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# Instruction Manual / Data sheet

**CP P9**

V. 1.1  
08/2019  
GB



PROFESSIONAL MEASURING

CP P9-BA-e-1911



# SAUTER CP P9

V. 1.1 08/2019

## Instruction Manual / Data sheet

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## 1 Short description

- Stainless steel IP68 (acc. to EN 60529) / IP69K (acc. to ISO 20653)) single point load cell
- Suitable for platform, belt scales and other weighing devices in raw environment
- Maximum platform size 100 – 500kg: 800 x 800 mm
- Maximum platform size 10 – 50kg: 400 x 400 mm
- Accuracy OIML R60 C3
- Option on request: accuracy C4 / C5, EX
- OIML certificated
- RoHS conform

## 2 Available models

Nennlast	Modell
10kg	CP 10-3P9
10kg	CP 10-4MRP9
20kg	CP 20-3P9
20kg	CP 20-4MRP9
50kg	CP 50-3P9
50kg	CP 50-4MRP9
100kg	CP 100-3P9
150kg	CP 100-3P9
200kg	CP 200-3P9
300kg	CP 300-3P9
400kg	CP 400-3P9
500kg	CP 500-3P9

## 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

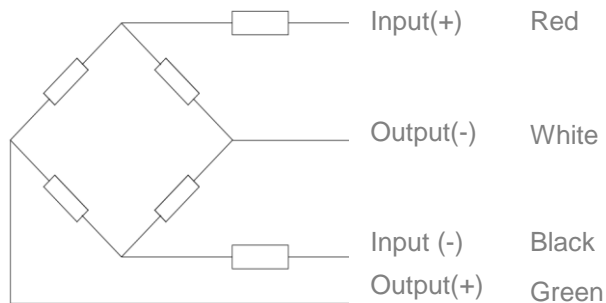
## 6 Detailed specifications

Output sensitivity ( FS )	mV/V	2.0 ± 0.2	
Maximum capacity ( Emax )	kg	10, 20, 50, 100, 200,	10, 20, 50
Max.number of load cell intervals	nLC	3000	4000
Ratio of min. LC verification interval	Y = Emax / vmin	10000	20000
Combined Error	%FS	≤± 0.0230	
Minimum dead load	Of Emax	0%	
Safe overload	of Emax	150 %	
Ultimate overload	of Emax	300 %	
Zero balance	of FS	< ± 2.0 %	
Excitation, recommended voltage	V	5 ~ 12	
Excitation maximum	V	18	
Input resistance	Ω	(10kg, 20kg, 50kg) 380 ± 15	(100kg, 200kg, 300kg, 400kg, 500kg) 350 ± 3.5
Output resistance	Ω	350 ± 10	
Insulation resistance	MΩ	≥5000 ( at 50VDC )	
Compensated temperature	°C	-10 ~+40	
Operating temperature	°C	-35 ~+65	
Storage temperature	°C	-40 ~ +70	
Recommended torque on fixation bolts	Nm	M6: 10	M8:25

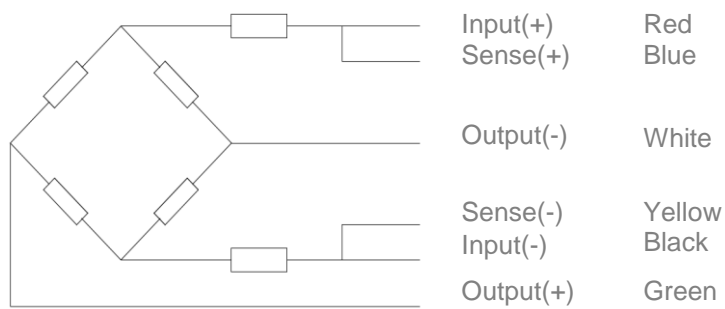
## 7 Wiring

Shielded cable, 6 conductor cable for 10-50kg and 4 conductor cable for 100-500kg. Shield not connected to element. Cable diameter: Ø5mm Standard cable length: 3m

