

Inside Micrometers

For easy and accurate measurement of inside diameters

Tubular Inside Micrometers SERIES 139, 339, 140 — Extension Pipe Type

- Wide range of inside diameter measurements possible by combining extension pipes and anvils with the micrometer head.
- Carbide measuring faces are available.
- The sleeve is rotated to adjust the index line position when setting to a length standard.
- An inside length standard is required for accurately setting the micrometer.
- Order No. 339-101/301/302/102/303/304 features:
 - IP65 (water-proof) protection level that enables use in the presence of cutting fluid.
 - A large-character LCD display.
 - Storage of 2 preset values for use when setting to an inside length standard.
 - A function lock that prevents accidental changing of the reference setting during measurement.
 - An output port for measurement data that enables inclusion in a statistical process control or networked measurement system. Refer to page A-3 for details.
 - Ability to use Interface Input Tools that enable conversion of measurement data to keyboard signals that are then directly input to cells in off-the-shelf spreadsheet software such as Excel. Refer to page A-5 for details.



339-301



139-177

SPECIFICATIONS

Metric						
Order No.	Range	Resolution	Micrometer head stroke	Extension pipes		Display unit
				Qty	Size	
Digimatic (LCD)						
339-101	200 - 225mm	0.001mm	25mm	—	—	200 - 225mm
339-301	200 - 1000mm			5	25, 50, 100, 200, 400mm	
339-302	200 - 2000mm			8	25, 50, 100, 200 (2pcs), 400 (3pcs)mm	

Metric								
Order No.	Range	Graduation	Micrometer head stroke	Extension pipes		Main unit		
				Qty	Size			
Analog								
139-173	100 - 500mm	0.01mm	25mm	4	25, 50, 100, 200mm	100 - 125mm		
139-174	100 - 900mm			5	25, 50, 100, 200, 400mm			
139-175	100 - 1300mm			6	25, 50, 100, 200, 400mm (2 pcs.)			
139-176	100 - 1700mm			7	25, 50, 100, 200, 400mm (3 pcs.)			
139-177	100 - 2100mm			8	25, 50, 100, 200, 400mm (4 pcs.)			
140-157	1000 - 2000mm			50mm	50mm	5	50, 100 (2 pcs.), 200, 500mm	1000 - 1050mm
140-158	1000 - 3000mm					6	50, 100 (2 pcs.), 200, 500, 1000mm	
140-159	1000 - 4000mm					7	50, 100 (2 pcs.), 200, 500, 1000mm (2 pcs.)	
140-160	1000 - 5000mm	8	50, 100 (2 pcs.), 200, 500, 1000mm (3 pcs.)					

Inch/Metric						
Order No.	Range	Resolution	Micrometer head stroke	Extension pipes		Display unit
				Qty	Size	
Digimatic (LCD)						
339-102	8" - 9"	.0001"/0.001mm	1"	—	—	8" - 9"
339-303	8" - 40"			5	1", 2", 4", 8", 16"	
339-304	8" - 80"			8	1", 2", 4", 8" (2 pcs.), 16" (3 pcs.)	

Inch								
Order No.	Range	Graduation	Micrometer head stroke	Extension pipes		Main unit		
				Qty	Size			
Analog								
139-178	4" - 20"	.001"	1"	4	1", 2", 4", 8"	4" - 5"		
139-179	4" - 36"			5	1", 2", 4", 8", 16"			
139-180	4" - 52"			6	1", 2", 4", 8", 16" (2 pcs.)			
139-181	4" - 68"			7	1", 2", 4", 8", 16" (3 pcs.)			
139-182	4" - 84"			8	1", 2", 4", 8", 16" (4 pcs.)			
140-161	40" - 80"			2"	2"	5	2", 4" (2 pcs.), 8", 20"	40" - 42"
140-162	40" - 120"					6	2", 4" (2 pcs.), 8", 20", 40"	
140-163	40" - 160"					7	2", 4" (2 pcs.), 8", 20", 40" (2 pcs.)	
140-164	40" - 200"	8	2", 4" (2 pcs.), 8", 20", 40" (3 pcs.)					



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



(Refer to page IX for details.)

IP Codes

- Level 6: Dust-proof.
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.

Technical Data

- Accuracy
- 339 series**
±(3 + number of pipes + maximum measurement length/50)µm (fraction rounded up)
- 139 series**
±(3 + number of pipes + maximum measurement length/50)µm (fraction rounded up)
- 140 series**
±(7 + number of pipes + maximum measurement length/50)µm (fraction rounded up)
- Excluding quantizing error (only for Digimatic)



Functions

(for 339-101/301/302/102/303/304)

- Zero-setting
- Origin restoration
- Data hold
- Function lock
- Automatic power ON/OFF
- 2-point Preset
- Error alarm
- Data output

Battery

(for 339-101/301/302/102/303/304)

- SR44 (1 pc), **938882**, for initial operational checks (standard accessory)

Optional accessories

Refer to page A-21 for details
Connecting cables with **IT/DP/MUX**, etc.

1m: **05CZA662**

2m: **05CZA663**

USB Input Tool Direct (2m): **06ADV380B**

Connecting cables for **U-WAVE-T**

For standard (160mm): **02AZD790B**

For foot switch: **02AZE140B**

Tubular Inside Micrometers SERIES 139 — Extension Pipe Type (main unit)

- Micrometer head for Extension Pipe Type inside micrometer.
- The sleeve is rotated to adjust the index line position when setting to a length standard
- An inside length standard is required for accurately setting the micrometer.



139-001

SPECIFICATIONS

Metric				
Order No.	Range	Graduation	Accuracy	Micrometer head stroke
139-001	100 - 125mm	0.01mm	$\pm 3\mu\text{m}$	25mm

Inch				
Order No.	Range	Graduation	Accuracy	Micrometer head stroke
139-002	4" - 5"	.001"	$\pm .00015"$	1"

DIMENSIONS

