

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 range 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 indicator appears well before the micrometer becomes unusable.

Optional Accessories

Order No.	Type	Description
959149	C	Connecting cables for series 164 (1 m)
959150	C	Connecting cables for series 164 (2 m)
06AFM380C	C	USB Input Tool Direct for series 164 (2 m)
02AZD790C	C	Connecting cables for U-WAVE-T (160 mm): for series 164
02AZE140C	C	Connecting cables for U-WAVE-T For foot switch: for series 164
05CZA662	B	Connecting cables (1 m): for series 350 (IP65)
05CZA663	B	Connecting cables (2 m): for series 350 (IP65)
06AFM380B	B	USB Input Tool Direct for series 350 (IP65) (2 m)
02AZD790B	B	Connecting cables for U-WAVE-T (160 mm): for series 350 (IP65)
02AZE140B	B	Connecting cables for U-WAVE-T For foot switch: for series 350 (IP65)
264-622	IP67	U-WAVE-TM
264-623	Buzzer	U-WAVE-TM
264-626	IP67	U-WAVE-TMB
264-627	Buzzer	U-WAVE-TMB
02AZF310	IP67 / buzzer	Connecting unit for U-WAVE-TM / TMB*

* Cannot be used with 164-163 and 164-164

Digimatic Micrometer Heads SERIES 164, 350

- Equipped with digital display and output.
- 350-28X-30, 350-261-30, 350-38X-30 and 350-361-30 are protection grade IP65, water-proof Digimatic micrometer heads.
- Digimatic models can be easily integrated into statistical process control and measurement systems.



164-163

SPECIFICATIONS

Metric									
Order No.	Range (mm)	Resolution (mm)	Graduation (mm)	Stem	Stem dia. (mm)	Spindle end	Graduation features	Maximum permissible error J_{MPE} (μm)	
164-163	0 - 50	0.001	—	Plain	18	Flat (carbide tip)	Standard	±3	
350-251-30* ¹	0 - 25		0.01	W/clamp nut	10				Spherical (SR4) (carbide tip)
350-252-30* ¹				Plain					
350-253-30* ¹				W/clamp nut					
350-254-30* ¹				Plain	12	Flat (carbide tip)			
350-281-30* ²				W/clamp nut					
350-282-30* ²				Plain					Spherical (SR4) (carbide tip)
350-283-30* ²				W/clamp nut					
350-284-30* ²				Plain					
350-261-30* ²				Plain					

Inch/Metric									
Order No.	Range (in)	Resolution	Graduation	Stem	Stem dia. (in)	Spindle end	Graduation features	Maximum permissible error J_{MPE} (in)	
164-164	0 - 2	0.00005 in/ 0.001 mm	—	Plain	0.709	Flat (carbide tip)	Standard	±0.0001	
350-351-30*1	0 - 1		0.001 in/ 0.01 mm	W/clamp nut	0.375	Spherical (SR4) (carbide tip)			
350-352-30*1				Plain					
350-353-30*1				W/clamp nut	0.5	Flat (carbide tip)			
350-354-30*1				Plain					Spherical (SR4) (carbide tip)
350-381-30*2				W/clamp nut					
350-382-30*2				Plain					Flat
350-383-30*2				W/clamp nut					
350-384-30*2				Plain					
350-361-30*2									

- 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 350-XXX)
Approx. 1.8 years under normal use (for 164-163, 164)
- Length standard: Electromagnetic rotary sensor Spanner (301336), 1 pc. (for 350-XXX)
Screwdriver (05CAA952), 1 pc. (for 164-163, 164)
- Measuring face: Material/Carbide tip, Hardness/90 HRA or more, Lapped
- Scale finishing: Satin-chrome plated
- *1 These models are not water-proof.
- *2 IP65 dust / water protection type. Stem diameter of IP65 type is 12 mm.

Note 1: For functional details of series 350 refer to page B-7. Origin setting is by presetting.
Note 2: Refer to page B-129 for details of the recommended maximum loading limit.

DIMENSIONS

Plain Stem

Unit: mm

164-163 Rotatable display Mass: 490 g
(): with spindle fully retracted.

