

RMP40 radio machine probe



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	UK, EU, EFTA, Japan and USA (China exempt). For details about other regions, 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 (8.82 oz)
Switch-on / switch-off options	Radio on Spin on	Radio off or timer off Spin off or timer off
Battery life (2 x ½AA 3.6 V lithium-thionyl chloride)	Standby life	290 days maximum, dependent on switch-on / switch-off option.
	Continuous life	450 hours maximum, dependent on switch-on / switch-off option.
Sense directions	Omni-directional ±X, ±Y, +Z	
Unidirectional repeatability	1.00 µm (40 µin) 2σ ¹	
Stylus trigger force ^{2,3} XY low force XY high force +Z direction	0.50 N, 51 gf (1.80 ozf) 0.90 N, 92 gf (3.24 ozf) 5.85 N, 597 gf (21.04 ozf)	
Environment	IP rating	IPX8, BS EN 60529:1992+A2:2013
	IK rating (RMP40) (typical)	IK01 (EN/IEC 62262: 2002) [for glass window]
	IK rating (RMP40M) (typical)	IK02 (EN/IEC 62262: 2002) [for glass window]
	Storage temperature	-25 °C to +70 °C (-13 °F to +158 °F)
	Operating temperature	+5 °C to +55 °C (+41 °F to +131 °F)

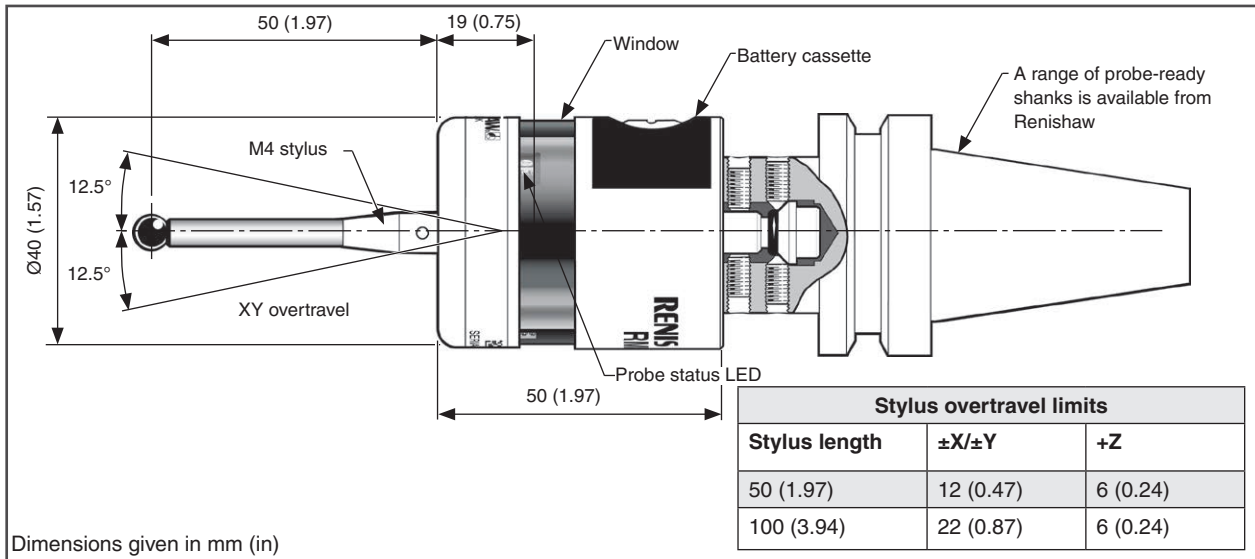
¹ Performance specification is tested at a standard test velocity of 480 mm/min (18.9 in/min) with a 50 mm stylus. Significantly higher velocity is possible depending on application requirements.

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, machine deceleration and system latency.

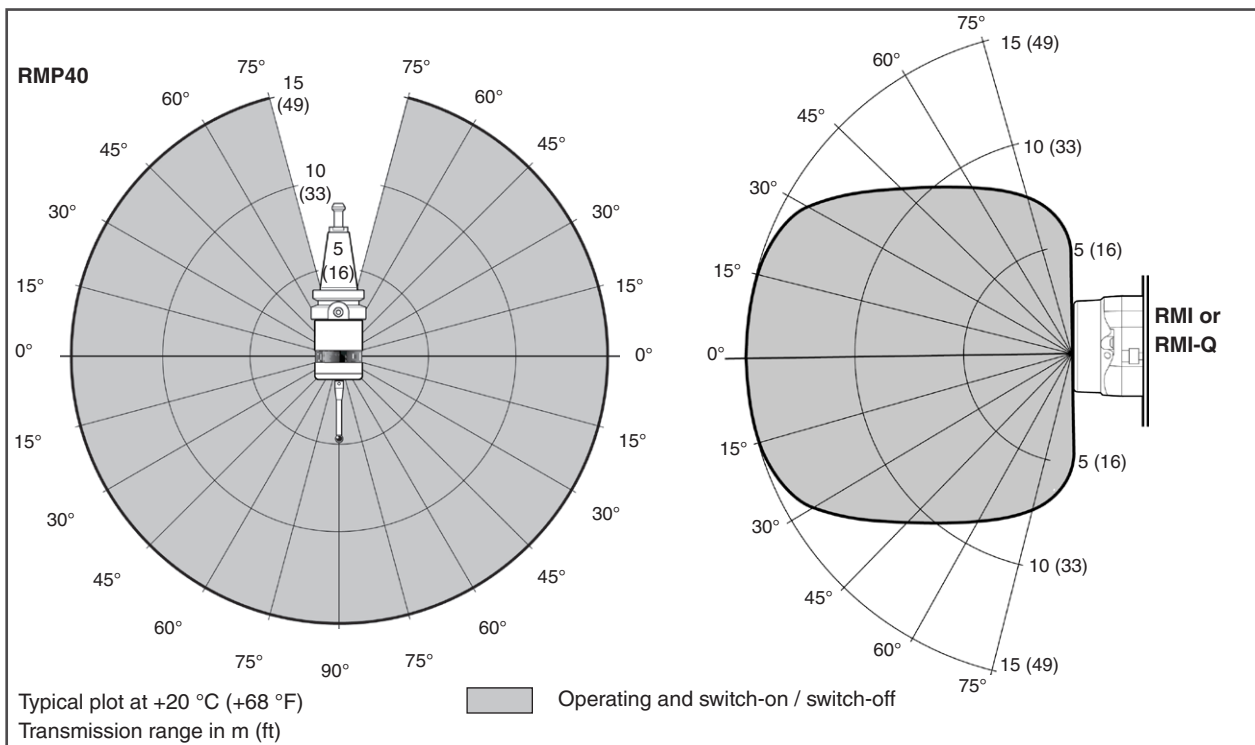
³ These are the factory settings, manual adjustment is not possible.

For further information and the best possible application and performance support, 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. Contact Renishaw for a full list.

www.renishaw.com/rmp40

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