

TESATAST Standard Models



	mm		Ø		Insert
01810005	0,01	0,8	28	0 ÷ 0,4 ÷ 0	12,53
01810006	0,01	0,8	38	0 ÷ 0,4 ÷ 0	12,53
01810007	0,01	0,5	28	0 ÷ 0,25 ÷ 0	36,53
01810008	0,01	0,5	38	0 ÷ 0,25 ÷ 0	36,53
01810009	0,002	0,2	28	0 ÷ 100 ÷ 0	12,53
01810010	0,002	0,2	38	0 ÷ 100 ÷ 0	12,53



	in				
01820006	0.0005	0.030	1.1	0 ÷ 15 ÷ 0	1/2
01820007	0.0005	0.030	1.5	0 ÷ 15 ÷ 0	1/2
01820008	0.0005	0.020	1.1	0 ÷ 10 ÷ 0	1 7/16
01820009	0.0005	0.020	1.5	0 ÷ 10 ÷ 0	1 7/16
01820010	0.001	0.030	1.1	0 ÷ 15 ÷ 0	1/2
01820011	0.0001	0.008	1.1	0 ÷ 4 ÷ 0	1/2
01820012	0.0001	0.008	1.5	0 ÷ 4 ÷ 0	1/2
01820013	0.00005	0.008	1.5	0 ÷ 4 ÷ 0	1/2



DIN 2270
NF E 11-053



Rotating dial



Very low measuring force as shown in table opposite



Movement with patented shock proof system



Lever system with friction drive to prevent overload



Accuracy: see table on page F-3



Supplied in a plastic case along with:
1 Insert with a 2 mm dia.
1 Wrench (No. 01860307)
1 Mounting rod with a 8 mm dia. (No. 01840105)



Identification number



Declaration of conformity

SWISSTAST Standard Models



	mm		Ø		Insert
01811000	0,01	0,8	28	0 ÷ 0,4 ÷ 0	12,53
01811001	0,002	0,2	38	0 ÷ 100 ÷ 0	12,53

* Same technical data as standard models, but equipped with a 2 mm dia. ruby ball tip
No. 01860302.

TESATAST Perpendicular Models



	mm		Ø		Insert
01810204	0,01	0,8	28	0 ÷ 0,4 ÷ 0	12,53
01810205	0,01	0,5	28	0 ÷ 0,25 ÷ 0	36,53
01810304	0,002	0,2	38	0 ÷ 100 ÷ 0	12,53

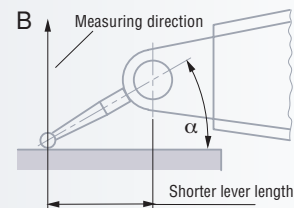
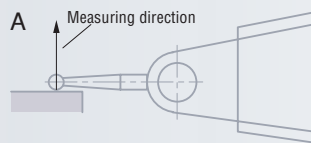


01820204	0.0005	0.030	1.1	0 ÷ 15 ÷ 0	1/2
01820304	0.0001	0.008	1.5	0 ÷ 4 ÷ 0	1/2



TESATAST Lateral Models

01810011	0,01	0,8	28	0 ÷ 0,4 ÷ 0	12,53
01810012	0,02	2	38	0 ÷ 1,0 ÷ 0	36,53
01810013	0,002	0,2	28	0 ÷ 100 ÷ 0	12,53
01820014	0.0005	0.030	1.1	0 ÷ 15 ÷ 0	1/2

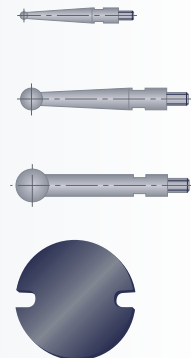


Note on the use of TESATAST dial test indicators

With the measuring insert lying parallel to the workpiece surface (Fig. A), these 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 needs to be corrected. With respect to this, also refer to the instruction manual.

Measuring inserts

Carbide ball tips	Ruby ball tips			mm
01860201	01860301	1		12,53
01860202	01860302	2		12,53
01860203	01860303	3		12,53
01860211	01860304	1		36,53
01860212	01860305	2		36,53
01860213	01860309	3		36,53
01860307	Wrench for measuring inserts			



Note

The original measuring insert mounted on every TESATAST as well as any other insert with same nominal length but having a different ball tip diameter are fully interchangeable.



