

Comparison measuring instruments which ensure high quality, high accuracy and reliability.



With revolution counter












Long stylus










Carbide contact point
(Slightly magnetic)




SPECIFICATIONS




Metric			Horizontal (20° tilted face) type													
Order No.			Graduation	Range	Dial reading	Accuracy					Mass	Measuring force				Remarks
Basic set	Plus set	Full set				Measuring range	One rev.	10 scale divisions	Hysteresis	Repeatability						
513-444-10E	513-444-10A	513-444-10T	0.01 mm	1.6 mm	0-40-0	16 µm	10 µm	5 µm	5 µm	3 µm	48 g	0.3 N or less				
513-445-10E	513-445-10A	513-445-10T	0.002 mm	0.4 mm	0-100-0	6 µm	5 µm	2 µm	4 µm	1 µm						

Inch			Horizontal (20° tilted face) type													
Order No.			Graduation	Range	Dial reading	Accuracy				Mass	Measuring force				Remarks	
Basic set	Plus set	Full set				One rev.	First 2.5 rev.	Hysteresis	Repeatability							
—	513-442-10A	513-442-10T	0.0005 in	0.06 in	0-15-0	±0.0005 in	±0.0005 in	0.0002 in	±0.0002 in	48 g	0.3 N or less	✓		✓		
—	513-442-16A	513-442-16T									0.3 N or less	✓		✓		Black dia
—	513-446-10A	513-446-10T									0.2 N or less	✓		✓		
—	513-446-16A	513-446-16T	0.2 N or less	✓	✓	✓		Black dia								
—	513-443-10A	513-443-10T	0.0001 in	0.016 in	0-4-0	±0.0002 in	±0.0002 in	0.0001 in	±0.00004 in		0.3 N or less	✓		✓		
—	513-443-16A	513-443-16T									0.3 N or less	✓		✓		Black dia

Metric	Vertical type																	
Order No.			Graduation	Range	Dial reading	Accuracy					Mass	Measuring force				Remark		
Basic set	Plus set	Full set				Measuring range	One rev.	10 scale divisions	Hysteresis	Repeatability								
513-456-10E	513-454-10A	—	0.01 mm	0.5 mm	0.25-0	6 μm	—	5 μm	4 μm	3 μm	46 g	0.3 N or less						
513-454-10E	513-454-10A	513-454-10T		0.8 mm	0-40-0	9 μm											✓	
513-455-10E	513-455-10A	513-455-10T	0.002 mm	0.2 mm	0-100-0	4 μm	—	2 μm	3 μm	1 μm							✓	

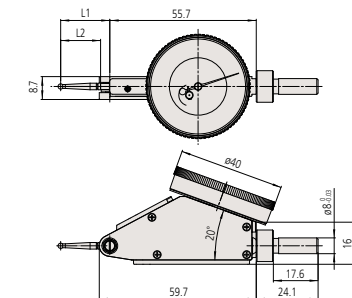
Inch			Vertical type												
Order No.			Graduation	Range	Dial reading	Accuracy				Mass	Measuring force				Remark
Basic set	Plus set	Full set				One rev.	First 2.5 rev.	Hysteresis	Repeatability						
513-452-10E	—	513-452-10T	0.0005 in	0.03 in	0-15-0	±0.0005 in	—	0.0002 in	±0.0002 in	46 g	0.3 N or less 0.3 N or less				
513-453-10E	—	513-453-10T	0.0001 in	0.008 in	0-4-0	±0.0001 in	—	0.0001 in	±0.00004 in						

Metric	Parallel Type															
Order No.			Graduation	Range	Dial reading	Accuracy					Mass	Measuring force				Remark
Basic set	Plus set	Full set				Measuring range	One rev.	10 scale divisions	Hysteresis	Repeatability						
513-486-10E	—	—	0.01 mm	0.5 mm	0.25-0	6 µm	—	5 µm	4 µm	3 µm	53 g	0.3 N or less				
513-484-10E	513-484-10A	513-484-10T		0.8 mm	0.40-0	9 µm	—									✓
513-485-10E	—	—	0.002 mm	0.2 mm	0.100-0	4 µm	—	2 µm	3 µm	1 µm						✓

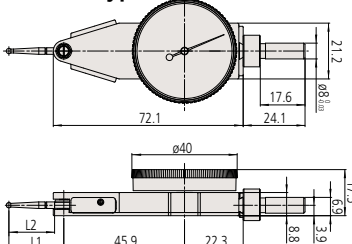
Inch			Parallel Type													
Order No.			Graduation	Range	Dial reading	Accuracy				Mass	Measuring force				Remarks	
Basic set	Plus set	Full set				One rev.	First 2.5 rev.	Hysteresis	Repeatability							
—	513-482-10A	513-482-10T	0.0005 in	0.03 in	0-15-0	±0.0005 in	—	0.0002 in	±0.0002 in	53 g	0.3 N or less				✓	

DIMENSIONS

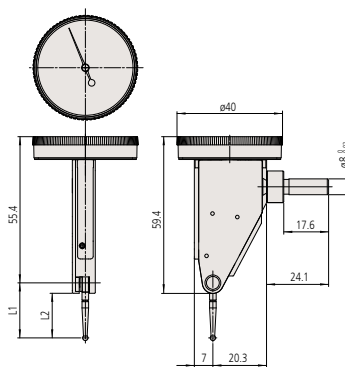
Horizontal (20° Tilted Face) Type



Parallel Type



Vertical Type



Order No.	L1	L2
513-445-10E	18.7	15.2
513-444-10E	20.9	17.4

Order No.	L1	L2
513-484-10E	20.9	17.4
513-485-10E	18.7	15.2
513-486-10E	22.2	18.7

Order No.	L1	L2
513-454-10E	20.9	17.4
513-455-10E	18.7	15.2
513-456-10E	22.2	18.7

unit: mm

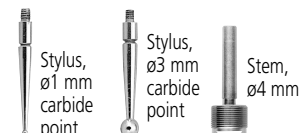
Note: A slight difference may occur depending on the center of the contact point, graduation plate, and stem fixing position, etc.

Set Configuration: Metric

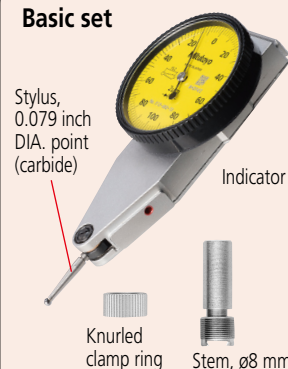
Full set



Plus set



Basic set

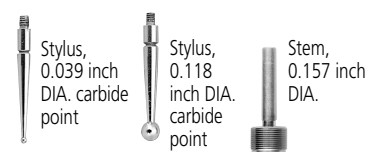


Set Configuration: Inch

Full set



Plus set



Basic set

