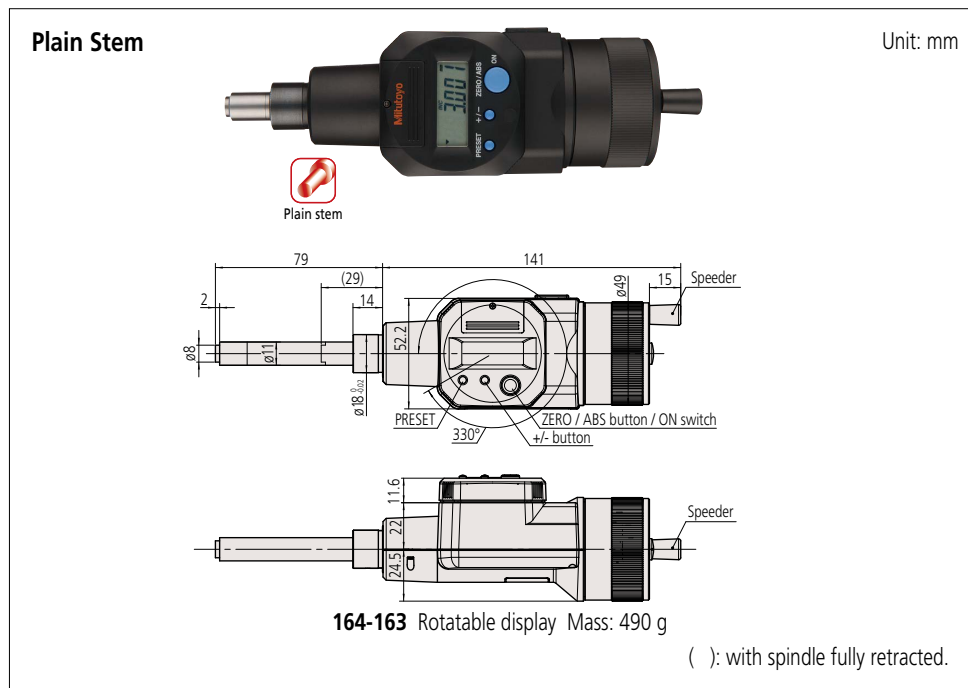


## The origin of Mitutoyo's trustworthy brand of small tool instruments

## Digimatic Micrometer Heads SERIES 164, 350

- Equipped with digital display and output.
- **Series 350** IP65 models\*: the Digimatic output port enables inclusion in a statistical process control or networked measurement system. (Refer to page A-3 for details.)

## DIMENSIONS



## SPECIFICATIONS

Metric									
Order No.	Stroke (mm)	Resolution (mm)	Graduation (mm)	Stem	Stem dia. (mm)	Spindle end	Graduation features	Accuracy*2 (μm)	
164-163	50	0.001	—	Plain	18	Flat (carbide tip)	Standard	±3	
350-251-30	25		0.01		W/clamp nut				10
350-252-30					Plain				
350-253-30				W/clamp nut					
350-254-30				Plain	12	Flat (carbide tip)			
350-281-30*1				W/clamp nut					Spherical (SR4) (carbide tip)
350-282-30*1				Plain					
350-283-30*1				W/clamp nut		Flat			
350-284-30*1				Plain					
350-261-30*1									

\*1 IP65 dust/water protection type

\*2 Excluding quantizing error

Note 1: For functional details of **series 350** refer to page B-8.

Please note that these models are not water-proof, and that origin setting is by presetting.

Note 2: Stem diameter of IP65 type is 12 mm.