Tungsten carbide or ruby ball tip

M1.4 coupling thread



DIN 2270
NF E 11-053

Technical data are listed under each single product

Plastic case

Identification number

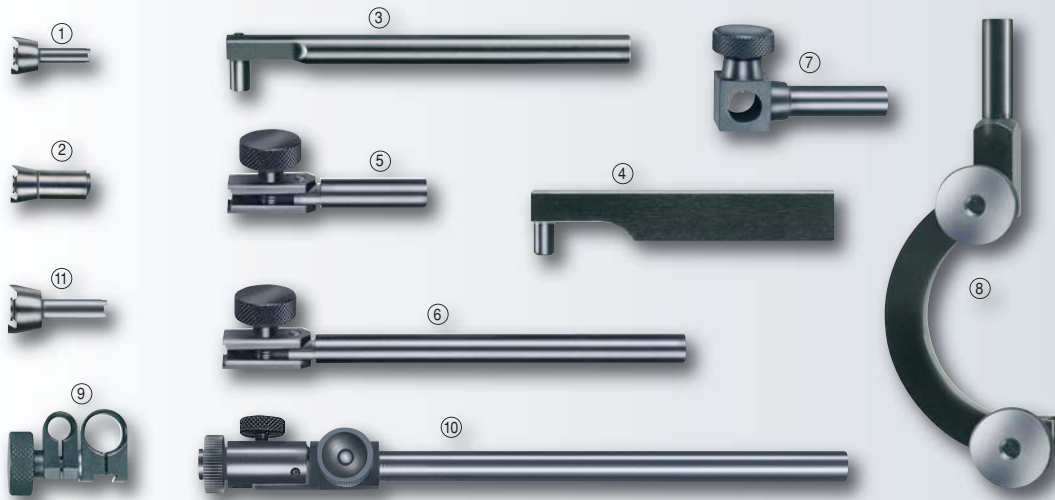
Declaration of conformity

Indicator Sets with Small Support

01630003		Indicator sets with small support
<i>consisting of:</i>		
01810005		Dial test indicator (lever-type)
01810010		Dial test indicator (lever-type)
01860203		Measuring insert
01840104		Mounting rod
01840105		Mounting rod
01860307		Wrench for measuring inserts
01639007		INTERAPID small support UJ 15



TESATAST Accessories



Nº	=		mm	Nº	in
01840104	①	Mounting rod with dovetail clamp	∅ 4	01850104	∅ 7/32
01840105	②	Mounting rod with dovetail clamp	∅ 8	01850105	∅ 1/4
01840202	③	Mounting rod with cylindrical body and clamping tenon	∅ 8 x 80 ∅ 5,6	01850202	∅ 3/8 x 3.5 ∅ 7/32
01840203	④	Mounting rod with right-angle body and clamping tenon	13 x 6 x 50 ∅ 5,6	01850203	1/2 x 1/4 x 2 ∅ 7/32
01840404	⑤	Short swivel holder with mounting rod and dovetail clamp	∅ 8 x 25	01850404	∅ 3/8 x 1
01840405	⑥	Long swivel holder with mounting rod and dovetail clamp	∅ 8 x 90	01850405	∅ 3/8 x 3.5
01840406	⑦	Angle holder with mounting rod Clamping bore	∅ 8 x 25 ∅ 8	01850406	∅ 3/8 x 1 ∅ 3/8
01840501	⑧	Centring shoulder for TESATAST Perpendicular with cylindrical rod Clamping point for mounting rod and dovetail clamp	∅ 8 x 25 ∅ 4	01840501	
01860401	⑨	Dovetail clamp with tightening point	∅ 5,6 ∅ 9,5	01860401	
01840407	⑩	Long swivel holder with cylindrical rod and dovetail clamp as well as fine setting device	∅ 8 x 125		
01860008	⑪	Mounting rod with dovetail clamp	∅ 6		

Sets of Accessories

Consisting of the following components:

Nº	mm	01840104	01840105	01840202	01840203	01840404	01840405	01840406	01840501	01860401
01840001*	Nº 1	●	●							
01840100**	Nº 2			●	●	●	●	●		●
01840703***	Nº 3			●	●	●	●	●	●	●

Nº	in	01850104	01850105	01850202	01850203	01850404	01850405	01850406	01840501	01860401
01850001*	Nº 1	●	●							
01850100**	Nº 2			●	●	●	●	●		●
01850703***	Nº 3			●	●	●	●	●	●	●

* Supplied with one single insert No. 01860201, 01860202 and 01860203, one wrench No. 01860307 as well as a suited case No. 01860308.

** Supplied in a suited case No. 01860608.

*** Supplied in a suited case No. 01860702.

INTERRAPID 312 Dial Test Indicators

Very large measuring span – Ideal for inspecting all significant size variations, e.g. on the surface plate – Measure position, form and shape errors.

- Additional revolution counter for safe reading.
- Bidirectional measuring with automatic reversal inside the movement.
- Thereby pointer rotation is constant.
- Jewelled movement with rubies.
- Ball-bearing lever system with measuring insert swivelling through 210°.
- Full-metal construction giving outstanding robustness.
- Monobloc housing with mounted dovetail attachments as well as a 4 mm swivelling shank.



Regular Model

Time-tested dial test indicator with dial face mounted parallel to the insert axis.

Perpendicular Model

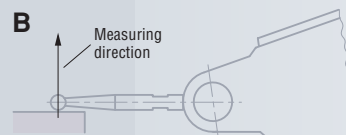
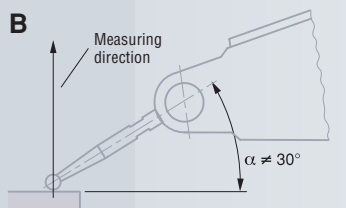
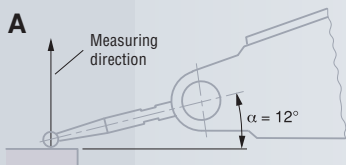
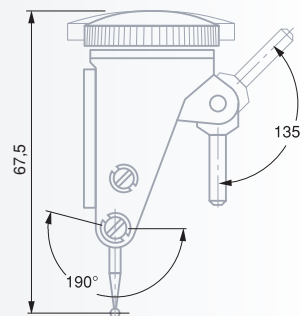
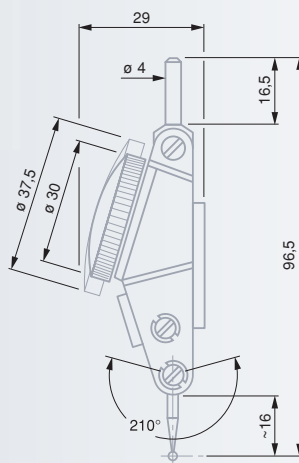
Dial test indicator with dial face mounted at right angle to insert axis.



Stylus insert with angular position of 12°

All models INTERRAPID 312 are designed to give a true reading when the angle between the stylus and the workpiece surface is 12° (Fig. A).

