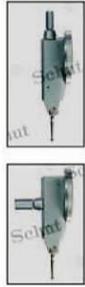
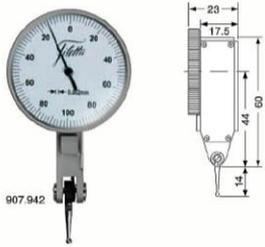
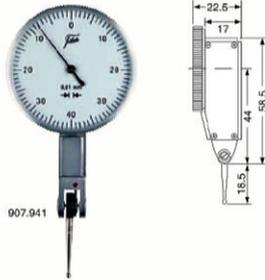




Lever-type test indicators

- Measuring range: up to 0.8 mm.
- Graduation: 0.01 or 0.002 mm.
- With dovetail joint and clamping stems  $\phi 6$  and  $\phi 8$  mm.
- Dial diameter: 40 mm.
- Rotatable dial.
- Stylus tip:  $\phi 2$  mm.
- Delivery with an inspection report.



Item No.	Measuring range/mm	Graduation mm	Scale numbering	Insert length/mm
907.941	0.8	0.01	0-40-0	19
907.942	0.2	0.002	0-100-0	13

**Options:**  
 909.114 Steel spare stylus tip for 907.941  
 909.115 Steel spare stylus tip for 907.942  
 906.663 Ruby spare stylus tip for 907.941  
 906.664 Ruby spare stylus tip for 907.942



Clamping stem  $\phi 6/\phi 8$  mm.

Peacock lever-type dial test indicators

- Measuring range: up to 1 mm.
- Graduation: 0.01, 0.002 or 0.001 mm.
- With dovetail joint and clamping stem  $\phi 6$  mm.
- Measuring force:  $< 0.3$  N (except 855.610: 0.05 N).
- Tungsten carbide stylus tip:  $\phi 2$  mm.
- Insert thread: M1.7.



Inserts for lever-type dial test indicators

Item No.	Effective length (EL)/mm	Ball $\phi$ /mm	Price EUR
<b>For 855.601, 855.605 and 855.610:</b>			
859.016	17.74	2	
859.152	17.74	1	
859.151	17.74	0.8	
859.290	17.74	0.5	
<b>For 855.602:</b>			
859.126	39.00	2	
859.291	39.00	1	
859.292	39.00	0.8	
859.293	39.00	0.5	
<b>For 855.603 and 855.606:</b>			
859.200	14.33	2	
859.294	14.33	1	
859.295	14.33	0.8	
859.296	14.33	0.5	
<b>For 855.604:</b>			
859.259	8.13	2	
859.297	8.13	1	
859.298	8.13	0.8	
859.299	8.13	0.5	
<b>For 855.611:</b>			
859.464	19.24	2	
859.465	19.24	1	
859.466	19.24	0.8	
859.467	19.24	0.5	

Item No.	Measuring range/mm	Graduation mm	Dial $\phi$ /mm	Scale numbering	Insert	Total insert length (TL)/mm	Price EUR
<b>Horizontal:</b>							
855.601	0.5	0.01	35	0-25-0	859.016	21.3	
855.602	1	0.01	35	0-50-0	859.126	42.8	
855.603	0.28	0.002	35	0-140-0	859.200	17.9	
855.604	0.14	0.001	35	0-70-0	859.259	11.7	
855.611	0.8	0.01	35	0-40-0	859.464	22.4	
855.610	0.5	0.01	35	0-25-0	859.016	21.3	
<b>Perpendicular:</b>							
855.605	0.5	0.01	35	0-25-0	859.200	21.3	
855.606	0.28	0.002	35	0-140-0	859.200	17.9	

Mitutoyo lever-type dial test indicators 0.01 mm

These dial test indicators are able to measure in both directions without having to switch direction.

- Measuring range: up to 1 mm.
- Graduation: 0.01 mm.
- With dovetail joint and clamping stem  $\phi 8$  mm.
- Dial diameter:  $\phi 40$  mm.
- Tungsten carbide stylus tip:  $\phi 2$  mm.
- Insert thread: M1.7 (optional inserts on request).
- Jewel beared clockwork.
- Antimagnetic.
- Delivery in a case with a clamping stem.
- Various different models available.



