

Fixturing for Keyence XM systems

Fixturing for hand-held CMM probing systems, made simple

Renishaw CMM fixtures can improve the throughput, reproducibility and accuracy of your inspection process by providing quick and repeatable fixturing set-ups for your components. Renishaw CMM fixtures are modular and can be expanded with your requirements to provide a complete fixturing solution for parts of almost any size, shape or material.

Build your fixturing solution

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Plate options

Recommended CMM fixture base plates

Parts are held securely using Renishaw's CMM fixture base plate and modular fixturing components, ensuring repeatability and reproducibility. Our CMM cast aluminium base plates are coated with Nituff® hard coat anodise to resist wear and scratching. Set-ups can be documented and repeated with accuracy using our alpha-numerically labelled base plates.

Additional M6, ¼-20 and M8 thread size plates are also available; please contact your local sales representative.

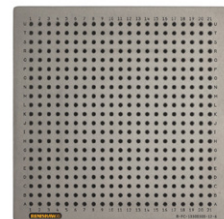
Keyence XM specific plates

Part number	Thread	Height	Width	Depth	Spacing
A-5874-1940	M6	13 mm	750 mm	300 mm	12.5 mm OC
A-5874-1942	M6	13 mm	600 mm	600 mm	12.5 mm OC
A-5874-1943	¼-20	0.50 in	24 in	12 in	0.50 in OC
A-5874-1939	¼-20	0.50 in	30 in	12 in	0.50 in OC
A-5874-1941	¼-20	0.50 in	24 in	24 in	0.50 in OC

N.B. all of the above plates will come with counterbored holes to mount to the XM stage.

The 600 mm × 600 mm and 24 in × 24 in plates are better suited for use with the XM-1200 and XM-T1200 machines.

M8 thread size plates are also available, please contact your local sales representative.



M6 300 mm × 300 mm
aluminium base plate

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Component set options

Recommended component sets

There are several component sets recommended for fixturing your parts on your base plate. Components with M6, M8 and ¼-20 thread sizes are all suitable for use with the Keyence XM system, however compatibility is dependant on your base plate thread size.

N.B. Additional M6, ¼-20 and M8 thread size component sets are also available; please contact your local sales representative.



¼-20 magnetic and clamping component set A:
R-FSC-MCA-20

Keyence CMM component sets

Part number	Thread	Description	Quantity
R-KFK-6			
R-S-1915-6	M6	19 mm dia. × 15 mm standoff	4
R-S-1925-6	M6	19 mm dia. × 25 mm standoff	4
R-S-1950-6	M6	19 mm dia. × 50 mm standoff	4
R-RCS-6	M6	Steel resting cone	4
R-AS-70-6	M6	70 mm long adjustable slide	5
R-CTT-64-70-6	M6	64 mm soft tip tension clamp, 70 mm post	5
R-BC10	N/A	Compartment box	1
R-KFK2-6			
R-S-1915-6	M6	19 mm dia. × 15 mm standoff	4
R-S-1925-6	M6	19 mm dia. × 25 mm standoff	4
R-S-1950-6	M6	19 mm dia. × 50 mm standoff	4
R-RCS-6	M6	Steel resting cone	6
R-AS-70-6	M6	70 mm long adjustable slide	6
R-CTT-64-70-6	M6	64 mm soft tip tension clamp, 70 mm post	6
R-BC10	N/A	Compartment box	1
R-KFK3-6			
R-S-2525-6	M6	25 mm dia. × 25 mm standoff	4
R-S-2550-6	M6	25 mm dia. × 50 mm standoff	4
R-RCS-6	M6	Steel resting cone	4
R-CTT-64-70-6	M6	64 mm soft tip tension clamp, 70 mm post	5
R-BC10	N/A	Compartment box	1

N.B. A Keyence specific kit with M8 thread size (R-KFK-8) is also available; please contact your local sales representative.

M6 CMM component sets

Part number	Description	Clamping (part no. R-FSC-CA-6)	Magnetic and clamping (part no. R-FSC-MCA-6)
R-S-1320-6	13 mm dia. × 20 mm standoff	3	3
R-S-1325-6	13 mm dia. × 25 mm standoff	3	3
R-S-1350-6	13 mm dia. × 50 mm standoff	3	3
R-S-1920-6	19 mm dia. × 20 mm standoff	3	3
R-S-1925-6	19 mm dia. × 25 mm standoff	3	3
R-S-1950-6	19 mm dia. × 50 mm standoff	3	3
R-S-2520-6	25 mm dia. × 20 mm standoff	3	3
R-S-2525-6	25 mm dia. × 25 mm standoff	3	3
R-S-2550-6	25 mm dia. × 50 mm standoff	3	3
R-SP-1325-6	13 mm dia. × 25 mm pin standoff	2	-
R-CT-40-30-6	40 mm tension clamp with 30 mm post	2	-
R-CT-64-70-6	64 mm tension clamp with 70 mm post	4	4
R-RCD-6	Delrin® resting cone	4	4
R-AJ-13-6	13 mm dia. adjustable jackstand	1	1
R-AS-45-6	45 mm long adjustable slide	1	1
R-AS-70-6	70 mm long adjustable slide	1	1
R-TC-500200	500 mm × 200 mm × 25 mm component tray	1	1
R-BC10	50 mm × 200 mm × 150 mm compartment box	1	1
R-M-13-6	13 mm dia. × 25 mm magnet	-	3
R-M-19-6	19 mm dia. × 25 mm magnet	-	3
R-M-25-6	25 mm dia. × 25 mm magnet	-	3
Total number of components in each set		44	49

