



# Non-inductive Strain Gauges QMF series NEW

These are non-inductive strain gauges suited to the measurement in magnetic field. The sensing element of this gauge consists of two identical grids with one grid folded back on another. This construction makes to cancel the electromagnetically induced noise each other. The twisted leadwire is also effective to cancel the induced noise in the same way. Accordingly, this strain gauge is less sensitive to the influence of noise induced in changing magnetic field.

Operating temperature range	-30~+200°C	Applicable adhesives	CN -30~+120°C
Temperature compensation range	0~+150°C	NP-50B	-30~+200°C

Please specify the type number as shown in the example below.

**QMFLA -2 (-350) -11 -005LET-6FD1LTSS-F**

↑ Gauge series name    ↑ Gauge length    ↑ Gauge resistance (blank for 120Ω)    ↑ Objective material for temperature compensation    ↑ 3-wire from the root of gauge leads (blank for 2-wire)    ↑ Length in meter and type of integral leadwire CE compliant leadwire

Objective material for temperature compensation (coefficient of linear thermal expansion  $\times 10^{-6}/^{\circ}\text{C}$ )  
 -11: Mild steel    -17: Stainless steel    -23: Aluminium

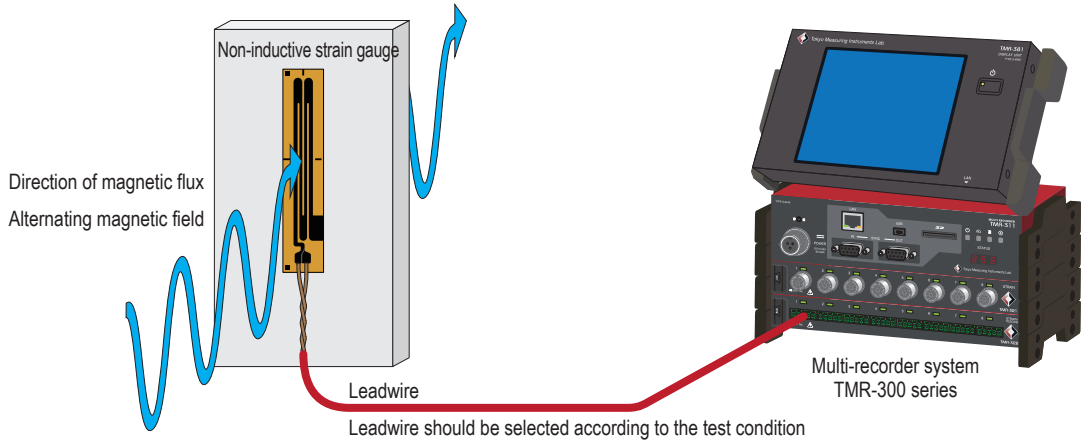
Note: The backing color of QMF series gauges are the same for every material for temperature compensation.

## Single axis (for steel)

Gauge pattern	Type	Gauge size (mm)		Backing size (mm)		Resistance (Ω)
		Length	Width	Length	Width	
<p>●Single axis</p>	QMFLA-2	2	0.5	5	1.5	120
	QMFLA-5	5	0.8	9	1.8	120
	QMFLA-2-350	2	0.3	4.5	1.5	350
	QMFLA-5-350	5	0.3	7.8	1.5	350

• Minimum order quantity is 10 strain gauges.  
 • These strain gauges need to be supplied with integral leadwires (made-to-order).

### Important point




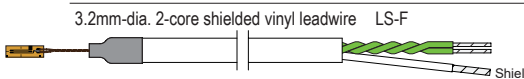
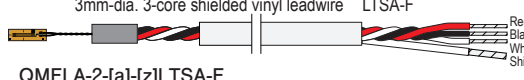
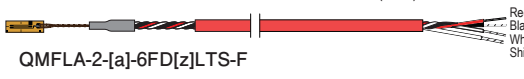


### Features

- Gauge resistance of 120 Ω is added to the product lineup
- Connection is selected from quarter bridge 2-wire, quarter bridge 3-wire and quarter bridge 3-wire (with 3-wire from the root of gauge leads) according to the test condition
- Operating temperature range is extended to -30 ~ +200°C (temperature compensation range to 0 ~ +150°C)
- Gauge lead length of approx. 50 mm allows easy bonding works (only for the gauges with 3-wire from the root of gauge leads)
- CE marked

## Strain Gauge Extension Leadwires Recommended for QMF Series

We offer various types of extension leadwires dedicated to strain gauges in order to satisfy customers' requirements.

### Type and designation of leadwire

Application	Leadwire name	Operating temperature range of leadwire (°C)	Loop resistance per 1 meter (Ω)	Example of type number
Magnetic field Room temperature (without temperature change)	2-wire twisted vinyl leadwire LJAY-F  QMFLA-2-[a]-[z]LJAY-F	-20 ~ +80	0.44	QMFLA-2-11-1LJAY-F
	3.2mm-dia. 2-core shielded vinyl leadwire LS-F  QMFLA-2-[a]-[z]LS-F	-20 ~ +80	0.44	QMFLA-2-11-1LS-F
Magnetic field Room temperature	3mm-dia. 3-core shielded vinyl leadwire LTSA-F  QMFLA-2-[a]-[z]LTSA-F	-20 ~ +80	0.44	QMFLA-2-11-1LTSA-F
Magnetic field High temperature	1.5mm-dia. 3-core shielded fluorinated resin (FEP) leadwire 6FDOLTS-F  QMFLA-2-[a]-6FD[z]LTS-F	-30 ~ +200	1.1	QMFLA-2-11-6FD1LTS-F
Magnetic field Room temperature (with 3-wire from the root of gauge leads)	3mm-dia. 3-core shielded vinyl leadwire LTSAS-F  QMFLA-2-[a]-005LET-[z]LTSAS-F	-20 ~ +80	0.44	QMFLA-2-11-005LET-1LTSAS-F
Magnetic field High temperature (with 3-wire from the root of gauge leads)	1.5mm-dia. 3-core shielded fluorinated resin (FEP) leadwire 6FDOLTSS-F  QMFLA-2-[a]-005LET-6FD[z]LTSS-F	-30 ~ +200	1.1	QMFLA-2-11-005LET-6FD1LTSS-F

[a] : Objective material for temperature compensation (coefficient of linear thermal expansion  $\times 10^{-6}/^{\circ}\text{C}$ )

[z] : Leadwire length (m)

