

RMP40 radio machine probe



www.renishaw.com/rmp40

Specification

Principal application		Workpiece inspection and job set-up on machining centres and multi-tasking machines.
Transmission type		Frequency hopping spread spectrum (FHSS) radio Radio frequency 2400 MHz to 2483.5 MHz
Radio approval regions		China, Europe (all countries within the European Union), Japan and USA. For details about other regions, please contact Renishaw.
Compatible interfaces		RMI and RMI-Q
Operating range		Up to 15 m (49.2 ft)
Recommended styli		Ceramic, lengths 50 mm (1.97 in) to 150 mm (5.91 in)
Weight without shank (including batteries)		250 g (8.81 oz)
Switch-on/switch-off options		Radio on → Radio off or timer off Spin on → Spin off or timer off
Battery life (2 × ½ AA 3.6 V lithium-thionyl chloride)	Standby life	290 days maximum, dependent on switch-on/switch-off option.
	Continuous use	450 hours maximum, dependent on switch-on/switch-off option.
Sense directions		±X, ±Y, +Z
Unidirectional repeatability		1.00 µm (40 µin) 2σ (see note 1)
Stylus trigger force (see notes 2 and 3)		
XY low force		0.50 N, 51 gf (1.80 ozf)
XY high force		0.90 N, 92 gf (3.24 ozf)
+Z direction		5.85 N, 597 gf (21.04 ozf)
Sealing		IPX8 (EN/IEC 60529)
Operating temperature		+5 °C to +55 °C (+41 °F to +131 °F)

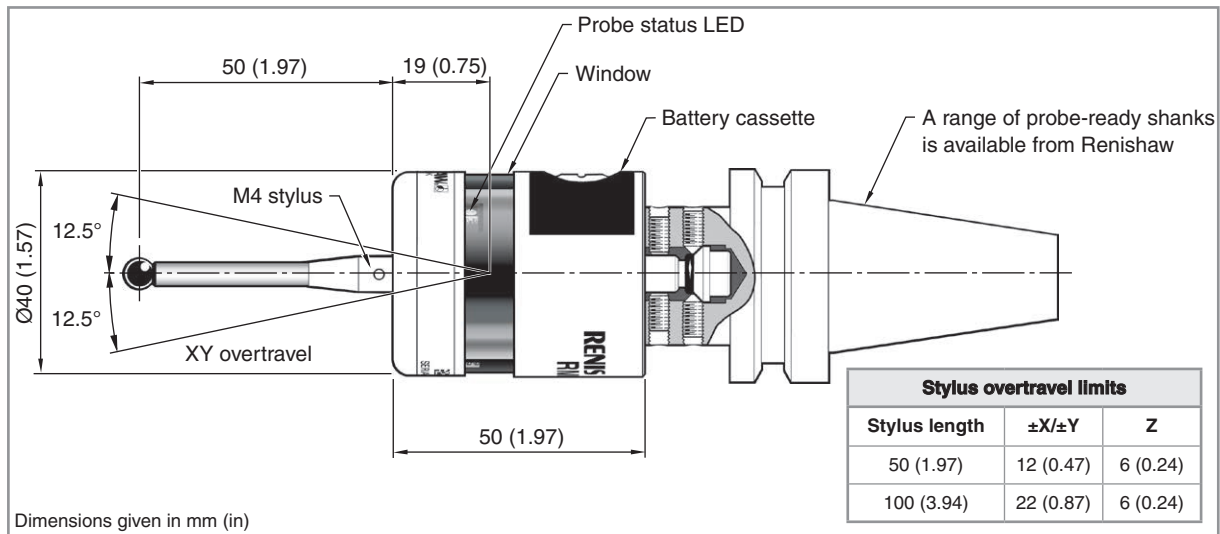
Note 1 Performance specification is tested at a standard test velocity of 480 mm/min (18.9 in/min) with a 50 mm stylus. Significantly higher velocity is possible depending on application requirements.

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 (overtravel). The force value depends on related variables including measuring speed and machine deceleration.

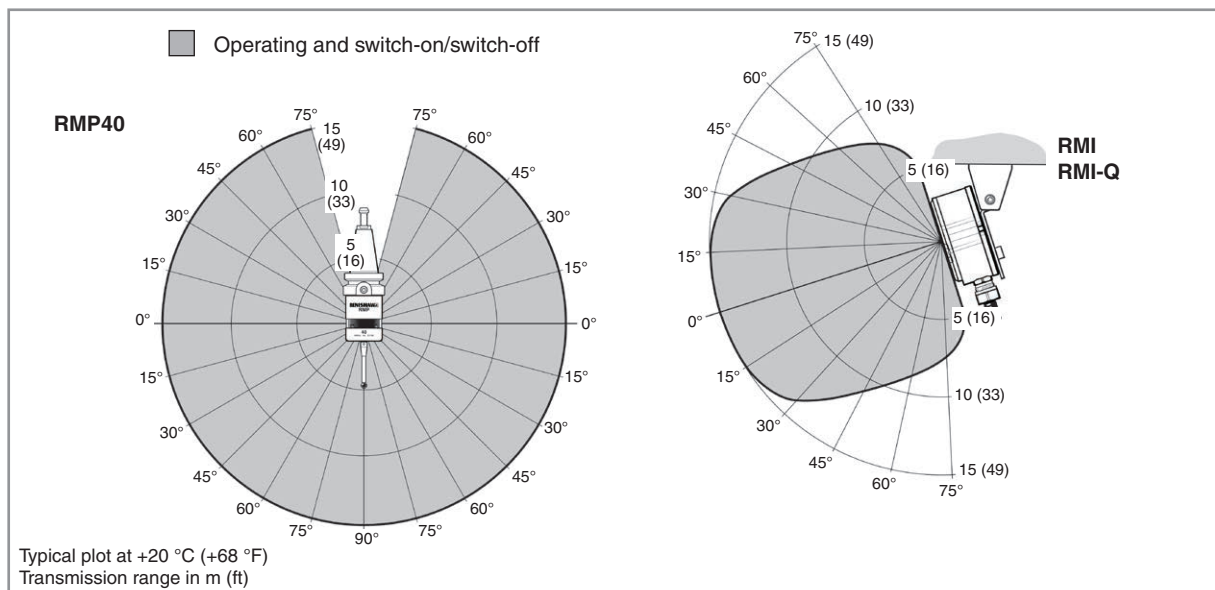
Note 3 These are the factory settings, manual adjustment is not possible.

For further information and the best possible application and performance support please contact Renishaw or visit
www.renishaw.com/rmp40

RMP40 dimensions



RMP40 performance envelope



Spare parts and accessories

A full range of spare parts and accessories is available. Please contact Renishaw for a full list. For a full range of modular accessories that can be used with the RMP40 radio probe, refer to data sheet H-2187-8200.

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