Inserts

Item No.	Ball $\phi$ /mm
<b>For 513.424/426:</b>	
137.557 <sup>1</sup>	2
290.654 <sup>2</sup>	0.5
190.653 <sup>2</sup>	0.7
137.558 <sup>1</sup>	1
137.559 <sup>1</sup>	3
<b>For 513.414:</b>	
131.324 <sup>1</sup>	2
103.006 <sup>1</sup>	1
<b>For 513.403/454/484:</b>	
290.549 <sup>2</sup>	0.5
290.550 <sup>2</sup>	0.7
103.013 <sup>1</sup>	1
210.201 <sup>3</sup>	2
103.014 <sup>1</sup>	3
<b>For 513.415:</b>	
136.013 <sup>1</sup>	2
290.656 <sup>2</sup>	0.5
290.655 <sup>2</sup>	0.7
136.235 <sup>1</sup>	1
211.211 <sup>3</sup>	2
136.236 <sup>1</sup>	3

<sup>1</sup> Tungsten carbide.  
<sup>2</sup> Steel.  
<sup>3</sup> Ruby.



Item No.	Measuring range/mm	Accuracy $f_{pm}$ /mm	Hysteresis mm	Measuring force/N	Scale numbering	Insert	Insert length (L1/L2)/mm
<b>Horizontal model:</b>							
513.424	0.5	0.006	0.004	$\leq 0.3$	0-25-0	137.557	22.2/18.7
513.426	1.5	0.016	0.005	$\leq 0.4$	0-25-0	137.557	22.2/18.7
513.414	0.5	0.010	0.005	$\leq 0.2$	0-25-0	131.324	37.4/33.9
513.403	0.8	0.009	0.004	$\leq 0.3$	0-40-0	103.006	20.9/17.4
513.415	1	0.010	0.005	$\leq 0.2$	0-50-0	136.013	44.5/41.0
<b>Vertical model:</b>							
513.454	0.8	0.009	0.004	$\leq 0.3$	0-40-0	103.006	20.9/17.4
<b>Parallel model:</b>							
513.484	0.8	0.009	0.004	$\leq 0.3$	0-40-0	103.006	20.9/17.4

Mitutoyo lever-type dial test indicators 0.001 and 0.002 mm

These dial test indicators are able to measure in both directions without having to switch direction.

- Measuring range: up to 0.6 mm.
- Graduation: 513.401: 0.001 mm, 513.465/406/425: 0.002 mm.
- With dovetail joint and clamping stem  $\phi 8$  mm.
- Dial diameter: 513.465:  $\phi 29$  mm, 513.401/406/425:  $\phi 40$  mm.
- Tungsten carbide stylus tip:  $\phi 2$  mm.
- Insert thread: M1.7 (optional inserts on request).
- Jewel beared clockwork.
- Antimagnetic.
- Delivery in a case with a clamping stem.
- Various different models available.

Inserts

Item No.	Ball $\phi$ /mm
<b>For 513.465/406/425</b>	
103.011 <sup>1</sup>	2
131.314 <sup>1</sup>	1
131.315 <sup>1</sup>	3
210.068 <sup>2</sup>	2
<b>For 513.401:</b>	
103.010 <sup>1</sup>	2
290.547 <sup>3</sup>	0.5
290.548 <sup>3</sup>	0.7
103.017 <sup>1</sup>	1
210.209 <sup>2</sup>	2
103.018 <sup>1</sup>	3

<sup>1</sup> Tungsten carbide.  
<sup>2</sup> Ruby.  
<sup>3</sup> Steel.

Item No.	Measuring range/mm	Accuracy $f_{pm}$ /mm	Hysteresis mm	Measuring force/N	Scale numbering	Insert	Insert length (L1/L2)/mm
513.401	0.14	0.004	0.003	$\leq 0.3$	0-70-0	103.010	14.7/11.2
513.465	0.2	0.004	0.003	$\leq 0.3$	0-100-0	103.011	18.7/15.2
513.406	0.2	0.004	0.003	$\leq 0.3$	0-100-0	103.011	18.7/15.2
513.425	0.6	0.007	0.004	$\leq 0.4$	0-100-0	103.011	18.7/15.2

Mitutoyo lever-type dial test indicator sets

The set consists of:

- lever-type dial test indicator,
- insert with hard chrome plated tip  $\phi 1$  mm,
- insert with tungsten carbide tip  $\phi 2$  mm,
- insert with hard chrome plated tip  $\phi 3$  mm,
- union nut,
- clamping stem  $\phi 4$  mm,
- clamping stem  $\phi 8$  mm,
- universal rotatable holder,
- clamping stem for height gauge (9 x 9 x 100 mm),
- case.



