

# 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

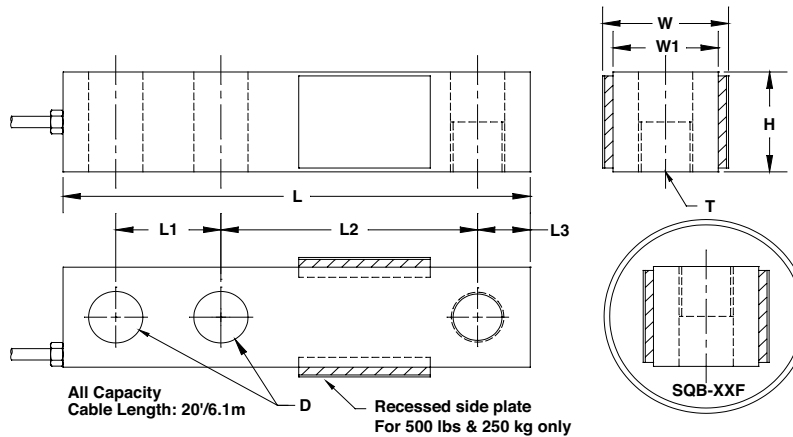
- Truck/rail scales
- Silo/hopper/tank weighing
- Platform scales (multiple load cells)
- Pallet truck scales
- Packaging machines

## 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 protect the cell from water and moisture damage.

## OUTLINE DIMENSIONS



### Wiring

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

CAPACITY		L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	W	W <sub>1</sub>	H	D	T
250 kg	mm	130.2	25.4	76.2	12.7	31.7	31.7	24.8	13.5	M12 x 1.75
500 lbs	(inch)	5.12	1.00	3.00	0.50	1.23	1.23	0.98	0.53	1/2-20UNF
500/1000/1500/2000 kg	mm	130.2	25.4	76.2	12.7	37.2	31.2	31.2	13.5	M12 x 1.75
1k/2k/2.5k/3k/4k/5kSE lbs	(inch)	5.12	1.00	3.00	0.50	1.46	1.23	1.23	0.53	1/2-20UNF
2500/5000 kg	mm	171.5	38.1	95.3	19.0	43.6	37.6	37.6	19.8	M20 x 1.5
5k/10k lbs	(inch)	6.75	1.50	3.75	0.75	1.74	1.48	1.48	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	1.02	1-14UNS

## Single-Ended Beam

SPECIFICATIONS			
PARAMETER	VALUE		UNIT
NTEP/OIML accuracy class	NTEP III	Non-Approved	
Maximum no. of intervals (n)	3000 single <sup>(1)</sup> 5000 multiple <sup>(1)</sup>	1000	
Y = E <sub>max</sub> /V <sub>min</sub>	10000	5000	Maximum available
Standard capacities (E <sub>max</sub> )	250, 500, 1000, 1500, 2000, 2500, 5000		kg
Standard capacities (E <sub>max</sub> )	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 <sup>(2)</sup>		
Environmental protection	IP67		

**Notes:**

<sup>(1)</sup> Capacities 1k–10k lbs

<sup>(2)</sup> 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



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