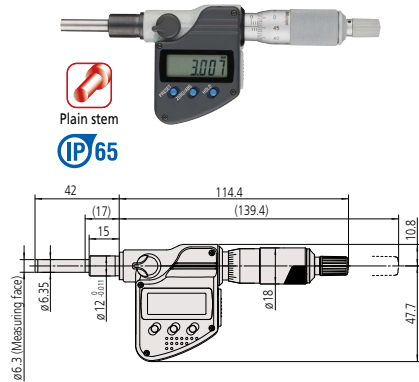
Micrometer Head

Digimatic Micrometer Heads SERIES 164, 350

DIMENSIONS

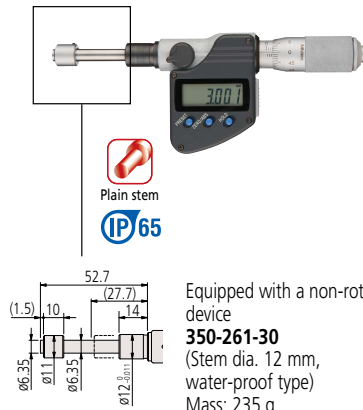
Plain Stem

Unit: mm



350-281-30

(Stem dia. 12 mm, water-proof type) Mass: 230 g

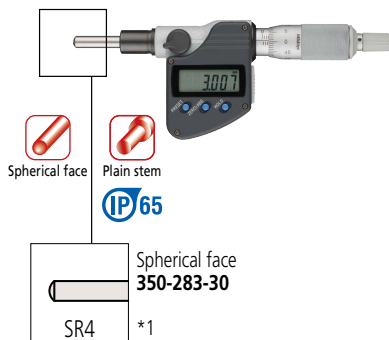


Equipped with a non-rotating device

350-261-30

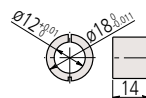
(Stem dia. 12 mm, water-proof type)

Mass: 235 g



Spherical face
350-283-30

*1

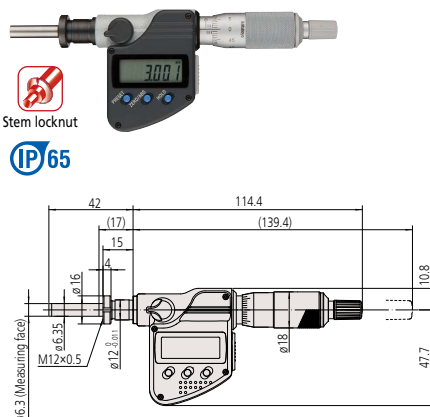


Bush (standard accessory)

350-261-30

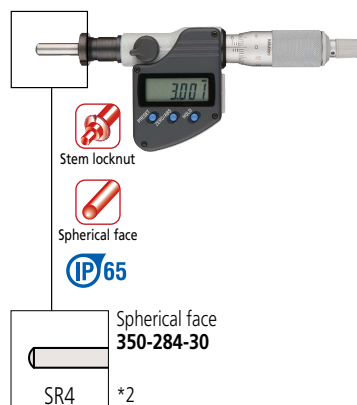
*1 Other dimensions are the same as **350-281-30**.
(): with spindle fully retracted.

Stem locknut



• Fixture thickness: 11.5 mm

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



Spherical face
350-284-30

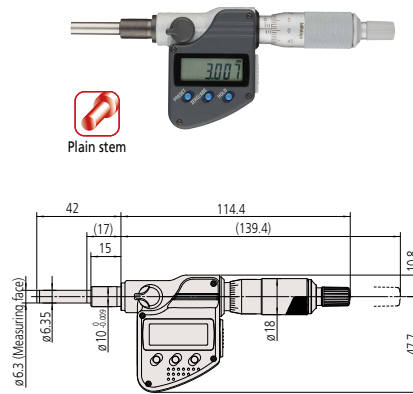
*2

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

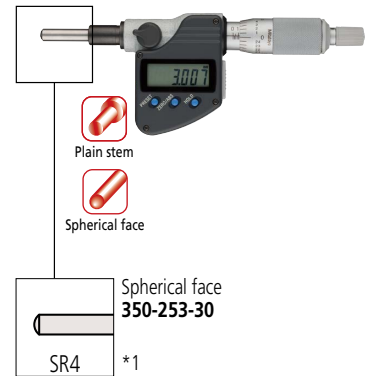
DIMENSIONS

Plain Stem

Unit: mm



Plain stem



Plain stem

Spherical face

Spherical face
350-253-30
SR4 *1

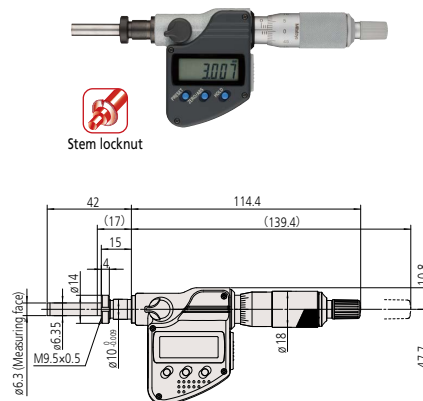
350-251-30

(Stem dia. 10 mm, for general use) Mass: 230 g

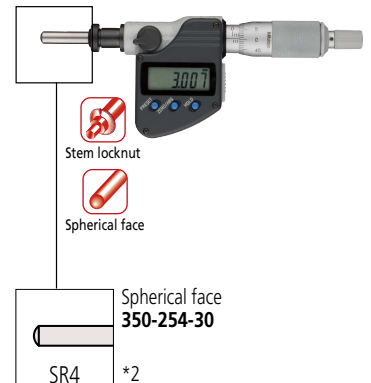
*1 Other dimensions are the same as **350-251-30**.

(): with spindle fully retracted.

Stem Locknut



Stem locknut



Stem locknut

Spherical face

Spherical face
350-254-30
SR4 *2

• Fixture thickness: 11.5 mm

350-252-30

(Stem dia. 10 mm, for general use) Mass: 230 g

*2 Other dimensions are the same as **350-252-30**.

(): with spindle fully retracted.