Trescal

Certificate of Calibration

Date of Issue 31 October 2025

Certificate No. 4786850001

UKAS CALIBRATION 0013

Issued by
Trescal Ltd
Park Gate Close, Bredbury Park Way
Bredbury, Stockport
SK6 2SL, UK
Tel: +44 (0)161 4067878

APPROVED SIGNATORY
Hazem Salama (892)
(Signed electronically)

Customer:
PPT Group UK Ltd t/a Mecmesin, Newton House, Spring Copse Business Park
Slinfold, 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		
Manufacturer:	ELV		
Type No:	LSU 100	Date of Receipt:	12 Sep 2025
		Order No:	PO139051-1
Serial No:	TM0405	Our Reference:	00527554
Calibrated By:	Alexandre Duarte	Date of Calibration:	31 Oct 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

Receipt Comments:

FOC CAL

Calibration Equipment Used

Asset No	Due Date	Asset No	Due Date
120518	30/11/2026	E492	30/09/2026
FC224	31/12/2025	FC332a	28/02/2026
FC628	31/01/2026		

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.

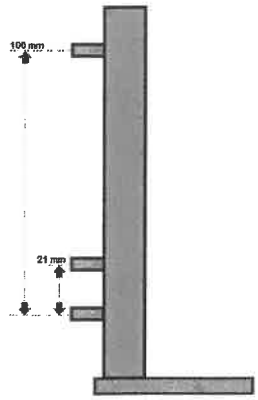
Basis of Test: Measured Results.

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	72.618	93.573	20.955
2	21	72.627	93.591	20.964
3	21	72.666	93.603	20.937
4	21	72.669	93.594	20.925
5	21	72.648	93.598	20.950
Mean		72.646	93.592	20.946
Maximum variation		0.051	0.030	0.039

Position reference	Nominal length (mm)	Start position (mm)	Stop position (mm)	Measured length (mm)
1	100	72.618	172.733	100.115
2	100	72.627	172.799	100.172
3	100	72.666	172.807	100.141
4	100	72.669	172.809	100.140
5	100	72.648	172.797	100.149
Mean		72.646	172.789	100.143
Maximum variation		0.051	0.076	0.057

Figure 1



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	19.992	19.982	0.013
	2		19.982		
	3		19.976		
	4		19.982		
	5		19.986		

Feature	Position	Nominal Distance (mm)	Measured Results (mm)	Mean Value (mm)	Parallelism (mm)
Downwards Distance	1	20.0	19.921	19.922	0.045
	2		19.912		
	3		19.916		
	4		19.908		
	5		19.953		

Figure 2

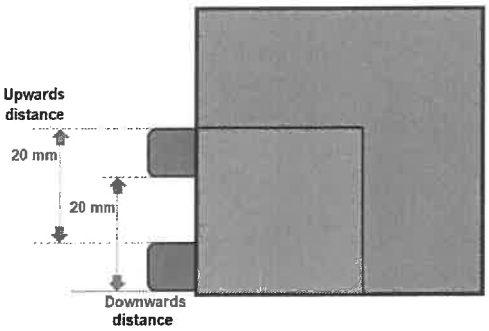
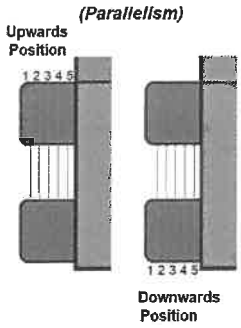


Figure 3



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

Calibration Procedure : QCD/CALP/18
Our Reference : AFD478685

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

UUT Indication	Standard Indication	Standard Equivalent
00 hr 00 min 05.284 sec	5.222 sec	0 min 05.222 sec
00 hr 00 min 10.304 sec	10.248 sec	0 min 10.248 sec
00 hr 00 min 30.324 sec	30.278 sec	0 min 30.278 sec
00 hr 01 min 00.311 sec	60.287 sec	1 min 00.287 sec
00 hr 05 min 00.393 sec	300.328 sec	5 min 00.327 sec
00 hr 10 min 00.355 sec	600.254 sec	10 min 00.254 sec

The overall uncertainty in the measurement was:

± 0.06 seconds of indication

Specification taken from:

Measured results only no specifications available.

End of Results