# 9102 SINGLE ENDED BEAM LOAD CELL





### **DESCRIPTION:**

The 9102 is a stainless steel single ended beam type load cell.

This product is suitable for small and medium platform scales, overhead track scales and process weighing.

The fully welded construction and water block cable entry ensure that this product can be used successfully in harsh environments found in the food, chemical and allied process industries.

This product meets the stringent Weights and Measures requirements throughout Europe.

## **FEATURES:**

- Low profile, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 5000d
- ATEX certified versions are available for use in potentially explosive atmospheres
- Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells
- Interchangeable with existing model 5102
- CAPACITIES: 200-2500lbs



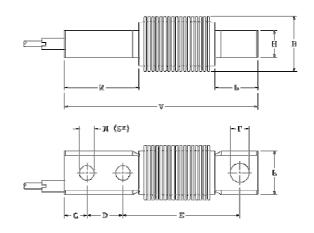
## 9102: SPECIFICATIONS

Standard Capacities (=E <sub>max</sub> )	Lbs		200, 500, 1000, 2500			
Accuracy Class According to OIML R-60			C3	C4	C5	
Max. Number of Verification Intervals (n <sub>lc</sub> )			3000	4000	5000	
Minimum Verification Interval (v <sub>min</sub> )			E <sub>max</sub> /15000	E <sub>max</sub> /15000	E <sub>max</sub> /15000	
Accuracy According to Type Designation		CC	C3	C4	C5	
Combined Error	%S	≤± 0.0500	≤± 0.0200	≤± 0.0150	≤± 0.0100	
Non-Repeatability	%S	≤± 0.0200	≤± 0.0100	≤± 0.0090	≤± 0.0070	
Minimum Dead Load Output Return <sup>1</sup>	%S	≤± 0.0500	≤± 0.0167	≤± 0.0125	≤± 0.0100	
Creep Error (30 Minutes) <sup>1</sup>	%S	≤± 0.0600	≤± 0.0245	≤± 0.0184	≤± 0.0147	
Creep Error (20-30 Minutes) <sup>1</sup>	%S	≤± 0.0200	≤± 0.0053	≤± 0.0039	≤± 0.0032	
Temp. Effect on Min. Dead Load Output	%S/5°C	≤± 0.0250	≤± 0.0047	≤± 0.0047	≤± 0.0047	
Temp. Effect on Sensitivity	%S/5°C	≤± 0.0250	≤± 0.0055	≤± 0.0045	≤± 0.0035	
Minimum Dead Load	%E <sub>max</sub>	0				
Maximum Safe Over Load	%E <sub>max</sub>	150				
Ultimate Over Load	%E <sub>max</sub>	300				
Maximum Safe Side Load	%E <sub>max</sub>	100 (50 for 200lbs)				
Deflection at E <sub>max</sub>	mm	0.2/ 0.2/ 0.8/ 0.8				
Excitation Voltage	V	512				
Maximum Excitation Voltage	V	15				
Rated Output (=S)	mV/V	2				
Tolerance on Rated Output	mV/V	± 0.02				
Zero Balance	%S	≤±1.0				
Input Resistance	Ω	350 ± 3.5				
Output Resistance	Ω	350 ± 3.5				
Insulation Resistance	MΩ	≥ 5000				
Compensated Temperature Range	°C	-10+40				
Operating Temperature Range	°C	-40+80				
Storage Temperature Range	°C	-40+90				
Element Material (DIN)		Stainless Steel 1.4542				
Sealing (DIN 40.050 / EN 60.529)		IP66 and IP68				
SC-Version (Current Calibration)		Standard				
Recommended Torque on Fixation Bolts	Nm	80 (70 for 200lbs)				
ATEX options for potentially explosive atmospheres		II1G EEx ia IIC T4/T6, II2D				

<sup>1</sup> Applies for the temperature range -10 to +40 C

"SC-Version" The "Rated Output" and the "Output Resistance" are balanced in such a way, that the output current is calibrated within 0.05% to a reference value. This allows an easy parallel connection of load cells. Accuracy classes C3, C4 and C5 are in agreement with the OIML recommendation R-60. Accuracy classes C1 and C2 are also available.

Correct mounting of the load cells is essential to ensure optimum performance. Further information is available on request.



### Cable specifications:

Cable length 3m
Excitation + Red
Excitation - Black
Output + Green
Output - White
Shield Transparant

Cable screen is not connected to load cell body. Performance may be affected if load cell cables are shortened

#### Attention:

Dimensions: mm All dimension tolerances according to ISO 2768m, unless otherwise specified.

Capacity	200	500-1000	2500
Α	127.0	136.7	136.7
В	39.0	39.0	39.0
С	9.7	15.8	15.8
D	15.9	25.4	25.4
E	88.9	82.6	82.6
F	31.0	31.0	31.0
Н	19.0	19.0	19.0
L thru	9.9	10.3	13.5
M thru	6.8	10.3	10.3
N	38.1	52.6	52.6
Р	31.8	30.5	30.5

All specifications subject to change without notice.

Instrotech Australia Pty Ltd PO Box 3137 Newton SA 5074 Tel.: + 61 8 8337 8033

Fax.: + 61 8 8337 8656 Email: sales@instrotech.com.au