

# RCPT Series Dini Argeo Analogue Column Load Cell



As of: Thursday, March 19,  
2026



## Standard Features

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- C3 precision class
- Special alloy steel body with stainless steel external casing; manufactured with laser soldering
- Optimized for parallel connection
- IP68 protection rating
- Capacity from 20000 to 50000 kg
- Shielded 20 m connection cable
- Test certificate available upon request
- Fitted with self-aligned articulated joints, self-centering plates and protection washer (version with cups)



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**Capacities (kg):** 20000, 30000, 50000

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**OIML R60, C3** precision class

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Special allow steel body with **stainless steel** external casing; manufactured with laser soldering. **IP68** protection.

Column load cell for CE-M approved weighbridges, tanks, silos, etc..

## Specifications

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**Minimum load cell verification interval:**

$$V_{min} = E_{Max} / 10.000$$

**Maximum number of load cell divisions:**

$$n_{LC} = 3000 \text{ (C3)}$$

**Sensitivity:**

$$2\text{mV/V} \pm 0,1\%$$

**Temperature effect on full scale:**

$$0,002\% / ^\circ\text{C}$$

**Temperature effect on zero:**

$$0,002\% / ^\circ\text{C}$$

**Compensated temperature range:**

$$-10^\circ\text{C}/+40^\circ\text{C}$$

**Operating temperature range:**

$$-30^\circ\text{C}/+70^\circ\text{C}$$

**Creep error after 30 minutes:**

$$0,02\% \text{ F.S.}$$

**Excitation voltage:**

From 5 to 15 VDC

**Input resistance:**

$$730 \pm 30 \text{ Ohm}$$

**Output resistance:**

$$705 \pm 5 \text{ Ohm}$$

**Zero balance:**

$$\pm 1\% \text{ F.S.}$$

**Insulation resistance:**

$$>5000 \text{ MOhm}$$

**Safe overload:**

$$>150\% \text{ F.S.}$$

**Ultimate overload:**

$$250\% \text{ F.S.}$$

**Shielded cable:**

4-wire shielded cable, 20 m long, 5mm diameter.

## Wiring Code

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<u>Wiring Code</u>	
Colour	Function
GREEN	OUTPUT +
WHITE	OUTPUT -
RED	INPUT +
BLACK	INPUT -

## ATEX Version

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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

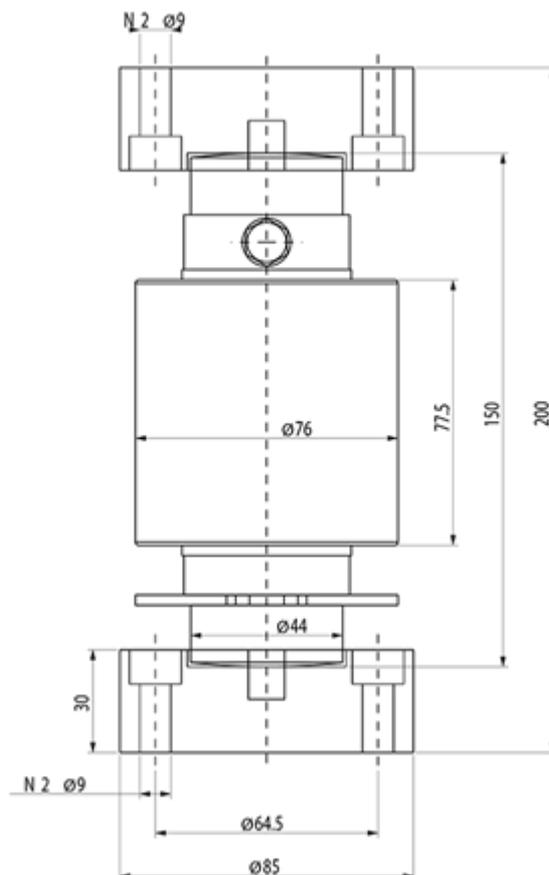
ATEX II 1D Ex ta IIIC TX°C (Ta -20÷+40°C) TX°C (Ta -20÷+65°C) Da IP65.

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.

