

ROSETTE STRAIN GAGES

To Order (Specify Model Number)

TYPE SERIES	MODEL NO.	PRICE PER PKG OF 5	OHMS	DIMENSIONS [MM]				MAX EXC	TERM PADS	FIG
				GRID		CARRIER				
				A	B	C	D			
0°/45°/90° Encapsulated with Ribbon Leads RY51 Temperature characteristics matched to carbon steel RY53 Temperature characteristics matched to aluminum	SG-2/120-RY51	\$125	120	2.0	1.8	6.3	5.0	5	TP-1	1
	SG-3/350-RY51	139	350	3.0	1.6	7.0	6.8	8	TP-2	2
	SG-7/120-RY51	165	120	6.0	3.0	12.0	11.0	10	TP-3	3
	SG-2/120-RY53	125	120	2.0	1.8	6.3	5.0	5	TP-1	1
	SG-3/350-RY53	139	350	3.0	1.6	7.0	6.8	8	TP-2	2
	SG-7/120-RY53	165	120	6.0	3.0	12.0	11.0	10	TP-3	3

Diagrams Shown Larger Than Actual Size

For Accessory Terminal Pads, see page E-25.

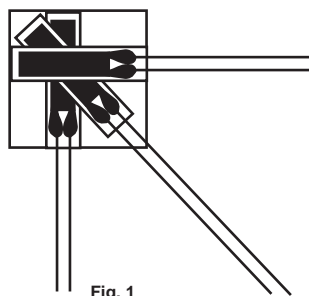


Fig. 1

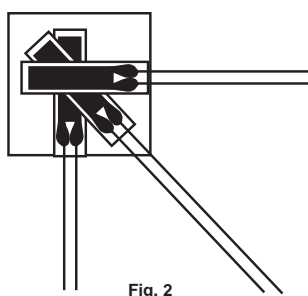


Fig. 2

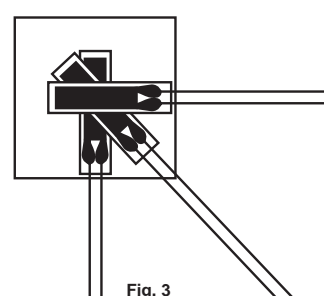


Fig. 3

To Order (Specify Model Number)

TYPE SERIES	MODEL NO.	PRICE PER PKG OF 5	OHMS	DIMENSIONS [MM]				MAX EXC	TERM PADS	FIG
				GRID		CARRIER				
				A	B	C	D			
0°/45°/90° Encapsulated with Solder Tabs RY61 Temperature characteristics matched to carbon steel RY63 Temperature characteristics matched to aluminum	SG-2/120-RY61	\$125	120	2.0	1.8	6.3	5.0	5	TP-1	1
	SG-3/350-RY61	139	350	3.0	1.6	7.0	6.8	8	TP-2	2
	SG-7/120-RY61	165	120	6.0	3.0	12.0	11.0	9	TP-3	3
	SG-2/120-RY63	125	120	2.0	1.8	6.3	5.0	5	TP-1	1
	SG-3/350-RY63	139	350	3.0	1.6	7.0	6.8	8	TP-2	2
	SG-7/120-RY63	165	120	6.0	3.0	12.0	11.0	9	TP-3	3

Diagrams Shown Larger Than Actual Size

For Accessory Terminal Pads, see page E-25.



Fig. 1



Fig. 2

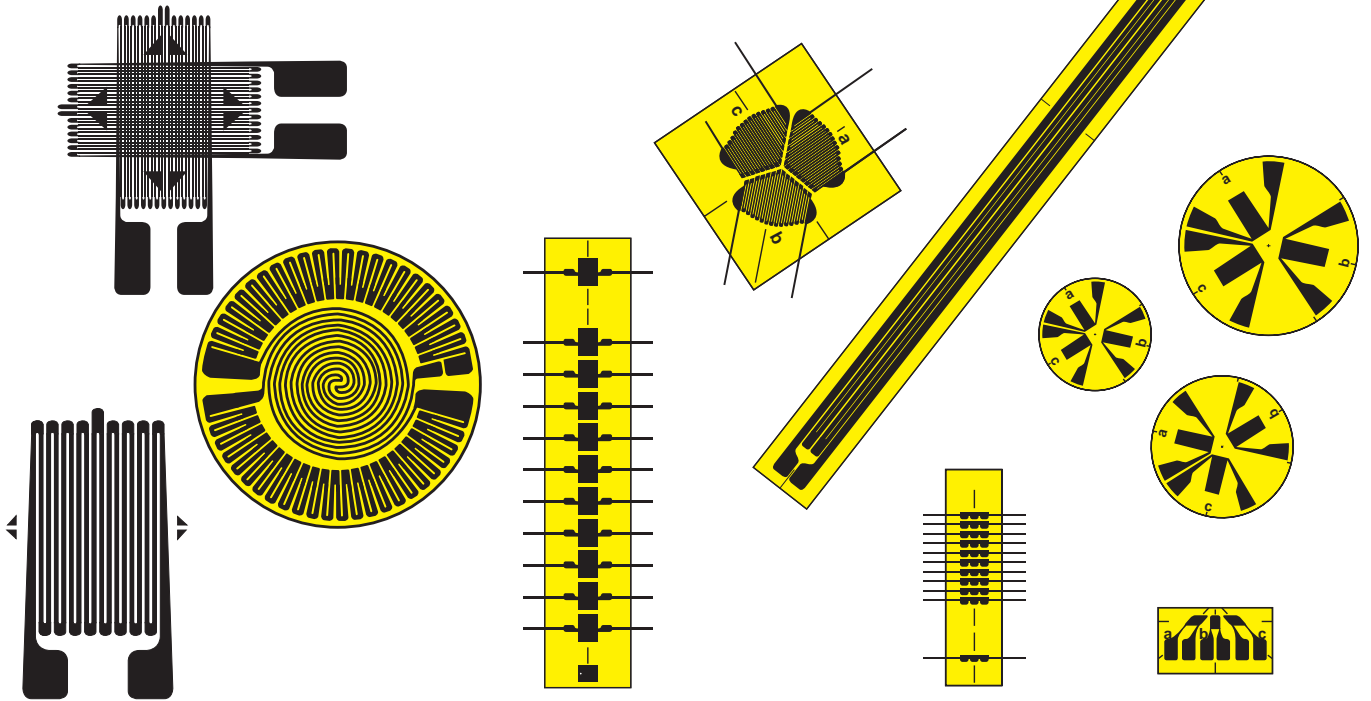


Fig. 3

Ordering Example:
 SG-7/120-RY61, package of five rosette strain gages encapsulated with solder tabs, with temperature characteristics matched to carbon steel and max. excitation of 9 V, \$165.

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 (½ inch) —	5% or 50,000 µε Negligible > 10,000,000 cycles 3 mm (½ inch) Stated on each package



UNITED STATES

www.omega.com
1-800-TC-OMEGA
Stamford, CT.

CANADA

www.omega.ca
Laval(Quebec)
1-800-TC-OMEGA

GERMANY

www.omega.de
Deckenpfronn, Germany
0800-8266342

UNITED KINGDOM

www.omega.co.uk
Manchester, England
0800-488-488

FRANCE

www.omega.fr
Guyancourt, France
088-466-342

CZECH REPUBLIC

www.omegaeng.cz
Karviná, Czech Republic
596-311-899

BENELUX

www.omega.nl
Amstelveen, NL
0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters