

LAUMAS®

FCAL Series - Bending Beam Load Cells

Overview

The Laumas bending beam load cell delivers exceptional accuracy with capacities ranging from 50 kg to 300 kg. An IP68 rating ensures reliable performance in tough environments. The FCAL is a great solution for industrial weighing applications and has several accessories that allow for mounting in many different applications (sold separately). Laumas load cells are manufactured in Europe to high quality specifications and standards.

Part No. [FCAL75](#)

Features

- High level of accuracy +/- 0.017% full scale
- Tough corrosion-resistant stainless steel construction
- 150% overload rating prevents damage and extends sensor lifespan
- Ideal for platform scales, conveyor systems, and small hopper applications
- Integrated shielded 4-conductor cable
- IP68 protection rating
- Made in Spain



FCAL Series Bending Beam 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
FCAL50	110 lb/50 kg	420 Stainless Steel PVC cable	+/- 0.017% of full scale	2 mV/V	3-15 VDC	350Ω	9.8ft/3m integral 4-wire shielded cable	\$295.00	1.55	PDF	PDF	PDF
FCAL75	165 lb/75 kg							\$295.00	1.55	PDF		
FCAL150	330 lb/150 kg							\$295.00	1.57	PDF		
FCAL300	660 lb/300 kg							\$295.00	1.59	PDF		

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

Wiring







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.

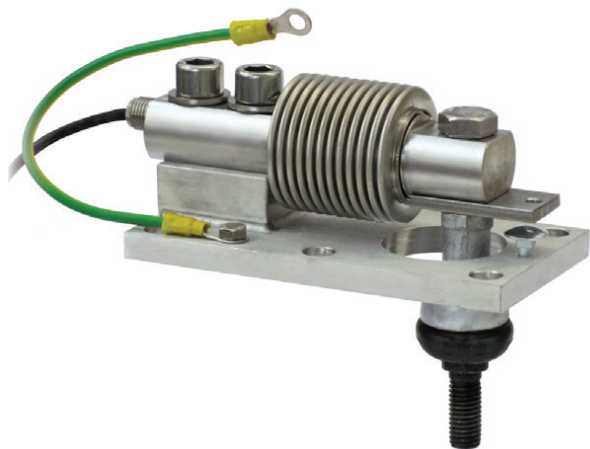


FCAL Series - Bending Beam Load Cell - Accessories

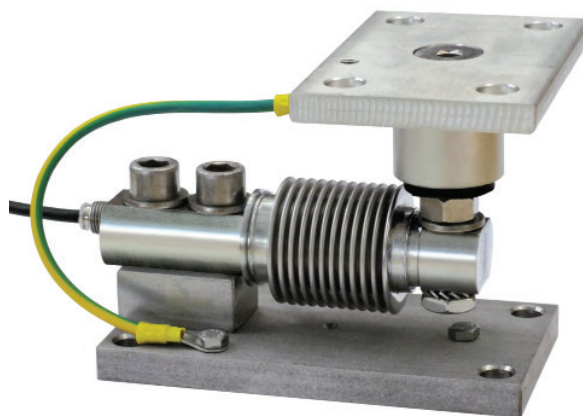
FCAL Series Bending Beam Load Cell - Accessories								
Item Photo	Part No.	Description	Price	Material	Weight (lbs)	Drawing Link	Manufacturer Technical Specifications	Manufacturer Installation Guidelines
	<u>ANTIV45</u>	Laumas compression joint, stainless steel/rubber, 4409 lb/2000 kg. For use with Laumas FCAL series load cells.	\$49.00	304 Stainless Steel and rubber	0.276	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>
	<u>TFGP</u>	Laumas alignment mounting hardware, stainless steel/rubber, 1102 lb/500 kg. For use with Laumas FCAL series load cells.	\$120.00		5.156	<u>PDF</u>	<u>PDF</u>	
	<u>TFAST</u>	Laumas hanging alignment mounting hardware, aluminum/stainless steel/rubber, 1102 lb/500 kg. For use with Laumas FCAL series load cells.	\$115.00		3.002	<u>PDF</u>	<u>PDF</u>	
	<u>STAFFEFCAMONT</u>	Laumas tension bracket, stainless steel, 660 lb/300 kg. For use with Laumas FCAL series load cells.	\$79.00	304 Stainless Steel	1.618	<u>PDF</u>	<u>PDF</u>	

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

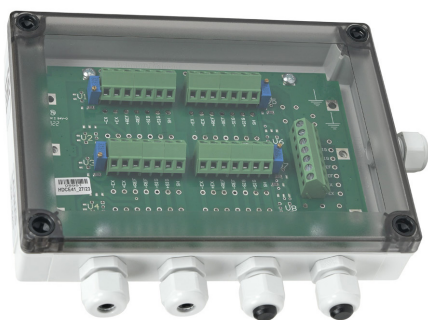
[TFAST](#) Example



[TFGP](#) Example



LAUMAS® 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 [TLB4](#), for example).

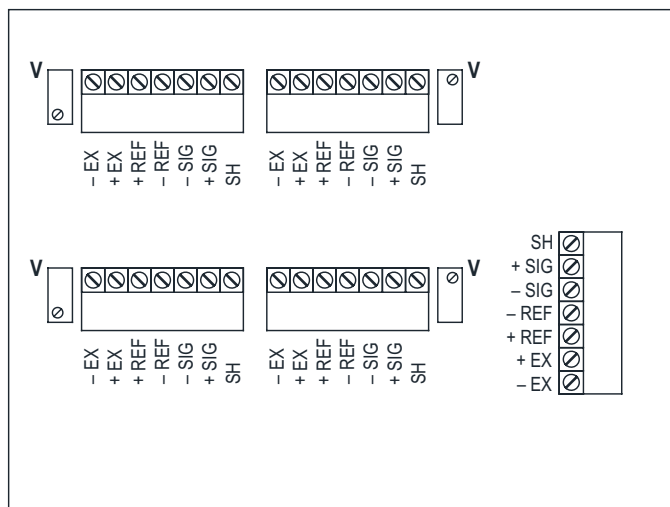
Features

- 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

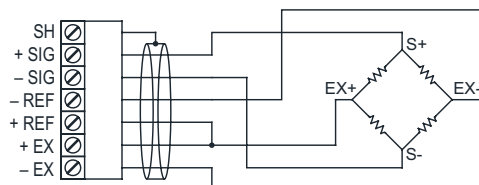
Equalization Junction Box					
Part Number	Description	Price	Weight (lbs)	Drawing Link	Manufacturer Technical Specifications
CE41N	Laumas equalization junction box, ABS plastic. For use with up to (4) 4- or 6-wire load cells.	\$89.00	0.952	PDF	PDF

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

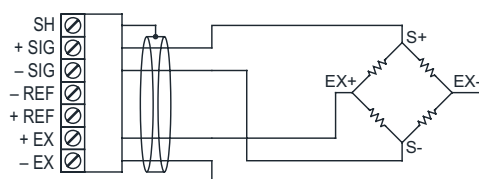
Wiring



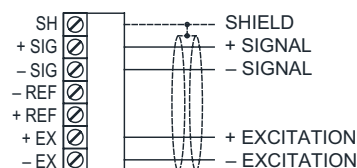
6-WIRE LOAD CELLS CONNECTION



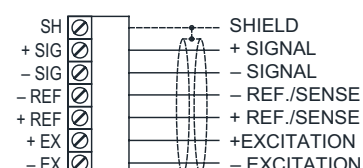
4-WIRE LOAD CELLS CONNECTION



4-WIRE OUTPUT CABLE WITH 4-WIRES LOAD CELL



6-WIRE OUTPUT CABLE WITH 6-WIRE LOAD CELL



6-WIRE OUTPUT CABLE WITH 4-WIRE LOAD CELL

