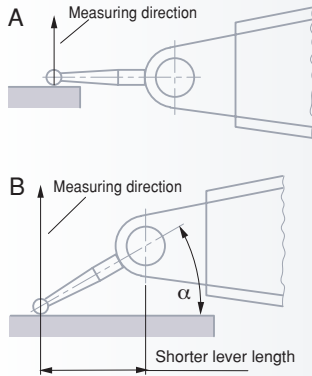


COMPAC Dial Test Indicators

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.



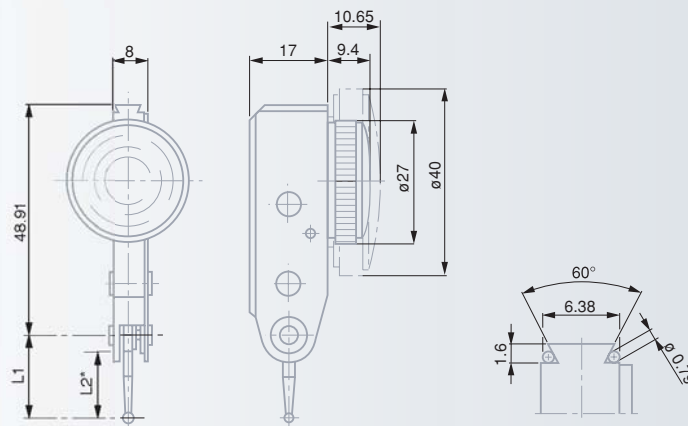
Technical features

- 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 as produced in universal 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 another measuring position (angle α 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



Metric Reading

	No	Travel/revolution	Total travel	mm	Ø mm	Contact point L1 mm	µm	µm	µm	N
213	0,01	0,5	1,5	27	0÷25÷ 50	18	13	3	3	≤ 0,35
213G	0,01	0,5	1,5	40	0÷25÷ 50	18	13	3	3	≤ 0,35
212L	0,01	1	3	27	0÷50÷100	36	26	3	6	≤ 0,20
212GL	0,01	1	3	40	0÷50÷100	36	26	3	6	≤ 0,20
215	0,002	0,1	0,6	27	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30
215G	0,002	0,1	0,6	40	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30
215GL	0,002	0,2	1,2	40	0÷10÷ 20	36	26	1,5	5	≤ 0,20
216G	0,001	0,1	0,6	40	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30



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

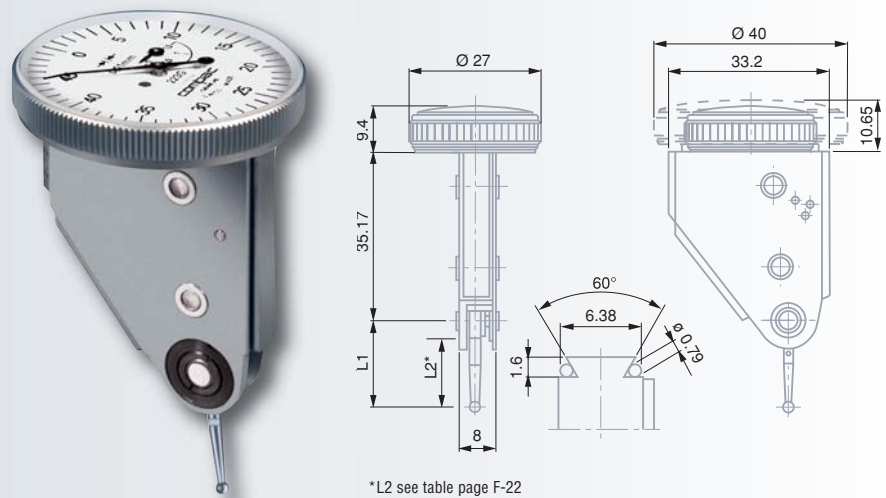


Inspection report with a declaration of conformity

Inch Reading

No										
212A	0.001	0.06	0.02	1.063	0÷10÷20	0.72	0.0005	0.00015	0.00015	≤ 0,35
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 F-22

