

Cardinal LOAD CELLS

SERIES DB - LOAD CELLS FOR COMPRESSION WEIGHING



- **Model DB-50000S**
- **Capacity 22500 kg**
- **Environmentally sealed (IP67)**
- **Stainless steel construction**
- **10 m integral shielded cable**
- **2 year warranty**

The heavy capacity series of double ended, shear beam load cells are ideal for multiple load cell applications such as motor truck scales and heavy duty tank weighing systems. These load cells are available in a 22500 kg capacity.

Load cells are fabricated from stainless steel to provide the ultimate in protection when caustic, corrosive or wet environments are encountered. Load cells are environmentally sealed for absolute water protection (NEMA 6P/IP67).

Each load cell is furnished with a 10 m integral multiconductor cable secured by a strain relief seal.

SPECIFICATIONS

Mechanical Data

| | |
|--|-----------|
| Rated Capacity, (R.C.)E _{max} | 22500 kg |
| Minimum Dead Load | 225 kg |
| Safe Load Limit | 150% R.C. |
| Ultimate Load | 300% R.C. |
| Deflection at R.C. | 0.38 mm |
| Spring Element Material | 17-4 PH |
| Net Weight | 4 kg |

Certificate Data

| | | |
|---|----------|-------------------|
| Issuing Body | NTEP | OIML |
| Certificate Number | 97-133A1 | R60/1991-DK-99.01 |
| Accuracy Class | IIIL | C3 |
| Maximum Number of Load Cell Intervals, | | |
| n _{max} | 10000 | 3000 |
| Single/Multiple | M | |
| Humidity Symbol | | CH |
| Minimum Load Cell Verification Interval | | |
| V _{min} | .64 kg | 2.5 kg |

Electrical Data

| | |
|---------------------------------|-------------------------|
| Rated Output | 2 ± 0.1% mV/V |
| Excitation Voltage, Recommended | 10 VDC |
| Excitation Voltage, Maximum | 15 VDC |
| Cable Length | 10 m |
| Terminal Resistance | |
| Excitation | 778 ± 12 ohms |
| Signal | 702 ± 10 ohms |
| Zero Load Output | ± 1% R.C. |
| Insulation Resistance | >5000 megohms at 50 VDC |

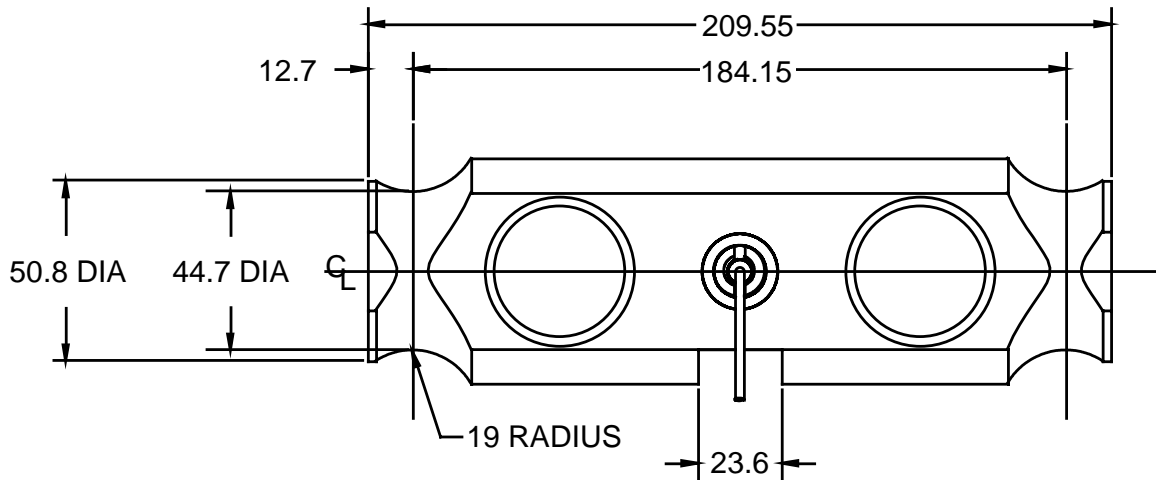
Environmental Data

| | |
|--|-----------------|
| Temperature Compensation | |
| Range | -10° to +40°C |
| Operating Temperature Range | -29° to +93°C |
| Construction & Protection | |
| Code | CP-67 HU, IP67 |
| Barometric Pressure Effect on Zero Load Output | <1 v (min)/1kPa |

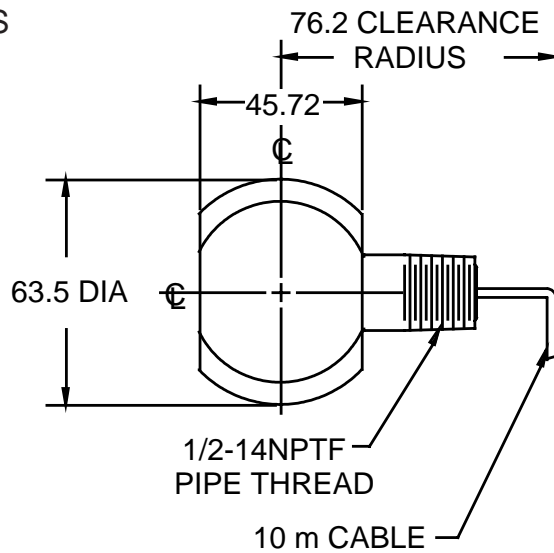
Color Code

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

Cardinal COMPRESSION LOAD CELLS



Model: DB-50000S
Capacity: 22500 kg



All dimensions in mm unless otherwise noted.



The SB Series Load Cells meet all requirements of OIML R60 and has been issued OIML certificate no. R60/1991-DK-99.01.



The SB Series Load Cells meet all requirements of Handbook 44, issued by the National Institute of Standards and Technology and have been issued the NTEP Certificate of Conformance No. 97-133A1.



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

ELECTRICAL INFORMATION

- Red + excitation
- Black - excitation
- Yellow - Shield
- White - signal
- Green + signal

Cardinal
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