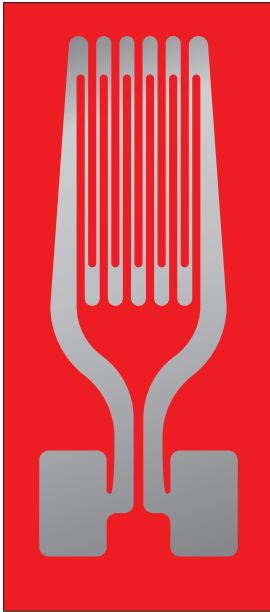




# GOBLET series



In a conventional strain gauge, the gauge leads, which conduct electrical signal to the metal foil called gauge element, are soldered using leaded solder. The leaded solder is an alloy composed of lead and tin, and the lead is effective to reduce the stress because it is soft. On the other hand, the lead is not only harmful to human bodies but may cause adverse effects on the natural environment. Use of lead-free solder is required according to the RoHS Directive. However, in the combination of lead-free solder and conventional strain gauge pattern, fatigue life conforming to the NAS 942 is not satisfied for some strain gauges. We have developed a new gauge pattern that does not cause stress concentration even if the lead-free solder is used. We propose our next generation strain gauge GOBLET, which maintains the conventional strain gauge performance while considering the environment by the adoption of the new gauge pattern.

The concept of development of GOBLET is "Gauges Of Brilliant Lifespan and Environmentally Thoughtful", which represents the excellent fatigue life and small environmental effect of these strain gauges. The GOBLET is series of our strain gauges which are compliant to RoHS Directive and CE marked.

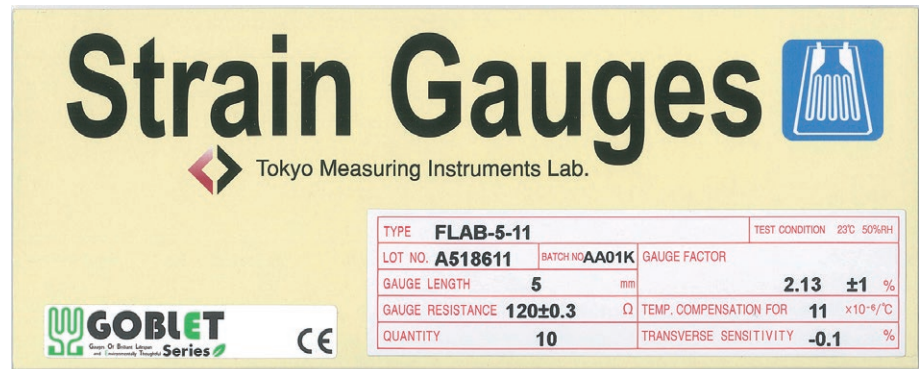
The GOBLET is currently available for the series below. The dedicated leadwires which use lead-free solder are also available.

- Strain gauge for general use F-series (partly not compliant)
- Strain gauge for high temperature use QF-series (partly not compliant)
- Strain gauge for composite material BF-series
- Strain gauge for plastics GF-series
- Strain gauge for wood and gypsum LF-series
- Strain gauge for post-yield (large strain) measurement YEF-series

## GOBLET Logo (Registered design)



Package of GOBLET series strain gauges (example)



The GOBLET strain gauges bear the logo and the CE mark on their package.

## Dedicated leadwires (using lead-free solder)

Leadwire name	Suffix code	Number of cores/Core diameter(mm)	Cross sectional area (mm <sup>2</sup> )	Operating temperature range (Leadwire only)
Parallel vinyl leadwire	LJB-F	7/0.12	0.08	-20 ~ +80 °C
3-wire parallel vinyl leadwire	LJBT-F	7/0.12	0.08	-20 ~ +80 °C
Parallel vinyl leadwire	LJC-F	10/0.12	0.11	-20 ~ +80 °C
3-wire parallel vinyl leadwire	LJCT-F	10/0.12	0.11	-20 ~ +80 °C
Polypropylene 4-wire parallel leadwire	LQM-F	7/0.12	0.08	-20 ~ +100 °C
3-wire parallel special vinyl leadwire	LXT-F	7/0.12	0.08	-20 ~ +150 °C
3-wire twisted fluorinated resin (FEP) leadwire	6FA □ LT-F	7/0.18	0.18	-269 ~ +200 °C
3-wire twisted fluorinated resin (FEP) leadwire (Surface treatment (tetra-etching) is not required)	6FAS □ LT-F	7/0.18	0.18	-269 ~ +200 °C
3-wire twisted fluorinated resin (FEP) single-core leadwire	6FB □ LT-F	1/0.2	0.03	-269 ~ +200 °C
3-wire twisted fluorinated resin (FEP) leadwire	6FC □ LT-F	7/0.08	0.04	-269 ~ +200 °C
Polyurethane leadwire	LJP-F	1/0.14	0.015	-10 ~ +120 °C
Polyester leadwire	LJU-F	1/0.14	0.015	-196 ~ +200 °C
Polyimide leadwire	LJE-F	1/0.14	0.015	-269 ~ +300 °C