Ring torsion load cells model RTC

- **IP68, Stainless Steel**
- **High output signal**
- **High internal resistance allowing up to 12 load cells to be used from a single controller**
- **High overload capacity**
- **Low profile design**
- **Ring torsion design to reduce the influence of side forces**

Application

The load cell converts the vertical load into a proportional electrical output signal using strain gauges configured in a Wheatstone bridge.

When combined with a controller, load cells can be used in applications including;

- Batching
- Blending
- Weighbridges
- Hopper scales
- almost all weighing applications.

The ring torsion design makes the load cell very stable under the most extreme and harsh conditions.

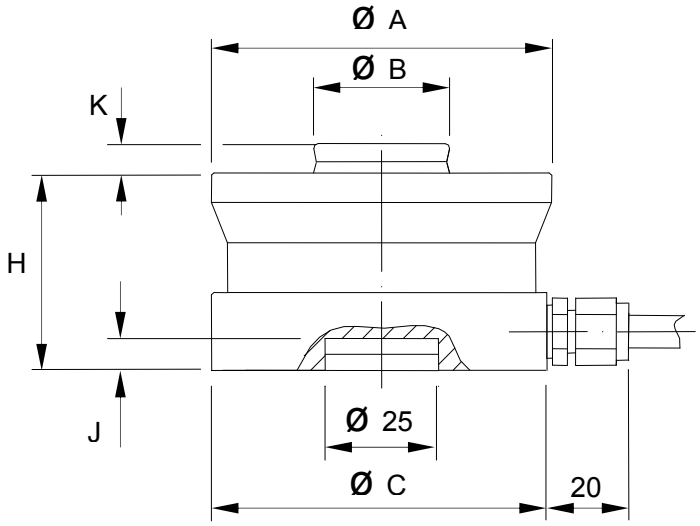
Construction

Ring torsion design means that the force is measured by strain gauges mounted concentrically around the vertical loading surface. This design gives superior resistance to shock and side forces experienced in most industrial weighing applications.
The balance resistors and lightning protection are protected within the construction of the cell.
The cell is constructed of stainless steel*, laser welded and is IP68. The unit is hermetically sealed and electrolytically polished.

Features

- High impedance means lower power consumption through the stabilized power supply (longer life of electronics).
- Superior resistance to shock and side loads eliminating requirement for complex restraints.
- Lowest defection of any commercially available cell (less than 0.2mm), increasing accuracy.
- Linear cell – does not require full loading to calibrate.
- High minimum utilisation (15%) giving high accuracy at low utilisation.
- Lightning Protection and temperature compensation internal to the Load Cell

Technical Data and Dimensions



Dimensions

Rated Load (t)	Limit load (t)	A	B	C	H	J	K	kg
10	20	75	30	75	50	7	6.5	6.5
15	30	75	30	75	50	7	6.5	6.5
22	44	75	30	75	50	7	6.5	6.5
33	66	95	40	95	65	7	10	10
47	94	130	60	130	75	7	14	14
68	136	130	60	130	85	7	14	14
100	200	150	70	150	90	7	16	16

Technical Data

Total error	0.05%
Sensitivity	2.85 ± 0.005mV/V
Creep (30min)	0.03% Full scale
Zero balance	1% Full scale
Zero error from temp. change	0.03% Full Scale per 10°C
Span error from temp. change	0.03% Full Scale per 10°C
Input resistance	1450Ω ± 10Ω (Option, for special applications, 4480Ω ± 80Ω)
Output resistance	1402Ω ± 5Ω (Option, for special applications, 4400Ω ± 1Ω)
Isolation resistance	≥ 5000MΩ
Operating temperature	-30° to 70°C
Maximum excitation	Recommended 10V to 12V maximum15V
Construction	IP68 Stainless Steel (*option for Alloy Steel)
Cable length	10t to 33t 12M 6mm Dia. PVC 47t to 100t 16M 6mm Dia. PVC
Cable colours	Red Excitation + Black Excitation – Green Signal + White Signal – Blue Shield

Dimensions and specifications are subject to change without notice.

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