



Issued by
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APPROVED SIGNATORY

Hazem Salama (892)
(Signed electronically)

Customer:
PPT Group UK Ltd t/a Mecmesin, Newton House, Spring Copse Business Park
Slindfold, Horsham, West Sussex, RH13 0SZ

Location of calibration:
Trescal Ltd, Park Gate Close, Bredbury Park Way
Bredbury, Stockport, SK6 2SL, UK

Equipment Details:

Description:	Speed Verification Tool	Customer Ref:	TM0430
Manufacturer:	ELV	Date of Receipt:	19 Aug 2025
Type No:	LSU 100	Order No:	
Serial No:	SEQ2879007	Our Reference:	72943975
Calibrated By:	Alexandre Duarte	Date of Calibration:	27 Aug 2025

Calibration Summary

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.
Assessment of conformance has been undertaken in accordance with the agreed decision rule detailed within this certificate.

Status on Receipt: Measured Values Only
No assessment of conformance has been undertaken.

Status on Despatch: Measured Values Only
No assessment of conformance has been undertaken.

Action(s) Taken: Full Calibration

Ambient Conditions: Temperature: 20 ± 2 °C Humidity: 35 ± 20 %rh

Customer requested calibration due date:

The results given within this certificate only relate to the item calibrated. The expanded uncertainties quoted refer to the measured values only, with no account being taken of the instruments ability to maintain its calibration. The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k = 2$, which for a normal distribution corresponds to a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Agreed and applied Decision Rule used to determine conformance:

It has been stipulated by the customer that assessment of conformance is not required. (Trescal Rule 0)
Reference: Trescal document TRE/DEC/0004 Issue 1

Calibration Equipment Used

Asset No	Due Date	Asset No	Due Date
120500	31/08/2025	120518	30/11/2026
Elect Temp	30/09/2025	FC552	31/01/2026
FC571	01/04/2026	FC657	31/10/2025
STD0183	19/08/2026		

The following information and any identified symbols are used by Trescal in determining the conformance of the device at each measurement point, which is then evaluated in line with the requested decision rule. Where this decision rule is of a "Binary Rule" type then the "Conditional Pass & Fail" statuses are treated as specified by the chosen decision rule. The overall conformance statement determined is given on page one of this certificate.

Key to results annotations, where applicable

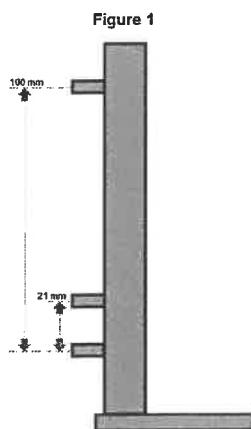
- * The measurements marked thus have been determined to be outside the specification, due allowance having been made for the expanded uncertainty.
- ! The measurements marked thus are within the specification by a margin less than the expanded uncertainty.
- ^ The measurements marked thus are outside the specification by a margin less than the expanded uncertainty.
- @ The expanded uncertainty is significant in relation to the unit specification and it is therefore not possible to demonstrate conformance unambiguously.
- \$ The measurements marked thus do not lie within the scope of the Laboratory's prevailing UKAS accreditation but are reported herein for completeness.

Basis of Test: Measured Results.

This instrument has been measured using laboratory standards for the distance between the laser sensors operating the stopwatch (Figure 1), with the datum laser being at the bottom of the column. Repeat readings were taken to determine the accuracy and the measured results reported in the following tables:

Position reference	Nominal length (mm)	Start position (mm)	Stop position (mm)	Measured length (mm)
1	21	117.004	138.077	21.073
2	21	117.016	138.048	21.032
3	21	117.018	138.075	21.057
4	21	117.016	138.058	21.042
5	21	117.031	138.064	21.033
Mean Value		117.017	138.064	21.047
Maximum variation		0.027	0.029	0.041

Position reference	Nominal length (mm)	Start position (mm)	Stop position (mm)	Measured length (mm)
0	100	117.004	217.288	100.284
2	100	117.016	217.278	100.262
3	100	117.018	217.309	100.291
4	100	117.016	217.320	100.304
5	100	117.031	217.326	100.295
Mean Value		117.017	217.304	100.287
Maximum variation		0.027	0.048	0.042



The dovetail bracket (Figure 2 & 3) was measured for the distance between faces with the following results:

Feature	Position	Nominal Distance (mm)	Measured Results (mm)	Mean Value (mm)	Parallelism (mm)
Upwards Distance	1	20.0	20.017	20.014	0.010
	2		20.016		
	3		20.008		
	4		20.018		
	5		20.013		

Feature	Position	Nominal Distance (mm)	Measured Results (mm)	Mean Value (mm)	Parallelism (mm)
Downwards Distance	1	20.0	19.997	19.979	0.044
	2		19.996		
	3		19.975		
	4		19.973		
	5		19.953		

Figure 2

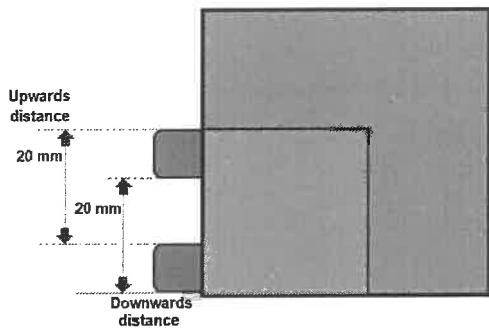
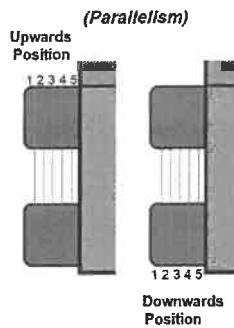


Figure 3



Uncertainty of measurement : ± 0.003 mm (Linear)
 ± 0.005 mm (Laser Displacement)

Calibration Procedure : QCD/CALP/18
 Our Reference : AFD475754

Calibration Procedure: The instrument was placed in the laboratory for 24 hours prior to calibration for stabilisation purposes. Tests were made by comparison with a standard counter at the given indications. The equipment was calibrated in a controlled environment using devices having known and traceable values. The uncertainties reported refer to the measured values only with no account being taken of the instrument ability to maintain its calibration.

Time Checks

<u>UUT Indication</u>	<u>Standard Indication</u>	<u>Standard Equivalent</u>
00 hr 00 min 5.068 sec	5.087 sec	0 min 05.087 sec
00 hr 00 min 10.157 sec	10.051 sec	0 min 10.051 sec
00 hr 00 min 30.152 sec	30.111 sec	0 min 30.111 sec
00 hr 01 min 00.072 sec	60.021 sec	1 min 00.021 sec
00 hr 05 min 00.257 sec	300.189 sec	5 min 00.189 sec
00 hr 10 min 00.648 sec	600.536 sec	10 min 00.536 sec

The overall uncertainty in the measurement was:

± 0.013 seconds of indication

Specification taken from:

Measured results only no specifications available.

End of Results