In another measuring position, including parallel position of the stylus against the workpiece surface, read values have to be corrected accordingly (Fig. B). With regard to this, also read in the instruction manual.



APermissible limits of a metrological characteristic (MPE/MPL)

	0,01 mm		0,002 mm	
	Pointer Rev 1	2	Pointer Rev 1	2
Deviation range, f_e	10 μm	20 μm	4 μm	8 μm
Total deviation range, f_{ges}	13 μm	23 μm	6 μm	10 μm
Repeatability limit, f_w	3 μm		1 μm	
Max. hysteresis, f_u	3 μm		2 μm	
Measuring force	0,12 N		0,25 N	

INTERAPID 312 Regular Models

		mm				
		0,01	1,6	37,5	0 ÷ 40 ÷ 0	16,5
		0,01	1,6	30	0 ÷ 40 ÷ 0	16,5
		0,002	0,4	37,5	0 ÷ 10 ÷ 0	15,2
		0,002	0,4	30	0 ÷ 10 ÷ 0	15,2
		in				
		0.0005	0.060	1.5	0 ÷ 15 ÷ 0	0.65
		0.0005	0.060	1.2	0 ÷ 15 ÷ 0	0.65
		0.0005	0.060	1.5	0 ÷ 15 ÷ 0	2.675
		0.001	0.060	1.2	0 ÷ 15 ÷ 0	0.65
		0.0001	0.016	1.5	0 ÷ 4 ÷ 0	0.65
		0.0001	0.016	1.2	0 ÷ 4 ÷ 0	0.65



Rotating dial

Very low measuring force (see table on page F-7)

Lever system with friction drive to prevent overload

Accuracy: see table on page F-7

Supplied in a plastic case along with:
1 steel insert with a 2 mm diameter, hardened.
1 key No. 01860307

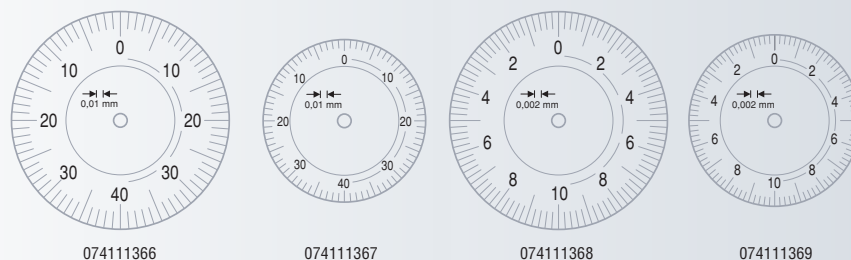
Identification number

Declaration of conformity



INTERAPID 312 Perpendicular Models

		mm				
		0,01	1,6	37,5	0 ÷ 40 ÷ 0	16,5
		0,01	1,6	30	0 ÷ 40 ÷ 0	16,5
		in				
		0.0005	0.060	1.5	0 ÷ 15 ÷ 0	0.65
		0.0005	0.060	1.2	0 ÷ 15 ÷ 0	0.65
		0.0005	0.060	1.5	0 ÷ 15 ÷ 0	2.675
		0.001	0.060	1.2	0 ÷ 15 ÷ 0	0.65
		0.0001	0.016	1.5	0 ÷ 4 ÷ 0	0.65



074111366

074111367

074111368

074111369



Technical data as listed under: each single product

Plastic case

Identification number

Declaration of conformity

Dial Test Indicator Sets, Complete with Accessories

Each full set consists of:



INTERAPID 312 as listed in the tables below

- 074106331** Rectangular attachment
- 074108942** Reducing sleeve, metric or
- 074108943** Reducing sleeve, inch
- 074106026** Swivel holder, metric or
- 074106931** Swivel holder, inch
- 074111474** Storage case for measuring inserts
- 01860307** Wrench for measuring inserts



INTERAPID 312 Regular Models



mm	074111366	074111367	074111368	074111369	074106331	074108942	074106026	074111474	01860307
074111502	●				●	●	●	●	●
074111503		●			●	●	●	●	●
074111504			●		●	●	●	●	●
074111505				●	●	●	●	●	●



in	074111370	074111371	074111372	074111373	074106331	074108943	074106931	074111474	01860307
074111508	●				●	●	●	●	●
074111509		●			●	●	●	●	●
074111510			●		●	●	●	●	●
074111511				●	●	●	●	●	●

INTERAPID 312 Perpendicular Models

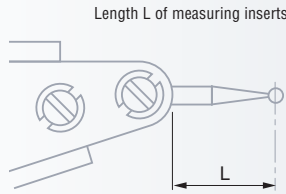


mm	074111375	074111376	074106331	074108942	074106026	074111474	01860307
074111506	●		●	●	●	●	●
074111507		●	●	●	●	●	●



in	074111377	074111378	074106331	074108943	074106931	074111474	01860307
074111513	●		●	●	●	●	●
074111514		●	●	●	●	●	●

Measuring Inserts for INTERAPID 312



Steel ball tips		Carbide ball tips		L	
mm		in			
074107893	074105993	0,01	2	16,5	
074107895	074105994	0,01	1,5	16,5	
074107897	074105995	0,01	0,8	16,5	
	074106358	0,01	2	36,6*	
	074106360	0,01	0,8	36,6*	
<hr/>					
074110481	074110482	0,002	2	15,2	
074110492	074110491	0,002	1,5	15,2	
074110493	074110507	0,002	0,8	15,2	
	074110494	0,002	2	34*	
	074110508	0,002	0,8	34*	
<hr/>					
		all**		0.080	0.650
		all**		0.060	0.650
		all**		0.031	0.650
		all**		0.080	1.375*
		all**		0.031	1.375*
<hr/>					
		074111913***		0.080	2.675
		074111912****		0.100	2.675
<hr/>					
01860307		Wrench for measuring inserts			
074111474		Storage case for measuring inserts			

- * The length of the used insert changes the amplification factor of the lever system. Therefore, each read value must be doubled.
- ** Except for both models No. 074111965 and 074111958.
- *** Model No. 074111965 only.
- **** Model No. 074111958 only.

