



LD360s™

A rugged, stainless steel load cell for in-process vessels and tanks. Sets new standards for the ultimate in sanitary conditions with the vessel hold-down protection built in.

TECHNICAL SPECIFICATIONS



FEATURES AND BENEFITS

Sanitize

Simple, self-contained design virtually eliminates bacteria hiding places and withstands rigorous CIP cleaning practices.

Easy To Install

Single footprint and height dimension over all capacity ranges allows for a common system design. Minimal deflection (0.008 inches) reduces plumbing effects for better system accuracy. Optional hardware with built-in leveling features eliminates shimming. High output semiconductor gage provides 2000 foot cable runs and better noise immunity.

Virtually Maintenance Free

Fusion-bonded gages provide a robust and rugged load cell. Unique NEMA-6P load cell and optional cable system provides unsurpassed protection in wash-down environments.

The LD360s™ is a rugged, stainless steel load cell for in-process tanks and bulk storage vessels. It combines vessel "hold-down" with an unprecedented ability to sanitize never before seen in load cell design. The LD360s, using proven Kistler-Morse semiconductor strain gage technology, continuously measures the weight of the material in the tank, provides batching information control, and supplies material on hand information for a variety of applications.

Its sealed, stainless steel construction, as well as its unique NEMA-6P rated cable system, makes the LD360s ideal for use in high-pressure wash-down environments where cleaning and sanitizing chemicals are used. The LD360s is particularly suitable for use on mixing and blending vessels, surge hoppers and vessels with agitators. Standard load ranges are from 1,000 to 25,000 lbs (453 to 11,340 kg) per vessel support with system performance accuracies of 0.08%. Batching accuracies could be much higher.

The design of the LD360s keeps the vessel's center of gravity low and stable. Vessel tipping, "walking", or overturning is eliminated, protecting your valuable product. Violent agitation is also no match for its integral hold-down design. Installation is simple. Unlike conventional load cells, no extra external hardware, turnbuckles, or specific cell orientation is needed, even in areas of seismic activity or winds (outdoor vessels). This lock-down design eliminates the moving pivot points, bearing surfaces and "floating" hardware that can cause long term maintenance and accuracy problems as well as provide a home for bacteria.

The high output of the sensor provides immunity to industrial noise and allows longer cable runs to keep electronics out of the intensive cleaning area. The LD360s identical bolt hole and height dimension for all capacity ranges simplifies plant-wide design and installation. A wide range of accessories such as mounting plates with leveling, make for easy installation and start-up.

HOW TO ORDER HALF BRIDGE

LD360s - - - P - X

FINISH

P = Polished Finish

OPERATING TEMPERATURE

F = Mid-Range Temperature, 50° to 150° F (10° to 66° C)

X = Ambient Temperature, 0° to 100° F (-18° to 38°)

LOAD RATED

01K = 1,000 lb (454 kg)

02K = 2,000 lb (907 kg)

03K = 3,000 lb (1,361 kg)

05K = 5,000 lb (2,268 kg)

07K = 7,500 lb (3,402 kg)

10K = 10,000 lb (4,536 kg)

15K = 15,000 lb (6,804 kg)

20K = 20,000 lb (9,072 kg)

25K = 25,000 lb (11,340 kg)

LD360s LOAD CELL

SPECIFICATIONS

FUNCTIONAL

Excitation Voltage - Operating Range	10 to 30 VDC
Maximum Current	3 mA @ 12 VDC excitation
Impedance	7.5K ohms \pm 1%
Recommended Supply Voltage	12 VDC
Compression	4 x rated load
Tension	1 x rated load
Shear	0.5 x rated load
Functional Integrity	2 x rated load (compression)

PERFORMANCE

Non-Linearity/Hysteresis Combined	0.08% performance: 0.1% standardized output
Return to Zero	0.05% standardized output
Zero Balance	1% rated capacity
Rated Output	360 mV DC @ 12 VDC \pm 1%

PHYSICAL

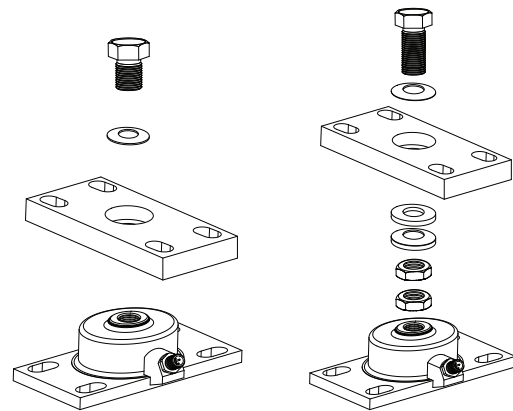
Temperature	0° to 100° F (-18° C to 38° C) Standard; 50° to 150° F (10° C to 66° C) Mid; 0.015% /° F (0.027% /° C) Sensitivity
Storage Temp Range	-40° to 176° F (-40° to 80° C)
Humidity	100%
Rating	NEMA-6P
Construction	17-4 PH 900 Stainless Steel
Connector	6P rated sealed 4-conductor, 12 mm male receptacle
Cable	Female molded connector to 4 m (13 ft) pigtail
Shipping Weight	8.5 lbs (3.9 kg)

APPROVALS

	FM: Intrinsically Safe Class I, II, III, Division I, Groups C, D, E, F, G; T4 N1 Class I, Division 2, Groups A, B, C, D; T4 S Class II, III, Division 2, Groups F, G; T4; Type 6P
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DIMENSIONS

Base Plate Size	Length x Width
All Models	6.0" x 3.5" (152.4 mm x 88.9 mm)
Installed Height	
LD360s W/UA360	1K to 10K lbs: 2.76" (70.1 mm) 15K to 25K lbs: 3.33" (84.6 mm)
LD360s W/LT360	1K to 7.5 lbs Only: Minimum 4.09" (104 mm) Maximum 4.22" (107.2 mm)
Top Plate Size	Length x Width
UA3xi	6.0" x 3.5" (152.4 mm x 88.9 mm)
LT3xi	6.0" x 3.5" (152.4 mm x 88.9 mm)



LD360s with UA360
Top Adapter Plate

LD360s with LT360
Leveling Top Adapter Plate