



Sauter GmbH

Datasheet / User manual

SAUTER CS Y1

V. 1.0
02/2020
GB



PROFESSIONAL MEASURING

CS Y1-BA-e-2010.docx



SAUTER CS Y1

V. 1.0 02/2020

Datasheet / User manual

Summarize:

| | | |
|---|----------------------------------|---|
| 1 | Short description | 3 |
| 2 | Available models | 3 |
| 3 | Introduction | 3 |
| 4 | Warning notes | 3 |
| 5 | Warranty | 4 |
| 6 | Detailed specifications | 4 |
| 7 | Wiring | 5 |
| 8 | Dimension in mm | 5 |
| 9 | Certificate of Compliance | 5 |

1 Short description

- Miniature S-type load cell stainless steel IP66 (acc. to EN 60529)
- Force measuring compatible
- RoHS conform
- Suitable for testing facilities and test stands
- Tension and compression measuring
- High precision (comprehensive Error 0,05%F.S.)

2 Available models

| Capacity | Model |
|--------------|----------|
| 1kg (≈10N) | CS 1-Y1 |
| 2kg (≈20N) | CS 2-Y1 |
| 5kg (≈50N) | CS 5-Y1 |
| 10kg (≈100N) | CS 10-Y1 |
| 20kg (≈200N) | CS 20-Y1 |

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

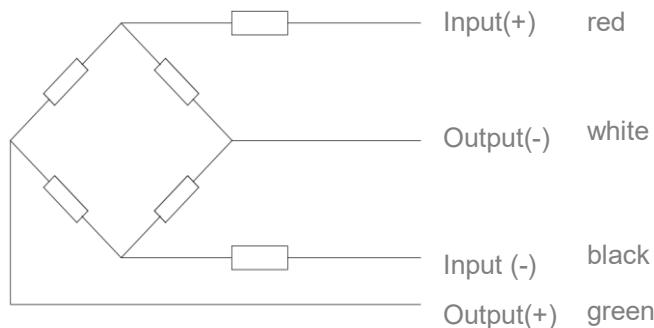
6 Detailed specifications

| | | |
|---------------------------------|-------------|-----------------|
| Output sensitivity (FS) | mV/V | 1.0/2.0±10% |
| Maximum capacity (Emax) | kg | 1, 2, 5, 10, 20 |
| Comprehensive Error | %FS | ≤± 0.1 |
| Zero balance | %FS | ≤ 2.0 |
| Non linearity | %FS | ± 0.1 |
| Creep | %F.S./30min | ± 0.05 |
| Temperature effect on span | %F.S./10°C | ± 0.05 |
| Temperature effect on Zero | %F.S./10°C | ± 0.05 |
| Safe overload | of Emax | 300 % |
| Excitation, recommended voltage | V | 5 ~ 12 |
| Input resistance | Ω | 350 ± 30 |
| Output resistance | Ω | 350 ± 5 |
| Insulation resistance | MΩ | ≥5000 |
| Compensated temp range | °C | -10 ~ +60 |
| Operating temperature | °C | -20 ~ +80 |

7 Wiring

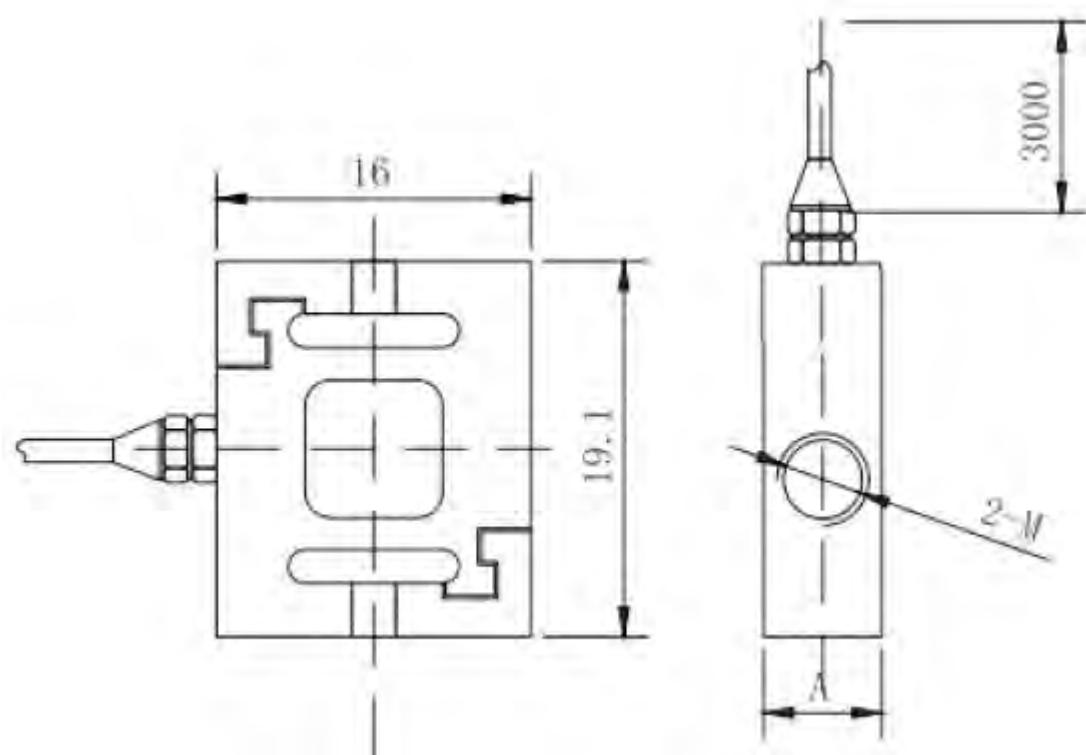
Shielded, 4 conductor cable. Cable diameter: Ø3mm. Shield not connected to element.

Cable length: 2m



8 Dimension in mm

| Dimension / Capacity | 2-M |
|----------------------|-----|
| 1 - 2kg | M3 |
| 5- 20 kg | M4 |



9 Certificate of Compliance

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