

Nickel Plated Steel S-Type Load Cells

FEATURES

- Capacity range: 50 to 20K lb (22.7 to 9K kg)
- Designed for single or multiple load cell applications
- Nickel-plated, alloy steel construction
- Integral 20-foot cable for maximum mounting flexibility
- Sealed to IP67 standards
- Tension and compression measurement
- NTEP certified
- FM approved

APPLICATIONS

- Bin and hopper weighing systems
- Mechanical scale conversion
- Tension force measurement
- OEM scale construction
- Truck scale conversions
- Level and inventory measurement

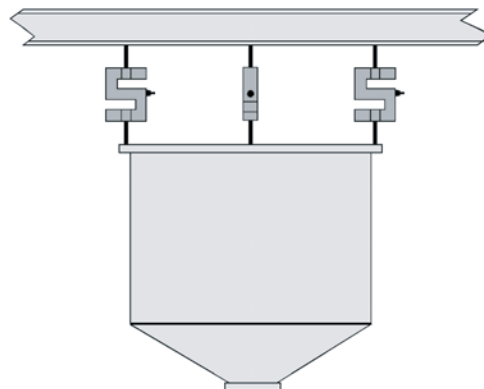
DESCRIPTION

U3SB-A S-Type Load Cells quickly and cost-effectively convert any tank, bin, or hopper into a weighing scale system. The compact size of the U3SB-A makes it ideal for applications where space is at a premium. Superior nickel plating provides excellent environmental protection for general, indoor, factory installations.



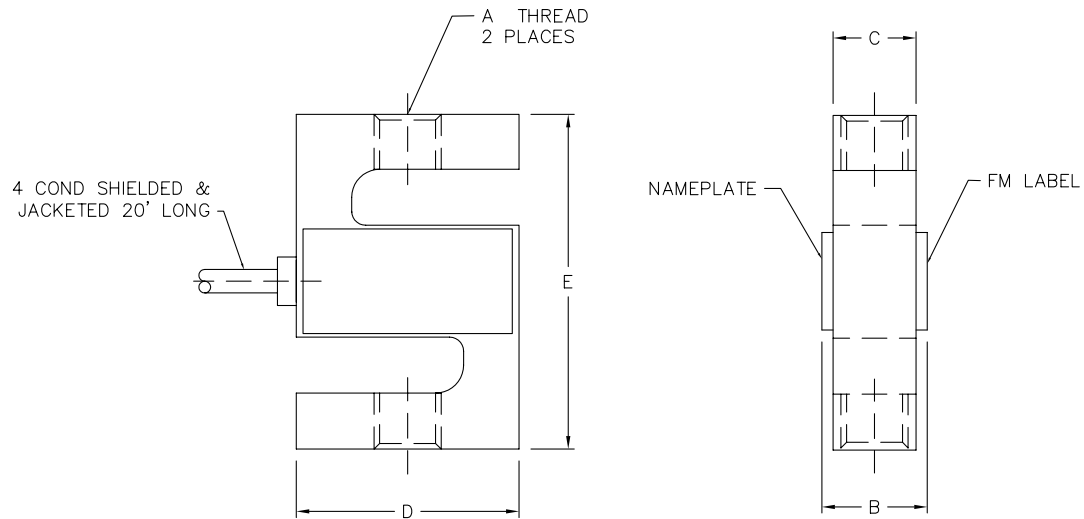
The U3SB-A is available in sixteen capacities from 50 to 20K pounds. Each cell has a 20-foot, four conductor cable for maximum flexibility in mounting and positioning.

CONFIGURATION



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OUTLINE DIMENSIONS



WIRING	
FUNCTION	COLOR
+ EXCITATION	RED
- EXCITATION	BLACK
+ OUTPUT	GREEN
- OUTPUT	WHITE

CAPACITY (LBS)	A	B	C	D	E
50-150	1/4-28 UNF-2B	0.65	0.50	2.00	2.50
250-300	3/8-24 UNF-2B	0.75	0.50	2.00	3.00
500-1.5K	1/2-20 UNF-2B	1.00	0.75	2.00	3.00
2K-3K	1/2-20 UNF-2B	1.25	1.00	2.00	3.00
5K-10K	3/4-16 UNF-2B	1.25	1.00	3.50	4.75
15K	1-14 UNF-2B	1.50	1.25	4.00	5.50
20K	1 1/4-12 UNF-2B	2.12	2.00	5.00	7.00

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SPECIFICATIONS		PARAMETER	VALUE
PERFORMANCE		ADVERSE LOAD RATINGS	
Rated capacities (lb)	50, 100, 150, 250, 300, 500, 750 1K, 1.5K, 2K, 2.5K, 3K, 5K, 10K, 15K, and 20K lb	Safe overload	150% rated capacity
Rated output (RO)	3.0 mV/V ± 0.25%	Ultimate overload	300% rated capacity
Repeatability	0.01% RO	MATERIAL	
Combined error	0.02% RO	Material	nickel plated alloy steel
Zero balance	1.0% RO	Cable fitting	stainless steel
Creep (20 minutes)	0.030% RO	SEALING	
Temperature effects* on zero balance	0.0008% RO/°F	Environmental class	IP67
Temperature effects* on span	0.0006% Load/°F	DEFLECTION	
ELECTRICAL		50–150 lb	0.010–0.015 in
Recommended excitation	10 VDC (15 VDC max.)	250–300 lb	0.010 in
Input resistance	343–450 Ω	500–1.5K lb	0.010–0.012 in
Output resistance	349–355 Ω	2K–3K lb	0.012 in
Cable connection	20-ft, 4-conductor shielded cable	5K lb	0.017 in
TEMPERATURE		10K–20K lb	0.025 in
Storage range	–65 to +185°F		
Operating range	0 to +150°F		
Compensated range	+14 to +104°F		

* Compensated range

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly.