

RCA Series, Dini Argeo Analogue Column Load Cell, Stainless Steel



As of: Thursday, March 19,
2026



Standard 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
- $Z = E_{max}/(2 \times DR)$: 4000

ELECTRICAL

- Nominal range of excitation voltage: 1 - 15Vdc
- Rated output at Cn: 2mV/V
- Zero balance: $< \pm 2.50\%C_n$
- 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 ~ +60 °C
- Compensated temperature range: -10 ~ +40 °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.

Analogue version of compression load cells, ideal for CE-M approved weighbridges, tanks, silos, etc.
Manufactured in stainless steel, IP68 protection, 4000 divisions, fitted with "rodent proof" armored cable.

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

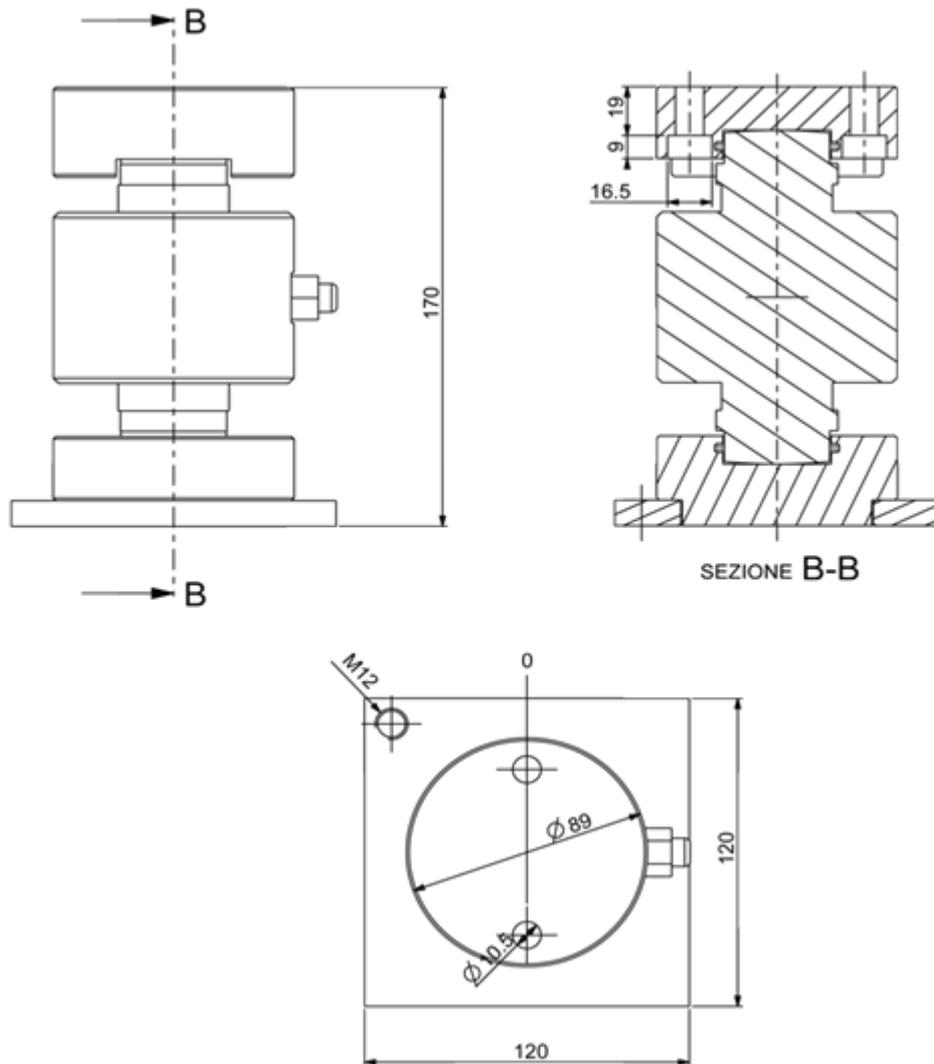
Low Profile Height of only **130mm**.

Version available for **ATEX** environments.

Wiring Code

Wiring Code	
<u>Colour</u>	<u>Function</u>
WHITE	OUTPUT +
RED	INPUT +
YELLOW	OUTPUT -
BLUE	INPUT -

RCA with Optional KRCA Kit Dimensions (mm)



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÷+40°C) TX (Ta -20÷+65°C) Ga

ATEX II 1D Ex ta IIIC TX°C (Ta -20÷+40°C) TX°C (Ta -20÷+65°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.

Available versions

Code	Max (kg)
<u>RCD30C4</u>	30000

Parts

Part # **Description**

Available Versions

RCA30C4 Column approved load cell, C4, Max=30000kg. Stainless steel, IP68 protection degree, 700 Ohm output resistance.

