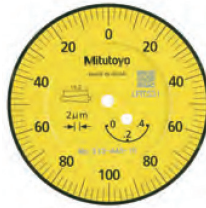


# Lever Indicator Horizontal (20° Tilted Face) Type

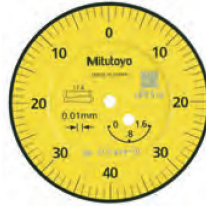
## Series 513

- Drastically enhanced durability, sensitivity and visibility.
- Glare-free flat crystal face allows easy reading of graduations.



513-445-10E

513-445-10E



513-444-10E

513-444-10E

### Metric Basic set

No.	Range [mm]	Graduation	Scale	Measuring force [N]	Carbide stylus tip ø2 mm No.	L1 [mm]	L2 [mm]	Mass [g]
513-445-10E	0,4	0,002 mm	0-100-0	0,01-0,3	103011	18,7	15,2	48
513-444-10E	1,6	0,01 mm	0-40-0	0,01-0,3	103006	20,9	17,4	48

### Metric Full set

No.	Range [mm]	Graduation	Scale	Measuring force [N]	Carbide stylus tip ø2 mm No.	L1 [mm]	L2 [mm]	Mass [g]
513-445-10T	0,4	0,002 mm	0-100-0	0,01-0,3	103011	18,7	15,2	48
513-444-10T	1,6	0,01 mm	0-40-0	0,01-0,3	103006	20,9	17,4	48

No.	DIN 2270 (2016)				EN ISO 9493 (2010)					
	Error of indication over a range of		Hysteresis	Repeatability	Error of indication over a range of				Hysteresis	Repeatability
	any 10 scale divisions	measuring range			any 10 scale divisions	any half revolution	any one revolution	measuring range		
513-445-10E					2	3	5	6	4	1
513-444-10E	5	16	4	3	5	8	10	16	4	3
513-445-10T					2	3	5	6	4	1
513-444-10T	5	16	4	3	5	8	10	16	4	3

Series 513	
Functions	513-444-10E up to 513-445-10T
Coaxial revolution counter	<input checked="" type="checkbox"/>
Anti-magnet	<input checked="" type="checkbox"/>

### Specifications

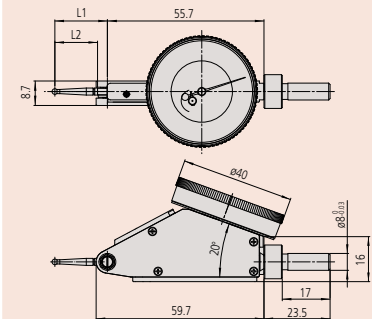
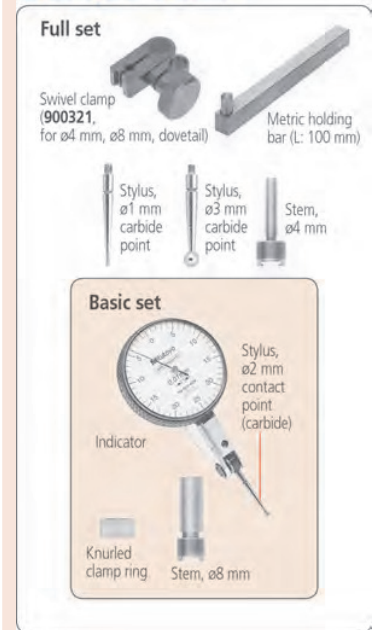
Contact point Thread M 1,7 x 0,35

For optional accessories, see end of lever indicators section.

