



Sauter GmbH

Instruction Manual / Data sheet

CT P1 / CT P2

V. 1.0
12/2018
GB



PROFESSIONAL MEASURING

CT P1 / CT P2 -BA-e-1810



SAUTER CT P1 / CT P2

V. 1.0 12/2018

Instruction Manual / Data sheet

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1 Short description

- Stainless steel IP67 (acc. to EN 60529) shear beam load cell
- Suitable platform, hopper, bed and other weighing
- adhesive sealed
- Accuracy OIML R60 C3
- OIML certificated
- RoHS conform
- Option on request: EX, Accuracy C4 / C5, 6 Conductor cable

2 Available models

2.1 Models CT P1

| Capacity | Model |
|----------|--------------|
| 500kg | CT 500-3P1 |
| 1000kg | CT 1000-3P1 |
| 1500kg | CT 1500-3P1 |
| 2500kg | CT 2500-3P1 |
| 3000kg | CT 3000-3P1 |
| 5000kg | CT 5000-3P1 |
| 10000kg | CT 10000-3P1 |

2.2 Models CT P2

with adjusted characteristic value (when ordering more than one cell, this saves time by reducing the effort required for corner adjustment)

| Capacity | Model |
|----------|--------------|
| 500kg | CT 500-3P2 |
| 1000kg | CT 1000-3P2 |
| 3000kg | CT 3000-3P2 |
| 5000kg | CT 5000-3P2 |
| 10000kg | CT 10000-3P2 |

3 Introduction

Please pay attention to the notes of the operating manual: read these operating manual carefully before commissioning, even if you already have experience with SAUTER measuring cells.

After receiving the measuring cell, it should be checked in advance whether no transport damage has occurred, whether the outer packaging or other parts or even the article itself has been damaged. If any damage is evident, please inform SAUTER GmbH immediately.

4 Warning notes

Observe the national accident prevention regulations.

Not correct executed use of the measuring cell can lead to serious injuries, death, material damage and personal injuries. Use only by trained and experienced people. Never load more than the max. capacity to a measuring cell. Overloaded measuring cells no longer have the required accuracy. Overloaded or deformed measuring cells are no longer allowed to use and must be changed quickly.

Never step under suspended loads.

Always fasten overload- or break security to your construction.

Pay attention to the allowed static and dynamic loads of the used equipment.

Let the measuring cells calibrate at regular intervals.

Only load the measuring cell in its specified load direction. Avoid lateral forces.

Control the measuring cells to deformations and cracks.

Measuring cells with 4-Conductor cable will change their characteristic value when shortened or extended the cable length.

5 Warranty

The warranty expires at:

- Disregard of the specifications of the operating manual
- Modification or opening the measuring cell
- Overload
- Mechanical damages
- Damage caused by liquids or media
- Natural loss
- Not correct installation

