# LAUMAS<sup>®</sup> CTL Series - Tension and Compression Load Cells



Part No. CTL500



### **Overview**

Laumas CTL Series tension/compression load cells provide a force reading in either direction with capacities ranging from 100 kg to 12,500 kg. An IP68 rating ensures reliable performance in tough environments, making the CTL a great solution for industrial weighing applications. Laumas load cells are manufactured in Europe to high quality specifications and standards.

### Features

- Measures compression and/or tension
- Tough corrosion-resistant stainless steel construction
- 150% overload rating prevents damage and extends sensor lifespan
- Ideal for cranes, hoppers, and tank applications
- Integrated shielded 6-conductor cable
- IP68 protection rating
- Made in Italy
- CE

#### Part No. CTL5000

CTL Series Tension and Compression Load Cells												
Part Number	Load Rating	Material	Accuracy	Voltage Signal Range	Operating Voltage	Output Resistance	Electrical Connection	Price	Weight (lbs)	Drawing Link	Manufacturer Technical Specifications	Manufacturer Installation Guidelines
<u>CTL100</u>	220 lb/100 kg			f 2 mV/V	3-15 VDC	350Ω <sup>i</sup>	32.8 ft/10m integral 4-wire shielded cable	\$320.00	1.93	<u>PDF</u>	PDF	PDF
<u>CTL200</u>	440 lb/200 kg							\$320.00	1.94	<u>PDF</u>		
<u>CTL300</u>	660 lb/300 kg							\$320.00	1.99	<u>PDF</u>		
<u>CTL500</u>	1102 lb/500 kg							\$320.00	3.33	<u>PDF</u>		
<u>CTL1000</u>	2204 lb/1000 kg	17-4PH Stainless	+/- 0.02% of					\$320.00	3.35	PDF		
<u>CTL2500</u>	5510 lb/2500 kg	Steel PVC cable	full scale					\$320.00	3.32	PDF		
<u>CTL5000</u>	11020 lb/5000 kg							\$465.00	6.54	PDF		
<u>CTL7500</u>	16530 lb/7500 kg							\$465.00	6.60	PDF		
<u>CTL10000</u>	22040 lb/10000 kg							\$585.00	8.56	PDF		
<u>CTL12500</u>	27550 lb/12500 kg							\$625.00	11.67	<u>PDF</u>		

Note: For additional wiring, specifications and installation information, refer to the additional Manufacturer Specs and Manual PDFs.

## Wiring

	SHIELD	
	+ SIGNAL	GREEN
	+ EXCITATION + REF./SENSE	RED BLUE
	- SIGNAL	WHITE
$\sim$	- EXCITATION - REF./SENSE	BLACK YELLOW

## Sizing of load cells capacity

For static weighing, it is advisable to implement a safety factor and only use load cells at a maximum of 70-80% of its nominal capacity (assuming that the load is uniformly distributed over the entire weighed structure). Further reduction may be required for loads that are not uniform; for example, forklift handling and bridge crane applications. Dynamic loads require the consideration of additional introduced forces that contribute to the total maximum load on the load cell.

# **LAUMAS**<sup>®</sup> Equalization Junction Box



Part No. CE41N

### **Overview**

The Laumas CE41N equalization junction box provides an easy way to take multiple load cells in a weighing system and sum them up for a total weight. The CE41N's built-in potentiometers allow for trimming the individual load cells that make up the summed signal so the same load applied at each cell provides a consistent change to the combined output signal. Multiple units can be utilized to allow for even larger numbers of load cells to be used with electronics with multiple inputs (up to 16 load cells with the <u>TLB4</u>, for example).

### Features

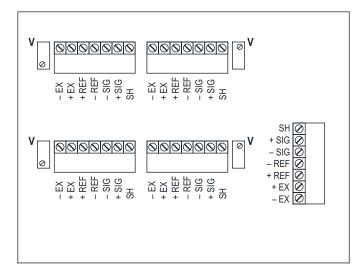
- Clear cover for easy inspection of wiring
- Trimmer potentiometers for signal equalization of up to 4 load cells
- IP67 protection rating
- Cable glands included

- Works with 4- or 6-wire load cells
- Made in Italy

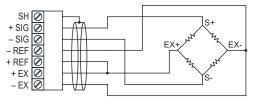
Equalization Junction Box					
Part Number	Description	Price	Weight (Ibs)	Drawing Link	Manufacturer Technical Specifications
<u>CE41N</u>	Laumas equalization junction box, ABS plastic. For use with up to (4) 4- or 6-wire load cells.	\$89.00	0.952	<u>PDF</u>	PDF

Note: For additional wiring, specifications and installation information refer to the additional Manufacturer Specs PDFs.

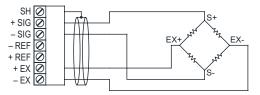
# Wiring



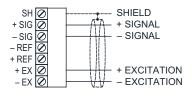
6-WIRE LOAD CELLS CONNECTION



#### 4-WIRE LOAD CELLS CONNECTION



4-WIRE OUTPUT CABLE WITH 4-WIRES LOAD CELL



6-WIRE OUTPUT CABLE WITH 6-WIRE LOAD CELL

SH (2) + SIG (2) - SIG (2) - REF (2) + REF (2) + EX (2)		SHIELD + SIGNAL - SIGNAL - REF./SENSE + REF./SENSE + EXCITATION
– EX 🖉	)	

# 6-WIRE OUTPUT CABLE WITH 4-WIRE LOAD CELL

-

+

SH	0	SHIELD
+ SIG	0	+ SIGNAL
- SIG	0	
REF	$\oslash$	REF./SENSE
REF	$\oslash$	+ REF./SENSE
+ EX	$\oslash$	++++++++++++++++++++++++++++++++++++++
– EX	0	