

# RMP40 (QE) radio machine probe



## Specification

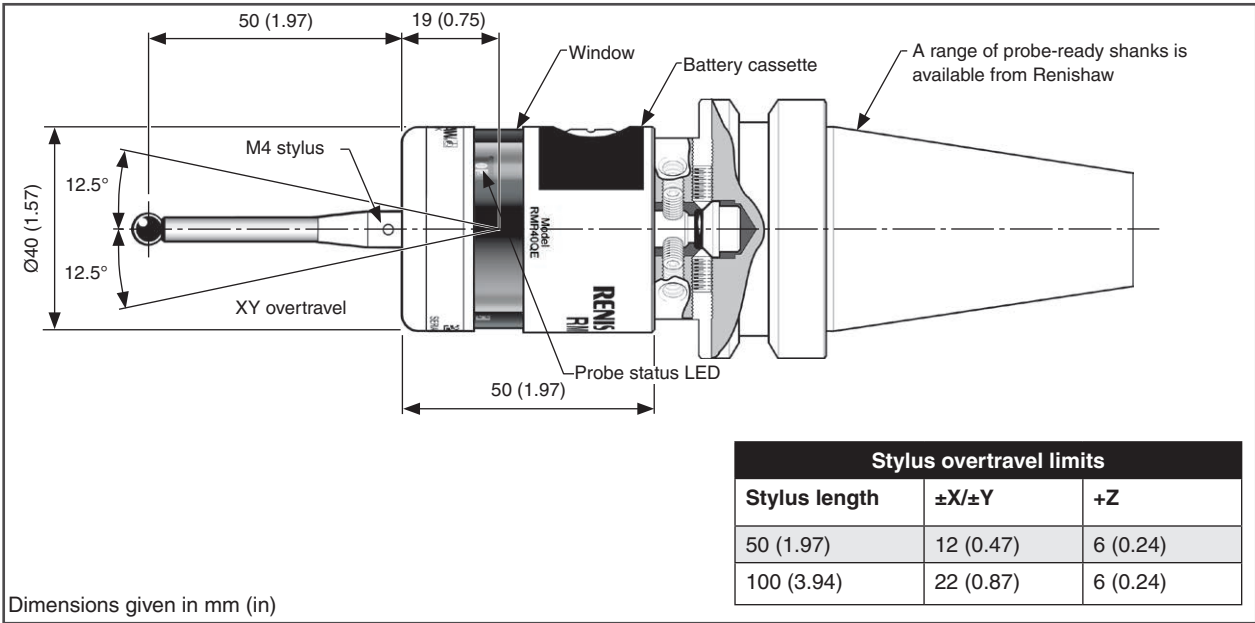
<b>Principal application</b>		Workpiece inspection and job set-up on machining centres and multi-tasking machines.
<b>Weight without shank</b> (including batteries)		250 g (8.82 oz)
<b>Transmission type</b>		Frequency-hopping spread spectrum (FHSS) radio Radio frequency 2400 MHz to 2483.5 MHz
<b>Radio approval regions</b>		UK, EU, EFTA, Japan and USA (China exempt). For details about other regions, contact Renishaw.
<b>Compatible interfaces</b>		RMI-Q or RMI-QE combined antenna, interface and receiver unit.
<b>Operating range</b>		Up to 15 m (49.2 ft)
<b>Recommended styli</b>		Ceramic, lengths 50 mm (1.97 in) to 150 mm (5.91 in)
<b>Switch-on / switch-off options</b>		Radio on $\longrightarrow$ Radio off or timer off Spin on $\longrightarrow$ Spin off or timer off
<b>Battery life</b> (2 × ½AA 3.6 V lithium-thionyl chloride)	Standby life	82 months maximum, dependent on switch-on / switch-off option.
	Continuous life	2560 hours maximum, dependent on switch-on / switch-off option.
<b>Sense directions</b>		±X, ±Y, +Z
<b>Unidirectional repeatability</b>		1.00 µm (40 µin) 2σ <sup>1</sup>
<b>Stylus trigger force</b> <sup>2,3</sup> 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)
<b>Stylus overtravel</b>		XY plane ±12.5° +Z plane 6 mm (0.24 in)
<b>Environment</b>		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)
		Indoor/outdoor use Indoor use
		Altitude <3000 m
		Relative humidity 5% to 95%
		Wet location Yes, water/oil/coolant
		Pollution degree Level 2

<sup>1</sup> 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.

