

RMP24-micro radio machine probe



Specification

Principal application	Workpiece inspection and job set-up on small machining centres and multi-tasking machines	
Dimensions	Length	31.4 mm (1.24 in)
	Diameter	24 mm (0.94 in)
Weight (without shank)	With batteries	36.5 g (1.28 oz)
	Without batteries	32.5 g (1.14 oz)
Transmission type	Frequency hopping spread spectrum (FHSS) radio	
Radio frequency	2400 MHz to 2483.5 MHz	
Switch-on / Switch-off options	Radio on	→ Radio off
Typical battery life 2 × CR1632 lithium manganese dioxide (Li/MnO ₂)	Standby life	5.0 months
	Continuous life	228 hours
Spindle speed (maximum)	1000 r/min	
Recommended styli	Steel, lengths 10 mm (0.39 in) to 30 mm (1.18 in)	
Operating range	Up to 5 m (16.4 ft)	
Receiver/interface	RMI-QE combined antenna, interface and receiver unit	
Sense directions	Omni-directional ±X, ±Y, ±Z	
Unidirectional repeatability	0.35 µm (14 µin) 2σ ¹	
Stylus trigger force ^{2,3} XY low force XY high force Z	XY low force	0.08 N, 8.2 gf (0.29 ozf)
	XY high force	0.14 N, 14.3 gf (0.50 ozf)
	Z	0.75 N, 76.5 gf (2.70 ozf)
Stylus overtravel	XY plane	±14°
	+Z plane	4 mm (0.16 in)
Environment ⁴	IP rating	IPX8, BS EN 60529:1992+A2:2013
	IK rating	IK02 BS EN IEC 62262: 2002
	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

¹ Performance specification is tested at a standard test velocity of 480 mm/min (18.89 in/min) with a 10 mm stylus. For best performance probing feedrates of up to 100 mm/min (3.94 in/min) and back-off feed of greater than 1000 mm/min (39.34 in/min) are recommended.

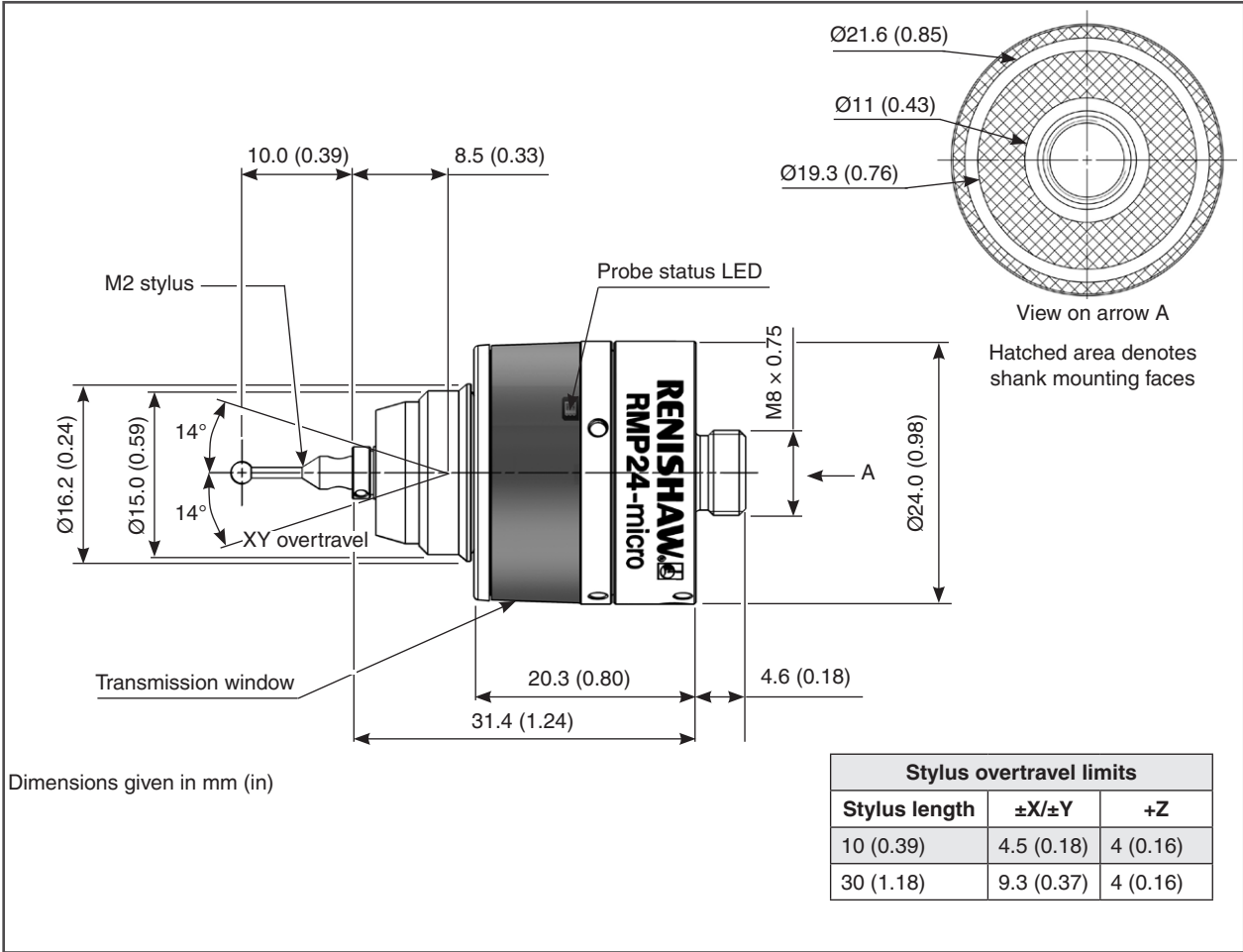
² Trigger force, which is critical in some applications, is the force exerted on the component by the stylus when the probe triggers. The maximum force applied will occur after the trigger point (overtravel). The force value depends on related variables including measuring speed, machine deceleration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

