

Dial Test Indicators

SERIES 513 — Horizontal Type

FEATURES

- Performs easy and accurate measurement of narrow or recessed areas, plus inside and outside diameters that dial indicators cannot access.
- No-clutch structure for automatic reversal of measuring direction.
- One-piece bezel and crystal design with O-ring provide resistance to water and dust.
- The glare-free flat crystal face has a scratch-resistant coating.
- High sensitivity and quick response because of jeweled bearings.
- Standard carbide contact point provide.



513-424-10E



513-414-10E

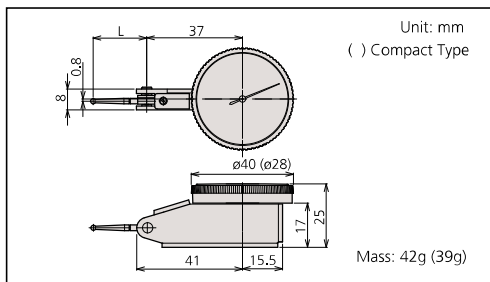


513-404-10E



513-402-10E

DIMENSIONS AND MASS



Optional Accessories

- : Swivel clamp
- : Holding bar
- : Stem
- : Contact points

Special Set: No. 513-908-10E (mm)

- 513-404-10E: Dial test indicator
- 7014-10E: Mini magnetic stand

No. 513-907-10E (inch)

- 513-402-10E: Dial test indicator
- 7014E-10: Mini magnetic stand




Description of Icon

Icon	Description
	With revolution counter
	Long contact point
	Jeweled bearing
	Double scale spacing, easy to read
	Compact
	Dustproof
	Anti-magnetic

Set Configuration: Test Indicators

Inch

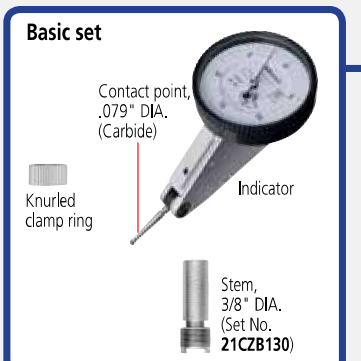
Full set



Swivel clamp (900322, for .157" DIA., 3/8" DIA., dovetail)

Inch holding bar (L: 4") (900306)

Basic set



Contact point, .079" DIA. (Carbide)

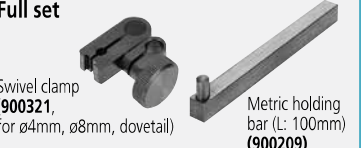
Indicator

Knurled clamp ring

Stem, 3/8" DIA. (Set No. 21CZB130)

Metric

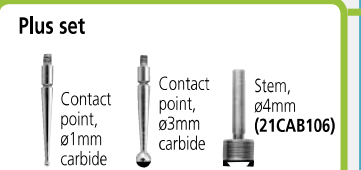
Full set



Swivel clamp (900321, for ø4mm, ø8mm, dovetail)

Metric holding bar (L: 100mm) (900209)

Plus set

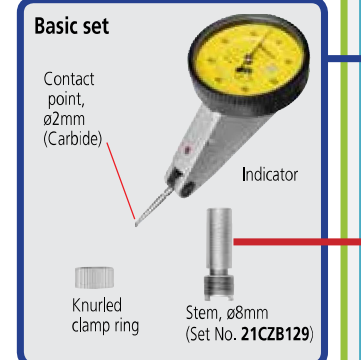


Contact point, ø1mm carbide

Contact point, ø3mm carbide

Stem, ø4mm (21CAB106)

Basic set









Contact point, ø2mm (Carbide)

Indicator

Knurled clamp ring

Stem, ø8mm (Set No. 21CZB129)

-  Anti-magnet type
-  Double scale spacing type
-  Long contact point type
-  Jeweled bearing type
-  Compact type
-  With revolution counter type



