

Stainless 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
- Constructed with quality 17-4 stainless-steel
- Integral 20-ft cable for maximum mounting flexibility
- Sealed to IP67 standards
- Tension and compression measurement
- FM and CSA approved

APPLICATIONS

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

DESCRIPTION

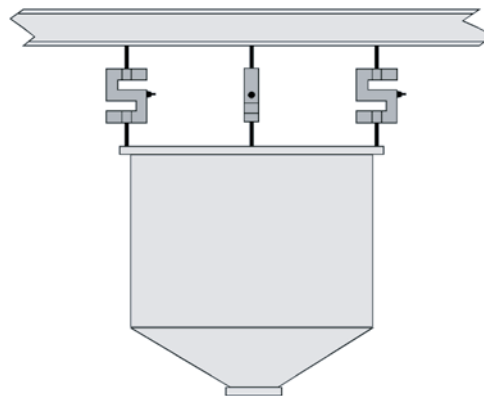
U3SB-B S-Type Load Cells quickly and cost-effectively convert any tank, bin, or hopper into a weighing scale system. The compact size of the U3SB-B makes it ideal for applications where space is at a premium. These stainless steel units stand up to washdown, rain, and



other environmental challenges typically found in the food, pharmaceutical, and chemical industries.

The U3SB-B is available in 16 capacities from 50 to 20K pounds. Each cell has a 20-ft, four-conductor cable for maximum flexibility in mounting and positioning.

CONFIGURATION



Stainless 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	.65	.50	2.00	2.50
250-300	3/8-24 UNF-2B	.75	.50	2.00	3.00
500-1.5K	1/2-20 UNF-2B	1.00	.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

SPECIFICATIONS

PARAMETER	VALUE
PERFORMANCE	
Capacities	50, 100, 150, 250, 300, 500, 750 lb 1K, 1.5K, 2K, 2.5K, 3K, 5K, 10K, 15K, and 20K lb
Rated output (RO)	3.0 mV/V ±0.25%
Repeatability	0.01% RO
Combined error	0.05% RO
Zero balance	1% RO
Creep (20 minutes)	0.03% RO
TEMPERATURE effects (compensated range)	
On zero balance	0.0014% RO/°F
On span	0.0025% Load/°F
ELECTRICAL	
Recommended excitation	10 VDC (15 VDC max.)
Input resistance	343–450 Ω
Output resistance	349–355 Ω
Cable length	20-ft, 4-conductor shielded cable
TEMPERATURE	
Storage range	–65 to +185°F
Operating range	0 to +150°F
Compensated range	+14 to +104°F

PARAMETER	VALUE
ADVERSE LOAD RATINGS	
Safe overload	150% rated capacity
Ultimate overload	300% rated capacity
MATERIAL	
Material	17-4 stainless steel
Cable fitting	stainless steel
SEALING	
Environmental class	IP67
DEFLECTION	
50–150 lb	0.010–0.015 in
250–300 lb	0.010 in
500–1.5K lb	0.010–0.012 in
2K–3K lb	0.012 in
5K lb	0.017 in
10K–20K lb	0.025 in

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