Options

Part #	Description
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Mounting kits

KRCA	Kit of 2 jointed cups for self-alignment and fixing plate. In zinc-plated steel.
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Junction Box / Boards - Load Cell Cables

JB8Q-1	Equalisation box for connection with up to 8 analogue load cells. Reinforced polyester box, with 8 + 1 PG11 cable glands. With surge arresters, PCB, Terminal block, plastic box and UL marked labels (if applicable).
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JB10Q	Equalisation box for connection with up to 10 analogue load cells. Reinforced polyester box, with 10 + 1 cable glands. With surge arresters, PCB, Terminal block, plastic box and UL marked labels (if applicable).
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Analogue Kit for Weighbridges

WK630A	Kit for ANALOGUE weighbridges with 6 load cells. Composed of 3590ET indicator fitted with AF03 software, 2 inputs, 4 outputs and RS485 port, 6 RCA30C4 analogue load cells with KRCA mounting kit, and JB10Q equalisation box with 10 inputs.
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WK830A	Kit for ANALOGUE weighbridges with 8 load cells. Composed of 3590ET indicator fitted with AF03 software, 2 inputs, 4 outputs and RS485 port, 8 RCA30C4 analogue load cells with KRCA mounting kit, and JB10Q equalisation box with 10 inputs.
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Protection for Junction Box / Electronic Circuits

GELBOX	Anti condensation, insulating, and sealing gel. Useful to protect the electronic circuits of the weighing system, even under prolonged immersions conditions. Pack of 300ml.
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Options for ATEX Version

ZBA1S	Intrinsic protection three channel Zener barrier. Specific for connection to load cells, for mounting on DIN rail in a safe area, or in a flame-proof case. Marking: ATEX/IECEx II (1) GD [Ex ia Ga] IIC [Ex ia Da] IIIC. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
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KZBA-1	ATEX ABS housing kit with Zener Barrier ZBA1S for load cells. For intrinsically safe weighing systems in a dangerous zone. Dimensions 179x359x166,5mm. Marking of housing + Zener Barrier ZBA1S: ATEX II 3(1)G Ex nA [ia Ga] IIC T4 Gc X for gas, ATEX II 3(1)D Ex tc [ia Da] IIIC T135°C Dc IP66 X for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN and IT).
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JB4QAI	ATEX equalisation box made of stainless steel IP66 for up to 4 cells. 4 + 1 fairleads. Marking: ATEX II 2G Ex ib IIC T6 Gb for gases, ATEX II 2D Ex tb IIIC T115°C Db IP65 for dusts. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
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JB4QA	ATEX equalisation box made of ABS IP67, for up to 4 cells. 4 + 1 fairleads. Marking: ATEX II 2G Ex ib IIC T6 Gb for gases, ATEX II 2D Ex tb IIIC T115°C Db IP65 for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
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EXCB6	Blue shielded cable 6x0.22 mm ² , only for EX i (2GD) assemblies. PVC inner sheath. Tinned copper braid shielding. Polyurethane outer sheath, diameter 5.8 mm. Temperature range: -40 / +80 °C. Minimum bending radius $\geq 7 \times$ O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).
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Part #	Description
KMB4-1	Kit of 3 ATEX Zener barriers for load cells, in an ABS box. For up to 4 load cells of 350 ohm, for intrinsic protection weighing systems in a dangerous area. Marking of the whole box with three Zener barriers: ATEX II 3(1)G Ex nA [ia Ga] IIC T4 Gc (-20°C = Ta = +40°C) for gas, ATEX II 3(1)D Ex tb [ia Da] IIIC T130°C Dc IP65 (-20°C = Ta = +40°C) for dusts. Provided with safety instructions and the ATEX EU declaration of conformity (EN and IT).
CCATEX-1	Optional ATEX version for single load cell. Marking: ATEX II 1G Ex ia IIC T6 (Ta -20÷+40°C) TX (Ta -20÷+65°C) Ga and ATEX II 1D Ex ta IIIC TX°C (Ta -20÷+40°C) TX°C (Ta -20÷+65°C) Da IP65. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
CCATEX3GD	ATEX certificate for each load cell. Marking: ATEX II 3G Ex nA IIC T6 Gc for gas and ATEX II 3D Ex tc IIIC T115°C Dc IP65 for dusts. Complete with manual and ATEX CE conformity declaration (available in EN, DE, FR and IT).
DCATEXMECH	ATEX version for the PLATFORM / LOAD CELL MOUNTING KIT for zone 1/21 (for the load cells ATEX declaration see CCATEX code). Option to be offered only if the platform is ordered without the indicator, otherwise refer to the available certifications for the chosen weight indicator. Provided with safety instructions and ATEX EU declaration of conformity (EN, DE, FR, ES and IT). Includes IP68 connection between platform and weight indicator.
DCATEXMB4	ATEX declaration for the whole system with Dini Argeo Zener barriers. Ex II 2G IIC T6 Gb X e Ex II 2D IIIC T125°C Db X system, with label of the whole system, for weight indicator connected to Dini Argeo zener barriers, connected to a mechanical structure with ATEX load cells (each cell must be certified with CCATEX option). Provided with descriptive document of the assembly and ATEX EU declaration of conformity of the assembly (EN and IT).

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