Note

The original measuring insert mounted on every INTERAPID 312 as well as any other insert with same nominal length but having different ball tip diameters are fully interchangeable.

- ✓
- Ball tips in hardened steel or tungsten carbide
- M1,7 coupling thread

Accessories for INTERAPID 312



		mm		in	
074106331	Rectangular clamping attachment, complete			074106331	
01840203	Rectangular attachment with clamp	13 x 6 x 50	Ø 5,6	01850203	1/2 x 1/4 x 2 Ø 7/32
074108603	Double attachment with clamping point and dovetail	Ø 4		074108603	
074106026	Swivel holder with clamping points and dovetail	Ø 8 x 133	Ø 4	074106931	Ø 3/8 x 5.25
074108942	Reducing sleeve	Ø 8 / Ø 4		074108943	Ø 3/8 / Ø 5/32
	Rectangular mounting rod			074111481	3/16 x 5/16



DIN 2270
NF E 11-053

Rotating dial

Very low measuring force
(see table on page F-3)

Movement with shock absorber

Lever system with friction clutch acting as load inhibitor

For accuracy, see table on page F-3

Provided in a suited plastic case including:

- 3 measuring inserts with 1 mm dia. (No. 01860201)
- 2 mm dia. (No. 01860202)
- 3 mm dia. (No. 01860203)
- 1 wrench (No. 01860307)
- 2 mounting rods with 4 mm dia. (No. 01840104)
- 8 mm dia. (No. 01840105)

Exceptions

ROCTEST No. 0351761303 in a plastic case including:

- 1 measuring insert with 2 mm dia. (No. 01860202)
- 1 wrench (No. 01860307)
- 1 mounting rod with 8 mm dia. (No. 01840105)

ROCTEST No. 0351761305 in a plastic case including:

- 1 36,53 mm meas. insert, 2 mm dia. (No. 01860212)
- 1 wrench (No. 01860307)
- 1 mounting rod with a 8 mm dia. (No. 01840105)

Identification number

Declaration of conformity



Carbide or ruby ball tips

M1,4 coupling thread

ROCH Dial Test Indicators ROCTEST

- Bidirectional measuring through automatic reversal inside the movement.
- Continuous clockwise pointer rotation providing clear unambiguous reading.
- Insensitive to magnetic fields.
- Jeweled movement with rubies.
- Ball-bearing lever mechanism with measuring insert swivelling through 240°.
- Very low measuring force.
- Full-metal construction giving exceptional robustness.
- One-piece housing with 3 dovetail mounting attachments.

ROCTEST Regular Models

No	mm	mm	∅		Insert
0351761301	0,01	0,8	28	0 ÷ 0,4 ÷ 0	12,53
0351761302	0,01	0,8	38	0 ÷ 0,4 ÷ 0	12,53
0351761303*	0,01	0,8	28	0 ÷ 0,4 ÷ 0	12,53
0351761305	0,01	0,5	38	0 ÷ 0,25 ÷ 0	36,53
0351761311	0,002	0,2	28	0 ÷ 100 ÷ 0	12,53
0351761312	0,002	0,2	38	0 ÷ 100 ÷ 0	12,53

* Low-cost model (for information on the scope of delivery, see opposite)

ROCTEST Perpendicular Models

No	mm	mm	∅		Insert
0351761321	0,01	0,8	28	0 ÷ 0,4 ÷ 0	12,53
0351761322	0,01	0,8	38	0 ÷ 0,4 ÷ 0	12,53
0351761331	0,002	0,2	28	0 ÷ 100 ÷ 0	12,53
0351761332	0,002	0,2	38	0 ÷ 100 ÷ 0	12,53

ROCTEST Lateral Models

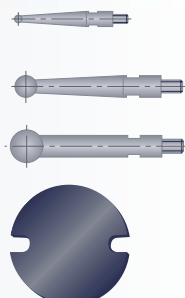
No	mm	mm	∅		Insert
0351761341	0,01	0,8	28	0 ÷ 0,4 ÷ 0	12,53
0351761342	0,01	0,8	38	0 ÷ 0,4 ÷ 0	12,53
0351761351	0,002	0,2	28	0 ÷ 100 ÷ 0	12,53
0351761352	0,002	0,2	38	0 ÷ 100 ÷ 0	12,53

Measuring inserts

No	No	mm	mm
Carbide ball tips	Ruby ball tips		
01860201	01860301	1	12,53
01860202	01860302	2	12,53
01860203	01860303	3	12,53
01860211	01860304	1	36,53
01860212	01860305	2	36,53
01860213	01860309	3	36,53
01860307	Wrench for measuring inserts		

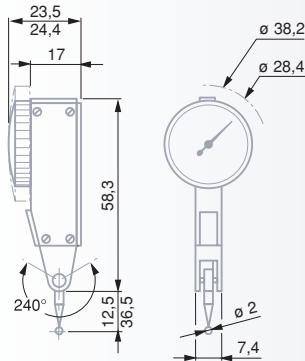
Note

The original insert mounted on each ROCTEST can be replaced by any other one with same or different ball tip diameter as long as the nominal length is respected.



