

Micrometer

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

Gear Tooth Micrometers

SERIES 324, 124 — Interchangeable Ball Anvil / Spindle Tip Type

- Measures over-pin diameter of gears using precision steel (or carbide) ball anvils / spindle tips.
- Series 324: IP65 Digimatic gear tooth micrometers.
- Determination of the over-pin diameter: refer to "Quick Guide to Precision Measuring Instruments".
- Interchangeable ball anvils / spindle tips for various gear modules (0.5-5.25) are optional.
- Equipped with Ratchet Stop for constant measuring force.
- Ball anvil / spindle tips: optional.



324-251-30



124-173

SPECIFICATIONS

Metric			
Order No.	Range	Resolution	Accuracy*
Digimatic (LCD)			
324-251-30	0 - 25mm	0.001mm	±4μm
324-252-30	25 - 50mm		
324-253-30	50 - 75mm		
324-254-30	75 - 100mm		
			±5μm

* Excluding quantizing error

Metric			
Order No.	Range	Graduation	Accuracy
Analog			
124-173	0 - 25mm	0.01mm	±4μm
124-174	25 - 50mm		
124-175	50 - 75mm		
124-176	75 - 100mm		±5μm
124-177	100 - 125mm		
124-178	125 - 150mm		
124-179	150 - 175mm		
124-180	175 - 200mm		±6μm
124-181	200 - 225mm		
124-182	225 - 250mm		
124-183	250 - 275mm	±7μm	
124-195	275 - 300mm		

Inch/Metric			
Order No.	Range	Resolution	Accuracy*
Digimatic (LCD)			
324-351-30	0 - 1"	.00005"/ 0.001mm	±.0002"
324-352-30	1" - 2"		
324-353-30	2" - 3"		
324-354-30	3" - 4"		
			±.00025"

* Excluding quantizing error



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 324)

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.



Optional accessories

- Interchangeable ball anvil / spindle tip set

Order No.	Diameter* (mm)	Gear module	Dia. pitch
124-801	ø0.8	0.5 - 0.55	50
124-802	ø1.0	0.6 - 0.65	45
124-803	ø1.191 (³ / ₆₄ "*)	0.7 - 0.8	35 - 30
124-821	ø1.5	0.9 - 1	28 - 26
124-804	ø1.588 (¹ / ₁₆ "*)	0.9 - 1	28 - 26
124-805	ø2.0	1.25	22
124-806	ø2.381 (³ / ₃₂ "*)	1.5	17
124-822	ø2.5	1.5	17
124-807	ø3.0	1.75	15
124-808	ø3.175 (¹ / ₈ "*)	—	14
124-823	ø3.5	2	13
124-809	ø3.969 (⁵ / ₃₂ "*)	2	13
124-810	ø4.0	2.25	11
124-824	ø4.5	2.5	10
124-811	ø4.763 (³ / ₁₆ "*)	2.5	10
124-812	ø5.0	2.75	9
124-813	ø5.556 (⁷ / ₃₂ "*)	3.0 - 3.25	8
124-814	ø6.0	3.5	7
124-815	ø6.35 (¹ / ₄ "*)	3.75	7
124-816	ø7.0	4.0	6.5
124-817	ø7.144 (⁹ / ₃₂ "*)	4.25	6
124-818	ø7.938 (⁵ / ₁₆ "*)	4.5	5.5
124-819	ø8.0	4.75	5.5
124-820	ø8.731 (¹¹ / ₃₂ "*)	5.0 - 5.25	5

* ø2mm or less/ carbide-tipped type

Battery for series 324

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

Battery life: Approx. 2.4 years under normal use (for series 324)

Length standard: Electromagnetic rotary sensor (for series 324)

Standard accessories: Reference bar, 1 pc

(except for measuring range 0-25mm (0-1") models)

Spanner (301336), 1 pc

Optional accessories

Connecting cables for series 324

1m: 05CZA662

2m: 05CZA663

USB Input Tool Direct

USB-ITN-B (2m): 06ADV380B

SPC cables for U-WAVE w/ data switch (160mm):

02AZD790B

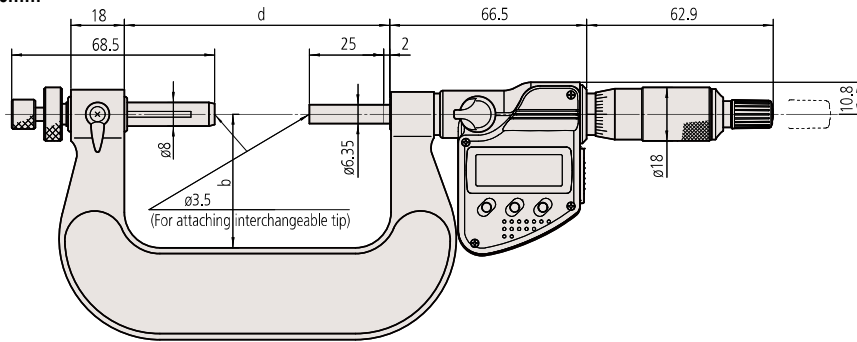
For foot switch: 02AZE140B

(Refer to page B-68 for details.)

