



LD3xiC™

Process Tank Weighing for Dry-To-Wet Operating Conditions

TECHNICAL SPECIFICATIONS



From bakery, pasta, confectionery and spice processing to resins, concrete/aggregate, sand, pulp, minerals and other dry-to-wet operating conditions, the full bridge foil gauge LD3xiC™ offers very specific advantages not available in most higher-priced load cells. Standards include a tough cage mounting fixture into which the 17-4 stainless steel LD3xiC™ load cell securely locks in place. This unique cage arrangement compensates for minor structural misalignment and offsets side loads due to positioning errors, thermal tank expansion, etc., while providing a high-strength structural support.

FEATURES AND BENEFITS

Easy to Install and Access

Sensor mounted into rugged “cage” fixture hardware which never requires removal in the event of load cell changeovers.

Single Footprint and Cost

Easy to design in, regardless the capacity.

Load Self Alignment

Ensures high performance.

All Stainless Steel Sensor Design

Beneficial in washdown environments for corrosion free sensor.

Self Checking and Overlift Protection Structure

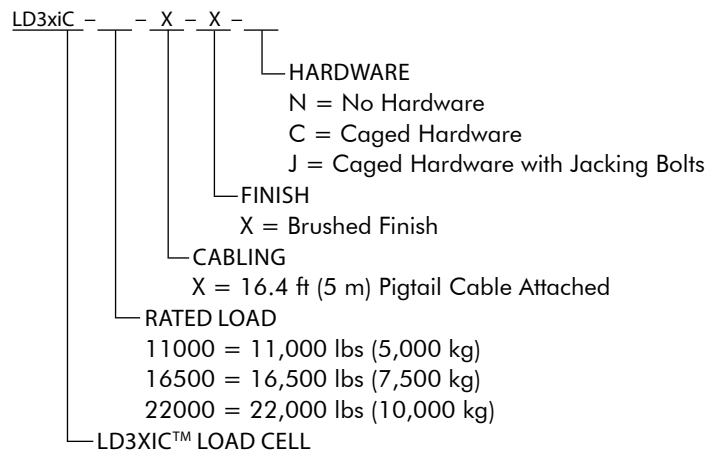
No check rods needed.

High Functional Overload Capacity

Allows overloading vessel without damaging load cells.

This stainless steel load cell has been designed to ease the installation of weighing and batching systems, in tanks, bins and in static or vibrating hoppers. Since the LD3xiC™ load cell can be installed before or after the tank is installed onto the cage fixture, there is more flexibility in mounting procedures. If ever the load cell needs to be replaced, it can be removed without having to remove the cage fixture itself. The LD3xiC™ is available in weight capacities from 11,000 to 22,000 lb and is easy to specify.

HOW TO ORDER



SPECIFICATIONS

FUNCTIONAL

Excitation Voltage - Operating Range	5 VDC- 15 VDC
Maximum Current	16 mA @ 10 VDC excitation
Input Resistance	700 ohms \pm 1%
Insulation Resistance	> 5 ohms
Recommended Supply Voltage	10 VDC
Compression	3 x rated load
Functional Integrity	1.5 x rated load (compression)

PERFORMANCE

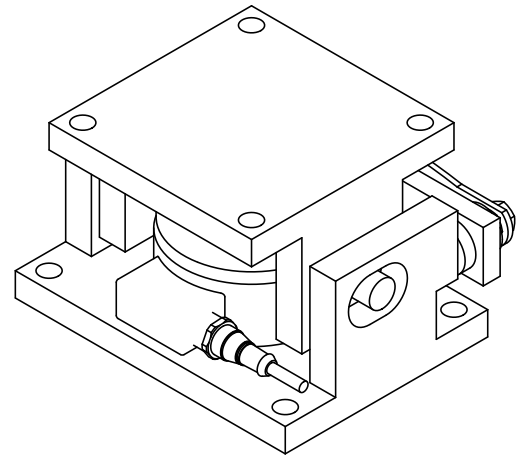
Non-linearity/Hysteresis Combined	0.03% rated load
Return to Zero	Over 30 min: 0.026% rated output
Creep	Over 30 min: 0.028% rated output Over 20 and 30 min: 0.008% rated output
Zero Balance	1% rated output
Rated Output	2 mV/V \pm 0.1%

PHYSICAL

Temperature Range	Standard: 14° to 104° F (-10° to 40° C) Sensitivity Change: 0.00094% /° F (0.0017% /° C) Zero Shift: 0.0013% /° F (0.0024% /° C) Storage Temp Range: -4° to 176° F (-20° to 80° C)
Humidity	100%
Rating	IP68 (100h at 1m water column)
Construction	Load cell and cage: 17- 4 PH 900 SS
Cable	4-conductor, 22 gage shielded, 16 ft (5 m) long, with finned pigtail termination
Shipping Weight	18.7 lb (3.9 kg)

DIMENSIONS

Installed Height	3.94 in (100.0 mm)
Base Plate	6.30 in x 4.72 in (160 x 120.0 mm)
Top Plate	4.72 in x 4.72 in (120 x 120 mm)
Overall Length	6.88 in (169.7 mm)
Overall Depth	5.04 in (137.2 mm)



LD3xiC



LD3xi™

Process Tank Weighing for Wet-to-Sanitary Operating Conditions

TECHNICAL SPECIFICATIONS



FEATURES AND BENEFITS

Cleanability and Strength For CIP/SIP

Built-in vessel hold-down eliminates mechanical pivot points, a source of bacteria traps and system errors caused by hardware gradually binding. Less operator time spent cleaning.