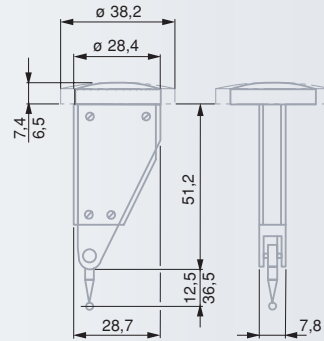
Regular Models

Models with dial mounted parallel to the insert axis.



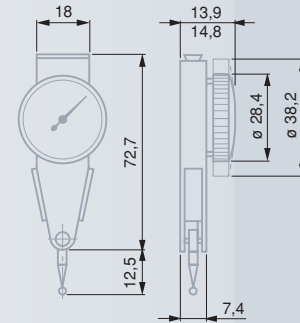
Perpendicular Models

Models with dial mounted at right angle to the insert axis.



Lateral Models

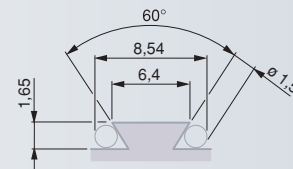
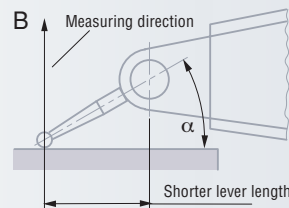
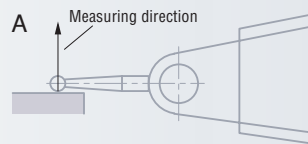
Models with dial mounted parallel to the insert axis, but on the lateral face of the housing.



Note on the use of ROCTEST dial test indicators

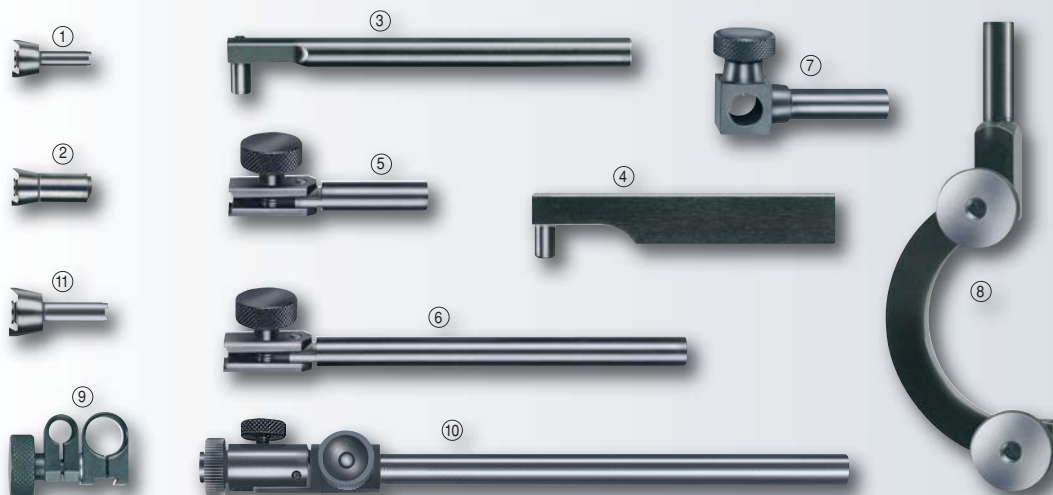
With the measuring insert lying parallel to the workpiece surface (Fig. A), these indicators give true reading due to the amplification factor to 1:1.

In another measuring position (angle α in Fig. B), the effective lever length changes so that the read value needs to be corrected. With respect to this, also refer to the instruction manual.



ROCTEST Accessories

For a detailed description of the components shown in this catalogue as well as the complete accessory sets and order numbers, see on page F-6.



MERCER Series 300

- Bidirectional measuring through automatic reversal inside the movement.
- Continuous clockwise pointer rotation providing clear, unambiguous reading.
- Insensitive to magnetic fields.
- Jewelled Movement with rubies.
- Ball-bearing lever system with measuring insert swivelling through 240°.
- Full-metal construction giving exceptional robustness.
- One-piece housing with dovetail attachment on 3 faces.



DIN 2270 and factory standard

Rotating dial

See table opposite

Lever system with friction clutch acting as load inhibitor

Tungsten carbide ball tips

Supplied in a suited plastic case including:
1 insert with a 2 mm dia.
1 rigid rod with a 1/4 dia.
(No. 01850107).

A 8 mm dia. rod or a mounting lug (No. 01840107 or No. 03238013) can also be used instead of the rigid rod.

Both are provided at no extra cost if specified on order.

