OIML Certificate

OIML Member State
The Netherlands

Number R60/2017-A-NL1-21.08
Project number 2495901

Issuing authority	NMi Certin B.V. Person responsible: M.Ph.D. Schmidt
Applicant and Manufacturer	Mettler-Toledo Changzhou Precision Instrument Ltd No.22, ZhengQiang Road Changzhou, Jiangsu, 213125 CHINA
Identification of the certified type	A **single point load cell**, with strain gauges, equipped with electronics. Registered trade name : METTLER TOLEDO Type : SLP220D, SLP231D
Characteristics	See next page

This OIML Certificate is issued under scheme A.

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 R 60 - Edition 2017 (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
6 September 2021

Certification Board

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The conformity was established by the results of tests and examinations provided in the associated OIML Type Evaluation Reports:
- No. NMi-2495901-01 dated 6 September 2021 that includes 72 pages;
- No. NMi-2495901-02 dated 6 September 2021 that includes 65 pages.

Characteristics of the load cell:

		SLP220D series	SLP231D series
Strain gauge		4x single	2x half bridge
Characterization of load cell capabilities		Digital load cell with data processing	
Maximum capacity (E_{max})		10 kg up to and including 50 kg	30 kg up to and including 100 kg
Minimum dead load		0 kg	
Accuracy Class		C	
Maximum number of load cell intervals (n) (1)		6000	
Ratio of minimum LC Verification interval (1) $Y = E_{max} / v_{min}$		30000	
Ratio of minimum dead load output return (1) $Z = E_{max} / (2 * DR)$		15000	
Temperature range		-10 °C / + 40 °C	
Fraction p_{LC}		0,8	
Humidity Class		SH	
Safe overload		150% of E_{max}	
Recommended excitation		5 V DC	
Excitation maximum		5,2 V DC	
Transducer material		Aluminium	
Atmospheric protection		Silicon rubber	
Electromagnetic environment class		E2	
Data transmission	Interface and data protocol	MT-SICS Level 0_1	
	Filtering	Adaptive	
	Sample frequency	366,21 Hz	
Software identification (2)		See certificate TC8039	

Remarks:
1. The characteristics for n_{max}, Y and Z can be reduced separately.
2. The software identification can be sent through the interface on command and will be displayed on the device that displays the primary indications.

The digital load cell has embedded software (OIML R 76-1 (2006)).

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The legally relevant functions are listed in certificate TC8039.

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

The above identified Type (represented by the sample(s) identified in the OIML Test Report) have been found to comply with the additional national requirements established by the United States of America (NIST Handbook 44 and NCWM Publication 14), included in the Utilizer Declaration:

- R 60 OIML-CS rev.2 Additional requirements from the United States Accuracy class III L;
- R 60 OIML-CS rev.2 Additional requirements from the United States Marking requirements.