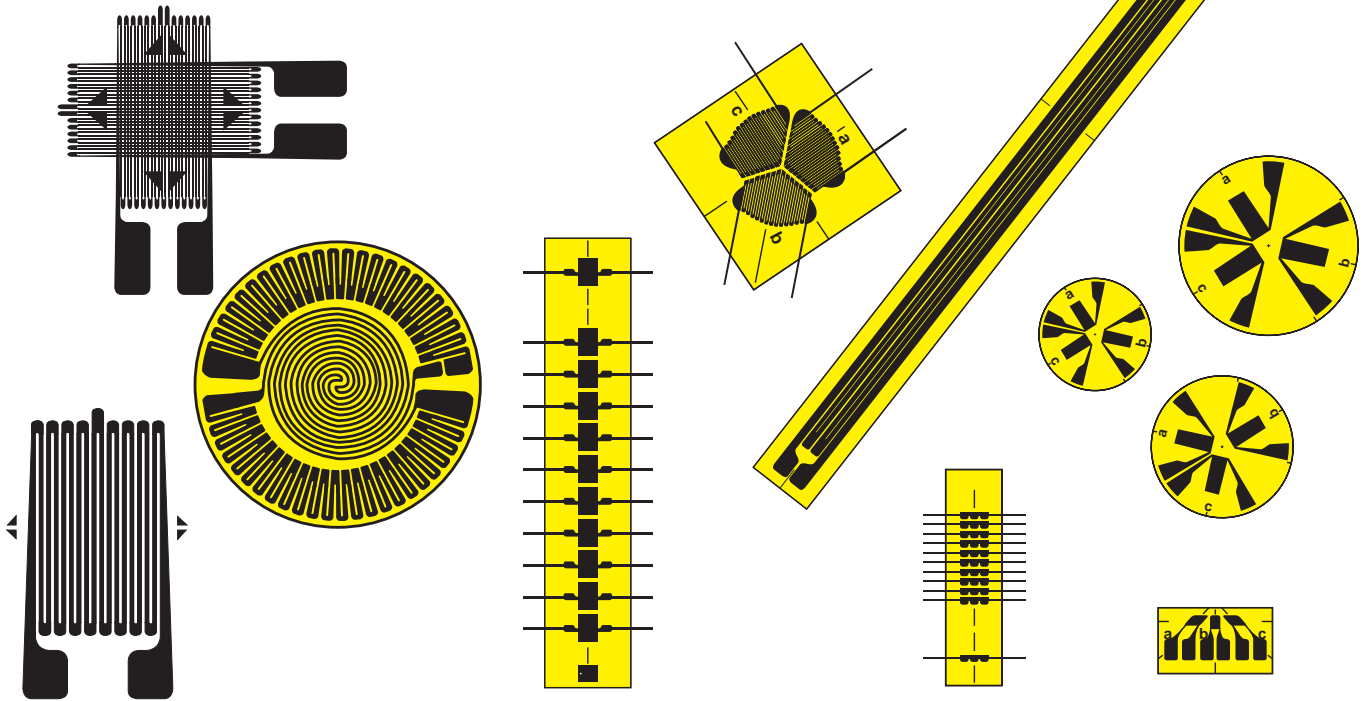


OMEGA[®] STRAIN GAGES

SPECIFICATIONS CHART



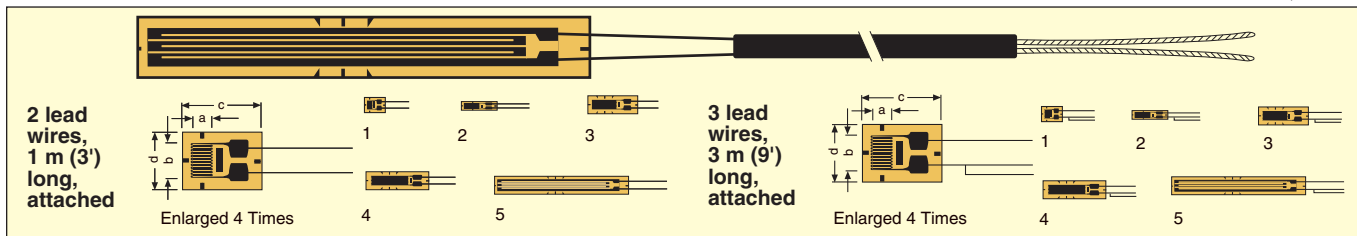
	SG SERIES	KFG SERIES
Foil strain gages are constructed by embedding a foil measuring element into a carrier. Foil measuring grid Carrier Substrate thickness Cover thickness Connection dimensions in (mm) [in]	Constantan foil 5 µm thick Polyimide 50 µm 25 µm Solder pads or ribbon leads (30 long x .05 thick 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 ±0.4 ohms 03% 2.10 ±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) ±20 ppm°C (±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 ±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