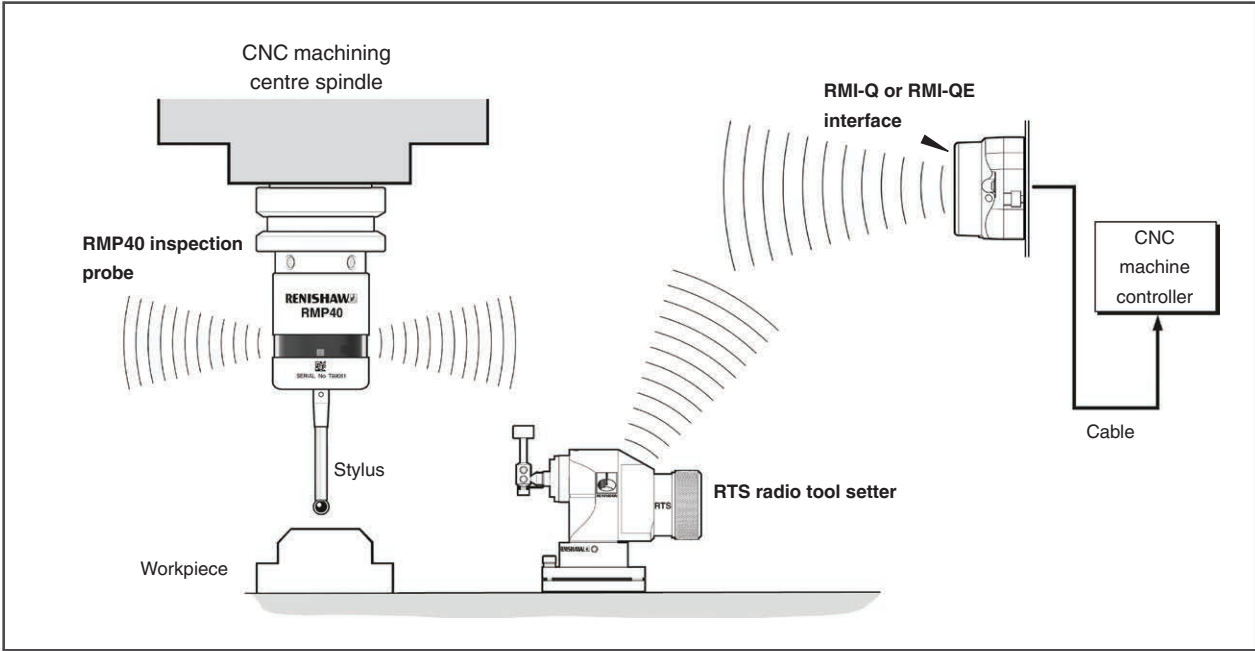
<sup>2</sup> Trigger force, which is critical in some applications, is the force exerted on the component by the stylus when the probe triggers. The maximum force applied will occur after the trigger point (overtravel). The force value depends on related variables, including measuring speed, machine deceleration and system latency.

<sup>3</sup> These are the factory settings; manual adjustment is not possible.

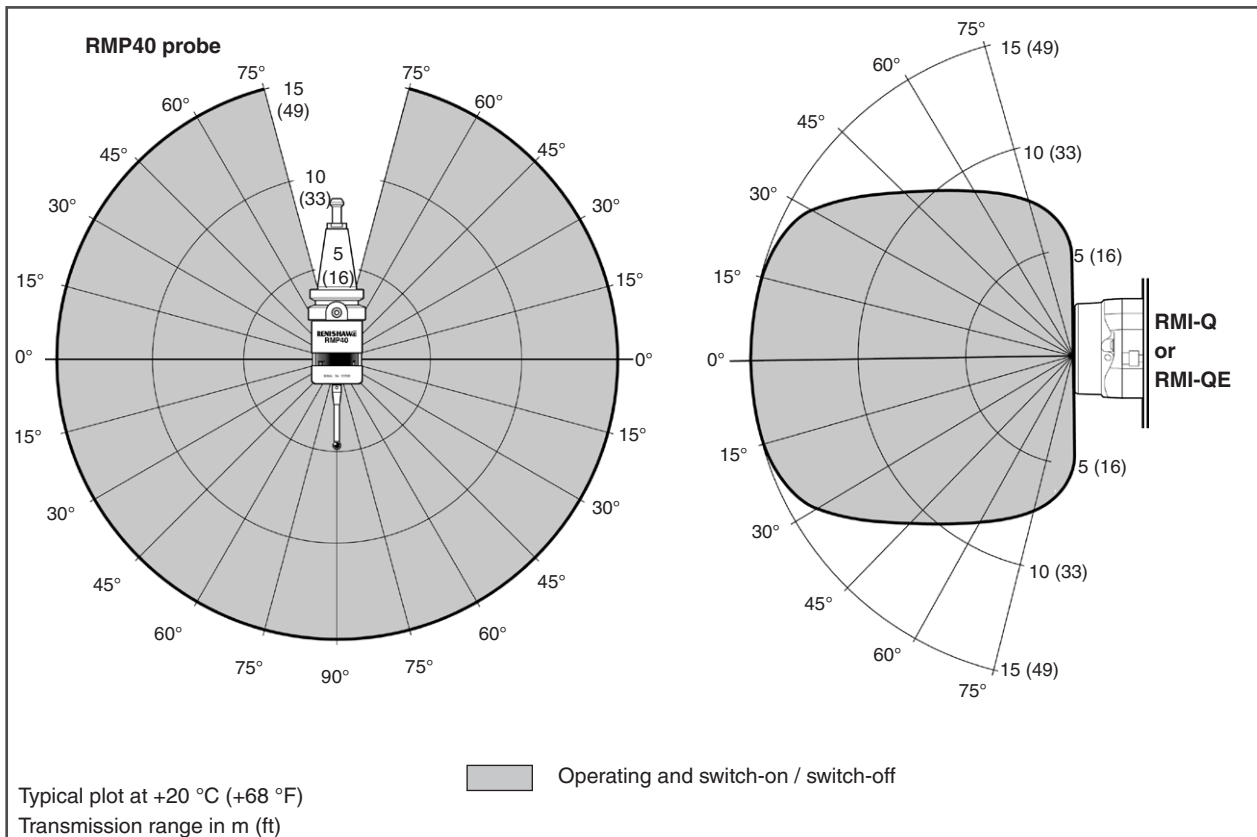
**RMP40 dimensions**



**Installing the RMP40 with a RMI-Q or RMI-QE**



## 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](http://www.renishaw.com/rmp40)

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Part no.: H-6588-8200-01-C

Issued: 04.2025