Inch / Metric									
Order No.	Stroke (in)	Resolution	Graduation	Stem	Stem dia. (in)	Spindle end	Graduation features	Accuracy* <sup>2</sup> (in)	
164-164	2	0.00005 in/ 0.001 mm	0.001 in/ 0.01 mm	Plain	0.709	Flat (carbide tip)	Standard	±0.00015	
350-351-30	1				W/clamp nut				0.375
350-352-30					Plain				
350-353-30				W/clamp nut	Spherical (SR4) (carbide tip)				
350-354-30				Plain		0.5			Flat (carbide tip)
350-381-30* <sup>1</sup>				W/clamp nut					
350-382-30* <sup>1</sup>				Plain					
350-383-30* <sup>1</sup>				W/clamp nut	Flat				
350-384-30* <sup>1</sup>				Plain					
350-361-30* <sup>1</sup>									

\*1 IP65 dust/water protection type

\*2 Excluding quantizing error

Note 1: For functional details of **series 350** (IP65) refer to page B-8.

These models are water-proof to IP65 level, and that origin setting is by presetting.

Note 2: Stem diameter of IP65 type is 12 mm.



These marks indicate that a product has successfully passed IP65-level testing, which is carried out by the independent German certification organization TÜV Rheinland.



### IP Codes (series 350\*<sup>1</sup>)

Level 6: Dustproof

No ingress of dust allowed.

Level 5: Protected against water jets.

Water projected in jets against the enclosure from any direction shall have no harmful effects.

- Battery for **series 350**  
SR44(1 pc.), **938882** for initial operation checks (standard accessory)
- Battery for **series 164**  
SR44(2 pcs.), **938882** for initial operation checks (standard accessory)
- Battery life: Approx. 2.4 years under normal use  
(for **series 350-XXX**)  
Approx. 1.8 years under normal use  
(for **series 164-163, 164**)

Length standard: Electromagnetic rotary sensor

Spanner (**301336**), 1 pc. (for **series 350-XXX**)

Screwdriver (No.05CAA952), 1 pc. (for series 164-163, 164)

## Functions (series 164)

**Origin point setting** (ABS measurement system): Resets the ABS origin at the current spindle position to the minimum value of the measuring stroke and switches to ABS mode.

**Zero-setting** (INC measurement system):

A brief press on the ZERO/ABS button sets display to zero at the current spindle position and switches to the incremental (INC) measuring mode. A longer press resets to the ABS measuring mode.

**Data output:**

Equipped with output port for transferring measurement data to a Statistical Process Control (SPC) and measurement system.

**Auto power ON / OFF:**

The reading on the LCD disappears after this instrument is idle for about 20 minutes, but the reading and measurement mode are retained. Turning the spindle causes the reading on the LCD to reappear.

**Error alarm:**

In case of an overflow on the LCD or a computing error, an error message appears on the LCD and the measuring function stops. This prevents an instrument from giving an erroneous reading. Also, when the battery voltage drops to a certain level, the low-battery-voltage alarm annunciator appears well before the micrometer becomes unusable.

## Optional Accessories

- Connecting cables for **series 164**  
1 m: **959149**  
2 m: **959150**
- USB Input Tool Direct  
**USB-ITN-C (2 m): 06ADV380C**  
**02AZD790C** 160 mm  
For foot switch: **02AZE140C**
- Connecting cables for **series 350**  
1 m: **05CZA662**  
2 m: **05CZA663**
- USB Input Tool Direct  
**USB-ITN-B (2 m): 06ADV380B**

## Wireless Data Output **U-WAVE**<sup>fit</sup>

- **U-WAVE-TM 264-622** (IP67 type)  
**264-623** (Buzzer type)
- Connecting unit for **U-WAVE-TM 02AZF310** (IP67 /buzzer type common specification)  
Note: cannot be used with **164-163** and **164-164**  
Refer to page A-15 for details.

