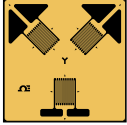
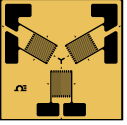

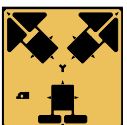


ROSETTE STRAIN GAGES

0/45/90° AND 0/60/120° ROSETTES

**Custom-Designed
Strain Gages
Available!**
No Minimum Quantities.
Consult Engineering.

To Order									
GAGE PATTERN Leads not shown	MODEL NO. Pkg of 5	NOM. RESIS- TANCE (Ω)	DIMENSIONS mm (inch) [†]				MAX V* (Vrms)	TERMINATION	TEMP COMP
			GRID		CARRIER				
			A	B	C	D			
Shown actual size, 16 mm 	SGD-3/120-RY11	120	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	5.5	Ribbon Leads	ST
	SGD-3/120-RY13	120	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	8	Ribbon Leads	AL
	SGD-3/120-RY31	120	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	5.5	Solder Pads	ST
	SGD-3/120-RY33	120	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	8	Solder Pads	AL
Shown actual size, 16 mm 	SGD-3/350-RY11	350	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	9.5	Ribbon Leads	ST
	SGD-3/350-RY13	350	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	13	Ribbon Leads	AL
	SGD-3/350-RY31	350	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	9.5	Solder Pads	ST
	SGD-3/350-RY33	350	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	13	Solder Pads	AL
Shown actual size, 16 mm 	†SGD-3/120-RY41	120	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	5.5	Ribbon Leads	ST
	SGD-3/120-RY43	120	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	8	Ribbon Leads	AL
	†SGD-3/120-RY71	120	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	5.5	Solder Pads	ST
	†SGD-3/120-RY73	120	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	8	Solder Pads	AL
Shown actual size, 16 mm 	†SGD-3/350-RY41	350	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	9.5	Ribbon Leads	ST
	†SGD-3/350-RY43	350	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	13	Ribbon Leads	AL
	†SGD-3/350-RY71	350	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	9.5	Solder Pads	ST
	†SGD-3/350-RY73	350	3.00 (0.118)	2.90 (0.114)	16.00 (0.630)	16.00 (0.630)	13	Solder Pads	AL

[†]For dimensions key, visit us online.

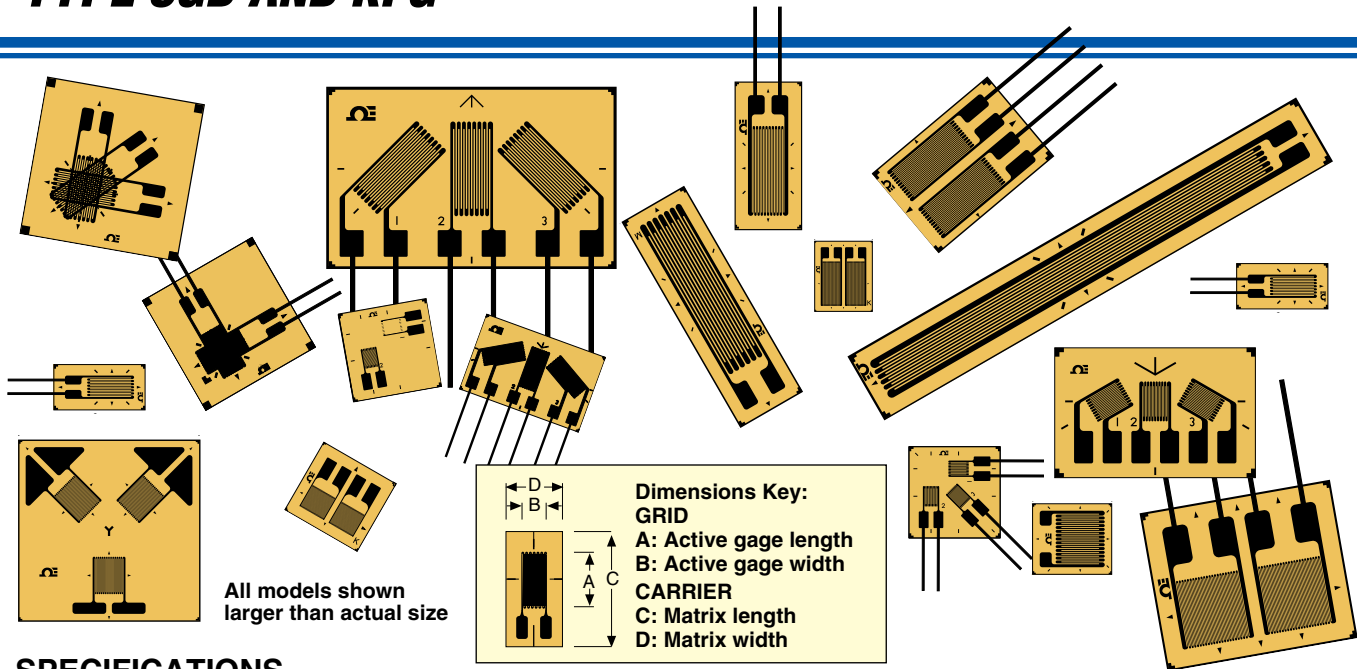
* Maximum permitted bridge energizing voltage (Vrms). ** For accessory terminal pads, visit us online.

