

# MP250



[www.renishaw.com/mp250](http://www.renishaw.com/mp250)

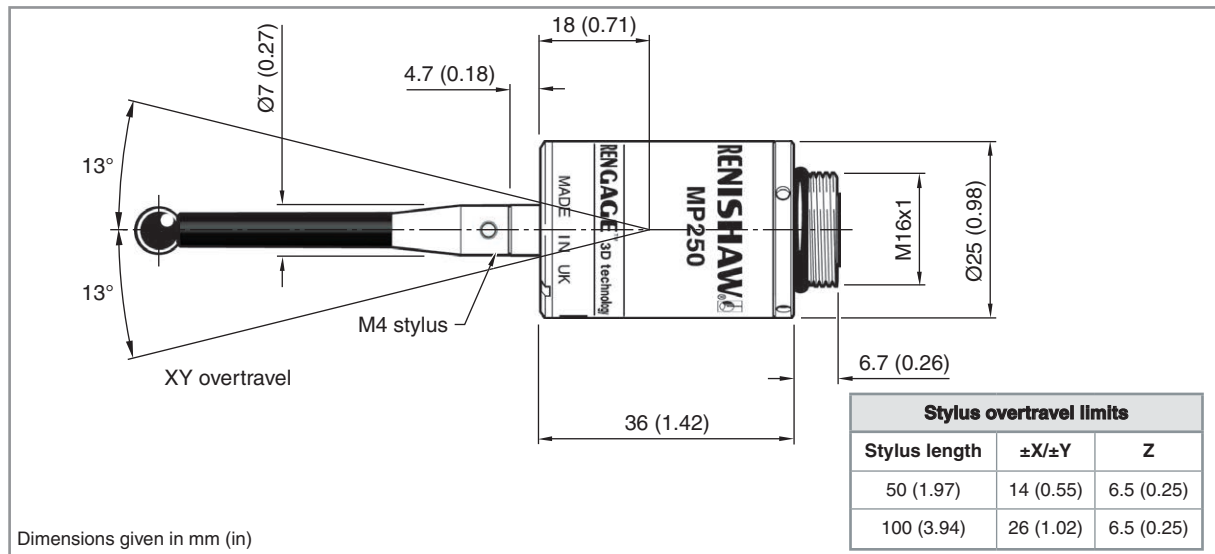
## Specification

<b>Principal application</b>	Workpiece inspection and job set-up on CNC grinders.	
<b>Transmission type</b>	Hard-wired transmission	
<b>Compatible interfaces</b>	HSI and HSI-C	
<b>Recommended styli</b>	High modulus carbon fibre, lengths 50.0 mm (1.97 in) or 100.0 mm (3.94 in).	
<b>Weight</b>	64 g (2.26 oz)	
<b>Sense directions</b>	±X, ±Y, +Z	
<b>Unidirectional repeatability</b>	0.25 µm (10.00 µin) 2σ – 35 mm stylus length (see note 1)	
<b>X, Y (2D) form measurement deviation</b>	±0.25 µm (10.00 µin) – 35 mm stylus length (see note 1)	
<b>X, Y, Z (3D) form measurement deviation</b>	±1.00 µm (40.00 µin) – 35 mm stylus length (see note 1)	
<b>Stylus trigger force</b>		
<b>XY plane (typical minimum)</b>	0.08 N, 8.0 gf (0.29 ozf) (see notes 2 and 5)	
<b>+Z direction (typical minimum)</b>	2.25 N, 229.0 gf (8.09 ozf) (see notes 2 and 5)	
<b>Stylus overtravel force</b>		
<b>XY plane (typical minimum)</b>	0.70 N, 71.3 gf (2.52 ozf) (see notes 3 and 5)	
<b>+Z plane (typical minimum)</b>	5.0 N, 510 gf (18.0 ozf) (see notes 4 and 5)	
<b>Minimum probing speed</b>	3 mm/min (0.12 in/min)	
<b>Environment</b>	<b>IP rating</b>	IPX8 BS EN 60529:1992 + A2 2013 (IEC 60529:1989+AMD1:1999+AMD2:2013)
	<b>Storage temperature</b>	–25 °C to +70 °C (–13 °F to +158 °F)
	<b>Operating temperature</b>	+5 °C to +55 °C (+41 °F to +131 °F)

