

A load cell incorporating from 8 to 16 high output electrical resistance strain gauges, in a full bridge configuration bonded to a high strength steel or stainless steel spool. This arrangement compensates for both temperature effects and off center loading. Available in virtually any size, in both annular and solid styles. Gauge waterproofing is provided utilizing the latest application techniques and protective materials. The rugged design includes heavy duty protective cover, sealed construction, and low deflection under load.

Mounting surfaces should be flat and parallel for optimum performance. RST recommends the use of top & bottom loading platens for best performance with annular load cells.



## FEATURES

Compatible with any conventional strain indicator instrument.

Optional readout instrument in engineering units – Models IR-2840.

High resistance strain gauges to minimize cable effects.

High sensitivity.

Long term reliability.

Heat treated and stress relieved load element.

Available with either a plug connector, or with cable attached to load cells per client specified length.

Accommodates off center loading.

Custom manufactured to fit project requirements.

Matched calibration for readout in engineering units.

Temperature compensated.



Specifications may change without notice. LPB0005C

**rst**  
INSTRUMENTS

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**STRAIN GAUGE LOAD CELLS**

The RST Instruments  
Management System  
is certified to  
ISO 9001:2000



## SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Capacity	22.5 kN to 10675 kN (5,000 lbs to 2,400,000 lbs).
Hole Size	16 mm to 356 mm (5/8 in. to 14 in.), as required.
Material	High strength steel or stainless elements.
Temperature Compensation	-40°F to +107°F (-40°C to +40°C)
Overrange	100% FS
Sensitivity	±2.0 mV/V



## STANDARD DIMENSIONS

MODEL	CAPACITY		I.D.		O.D.		HEIGHT	
	Kips	(kN)	Inches	Millimeters	Inches	Millimeters	Inches	Millimeters
SGA-50-1	50	(233)	1.0	(25)	4.0	(102)	3.0	(76)
SGA-100-1	100	(445)	1.0	(25)	4.0	(102)	3.0	(76)
SGA-136-1.4	136	(605)	1.4	(36)	4.5	(114)	3.5	(89)
SGA-200-1.75	200	(890)	1.75	(44)	5.0	(127)	5.0	(127)
SGA-255-2.0	255	(1135)	2.0	(51)	5.5	(140)	5.25	(133)
SGA-300-2.0	300	(1334)	2.0	(51)	5.5	(140)	5.25	(133)
SGA-300-3.0	300	(1334)	3.0	(76)	6.0	(152)	6.25	(159)
SGA-400-2.5	400	(1779)	2.5	(63)	6.0	(152)	6.25	(159)
SGA-400-3.5	400	(1779)	3.5	(89)	7.0	(178)	7.25	(184)
SGA-600-3.0	600	(2669)	3.0	(76)	7.0	(178)	7.5	(190)
SGA-600-4.0	600	(2669)	4.0	(102)	7.75	(197)	8.5	(216)

NOTE: These dimensions are typical only and may be modified to suit project requirements.

The model number is determined as follows: eg. SGA - 200 - 1.5

SGA – Strain Gauge Annular Cell

200 – Maximum capacity in Kips

1.5 – Hole size in inches

## ORDERING INFORMATION (Specify when ordering)

Application

Annular or solid cell

Maximum capacity and smallest increment required

Environmental data

Size limitations

Cable connection and length

Loading Platens

Options

## ACCESSORIES (Specify when ordering)

Digital strain indicator

Cable

Load and bearing plates

Terminal stations

Centralizer bushings if required

## OPTIONS (Specify when ordering)

Armored cable

Metal military, or plastic connectors  
(connectors not recommended in waterproof applications)