

INTERAPID 312 LEVER DIAL TEST INDICATORS

INTERAPID 312 Dial Test Indicators very large measuring span – Ideal for inspecting all significant size variations, e.g. on the surface plate – Measures position, form and shape errors.



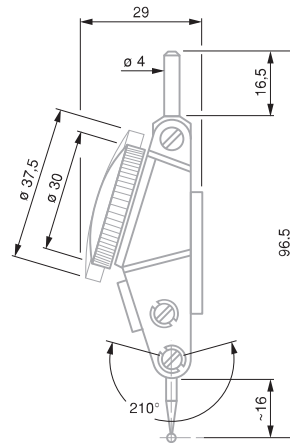
- Safe reading thanks to secondary pointer totalling the number of revolutions made by the main pointer.
- Bidirectional measuring with automatic reversal within the movement.
- Pointer rotation direction is always constant due to automatic reversal effect.
- Jewelled movement with rubies.
- Ball-bearing lever system. Measuring insert swivelling through 210°.
- Particularly robust due to full-metal construction.
- Monobloc housing with mounting through dovetail clamping and a $\varnothing 4$ mm swivelling shank.

Stylus insert with angular position of 12°

All models INTERAPID 312 are designed to give a true reading when the angle between the stylus and the workpiece surface is 12° (Fig. A). In any other measuring position, including parallel position of the stylus against the workpiece surface, measured readings have to be corrected accordingly (Fig. B). Please consult the instruction manual on this subject.

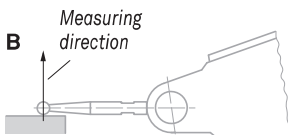
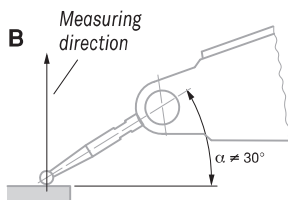
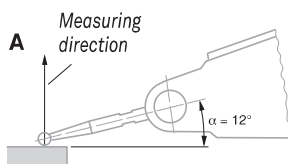
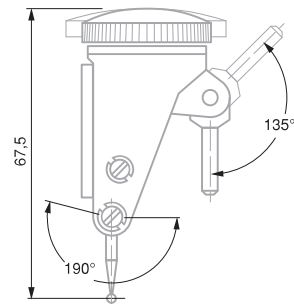
Standard Model

Time-tested dial test indicator. The dial face is mounted parallel to the axis of the insert.



Perpendicular model

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



Permissible limits of a metrological characteristic (MPE/MPL)

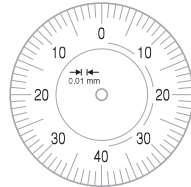
	0,01 mm		0,002 mm	
	Pointer revolution		Pointer revolution	
	1	2	1	2
Deviation range over partial measuring range, f_e	10 μ m	20 μ m	4 μ m	8 μ m
Total deviation range, f_{ges}	13 μ m	23 μ m	6 μ m	10 μ m
Repeatability limit, f_w	3 μ m		1 μ m	
Max. hysteresis, f_u	3 μ m		2 μ m	
Measuring force	0,12 N	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





INTERAPID 312 Standard Models

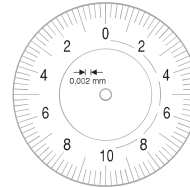
No	mm	mm	∅, mm		Insert, mm
074111366	1,6	0,01	37,5	0 ÷ 40 ÷ 0	16,5
074111367	1,6	0,01	30	0 ÷ 40 ÷ 0	16,5
074111368	0,4	0,002	37,5	0 ÷ 10 ÷ 0	15,2
074111369	0,4	0,002	30	0 ÷ 10 ÷ 0	15,2



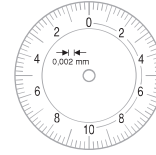
074111366



074111367



074111368



074111369



INTERAPID 312 Perpendicular Models

No	mm	mm	∅, mm		Insert, mm
074111375	1,6	0,01	37,5	0 ÷ 40 ÷ 0	16,5
074111376	1,6	0,01	30	0 ÷ 40 ÷ 0	16,5

- Rotating dial
- Very low measuring force: (see table for tolerance limits)
- Lever system with friction drive to prevent overload
- Accuracy: see table for tolerance limits
- Supplied in a plastic case with:
1 with a ∅ 2 mm insert in hardened steel,
1 stylus key
No. 01860307

Dial Test Indicator Sets, Complete with Accessories – INTERAPID 312 Standard Models

Each full set consists of:

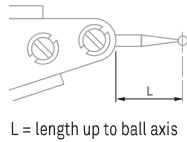


No	=
	INTERAPID 312 lever test indicators as listed in the table below:
074106331	Rectangular mounting attachment
074108942	Reducing sleeve, metric
074106026	Swivel holder, metric
074111474	Case for measuring inserts
01860307	Wrench for measuring inserts

Technical data: see description for each product

No	074111366	074111367	074111368	074111369	074106331	074108942	074106026	074111474	01860307
074111502	•			•	•	•	•	•	•
074111503		•			•	•	•	•	•
074111504			•		•	•	•	•	•
074111505				•	•	•	•	•	•

M1,7 coupling thread



Measuring Inserts

No	mm	Ball tip, mm	Ball tip material	L mm
074107893	0,01	2	Steel	16,5
074107895	0,01	1,5	Steel	16,5
074107897	0,01	0,8	Steel	16,5
074110481	0,002	2	Steel	15,2
074110492	0,002	1,5	Steel	15,2
074110493	0,002	0,8	Steel	15,2
074105993	0,01	2	Carbide	16,5
074105994	0,01	1,5	Carbide	16,5
074105995	0,01	0,8	Carbide	16,5
074106358	*	2	Carbide	36,6
074106360	*	0,8	Carbide	36,6
074110482	0,002	2	Carbide	15,2
074110491	0,002	1,5	Carbide	15,2
074110507	0,002	0,8	Carbide	15,2

* The length of the insert used changes the amplification factor of the lever system. The values read off must therefore be doubled.

Note:

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

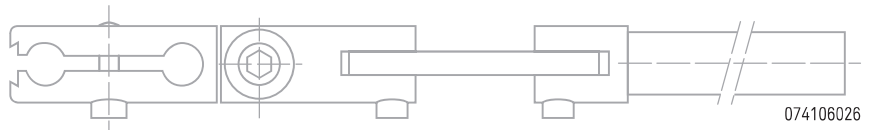
Accessories for INTERAPID 312

Clamping Attachment

No	=	mm
074108603	Double attachment with clamping point and dovetail	∅ 4

HOLDERS

No	=	mm
074106026	Swivel holder with clamping points and dovetail	∅ 8 x 133 (∅ 4 for clamping point)



Clamping Attachment

No	=	
074106331	Rectangular clamping attachment complete	

074106331

Reducing Sleeve

No	=	mm
074108942	Reducing sleeve	∅ 8 / ∅ 4

074108942

