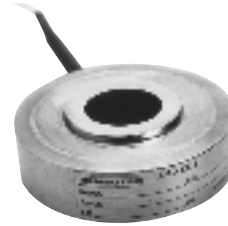


Donut Shaped Load Cells

Model D



Model D (Compression Only)

THRU-HOLE DESIGN

150 GMS - 30,000 LBS.

FLEXIBLE DESIGN

The Model D Donut Shaped Load Cell features a smooth thru-hole design perfect for applications which require the load structure to pass directly through the cell. Such applications include bolt force measurements, clamping forces, and monitoring overloads. Load ranges as low as 150 grams and as great as 30,000 pounds can be measured within a maximum full scale non-linearity and hysteresis of $\pm 0.5\%$ F.S. These models are used in compression applications and are available in multiple hole sizes. For optimum performance, these cells must be mounted between load surfaces which are flat and parallel. The Model D miniature load cell is designed to have a minimum thickness.

PERFORMANCE

Model D (Compression Only)	
Load Ranges	150 gms to 30,000 lbs.
Non-linearity and Hysteresis (max)	$\pm 0.5\%$ F.S.
Non-repeatability (max)	$\pm 0.1\%$ F.S.
Output	20mV/V (gram units) 2mV/V (5 lb. and above)
Resolution	Infinite

ENVIRONMENTAL

Temperature, Operating	-65° F to 250° F
Temperature, Compensated	60° F to 160° F
Temperature Effect	
- Zero (max)005% F.S./° F (5 lb. and above); .01%/° F (gram units)
- Span (max)010% Rdg./° F (5 lb. and above); .02%/° F (gram units)

ELECTRICAL

Strain Gage Type	Semi conductor (gram units) Bonded foil (5 lb. and above)
Excitation (calibration)	Semi conductor 5V Bonded foil 10V
Bridge Resistance	500 ohms (gram units) 350 ohms (5 lb. and above)
Wiring Code (std)	#1 (See Pg. AP-8)
Electrical Termination (std)	Teflon cable (5 ft.)

MECHANICAL

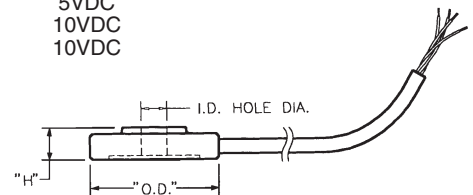
Overload, Safe	50% over capacity
Casing Material	Stainless Steel

Dimensions

Model D (Order Code BL912)

Selection Guide—150 gms. to 100 lbs. units

Available Ranges	O.D."	I.D."	H"	Excitation
150; 250; 500; 1000 gms	.50	.10	.15	5VDC
5; 10 lbs.	1.00	.20	.28	10VDC
25; 50; 100 lbs.	1.00	.20	.28	10VDC



Options (See Appendix)

Temperature compensated 1b, 1c, 1f; Special calibration 9a, 9b
Premium Options: 1g (≥ 5 lb. only); 12b

Selection Instructions for Larger Capacity Units—30,000 lbs.

Shown below are three separate outline drawings for the Model D Load Cell. The frame size selection guide below indicates that with a single shell size (outside diameter), different “donut holes” are available. For example, in the small frame size (A) it is possible to select a 250 lb. load cell with a nominal hole size of 1/8" (P), 3/16" (Q), 1/4" (R), or 3/8" (S) diameter. We manufacture the actual hole dimensions to provide some clearance; for example the 1/8" (P) diameter dimension, the actual dimension is 0.128".

HOW TO ORDER: SPECIAL ORDER INSTRUCTIONS

1. Specify the **order code** (See frame size A, B or C)
2. State the **load range** required in pounds and range code.
3. State the nominal **hole diameter** letter.

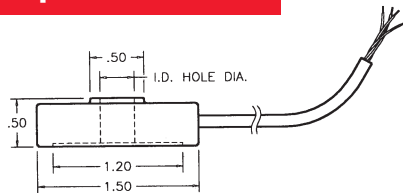
e.g. Model D: BL914CN R (1/4 inch) [250 lbs.]