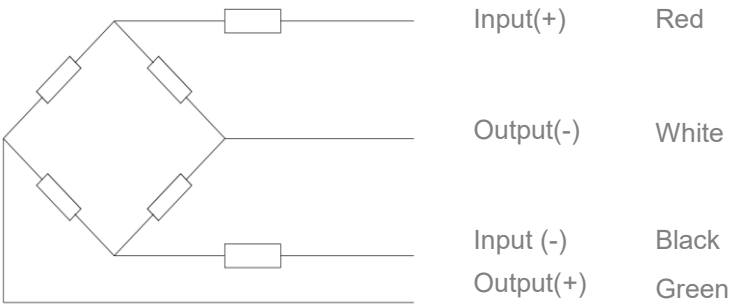
6 Detailed specifications

| | | | | |
|--|---------------------------|--|---------|---------|
| Output sensitivity (FS) | mV/V | 3.0 ± 0.003 | | |
| Maximum capacity (E _{max}) | kg | 500, 1000, 1500, 2500, 3000, 5000, 10000 | | |
| Max.number of load cell | n _{LC} | 3000 | | |
| Ratio of min. LC verification interval | $Y = E_{\max} / V_{\min}$ | 10000 | | |
| Combined Error | %FS | ≤± 0.023 | | |
| Minimum dead load | Of E _{max} | 0% | | |
| Safe overload | of E _{max} | 150 % | | |
| Ultimate overload | of E _{max} | 300 % | | |
| Zero balance | of FS | < ± 1.0 % | | |
| Excitation, recommended voltage | V | 5 ~ 12 | | |
| Excitation maximum | V | 18 | | |
| Input resistance | Ω | 350 ± 3.5 | | |
| Output resistance | Ω | 350 ± 3.5 | | |
| Insulation resistance | MΩ | ≥5000 (at 50VDC) | | |
| Compensated temperature | °C | -10 ~ +40 | | |
| Operating temperature | °C | -35 ~ +65 | | |
| Storage temperature | °C | -40 ~ +80 | | |
| Recommended torque on fixation bolts | Nm | M12: 75 | M18:500 | M24:750 |

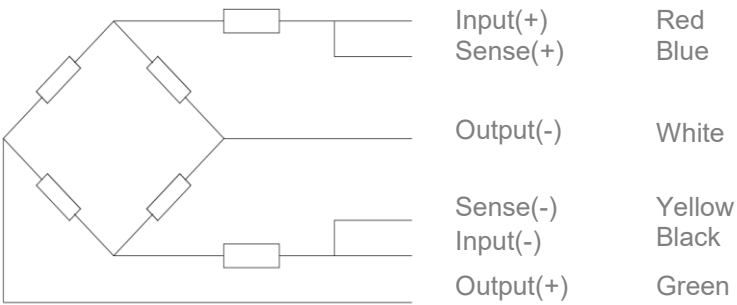
7 Wiring

Shielded, 4 cable. Shield not connected to element.
Cable diameter: Ø5mm.
Standard cable length for 500kg – 1000kg: 4m
Standard cable length for 1500kg – 10000kg: 6m

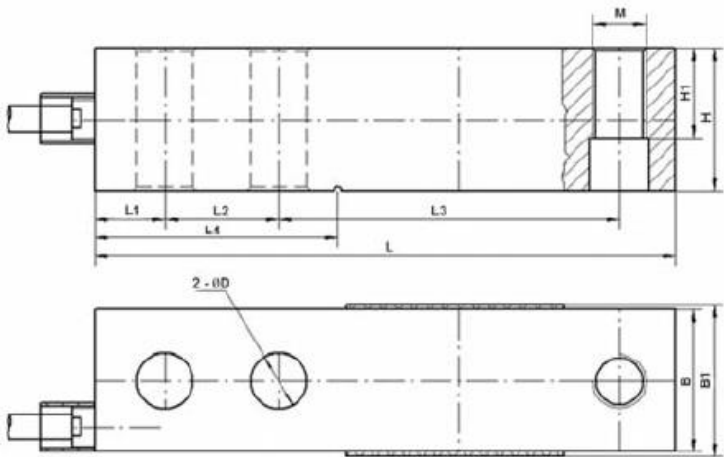
7.1 4-wire diagram



7.2 6-wire diagram (option on request)



8 Dimensions in mm



| Dimension Capacity | L | L1 | L2 | L3 | L4 | B | B1 | H | H1 | H2 | H3 | H4 | ØD | M |
|-----------------------|---|----|----|----|----|---|----|---|----|----|----|----|----|---|
|-----------------------|---|----|----|----|----|---|----|---|----|----|----|----|----|---|

| | | | | | | | | | | | | | | |
|--------------------|-------|------|------|-------|-------|------|------|------|------|------|------|-----|------|-------------------|
| 500kg – 1500kg | 130 | 15.8 | 25.4 | 76.2 | 54.2 | 31.8 | 34 | 31.8 | 15.8 | 14.5 | 15.8 | 4.8 | 13.5 | M 12 x 1.75 |
| 2500kg – 5000kg | 171.5 | 19.1 | 38.1 | 95.3 | 77.2 | 38.1 | 40 | 38.1 | 18.8 | 17.5 | 18.8 | 4.8 | 19.8 | M 18 x 1.5 |
| 10000kg | 222.3 | 25.4 | 50.8 | 120.7 | 101.6 | 50.8 | 52.4 | 50.8 | 25.4 | - | - | - | 26 | M 24 x 2 |

9 Certificate of Compliance

The Certificate of Compliance can be downloaded from the website www.sauter.eu