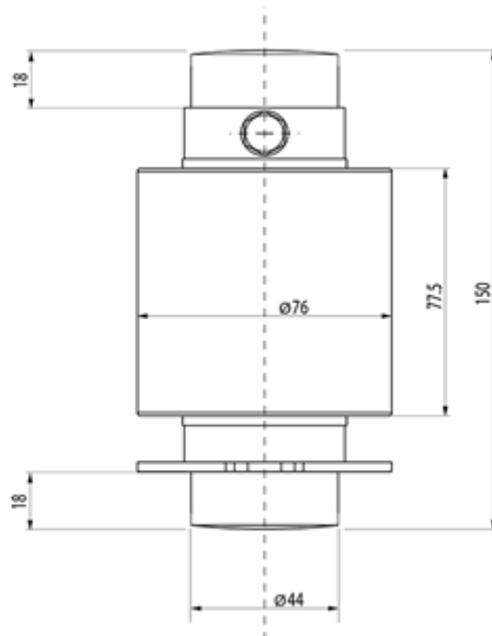
## RCPT Dimensions (mm)

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## RCPTNK Dimensions (mm)

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## Available versions

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Code	Max (kg)
<u>RCPT30C3NC</u>	30000
<u>RCPT20C3</u>	20000
<u>RCPT30C3</u>	30000
<u>RCPT50C3</u>	50000

# Parts

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**Part #**      **Description**

## Available Versions

**RCPT20C3-1**      Column approved load cell, C3, Max=20000kg. Stainless steel with nickel-plated steel body, IP68 protection rating, 703 Ohm output resistance. Consisting of self-aligned articulated joints, self-centering plates and protection washers. Cable length: 20 m.

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**RCPT30C3NC-1**      Column approved load cell, C3, Max=30000kg. Stainless steel with nickel-plated steel body, IP68 protection rating, 703 Ohm output resistance. Cable length: 20 m.

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**RCPT30C3-1**      Column approved load cell, C3, Max=30000kg. Stainless steel with nickel-plated steel body, IP68 protection rating, 703 Ohm output resistance. Consisting of self-aligned articulated joints, self-centering plates and protection washers. Cable length: 20 m.

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**RCPT50C3-1**      Column approved load cell, C3, Max=50000kg. Stainless steel with nickel-plated steel body, IP68 protection degree, 703 Ohm output resistance. Consisting of self-aligned articulated joints, selfcentering plates and protection washers. Cable length: 20 m.

# Options

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## Part # Description

### Mounting kits

**KRCPT** Kit of 2 jointed cups for self-alignment In galvanised steel.

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### Analogue Kit for Weighbridges

**WKPT830A-1** Kit for ANALOGUE weighbridges with 8 load cells. Composed of 3590ET indicator fitted with AF03 software, 2 inputs, 4 outputs and RS485 port, 8 RCPT30C3-1 analogue load cells with mounting kit, and JB10Q equalisation box with 10 inputs.

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**WBKPTA830C3-1** RCPT30C3-1 8 Analog Load Cells Kit in stainless steel with IP68 protection rating and 30t capacity, 8 oscillating resting joints for self-alignment and JB10Q IP66 reinforced polyester junction box.

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### Junction Box / Boards - Load Cell Cables

**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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**LCCB** Shielded cable 6x0.25 mm<sup>2</sup> (suitable for Ex zones). PVC inner sheath. Tinned copper braid shielding. PVC outer sheath, diameter 5.8 mm. Temperature range: -40 / +80 °C. Minimum bending radius  $\geq 6 \times$  O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

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**LCCBA** Armoured cable 6x0.25 mm<sup>2</sup> (suitable for Ex zones). PVC inner sheath, diameter 5mm. Iron-zinc alloy armour. Transparent PVC outer sheath, 8 mm diameter. Temperature range: -15 / +70 °C. Minimum bending radius  $\geq 5 \times$  O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

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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<sup>2</sup>, 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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<b>Part #</b>	<b>Description</b>
<b>KMB4-1</b>	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).
<b>CCATEX-1</b>	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).
<b>CCATEX3GD</b>	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).
<b>DCATEXMECH</b>	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.
<b>DCATEXMB4</b>	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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