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

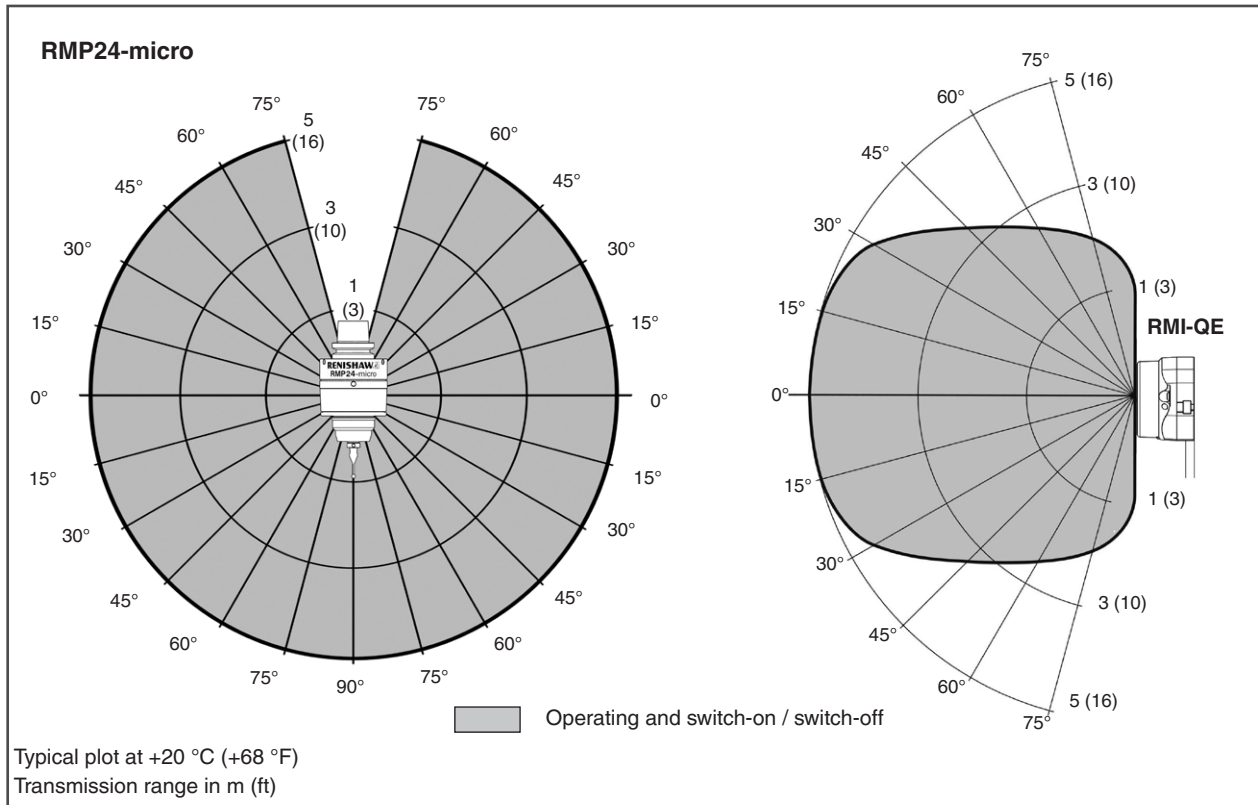
⁴ With the battery cap removed the sealing rating is not applicable.

For further information and the best possible application and performance support, contact Renishaw or visit www.renishaw.com/rmp24-micro

RMP24-micro dimensions



RMP24-micro 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/rmp24-micro

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Part no.: H-6906-8200-01-A
Issued: 05.2024