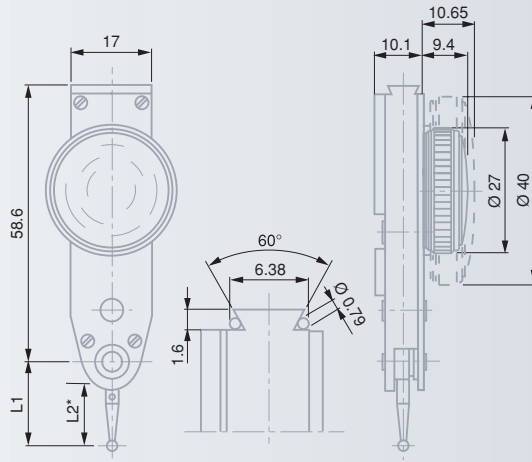
Metric Reading

No										
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										
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
223LA	0.0005	0.12	0.04	1.063	0÷20÷40	1.44	0.001	0.00015	0.00025	≤ 0,20
223GLA	0.0005	0.12	0.04	1.575	0÷20÷40	1.44	0.001	0.00015	0.00025	≤ 0,20
225A	0.0001	0.024	0.004	1.063	0÷20÷40	0.72	0.0005	0.00005	0.0001	≤ 0,30
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



*L2 see table page F-22



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

Metric Reading

No	mm	Total travel mm	Travel/revolution mm	Ø mm		Contact point L1 mm	µm	µm	µm	N
233	0,01	1,5	0,5	27	0÷25÷ 50	18	13	3	3	≤ 0,35
233G	0,01	1,5	0,5	40	0÷25÷ 50	18	13	3	3	≤ 0,35
232L	0,01	3	1	27	0÷50÷100	36	26	3	6	≤ 0,20
232GL	0,01	3	1	40	0÷50÷100	36	26	3	6	≤ 0,20
235	0,002	0,6	0,1	27	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30
235G	0,002	0,6	0,1	40	0÷ 5÷ 10	18	13	1,5	2,5	≤ 0,30

Inch Reading

No	in	Total travel in	Travel/revolution in	Ø in		Contact point L1 in	in	in	in	N
234A	0.0005	0.06	0.02	1.063	0÷10÷20	0.72	0.0005	0.00015	0.00015	≤ 0,35
234GA	0.0005	0.06	0.02	1.575	0÷10÷20	0.72	0.0005	0.00015	0.00015	≤ 0,35
233LA	0.0005	0.12	0.04	1.063	0÷20÷40	1.44	0.001	0.00015	0.00025	≤ 0,20
233GLA	0.0005	0.12	0.04	1.575	0÷20÷40	1.44	0.001	0.00015	0.00025	≤ 0,20
235A	0.0001	0.024	0.004	1.063	0÷20÷40	0.72	0.0005	0.0001	0.0001	≤ 0,30
235GA	0.0001	0.024	0.004	1.575	0÷20÷40	0.72	0.0005	0.0001	0.0001	≤ 0,30

COMPAC Series 240 – Reduced Range

One-revolution models



N DIN 2270 and factory standard

Rotating dial

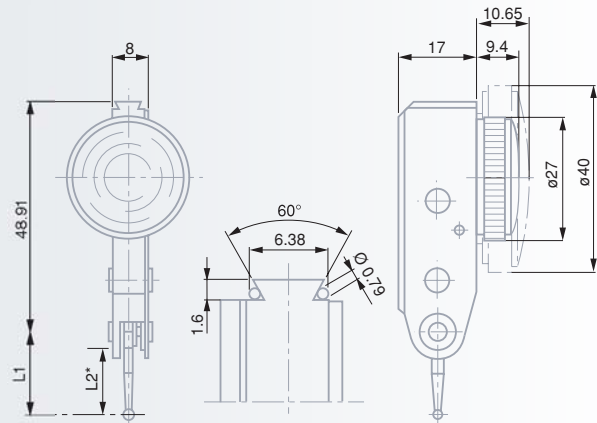
Friction lever system to preventing overload

