

# CPH Series Compression Load Cell



## Standard Features

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- Capacities from 50 to 1.000 t
- Great resistance to lateral forces
- Stainless steel construction
- IP67 protection rating
- Shielded connection cable
- Removable handles for transporting the load cell (available only for 800 and 1000 t capacities)

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**CAPACITIES (t):** 50, 100, 250, 500, 800, 1.000.

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Stainless steel. **IP67** protection rating.

Stainless steel compression load cells with very high load capacity, up to 1000 t. The CPH model is designed to ensure optimum weighing performance even in the harshest environments. Ideal for load control applications in large capacity silos and to replace level indicators, ensuring greater accuracy and reliability.

## Specifications

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**Full Scale Output:**

2mV/V ± 1%

**Repeatability:**

0,1% F.S.

**Temperature effect on zero:**

0,0014% F.S./°C

**Temperature effect on full scale output:**

0,0013% F.S./°C

**Compensated Temperature**

**Range:**

-10°C / +40°C

**Operating Temperature Range:**

-30°C / +85°C

**Storage Temperature Range:**

-30°C / +90°C

**Non-linearity:**

0,15% F.S.

**Hysteresis:**

0,15% F.S.

**Creep error after 4 hours:**

0,05% F.S.

**Maximum tolerated excitation voltage:**

15 Vdc

**Input Resistance (capacity from 50 to 500 t):**

1050 ± 20 Ohm

**Output Resistance (capacity from 50 to 500 t):**

1050 ± 20 Ohm

**Input Resistance (capacity from 800 to 1.000 t):**

1400 ± 20 Ohm

**Output Resistance (capacity from 800 to 1.000 t):**

1400 ± 20 Ohm

**Zero Balance:**

± 2% F.S.

**Insulation Resistance:**

> 5.000 MOhm

**Safe Overload:**

> 150% F.S.

**Breaking load:**

> 300% F.S.

**Shielded cable:**

6-wire shielded cable, 5 mm diameter:

- 15 m long for the versions from 50 to 500 t

- 25 m long for the versions from 800 to 1.000 t

## Wiring Code

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

## Available versions

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Code	Max (kg)
<b><u>CPH50</u></b>	50.000
<b><u>CPH100</u></b>	100.000
<b><u>CPH250</u></b>	250.000
<b><u>CPH500</u></b>	500.000
<b><u>CPH800</u></b>	800.000
<b><u>CPH1000</u></b>	1.000.000

# Parts

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<b>Part #</b>	<b>Description</b>
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## Available Versions

<b>CPH50</b>	Compression load cell, Max=50.000 kg Stainless steel, IP67 protection degree.
<b>CPH100</b>	Compression load cell, Max=100.000 kg Stainless steel, IP67 protection degree.
<b>CPH250</b>	Compression load cell, Max=250.000 kg Stainless steel, IP67 protection degree.
<b>CPH500</b>	Compression load cell, Max=500.000 kg Stainless steel, IP67 protection degree.
<b>CPH800</b>	Compression load cell, Max=800.000 kg Stainless steel, IP67 protection degree.
<b>CPH1000</b>	Compression load cell, Max=1.000.000 kg Stainless steel, IP67 protection degree.

# Options

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## Part # Description

### Mounting kits

**KCPXH250** Stainless steel kit for assembling a CPH cell, up to 250.000 kg. (Load cell not included)

**KCPXH500** Stainless steel kit for assembling a CPH500 cell, up to 500.000 kg. (Load cell not included)

**KCPXH800** Stainless steel kit for assembling a CPH800 cell up to 800.000 kg. (Load cell not included)

**KCPXH1000** Stainless steel kit for assembling a CPH800 cell up to 1.000.000 kg. (Load cell not included)

### Connection Cables

**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).

**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).

**LCCBM** Shielded 4x0,34 mm<sup>2</sup> cable for moving applications. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

**PRCB** Protection sheathing for shielded cable. €/meter internal  $\varnothing$  15mm. Maximum orderable length: 100 m (longer lengths available only upon request).

### Junction Boxes

**JB4** Junction box with up to 4 load cells. ABS box, IP67 protection rating, with 4 + 1 fairleads.

**JB4Q** Equalisation box for connection with up to 4 load cells. ABS box, IP67 protection rating, with 4 + 1 fairleads.

**JB4QI** Stainless steel equalisation box for connection with up to 4 load cells. IP65 protection rating, with 4 + 1 fairleads.

**JB4** Junction box with up to 4 load cells. ABS box, IP67 protection rating, with 4 + 1 fairleads.

### Available Weight Indicator / Transmitter

**DGT1S** Weight transmitter on DIN bar, with 2 INPUTS and 2 OUTPUTS. Fitted with 5-key keypad and LED display. Multifunction weighing program.

**DGT1** Weight transmitter for DIN bar. 5-key keypad, LED display, date/time, alibi memory, and multifunction weighing program.

**DGT4** Transmitter for DIN bar with 4 channels, 2 IN and 2 OUT. 5-key keypad, LED display, and standard weighing program.

**DGTQ** Transmitter for panel mounting, with 2 IN and 2 OUT. 5-key keypad, LED display, and standard weighing program.

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