NEMA-6P / IP68 Submersion Rating, 17-4 ph 900 SS Construction

Unsurpassed waterproof protection and corrosion resistance for long life in rigorous CIP wash down areas. First load cell ever with a sealed cabling system option.

Minimal Deflection

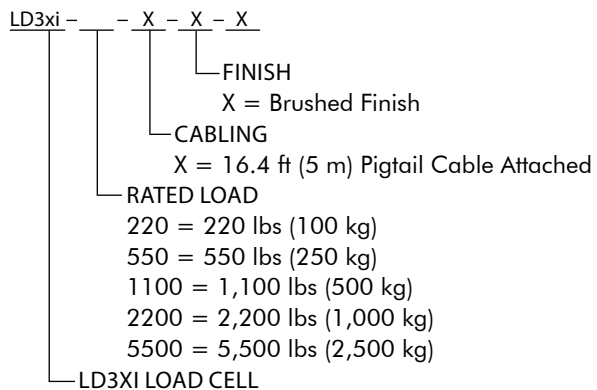
Better system performance on tanks with pipes and process plumbing connections.

The LD3xi™ shares many common features to Kistler-Morse's LD360s but features higher accuracies for smaller-capacity weighing applications and is available in weight ranges between 220 lbs. and 5,500 lbs.

The LD3xi™ is a rugged, stainless steel load cell for in-process tanks and bulk storage vessels. It combines vessel "hold-down" with cleanability. It continuously measures the weight of the tank, providing 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 LD3xi™ ideal for use in high-pressure, wash-down environments where cleaning and sanitizing chemicals are used. The LD3xi™ is particularly suitable for use on mixing and blending vessels, surge hoppers and vessels with agitators.

HOW TO ORDER



SPECIFICATIONS

FUNCTIONAL

Excitation Voltage	Operating Range: 5 VDC - 15 VDC
Maximum Current	16 mA @ 10 VDC excitation
Input Resistance	700 ohms \pm 2%
Recommended Supply Voltage	10 VDC
Compression	3 x Rated Load
Functional Integrity	1.5 x Rated Load (compression)

PERFORMANCE

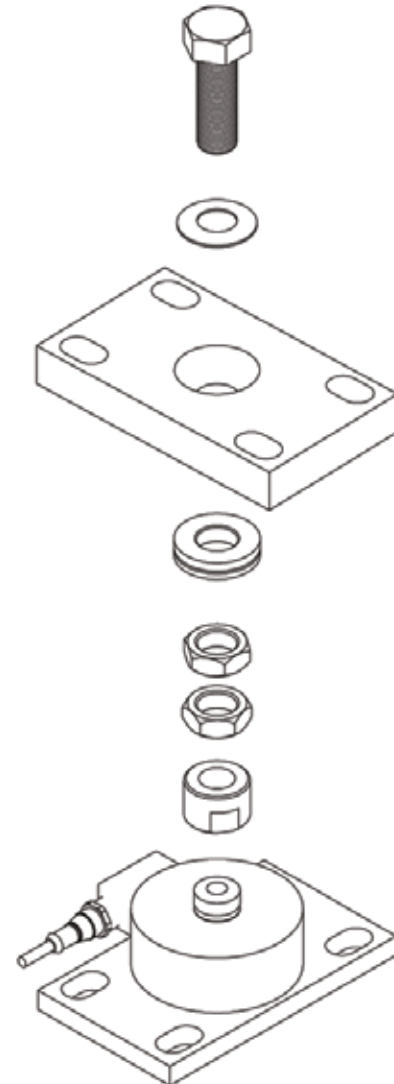
Non-linearity/Hysteresis Combined	0.03% Rated Load
Return to Zero	Over 30 min: 0.026% Rated Load
Creep	Over 30 min: 0.028% Rated Load, Over 20 & 30 min: 0.008% Rated Output
Zero Balance	1% Rated Output
Rated Output	2 mV/V \pm 0.1%
Deflection	0.004"-0.008" for capacities 220 to 5500 lb

PHYSICAL

Temperature	Standard: 14° to 104° F (-10° to 40° C) Sensitivity change: 0.00094%/° F (0.0017%/° C) Zero shift: 0.0013%/° F (0.0024%/° C) Storage Range: -4° to 176° F (-20° to 80° C)
Humidity	100%
Rating	IP68 (100h at 1m water column)
Construction	17-4 PH 900 stainless steel
Cable	4-conductor, 22 gage shielded, 16 ft (5m) long, with tinned pigtail termination
Shipping Weight	5 lbs. (2.53 kg)

DIMENSIONS

Base Plate Size Length x Width	6" x 3 1/2" (152.4 mm x 88.9 mm)
Installed Height	LD3xi™ w/UA3xi: 2 3/4" (69.3 mm) LD3xi™ w/LT3xi: min=5" (127 mm), max=5 17/100" (131.3 mm)
Top Plate Size Length x Width	UA3xi: 6" x 3 1/2" (152.4 mm x 88.9 mm) LT3xi: 6" x 3 1/2" (152.4 mm x 88.9 mm)



LD3xi with LT3xi Leveling Top Adapter Plate