

# RLP40 radio lathe probe



[www.renishaw.com/rlp40](http://www.renishaw.com/rlp40)

## Specification

<b>Principal application</b>		Workpiece inspection and job set-up on multi-tasking machines and lathes.
<b>Transmission type</b>		Frequency hopping spread spectrum (FHSS) radio Radio frequency 2400 MHz to 2483.5 MHz
<b>Radio approval regions</b>		China, Europe (all countries within the European Union), Japan and USA. For details about other regions, please contact Renishaw.
<b>Compatible interfaces</b>		RMI and RMI-Q
<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>Weight without shank (including batteries)</b>		260 g (9.17 oz)
<b>Switch-on/switch-off options</b>		Radio on → Radio off or timer off Spin on → Spin off or timer off
<b>Battery life</b> (2 × ½ AA 3.6 V lithium-thionyl chloride)	<b>Standby life</b>	290 days maximum, dependent on switch-on/switch-off option.
	<b>Continuous use</b>	450 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 (see note 1)
<b>Stylus trigger force (see notes 2 and 3)</b>		
XY low force		0.40 N, 41 gf (1.44 ozf)
XY high force		0.80 N, 82 gf (2.88 ozf)
+Z direction		5.30 N, 540 gf (19.06 ozf)
<b>Sealing</b>		IPX8 (EN/IEC 60529)
<b>Operating temperature</b>		+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.

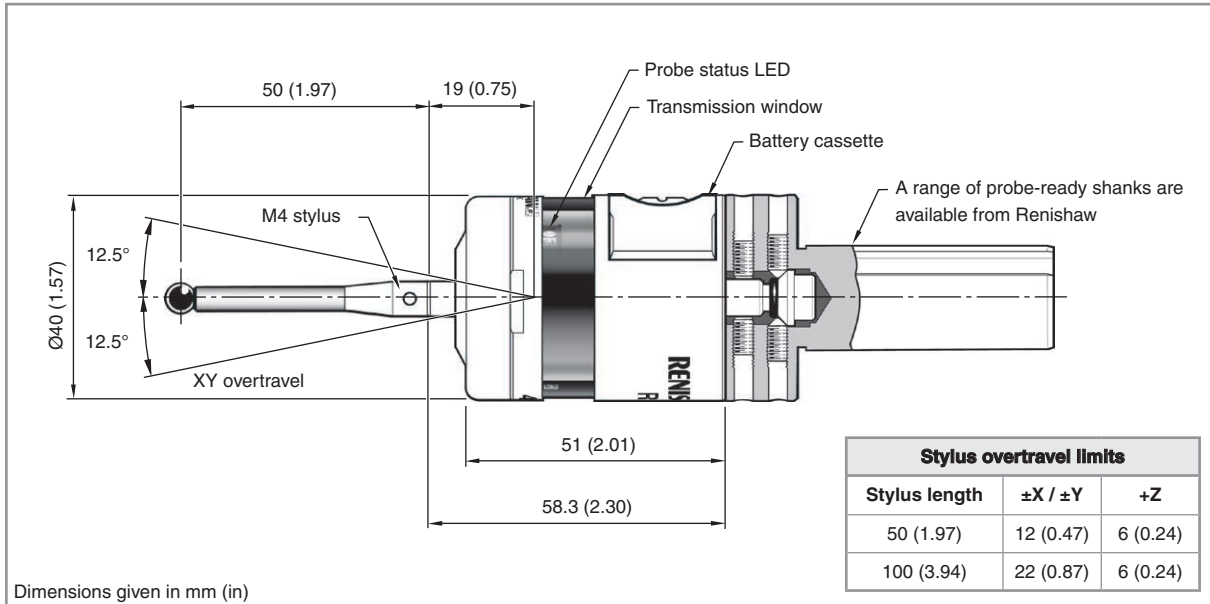
Note 2 Trigger force, which is critical in some applications, is the force exerted on the component by the stylus when the probe triggers. The maximum force applied will occur after the trigger point (overtravel). The force value depends on related variables including measuring speed and machine deceleration.

Note 3 These are the factory settings, manual adjustment is possible. For more details, please refer to the *RLP40 installation guide* (Renishaw part no. H-5627-8504).

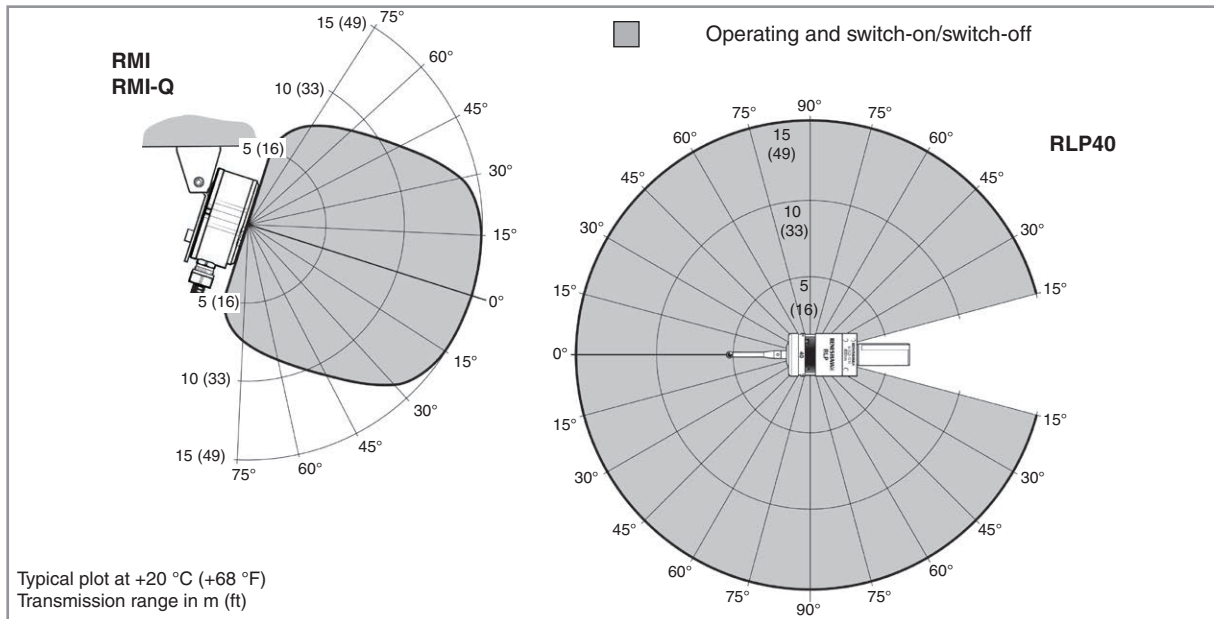
For further information and the best possible application and performance support please contact Renishaw or visit

[www.renishaw.com/rlp40](http://www.renishaw.com/rlp40)

## RLP40 dimensions



## RLP40 performance envelope



## 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](http://www.renishaw.com/contact)**

