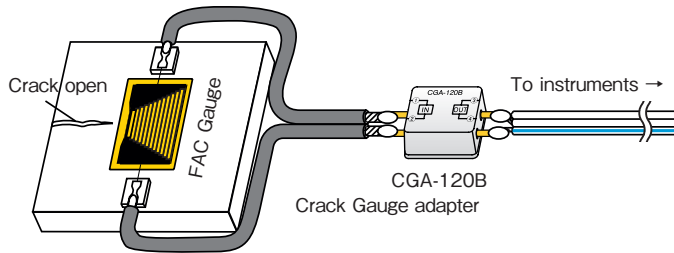




Crack Detection Gauges FAC series $\text{C}\epsilon$

These gauges are designed to measure the propagation speed of fatigue crack in a metal specimen. The gauges are bonded with an adhesive on the position where the crack is initiated or the crack initiation is expected. The grids of the gauges, which are aligned at interval of 0.1mm or 0.5mm, are disconnected one by one with the propagation of the crack. The gauges are used together with the crack gauge adapter CGA-120B, and the disconnection of one grid is measured as the change of approx. 45 or 40×10^{-6} strain by a strainmeter.

Operating temperature range	-30~+80°C	Applicable adhesives	
		CN	-30~+80°C
		RP-2	-30~+80°C



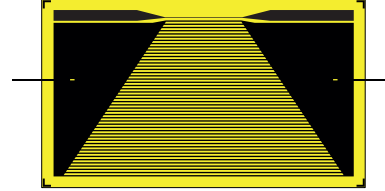
CRACK GAUGES

Gauge type	FAC-5	FAC-20
Measuring range	4.5mm	20mm
Gauge resistance	approx. 1Ω	
Grid interval	0.1mm	0.5mm
Number of grids	46	41
Output per grid	approx. 45×10^{-6} strain	approx. 40×10^{-6} strain
Operating temperature	-30~+80°C	
Backing size	28 x 5mm	43 x 25mm

● Crack Gauges



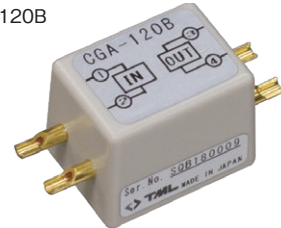
FAC-5



FAC-20

Minimum order quantity is 10 crack gauges.

● Crack Gauge adapter CGA-120B



Minimum order quantity is 1 crack gauge adapter.

Crack Gauge adapter CGA-120B

Measuring point	1 point
Allowable temperature	-30~+80°C
Bridge connection	Quarter bridge 3-wire method 120Ω
Dimensions	20(W) x 15(H) x 15(D) mm (except projection parts)
Weight	5g

• Option F: LEAD-free soldering

Example) Crack gauge FAC-5-F / FAC-20-F
adapter CGA-120B-F



AXIAL STRESS MEASUREMENT

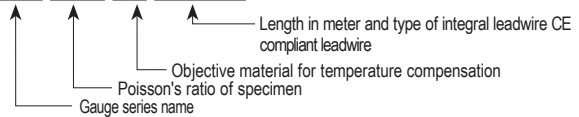
Stress Gauges SF series $\text{C}\epsilon$

These gauges are intended to measure the stress in an optional direction of the specimen in plane stress field. The gauges are sensitive not only in these axial direction but also in the transverse direction, and the sensitivity ratio of the transverse direction to the axial direction is equal to the Poisson's ratio of the specimen material. In addition, the gauges are not sensitive to the shearing strain. Accordingly, the output of the gauges is proportional to the stress in the axial direction. The gauges are available in three types depending on the Poisson's ratio of the specimen material.

Operating temperature range	-20~+200°C	Applicable adhesives	
Temperature compensation range	+10~+100°C	NP-50B	-20~+200°C
		C-1	-20~+200°C
		CN	-20~+120°C

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

SFA-285-11-3LJC-F



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 SF series gauges are the same for every material for temperature compensation.

Gauge pattern	Poisson's ratio of specimen	Type	Gauge size(mm)		Backing size(mm)		Resistance Ω
			Length	Width	Length	Width	
● Single axis SFA-285	0.285	SFA-285-11					
 SFA-305-17 Q (×3)	0.305	SFA-305-17	4	3	9	6	120
	0.330	SFA-330-23					

Minimum order quantity is 10 strain gauges.
These strain gauges are available with integral leadwires attached. (made to order)