

THV



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INTRODUCTION

The horizontal THV instrument has been designed for calibration and certification of gauging equipment of small dimension.

It allows easy and precise checking of plug gauges, ring gauges, thread plug gauges, test and dial indicators as well as measuring of high precision production parts.

The incorporated opto-electronic measuring system guarantees high accuracy. A separate display unit or a PC with Trimos WinDHI software can be used to display the measurement results.

The THV instruments can also be delivered without measuring system. An electronic probe or a dial indicator shall then be used as measuring system.

Due to its small size, The THV can be moved easily. It is therefore frequently used as mobile calibration station.

IDEAL FOR THE USE IN A CLEAN ROOM AND IN THE WORKSHOP AREA

THE INSTRUMENT MEETS THE REQUIREMENTS OF ALL EN ISO 9000

VERY SIMPLE MANIPULATION

LARGE RANGE OF ACCESSORIES

CHECKING OF INTERNAL AND EXTERNAL DIMENSIONS USING A SINGLE MEASURING ELEMENT

ACCORDING TO THE APPLICATION, THE INSTRUMENT CAN BE USED IN HORIZONTAL POSITION OR IT CAN BE INCLINED UPTO 90° USING THE ADDITIONAL STAND

DESCRIPTION

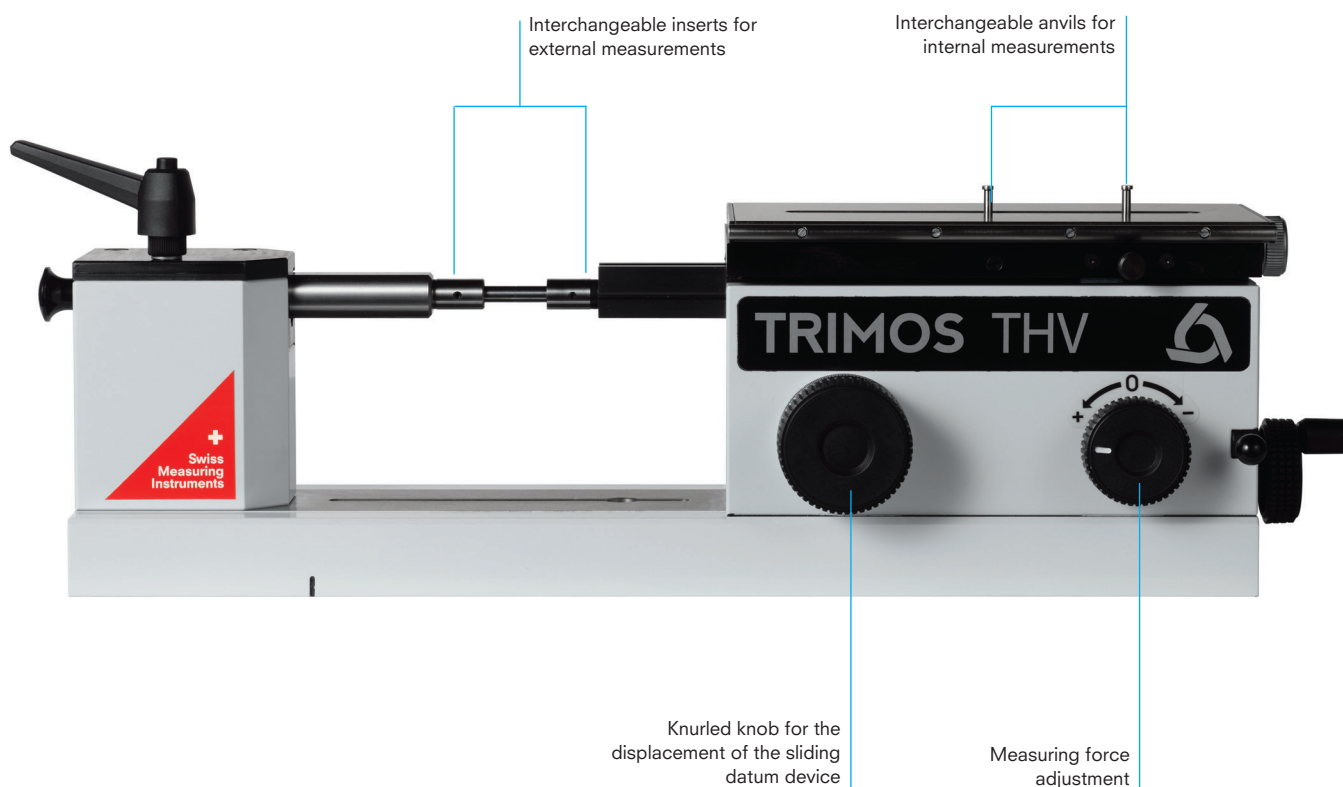
DISPLAY UNITS:



Heidenhain ND1100



PC with TRIMOS-WinDHI software



THV

DISPLAY / SOFTWARE

DISPLAY UNIT HEIDENHAIN ND1100

LINEAR MEASURING SYSTEM, MIN./MAX. VALUE HOLD

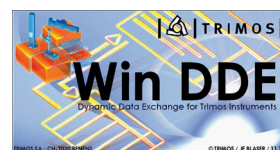
INVERSION OF MEASURING DIRECTION SIGN (+/-)

ZERO SETTING OF THE DISPLAY AND PRESET INPUT

PARAMETER SETTINGS AND CLASSIFICATION

CONFIGURATION OF THE DISPLAY USING EXTERNAL CONTACT

RS232 DATA OUTPUT



PC WITH TRIMOS WINDHI

TRIMOS-WinDHI Software allows the performance of all required measuring functions and the connection to a gauge inspection and management system.