Identification number

Declaration of conformity



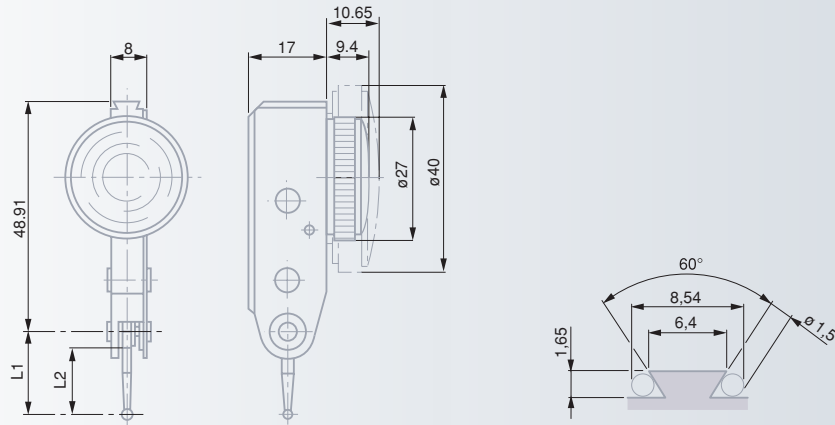
Inch Versions

No	=	in	in	Ø mm	Insert* L ₁ in	L ₂ in	N
01826001	301-1	0.0005	0.030	27	0 ÷ 15 ÷ 0	0.6754	0.5278 ≤ 0,25
01826002	303-1	0.0001	0.008	27	0 ÷ 4 ÷ 0	0.7200	0.5724 ≤ 0,25
01826003	305-1	0.001	0.030	27	0 ÷ 15 ÷ 0	0.6754	0.5278 ≤ 0,25
01826004	306-1	0.0005	0.030	40	0 ÷ 15 ÷ 0	0.6754	0.5278 ≤ 0,25
01826005	310-1	0.001	0.080	27	0 ÷ 40 ÷ 0	1.800	1.6527 ≤ 0,25
01826006	312-1	0.0005	0.060	40	0 ÷ 30 ÷ 0	1.440	1.2035 ≤ 0,25

Metric Versions

No	=	mm	mm	Ø mm	Insert* L ₁ mm	L ₂ mm	N
01816001	302-1	0,01	0,8	27	0 ÷ 40 ÷ 0	18	14,26 ≤ 0,25
01816002	304-1	0,002	0,2	27	0 ÷ 10 ÷ 0	18	14,26 ≤ 0,25
01816003	307-1	0,01	0,8	40	0 ÷ 40 ÷ 0	18	14,26 ≤ 0,25
01816004	311-1	0,025	2,0	27	0 ÷ 10 ÷ 0	45	41,26 ≤ 0,25
01816005	313-1	0,01	1,6	40	0 ÷ 8 ÷ 0	36	32,26 ≤ 0,25

* For both sizes L1 and L2, see drawing on page F-14.



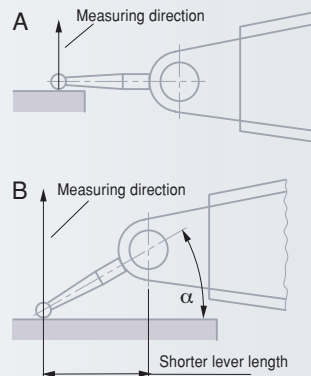
Maximum permissible errors for a metrological characteristic (MPE)

	0.001 in 0.0005 in	0.0001 in	0,025 mm 0,01 mm	0,002 mm
Deviation span, f_e	0.0004 in	0.00012 in	10 μm	3 μm
Total deviation span, f_{ges}	0.0005 in	0.00015 in	13 μm	4 μm
Repeatability limit, f_w	0.00015 in	0.00006 in	3 μm	1 μm
Max. hysteresis, f_h	0.00015 in	0.00008 in	3 μm	1 μm

Note on the use of MERCER dial test indicators

With the measuring insert lying parallel to the workpiece surface (Fig. A), these 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 needs to be corrected. With respect to this, also refer to the instruction manual.



MERCER TOP Quality Dial Test Indicators

Models with extra long measuring span.

- Bidirectional measuring through automatic reversal inside the movement.
- Continuous clockwise pointer rotation providing clear unambiguous reading.
- Insensitive to magnetic fields.
- Jewelled movement with rubies.
- Bell-bearing lever system with measuring insert swivelling through 240°.
- Full-metal construction giving exceptional robustness.
- One-piece housing with dovetail attachment on 3 faces.



DIN 2270 and factory standard

Rotating dial

See table opposite

Lever system with friction clutch acting as load inhibitor

Tungsten carbide ball tips

For sizes see on previous page F-14

Supplied in a suited plastic case including:
1 insert with a 2 mm dia.
1 rigid rod with a 1/4 dia.
(No. 01850107).

A 8 mm dia. rod or a mounting lug (No. 01840107 or No. 03238013) can also be used instead of the rigid rod. Both are provided at no extra cost if specified on order.

Identification number

Declaration of conformity

Inch Versions

No	=	in	in	Ø in	Insert*	L ₁ in	L ₂ in	N
01826011	0.0005	0.06	0.02	1.063	0 ÷ 10 ÷ 20	0.72	0.5724	≤ 0,35
01826012	0.0005	0.06	0.02	1.575	0 ÷ 10 ÷ 20	0.72	0.5724	≤ 0,35
01826013	0.0005	0.12	0.04	1.063	0 ÷ 20 ÷ 40	1.44	1.2924	≤ 0,20
01826014	0.0005	0.12	0.04	1.575	0 ÷ 20 ÷ 40	1.44	1.2924	≤ 0,20
01826015	0.0001	0.024	0.004	1.063	0 ÷ 20 ÷ 40	0.72	0.5724	≤ 0,30
01826016	0.0001	0.024	0.004	1.575	0 ÷ 20 ÷ 40	0.72	0.5724	≤ 0,30

Metric Versions

No	=	mm	mm	Ø mm	Insert*	L ₁ mm	L ₂ mm	N
01816011	0,01	1,5	0,5	27	0 ÷ 25 ÷ 50	18	14,26	≤ 0,35
01816012	0,01	1,5	0,5	40	0 ÷ 25 ÷ 50	18	14,26	≤ 0,35
01816013	0,01	3,0	1,0	27	0 ÷ 50 ÷ 100	36	32,26	≤ 0,20
01816014	0,01	3,0	1,0	40	0 ÷ 50 ÷ 100	36	32,26	≤ 0,20
01816015	0,002	0,6	0,1	27	0 ÷ 50 ÷ 100	18	14,26	≤ 0,30
01816016	0,002	0,6	0,1	40	0 ÷ 50 ÷ 100	18	14,26	≤ 0,30

