

# V/V Plus



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## INTRODUCTION

Talking about the V and V Plus series means looking at a height measuring instrument of universal use.

The new ergonomic and compact design has been well accepted from the industry worldwide. Ease of use and quick performance of all measuring tasks are given by the clearly defined function keys.

The updated measuring system combined with a powerful display unit guarantees high precision and maintains an incomparable self-containment of use in any manufacturing conditions.

The adjustable measuring force of V Plus models between 0.7 N and 1.6 N (0.3 N on request) allows the performance of measurements on components of delicate material.

The result of a modular instrument concept is a complete series with application ranges from 300 mm to 1235 mm at very competitive prices.

A wide range of accessories makes it possible to solve all required measuring tasks.

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PERFECT FOR USE IN THE WORKSHOP AREA

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EXTREMELY EASY TO OPERATE

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AUTONOMOUS USE WITH RECHARGEABLE BATTERY PACK

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AIR CUSHION STANDARD ON C VERSION (V PLUS)

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CLEAR DEFINITION OF ALL MEASURING FUNCTIONS

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EXTREMELY LARGE DISPLAY OF VALUES

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ACCEPTANCE OF A MEASURED VALUE BY ACOUSTIC SIGNAL








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DIRECT RS232C DATA OUTPUT (BI-DIRECTIONAL)

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ADJUSTABLE MEASURING FORCE

## DESCRIPTION

-  Surfaces
-  Internal/external diameters
-  Centerline distances
-  Min/Max/Delta
-  2 references
-  Squareness measurements
-  Calculation mode



# V/V Plus

## DISPLA / SOFTWARE

The clearly defined functions of the display unit allow quick performance of all required height measurements.

SURFACE AND CENTERLINE DISTANCE MEASUREMENTS

ZERO SETTING OF THE DISPLAY OR PRESET VALUE SETTING

DATA TRANSFER (RS 232)

SELECTION OF MEASURING UNIT MM OR INCH

SELECTOR KEY TO OBTAIN A MIN/MAX/DELTA VALUE

MEASURING USING TWO REFERENCES

ADJUSTMENT OF THE ACOUSTIC SIGNAL



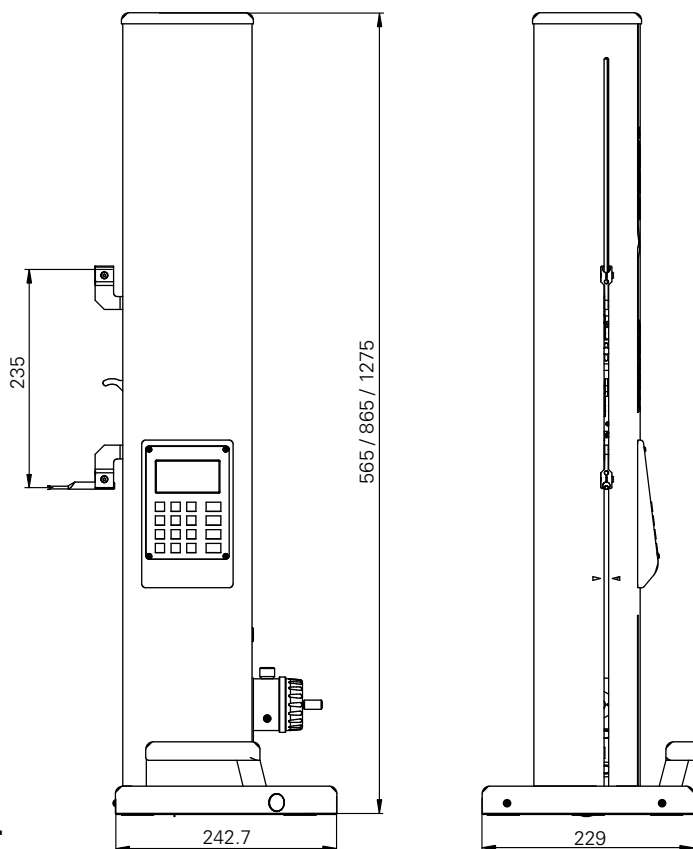
## TECHNICAL SPECIFICATIONS

V		300	600
Measuring range	mm (in)	300 (12)	600 (24)
Application range	mm (in)	535 (21)	835 (32)
Max. permissible errors <sup>1)</sup>	µm	8	10
Repeatability (2s) <sup>1)</sup>	µm	2 (Ø:4)	
Frontal squareness deviation	µm	10	15
Resolutions	mm (in)	0.01/0.001 (.0001/.00005)	
Measuring force	N	1	
Max. manual carriage displacement speed	mm/s	1500	
Autonomy	h	100	
Data output		RS232	
Operational temperature	°C	+10 ÷ +40	
Temperature of storage	°C	-10 ÷ +40	
Weight	kg	10	12

