

# COMPAC Dial Test Indicators

Essential for the workshop, but also in the inspection room or measuring laboratory – Ideal for comparative measurement on a surface plate – Detect form and position errors – Measure axial and radial runouts, especially.



DIN 2270 and factory standard

Rotating dial

Friction lever system to preventing overload

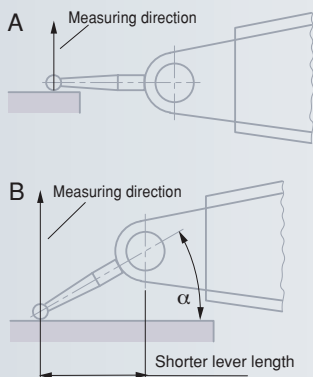
Contact points with tungsten carbide ball tips

Delivery in a suited plastic case

including:  
 1 contact point, 2 mm dia.,  
 1 rigid stem with 8 mm dia.,  
 L = 15 mm, No. 01840107  
 1 rigid stem with 4 mm dia.,  
 L = 15 mm, No. 01840109  
 (except for series 220).

Serial number

Inspection report with a declaration of conformity



### Technical features

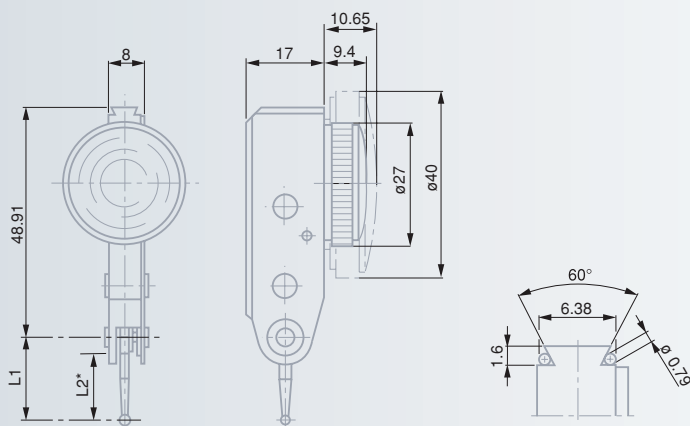
- Long range up to 3 mm.
- Bidirectional measuring, without reversing lever.
- Continuous two-way clockwise rotation of the pointer.
- Swivelling probe through 180°.
- Main pivot on oversized, self-aligning angular bearings.
- Dovetail mounting machined in the indicator body.
- Dull-chrome plated bezel and housing.
- Rotating dial.
- Insensitive to magnetic fields generated in common precision mechanics.

### Note for use of COMPAC dial test indicators

With the measuring insert lying parallel to the workpiece surface (Fig. A), these dial test indicators give true reading due to the amplification factor to 1:1.

In any other measuring position (angle  $\alpha$  in Fig. B), the effective lever length changes so that the read value need be corrected. With respect to this, also read in the instruction manual.

## COMPAC Series 210 – Type Standard



\*L2 see table page G-15



### Metric Reading

	mm	Whole travel mm	Travel/revolution mm	Ø mm	Contact point L1 mm	µm	µm	µm	N		
213	0,01	1,5	0,5	27	0÷25÷ 50	18	13	3	3	≤ 0,35	
213G	0,01	1,5	0,5	40	0÷25÷ 50	18	13	3	3	≤ 0,35	
212L	0,01	3	1	27	0÷50÷100	36	26	3	6	≤ 0,20	
212GL	0,01	3	1	40	0÷50÷100	36	26	3	6	≤ 0,20	
215	0,002	0,6	0,1	27	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30	
215G	0,002	0,6	0,1	40	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30	
215GL	0,002	1,2	0,2	40	0÷10÷ 20	36	26	1,5	5	≤ 0,20	
216G	0,001	0,6	0,1	40	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30	

