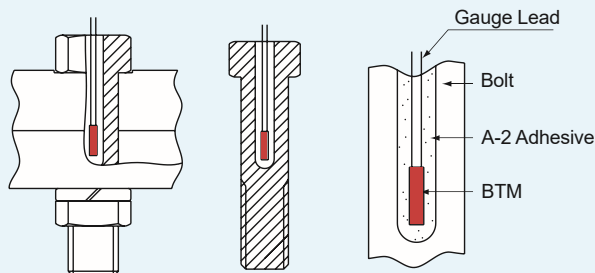


Temperature compensation range

Not available

BOLT AXIAL STRAIN MEASUREMENT

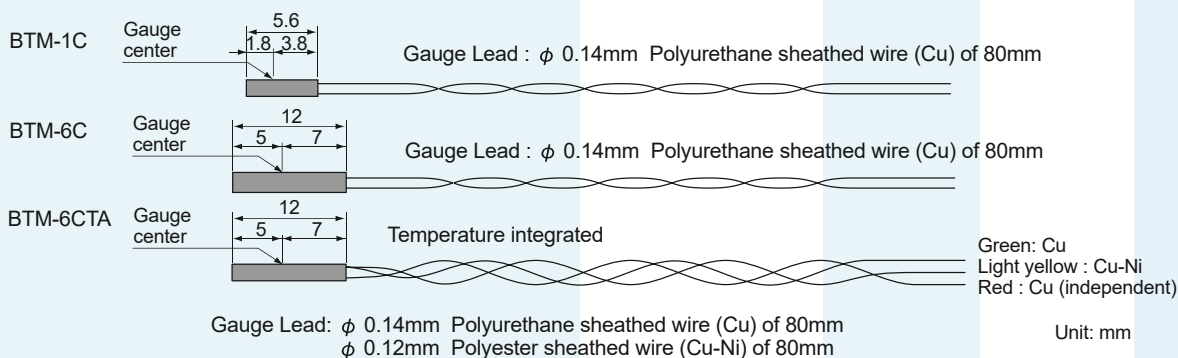
Gauge pattern	Basic type	Gauge size		Backing		Resistance Ω	
		L	W	L	W		
series BTM The BTM bolt gauges use heat-curing A-2 adhesive for installation, which provides better long-term stability.		L : length	W : width (Unit:mm)				
		Applicable adhesives	A-2		-10 ~ +80°C		
		Each package contains 10 gauges.					



BTM-1C Hole drilled: ϕ 1.6mm	1	0.7	5.6	1.4	120
BTM-6C Hole drilled: ϕ 2.0mm	6	1.0	12.0	1.7	120
BTM-6CTA Hole drilled: ϕ 2.0mm	6	1.0	12.0	1.7	120

Temperature integrated applicable in -10~+80°C

NB : Polyurethane sheath of the gauge leads is easily removed by heat of soldering iron, while Polyester sheath is removed by chemical solvent.



Optional syringe and needle

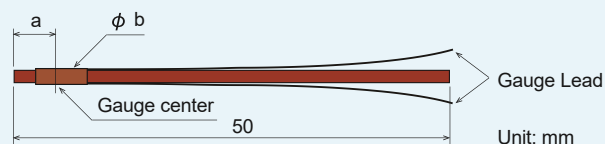
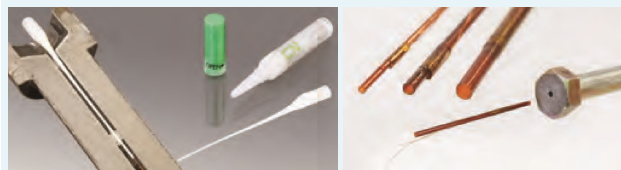


Applicable to	Needle diameter	Needle length
BTM-1C	1.5mm-dia.	60mm
BTM-6C	1.8mm-dia.	100mm

Exclusive syringe for injecting A-2 adhesive into the pre-drilled hole before BTM-1C or -6C gauge is embedded.

series BTMC

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.



Applicable adhesives

CN -10 ~ +80°C

Basic type	Gauge Length (mm)	Gauge Center a (mm)	Backing diameter ϕ b (mm)	Resistance Ω
BTMC-05-D10-003LE Hole drilled: ϕ 1.0mm	0.5	5	ϕ 0.9	120
BTMC-1-D16-003LE Hole drilled: ϕ 1.6mm	1	5	ϕ 1.5	120
BTMC-3-D20-006LE Hole drilled: ϕ 2.0mm	3	10	ϕ 1.9	120

Gauge Lead: ϕ 0.1mm Polyimide sheathed of 30mm for BTMC-05 and BTMC-1, 60mm for BTMC-3