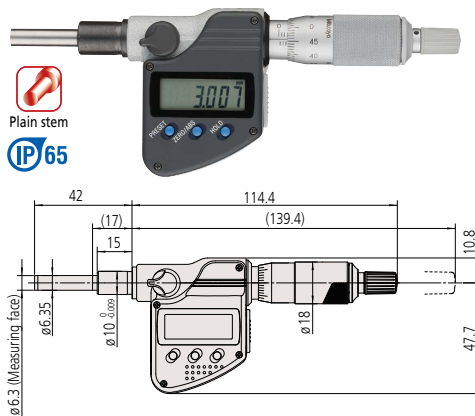
## Technical Data

- Measuring face  
Material: Carbide  
Hardness: 90 HRA or more  
Lapped
- Scale finishing:  
Satin-chrome plated

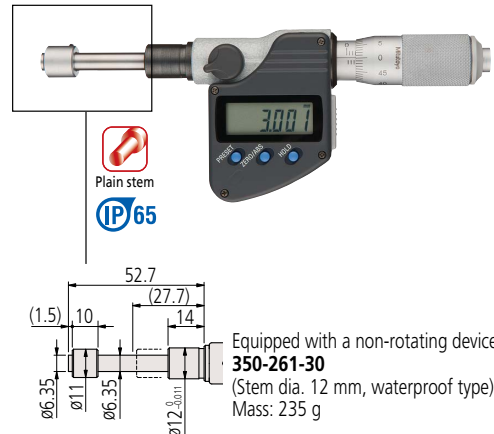
## DIMENSIONS

### Plain Stem

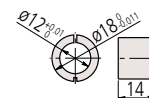
Unit: mm



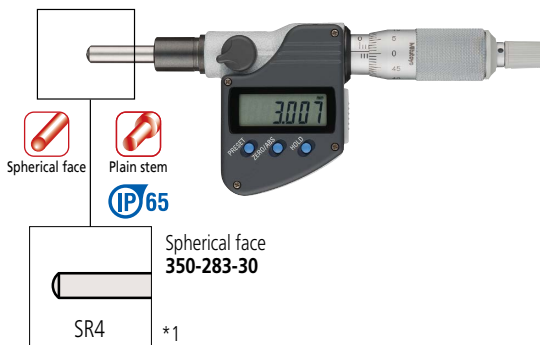
**350-281-30** (Stem dia. 12mm, waterproof type) Mass: 230 g



Equipped with a non-rotating device  
**350-261-30**  
(Stem dia. 12 mm, waterproof type)  
Mass: 235 g



Bush (standard accessory)  
**350-261-30**

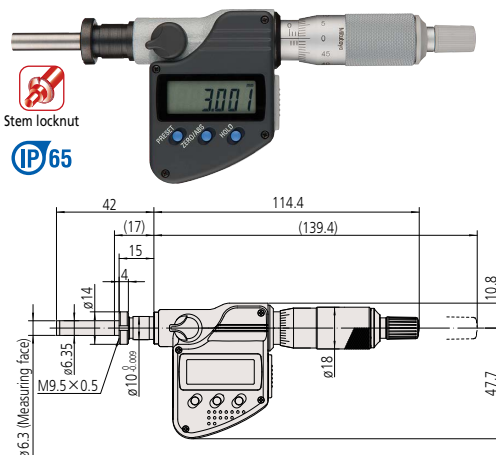


Spherical face  
**350-283-30**

SR4 \*1

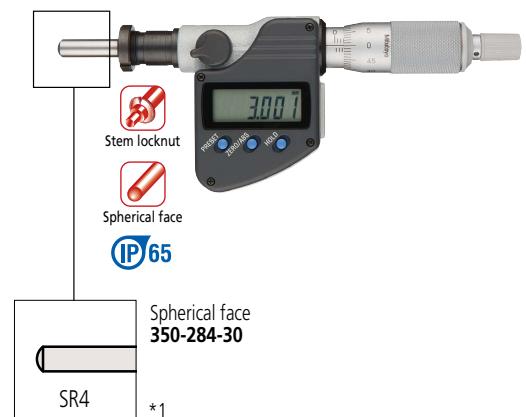
\*1 Other dimensions are the same as **350-281-30**.  
( ): with spindle fully retracted.

### Stem locknut



Fixture thickness: 11.5 mm

**350-282-30** (Stem dia. 12 mm, equipped with locknut, waterproof type) Mass: 230 g



Spherical face  
**350-284-30**

SR4 \*1

\*1 Other dimensions are the same as **350-282-30**.  
( ): with spindle fully retracted.