Frame Size Selection Guide

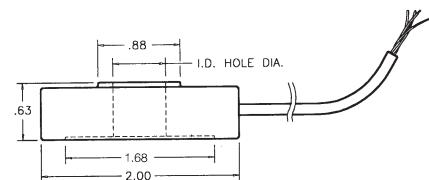
Hole Letters	P	Q	R	S	T	V	W	Y	Z
Nominal Hole Dia.	1/8"	3/16"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 -1/4"
Actual Hole Dia.	.128"	.193"	.266"	.391"	.532"	.656"	.781"	1.032"	1.281"
100 lbs.	A	A	A	A					
250 lbs.	A or B	A or B	A or B	A or B	B	B			
500 lbs.	A or B	A or B	A or B	A or B	B	B			
1,000 lbs.	A or B	A or B	A or B	B	B	B			
2,000 lbs.	A, B or C	A, B or C	A, B or C	B or C	B or C	B or C	C	C	C
3,000 lbs.	B or C	B or C	B or C	B or C	B or C	C	C	C	C
5,000 lbs.	B or C	B or C	B or C	B or C	B or C	C	C	C	C
7,500 lbs.	B or C	B or C	B or C	B or C	B or C	C	C	C	C
10,000 lbs.	B or C	B or C	B or C	B or C	B or C	C	C	C	C
15,000 lbs.	C	C	C	C	C	C	C	C	C
20,000 lbs.	C	C	C	C	C	C	C	C	C
30,000 lbs.	C	C	C	C	C	C	C	C	C

LOAD
DONUT

Options

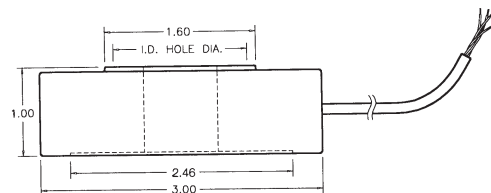


FRAME SIZE A
ORDER CODE BL913



FRAME SIZE B
ORDER CODE BL914

*Choose Hole Dia. from Selection Guide above.



FRAME SIZE C
ORDER CODE BL915

SUNSTAR 商斯达实业集团是集研发、生产、工程、销售、代理经销、技术咨询、信息服务等为一体的高科技企业，是专业高科技电子产品生产厂家，是具有 10 多年历史的专业电子元器件供应商，是中国最早和最大的仓储式连锁规模经营大型综合电子零部件代理分销商之一，是一家专业代理和分销世界各大品牌 IC 芯片和电子元器件的连锁经营综合性国际公司，专业经营进口、国产名厂名牌电子元件，型号、种类齐全。在香港、北京、深圳、上海、西安、成都等全国主要电子市场设有直属分公司和产品展示展销窗口门市部专卖店及代理分销商，已在全国范围内建成强大统一的供货和代理分销网络。我们专业代理经销、开发生产电子元器件、集成电路、传感器、微波光电元器件、工控机/DOC/DOM 电子盘、专用电路、单片机开发、MCU/DSP/ARM/FPGA 软件硬件、二极管、三极管、模块等，是您可靠的一站式现货配套供应商、方案提供商、部件功能模块开发配套商。商斯达实业公司拥有庞大的资料库，有数位毕业于著名高校——有中国电子工业摇篮之称的西安电子科技大学（西军电）并长期从事国防尖端科技研究的高级工程师为您精挑细选、量身订做各种高科技电子元器件，并解决各种技术问题。

更多产品请看本公司产品专用销售网站：

商斯达中国传感器科技信息网：<http://www.sensor-ic.com/>

商斯达工控安防网：<http://www.pc-ps.net/>

商斯达电子元器件网：<http://www.sunstare.com/>

商斯达微波光电产品网：[HTTP://www.rfoe.net/](http://www.rfoe.net/)

商斯达消费电子产品网：<http://www.icasic.com/>

商斯达实业科技产品网：<http://www.sunstars.cn/>

传感器销售热线：

地址：深圳市福田区福华路福庆街鸿图大厦 1602 室

电话：0755-83370250 83376489 83376549 83607652 83370251 82500323

传真：0755-83376182 (0) 13902971329 MSN: SUNS8888@hotmail.com

邮编：518033 E-mail:szss20@163.com QQ: 195847376

深圳赛格展销部：深圳华强北路赛格电子市场 2583 号 电话：0755-83665529 25059422

技术支持：0755-83394033 13501568376

欢迎索取免费详细资料、设计指南和光盘；产品凡多，未能尽录，欢迎来电查询。

北京分公司：北京海淀区知春路 132 号中发电子大厦 3097 号

TEL: 010-81159046 82615020 13501189838 FAX: 010-62543996

上海分公司：上海市北京东路 668 号上海赛格电子市场 2B35 号

TEL: 021-28311762 56703037 13701955389 FAX: 021-56703037

西安分公司：西安高新开发区 20 所(中国电子科技集团导航技术研究所)

西安劳动南路 88 号电子商城二楼 D23 号

TEL: 029-81022619 13072977981 FAX:029-88789382