



# RENISHAW SFM-B3 Surface Finish Probe Module Instructions

[Home](#) » [RENISHAW](#) » RENISHAW SFM-B3 Surface Finish Probe Module Instructions 



## SFM-B3 Surface Finish Probe Module Instructions



## Contents

- [1 SFM-B3 Surface finish probe module](#)
- [2 Features](#)
- [3 Typical applications](#)
- [4 Specification](#)
- [5 Documents / Resources](#)
  - [5.1 References](#)
- [6 Related Posts](#)

## SFM-B3 Surface finish probe module

### Enhanced access and inspection capability for integrated surface finish measurement

The SFP2 consists of a probe and a range of SFM modules that have been designed to suit the demands of specific parts and features encountered in a precision manufacturing environment. The probe and modules can be automatically interchanged with all other REVO® probe options, providing the flexibility to easily select the optimum tool to inspect a wide range of features. Each SFM module is its own mini-measuring device, incorporating Renishaw's proprietary scale and read head system, to transduce the motion of the stylus tip.



## Features

The B-series of modules feature a small skid which allows the stylus to be placed close to the edge of surfaces of interest. The modules can provide access into awkward to reach features.

## Typical applications

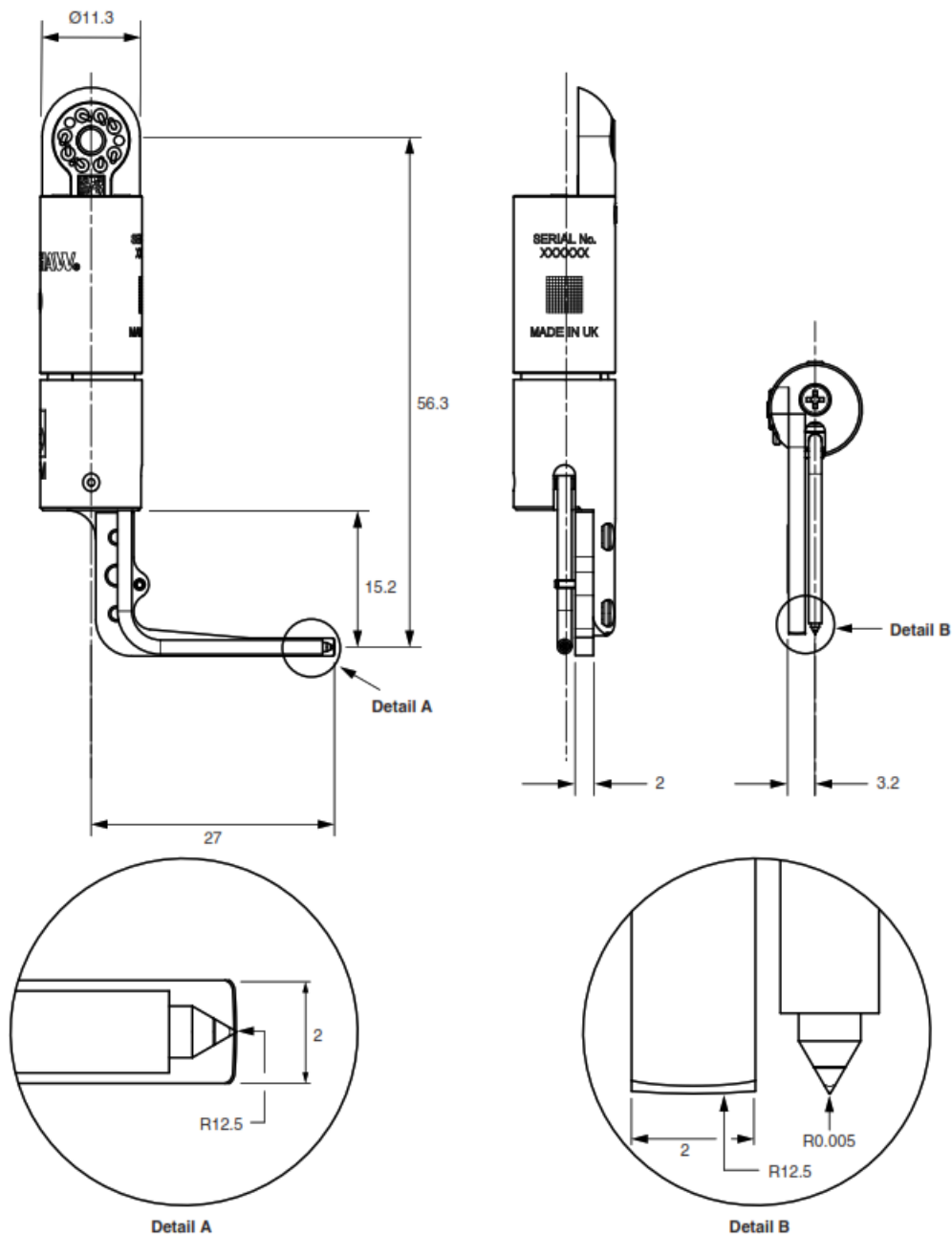
Undercuts and grooves.

## Specification

|   |                             |
|---|-----------------------------|
| Diamond tip radius (pm)                           | 5                           |
| Surface finish measurement range (pm)             | 6.3 to 0.10 Ra              |
| Typical surface finish accuracy (of nominal Ra) * | $\pm(10\% + 20 \text{ nm})$ |
| Skid / stylus arrangement                         | Side-by-side                |
| Skid material                                     | DLC coated stainless steel  |
| Nominal stylus tip protrusion beyond skid (mm)    | 0.5                         |
| Skid length / radius (mm)                         | 2 / 12.5                    |
| Skid width / radius (mm)                          | 2 / 12.5                    |
| Skid contact force (N)                            | 0.2                         |
| Stylus contact force (N)                          | 0.006                       |
| SFM / SFH knuckle adjustment range                | $\pm 90^\circ$              |
| Weight (g)  | 13                          |
| Resolution (nm)                                   | 1                           |
| Measurement speed (mm/s)                          | Up to 1                     |
| Stylus holder compatibility                       | SFH-1, SFH-2                |
| Lateral scanning capability                       | No                          |

\* Accuracy values are dependent upon a number of system variables. These include the machine size and configuration, scan orientation, condition of stylus tip, part fixturing system, and environmental noise.

**All dimensions in mm.**



[www.renishaw.com/SFP2](http://www.renishaw.com/SFP2)

#renishaw



+44 (0) 1453 524524



[uk@renishaw.com](mailto:uk@renishaw.com)

© 20192021 Renishaw plc. All rights reserved. RENISHAW® and the probe symbol are registered trademarks of Renishaw plc.

Renishaw product names, designations, and the mark 'apply innovation' are trademarks of Renishaw plc or its subsidiaries.

Other brands, products, or company names are trademarks of their respective owners.


Renishaw plc. Registered in England and Wales. Company no: 1106260.

Registered office: New Mills, Wotton-under-Edge, Glos, GL12 8JR, UK.

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.

Part no.: H-1000-2299-02-A

Issued: 10.2021



[RENISHAW SFM-B3 Surface Finish Probe Module](#) [pdf] Instructions  
SFM-B3, Surface Finish Probe Module, Finish Probe Module, Probe Module, SFM-B3, Module

References

-  [SFP2 surface finish probe for the REVOÂ® system](#)