RENISHAW
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LP2 modular probe system for tool setting and workpiece inspection



Specification

Variants		LP2 / LP2DD		LP2H / LP2HDD	
Principal application		Workpiece inspection and job set-up on all sizes of lathes, machining centres and CNC grinders.			
Transmission type		Hard-wired, or in conjunction with optical or radio transceiver modules			
Compatible interfaces	Hard-wired Optical Radio	HSI, HSI-C, MI 8-4, FS1i or FS2i OMI-2 / OMI-2T / OMI-2H / OSI or OSI-D with OMM-2 or OMM-2C RMI-Q / RMI-QE			
Recommended styli		50 mm (1.97 in) to 100 mm (3.94 in) Stylus material depends on application.		50 mm (1.97 in) to 150 mm (5.91 in) Stylus material depends on application.	
Weight		65 g (2.29 oz)			
Sense directions		±X, ±Y, +Z			
Unidirectional repeatability		1.00 µm (40 µin) 2σ [1]		2.00 µm (80 µin) 2σ [1]	
Stylus trigger force [2] [3] XY low force XY high force +Z direction		 0.50 N, 51 gf (1.80 ozf) 0.90 N, 92 gf (3.24 ozf) 5.85 N, 597 gf (21.04 ozf)		 2.00 N, 204 gf (7.19 ozf) 4.00 N, 408 gf (14.39 ozf) 30.00 N, 3059 gf (107.91 ozf)	
Maximum setting: XY low force XY high force +Z		 1.00 N, 102 gf (3.59 ozf) 1.85 N, 188 gf (6.65 ozf) 7.40 N, 754 gf (26.61 ozf)		Not applicable	
Minimum setting: XY low force XY high force +Z		 0.25 N, 25 gf (0.90 ozf) 0.50 N, 51 gf (1.80 ozf) 2.35 N, 239 gf (8.45 ozf)		Not applicable	
Stylus overtravel limits	Variant	LP2	LP2DD	LP2H	LP2HDD
	XY plane	14.87 mm (0.55 in) ±12.5°	19.06 mm (0.73 in) ±15°	14.87 mm (0.55 in) ±12.5°	19.06 mm (0.73 in) ±15°
	+Z plane	6.5 mm (0.26 in) 4.5 mm (0.18 in) when fitted with a swarf deflector		5.0 mm (0.20 in) 4.5 mm (0.18 in) when fitted with a swarf deflector	
Mounting		M16 thread, for LPE extension bars and adaptors.			
Environment	IP rating	IPX8, BS EN 60529:1992+A2:2013			
	Storage temperature	–25 °C to +70 °C (–13 °F to +158 °F)			
	Operating temperature	+5 °C to +55 °C (+41 °F to +131 °F)			

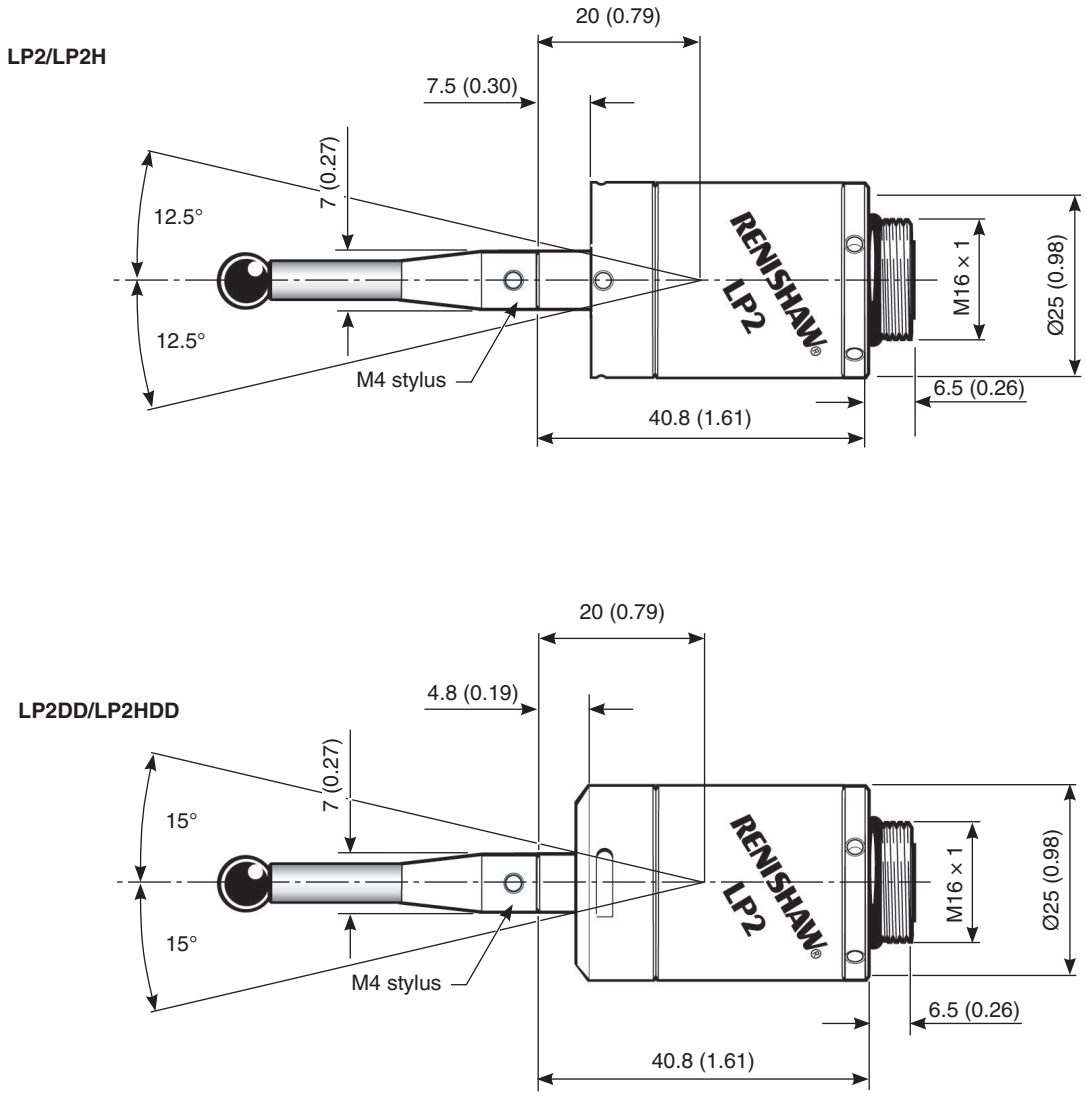
[1] Performance specification is tested at a standard test velocity of 480 mm/min (18.9 in/min) with a 35 mm stylus. Significantly higher velocity is possible depending on application requirements.