### 7.1 4-wire diagram

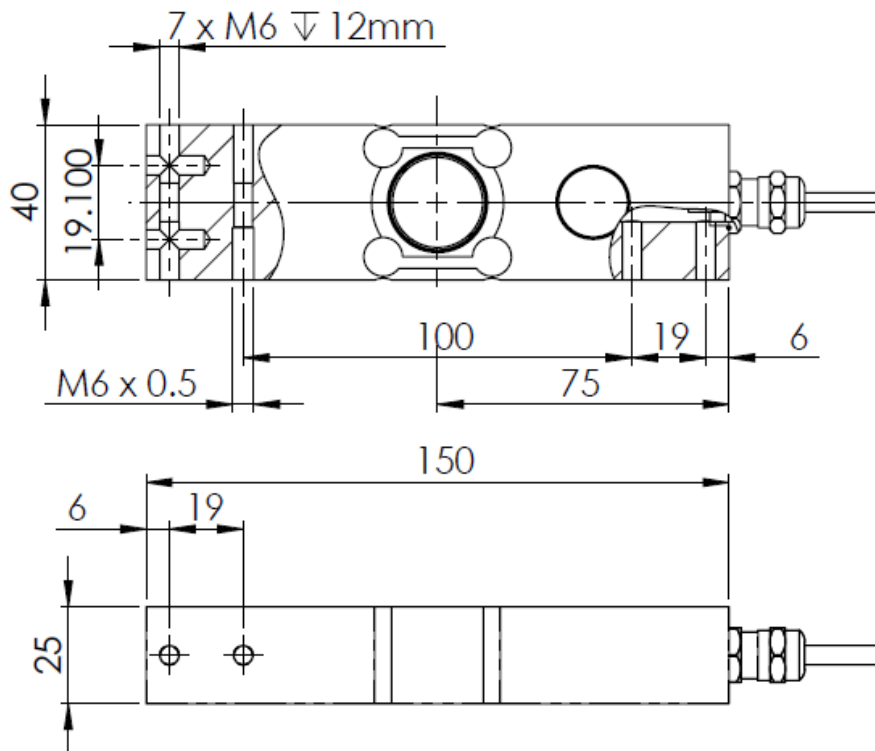


### 7.2 6-wire diagram

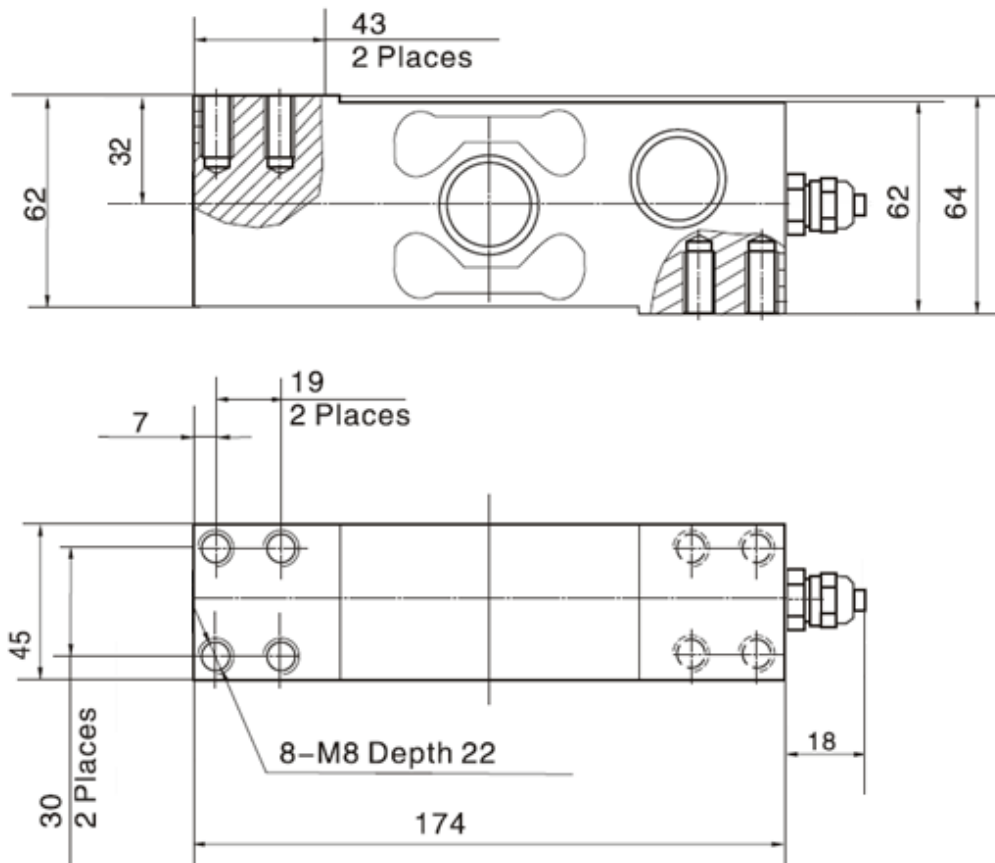


## 8 Dimensions in mm

### 8.1 Dimensions 10-50kg in mm



### 8.2 Dimensions 100-500kg in mm



## **9 Certificate of Compliance**

The Certificate of Compliance can be downloaded from the website [www.sauter.eu](http://www.sauter.eu)