# MarTest®. Test Indicators

# Concentricity on a shaft Concentricity in a sleeve Centering of a bore

## MarTest - Avoiding Measuring Errors

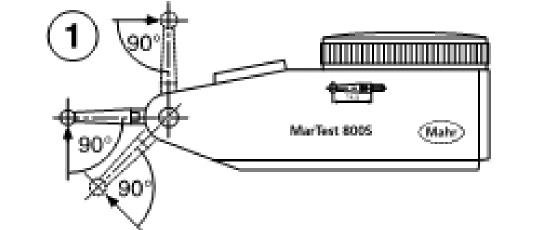
For accurate measurements, the axis of the contact point **must** be perpendicular to the measuring direction (Fig 1). If this is not possible, it is necessary to multiply the reading on the dial with a correction factor, this depends on the angle  $\alpha$  (Fig 2). The correction factor is negligible for angles below 15°.

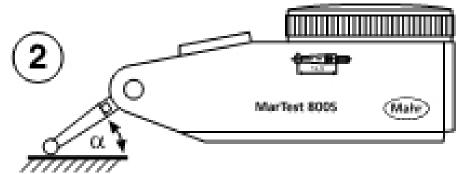
Angle $\alpha$	15°	30°	45°	60°
Correction factor	0.96	0.87	0.70	0.50

Example:

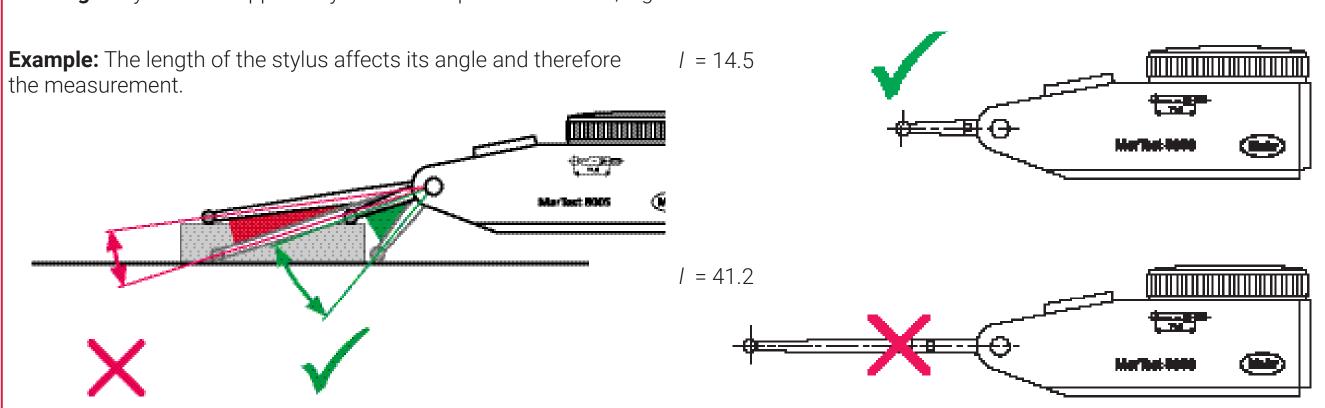
Angle α: 30° (estimated)
Reading: 0.38 mm

