

Member State of OIML  
Germany



OIML Certificate N°  
R60/2000-DE-02.01

## OIML CERTIFICATE OF CONFORMITY

### Issuing authority

Name: Physikalisch-Technische Bundesanstalt  
Address: Bundesallee 100, D-38116 Braunschweig  
Person responsible: Dr. Roman Schwartz

### Applicant:

Name: HBM Wägetechnik GmbH  
Address: Im Tiefen See 45  
64293 Darmstadt  
Bundesrepublik Deutschland

Manufacturer of the certified pattern is the Applicant.

Identification of the certified pattern: Strain-gauge compression load cell  
for self centering pendulum application

Type: **C16..**

Further characteristics see page 2

This certificate attests the conformity of the above-mentioned pattern (represented by the 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 C1 up to C5

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

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

The conformity was established by tests described in the associated test report N° 1.14-01073217 ( 5 pages ).

The issuing authority

The OIML member



Dr. R. Schwartz  
Regierungsdirektor




Prof. Dr. M. Kochsiek  
Vizepräsident

26.04.2002

26.04.2002

## Identification of the pattern (continued)

Load cells of the type C16 are compression load cells for self centering pendulum applications. Using the fitting elements of the manufacturer, the load cell is fixed against rotation. The one column load cell body and the housing are made of stainless steel. The strain-gauge application is hermetically sealed.

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

Table 1

Accuracy class		D1	C3	C4	C5	
Max. number of LC intervals	$n_{LC}$	1000	3000	4000	5000	
Maximum capacities	$E_{max}$	12 / 20 / 30 / 40 / 60 / 100 t				
Minimum LC verification interval ( $v_{min}$ ), with parameter class and capacity in reciprocal format $Y = E_{max} / v_{min}$ option MR ( $v_{min MR}$ ) $Y_{MR} = E_{max} / v_{min MR}$	Y	for class D at all capacities	for classes C3 to C5 at the capacities 12 / 20 / 30 / 40 t		60 t	100 t
		5000	10000	12000	6000	
	$Y_{MR}$	-	20000			

Minimum dead load  $0\% * E_{max}$ , safe load  $130\% * E_{max}$ , input resistance  $700 \Omega$ , fraction  $p_{LC} = 0,7$

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