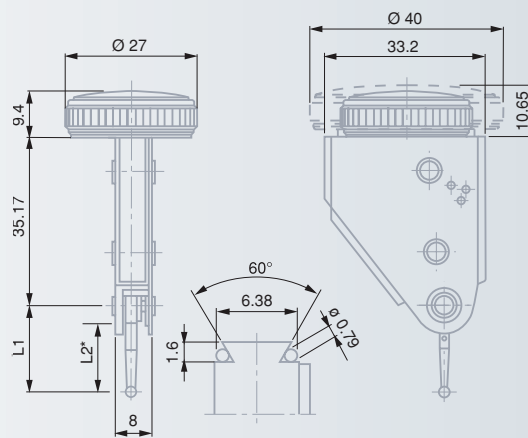


## DIAL TEST INDICATORS (LEVER-TYPE)

### Inch Reading

No										
	in	Whole travel in	Travel/revolution in	Ø in		Contact point L 1 in	in	in	in	N
214A	0.0005	0.06	0.02	1.063	0÷10÷20	0.72	0.0005	0.00015	0.00015	≤ 0,35
214GA	0.0005	0.06	0.02	1.575	0÷10÷20	0.72	0.0005	0.00015	0.00015	≤ 0,35
213LA	0.0005	0.12	0.04	1.063	0÷20÷40	1.44	0.001	0.00015	0.00025	≤ 0,20
213GLA	0.0005	0.12	0.04	1.575	0÷20÷40	1.44	0.001	0.00015	0.00025	≤ 0,20
215A	0.0001	0.024	0.004	1.063	0÷20÷40	0.72	0.00005	0.00005	0.0001	≤ 0,30
215GA	0.0001	0.024	0.004	1.575	0÷20÷40	0.72	0.00005	0.00005	0.0001	≤ 0,30

### COMPAC Series 220 – Type Perpendicular



\*L2 see table page G-15

### Metric Reading

No										
	mm	Whole travel mm	Travel/revolution mm	Ø mm		Contact point L1 mm	µm	µm	µm	N
223	0,01	1,5	0,5	27	0÷25÷ 50	18	13	3	3	≤ 0,35
223G	0,01	1,5	0,5	40	0÷25÷ 50	18	13	3	3	≤ 0,35
222L	0,01	3	1	27	0÷50÷100	36	26	3	6	≤ 0,20
222GL	0,01	3	1	40	0÷50÷100	36	26	3	6	≤ 0,20
225	0,002	0,6	0,1	27	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30
225G	0,002	0,6	0,1	40	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30

### Inch Reading

No										
	in	Wole travel in	Travel/revolution in	Ø in		Contact point L1 in	in	in	in	N
224A	0.0005	0.06	0.02	1.063	0÷10÷20	0.72	0.0005	0.00015	0.00015	≤ 0,35
224GA	0.0005	0.06	0.02	1.575	0÷10÷20	0.72	0.0005	0.00015	0.00015	≤ 0,35
223GLA	0.0005	0.12	0.04	1.575	0÷20÷40	1.44	0.001	0.00015	0.00025	≤ 0,20
225GA	0.0001	0.024	0.004	1.575	0÷20÷40	0.72	0.0005	0.00005	0.0001	≤ 0,30

COMPAC Series 230 – Type Parallel



DIN 2270 and factory standard

Rotating dial

Friction lever system to preventing overload

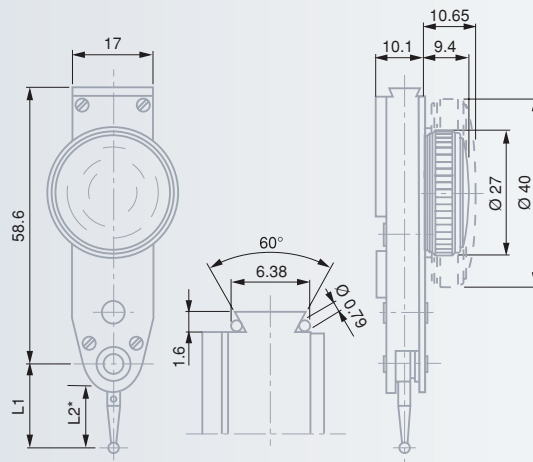
Contact points with tungsten carbide ball tips

Delivery in a suited plastic case

including:  
 1 contact point, 2 mm dia.  
 1 rigid stem with 8 mm dia., L = 15 mm, No. 01840107  
 1 rigid stem with 4 mm dia., L = 15 mm, No. 01840109 (except for series 220).