Measurement result: 0.38 x 0.87 = 0.33 mm





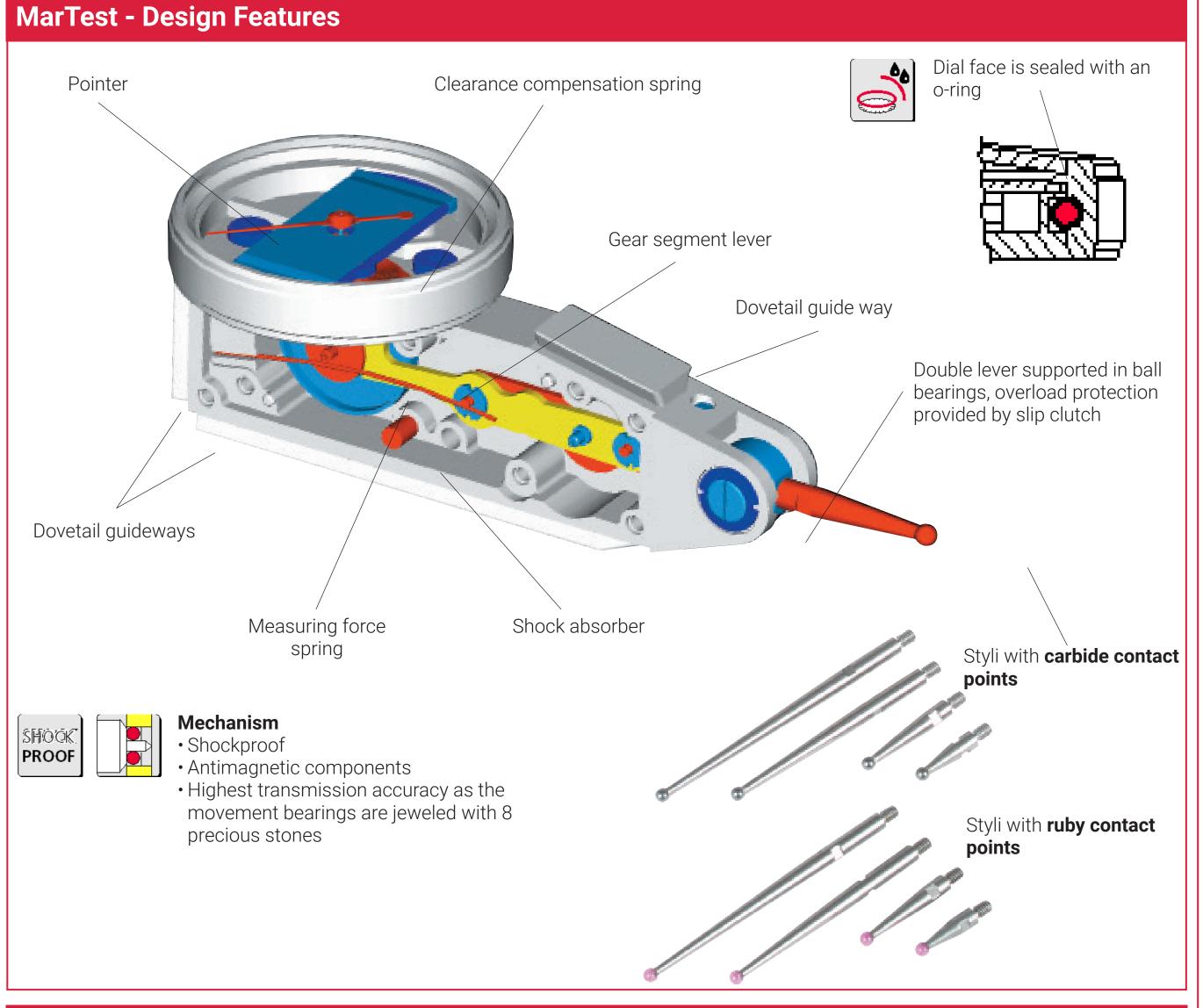
**Warning!** Only use the supplied stylus for each particular model, e.g.  $800 \, \text{S}$  with  $I = 14.5 \, \text{mm}$ 





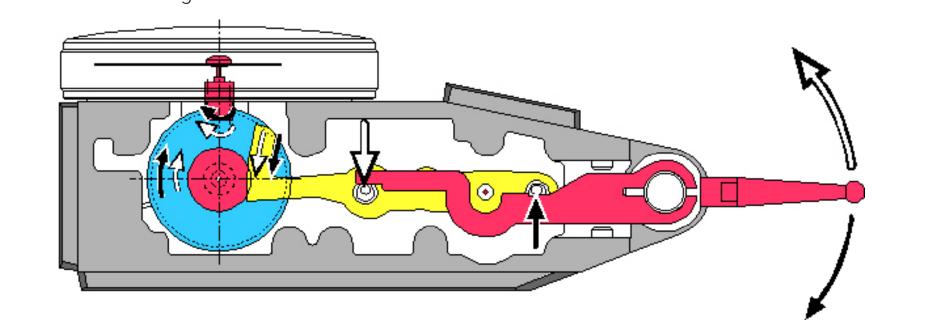
### Mahr Inc. 1139 Eddy Street Providence, RI 02905 1-800-343-2050 www.mahr.com

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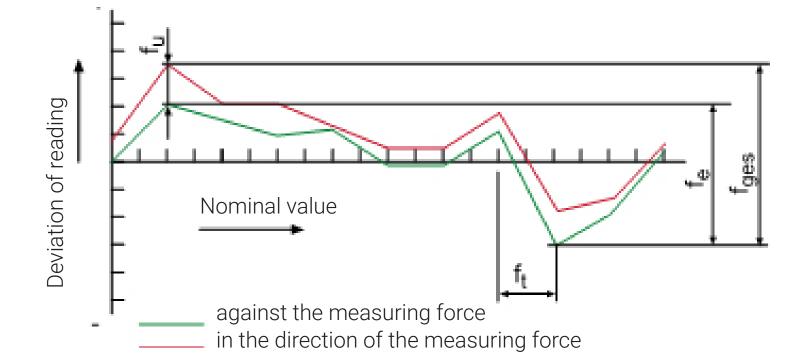


# MarTest - Automatic Matching to Measuring Direction

Automatic matching to the sensing direction, i.e. the pointer always moves in a clockwise direction regardless of which direction the stylus is moved; this ensures error-free reading.



# MarTest - Metrological Characteristics



- f<sub>u</sub> = Hysteresis
- f<sub>e</sub> = Deviation range
- = Total deviation range
- $f_t$  = Partial measuring span

