



Member State of OIML
Germany



OIML Certificate No.
R60/2000-DE1-08.11
Revision 1

OIML CERTIFICATE OF CONFORMITY

Issuing Authority

Name: Physikalisch-Technische Bundesanstalt
Address: Bundesallee 100, 38116 Braunschweig
Person responsible: Dr. O. Mack

Applicant

Name: Sartorius Mechatronics T&H GmbH
Address: Meiendorfer Str. 205, 22145 Hamburg

Manufacturer of the certified type is the applicant.

Identification of the certified type

Load cell
Strain gauge compression load cell for weighbridges

Type: PR 6221

Further characteristics see page 2

This Certificate attests the conformity of the above identified type (represented by the sample or samples identified in the associated Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R60, edition 2000
for accuracy class(es) C1 ÷ C6

This Certificate relates only to the metrological and technical characteristics of the type of instrument covered by the relevant OIML Recommendation identified above.

This Certificate does not bestow any form of legal international approval.



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With the 1st revision the accuracy class C6 for the maximum capacities of 50 t, 60 t and 75 t were added.

The conformity was established by the results of tests and examinations provided in the associated Test Reports

No. 1.12-4073824/1 that includes 20 pages
 No. 1.12-4073824/2 that includes 20 pages

The Issuing Authority

The CIML Member

Dr. O. Mack
 Head of Working Group

Dr. R. Schwartz
 Vice-President

08.06.2015

08.06.2015

The load cells (LC) of the series PR6221 are compact compression load cells for self-centering pendulum applications. The strain gauge application is hermetically sealed; the deep-drawn and micro plasma welded housing is made of stainless steel and filled with inert gas. The metrological characteristics for application in approved weighing instruments are listed in table 1.

Table 1: Essential data

| | | | | | | |
|---|----------------------------------|------|------------------------------|---------|-----|----|
| Accuracy class | | | C3 | | | |
| Maximum number of load cell intervals | n_{LC} | | 3000 | | | |
| Maximum capacity | E_{max} | t | 12.5 / 20 / 30 | 25 / 50 | 60 | 75 |
| Rated output | | mV/V | 1 | 2 | 2.4 | 3 |
| Temperature range | | °C | -10 ... +55 | | | |
| Minimum load cell verification interval | $V_{min} = (E_{max} / Y)$ | | $E_{max} / 14000$ | | | |
| Minimum dead load output return | $DR = (\frac{1}{2} E_{max} / Z)$ | | $\frac{1}{2} E_{max} / 6000$ | | | |

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|---|----------------------------------|------|------------------------------|---------|--|----|---------|
| Accuracy class | | C4 | | | | | |
| Maximum number of load cell intervals | n_{LC} | 4000 | | | | | |
| Maximum capacity | E_{max} | t | 12.5 | 20 / 30 | 25 | 50 | 60 / 75 |
| Rated output | | mV/V | 1 | | 2 | | 1.5 |
| Temperature range | | °C | -10 ... +55 | | | | |
| Minimum load cell verification interval | $V_{min} = (E_{max} / Y)$ | | $E_{max} / 18000$ | | $E_{max} / 20000$ | | |
| Minimum dead load output return | $DR = (\frac{1}{2} E_{max} / Z)$ | | $\frac{1}{2} E_{max} / 6000$ | | $\frac{1}{2} E_{max} / 8000$ ¹⁾ | | |

| | | | | | | | | |
|---|----------------------------------|------|--|----|--------------|---------|----|--------------|
| Accuracy class | | C5 | | | C6 | | | |
| Maximum number of load cell intervals | n_{LC} | 5000 | | | 6000 | | | |
| Maximum capacity | E_{max} | t | 20 / 30 | 25 | 50 / 60 / 75 | 20 / 30 | 25 | 50 / 60 / 75 |
| Rated output | | mV/V | 1 | 2 | 1.5 | 1 | 2 | 1.5 |
| Temperature range | | °C | -10 ... +55 | | | | | |
| Minimum load cell verification interval | $V_{min} = (E_{max} / Y)$ | | $E_{max} / 20000$ | | | | | |
| Minimum dead load output return | $DR = (\frac{1}{2} E_{max} / Z)$ | | $\frac{1}{2} E_{max} / 8000$ ¹⁾ | | | | | |

| | | | | | | | |
|------------------|-----------|-------------|------|---------|---------|-----|-----|
| Maximum capacity | E_{max} | t | 12.5 | 20 / 30 | 25 / 50 | 60 | 75 |
| Safe load limit | | % E_{max} | 300 | 200 | 150 | 125 | 100 |

¹⁾ For the compensated temperature range > 40°C Z = 6000

Dead load: 0%· E_{max} ; Input impedance: 1080 Ω; Fraction: $p_{LC} = 0.7$

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