Serial number

Inspection report with a declaration of conformity



\*L2 see table page G-15



Metric Reading

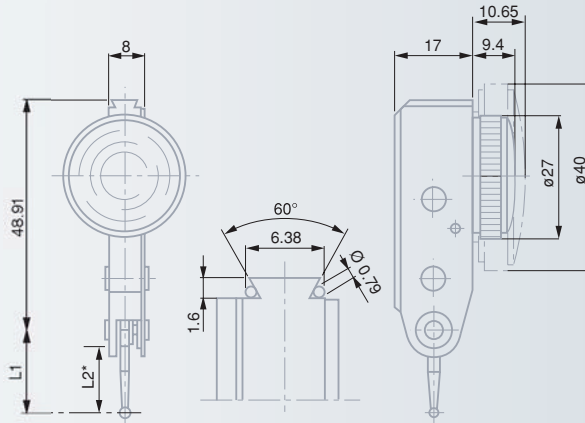


	mm	Whole travel mm	Travel/revolution mm	Ø mm		Contact point L1 mm	µm	µm	µm	N
<b>233</b>	0,01	1,5	0,5	27	0÷25÷ 50	18	13	3	3	≤ 0,35
<b>233G</b>	0,01	1,5	0,5	40	0÷25÷ 50	18	13	3	3	≤ 0,35
<b>232L</b>	0,01	3	1	27	0÷50÷100	36	26	3	6	≤ 0,20
<b>232GL</b>	0,01	3	1	40	0÷50÷100	36	26	3	6	≤ 0,20
<b>235G</b>	0,002	0,6	0,1	40	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30



## COMPAC Series 240 – Reduced Range

One-revolution models



\* L2 see table page G-15



DIN 2270 and factory standard



Rotating dial



Friction lever system to preventing overload



Contact points with tungsten carbide ball tips



Delivery in a suited plastic case including:  
 1 contact point with a 2 mm diameter  
 1 rigid stem with 8 mm dia., L = 15 mm, No. 01840107  
 1 rigid stem with 4 mm dia., L = 15 mm, No. 01840109



Serial number



Inspection report with a declaration of conformity

### Metric Reading

No	Whole travel	Ø	Contact point L1	µm	µm	µm	N		
mm	mm	mm	mm						
242	0,01	0,8	27	0÷40÷0	18	13	3	3	≤ 0,25
242G	0,01	0,8	40	0÷40÷0	18	13	3	3	≤ 0,25
243L	0,01	0,5	27	0÷25÷0	45	13	3	3,5	≤ 0,10
243GL	0,01	0,5	40	0÷25÷0	45	13	3	3,5	≤ 0,10
245	0,002	0,2	27	0÷10÷0	18	4	1,5	2	≤ 0,25
245G	0,002	0,2	40	0÷10÷0	18	4	1,5	2	≤ 0,25

### Inch Reading

No	Whole travel	Ø	Contact point L1	in	in	in	N		
in	in	in	in						
244A	0.0005	0.030	1.063	0÷15÷0	0.6754	0.0005	0.0001	0.00015	≤ 0,25
245A	0.0001	0.008	1.063	0÷ 4÷0	0.7200	0.00015	0.00006	0.00008	≤ 0,25
245GA	0.0001	0.008	1.575	0÷ 4÷0	0.7200	0.00015	0.00006	0.00008	≤ 0,25

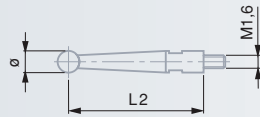


Stainless steel with carbide or ruby contact points

M1.6 coupling thread

Original inserts mounted on every indicators as well as any other inserts with same nominal length but having different tip diameters are fully interchangeable.

## Contact Points for COMPAC Dial Test Indicators



### Metric Models

Carbide ball tips		Ruby ball tips				
No	No	Ø	TF	mm	L1 mm	L2 mm
01866014		0,8	18	14,26		
01866003	01866026	2	18	14,26		
01866021		3	18	14,26		
01866016		0,8	36	32,26		
01866004	01866027	2	36	32,26		
01866023		3	36	32,26		
01866015		0,8	45	41,26		
01866006	01866028	2	45	41,26		
01866022		3	45	41,26		

### Inch Models

Ruby ball tips				
No	Ø	TF	mm	L1 in
				L2 in
01866010	0,8	0.6754	0.5278	
01866007	2	0.6754	0.5278	
01866011	0,8	0.72	0.5724	
01866005	2	0.72	0.5724	
01866024	0,8	1.44	1.2924	
01866009	2	1.44	1.2924	
01866025	3	1.44	1.2924	
01866008	2	1.8	1.6527	

