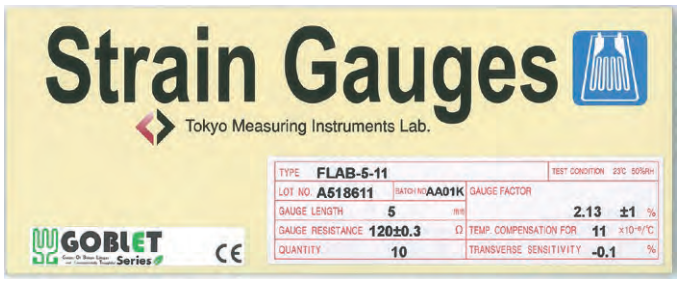
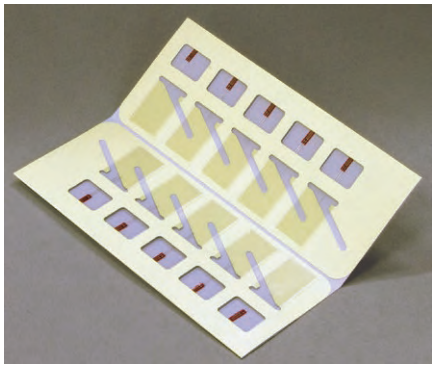
PACKAGE DESIGNATION

TML strain gauges are delivered together with TML Strain Gauge Test Data (example shown below). The evaluation methods conform to the National Aerospace Standard NAS942 (modified). For installation, handling and bonding procedures, please see the data sheet.

GAUGE PACKAGE





CE compliance

Affixing the CE marking and our logo mark of strain gauge GOBLET series to a container package

Batch No.

Production code for procedure and history.

Environment

Temperature in degrees centigrade and relative humidirty in % at which the test data are obtained.

TEST DATA

Gauge type	TYPE	FLAB-5-11		TEST CONDITION	23℃ 50%RH
Lot No.	LOT NO.	A516611	BATCH NO RK32C	GAUGE FACTOR	
	GAUGE LENGTH	5 mm		2.10 ±1 %	
	GAUGE RESISTANCE	120±0.3 Ω		TEMP. COMPENSATION FOR 11	×10⁻⁶/℃
	QUANTITY	10		TRANSVERSE SENSITIVITY 0.3	%

Quantity

Number of gauges contained in a package.

Gauge resistance

Electrical resistance of the strain gauge under free conditions at room temperature, unbonded as supplied. Various range (60, 120, 350 or 1000Ω) are available.

Gauge length

This represents the actual grid length in the axial direction. Within this length, the measured strain is averaged.

Ratio of transverse sensitivity

The sensitivity in the direction perpendicular to the axial direction in percent.

Applicable temperature compensation

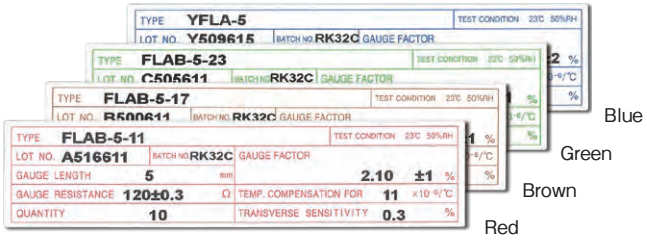
Various temperature compensation values are available (3, 5, 8, 11, 17, 23, 28, 50, 70ppm/° C)
(Blank indicates temperature compensation not available.)

Gauge factor with tolerance

This factor is a ratio of the resistance variation to the strain generated due to the uniaxial stress in the direction of the gauge axis.

COLOR CODING FOR TEST SPECIMEN

Colors of package label differ depending on the test specimen material for temperature compensation.



Test specimen	Linear thermal expansion coefficient	Coloring	Gauge type exampled
Mild steel	11×10^{-6}/° C	Red	FLAB-5-11
Stainless steel Copper alloy	17×10^{-6}/° C	Brown	FLAB-5-17
Aluminium	23×10^{-6}/° C	Green	FLAB-5-23
Others	-	Blue	YEFLAB-5

LEADWIRE-INTEGRATED STRAIN GAUGE PACKAGE

LJCT : 3-wire system

TYPE	FLAB-5-11-3LJCT-F		
LOT NO.	A518611	GAUGE LENGTH	5 mm
GAUGE FACTOR	2.13	±1 %	
GAUGE RESISTANCE	120±0.5 Ω	QUANTITY	10
TEMP. COMPENSATION FOR	11 ×10⁻⁶/℃	TEST CONDITION	23℃ 50%RH
TRANSVERSE SENSITIVITY	−0.1 %	BATCH NO.	AA01K
LEAD WIRES	10/0.12 3W 3m		

LJB : 2-wire system

TYPE	FLAB-5-11-5LJB-F		
LOT NO.	A518611	GAUGE LENGTH	5 mm
GAUGE FACTOR	2.13	±1 %	
GAUGE RESISTANCE	117.7±0.3 Ω	QUANTITY	10
TEMP. COMPENSATION FOR	11 ×10⁻⁶/℃	TEST CONDITION	23℃ 50%RH
TRANSVERSE SENSITIVITY	−0.1 %	BATCH NO.	AA01K
LEAD WIRES	7/0.12 2W 5m r=0.44Ω/m		

