

Cardinal LOAD CELLS

SERIES DB - LOAD CELLS FOR COMPRESSION WEIGHING



- **Model DB-50000S, DB-75000S**
- **Capacity 22500 kg, 34000 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.

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, 34000 kg
Minimum Dead Load	160 kg, 160 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	97-133A2	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 (DB-50K)
V_{min}	95 kg	2.5 kg (DB-75K)

Electrical Data

Rated Output	$2 \pm 0.1\%$ mV/V
Excitation Voltage, Recommended	10 VDC
Excitation Voltage, Maximum	15 VDC
Cable Length	10 m
Terminal Resistance	
Excitation	787 ± 40 ohms
Signal	702 ± 10 ohms
Zero Load Output	$\pm 1\%$ R.C.
Insulation Resistance	>5000 megohms at 50 VDC

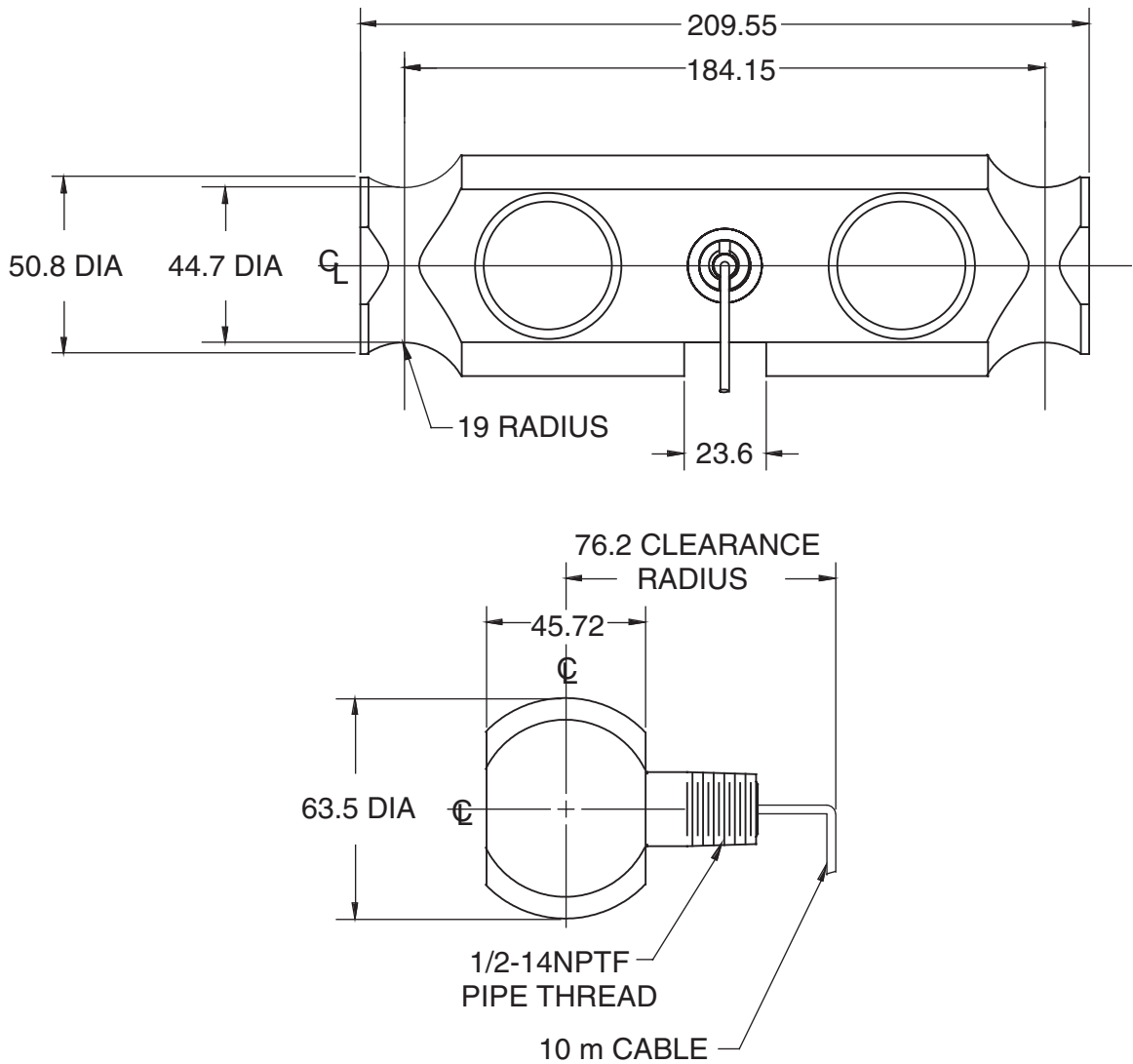
Environmental Data

Temperature Compensation Range	$-10\frac{1}{2}$ to $+40\frac{1}{2}$ C
Operating Temperature Range	$-29\frac{1}{2}$ to $+93\frac{1}{2}$ 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

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All dimensions in mm unless otherwise noted.



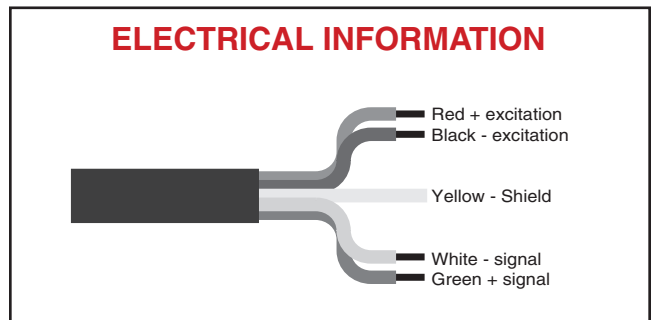
The DB-50K Load Cells meet all requirements of OIML R60 and has been issued OIML certificate no. R60/1991-DK-99.01.



The DB-50K and DB-75K 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. 97-133A2.



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



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