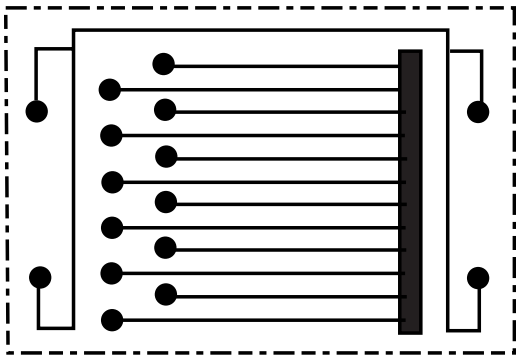
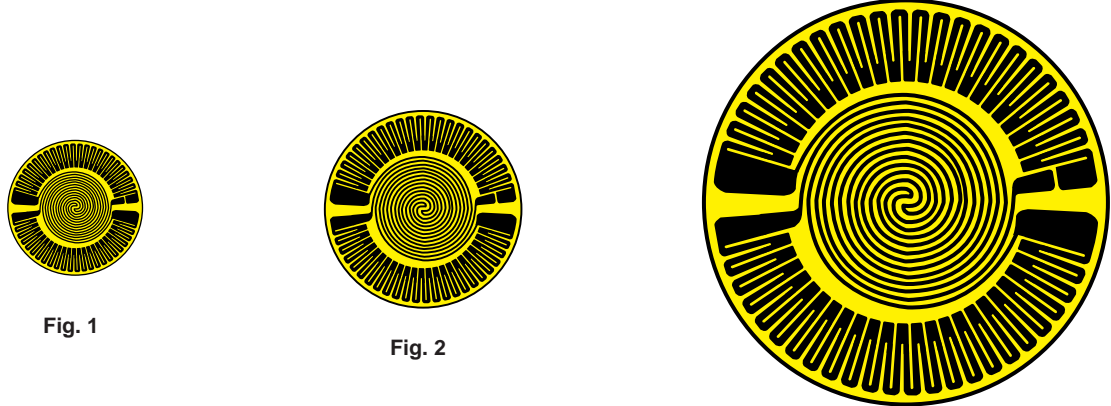


OMEGA[®] STRAIN GAGES

CRACK AND DIAPHRAGM GAGES

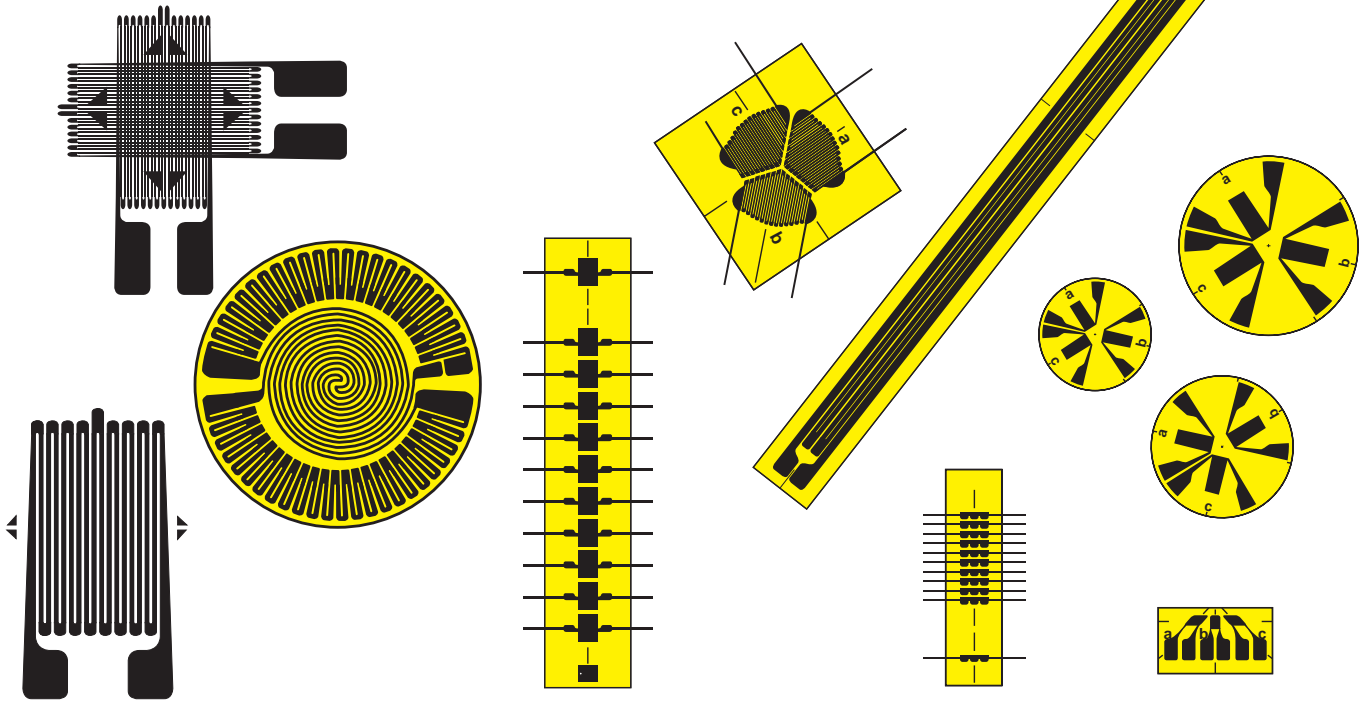
Crack propagation gages are used to monitor crack growth. The gage is glued in place, and, as the crack grows under the gage, each of the limbs undergoes strain. The limbs are equally spaced, and when the limb undergoes 2% strain, it breaks. By monitoring the