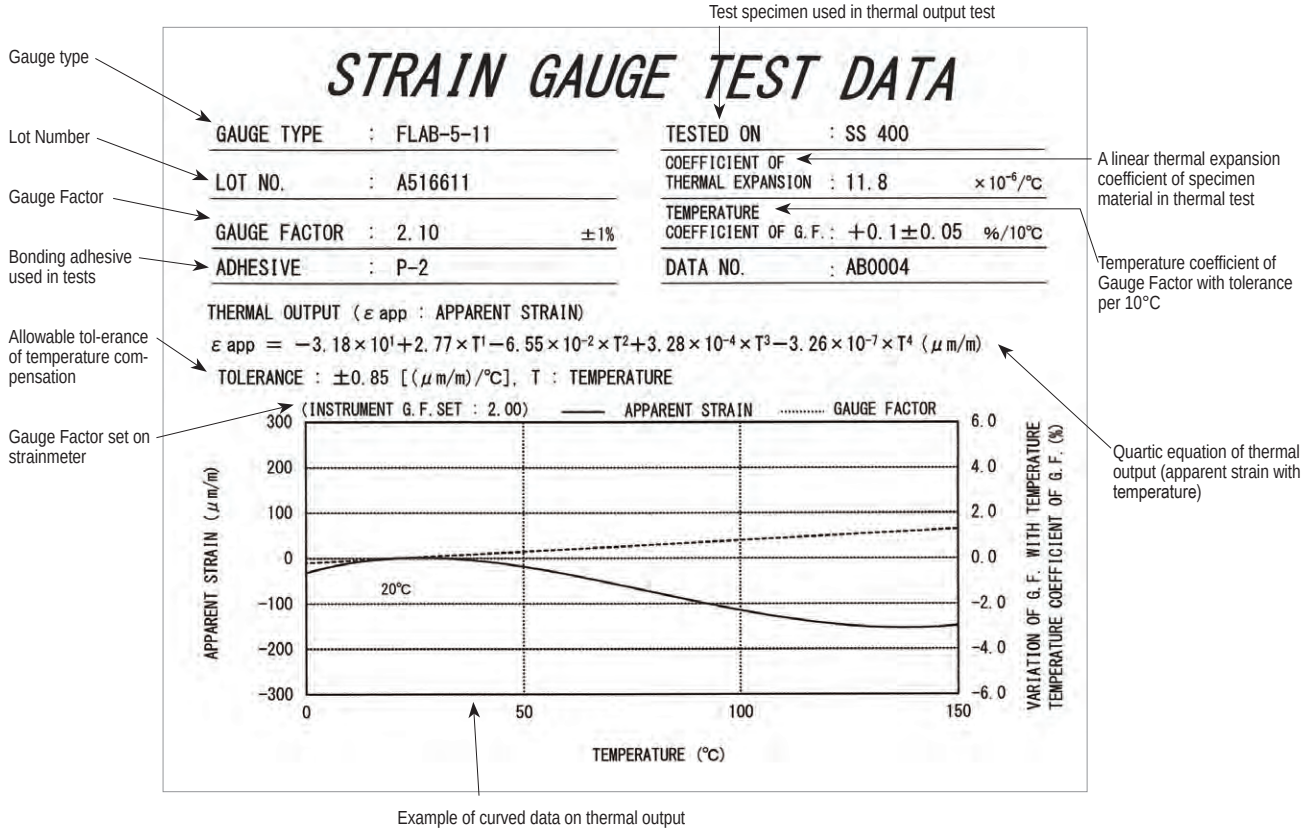
LEADWIRES

Core number/diameter Wiring system Length of leadwire
FLAB-5-11-3LJCT-F (Left)
10/0.12 3W 3m : 10-core 0.12mm diameter, 3-wire, 3-meter long.
FLAB-5-11-5LJB-F (Right)
7/0.12 2W 5m r=0.44Ω/m : 7-core 0.12mm diameter, 2-wire, 5-meter long, leadwire resistance per meter 0.44Ω above

GAUGE RESISTANCE

For pre-attached strain gauge, the gauge resistance value does not include the lead wire resistance. For correction of gauge factor due to the prolonged leadwire resistance, refer to the resistance per meter (r value) given in LEAD WIRES.

STRAIN GAUGE TEST DATA



GAUGE FACTOR OF LEADWIRE PRE-ATTACHED STRAIN GAUGES

The gauge factor of a leadwire pre-attached strain gauge given in its STRAIN GAUGE TEST DATA and package label is a value of the strain gauge itself. Since the given gauge factor does not include the influence of the leadwire resistance, it should be corrected referring to the description of “Gauge factor correction due to leadwire” in “Handling of strain gauge” which is found in the attached test data. The correction should be made considering the influence of all leadwires that are actually connected.