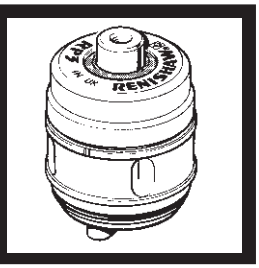
RENISHAW
apply innovation™

RP3 tool setting probe



Specification

Principal application	Manual and automatic tool setting arms on 2-axis and 3-axis lathes.	
Weight	80 g (2.82 oz)	
Transmission type	Hard-wired transmission	
Recommended styli	48.75 mm (1.92 in)	
Probe outputs	OEM kit including connection PCB	
Compatible interfaces	MI 8-4, TSI 2, TSI 2-C, TSI 3, TSI 3-C	
Sense directions	5-axis ±X, ±Y, +Z [1]	
Unidirectional repeatability	1.00 µm (40 µin) 2σ [2]	
Stylus trigger force [3] [4] XY low force XY high force +Z direction	 1.50 N, 153 gf (5.40 ozf) 3.50 N, 357 gf (12.59 ozf) 12.00 N, 1224 gf (43.16 ozf)	
Stylus overtravel	XY plane +Z plane	±9° 2 mm (0.08 in)
Environment	IP rating	IPX8, BS EN 60529:1992+A2:2013
	Storage temperature	–10 °C to +70 °C (+14 °F to +158 °F)
	Operating temperature	+5 °C to +55 °C (+41 °F to +131 °F)

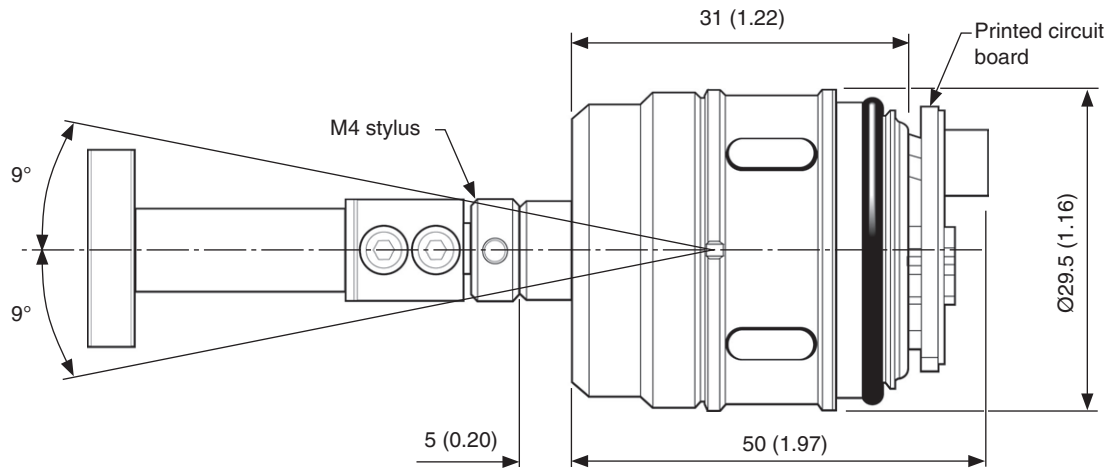
1 Where the RP3 is to be used in the probe's Z-axis (the lathe Y-axis), then a five-faced stylus is available to order from Styli and Fixturing.

2 Products Performance specification is tested at a standard test velocity of 480 mm/min (18.9 in/min) with a 35 mm stylus. Significantly higher velocity is possible depending on application requirements.

3 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.

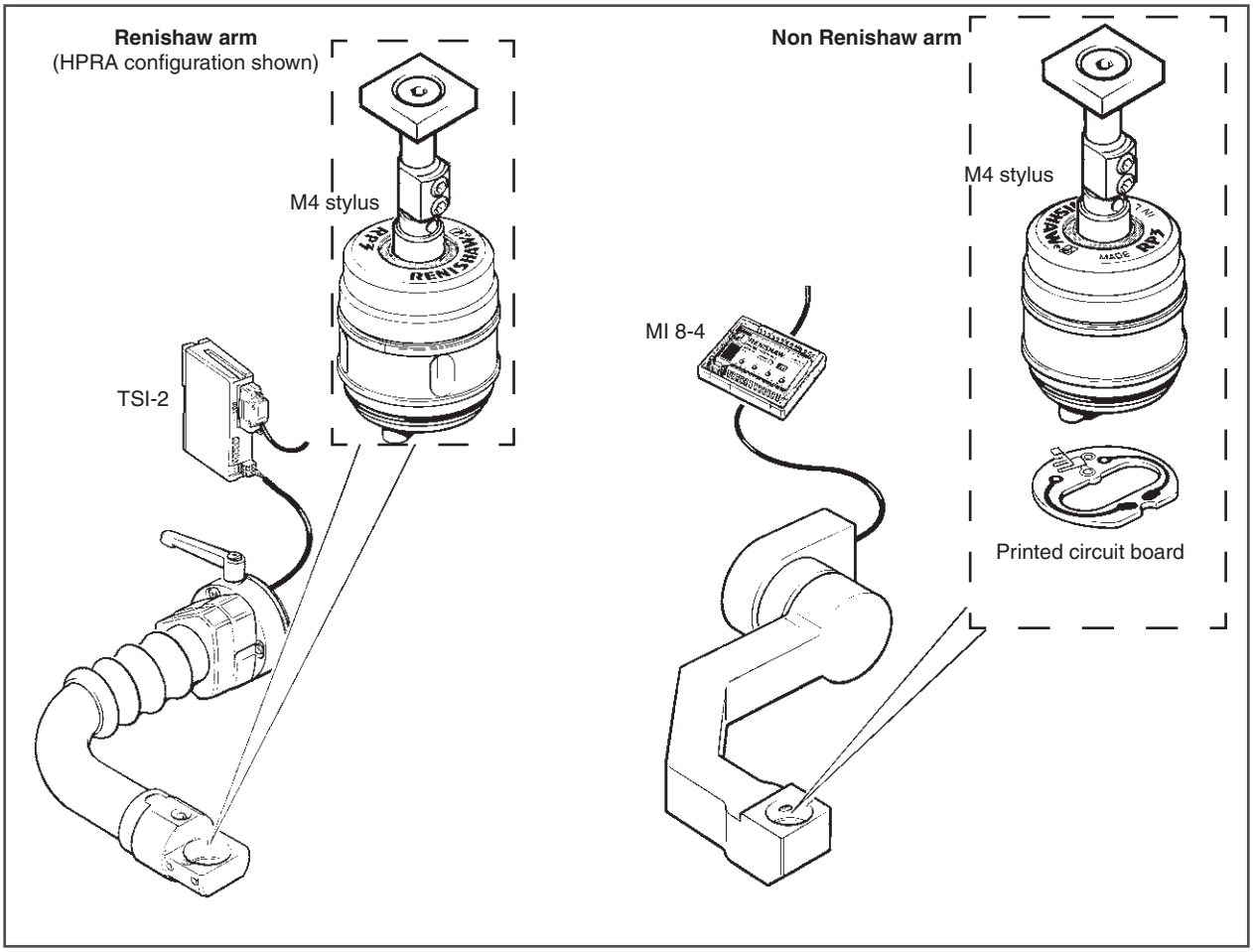
4 These are the factory settings; manual adjustment is not possible.

