Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

Member State of OIML
Germany

OIML Certificate No.
R60/2000-DE1-12.01
Revision 1

OIML CERTIFICATE OF CONFORMITY

Issuing Authority

Name:	Physikalisch-Technische Bundesanstalt
Address:	Bundesallee 100, 38116 Braunschweig
Person responsible:	Dr. Oliver 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	Digital strain gauge compressions load cell Type: PR 6204
	Further characteristics see page 2 and 3

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 classes D1, C3, 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.

R3-0033

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

No. 1.12-4051023-3 including 20 pages (SN: 396395 / 2t / C3 / Y10000)
No. 1.12-4051023-4 including 32 pages (SN: 383982 / 3t / C3 / Y14000 / digital tests)
No. 1.12-4051023-5 including 33 pages (SN: 285218 / 12.5t / C6 / Y20000 / digital tests / p_{LC} = 0.8)
No. 1.12-4051023-6 including 20 pages (SN: 396396 / 0.5t / D1 / Y2500 / Temp. -25°C to 55°C)
No. 1.12-4051023-7 including 19 pages (SN: 396404 / 1t / D1 / Y5000 / Temp. -25°C to 55°C)
No. 1.12-4051023-8 including 18 pages (SN: 396395 / 2t / D1 / Y5000 / Temp. -25°C to 55°C)
No. 1.12-4051023-9 including 18 pages (SN: 285218 / 12.5t / D1 / Y5000 / Temp. -25°C to 55°C)

An OIML Basic Certificate has been issued, because the Test Reports mentioned above are based on measurements performed at the laboratories of the applicant.

The Issuing Authority

Dr. O. Mack
Head of Working group

22.02.2013

The CIML Member

Dr. R. Schwartz
Head of Division

22.02.2013

The load cells of the series PR 6204 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 analog signal of the strain gauge bridge is amplified, scaled and filtered by the integrated module. The load cell is equipped with an interface RS485.

The load can only be used in combination with a data processing device of manufacturer Sartorius.

The metrological characteristics for application in approved weighing instruments are listed in table 1.

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Table 1: Essential data

Accuracy class			D1[1)]	C3	C6
Maximum number of load cell intervals	n_{LC}		1000	3000	6000
Maximum capacity	E_{max}	t	0.5 / 1 / 2 / 3 / 5 / 10 / 12.5 / 20 / 25 / 30 / 50 / 60	2 / 3 / 5 / 10 / 12.5 / 20 / 25 / 30 / 50 / 60	12.5 / 20 / 25 / 30 / 50 / 60
Minimum load cell verification interval	v_{min} = (E_{max} / Y)		E_{max} / 5000 [2)]	E_{max} / 14000 [3)]	E_{max} / 20000
Minimum dead load output return	DR = (½ ·E_{max} / Z)		½ · E_{max} / 1000	½ · E_{max} / 3000	½ · E_{max} / 8000

Dead load: 0%·E_{max}
Safe overload: 200%·E_{max} for E_{max} < 25 t; 150%·E_{max} for E_{max} ≥ 25 t
Fraction: p_{LC} = 0.7 for D1 and C3; p_{LC} = 0.8 for C6

[1)] Extended temperature range: -25°C to 55°C

[2)] For E_{max} = 0.5 t: v_{min} = E_{max} / 2500

[3)] For E_{max} = 2 t: v_{min} = E_{max} / 10000