INVERSION OF MEASURING DIRECTION SIGN (+/-)

DDE-SERVER (FOR EXCEL, WORD, ETC.)

GRAPHIC HELP FOR MEASURING FUNCTIONS

DATA TRANSFER USING A FOOT PEDAL

DIRECT DISPLAY OF ALL LENGTH MEASURING VALUES AND MIN./MAX. VALUE HOLD

MEASURING WITH 9 REFERENCES

COMPATIBLE WITH MEASURING EQUIPMENT MANAGEMENT SYSTEMS

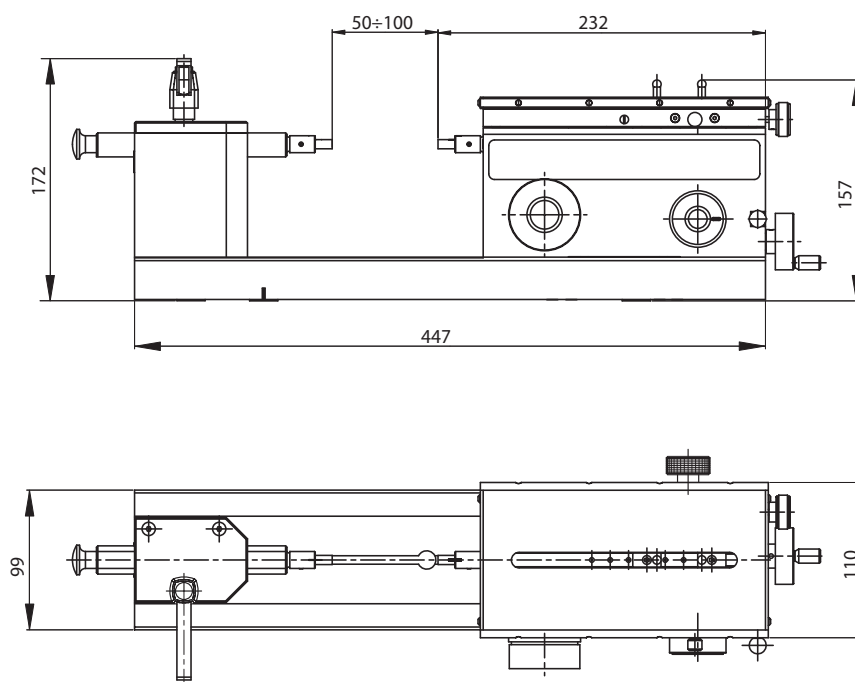


TECHNICAL SPECIFICATIONS

THV		
Absolute measuring range	mm (in)	50 (2)
Application range (external measurements)	mm (in)	100 (4)
Application range (internal measurements)	mm (in)	100 (4)
Max. permissible errors ¹⁾	µm	0.2+ L (mm)/250
Repeatability (2s) ¹⁾	µm	0.1
Resolutions (depending on display unit)	mm (in)	0.1 ÷ 0.00001 (.0001 ÷ .000001)
Measuring force (adjustable)	N	0 ÷ 4
Operational temperature	°C	+10 ÷ +40
Temperature of storage	°C	-10 ÷ +40
Weight	kg	22

¹⁾ Instruments with integrated measuring system. Values valid at temperature of 20±0.2 °C and relative humidity of 50±5%.

SCHEMA



STANDARD INSTRUMENT

The THV instruments are supplied as follows:

Instrument according to specifications (without display)

Measuring inserts for external measurements (TELS50)

Measuring anvils for internal measurements (THV-10)

Protection cover (THV.HO.0-50)

User's manual (750 50 0006 03)

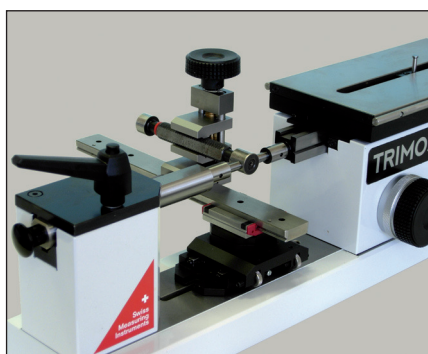
Test certificate

CODE NUMBERS

THV	Rigid table	Floating table
Instruments with measuring system	THVR.0-50 700 206 00 22	THVR.0-50S 700 206 00 24
Instruments without measuring system	THV.0-50 700 206 00 21	THV.0-50S 700 206 00 01

THV

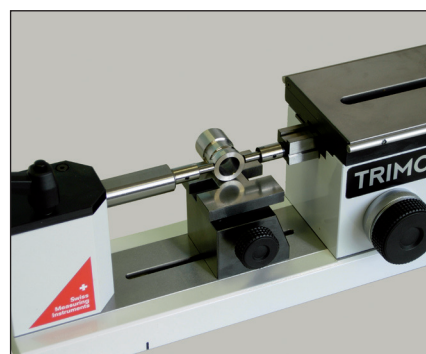
APPLICATIONS



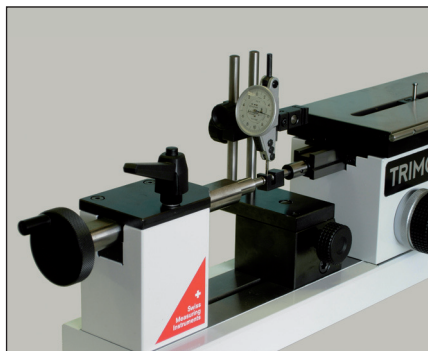
Calibration of plain and threaded plug gauges using the floating table (THV-115)



Calibration of plain rings gauges (THV-260)



Measuring of precision parts (THV-100/THV-101)



Checking of test indicators (THV-100/THV-150)



Adjustable support for a constant measuring force (THV-200)



Floating table for more accurate internal measurements