

# Cardinal LOAD CELLS

SERIES TB - BEAM TYPE - FOR MEDIUM TO HEAVY WEIGHING



- Capacities of 450 kg, 1100 kg, and 1800 kg
- Waterproof construction
- Stainless steel for corrosion resistance
- Direct mounting to weighing platform
- 3 m integral shielded cable

Cardinal's TB series, medium capacity beam load cells, are manufactured for medium to heavy weighing operations such as bench or floor scales. Stainless steel construction offers strength, and the ultimate in protection when caustic or corrosive environments are encountered. Heavy capacity single point cells are available in 450 kg to 1800 kg capacities. The unique design of these beam load cells offers cost-saving advantages for many weighing applications.

These cells are potted with a proprietary sealant that offers superior waterproofing, while remaining flexible over the life of the load cell. This special compound protects the load cell strain gages, and over a broad temperature range has no effect on load cell precision accuracy.

All load cells have threaded mounting holes, and a 3 m integral multiconductor cable secured by a strain relief seal.

## SPECIFICATIONS

### Mechanical Data

Rated Capacity, (R.C.) $E_{max}$  .450, 1100, & 1800 kg  
Minimum Dead Load .....0 kg  
Safe Load Limit.....150% R.C.  
Ultimate Load .....300% R.C.  
Deflection at R.C.....0.33 to 0.64 mm  
Spring Element Material .....17-4 PH  
Net Weight.....0.82 kg

### Certificate Data

Issuing Body .....OIML  
Certificate Number .....R60/1991-DK-97.03  
Accuracy Class.....C3  
Maximum Number of Load  
Cell Intervals, ( $n_{max}$ ) .....3000  
Single/Multiple .....S  
Humidity Symbol.....CH  
Minimum Load Cell  
Verification Interval ( $V_{min}$ ) ...0.08, 0.19, 0,32 kg

### Electrical Data

Rated Output .....2mV/V  
Excitation Voltage,  
Recommended .....10 VDC  
Excitation Voltage,  
Maximum .....15 VDC  
Cable Length .....3m  
Terminal Resistance  
Excitation .....400 ± 7 ohms  
Signal.....350 ± 5 ohms  
Zero Load Output .....± 1% R.C.  
Insulation Resistance .....>5000 megohms at  
50 VDC

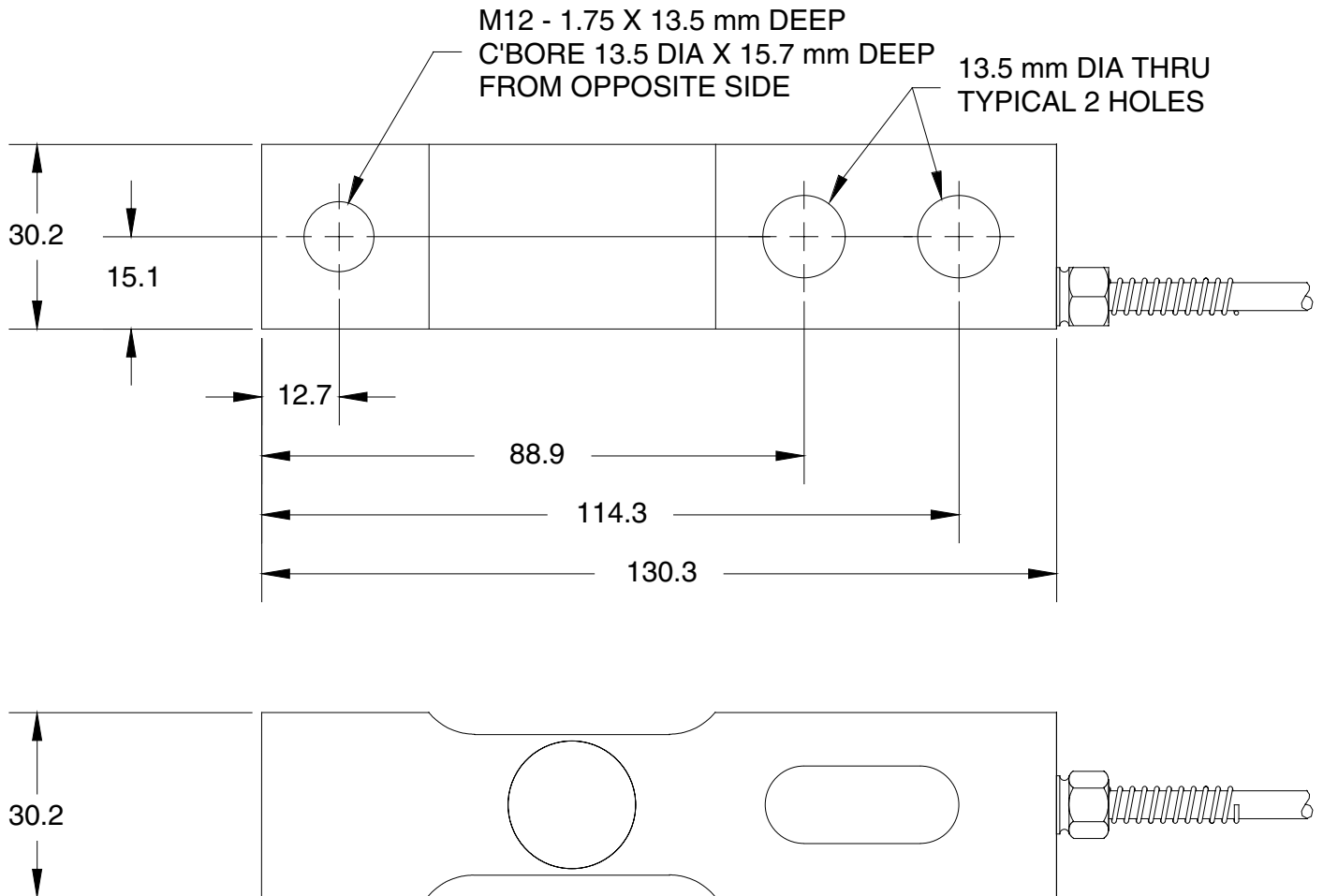
### Environmental Data

Temperature Compensation  
Range .....-10½ to +40½C  
Operating Temperature Range ..-29½ to +93½C  
Construction & Protection  
Code .....CP-56 HU, IP67  
Barometric Pressure Effect  
on Zero Load Output .....<1 v (min)/1kPa

### Color Code

+ Excitation .....Red | - Signal .....White  
- Excitation .....Black | + Signal .....Green

# Cardinal BEAM TYPE LOAD CELLS



All dimensions are in mm unless otherwise noted.



This load cell meets the requirements of OIML R60 and has been issued an OIML certificate no. R60/1991-DK-97.03.



Cardinal Scale reserves the right to improve, enhance and modify features and specifications without prior notice.

## ELECTRICAL INFORMATION

