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# Data sheet / User manual

# **SAUTER CJ X467 / CJ X468** V. 1.0

11/2020 GB





PROFESSIONAL MEASURING

CJ X467-CJ X468-BA-e-2010.docx



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## Summarize:

1	Introduction	3
2	Warnings	3
3	Brief description	3
4	Available models	3
5 5.1 5.2	Dimensions CJ X467 CJ X468	4
6 6.1 6.2 6.3 6.4	Electrical connection Cable diameter Connection description Connection of a 6-wire cell to a 4-wire terminal block Grounding	5 5 6
7 7.1	Adjusting the balance Corner adjustment	
8 8.1 8.2 8.3	Small troubleshooting The scale seems to indicate an incorrect weight The corners indicate unequal weights The displayed value drifts quickly	7 7
9	Declaration of conformity	7

## 1 Introduction

Please observe the notes in the operating instructions: Please read these operating instructions carefully before commissioning, even if you already have experience with SAUTER products.

After receipt of the measuring cell, it should be checked in advance to ensure that no transport damage has occurred, that the repackaging or other parts or even the article itself have not been damaged. If any damage is evident, please notify SAUTER GmbH immediately.

## 2 Warnings

Observe the national accident prevention regulations. Incorrect use of the junctions can lead to serious injury, death, damage to property and personal injury. Only trained and experienced personnel are allowed to use the junctions. Never step under suspended loads. For measuring cells with 4-wire connection, the characteristic value changes by shortening or lengthening the supplied cable.

## 3 Brief description

With a junction box several load cells with max. 3500hm can be connected to one evaluation unit. It is possible with all junctions that less load cells are connected than the maximum possible. All junctions are suitable for 4-wire cells.

The load cells to be connected should all be the same model and have the same rated load and output signal.

## 4 Available models

Model	Max. Number of load cells	Cable entry	Protection class	Material housing
CJ X467	4	PG screw connection	IP67	Stainless steel
CJ X468	4	PG screw connection	IP68	Aluminium

## **5** Dimensions

### 5.1 CJ X467



- (1) Cable gland load cell
- (2) Mounting bracket
- (3) Screw
- (4) Seal Screw
- (5) Cable bushing Evaluation unit
- (6) Pressure relief valve





## 6 Electrical connection

#### 6.1 Cable diameter

The glands are suitable for cables with a diameter of 3.5 to 7mm.

#### 6.2 Connection description

Open the lid of the box, insert the cables for the measuring cells and the evaluation unit through the cable glands into the box and connect them to the circuit board. Make sure that all wire connections are tight and the cables are not damaged.

+ EXC	Supply +
- EXC	Supply -
+ SIG	Signal +
- SIG	Signal -
+ SEN *	Probe +
- SEN *	probe -
SHIE	Screen

Table 1: Connection of load cells and evaluation units (\* only for connection to evaluation unit)



#### 6.3 Connection of a 6-wire cell to a 4-wire terminal block

If a 6-wire measuring cell is to be connected to a 4-wire connection block, the sensor wires and the supply line must be connected together as shown in the following figure (EXC+ and SEN+ as well as EXC- and SEN-).



#### 6.4 Grounding

## 7 Adjusting the balance



### 7.1 Corner adjustment

Before starting the calibration, make sure that all four jumpers are removed from J1, J2, J3 and J4 and that all trimpots are set so that they do not affect the corner load. This is achieved by turning the potentiometers VR1 (T1), VR2 (T2), VR3 (T3) and VR4 (T4) at least 20 turns clockwise or counterclockwise or until the end stop, which can be signaled by a click sound.

If the trimpots VR1 (T1) and VR2 (T2) are turned clockwise and the potentiometers VR3 (T3) and VR4 (T4) are turned counterclockwise, they reduce the load cell performance. Place the corner load at all four corners one after the other and note the highest measured value. Turn the corresponding trim pot to reduce the highest measured value until it matches the lowest corner. (VR1 [T1] for load cell 1, VR2 [T2] for load cell 2, VR3 [T3] for load cell 3 & VR4 [T4] for load cell 4)

Repeat the setting for the other corners as needed until all corners have the same weight when the corner load is applied.

## 8 Small troubleshooting

#### 8.1 The scale seems to indicate an incorrect weight

- 1. Unload the scale and check if the scale returns to zero.
- 2. Make sure that the object to be weighed is completely on the scale and is not supported elsewhere.

#### 8.2 The corners indicate unequal weights

- 1. Repeat the adjustment and the corner calibration (Chapter Fehler! Verweisquelle konnte nicht gefunden werden.and 7.1)
- 2. Check the load cells for damage

#### 8.3 The displayed value drifts quickly

- 1. Check that there is no water and dirt in the box.
- 2. Check the load cells and cables for damage.
- 3. Remove one load cell at a time from the box and, if necessary, carry out a crossexchange to locate a defective cell.

Use a load cell simulator to check if the evaluation unit works without errors and displays stable values.

## 9 Declaration of conformity

To view the CE declaration, please click on the following link: <a href="https://www.kern-sohn.com/shop/de/DOWNLOADS/">https://www.kern-sohn.com/shop/de/DOWNLOADS/</a>