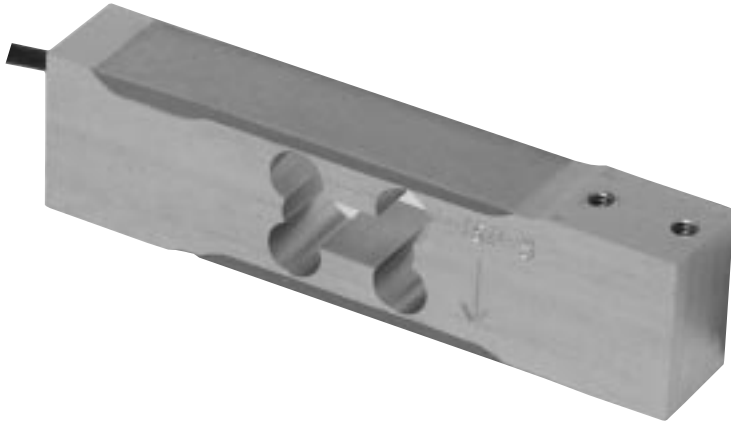


# Cardinal LOAD CELLS

## SERIES TSP - LOAD CELLS FOR BENCH APPLICATIONS



- High performance and low cost
- Platform size up to 400mm x 400mm
- Anodized aluminum construction
- Moisture-proof barrier
- Integral mounting boss
- Low profile
- 2 year limited warranty
- NTEP version available: TSP5

The economically priced TSP is a high performance, low profile, single point load cell for use in platform and hanging scales, counting scales, hoppers and packaging scales, and a variety of other medical, industrial and process weighing applications.

The TSP single point load cell is easy to install and use and is interchangeable with most other load cells of its type. All critical components and wiring are encapsulated to protect against moisture and to insure stable operation of the TSP in harsh environments.

### SPECIFICATIONS

#### Mechanical Data

Rated Capacity, (R.C.) $E_{max}$	5, 7, 10, 15, 20, 30, 50 & 100 kg
Minimum Dead Load	2 kg
Safe Load Limit	150% R.C.
Ultimate Load	300% R.C.
Deflection at R.C.	0.2 mm
Spring Element Material	Aluminum
Net Weight	0.4 kg

#### Environmental Data

Temperature Compensation	
Range	-10° to +40°C
Operating Temperature Range	-25° to +50°C
Construction & Protection	
Code	CP-67 HU, IP67
Barometric Pressure Effect on Zero Load Output	<1 v (min)/1kPa

#### Electrical Data

Rated Output	2±0.1% mV/V
Excitation Voltage, Recommended	12 VDC
Excitation Voltage, Maximum	20 VDC
Cable Length	3m
Terminal Resistance	
Excitation	435 ±10 ohms
Signal	350 ± 5 ohms
Zero Load Output	± 1% R.C.
Insulation Resistance	>5000 meg ohms @ 50 VDC

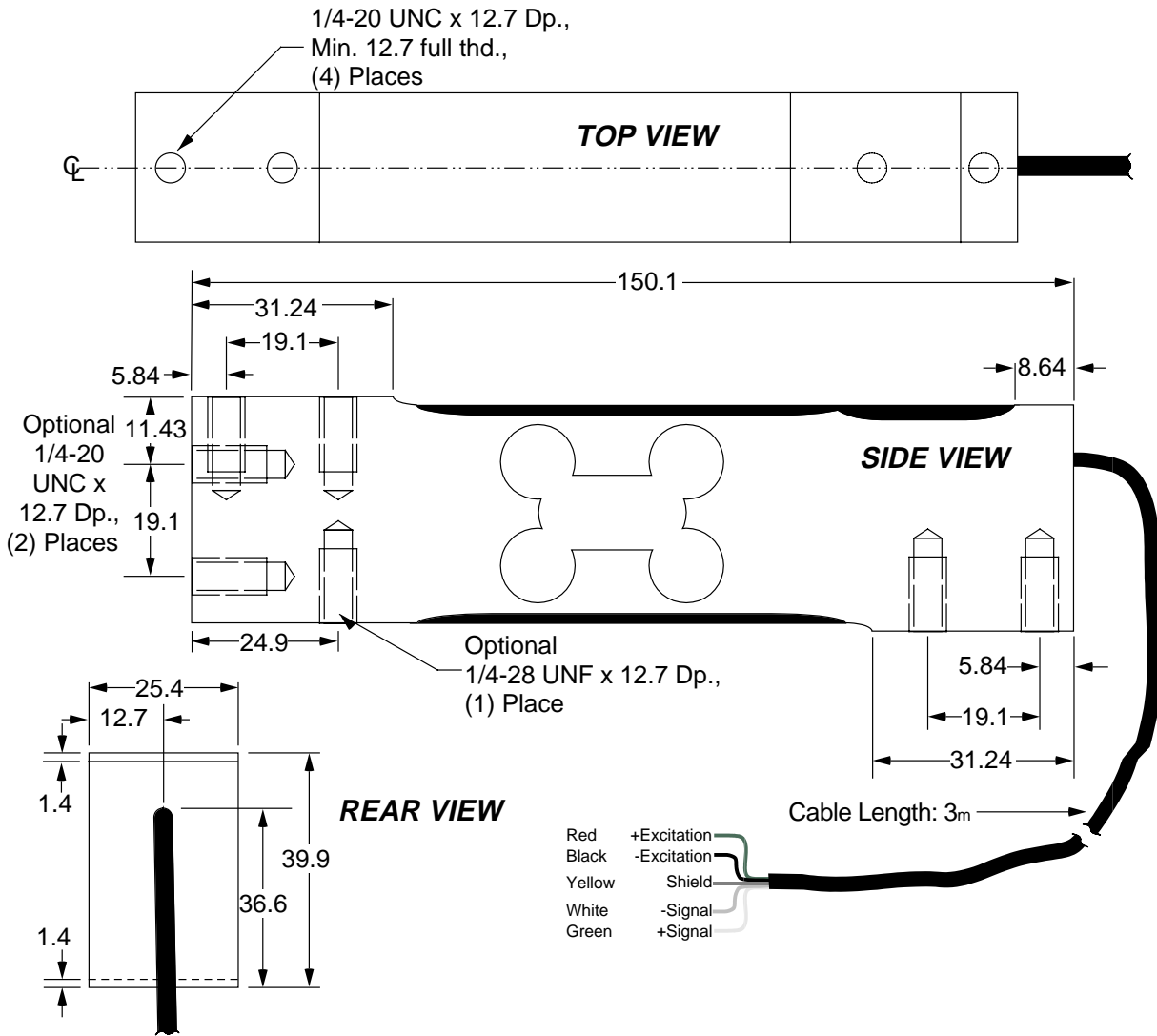
#### Color Code

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

#### Certificate Data

Issuing Body	NTEP <sup>1</sup>	OIML
Certificate Number	97-136	R60/1991-DK-97.01
Accuracy Class	III	C
Maximum Number of Load Cell Intervals, $n_{max}$	5000	3000
Single/Multiple	S	
Humidity Symbol		CH
Minimum Load Cell Verification Interval $V_{min}$	1.4, 2.1, 2.8, 4.2 g,	.0.5, 0.7, 1, 1.5, 2, 3 g
	7.0, 14.0 g	5 & 10 g

<sup>1</sup>Does not include TSP-5 kg and TSP-7 kg models.



This Load Cell meet all requirements of OIML R60 and has been issued OIML certificate no. R60/1991-DK-97.01.



This Load Cell 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. 97-136.



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

