

Single-Ended Beam

FEATURES

- Capacities: 500 to 20k lbs, 250 to 5000 kg
- High side-load tolerance
- Electroless nickel-plated-alloy tool steel
- NTEP Class III 5000M for SQB, SQB-F and SQB-SS available from 1k to 10k lbs
- SQB-SS stainless steel construction
- **Optional**
 - FM approval available

APPLICATIONS

- Truck/rail scales
- Silo/hopper/tank weighing
- Platform scales (multiple load cells)
- Pallet truck scales
- Packaging machines

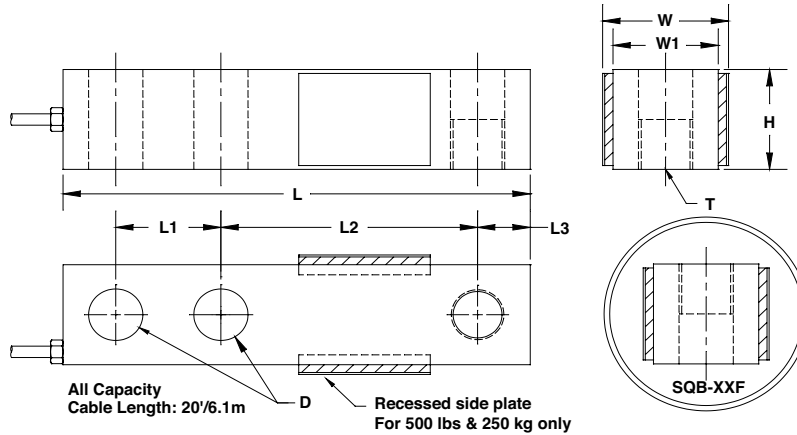
DESCRIPTION

SQB is a single-ended shear beam load cell designed for multiple cell applications such as low profile platform or small tank scales when used with proper mounting



accessories. It is insensitive to side loading and capable of reversed loading. SQB and SQB-F are constructed of alloy steel and fully potted with special chemical compounds to IP67 to protect the cell from water and moisture damage.

OUTLINE DIMENSIONS



Wiring

+ Excitation	Red
- Excitation	Black
+ Signal	Green
- Signal	White

CAPACITY		L	L ₁	L ₂	L ₃	W	W ₁	H	D	T
250 kg	mm	130.0	25.4	76.2	12.7	31.7	31.7	25.4	13.5	M12 x 1.75
500 lbs	(inch)	5.12	1.00	3.00	0.50	1.25	1.25	1.00	0.53	1/2-20UNF
500/1000/1500/2000 kg	mm	130.0	25.4	76.2	12.7	38.1	31.7	31.7	13.5	M12 x 1.75
1k/2k/2.5k/3k/4k/5kSE lbs	(inch)	5.12	1.00	3.00	0.50	1.50	1.25	1.25	0.53	1/2-20UNF
2500/5000 kg	mm	171.5	38.1	95.3	19.0	44.2	38.1	38.1	19.8	M20 x 1.5
5k/10k lbs	(inch)	6.75	1.50	3.75	0.75	1.74	1.50	1.50	0.78	3/4-16UNF
15k/20k lbs	mm	225.6	50.8	123.9	25.4	56.9	50.8	50.8	26.2	-----
	(inch)	8.88	2.00	4.88	1.00	2.24	2.00	2.00	1.03	1-14UNS

Single-Ended Beam

SPECIFICATIONS			
PARAMETER	VALUE		UNIT
NTEP/OIML accuracy class	NTEP III	Non-Approved	
Maximum no. of intervals (n)	3000 single ⁽¹⁾ 5000 multiple ⁽¹⁾	1000	
Y = E_{max}/V_{min}	10000	5000	Maximum available
Standard capacities (E_{max})	250, 500, 1000, 1500, 2000, 2500, 5000		kg
Standard capacities (E_{max})	500, 1k, 2k, 2.5k, 3k, 4k, 5kSE, 5k, 10k, 15k, 20k		lbs
Rated output—R.O.	3.0		mV/V
Rated output tolerance	0.25		±% of rated output
Zero balance	1		±% of rated output
Non-linearity	0.025	0.030 (SS: 0.05)	±% of rated output
Hysteresis	0.025	0.030 (SS: 0.05)	±% of rated output
Non-repeatability	0.020	0.020	±% of rated output
Creep error (20 minutes)	0.025	0.030	±% of rated output
Zero return (20 minutes)	0.025	0.030	±% of rated output
Temperature effect on min. dead load output	0.0017	0.0026	±% of rated output/°C
Temperature effect on sensitivity	0.0010	0.0015	±% of applied load/°C
Compensated temperature range	-10 to +40		°C
Operating temperature range	-20 to +60		°C
Safe overload	150		% of R.C.
Ultimate overload	300		% of R.C.
Excitation, recommended	10		VDC or VAC RMS
Excitation, maximum	15		VDC or VAC RMS
Input impedance	385±5		Ω
Output impedance	350±3		Ω
Insulation resistance	>5000		MΩ
Construction	Nickel-plated alloy steel ⁽²⁾		
Environmental protection	IP67		

Notes:
⁽¹⁾ Capacities 1k–10k lbs

⁽²⁾ Stainless steel available

All specifications subject to change without notice.

FM Approval

Intrinsically Safe: Class I, II, III; Div. 1 Groups A-G

Non-Incendive: Class I; Div. 2 Groups A-D

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay Precision Group"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify Vishay Precision Group's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

Vishay Precision Group makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, Vishay Precision Group disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on Vishay Precision Group's knowledge of typical requirements that are often placed on Vishay Precision Group products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of Vishay Precision Group.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay Precision Group products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay Precision Group for any damages arising or resulting from such use or sale. Please contact authorized Vishay Precision Group personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.