

MP250 probe



www.renishaw.com/mp250

Specification

Principal application	Workpiece inspection and job set-up on CNC grinders.
Transmission type	Hard-wired transmission
Compatible interfaces	HSI
Recommended styli	High modulus carbon fibre, lengths 50 mm (1.97 in) to 100 mm (3.94 in)
Weight	64 g (2.26 oz)
Sense directions	±X, ±Y, +Z
Unidirectional repeatability	0.25 µm (10 µin) 2σ (see note 1)
2D lobing in X, Y	±0.25 µm (10 µin) (see note 1)
3D lobing in X, Y, Z	±1.00 µm (40 µin) (see note 1)
Stylus trigger force (see notes 2 and 5)	
XY plane (typical minimum)	0.08 N, 8 gf (0.29 ozf)
+Z direction (typical minimum)	2.60 N, 265 gf (9.35 ozf)
Stylus overtravel force	
XY plane (typical minimum)	0.70 N, 71 gf (2.52 ozf) (see note 3)
+Z direction (typical minimum)	5.00 N, 510 gf (17.98 ozf) (see note 4)
Minimum probing speed	3 mm/min (0.12 in/min)
Sealing	IPX8 (EN/IEC 60529)
Operating temperature	+5 °C to +55 °C (+41 °F to +131 °F)

Note 1 Performance specification is tested at a standard test velocity of 480 mm/min (18.9 in/min) with a 35 mm stylus.

Note 2 Trigger force, which is critical in some applications, is the force exerted on the component by the stylus when the probe triggers. The maximum force applied will occur after the trigger point (overtravel). The force value depends on related variables including measuring speed and machine deceleration. **RENGAGE™** equipped probes offer ultra low trigger forces.

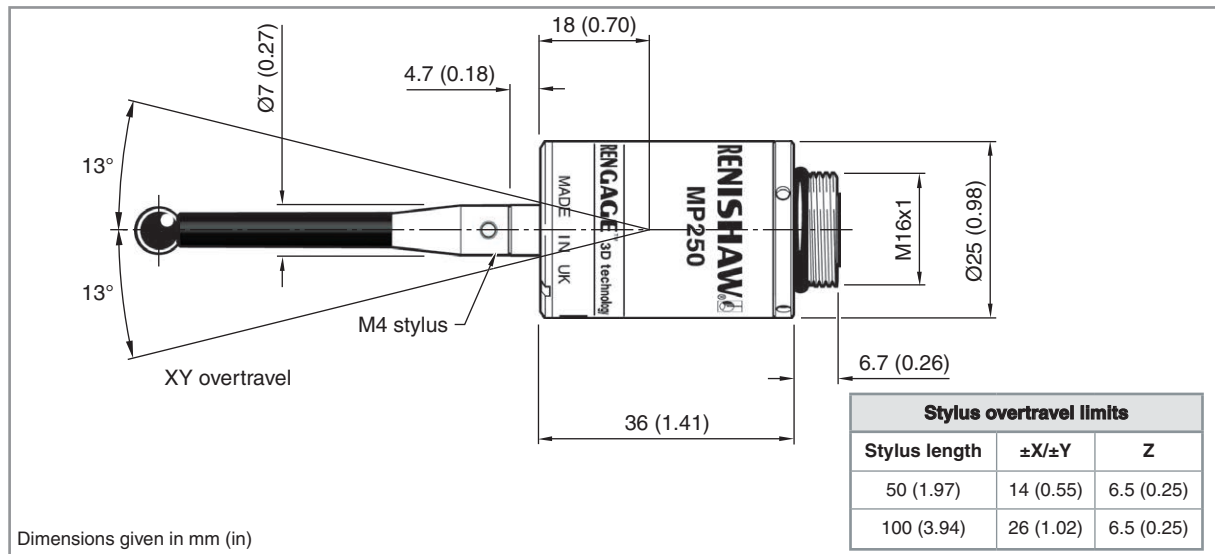
Note 3 Stylus overtravel force in the XY plane occurs 50 µm after the trigger point and rises by 0.12 N/mm, 12 gf/mm (11 ozf/in) until the machine tool stops (in the high force direction).

Note 4 Stylus overtravel force in the +Z direction occurs 11 µm after the trigger point and rises by 1.2 N/mm, 122 gf/mm (109 ozf/in) until the machine tool stops.

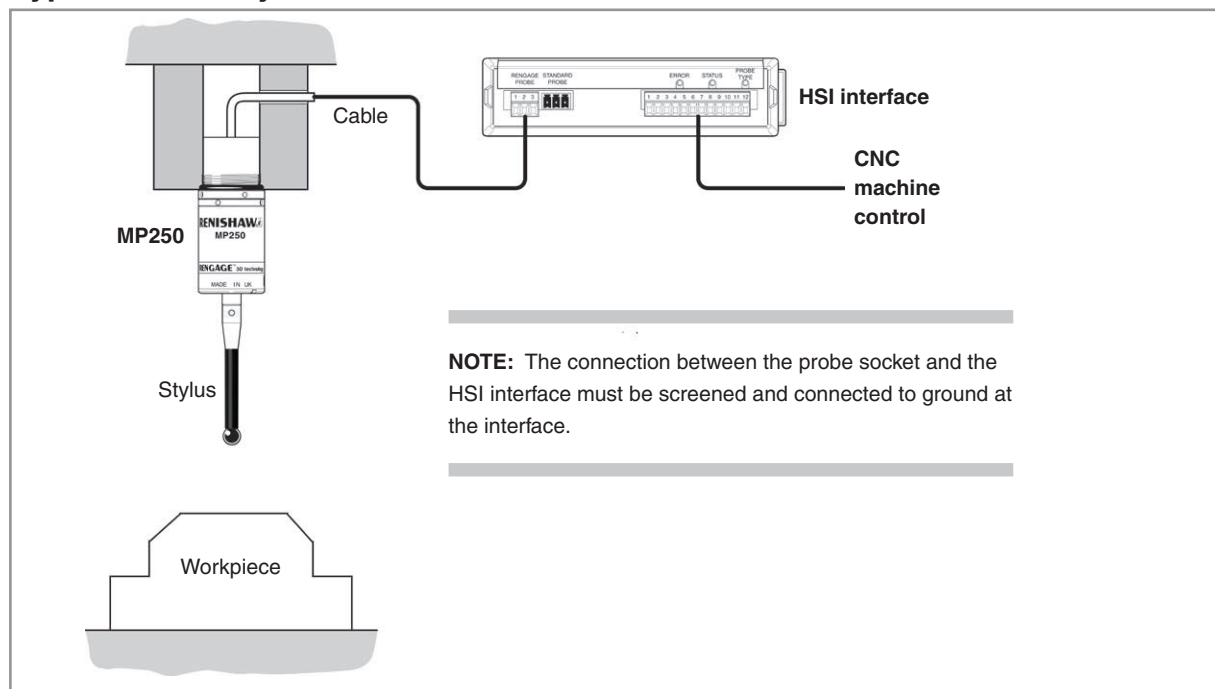
Note 5 These are the factory settings, manual adjustment is not possible.

For further information and the best possible application and performance support please contact Renishaw or visit www.renishaw.com/mp250

MP250 dimensions



Typical MP250 system



Spare parts and accessories

A full range of spare parts and accessories is available.
 Please contact Renishaw for a full list.

**For worldwide contact details, please visit our
 main website at www.renishaw.com/contact**