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

No Serial number

Inspection report with a declaration of conformity



*L2 see table page F-22

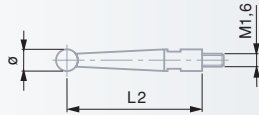
Metric Reading

No	mm	Total travel mm	Ø mm		Contact point L1 mm	µm	µm	µm	N
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	in	Total travel in	Ø in		Contact point L1 in	in	in	in	N
244A	0.0005	0.030	1.063	0÷15÷0	0.6754	0.0005	0.0001	0.00015	≤ 0,25
244GA	0.0005	0.030	1.575	0÷15÷0	0.6754	0.0005	0.0001	0.00015	≤ 0,25
244LA	0.0005	0.020	1.063	0÷10÷0	1.800	0.0005	0.00015	0.00015	≤ 0,10
244GLA	0.0005	0.020	1.575	0÷10÷0	1.800	0.0005	0.00015	0.00015	≤ 0,10
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

Contact Points for COMPAC Dial Test Indicators



Metric Models

Carbide ball tips		TESA		Ruby ball tips			mm	L1 mm	L2 mm
COMPAC	No	No	COMPAC	No	No	No			
4/210-84		01866014	÷	÷	÷		0,8	18	14,26
4/210-82		01866003	4/210-82R			01866026	2	18	14,26
4/210-83	210083	01866021	÷	÷	÷		3	18	14,26
4/210L-84		01866016	÷	÷	÷		0,8	36	32,26
4/210L-82		01866004	4/210L-82R	210L082R		01866027	2	36	32,26
4/210L-83	210L083	01866023	÷	÷	÷		3	36	32,26
4/240L-84	240L084	01866015	÷	÷	÷		0,8	45	41,26
4/240L-82		01866006	4/240L-82R			01866028	2	45	41,26
4/240L-83	240L083	01866022	÷	÷	÷		3	45	41,26

Inch Models

Ruby ball tips		TESA		mm	L1 in	L2 in
COMPAC	No	No				
4/240A-84	240A084	01866010		0,8	0.6754	0.5278
4/240A-82	240A082	01866007		2	0.6754	0.5278
4/240A-83	240A083	01866017		3	0.6754	0.5278
4/210A-84	210A084	01866011		0,8	0.72	0.5724
4/210A-82	210A082	01866005		2	0.72	0.5724
4/210A-83	210A083	01866018		3	0.72	0.5724
4/210LA-84	210LA084	01866024		0,8	1.44	1.2924
4/210LA-82		01866009		2	1.44	1.2924
4/210LA-83	210LA083	01866025		3	1.44	1.2924
4/240LA-84	240LA084	01866012		0,8	1.8	1.6527
4/240LA-82		01866008		2	1.8	1.6527
4/240LA-83	240LA083	01866019		3	1.8	1.6527

Contact points with COMPAC order codes are available while stock lasts.
Contact points with TESA order number are in stainless steel.