[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 latency.

[3] These are the factory settings, manual adjustment of the LP2/LP2DD is possible, but not possible on LP2H/LP2HDD.

For further information and the best possible application and performance support, contact Renishaw or visit **www.renishaw.com/lp2**

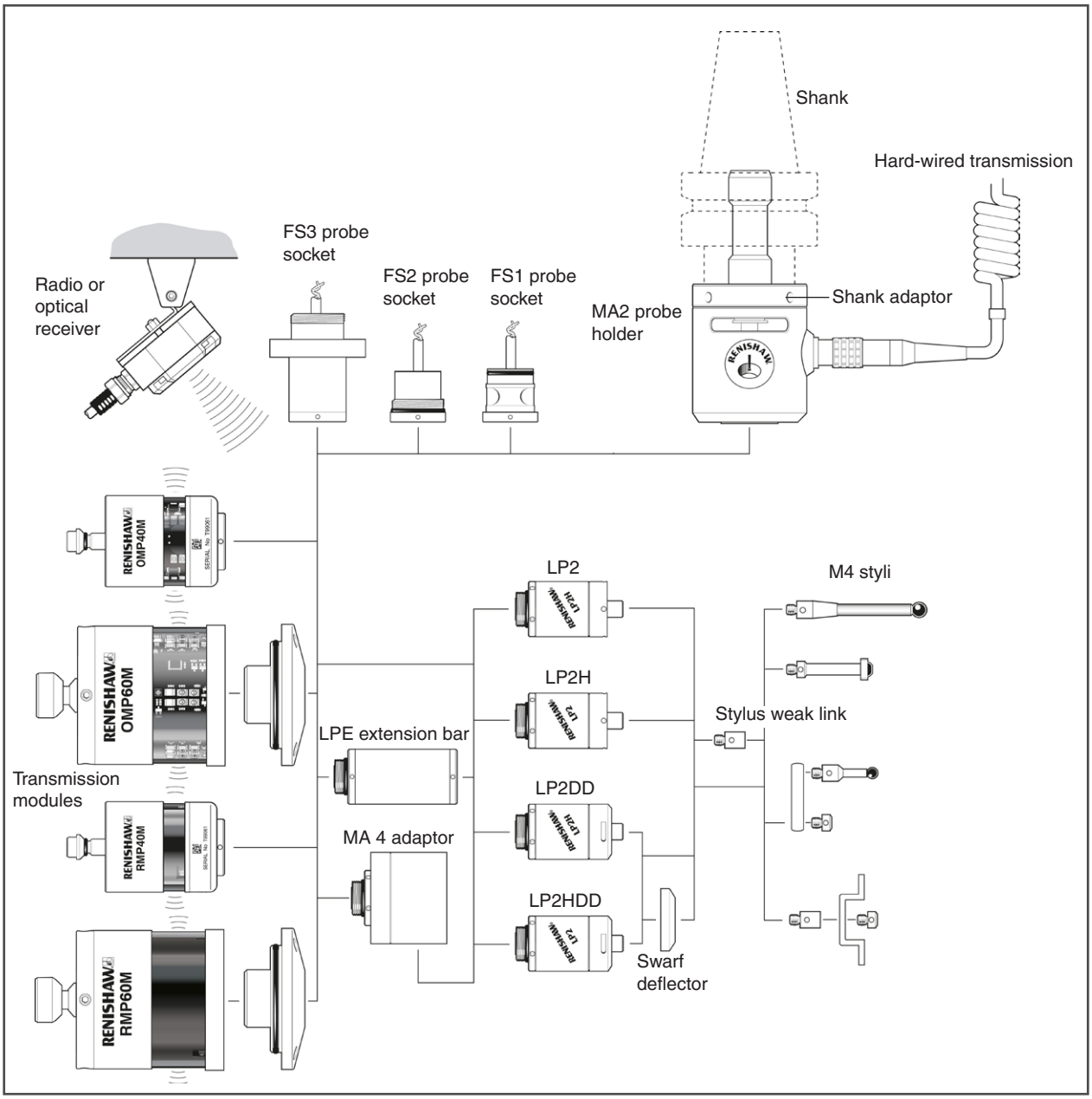
LP2 dimensions



Dimensions in mm (in)

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LP2 modular system



Spare parts and accessories

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

www.renishaw.com/lp2 **#renishaw**

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