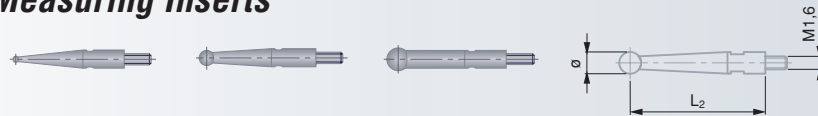
* For both sizes L₁ and L₂, see on page F-14

Maximum permissible errors for a metrological characteristic (MPE)

				1,5 mm	3,0 mm	0,6 mm
	0.06 in	0.12 in	0.024 in	1,5 mm	3,0 mm	0,6 mm
				0,025 mm	0,01 mm	0,002 mm
	0.0005 in	0.0005 in	0.0001 in	0,01 mm	0,01 mm	0,002 mm
Deviation span, f_e	0.0007 in	0.0009 in	0.0005 in	17 μ m	24 μ m	13 μ m
Total deviation span, f_{ges}	0.0008 in	0.0012 in	0.0006 in	20 μ m	30 μ m	15 μ m
Repeatability limit, f_w	0.00015 in	0.00025 in	0.0001 in	3 μ m	6 μ m	1,5 μ m
Max. hysteresis., f_0	0.00015 in	0.00025 in	0.0001 in	3 μ m	6 μ m	1,5 μ m

Accessories for MERCER Dial Test Indicators – Series 300 and TOP Quality

Measuring Inserts



	0,8 mm	2 mm	3 mm			
				Insert length L_2	Series 300	Series TOP Quality
<i>Inch Models</i>						
	01866010	01866007	01866017	0.5278 in	01826001 01826003 01826004	
	01866011	01866005	01866018	0.5724 in	01826002	01826011 01826012 01826015 01826016
	01866013	01866001	01866020	1.2035 in	01826006	
	01866012	01866008	01866019	1.6527 in	01826005	
	01866024	01866009	01866025	1.2924 in		01826013 01826014
<i>Metric models</i>						
	01866014	01866003	01866021	14,26 mm	01816001 01816002 01816003	01816011 01816012 01816016
	01866016	01866004	01866023	32,26 mm	01816005	01816013 01816014
	01866015	01866006	01866022	41,26 mm	01816004	



Tungsten carbide ball tips

M1.6 coupling thread

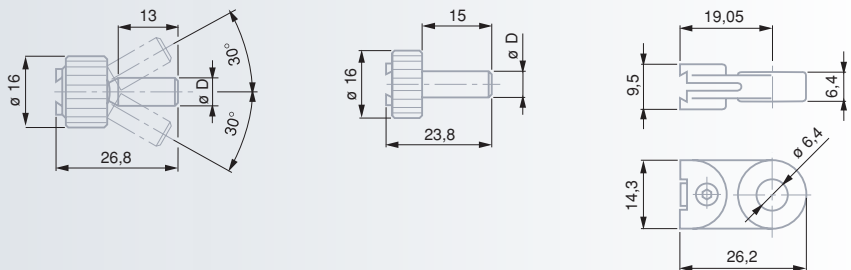
Original inserts mounted on every ROCTEST as well as any other inserts with same nominal length but having different tip diameters are fully interchangeable.



Attachments for MERCER Series 300 and TOP Quality Lever-Type Dial Test Indicators

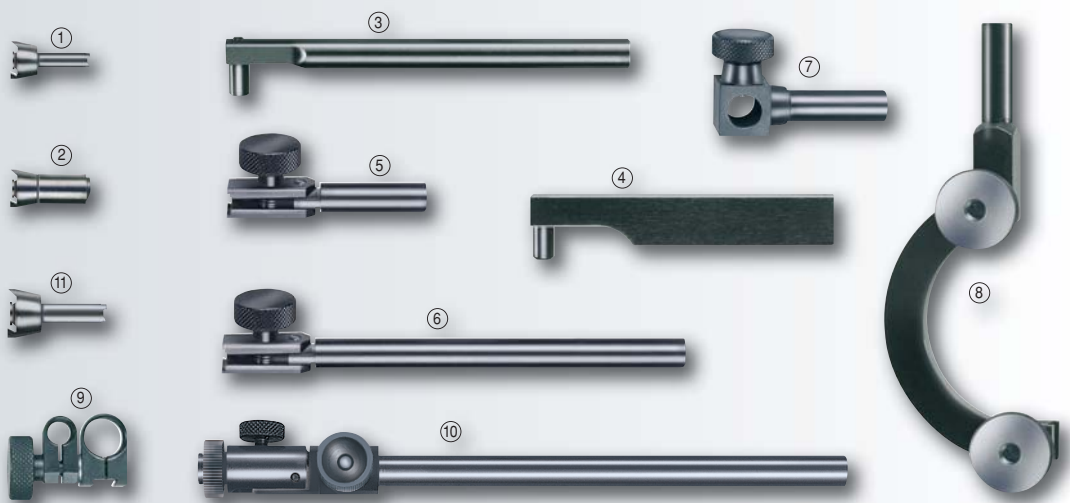
For a detailed description of the components shown in this catalogue as well as the complete accessory sets and order numbers, see on page F-6.

