www.renishaw.com/rmp24-micro

RMP24-micro radio machine probe

Specification

| Principal application | Workpiece inspection and job set-up on small machining centres and multi-tasking machines | |
|---|---|--------------------------------------|
| Dimensions | Length Diameter | 31.4 mm (1.24 in) 24 mm (0.94 in) |
| Weight (without shank) | With batteries Without batteries | 36.5 g (1.28 oz) 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/MnO2) | 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 $\pm X$, $\pm Y$, $+Z$ | |
| Unidirectional repeatability | 0.35 μm (14 μin) 2σ ¹ | |
| Stylus trigger force ²³ XY low force XY high force Z | 0.08 N, 8.2 gf (0.29 ozf) 0.14 N, 14.3 gf (0.50 ozf) 0.75 N, 76.5 gf (2.70 ozf) | |
| Stylus overtravel | XY plane +Z plane | ±14° 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 | <u>≤</u> 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



NISHAW





Ø21.6 (0.85) Ø11 (0.43) 10.0 (0.39) 8.5 (0.33) Ø19.3 (0.76) Probe status LED M2 stylus View on arrow A $M8 \times 0.75$ Hatched area denotes shank mounting faces RENISHAW. R. Ø16.2 (0.24) Ø24.0 (0.94) Ø15.0 (0.59) 0 14° 14 XY overtrave 4.6 (0.18) 20.3 (0.80) Transmission window 31.4 (1.24) Stylus overtravel limits Dimensions given in mm (in) Stylus length ±X/±Y +Z 10 (0.39) 4.5 (0.18) 4 (0.16) 30 (1.18) 9.3 (0.37) 4 (0.16)

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

📞 +44 (0) 1453 524524

wk@renishaw.com

© 2024 Renishaw plc. All rights reserved. This document may not be copied or reproduced in whole or in part, or transferred to any other media or language by any means, without the prior written permission of Renishaw.

RENISHAW® and the probe symbol are registered trade marks of Renishaw plc. Renishaw product names, designations and the mark 'apply innovation' are trade marks of Renishaw plc or its subsidiaries. Other brand, product or company names are trade marks of their respective owners.

WHILE CONSIDERABLE EFFORT WAS MADE TO VERIFY THE ACCURACY OF THIS DOCUMENT AT PUBLICATION, ALL WARRANTIES, CONDITIONS, REPRESENTATIONS AND LIABILITY, HOWSOEVER ARISING, ARE EXCLUDED TO THE EXTENT PERMITTED BY LAW. RENISHAW RESERVES THE RIGHT TO MAKE CHANGES TO THIS DOCUMENT AND TO THE EQUIPMENT, AND/OR SOFTWARE AND THE SPECIFICATION DESCRIBED HEREIN WITHOUT OBLIGATION TO PROVIDE NOTICE OF SUCH CHANGES.

Renishaw plc. Registered in England and Wales. Company no: 1106260. Registered office: New Mills, Wotton-under-Edge, Glos, GL12 8JR, UK.

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

#renishaw