

RCA SERIES

Analog Column Load Cell



Technical Features

METROLOGICAL

- Rated capacity (Cn): 30t.
- Combined error: $\pm 0.013 \%Cn$.
- Temperature effect on zero: $0.0014 \%Cn/^{\circ}C$.
- Temperature effect on sensitivity: $0.0011 \%Cn/^{\circ}C$.
- Creep error (30 min.): $0.018 \%Cn$.

LEGAL METROLOGY OIML R60

- Accuracy class: C4.
- Max. number of intervals (nmax): 4000e OIML.
- Minimum verification interval (vmin): 10000.
- $Z = Emax/(2xDR)$: 4000.

ELECTRICAL

- Nominal range of excitation voltage: 1 - 15Vdc.
- Rated output at Cn: 2mV/V.
- Zero balance: $< \pm 2.50 \%Cn$.
- Input resistance: $815 \pm 20\Omega$.
- Output resistance: $700 \pm 0.35\Omega$.
- Current adjustment: 0.1 %Cn.
- Over voltage protection: 10kA/20kV (8/20 μ s) - IEC61000-4/5.
- Insulation resistance: 5000M Ω /50V.

GENERAL

- Service temperature range: $-20 \sim +60^{\circ}C$.
- Compensated temperature range: $-10 \sim +40^{\circ}C$.
- Safe load limit: 150% Emax.
- Ultimate overload: 300% Emax.
- Protection degree IP68.
- Load cells with stainless steel body.
- 4-core armoured cable, PVC sheath, 20m length, 7mm diameter.
- Nickel plated steel cable gland.
- Armoured anti rodent cable with stainless steel armour.
- Self-centring spherical bases.
- Equipped with anti-rotation system, to be combined with KRCA cups for proper operation.

Available Versions

Code	Max (kg)
RCA30C4	30000

Analog version of compression load cells, ideal for CE-M approved weighbridges, tanks, silos, etc.

CAPACITIES (kg): 30000.

OIML R60. C4 precision class.

Load cells with stainless steel body. Degree of protection IP68.

20m armoured rodent resistant cable, with standard stainless steel armor.

Integrated surge arresters as standard.

Low profile height of only 130mm.

Version available for ATEX environments.

ATEX Version

- An ATEX version of the RCA load cell is available for explosive atmospheres.
- The CCATEX certificate makes the load cell suitable for use in hazardous areas with protection methods according to: ATEX II 1G Ex ia IIC T6 (Ta $-20 \div +40^{\circ}C$) TX (Ta $-20 \div +65^{\circ}C$) Ga ATEX II 1D Ex ta IIIC TX $^{\circ}C$ (Ta $-20 \div +40^{\circ}C$) TX $^{\circ}C$ (Ta $-20 \div +65^{\circ}C$) Da IP65.
- The certificate includes the manual and the ATEX CE conformity declaration (available in EN, DE, FR, and IT).
- IMPORTANT: the certificate refers to the single load cell. For systems with more load cells, it is necessary to order one certificate for each load cell.

Installation Kit

- The KRCA kit allows a correct installation of the RCA load cells below the weighbridge plate.
- The kit consists of an upper cup with anti-rotation system, a lower cup and a two-hole plate for easier and faster fixing. All components are made from nickel-plated steel.
- Both cups are designed for optimal operation in conjunction with the cell's self-centring spherical bases, allowing their proper oscillation and return to position.
- The cups are also fitted with triple function integrated washers:
 - they keep lubricating grease in its place.
 - they simplify the proper positioning and levelling of the cell and support it during installation/maintenance.
 - they protect the system by preventing dirt and water from accumulating on the bottom of the cup, thus maintaining the correct oscillation and mechanical compensation of the load cells over time.

Wiring Code	
Colour	Function
WHITE	OUTPUT +
RED	INPUT +
YELLOW	OUTPUT -
BLUE	INPUT -