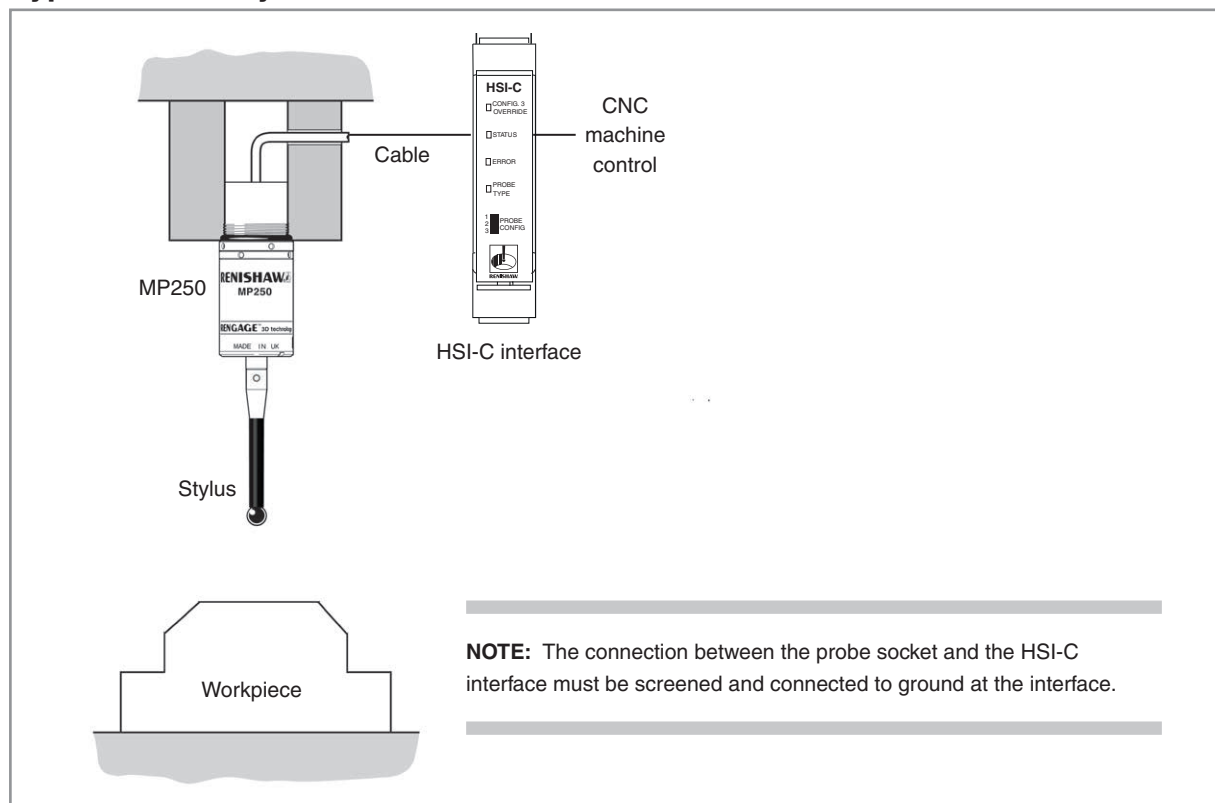
- Note 1 Performance specification is for a test velocity of 240 mm/min (9.45 in/min) using a 35 mm stylus. Significantly higher velocity is possible depending on application requirements.
- Note 2 Trigger force, which is critical in some applications, is the force exerted on the component by the stylus when the probe triggers. The maximum force applied will occur after the trigger point i.e. overtravel. The force value depends on related variables including measuring speed and machine deceleration. RENEGAGE equipped probes offer ultra low trigger forces.
- Note 3 Stylus overtravel force in XY plane occurs 50.0 µm (1968.50 µin) after the trigger point and rises by 0.12 N/mm, 12 gf/mm (0.02 ozf/in) until the machine tool stops (in the high force direction).
- Note 4 Stylus overtravel force in +Z direction occurs 1.0 µm (39.37 µin) after the trigger point and rises by 0.6 N/mm, 61 gf/mm (0.08 ozf/in) until the machine tool stops.
- Note 5 These are the factory settings, applicable when used with the HSI-C interface, level 2 default configuration for general usage, using a 50 mm stylus.

For further information and the best possible application and performance support please contact Renishaw or visit [www.renishaw.com/mp250](http://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,  
 visit [www.renishaw.com/contact](http://www.renishaw.com/contact)**