### Optional accessories

No.	Description
21AAB363	Limit indicators, 2 pcs., for dial indicator and dial test indicator

### Set Configuration: Metric



# Lever Indicator Vertical Type

Series 513

## Functions

Anti-magnet

513-454-10E  
up to  
513-455-10T

## Specifications

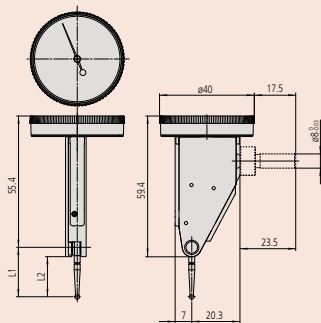
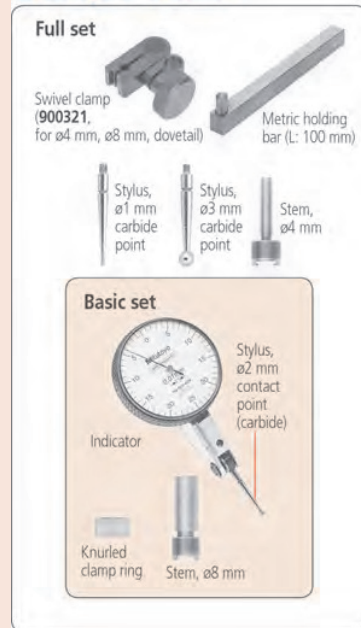
Contact point Thread M 1,7 x 0,35

For optional accessories, see end of lever indicators section.

## Optional accessories

No.	Description
21AAB363	Limit indicators, 2 pcs., for dial indicator and dial test indicator

## Set Configuration: Metric

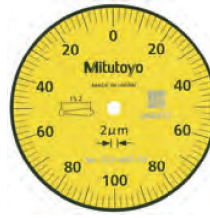


## Series 513

- Drastically enhanced durability, sensitivity and visibility.
- Glare-free flat crystal face allows easy reading of graduations.



513-455-10E



513-454-10E



513-454-10E

## Metric Basic set

No.	Range [mm]	Graduation	Scale	Measuring force [N]	Carbide stylus tip ø2 mm No.	L1 [mm]	L2 [mm]	Mass [g]
513-455-10E	0,2	0,002 mm	0-100-0	0,01-0,3	103011	18,7	15,2	46
513-454-10E	0,8	0,01 mm	0-40-0	0,01-0,3	103006	20,9	17,4	46

## Metric Full set

No.	Range [mm]	Graduation	Scale	Measuring force [N]	Carbide stylus tip ø2 mm No.	L1 [mm]	L2 [mm]	Mass [g]
513-455-10T	0,2	0,002 mm	0-100-0	0,01-0,3	103011	18,7	15,2	46
513-454-10T	0,8	0,01 mm	0-40-0	0,01-0,3	103006	20,9	17,4	46

No.	DIN 2270 (2016)				EN ISO 9493 (2010)					
	Error of indication over a range of		Hysteresis	Repeatability	Error of indication over a range of				Hysteresis	Repeatability
	any 10 scale divisions	measuring range			any 10 scale divisions	any half revolution	any one revolution	measuring range		
513-455-10E	2	3	2	1	2	3	3	2	1	
513-454-10E	5	8	3	3	5	6	8	3	3	
513-455-10T	2	3	2	1	2	3	3	2	1	
513-454-10T	5	8	3	3	5	6	8	3	3	

# Lever Indicator Parallel Type

## Series 513

- Drastically enhanced durability, sensitivity and visibility.
- Glare-free flat crystal face allows easy reading of graduations.



513-484-10E



513-484-10E

### Metric

#### Basic set

No.	Range [mm]	Graduation	Scale	Measuring force [N]	Carbide stylus tip $\phi 2$ mm No.	L1 [mm]	L2 [mm]	Mass [g]
513-484-10E	0,8	0,01 mm	0-40-0	0,01-0,3	103006	20,9	17,4	53

### Metric

#### Full set

No.	Range [mm]	Graduation	Scale	Measuring force [N]	Carbide stylus tip $\phi 2$ mm No.	L1 [mm]	L2 [mm]	Mass [g]
513-484-10T	0,8	0,01 mm	0-40-0	0,01-0,3	103006	20,9	17,4	53

No.	DIN 2270 (2016)				EN ISO 9493 (2010)					
	Error of indication over a range of		Hysteresis	Repeatability	Error of indication over a range of				Hysteresis	Repeatability
	any 10 scale divisions	measuring range			any 10 scale divisions	any half revolution	any one revolution	measuring range		
513-484-10E	5	8	3	3	5	6	8	3	3	
513-484-10T	5	8	3	3	5	6	8	3	3	

