

# Amber Instruments Ltd

## Welded, Hermetically Sealed Load Cell



### FEATURES

- Capacities 5 - 500 kg
- Stainless steel construction
- OIML R60 and NTEP approved
- IP68 protection

### OPTIONAL FEATURES

- EEx ia IIC T6 hazardous area approval
- FM approval available

### DESCRIPTION

Model 355 is a welded bending load cell manufactured in stainless steel. Hermetically sealed against moisture the Model 355 construction and polyurethane shielded cable enables the load cell to function in harsh environments while maintaining its operating specifications.

The low profile, high accuracy and sealing makes this load cell highly suitable for applications such as low profile platforms, weighing and packing machines, conversion of mechanical scales and variety of

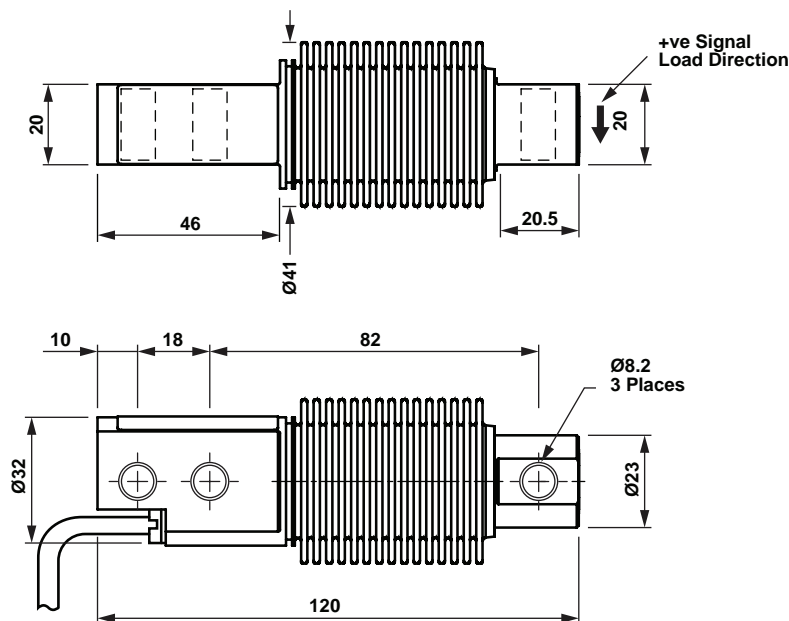
other applications where sealed cells are required. For hazardous environments this load cell is available with EEx ia IIC T6 level of approval as an option.

The two additional sense wires feed back the voltage reaching the load cell. Complete compensation of change in the lead resistance due to temperature change and/or cable extension, is achieved by feeding this voltage into the appropriate electronics.

### APPLICATIONS

- Low profile platforms
- Loss-in-weight feeders
- Marine and hybrid scales
- Belt weighers
- Food industry harsh environment

### OUTLINE DIMENSIONS in millimeters



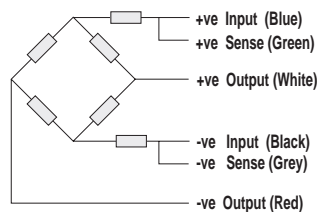
## SPECIFICATIONS

PARAMETER	VALUE				UNIT
	NTEP	C1	C3*	C4**	
NTEP/OIML Accuracy class					
Maximum no. of intervals (n)	4000 single	1000	3000	4000	
$Y = E_{max}/V_{min}$	5800	3333	15000	13333	Maximum available
Rated capacity-R.C. ( $E_{max}$ )	5, 10, 20, 30, 50, 100, 200, 250, 500				kg
Rated output-R.O.					mV/V
Rated output tolerance					± mV/V
Zero balance					± mV/V
Zero Return, 30 min.	0.0250	0.0500	0.0170	0.0130	± % of applied load
Total Error	0.0200	0.0300	0.0200	0.0150	± % of rated output
Temperature effect on zero	0.0023	0.007	0.0011	0.0011	± % of rated output/°C
Temperature effect on output	0.001	0.0040	0.0010	0.0008	± % of applied load/°C
Temp. range, compensated	-10 to +40				°C
Temp. range, safe	-20 to +70				°C
Maximum safe central overload	150				% of R.C.
Ultimate central overload	300				% of R.C.
Excitation, recommended	10				Vdc or Vac rms
Excitation, maximum	15				Vdc or Vac rms
Input impedance	380 ± 10				Ohms
Output impedance	350 ± 3				Ohms
Insulation resistance	> 2000				Mega-Ohms
Cable length	3				m
Cable type	6 wire, braided, Polyurethane, dual floating screen				Standard
Construction	Stainless steel				
Environmental protection	IP68				
Recommended torque	22.0				N*m

\* 20% utilization

\*\* 30% utilization

### Wiring Schematic Diagram



# Amber Instruments Ltd

Dunston House, Dunston Road, Chesterfield, Derbys, S41 9QD  
 Tel: 01246 260250 Fax: 01246 260955  
 e-mail: sales@amberinstruments.com web: www.amberinstruments.com

Torque Transducers, Load Cells (general purpose, weighing & fatigue rated). Multi-Axis Force/Torque, Weighing Instruments, Process Instruments, Portable Data Loggers, Pressure Sensors, Proximity Sensors, Laser (Distance Measuring) Sensors, & more.