

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

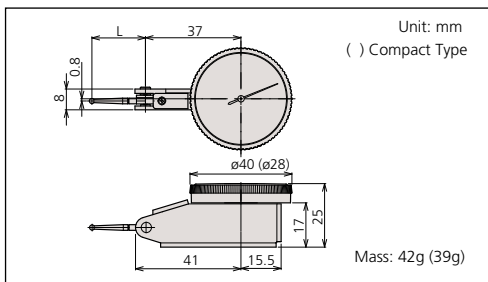


513-404-10E



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 |

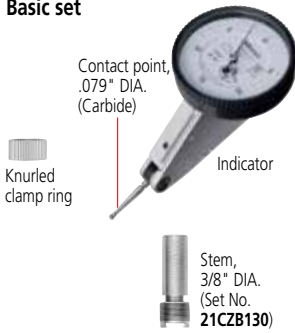
Set Configuration: Test Indicators

Inch

Full set



Basic set



Metric

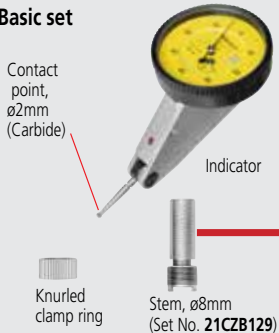
Full set



Plus set



Basic set



Anti-magnet type



Double scale spacing type



Long contact point type



Jeweled bearing type



Compact type



With revolution counter type



SPECIFICATIONS

Inch

| Graduation | Order No. | | Range | Accuracy | Dial reading | Measuring force | L (mm) | | | | | | | |
|------------|--------------|-------------|-------|----------|--------------|-----------------|--------|---|---|---|---|---|---|---|
| | Basic set | Full set | | | | | | | | | | | — | — |
| .00005" | 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.

Metric

| 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.

Metric/inch

| 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 | ✓ | ✓ | — | — | — | — | — |

Inch/Metric

| 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 | ✓ | ✓ | — | — | — | — | — |