

## 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

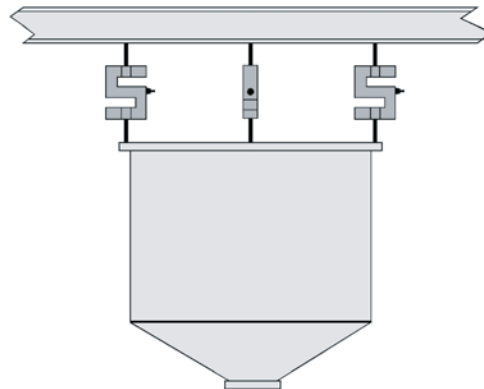
### DESCRIPTION

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.



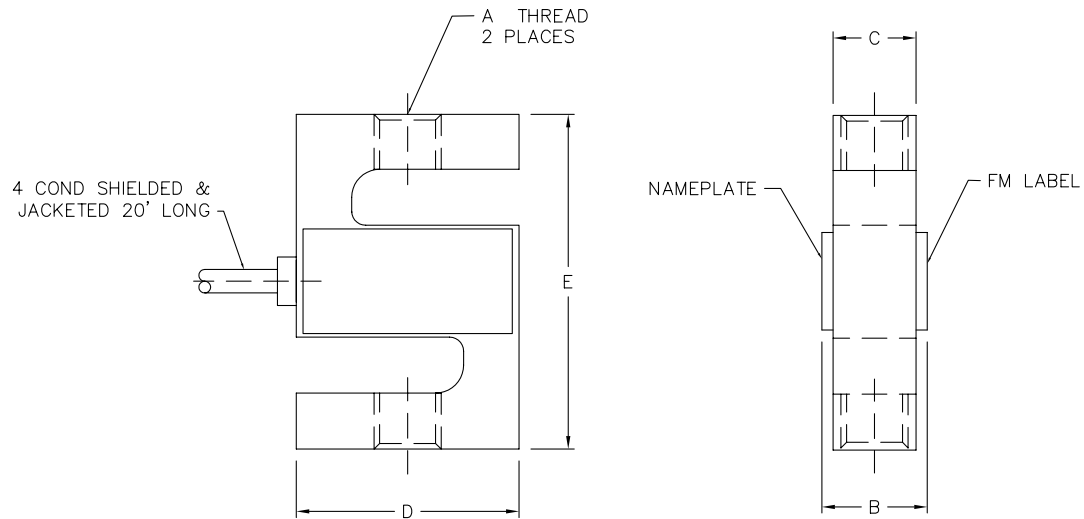
The U3SB-A is available in sixteen capacities from 50 to 20K pounds. Each cell has a 20-foot, four conductor cable for maximum flexibility in mounting and positioning.

### CONFIGURATION



Nickel Plated Steel S-Type Load Cells

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

\* Compensated range

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

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