

# V3 / V4

Height Gauges for the Workshop



# 1.

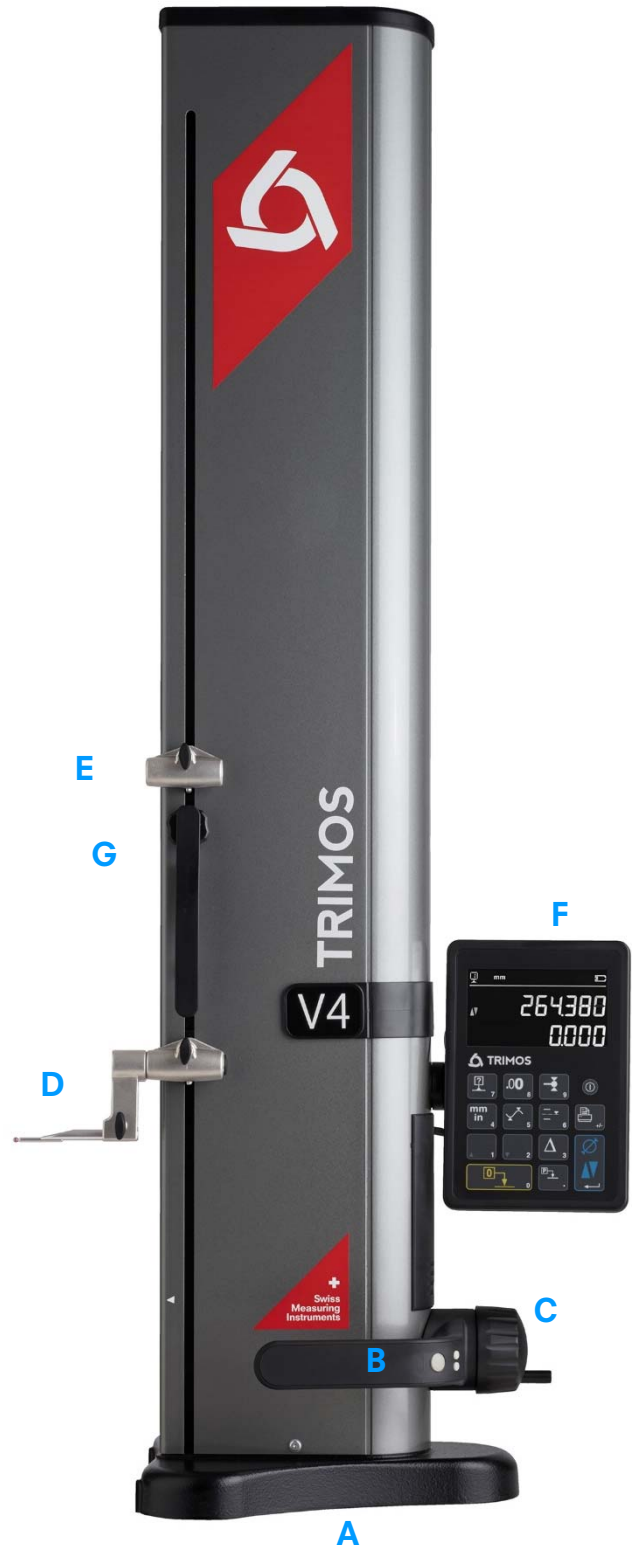
## INTRODUCTION

The V3 et V4 vertical measuring instruments have been developed for the most difficult workshop environments. Manufactured in their entirety in Switzerland, they will guarantee a robust, precise and reliable product on the long run.

For more than 40 years Trimos philosophy has been to offer easy-to-use instruments that are very efficient in production environment. The display unit provides functions that are directly accessible and depicted with symbols easy to understand. This allows for easy and quick handling even by unqualified personnel. The large 2-line « Black Mask » display offers an exceptional contrast in all lighting conditions, a unique characteristic on the market.

- Measuring ranges 400 and 700 mm
- Extremely easy to use
- Electronically adjustable measuring force
- Autonomy: 40 h (lithium-ion batteries)
- Larger than 300 mm probes as standard
- Vast range of accessories
- All adjustments possible without tools
- RS232 et USB interfaces

- A** Cast iron base for optimal stability
- B** Horizontal displacement handle with buttons for functions and air cushion (V4)
- C** Measuring carriage displacement handwheel
- D** Interchangeable insert holder and probe
- E** Additional probe holder (V4)
- F** "Black Mask" display with user-friendly functions
- G** Easy balance adjustment system



# 2.

## DIFFERENCES

### V3

The V3 measuring column represents the entry-level of Trimos universal measuring columns. It fully benefits from the developments realized on superior models. A robust and easy-to-use instrument including all functions essential for a use in the workshop.

