

RMP60 (QE) radio machine probe



Specification

Principal application		Workpiece inspection and job set-up on multi-tasking machines, machining centres and gantry machining centres.		
Weight without shank (including batteries)		876 g (30.90 oz)		
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-Q or RMI-QE combined interface and receiver unit.		
Operating range		Up to 15 m (49.2 ft)		
Recommended styli		Ceramic, lengths 50 mm (1.97 in) to 150 mm (5.91 in)		
Switch-on / switch-off options		Radio on Spin on Shank switch on	→ Radio off or timer off → Spin off or timer off → Shank switch off	
Battery life	Standby life	101 months maximum, dependent on switch-on / switch-off option.		
(2 × AA 3.6 V lithium-thionyl chloride)	Continuous life	4870 hours maximum, dependent on switch-on / switch-off option.		
Sense directions		±X, ±Y, +Z		
Unidirectional repeatability		1.00 μm (40 μin) 2σ ¹		
Stylus trigger force ²³ XY low force XY high force +Z		0.75 N, 76 gf (2.70 ozf) 1.40 N, 143 gf (5.04 ozf) 5.30 N, 540 gf (19.06 ozf)		
Maximum setting: XY low force XY high force +Z		2.00 N, 204 gf (7.19 ozf) 3.50 N, 357 gf (12.59 ozf) 14.00 N, 1428 gf (50.36 ozf)		
Minimum setting: XY low force XY high force +Z		0.50 N, 51 gf (1.80 ozf) 0.90 N, 92 gf (3.24 ozf) 3.50 N, 357 gf (12.59 ozf)		
Stylus overtravel		XY plane +Z plane	±18° 11 mm (0.43 in)	

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.



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.

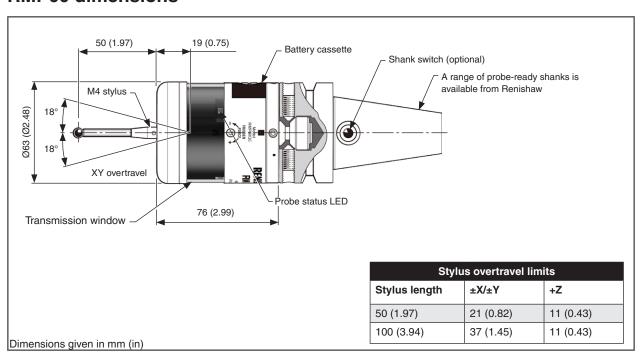
Tests carried out using a 50 mm stylus.



Specification (continued)

Environment	IP rating	IPX8, BS EN 60529:1992+A2:2013 (IEC 60529:1989+A1:1999+A2:2013)
	IK rating	IK01 (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

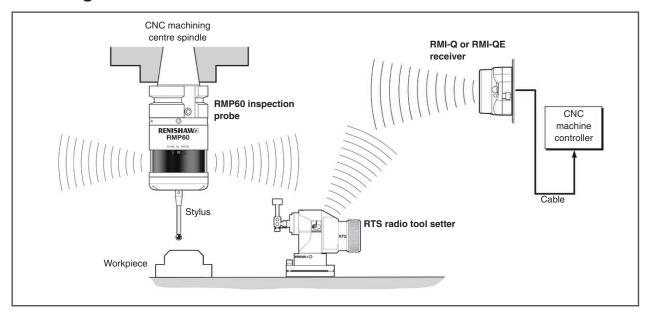
RMP60 dimensions



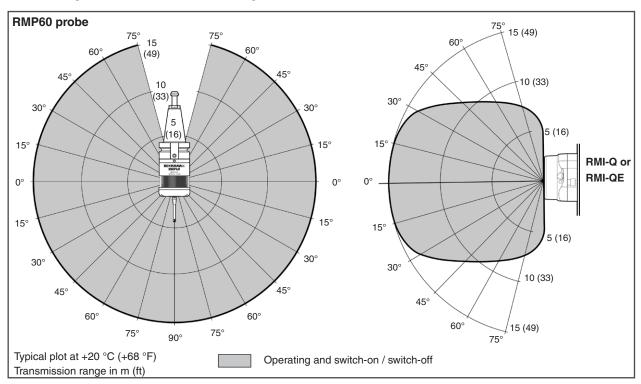
2 www.renishaw.com/rmp60



Installing the RMP60 with a RMI-Q or RMI-QE



RMP60 performance envelope



Spare parts and accessories

A full range of spare parts and accessories is available. Contact Renishaw for a full list.