# Micrometer Head

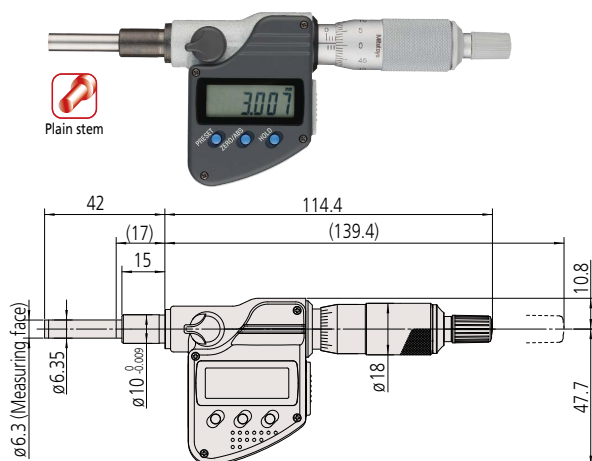
The origin of Mitutoyo's trustworthy brand of small tool instruments

## Digimatic Micrometer Heads SERIES 164, 350

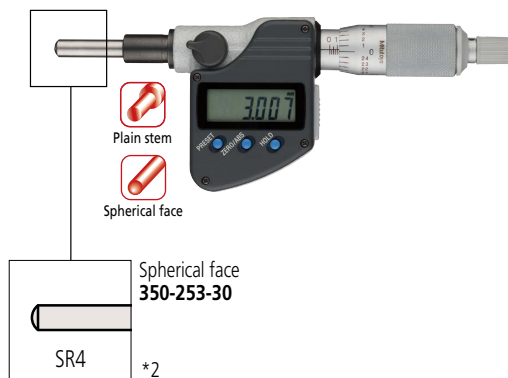
### DIMENSIONS

#### Plain Stem

Unit: mm

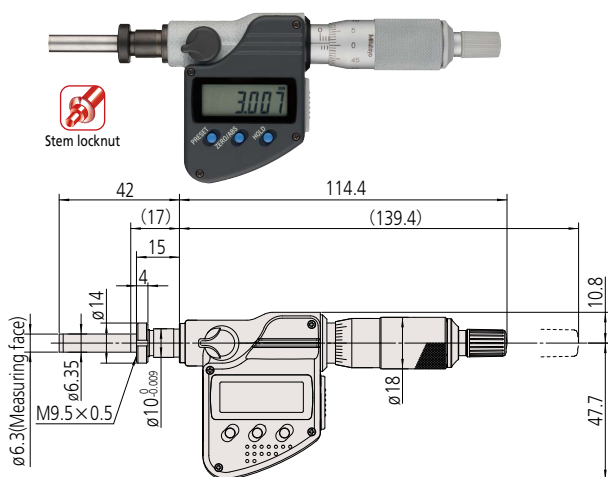


**350-251-30**  
(Stem dia. 10 mm, for general use) Mass: 230 g

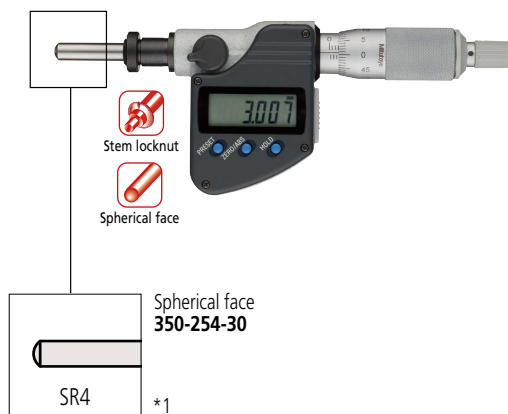


\*2 Other dimensions are the same as **350-251-30**.  
( ): with spindle fully retracted.

#### Stem Locknut



Fixture thickness: 11.5 mm  
**350-252-30**  
(Stem dia. 10 mm, for general use) Mass: 230 g



\*1 Other dimensions are the same as **350-252-30**.  
( ): with spindle fully retracted.