continuity of each limb and the time when the limbs break, studies of the crack growth can be completed. The gages also incorporate a boundary limb, so that measuring equipment can be switched on when the crack reaches the gage area.

To Order (Specify Model Number)									
TYPE SERIES MODEL NO.	PRICE PER PKG OF 5	NOMINAL RESISTANCE (Ω)	DIMENSIONS [MM]				MAX PERMITTED BRIDGE ENERGIZING VOLTAGE (V RMS)	ACCESSORY TERMINAL PADS PART NO.	FIG.
			LIMBS		CARRIER				
			A	B	C	D			
SG-CP1	\$129	—	1.6	1.6	10.7	10.7	—	TP-2	2
<p>Crack Propagation Gage</p>  <p style="text-align: right;">Enlarged 4 Times</p>									
SG-13/200-DG11	\$165	200	Carrier Dia.:		13.2	10	TP-2	1	
SG-20/240-DG11	189	240	Carrier Dia.:		20	15	TP-2	2	
<p>Full Bridge Diaphragm Strain Gage</p> <p>✓ Encapsulated Diaphragm Gage with Ribbon Leads</p>  <p style="text-align: center;">Fig. 2 Enlarged 2 Times</p>									

OMEGA[®] STRAIN GAGES

SPECIFICATIONS CHART



	SG SERIES	KFG SERIES
Foil strain gages are constructed by embedding a foil measuring element into a carrier. Foil measuring grid Carrier Substrate thickness Cover thickness Connection dimensions in (mm) [in]	Constantan foil 5 µm thick Polyimide 50 µm 25 µm Solder pads or ribbon leads (30 long x .05 thick x 3 wide) [1.2 long x .002 thick x .012 wide]	Constantan foil 6 µm thick Kapton 15 µm 9 µm 27 AWG strand polyvinyl insulation (1 x 2) [.04 x .08]
Nominal resistance Resistance tolerance per package Gage factor ($\mu\Omega/\mu\mu\Omega$) (actual value printed on each package) Gage factor tolerance per package	Stated in "to order" box 0.5% Approximately 2.0 1.0%	120 \pm 0.4 ohms 03% 2.10 \pm 10% 1.0%
Thermal Properties Reference temperature Service temperature: Static measurements Dynamic measurements Temperature characteristics: Steel Aluminum Uncompensated Temperature compensated range Tolerance of temp. compensation	23°C/73°F -30 to 250°C (-22 to 482°F) -30 to 300°C (-22 to 572°F) 11 ppm°C (6.1 ppm°F) 23 ppm°C (12.8 ppm°F) \pm 20 ppm°C (\pm 11.1 ppm°F) -5 to 120°C (5 to 248°F) 1 ppm°C (0.5 ppm°F)	23°C/73°F -20 to 100°C (-4 to 212°F) -20 to 100°C (-4 to 212°F) 10.8 ppm°C (6 ppm°F) — 10 to 80°C (50 to 176°F) 1 ppm°C (0.5 ppm°F)
Mechanical Properties Maximum strain Hysteresis Fatigue (at \pm 1500 µε) Smallest bending radius Transverse sensitivity	3% or 30,000 µε Negligible > 10,000,000 cycles 3 mm (1/8 inch) —	5% or 50,000 µε Negligible > 10,000,000 cycles 3 mm (1/8 inch) Stated on each package



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