			D
<i>Mounting rods and lug with dovetail grip</i>			
01850106	Mounting rod swivelling through $\pm 30^\circ$	$\text{Ø } 1/4$ in	
01850107	Rigid mounting rod	$\text{Ø } 1/4$ in	
01840106	Mounting rod swivelling through $\pm 30^\circ$	$\text{Ø } 8$ mm	
01840107	Rigid mounting rod	$\text{Ø } 8$ mm	
01840108	Mounting rod swivelling through $\pm 30^\circ$	$\text{Ø } 4$ mm	
01840109	Rigid mounting rod	$\text{Ø } 4$ mm	
03238013	Mounting lug		



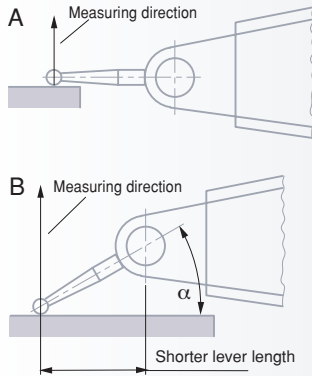
Additional Clamping Accessories

For a detailed description of the components listed in this catalogue as well as the complete accessory sets and order numbers, see on page F-6.



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.



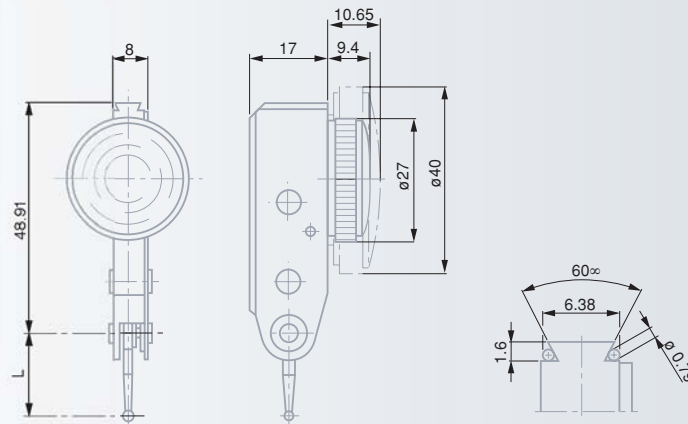
Technical features

- 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

	mm	Total travel mm	Travel/revolution mm	\emptyset mm		Contact point L mm	μ m	μ m	μ m	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



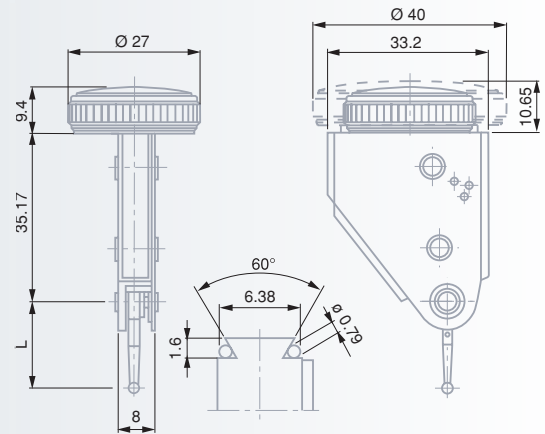
including:
 1 contact point, 2 mm dia.
 1 rigid stem with 8 mm dia., L = 15 mm, No. 01840107
 1 rigid stem with 4 mm dia., L = 15 mm, No. 01840109 (except for series 220).



Inch Reading

No										
							in	in	in	
	in	Total travel in	Travel/revolution in	Ø in		Contact point L in	in	in	in	N
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



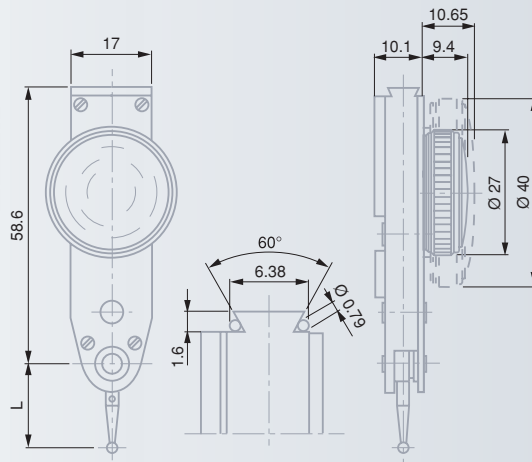
Metric Reading

No										
							mm	µm	µm	
	mm	Total travel mm	Travel/revolution mm	Ø mm		Contact point L 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	in	in	
	in	Total travel in	Travel/revolution in	Ø in		Contact point L 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
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



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

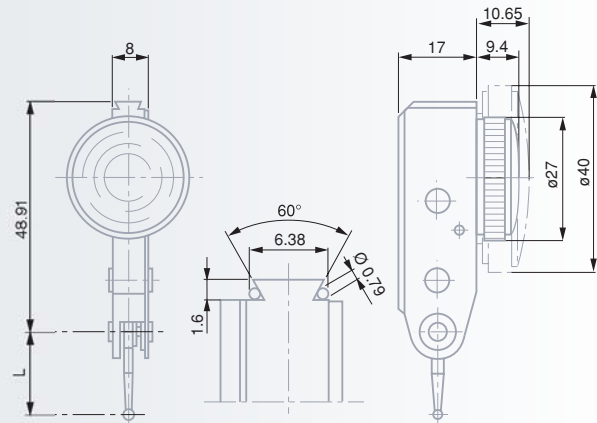
No	mm	Total travel mm	Travel/revolution mm	Ø mm		Contact point L mm	µm	µm	µm	N
233	0,01	1,5	0,5	27	0÷25÷ 50	18	13	3	3	≤ 0,35
233G	0,01	1,5	0,5	40	0÷25÷ 50	18	13	3	3	≤ 0,35
232L	0,01	3	1	27	0÷50÷100	36	26	3	6	≤ 0,20
232GL	0,01	3	1	40	0÷50÷100	36	26	3	6	≤ 0,20
235	0,002	0,6	0,1	27	0÷ 5÷ 10	18	13	1,5	2,5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



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	mm	Total travel mm	Ø mm	mm	Contact point L 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	in	Contact point L 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