Item No.	Description
513.404	Lever-type dial test indicator 0.8 mm with several accessories
513.408	Lever-type dial test indicator 0.2 mm with several accessories



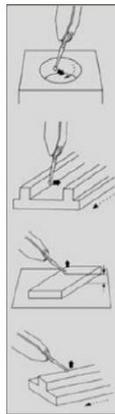
## TESA lever-type dial test indicators

- Measuring range: up to 2 mm.
- Graduation: 0.02, 0.01 or 0.002 mm.
- With dovetail joint.
- Tungsten carbide (Tesastat) or ruby (Swisstat) stylus tip,  $\phi$ 2 mm.

- Insert thread: M1.4.
- DIN 2270.
- Delivery with a clamping stem (780.172) and a declaration of conformity.



Item No.	Measuring range/mm	Graduation mm	Dial $\phi$ /mm	Scale numbering	Insert length/mm
<b>Tesastat, horizontal:</b>					
780.143	0.8	0.01	28	0-0.4-0	12.53
780.144	0.8	0.01	38	0-0.4-0	12.53
780.145	0.5	0.01	28	0-0.25-0	36.53
780.146	0.5	0.01	38	0-0.25-0	36.53
780.147	0.2	0.002	28	0-100-0	12.53
780.148	0.2	0.002	38	0-100-0	12.53
<b>Tesastat, lateral:</b>					
780.149	0.8	0.01	28	0-0.4-0	12.53
780.150	2.0	0.02	38	0-1.0-0	36.53
780.151	0.2	0.002	28	0-100-0	12.53
<b>Tesastat, perpendicular:</b>					
780.152	0.8	0.01	28	0-0.4-0	12.53
780.153	0.5	0.01	28	0-0.25-0	36.53
780.154	0.2	0.002	38	0-100-0	12.53
<b>Swisstat, horizontal:</b>					
781.466	0.8	0.01	28	0-0.4-0	12.53
781.467	0.2	0.002	38	0-100-0	12.53



## Interapid lever-type dial test indicators

- Measuring range: up to 1.6 mm.
- Graduation: 0.01 or 0.002 mm.
- Angle between insert and workpiece for true reading: 12°.
- With dovetail joint and clamping stem  $\phi$ 4 mm.
- Hardened steel stylus tip:  $\phi$ 2 mm.
- Insert thread: M1.7 (optional inserts on request).
- Delivery in a case with a declaration of conformity.

- The sets consist of:
- dial test indicator,
  - rectangular holder with clamp,
  - reducing sleeve,
  - swivel holder,
  - key,
  - case.



Item No.	Measuring range/mm	Graduation mm	Dial $\phi$ /mm	Scale numbering	Insert length/mm	Item No.	
<b>Horizontal:</b>						<b>In a set:</b>	
781.520	1.6	0.01	37.5	0-40-0	16.5		781.526
781.521	1.6	0.01	30	0-40-0	16.5		781.527
781.522	0.4	0.002	37.5	0-10-0	15.2		781.528
781.523	0.4	0.002	30	0-10-0	15.2	781.529	
<b>Perpendicular:</b>							
781.524	1.6	0.01	37.5	0-40-0	16.5		
781.525	1.6	0.01	30	0-40-0	16.5		

## Käfer lever-type dial test indicators

Käfer lever-type dial test indicators have a very high accuracy because of the ruby ball bearing. The direction of the rotation is independent of the measuring direction. Equipped with three dovetail mountings. Are standard delivered with a clamping stem  $\phi$ 8 mm.

- Measuring range: up to 0.8 mm.
- Graduation: 0.01 or 0.002 mm.
- With dovetail joint and clamping stem  $\phi$ 8 mm.
- Rotatable dial.
- Tungsten carbide stylus tip:  $\phi$ 2 mm.
- Insert thread: M1.6 (optional inserts on request).
- 240° adjustable measuring insert.
- Ruby ball bearing.
- DIN 2270.
- Delivery in a case incl. key.
- Various different models available.



Item No.	Measuring range/mm	Graduation mm	Dial $\phi$ /mm	Scale numbering	Insert length/mm
852.361	0.8	0.01	32	0-40-0	12
852.362	0.5	0.01	32	0-25-0	35
852.363	0.2	0.002	40	0-100-0	12

## Käfer saw tooth indicator

By placing the indicator on the saw blade you can easily measure the flatness of the blade, enabling you to saw very precisely. With the indicator you can also measure the height difference between the saw blade and the tooth. This principal of differential measuring of thickness or heights is not only suited for saw blades, but has many other applications.

Because the indicator has a two-sided read-out, it is usable for left- as well as right-handers.