Series 513

513-484-10E  
513-484-10T

### Functions

- Anti-magnet

### Specifications

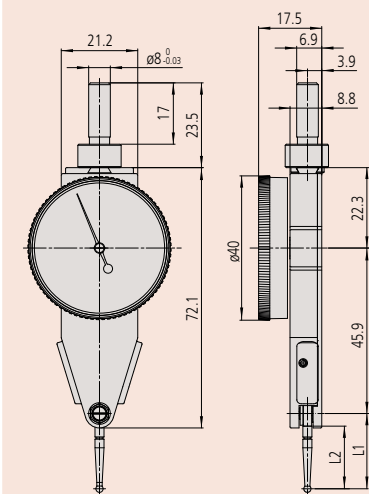
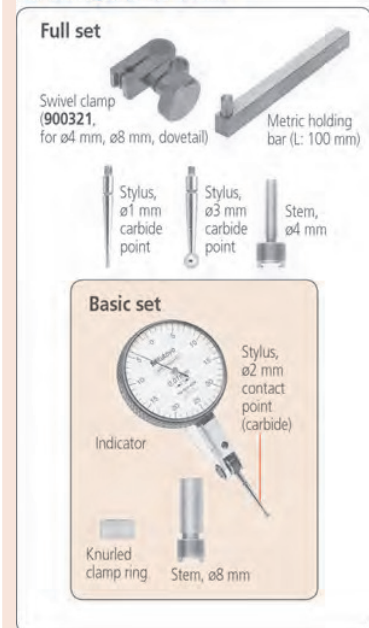
Contact point Thread M 1,7 x 0,35

For optional accessories, see end of lever indicators section.

### Optional accessories

No.	Description
21AAB363	Limit indicators, 2 pcs., for dial indicator and dial test indicator

### Set Configuration: Metric



Series 513

513-304GE

**Functions**

Jeweled bearing

**Specifications**

Contact point Thread M 1,4 x 0,3

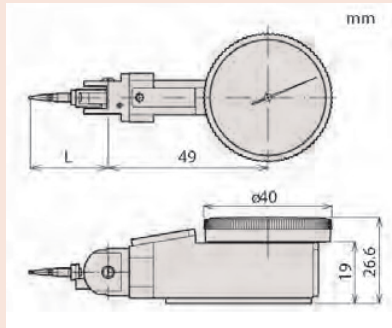
For optional accessories, see end of lever indicators section.

**Set Configuration: Metric**

**Full set**



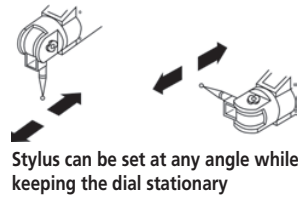
**Basic set**



# Lever Indicator Universal Type

## Series 513

- This level indicator makes reading much easier as you can rotate its measuring head through 360°.
- Centered, bi-directional action for automatic reversal of measuring direction.
  - Jewelled bearings and precision gears and pinions for smooth, accurate movement and quick response.



513-304GE

**Metric**

**Basic set**

No.	Range [mm]	Graduation	Scale	Measuring force [N]	Carbide stylus tip ø2 mm No.	L [mm]	Mass [g]
513-304GE	0,8	0,01 mm	0-40-0	≤ 0,3	102825	24	80

**Metric**

**Full set**

No.	Range [mm]	Graduation	Scale	Measuring force [N]	Carbide stylus tip ø2 mm No.	L [mm]	Mass [kg]
513-304GT	0,8	0,01 mm	0-40-0	≤ 0,3	102825	24	80

No.	DIN 2270 (2016)				EN ISO 9493 (2010)					
	Error of indication over a range of		Hysteresis	Repeatability	Error of indication over a range of				Hysteresis	Repeatability
	any 10 scale divisions	measuring range			any 10 scale divisions	any half revolution	any one revolution	measuring range		
513-304GE	5	8	3	3	5	6	8	3	3	
513-304GT	5	8	3	3	5	6	8	3	3	