1/4-20 CMM component sets

Part number	Description	Clamping (part no. R-FSC-CA-20)	Magnetic and clamping (part no. R-FSC-MCA-20)
R-S-5075-20	0.50 in dia. × 0.75 in standoff	3	3
R-S-501-20	0.50 in dia. × 1.0 in standoff	3	3
R-S-502-20	0.50 in dia. × 2.0 in standoff	3	3
R-S-7575-20	0.75 in dia. × 0.75 in standoff	3	3
R-S-751-20	0.75 in dia. × 1.0 in standoff	3	3
R-S-752-20	0.75 in dia. × 2.0 in standoff	3	3
R-S-175-20	1.0 in dia. × 0.75 in standoff	3	3
R-S-11-20	1.0 in dia. × 1.0 in standoff	3	3
R-S-12-20	1.0 in dia. × 2.0 in standoff	3	3
R-SP-501-20	0.50 in dia. × 1.0 in pin standoff	2	-
R-CT-160-125-20	1.6 in tension clamp with 1.25 in post	2	-
R-CT-250-275-20	2.5 in tension clamp with 2.75 in post	4	4
R-RCD-20	Delrin® resting cone	3	3
R-AJ-50-20	0.50 in dia. adjustable jackstand	1	1
R-AS-1-20	1.0 in long adjustable slide	1	1
R-AS-3-20	3.0 in long adjustable slide	1	1
R-M-50-20	0.50 in dia. × 1.0 in magnet	-	3
R-M-75-20	0.75 in dia. × 1.0 in magnet	-	3
R-M-1-20	1.0 in dia. × 1.0 in magnet	-	3
R-TC-500200	20 in × 8 in × 1 in component tray	1	1
R-BC10	8 in × 8 in × 2 in compartment box (not shown)	1	1
Total number of components in each set		42	47

Improve your inspection processes with Renishaw fixturing and styli

Renishaw offers a wide range of metrology fixturing components and styli available in imperial and metric thread sizes which will help to improve your inspection processes. Please contact your local sales representative or visit the Renishaw Web shop for full details at www.renishaw.com/shop

Recommended ruby ball styli for your Keyence XM system

Part number	A-5003-1325	A-5003-2932	A-5003-0054	A-5003-4793	A-5000-6731	A-5000-7555	A-5000-7557
Thread size	M2*	M4	M3**	M4	M4	M4	M4
Stem material	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Stainless steel	Stainless steel	Stainless steel
Ball dia. mm (in)	1.0 (0.04)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)
Length mm (in)	10.0 (0.40)	20.0 (0.79)	20.2 (0.80)	20.0 (0.79)	20.0 (0.79)	17.0 (0.67)	16.0 (0.63)
Stem dia. mm (in)	0.7 (0.028)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)	4.5 (0.18)	6.0 (0.24)

*If you require an M4 to M2 stainless steel stylus adaptor, please order part number A-5004-7595.

**If you require an M4 to M3 stainless steel stylus adaptor, please order part number A-5004-7597.

Recommended M4 stylus extensions for your Keyence XM system

Part number	A-5004-7599	A-5004-7600	A-5004-7601	A-5004-7602	A-5000-7754	A-5000-7755	A-5000-7727
Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Ceramic	Ceramic	Ceramic
Length mm (in)	10.0 (0.40)	15.0 (0.60)	20.0 (0.79)	30.0 (1.19)	30.0 (1.19)	50.0 (1.97)	100.0 (3.94)
Stem dia. mm (in)	7.0 (0.28)	7.0 (0.28)	7.0 (0.28)	7.0 (0.28)	7.4 (0.30)	7.4 (0.30)	7.4 (0.30)

Looking for a custom solution?

If our standard range of modular fixturing does not meet your requirements, we can provide custom fixtures for your CMM, vision system, multi-sensor machine or Equator™ gauge for singular or multiple parts. Let us design and create a custom fixture for almost any size, shape, weight or material parts that you need to inspect.

Ask your local sales representative about your custom fixturing solution today or visit

www.renishaw.com/customfixture



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