SPECIFICATIONS

Graduation	Order No.		Range	Accuracy	Dial reading	Measuring force	L (mm)						
	Basic set	Full set											
.0005"	513-407-10E	513-407-10T	.008"	±.0001"	0-4-0	0.3N or less	19	✓	—	✓	—	—	—
.0005"	513-402-10E	513-402-10T	.03"	±.0005"	0-15-0	0.3N or less	19.9	✓	—	✓	—	—	—
.0005"	513-472-10E*	—	.03"	±.0005"	0-15-0	0.3N or less	19.9	✓	—	✓	—	—	—
.0005"	513-412-10E	513-412-10T	.03"	±.0005"	0-15-0	0.2N or less	33.9	✓	✓	✓	—	—	—
.0005"	513-479-10E*	—	.03"	±.0005"	0-15-0	0.2N or less	33.9	✓	✓	✓	—	—	—
.0005"	513-462-10E	—	.03"	±.0005"	0-15-0	0.3N or less	19.9	✓	—	✓	✓	—	—
.0001"	513-403-10E	513-403-10T	.008"	±.0001"	0-4-0	0.3N or less	19	✓	—	✓	—	—	—
.0001"	513-473-10E*	—	.008"	±.0001"	0-4-0	0.3N or less	19	✓	—	✓	—	—	—
.0001"	513-463-10E	—	.008"	±.0001"	0-4-0	0.3N or less	15	✓	—	✓	✓	—	—

*Provided with a ø2mm ruby contact point as a substitute for ø2mm carbide contact point.

Graduation	Order No.		Range	Accuracy	Dial reading	Measuring force	L (mm)						
	Basic set	Full set											
0.01mm	513-424-10E	513-424-10T	0.5mm	5µm	0-25-0	0.3N or less	22.3	✓	✓	—	✓	—	—
0.01mm	513-414-10E	513-414-10T	0.5mm	10µm	0-25-0	0.2N or less	36.8	✓	✓	✓	✓	—	—
0.01mm	513-466-10E	—	0.5mm	5µm	0-25-0	0.3N or less	22.3	✓	✓	—	✓	✓	—
0.01mm	513-478-10E*	—	0.5mm	5µm	0-25-0	0.3N or less	22.3	✓	—	—	✓	—	—
0.01mm	513-404-10E	513-404-10T	0.8mm	8µm	0-40-0	0.3N or less	20.9	✓	—	—	✓	—	—
0.01mm	513-474-10E*	—	0.8mm	8µm	0-40-0	0.3N or less	20.9	✓	—	—	✓	—	—
0.01mm	513-464-10E	—	0.8mm	8µm	0-40-0	0.3N or less	20.9	✓	—	—	✓	✓	—
0.01mm	513-415-10E	513-415-10T	1mm	10µm	0-50-0	0.2N or less	44.5	✓	—	✓	✓	—	—
0.01mm	513-477-10E*	—	1mm	10µm	0-50-0	0.2N or less	44.5	✓	—	✓	✓	—	—
0.01mm	513-426-10E	—	1.5mm	16µm	0-25-0	0.4N or less	22.3	✓	✓	—	✓	—	✓
0.002mm	513-405-10E	513-405-10T	0.2mm	4µm	0-100-0	0.3N or less	14.7	✓	—	—	✓	—	—
0.002mm	513-465-10E	—	0.2mm	4µm	0-100-0	0.3N or less	14.7	✓	—	—	✓	—	—
0.002mm	513-475-10H*	—	0.2mm	4µm	0-100-0	0.3N or less	18.7	✓	—	—	✓	—	—
0.002mm	513-425-10E	—	0.6mm	7µm	0-100-0	0.4N or less	14.7	✓	—	—	✓	—	✓
0.001mm	513-401-10E	—	0.14mm	4µm	0-70-0	0.3N or less	12.8	✓	—	—	✓	—	—
0.001mm	513-471-10E*	—	0.14mm	4µm	0-70-0	0.3N or less	12.8	✓	—	—	✓	—	—

*Provided with a ø2mm ruby contact point as a substitute for ø2mm carbide contact point.

Graduation	Order No.		Range	Accuracy	Dial reading	Measuring force	L (mm)		
	Basic set	Full set							
0.002mm, .0001"	513-409-10E	513-409-10T	0.2mm, .0075"	3µm	0-10-0, 0-38-0	0.3N or less	14.7	✓	✓

Graduation	Order No.		Range	Accuracy	Dial reading	Measuring force	L (mm)		
	Basic set	Full set							
.0005", 0.01mm	513-406-10E	513-406-10T	.03", 0.7mm	±.0005"	0-15-0, 0-35-0	0.3N or less	19.9	✓	✓