

# Cardinal LOAD CELLS

## SERIES SCA - LOAD CELLS FOR COMPRESSION WEIGHING



- Capacities 22680 kg, 45360 kg, and 54430 kg
- Hermetically sealed (IP67)
- Stainless steel construction
- 9 m integral shielded cable
- 2 year warranty

The heavy capacity series of compression load cells are ideal for multiple load cell compression applications such as motor truck scales, railroad track scales and heavy duty tank weighing systems. These compression load cells are available in 22680 kg, 45360 kg and 54430 kg

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

Each load cell is furnished with stainless steel load buttons on each end, and a 9 m integral multiconductor cable secured by a strain relief seal.

### SPECIFICATIONS

#### Mechanical Data

Rated Capacity, (R.C.) $E_{max}$  . 22680, 45360 & 54430 kg  
Minimum Dead Load ..... 250, 500 kg  
Safe Load Limit ..... 150% R.C.  
Ultimate Load ..... 300% R.C.  
Deflection at R.C. .... 0.33 mm  
Spring Element Material ..... 17-4 PH  
Net Weight ..... 6 kg

#### Certificate Data

Issuing Body ..... NTEP ..... OIML  
Certificate Number ..... 89-042A3 .. R60/1991-DK-97.04  
rev 1  
Accuracy Class ..... III L ..... C3  
Maximum Number of Load  
Cell Intervals,  $n_{max}$  ..... 10000 ..... 3000  
Single/Multiple ..... M  
Humidity Symbol ..... CH  
Minimum Load Cell  
Verification Interval  $V_{min}$   
OIML ..... 2.3, 4.5 & 5.4 kg  
NTEP ..... 1.4 & 2.8 kg

#### Electrical Data

Rated Output ..... 2mV/V  
Excitation Voltage,  
Recommended ..... 10 VDC  
Excitation Voltage,  
Maximum ..... 15 VDC  
Cable Length ..... 9m  
Terminal Resistance  
Excitation .....  $1150 \pm 12$  ohms  
Signal .....  $1050 \pm 10$  ohms  
Zero Load Output .....  $\pm 1\%$  R.C.  
Insulation Resistance ..... >5000 megohms at  
50 VDC

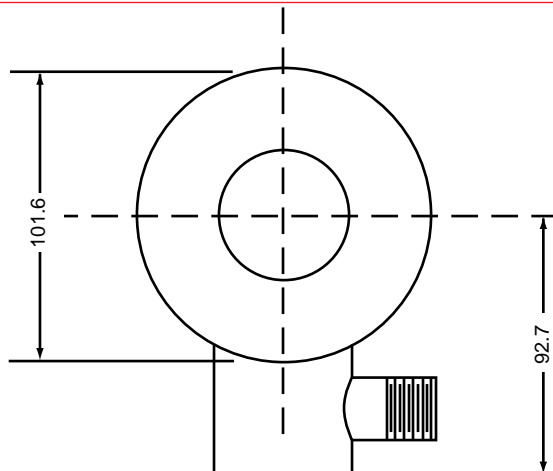
#### Environmental Data

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

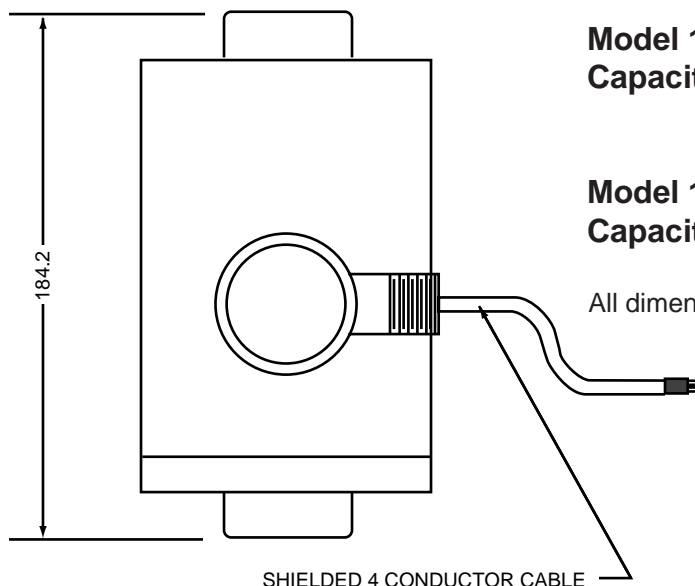
#### Color Code

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

# Cardinal COMPRESSION LOAD CELLS



**Model 50K-SCA**  
**Capacity: 22680 kg**



**Model 100K-SCA**  
**Capacity: 45360 kg**

**Model 120K-SCA**  
**Capacity: 54430 kg**

All dimensions are in mm unless otherwise noted.



The SCA Series Load Cells meet all requirements of OIML R60 and has been issued OIML certificate no. R60/1991-DK-97.04 rev1.

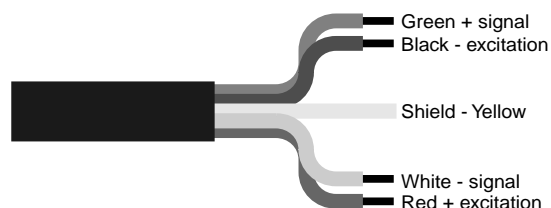


The SCA Series Load Cells meet all requirements of Handbook 44, issued by the National Institute of Standards and Technology and have been issued the NTEP Certificate of Conformance No. 89-042 A3.



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

## ELECTRICAL INFORMATION



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