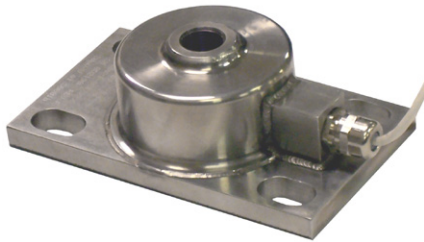




LD3™ Compression Load Cell

Low Cost - High Performance Compression Load Cell
Suitable for a Wide Range of Applications

TECHNICAL SPECIFICATIONS



FEATURES AND BENEFITS

Versatile Load Cell for Dry to Wet Applications

Due to its low cost and high performance, this load cell is suitable for applications ranging from bulk dry solids to sanitary washdown or corrosive environments.

Cleanability and Strength For CIP/SIP

Built-in vessel hold-down eliminates mechanical pivot points, a source of bacteria traps and system errors. Less 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 and corrosive areas.

Minimal Deflection

Better system performance on tanks with pipes and process plumbing connections versus load cells that need stay rods or check rods.

Utilizing the proven KM semiconductor strain gage technology, the rugged LD3™ Compression Load Cell continuously measures the weight of material for in-process and bulk storage vessels. The LD3™ is suitable for a wide range of applications from dry, solid material measurement to high-pressure washdown, corrosive or submerged environments and is available in capacities from 1,000 lbs. to 25,000 lbs.

The design of the LD3™ 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.

Many competitive load cell designs lend themselves to the entrapment of bacteria, requiring extensive cleaning and maintenance. With its smooth surfaces and hermetically sealed design, the LD3™ requires less cleaning compared to beam or pancake-style load cells. The LD3's monolithic design eliminates the need for restraints or stay rods and provides options for seismic applications.

HOW TO ORDER

LD3 - - - - X - X

FINISH

X = Brushed Finish

CABLE LENGTH

- 015 = 15 ft (4.57m) Cable
- 015T = 15 ft (4.57m) Cable Used w/ Operating Temp F
- 025 = 25 ft (7.62m) Cable
- 025T = 25 ft (7.62m) Cable Used w/ Operating Temp F
- 050 = 50 ft (15.24m) Cable
- 050T = 50 ft. (15.24m) Cable Used w/ Operating Temp F
- 100 = 100 ft (30.48m) Cable
- 100T = 100 ft. (30.48m) Cable Used w/ Operating Temp F

OPERATING TEMPERATURE

- F = Mid-Range Temperature 50° to 150° F (10° to 66° C)
- X = Ambient Temperature 0° to 100° F (-18° to 38° C)

RATED LOAD

- 01K = 1,000 lbs (454 kg)
- 02K = 2,000 lbs (907 kg)
- 03K = 3,000 lbs (1,361 kg)
- 05K = 5,000 lbs (2,268 kg)
- 07K = 7,500 lbs (3,402 kg)
- 10K = 10,000 lbs (4,536 kg)
- 15K = 15,000 lbs (6,804 kg)
- 20K = 20,000 lbs (9,072 kg)
- 25K = 25,000 lbs (11,340 kg)

LD3™ LOAD CELL

SPECIFICATIONS

FUNCTIONAL

Excitation Voltage - Operating Range	10 VDC - 30 VDC
Excitation Current	3 mA @ 12 VDC excitation (0° F) max
Output Resistance	7.5K ohms ± 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

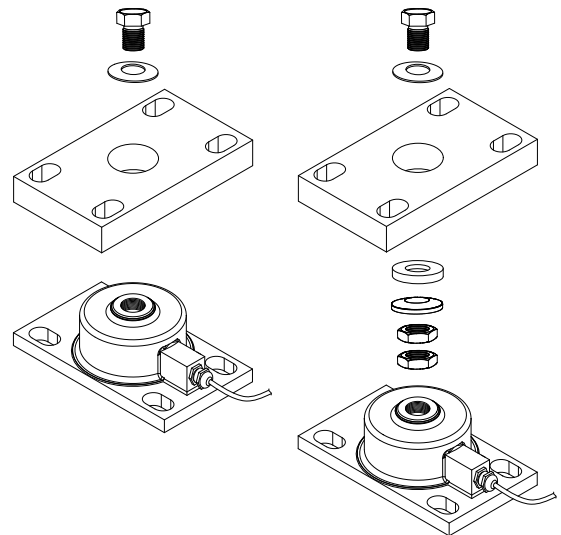
Non-linearity/ Hysteresis Combined	0.08% performance
Return to Zero	0.05% rated output
Zero Balance	1% rated output
Rated Output	360 mV DC @ 12 VDC ± 1%
Deflection	0.004" - 0.006" for capacities 1,000 - 5,000 lbs
	0.008" - 0.012" for capacities 7,500 - 25,000 lbs

PHYSICAL

Temperature Range	Standard: 0° to 100° F (-18° to 38° C)
	Mid: 50° to 150° F (10° to 66° C)
	Effects - Sensitivity Change: 0.015% /° F (0.027% /° C)
	Effects - Zero Shift: Std/Mid Temp Ranges: 0.006% /° F (0.011% /° C)
Storage Temp Range:	-40° to 176° F (-40° to 80° C)
Humidity	100%
Rating	NEMA - 6P
Construction	17 - 4 PH 900 stainless steel
Connector	Nickel plated brass body with polyimide insert and neoprene grommet
Cable	22 AWG 3 conductor unshielded with PVC sheath (15" standard)
Shipping Weight	5 lbs. (2.3 kg)

DIMENSIONS

Base Plate Size Length x Width	6.0" x 3.5" (152.4 mm x 88.9 mm)
Installed Height	LD3™ W/UA: 1K to 10K lbs: 2.7" (70.1 mm) 15K to 25K lbs: 3.33" (84.6 mm)
	LD3™ W/LT3: 1K to 7.5 lbs Only: Minimum 4.094" (104 mm), Maximum 4.219" (107.2 mm) (Adjustable)
Top Plate Size Length x Width	UA3: 6.0" x 3.5" (152.4 mm x 88.9 mm)
	LT3: 6.0" x 3.5" (152.4 mm x 88.9 mm)



LD3™ with UA3
Top Adapter Plate

LD3™ with LT3
Leveling Top Adapter Plate