DIMENSIONS

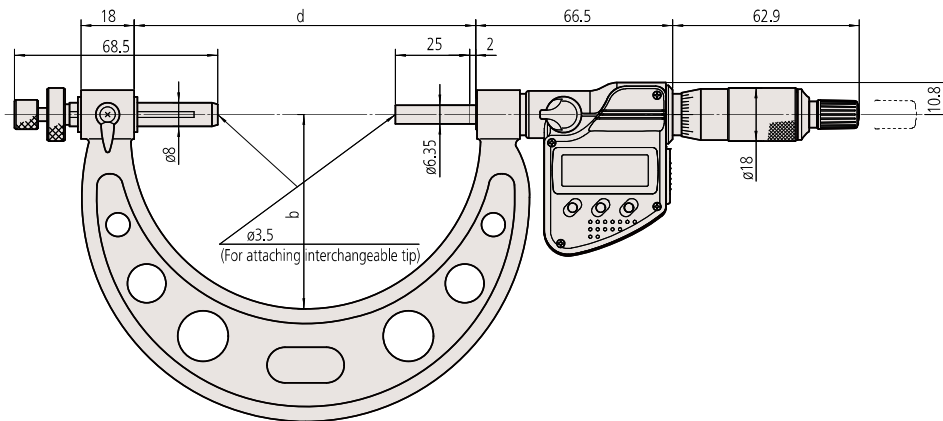
Unit: mm

Digital models up to 50mm



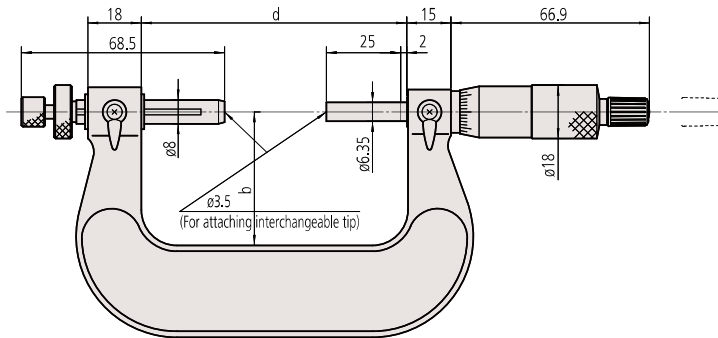
Range	b	d
0 - 25mm	32	64.5
25 - 50mm	45	89.5

Digital models over 50mm up to 100mm



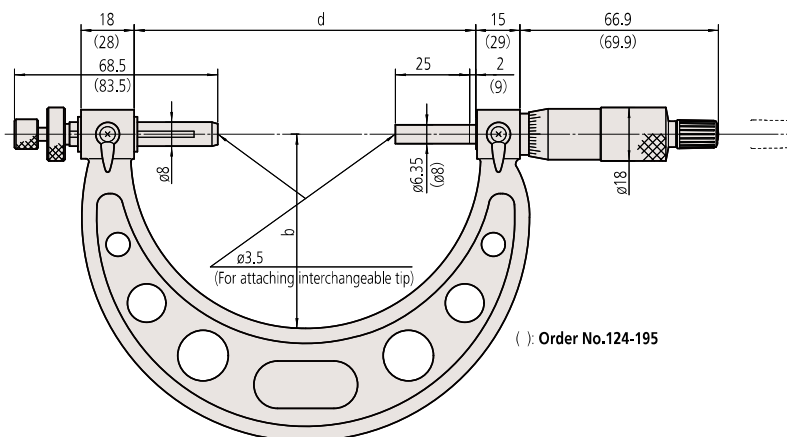
Range	b	d
50 - 75mm	65	115.1
75 - 100mm	79	140.1

Analog models up to 50mm



Range	b	d
0 - 25mm	32	64
25 - 50mm	45	89.5

Analog models over 50mm up to 300mm



() Order No.124-195

Range	b	d
50 - 75mm	65	115.1
75 - 100mm	79	140.1
100 - 125mm	93	165.1
125 - 150mm	105	190
150 - 175mm	118	214
175 - 200mm	131	240
200 - 225mm	144	265
225 - 250mm	156	290
250 - 275mm	169	314
275 - 300mm	187	352