



Frictional Axial Strain Transducer FGAH-1B



Applicable not only for tie-rod of motor cars but also for tension rod of architectural structures

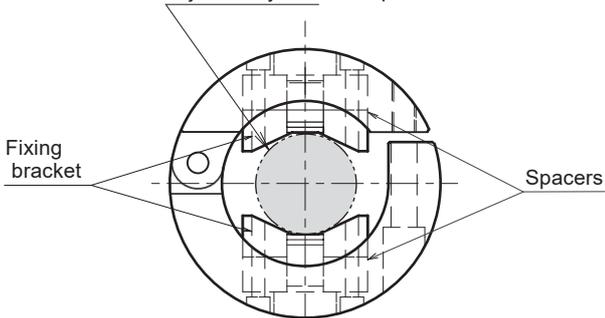
Features

- Easily installed by just clamping-on without detaching the existing tie-rod
- Tensile force management of rod between sheet piles or in architectural structures is easily achieved – The transducer can be used repeatedly
- Applicable rod:
FGAH-1B-R : Diameter is 10 to 25mm
FGAH-1B-H : Width cross flats 10 to 25mm
(Optional spacers are required)
- Small and light construction which allows installation in a narrow space

Dimensions

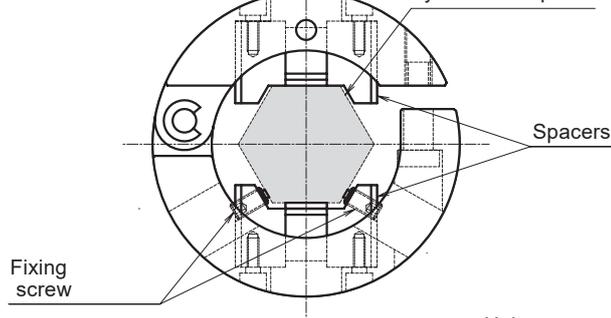
FGAH-1B-R

Shaft (Rod) $\Phi 10 \sim 25\text{mm}$
adjustable by 0.1mm step



FGAH-1B-H

Width across flats
10~25mm adjustable
by 0.1mm step



Unit : mm

This transducer measures axial strain of steering tie-rod of a car and consists of two types FGAH-1B-R and FGAH-1B-H for which a cross section of the rod is round shape or hexagon's. It is also suited to measure axial strain of a tension rod used in aseismic reinforcement structure or in steel frame structure. Since frictional strain gauges are used in this transducer, installation is completed and it gets ready for measurement by merely pinching the rod with the transducer, without detaching the rod. There is no need of technical skill and complicated works for attaching strain gauges on the rod.

NB:

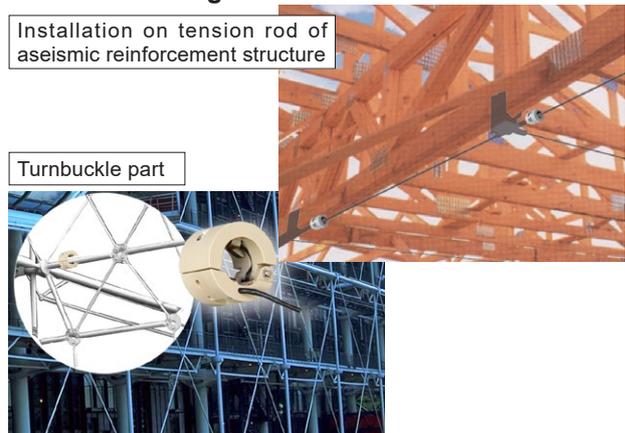
- Frictional strain gauges are consumable parts.
Applicable type of frictional strain gauges is CBFC-2 (option).

Specifications

Type	FGAH-1B-R	FGAH-1B-H
Applicable shaft	Round shape $\Phi 10 \sim 25\text{mm}$	Hexagon shape Width across flats 10~25mm
Capacity	$\pm 1000 \times 10^{-6}$ strain	
Rated output	Approx. 2600×10^{-6} strain	
Non-linearity	1%RO	
Allowable temperature range	$-30 \sim +60^\circ\text{C}$ (no dew condensation)	
Frequency response	Approx. 6.5kHz	
Input/output resistance	$1000\Omega \pm 3\%$	
Dimensions	Approx. $\Phi 52 \times 35\text{mm}$	
Weight	Approx. 55g (excluding spacers and cable)	
Protection rating	Equivalent to IP51	
Recommended exciting voltage	2V	
Allowable exciting voltage	5V	
Input/output cable	$\Phi 3.2\text{mm}$ 0.08mm ² 4-core shielded vinyl cable 5m	

Installation image

Installation on tension rod of
aseismic reinforcement structure



Turnbuckle part



Installation on steering tie-rod of a car