Tungsten carbide ball tips



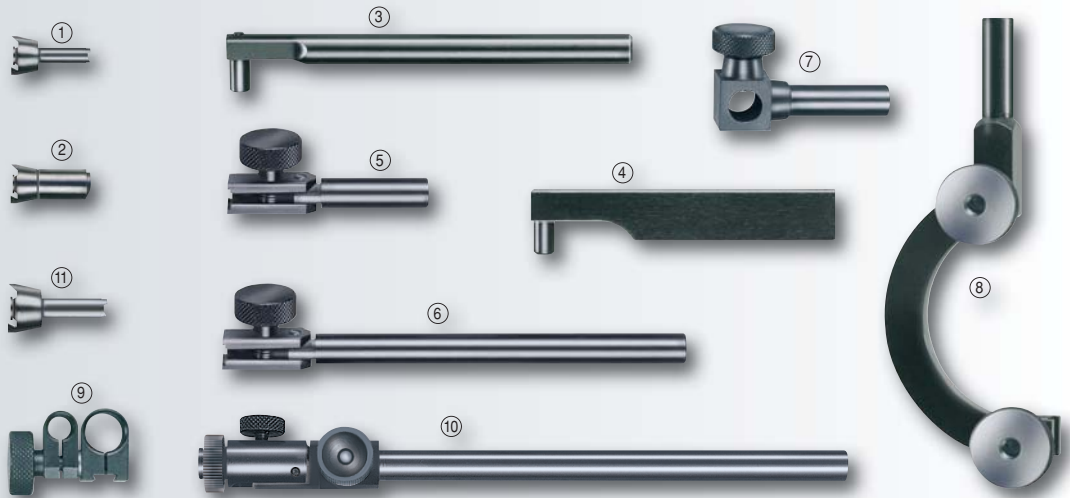
M1.6 coupling thread



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



Accessories for COMPAC Dial Test Indicators



N ^o	=		mm	N ^o	in
01840104	①	Fixing shank with dovetail clamp	Ø 4	01850104	Ø 7/32
01840105	②	Fixing shank with dovetail clamp	Ø 8	01850105	Ø 1/4
01840202	③	Cylindrical fixing shank with tightening tenon	Ø 8 x 80 Ø 5,6	01850202	Ø 3/8 x 3.5 Ø 7/32
01840203	④	Rectangular fixing shank with tightening tenon	13 x 6 x 50 Ø 5,6	01850203	1/2 x 1/4 x 2 Ø 7/32
01840404	⑤	Short swivel holder with cylindrical shank and dovetail grip	Ø 8 x 25	01850404	Ø 3/8 x 1
01840405	⑥	Long swivel holder with cylindrical shank and dovetail grip	Ø 8 x 90	01850405	Ø 3/8 x 3.5
01840406	⑦	Angle holder with cylindrical shank Clamping bore	Ø 8 x 25 Ø 8	01850406	Ø 3/8 x 1 Ø 3/8
01840501	⑧	Centring holder for perpendicular model with cylindrical shank Clamping point for fixing shank and dovetail clamp	Ø 8 x 25 Ø 4	01850501	Ø 1/4 x 1
01860401	⑨	Double fixing clamp with clamping point and dovetail clamp	Ø 5,6	01860401	
01840407	⑩	Long swivel holder, cylindrical shank with dovetail grip. Also with fine setting.	Ø 8 x 125		
01860008	⑪	Fixing shank with dovetail clamp	Ø 6		

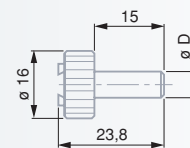
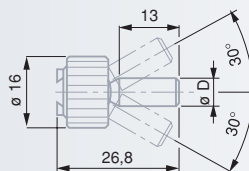
N^o



D

Mounting rods with dovetail grip

01850106	Fixing shank swivelling through ± 30°	Ø 1/4 in
01850107	Rigid fixing shank	Ø 1/4 in
01840106	Fixing shank swivelling through ± 30°	Ø 8 mm
01840107	Rigid fixing shank	Ø 8 mm
01840108	Fixing shank swivelling through ± 30°	Ø 4 mm
01840109	Rigid fixing shank	Ø 4 mm
TA6	Rigid fixing shank	Ø 5/16 in
TMA6	Fixing shank swivelling through ± 30°	Ø 5/16 in
TA8	Rigid fixing shank	Ø 3/8 in
TMA8	Fixing shank swivelling through ± 30°	Ø 3/8 in



Stem



Clamping length

SPT	Rotating holder	8 mm	25 mm
SPTA	Rotating holder	1/4 in	1 in
SPTA-3/16	Rotating holder	3/16 in	1 in
SPTA-3/8	Rotating holder	3/8 in	1 in
SPTA-5/16	Rotating holder	5/16 in	1 in