RP3 dimensions



Dimensions given in mm (in)

Installing the RP3

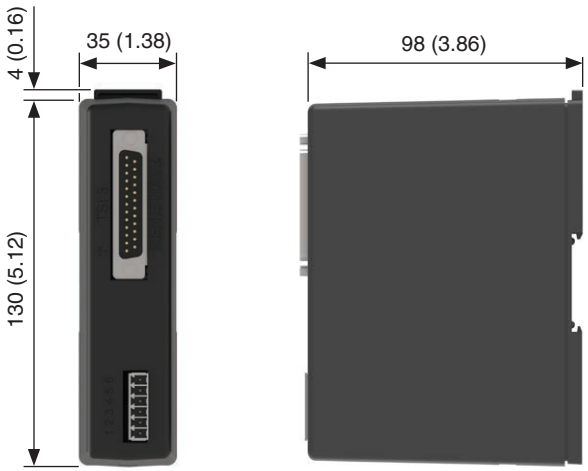


Interfaces

One of three types of interface must be used in conjunction with the RP3 probe kit.

TSI 3 and TSI 3-C dimensions

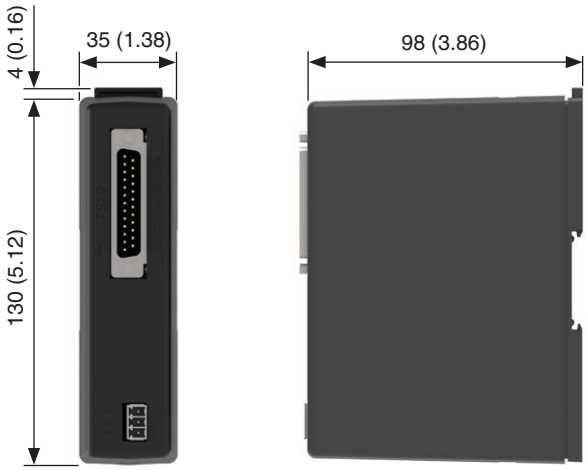
A TSI 3 interface unit must be used with the Renishaw HPMA.



Dimensions given in mm (in)

TSI 2 and TSI 2-C dimensions

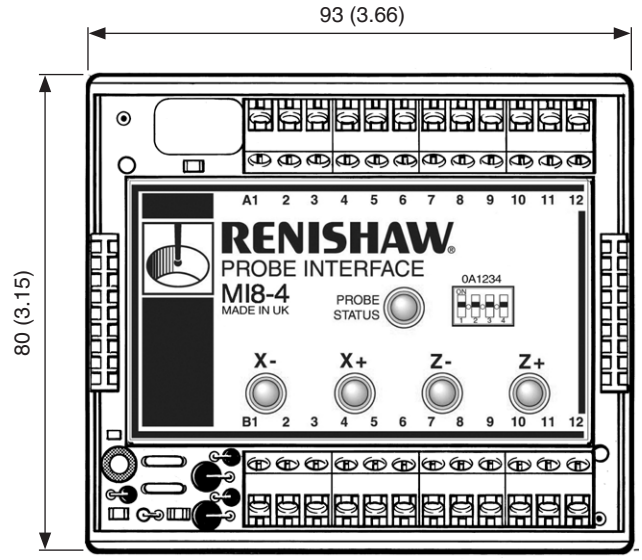
A TSI 2 interface unit must be used with the Renishaw HPRA or HPPA.



Dimensions given in mm (in)

MI 8-4 dimensions

A MI 8-4 interface unit must be used with any other type of arm.



Dimensions given in mm (in)

Spare parts and accessories

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

www.renishaw.com/rp3

#renishaw

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