- Measuring range: 0-2 mm.
- Graduation: 0.05 mm.
- Rotatable dial.
- Adjustable tolerance marker.



Item No.	Description
852.364	Saw tooth indicator



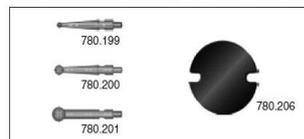
## TESA dial test indicator accessories

Item No.	Description
780.171	① Fixing shaft $\phi$ 4 x 12 mm
780.172	② Fixing shaft $\phi$ 8 x 12 mm
780.173	③ Cylindrical fixing shaft $\phi$ 8 x 80 mm, clamping shaft $\phi$ 5.6 mm
780.175	④ Swivelling holder $\phi$ 8 x 25 mm
780.176	⑤ Swivelling holder $\phi$ 8 x 90 mm
780.177	⑥ Angle holder $\phi$ 8 x 25 mm, clamping shaft $\phi$ 8 mm
780.178	⑦ Centering support $\phi$ 8 x 25 mm, clamping shaft $\phi$ 4 mm
780.208	⑧ Double fixing clamp $\phi$ 5.6/ $\phi$ 9.5 mm, with dovetail clamp
782.787	⑨ Swivelling holder $\phi$ 8 x 125 mm, with fine adjustment
782.590	⑩ Fixing shaft $\phi$ 6 x 12 mm
855.600	⑪ Fixing shaft 9 x 11 x 106 mm complete with dovetail clamp and clamping shaft $\phi$ 6 mm



## Measuring inserts for lever-type dial test indicators

Inserts for TESA lever-type dial test indicators, with tungsten carbide tip and thread M1.4



Item No.	Length/mm	$\phi$ /mm
780.199	12.53	1
780.200	12.53	2
780.201	12.53	3
780.202	36.53	1
780.203	36.53	2
780.204	36.53	3
780.206	Key	

\* Also available with ruby tip.

## Accessories dial indicators/dial test indicators

Item No.	Description
909.433	Centering support $\varnothing 8 \times 25$ mm, holder $\varnothing 4$ mm
909.434	Rectangular fixing shaft $12 \times 6 \times 76$ mm, holder $\varnothing 4/\varnothing 8$ mm and dovetail clamp
909.435	Rectangular fixing shaft $12 \times 6 \times 76$ mm, holder $\varnothing 6/\varnothing 8$ mm and dovetail clamp
909.436	Rectangular fixing shaft $9 \times 9 \times 76$ mm, holder $\varnothing 4/\varnothing 8$ mm and dovetail clamp
909.437	Rectangular fixing shaft $9 \times 9 \times 76$ mm, holder $\varnothing 6/\varnothing 8$ mm and dovetail clamp
909.438	Round, swivelling fixing shaft $\varnothing 6 \times 70$ mm, holder with dovetail clamp
909.439	Round, swivelling fixing shaft $\varnothing 8 \times 70$ mm, holder with dovetail clamp

909.434/909.435



909.436/909.437



909.438/909.439



### Reducer



837.190



Item No.	Thread
781.819	$\varnothing 8 \rightarrow 4$ mm
837.190	$\varnothing 8 \rightarrow 6$ mm

## Center-accessory

Small magnetic dial indicator stand which, in combination with a lever, could also be used as center-accessory to align bores in workpieces. For use in combination with a machine center.

- Permanent magnet  $\varnothing 27$  mm.
- Universal pivot with dovetail clamp.
- Delivery incl. cylindrical support  $\varnothing 9,5$  mm for insert in the collet chuck of a machine center.

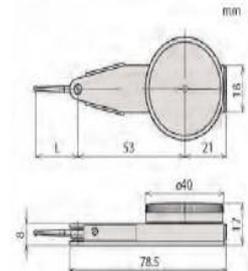


Item No.	Description
781.997	Center-accessory

## Lever Indicator Parallel Type

### Series 513

- ♦ Centered, bi-directional action for automatic reversal of measuring direction.
- ♦ Rotatable scale for easy zero setting.
- ♦ Jewelled bearings and precision gears and pinions for smooth, accurate movement and quick response.



513.284

Metric

Basic set

No.	Range [mm]	Graduation	Scale	$f_e$ [ $\mu$ m]	$f_u$ [ $\mu$ m]	$f_{ges}$ [ $\mu$ m]	Carbide stylus tip $\varnothing 2$ mm No.	L [mm]	Measuring force [N]	Mass [g]	Price [€]
513.284GE	0.8	0.01 mm	0-40.0	8	3	13	103006	209	$\leq 0,3$	68	111.00