PRE-WIRED STRAIN GAGES

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

ENCAPSULATED WITH 2 LEAD WIRES, 1 m (3') LONG, ATTACHED MODEL NO.	PRICE PER PKG OF 10	NOM. RESIS- TANCE (Ω)	DIMENSIONS mm (in)*				MAX PERMITTED BRIDGE ENERGIZING VOLTAGE (Vrms)	FIG.
			GRID		CARRIER			
			A	B	C	D		
KFG-02-120-C1-11 L1 M2R	\$140	120	0.2 (0.008)	1.3 (0.051)	3.3 (0.13)	2.4 (0.094)	1	1
KFG-1N-120-C1-11L1M2R	109	120	1.0 (0.039)	0.7 (0.028)	4.2 (0.17)	1.4 (0.055)	1.5	2
KFG-2N-120-C1-11L1M2R	94	120	2.0 (0.079)	0.9 (0.035)	5.3 (0.21)	1.4 (0.055)	2	2
KFG-3-120-C1-11L1M2R	88	120	3.0 (0.12)	1.3 (0.051)	7.4 (0.29)	2.8 (0.11)	4	3
KFG-3-350-C1-11L1M2R	121	350	3.0 (0.12)	1.3 (0.051)	7.4 (0.29)	2.8 (0.11)	15	3
KFG-5-120-C1-11L1M2R	80	120	5.0 (0.2)	1.4 (0.055)	9.4 (0.37)	2.8 (0.11)	8	3
KFG-5-350-C1-11L1M2R	124	350	5.0 (0.2)	1.4 (0.055)	9.4 (0.37)	2.8 (0.11)	20	4
KFG-10-120-C1-11L1M2R	100	120	10.0 (0.39)	3.0 (0.12)	16.0 (0.63)	5.2 (0.2)	15	4
KFG-30-120-C1-11 L1M2R	119	120	30.0 (1.18)	3.3 (0.13)	37.0 (1.46)	5.2 (0.2)	25	5



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

ENCAPSULATED WITH 3 LEAD WIRES, 3 m (9') LONG, ATTACHED* MODEL NO.	PRICE PER PKG OF 10	NOM. RESIS- TANCE (Ω)	DIMENSIONS mm (in)**				MAX PERMITTED BRIDGE ENERGIZING VOLTAGE (Vrms)	FIG.
			GRID		CARRIER			
			A	B	C	D		
KFG-02-120-C1-11L3M3R	\$184	120	0.2 (0.008)	1.3 (0.051)	3.3 (0.13)	2.4 (0.094)	1	1
KFG-1N-120-C1-11L3M3R	153	120	1.0 (0.039)	0.7 (0.028)	4.2 (0.17)	1.4 (0.055)	1.5	2
KFG-2N-120-C1-11L3M3R	138	120	2.0 (0.079)	0.9 (0.035)	5.3 (0.21)	1.4 (0.055)	2	2
KFG-3-120-C1-11L3M3R	131	120	3.0 (0.12)	1.3 (0.051)	7.4 (0.29)	2.8 (0.11)	4	3
KFG-3-350-C1-11L3M3R	165	350	3.0 (0.12)	1.3 (0.051)	7.4 (0.29)	2.8 (0.11)	15	3
KFG-5-120-C1-11L3M3R	124	120	5.0 (0.2)	1.4 (0.055)	9.4 (0.37)	2.8 (0.11)	8	3
KFG-5-350-C1-11L3M3R	165	350	5.0 (0.2)	1.4 (0.055)	9.4 (0.37)	2.8 (0.11)	20	4
KFG-10-120-C1-11L3M3R	145	120	10.0 (0.39)	3.0 (0.12)	16.0 (0.63)	5.2 (0.2)	15	4
KFG-30-120-C1-11L3M3R	163	120	30.0 (1.18)	3.3 (0.13)	37.0 (1.46)	5.2 (0.2)	25	5

* To minimize lead-wire resistance effects. ** For dimensions key, see page E-7.

Ordering Example: KFG-02-120-C1-11L1M2R, package of 10 pre-wired strain gages, encapsulated with 2 lead wires attached, \$140.