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CALIBRATION CERTIFICATE

issued by an Accredited Calibration Laboratory

Certificate number	Edition	Date of issue	Page (of)
1385486-1	1	26 October 2020	1 (4)

Calibration performed by
Peter Pettersson

Calibration approved by
Mikael Rydstedt, Technician

CUSTOMER	**Hettich Labinstrument AB** **Wenngarn Företagscenter** 193 91 SIGTUNA Sverige
DEVICE UNDER TEST	**Pocket Strobe, Testo, 476** MIO-id: M634238 Serial No: 1705-0036 Id No: -
COMMISSION	Custom Accredited calibration
CALIBRATION PROCEDURE	147328-54070-1
DATE OF RECEIPT	22 October 2020
DATE OF CALIBRATION	26 October 2020
LOCATION OF CALIBRATION	Element Metech AB, PAA, Arboga
AMBIENT CONDITIONS	Temperature: (23 ± 1) °C, Relative Humidity: (45 ± 10) %
TRACEABILITY	The calibration is performed with the reported reference equipment. Traceability to relevant primary standards is established by the corresponding Calibration Reports.
SPECIFICATION	Instruction Manual, Stroboscope, Testo 476, 0971.4760/01/T/dr, 27.10.2006 , FS00798
STATUS AS RECEIVED	COMPLIANCE (P) - All measured values were within the specified limits, when the measurement uncertainty is taken into account
STATUS AS SHIPPED	COMPLIANCE (P) - All measured values were within the specified limits, when the measurement uncertainty is taken into account

REFERENCE EQUIPMENT	MIO-id	Calibration Report	Next Calibration
SAAB Metech MAL 829	24716	1285142-1	Dec 2020
SAAB Metech Datum ET6000+Symmetricom 8040C	M321530	1342253-1	Dec 2020
Wavetek 901R	23712	1342226-1	Jun 2021

The measurement procedures and measuring equipment used have been selected to provide an uncertainty of measurement of less than a third of the specification and to ensure that the measurements are traceable to the International System of Units (SI), where possible. The uncertainty of measurement has been determined in accordance with EA Publication EA-4/02 and applies only to the measured result and do not imply anything regarding the long-term stability of the device under test. The compliance with specification has been determined in accordance with ILAC publication ILAC-G8:03/2009 and is only valid for the instrument calibrated. The statement of compliance with specification is based on a 95% coverage probability for the expanded uncertainty of the measurement results on which the decision of compliance is based.
Laboratories are accredited by the Swedish Board for Accreditation and Conformity Assessment (SWEDAC) under the terms of Swedish legislation. The accredited laboratory activities meet the requirements in ISO/IEC 17025:2005. Swedish Board for Accreditation and Conformity Assessment (SWEDAC) is one of the signatories to the Multilateral Agreements of the European co-operation for Accreditation (EA) for mutual recognition of calibration certificates and test reports.

SWEDAC ACKREDITERING
Accred. no. 0012
Calibration
ISO/IEC 17025

COMPLIANCE WITH SPECIFICATION

The compliance with specification has been determined in accordance with ILAC publication ILAC-G8:03/2009.
The statement of compliance is based on a 95 % coverage probability for the expanded uncertainty and is only valid at the tested points.

The status of compliance with specification is reported as:

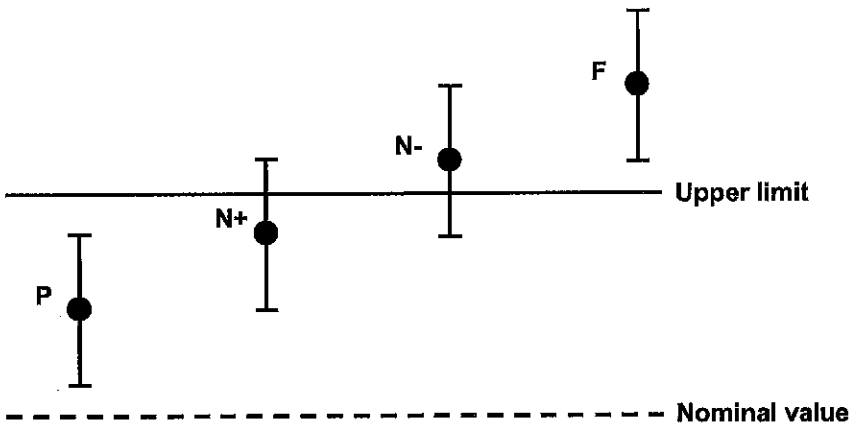
P COMPLIANCE - The measured value is within the specified limits, when the measurement uncertainty is taken into account.

N+ INDETERMINATE - It is not possible to state compliance using a 95 % coverage probability for the expanded uncertainty, although the measured value is within the specified limits, i.e. the measured value is within the specified limits by a margin less than the measurement uncertainty.

N- INDETERMINATE - It is not possible to state non-compliance using a 95 % coverage probability for the expanded uncertainty, although the measured value is outside the specified limits, i.e. the measured value is outside the specified limits by a margin less than the measurement uncertainty.

F NON-COMPLIANCE - The measured value is outside the specification limits, when the measurement uncertainty is taken into account.

A compilation for all performed tests of the status as received, i.e. before any adjustment/repair, and the status as shipped, i.e. after any adjustment/repair, is reported on the first page.
Any statement of compliance with specification is based on the model above and the final judgement, if the device under test conforms to the requirements for its intended use, has to be made by the customer.



Other terms that may be used:

NS The measured point is measured but has no specified limits (and not tested for compliance with specification).

NT The measured point is not measured (and not tested for compliance with specification).

UNCERTAINTY OF MEASUREMENT

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95 %.
If this is not the case, the actual coverage factor (k), distribution (D) and effective degrees of freedom (v) will be stated together with the reported expanded uncertainty of measurement.
Any quoted uncertainty measurement applies only to the measured value and do not imply anything regarding the long-term stability of the device under test.
The standard uncertainty of measurement has been determined in accordance with EA Publication EA-4/02.

SUMMARY OF ALL PERFORMED TESTS

Summary of the status of each performed test, see previous page for explanation of the reported status. Any statements reported inside brackets (...) indicates the status before any adjustment or repair of the device under test.

Number	Description	Status
1	Revolutions per minute (RPM)	P

RESULTS OF MEASUREMENT

1 Revolutions per minute (RPM)

Specification: Instruction Manual, Stroboscope, Testo 476, Manual No. 0971.4760/01/T/dr/27.10.2006 (Reg. No. FS00798).
Measurement Procedure: Measure frequency with Frequency Counter, T/2005:PMM3372

Nominal Value [r.p.m.]	Lower Limit [r.p.m.]	**Measured Value [r.p.m.]**	Uncertainty [±r.p.m]	Upper Limit [r.p.m.]	Result
900,00	898,91	**900,12784**	0,00047	901,09	P
1500,00	1498,85	**1500,22529**	0,00071	1501,15	P
3000,0	2998,7	**3000,4494**	0,0016	3001,3	P
6000,0	5998,4	**6000,8966**	0,0042	6001,6	P
9000,0	8998,1	**9001,157**	0,015	9001,9	P
11000,0	10997,9	**11001,935**	0,022	11002,1	P
12500,0	12497,75	**12501,881**	0,021	12502,25	P