Ordering Example: SGD-3/350-RY33, 350 Ω nominal-resistance strain gage.

PRECISION STRAIN GAGE

PRECISION SPECIFICATIONS CHART

TYPE SGD AND KFG



SPECIFICATIONS

	SGD SERIES	KFG SERIES—PRE-WIRED
Foil Measuring Grid	Constantan foil 5 microns thick	Constantan foil 6 microns thick
Carrier	Polyimide	Kapton®
Substrate Thickness	20 microns	15 microns
Cover Thickness	25 microns	9 microns
Connection Dimensions: mm (inch)	Solder pads or ribbon leads, tinned copper flat wire 30 L x 0.1 D x 0.3 mm W (1.2 x 0.004 x 0.012")	Pre-wired, 2 or 3 leads 27 AWG strand polyvinyl insulation 1 x 2 mm (0.04 x 0.08")
Nominal Resistance	Stated in "To Order" box	120 ±0.4 or 350 Ω
Resistance Tolerance Per Package	±0.15% to ±0.5% depending on gage spec	0.3%
Gage Factor (Actual Value Printed on Each Package)	2.0 ±5%	2.10 ±10%
Gage Factor Tolerance Per Package	1.00%	1.00%
THERMAL PROPERTIES		
Reference Temperature	23°C (73°F)	23°C (73°F)
SERVICE TEMPERATURE		
Static Measurements	-75 to 200°C (-100 to 392°F)	-20 to 100°C (-4 to 212°F)
Dynamic Measurements	-75 to 200°C (-100 to 392°F)	-20 to 100°C (-4 to 212°F)
TEMPERATURE CHARACTERISTICS		
Steel (and Certain Stainless Steels)	11 ppm/°C (6.1 ppm/°F)	10.8 ppm/°C (6 ppm/°F)
Aluminum	23 ppm/°C (12.8 ppm/°F)	—
Uncompensated	±20 ppm/°C (11.1 ppm/°F)	—
Temperature Compensated Range	-5 to 120°C (5 to 248°F)	10 to 80°C (50 to 176°F)
Tolerance of Temp Compensation	2 ppm/°C (1.0 ppm/°F)	1 ppm/°C (0.5 ppm/°F)
MECHANICAL PROPERTIES		
Maximum Strain	3% or 30,000 microstrain	5% or 50,000 microstrain
Hysteresis	Negligible	Negligible
Fatigue (at ±1500 microstrain)	>10,000,000 cycles	>10,000,000 cycles
Smallest Bending Radius	3 mm (1/8")	3 mm (1/8")
Transverse Sensitivity	—	Stated on each package