### V4

The V4 measuring column offers the same functions as the V3. In addition it is equipped with a second probe holder as well as with an air cushion for easy displacement on the measuring table. The programmable functions buttons of the handle allow a quick access to the functions most used.

# 3.

## APPLICATIONS AND FUNCTIONALITIES



### Height Measurements

Height, thickness and chain of dimensions measurements



### Diameter Measurements

Simultaneous display of diameter and centerline



### Min/Max/Delta

Easy detection of min, max points or flatness of a surface



### Perpendicularity

All instruments are mechanically corrected



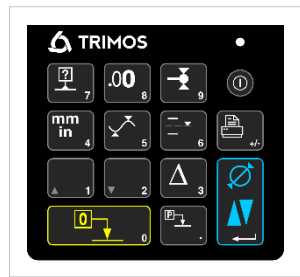
### Long Probes

Standard measuring inserts up to 340 mm, with excellent repeatability



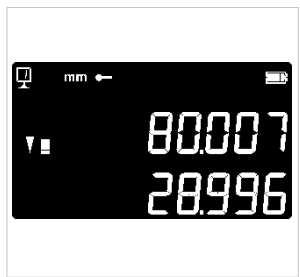
### Accessories

Very large range of accessories for any type of measurement



### User-Friendly Functions

Straightforward symbols and directly accessible functions



### Maximum Contrast

Easy reading at any time thanks to the "Black Mask" display

## 4.

## TECHNICAL DATA

V3		400	700
Measuring range	mm (in)	407 (16)	711 (28)
Measuring range with extension	mm (in)	508 (20)	812 (32)
Max. permissible errors, $E_{MPE}$	$\mu\text{m}$	7	8
Repeatability, $R_{MPE}$ (2s)	$\mu\text{m}$	2 ( $\varnothing$ : 4)	2 ( $\varnothing$ : 4)
Frontal squareness deviation, $S_{MPE}$	$\mu\text{m}$	10	15
Resolution	mm (in)	0.001 (0.00005)	
Measuring force	N	0.75 ÷ 1.5	
Autonomy	h	40	
Interfaces		USB / RS232	
Air cushion		No	

V4		400	700
Measuring range	mm (in)	407 (16)	711 (28)
Measuring range with extension	mm (in)	719 (28)	1023 (40)
Max. permissible errors, $E_{MPE}$	$\mu\text{m}$	5	7
Repeatability, $R_{MPE}$ (2s)	$\mu\text{m}$	2 ( $\varnothing$ : 4)	2 ( $\varnothing$ : 4)
Frontal squareness deviation, $S_{MPE}$	$\mu\text{m}$	10	15
Resolution	mm (in)	0.001 (0.00005)	
Measuring force	N	0.75 ÷ 1.5	
Autonomy	h	40	
Interfaces		USB / RS232	
Air cushion		Yes	

Note: The above values have been determined according to ISO 13225. They are valid with the standard measuring insert (TA-MI-101), at a temperature of  $20 \pm 0.5$  °C and relative humidity of  $50 \pm 5\%$ .

## STANDARD INSTRUMENT

## The V3 and V4 instruments are supplied as follows:

Instrument according to specifications	Charging unit (TA-EL-132)
Measuring insert with ruby ball $\varnothing$ 4 mm (TA-MI-101)	Setting Gauge (TA-MG-104)
V3: Quick Guide (750 50 0046 00)	V4: User's manual (750 50 0045 03)
Calibration certificate	

## CODE NUMBERS

V3		V4		
<b>V3-400</b>	700 110 10 03	<b>V4-400</b>	700 110 10 04	Measuring range 400 mm
<b>V3-700</b>	700 110 20 03	<b>V4-700</b>	700 110 20 04	Measuring range 700 mm

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# V5 / V6

Height Gauges for the Workshop



## 1.

## INTRODUCTION

The vertical measuring instruments V5 and V6 are the descendants of the legendary V+ line, from which thousands of units have already been sold in workshops all over the world and are universally recognized for their easy use and their high quality.

Trimos was the first to offer vertical measuring instruments on the market more than 40 years ago. The V5 and V6 represent a consolidation of know-how accumulated over the years. The very legible display and the user-friendly functions offer exceptional comfort use. But that's not it: The V5 and V6 are equipped with a revolutionary displacement handwheel which offers its user the choice of the displacement mode of the measuring carriage, either manual or motor-driven. Each one of these modes, suffers from no compromise, which means that the user who prefers a manual instrument will not notice a difference with a classic manual instrument and the same applies to the motor-driven displacement. This innovation avoids having to make a difficult choice during the purchase and can accommodate multiple potential users with the same instrument.

