

OIML Member State
The Netherlands

Number R60/2000-NL1-12.31
Project number SO12200368
Page 1 of 2

Issuing authority	NMi Certin B.V. Person responsible: C. Oosterman
Applicant	ARPEGE MASTER-K 38 Avenue des Frères Montgolfier B.P. 186 69686 Chassieu Cedex France
Manufacturer	ARPEGE MASTER-K 38 Avenue des Frères Montgolfier B.P. 186 69686 Chassieu Cedex France
Identification of the certified type	A shear beam load cell Type : CISA-I and CISA-A
Characteristics	See next page

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

OIML R60 - Edition 2000 (E) for accuracy class C

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified. This Certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Test Report(s) is not permitted, although either may be reproduced in full.

Issuing Authority **NMi Certin B.V., OIML Issuing Authority NL1**
3 July 2012

C. Oosterman
Head Certification Board

NMi Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
the Netherlands
T +31 78 6332332
certin@nmi.nl
www.nmi.nl

This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

The notification of NMi Certin B.V. as Issuing Authority can be verified at www.oiml.org

Parties concerned can lodge objection against this decision, within six weeks after the date of submission, to the general manager of NMi (see www.nmi.nl).

OIML Member State
The Netherlands

Number R60/2000-NL1-12.31
Project number SO12200368
Page 2 of 2

The conformity was established by the results of tests and examinations provided in the associated OIML Test Report(s):

- No. R60/2000-NL1-04.04 dated 11 March 2004 that includes 40 pages;
- No. R60/2000-NL1-05.10 dated 12 August 2005 that includes 37 pages;
- No. R60/2000-NL1-06.05 dated 16 May 2006 that includes 37 pages;
- No. R60/2000-NL1-06.13 dated 29 August 2006 that includes 37 pages;
- No. R60/2000-NL1-08.01 dated 15 January 2008 that includes 20 pages.

Characteristics of the load cell:

Type	CISA-A	CISA-I		
Maximum capacity (E_{max})	300 kg - 5000 kg	300 kg - 500 kg	500 kg - 2000 kg	2000 kg - 10000 kg
Minimum dead load	0 kg			
Accuracy Class	C			
Rated Output	2 mV/V			
Maximum number of load cell intervals (n)	3000	4000	6000	4000
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	10000	12000	15000	10000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	3000	4000	8000	4000
Input impedance	385 $\Omega \pm 20 \Omega$ or 1100 $\Omega \pm 50 \Omega$			
Temperature range	-10 °C / +40 °C			
Fraction p_{LC}	0,7			
Humidity Class	SH	CH		
Safe overload	150 % of E_{max}			
Output impedance	350 $\Omega \pm 5 \Omega$ or 1000 $\Omega \pm 10 \Omega$			
Recommended excitation	10 V DC/AC			
Excitation maximum	15 V DC/AC			
Transducer material	Stainless steel			
Atmospheric protection	Polymer potting	Hermetically sealed		

The characteristics for n_{max} and Y can be reduced separately. Z is proportional or equal to n_{max} .

Each produced load cell is provided with an accompanying document with information about its characteristics.