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Datasheet / User manual

SAUTER CR Y1

V. 1.1
03/2021
GB



PROFESSIONAL MEASURING

CR Y1-BA-e-2011.docx



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Datasheet / User manual

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1 Short description

- Spoke type alloy steel IP68 load cell
- Force measuring compatible
- RoHS conform
- Suitable for testing facilities and test stands
- Tension and compression measuring
- High precision (comprehensive Error 0,05%F.S.)
- OIML class C1

2 Available models

Capacity	Model
500kg (≈5kN)	CR 500-1Y1
1000kg (≈10kN)	CR 1000-1Y1
2000kg (≈20kN)	CR 2000-1Y1
5000kg (≈50kN)	CR 5000-1Y1
10000kg (≈100kN)	CR 10000-1Y1
20000kg (≈200kN)	CR 20000-1Y1

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:

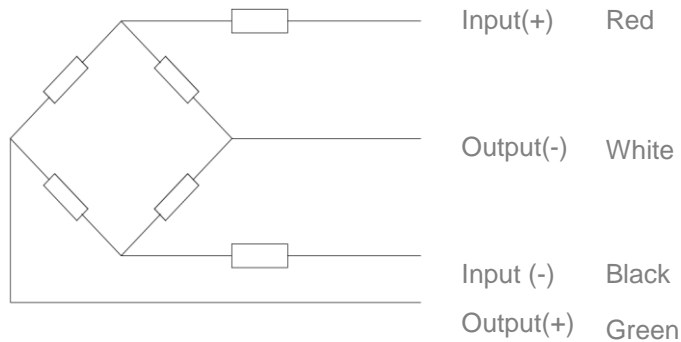
- Disregard of the specifications of the operating manual
- Modification or opening the measuring cell
- Overload
- Mechanical damages
- Damage caused by liquids or media
- Natural loss
- Not correct installation

6 Detailed specifications

Output sensitivity (FS)	mV/V	2 mV/V
Maximum capacity (Emax)	kg	500, 1000, 2000, 5000, 10000, 20000
Comprehensive Error	%F.S.	$\leq \pm 0.05$
Zero balance	%F.S.	± 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	150 %
Ultimate overload	of Emax	200 %
Excitation, recommended voltage	V	5 ~ 15
Input resistance	Ω	750 ± 15
Output resistance	Ω	700 ± 5
Insulation resistance	M Ω	≥ 5000
Operating temperature	°C	-20 ~ +65

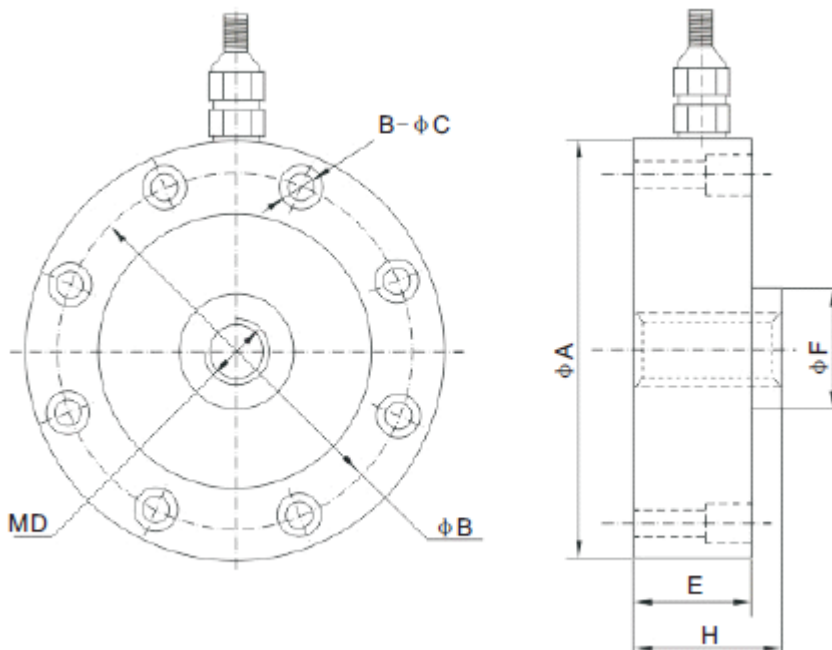
7 Wiring

Shielded, 4 conductor cable. Cable diameter: $\varnothing 3\text{mm}$. Shield not connected to element.
Cable length: 2m



8 Dimension in mm

Capacity in kg	A	B	C	F	MD	H	E
500-5000	105	88,9	6,5	32	M16x1,5	37	34
10000-20000	125	101,6	8,5	39	M 32x1,5	52	48



9 Certificate of Compliance

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