



Member State of OIML  
United Kingdom of Great Britain  
and Northern Ireland

OIML Certificate No  
R60/2000-GB1-05.03  
Revision 1

## OIML CERTIFICATE OF CONFORMITY

Issuing authority

Name: **National Weights and Measures Laboratory**  
Address: **Stanton Avenue  
Teddington  
Middlesex, TW11 0JZ  
United Kingdom**

Person responsible:

**Paul Dixon – Product Certification Manager**

Applicant

Name: **Vishay PM Onboard Ltd**  
Address: **Airedale House  
Canal Road  
Bradford, BD2 1AG  
United Kingdom**

Manufacturer of the certified pattern is:

**The applicant**

Identification of the certified pattern:

**Single Ended Shear Beam (bending) strain gauge load cell**

Model Designation	231600		
Maximum capacity, $E_{\max}$	500 kg	1000 kg*	2000 kg*
Accuracy class	C1.5		
Maximum number of load cell intervals, $n_{\max}$	1500		
Minimum verification interval, $V_{\min}$	0.077 kg	0.15 kg	0.31 kg
Apportionment factor, $p_{LC}$	0.7		

\* these capacities are also manufactured in a “reduced height” version. The “reduced height” load cells have smaller physical dimensions than the standard 231600 load cell.

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 Organisation of Legal Metrology -OIML):

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**R 60** *Metrological regulation for load cells*    **Edition: 2000 (E)** for **accuracy class : C1.5**

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° TR 00423 which includes 26 pages and test report: SN 1065 which includes 21 pages.

This revision replaces previous versions of the certificate.

Issuing authority



Mr P R Dixon  
for NWML

CIML member



Mr P E Mason

Date    08 August 2008  
Ref:    T1136/0021

**Table 1: Essential technical data**

<i>Model designation</i>	<i>Designation</i>	<i>Value</i>	<i>Units</i>
Classification		C1.5	
Additional marking		-	
Maximum number of load cell verification intervals	$n_{LC}$	1500	
Maximum capacity	$E_{max}$	500, 1000, 2000	kg
Minimum dead load, relative	$E_{min}/E_{max}$	-	%
Relative $V_{min}$ (ratio to minimum LC verification interval)	$Y = E_{max}/V_{min}$	6500	
Relative DR (ratio to minimum dead load output return)	$Z = E_{max}/(2*DR)$	3000	
Rated output		0.8	mV/V
Maximum excitation voltage		15	V dc
Input impedance (for strain gauge LCs)	$R_{LC}$	380	$\Omega$
Temperature rating		-10/+40	°C
Safe overload, relative	$E_{lim}/E_{max}$	300	%
Cable length		3	m
Additional characteristics		4 wire + screen	

*Important note:*    Apart from the mention of the certificates reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.