

Renishaw TP6 and TP6A Probe



Category: Renishaw Probe Body & Modules

Robust kinematic probes with M8 and autojoint mounting options.

The TP6 and TP6A probes have different probe mount options (M8 thread and autojoint respectively). Both probes are kinematic touch-trigger probes and have manually adjustable trigger force for optimum probe performance with different stylus configurations.

They can carry long styli (M3 range), are 25 mm (1 in) in diameter, providing substantial overtravel for excellent robustness.

Specification summary	TP6	TP6A
Principal application	Robust universal DCC and manual CMMs.	As TP6 but with fast probe exchange without requalification.
Sense directions	5-axis: $\pm X$, $\pm Y$, $+Z$	5-axis: $\pm X$, $\pm Y$, $+Z$
Unidirectional repeatability maximum (2s μm) (at stylus tip)	0.35 μm (0.000014 in)	0.35 μm (0.000014 in)
Pre-travel variation 360° (XY plane)	$\pm 1 \mu m$ (± 0.00004 in)	$\pm 1 \mu m$ (± 0.00004 in)
Weight	56 g (1.98 oz)	76 g (2.68 oz)
Stylus range	M3	M3
Stylus force range (adjustable)	0.11 N to 0.3 N	0.11 N to 0.3 N
Stylus force (set by Renishaw)	0.11 N to 0.13 N	0.11 N to 0.13 N
Stylus overtravel (typical)	XY plane: $\pm 22^\circ$ +Z-axis: 5.5 mm (0.22 in) at 0.11 N 2 mm (0.08 in) at 0.3 N	XY plane: $\pm 22^\circ$ +Z-axis: 5.5 mm (0.22 in) at 0.11 N 2 mm (0.08 in) at 0.3 N
Maximum extension on PH10 series	200 mm (7.87 in)	200 mm (7.87 in)
Mounting method	M8 thread	Autojoint
Suitable interface	PI 7-3, PI 200-3, UCC	PI 7-3, PI 200-3, UCC