V Plus		300	600	1000
Measuring range	mm(in)	300 (12)	600 (24)	1000 (40)
Application range	mm(in)	535 (21)	835 (32)	1235 (48)
Max. permissible errors <sup>1)</sup>	µm	2.5 + L (mm) / 300		
Repeatability (2s) <sup>1)</sup>	µm	2		
Frontal squareness deviation	µm	5	8	12
Resolutions	mm(in)	0.01/0.001 (.0001/.00005)		
Measuring force (adjustable)	N	0.7 ÷ 1.6 (V305: 0.3 ÷ 1.2)		
Max. manual carriage displacement speed	mm/s	1500		
Autonomy (without/with air cushion)	h	100/30		
Data output		RS232		
Operational temperature	°C	+10 ÷ +40		
Temperature of storage	°C	-10 ÷ +40		
Weight	kg	10	12	15

<sup>1)</sup> Values valid with standard ball probe (TA-MI-101) at temperature of 20 ± 0.5°C and relative humidity of 50 ± 5%.

## SCHEMA



## STANDARD INSTRUMENT

### The V instruments are supplied as follows:

Instrument according to specifications	User's manual (750 50 0004 00)
Charging unit (TA-EL-131)	Test certificate
Measuring insert with ruby ball Ø 4 mm (TA-MI-101)	Hex screw driver 2 mm (TA-TO-002)
Setting gauge (TA-MG-103)	Hex screw wrench 2.5 mm (V-50.15)

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Instrument according to specifications	User's manual (750 50 0004 00)
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Setting gauge (TA-MG-103)	Hex screw wrench 2.5 mm (V-50.15)
Protection cover (V.HO300/V.HO600/V.HO1000)	

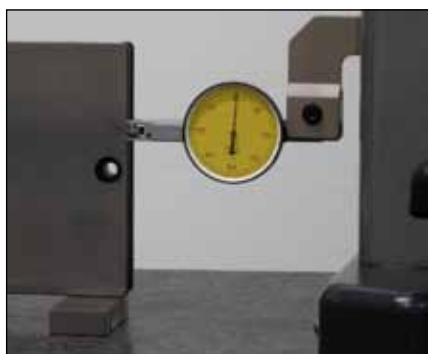
## CODE NUMBERS

V	V Plus		
	Without air cushion	With air cushion	
<b>VL300</b> 700 105 10 41	<b>V304</b> 700 105 10 01	<b>V304C</b> 700 105 10 02	Measuring range 300 mm
	<b>V305</b> 700 105 10 10	<b>V305C</b> 700 105 10 11	Measuring range 300 mm <sup>1)</sup>
<b>VL600</b> 700 105 20 41	<b>V604</b> 700 105 20 01	<b>V604C</b> 700 105 20 02	Measuring range 600 mm
		<b>V1004C</b> 700 105 30 02	Measuring range 1000 mm

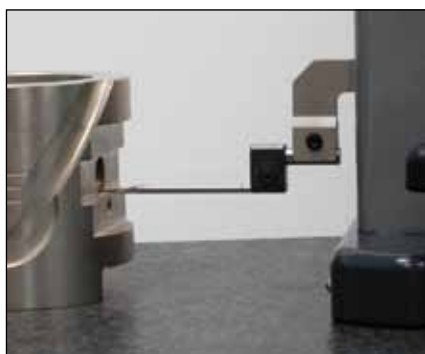
<sup>1)</sup> The instruments V305 and V305C are with low measuring force (0.3-1.2 N)

# V/V Plus

## APPLICATIONS



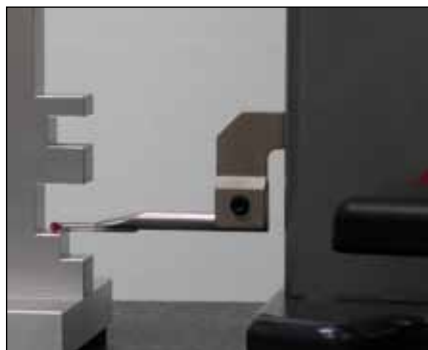
Checking of squareness deviation



Tiny Surface, diameter and centerline distance measurements (V-5/V50.9)



Depth measurement (TA-IH-109/V-50.5/V-50.4)



Checking of surface distances (TA-MI-101)



Thickness measurements (TA-MI-101)



Min/max measurements (TA-MI-101)