- Measuring ranges 400, 700 and 11000 mm
- Extremely easy to use
- Electronically adjustable measuring force
- Manual or motor-driven displacement
- Larger than 300 mm probes as standard
- Vast range of accessories
- All adjustments possible without tools
- RS232 et USB interfaces

- A** Cast iron base for optimal stability
- B** Horizontal displacement handle with buttons for functions and air cushion
- C** Measuring carriage displacement handwheel. Manual or motor-driven mode.
- D** Interchangeable insert holder and probe
- E** Additional probe holder
- F** "Black Mask" display with user-friendly functions
- G** Easy balance adjustment system





# 2.

## DIFFERENCES

### V5

The design of the V5 with its side probe holders revives an old Trimos tradition: They enable measuring with long, robust probes guaranteeing an excellent repeatability.

### V6

The V6 is of the same calibre as the V5. It's equipped with a more precise measuring system and enables the use of an electronic perpendicular probe.

# 3.

## APPLICATIONS AND FUNCTIONALITIES



### Height Measurements

Height, thickness and chain of dimensions measurements



### Diameter Measurements

Simultaneous display of diameter and centerline



### Min/Max/Delta

The motorization guarantees a perfectly constant measuring force



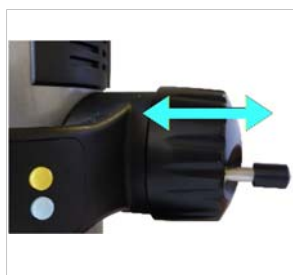
### Perpendicularity

Squareness measurements with electronic probe (V6)



### Long Probes

Standard measuring inserts up to 340 mm, with excellent repeatability



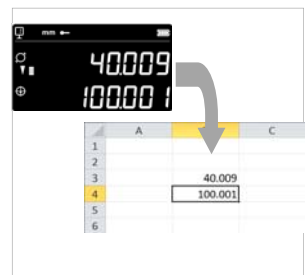
### Handwheel

Instant switch from the manual to the motor-driven mode



### Accessoires

Very large range of accessoires for any type of measurement



### Interface

The data transfer via the USB or RS232 port is very easy

## 4.

## DONNEES TECHNIQUES

V5		400	700	1100
Measuring range	mm (in)	407 (16.0)	711 (28)	1110 (43.7)
Measuring range with extension	mm (in)	719 (28.3)	1023 (40.3)	1422 (56)
Max. permissible errors, $E_{MPE}$	$\mu\text{m}$	2.5 + L(mm)/300		
Repeatability, $R_{MPE}$ (2s)	$\mu\text{m}$	2		
Frontal squareness deviation, $S_{MPE}$	$\mu\text{m}$	5	8	11
Maximal Resolution	mm (in)	0.001 (0.00005)		
Measuring force	N	0.75 ÷ 1.5		
Autonomy	h	40		
Interfaces		USB / RS232		
Air cushion		Yes		

V6		400	700	1100
Measuring range	mm (in)	407 (16.0)	711 (28)	1110 (43.7)
Measuring range with extension	mm (in)	719 (28.3)	1023 (40.3)	1422 (56)
Max. permissible errors, $E_{MPE}$	$\mu\text{m}$	2 + L(mm)/400		
Repeatability, $R_{MPE}$ (2s)	$\mu\text{m}$	1 ( $\varnothing$ : 2)		
Frontal squareness deviation, $S_{MPE}$	$\mu\text{m}$	5	8	11
Maximal Resolution	mm (in)	0.001 (0.00005)		
Measuring force	N	0.75 ÷ 1.5		
Autonomy	h	20		
Interfaces		USB / RS232		
Air cushion		Yes		

Note: The above values have been determined according to ISO 13225. They are valid with the standard measuring insert (TA-MI-101), at a temperature of  $20 \pm 0.5$  °C and relative humidity of  $50 \pm 5\%$ .

## STANDARD INSTRUMENT

## The V5 and V6 are supplied as follows:

Instrument according to specifications	Charging unit (TA-EL-132)
Measuring insert with ruby ball $\varnothing$ 4 mm (TA-MI-101)	Calibration certificate
Setting Gauge (TA-MG-104)	User's manual (750 50 0045 03)
Protection cover (TA-TO-114/115/116)	

## CODE NUMBERS

V5		V6		
<b>V5-400</b>	700 110 10 05	<b>V6-400</b>	700 110 10 06	Measuring range 400 mm
<b>V5-700</b>	700 110 20 05	<b>V6-700</b>	700 110 20 06	Measuring range 700 mm
<b>V5-1100</b>	700 110 30 05	<b>V6-1100</b>	700 110 30 06	Measuring range 1100 mm

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