

# Vision fixtures for Mitutoyo systems

## Fixturing made simple

The Renishaw QuickLoad™ corner fixture is designed to ensure repeatability and provide secure work-holding for any size, shape or type of part for measurement on your vision system. Hold even the smallest of parts in a wide variety of ways while maintaining a clear view of the part.

Features on our QuickLoad corner and acrylic base plates allow for increased speed and accuracy when exchanging plates and set-ups on your machine:

- Mounting holes allow users to attach the QuickLoad corner to the vision stage, ensuring a secure and stable position.
- Magnets on the QuickLoad corner frame and pins in the acrylic base plates mean the two lock into the same position every time.



## Hold virtually anything

Renishaw has a wide selection of modular metrology fixturing components, designed to hold even the smallest of parts, allowing for maximum visibility and probe access without obscuring any critical features.

## Cut inspection time

Keep your parts set up on multiple plates, switching on and off the machine within seconds. This minimises down time waiting for fixturing to be set up. Both modular and custom plates can be used on the QuickLoad corner, for even greater flexibility.

## Made for easy viewing

Serrations are present on the edges of the QuickLoad corner. Parts can be inspected easily when mounted directly against these serrations using Renishaw fixture clamping components, which allow complete access around your part.

## Why use a QuickLoad™ corner?

- Load and unload plates within seconds using quick release magnets
- Easy to secure to vision stage using mounting holes ensuring repeatable set-ups
- Ideal for multiple users
- Dedicated sub-plates available to save you time
- Flexibility of both modular and custom plates
- Maximise repeatability and reproducibility when using a QuickLoad corner with labelled components and alpha numeric plates
- Short payback period



# Build your fixturing solution

## 1 QuickLoad™ corner

To determine the correct QuickLoad corner frame to suit your machine, simply identify your machine model below.



Mitutoyo machine models	
Part number	Machine model
R-QLC-MIQI-A10-20-30	A505, A1010, A2010, A2017, A3017
R-QLC-MTIQVAP-S302	Quick Vision Apex Pro and Stream 302
R-QLC-MTIQVAP-S404	Quick Vision Apex Pro and Stream-404; Quick-Active-404
R-QLC-MTIQVEP-QZS-E	Elf 200, 202; Elf Pro 202; QS 200Z, 250Z

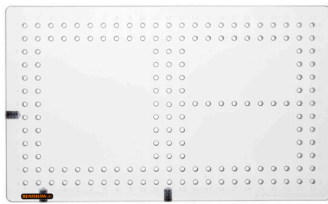
**NOTE:** Please contact your local sales representative if you do not see your machine listed or if you need to discuss requirements for a lower right mounting QuickLoad corner and plate set-up.

**2 Plate options**

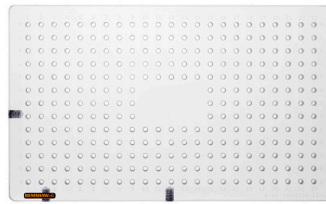
**Acrylic fixture base plate**

Parts can be placed directly on the acrylic multi-window or multi-hole base plate and are held securely using Renishaw's modular fixturing components, ensuring repeatability and reproducibility.

**NOTE:** Be mindful of your probe rack and artefacts that may limit the potential plate size used on your machine.



250 mm x 150 mm acrylic base plate:  
R-PV-W-13250150-10-4



250 mm x 150 mm acrylic base plate:  
R-PV-13250150-10-4

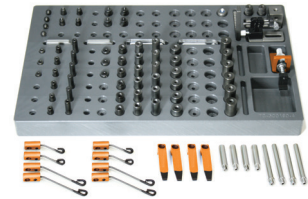
Plate options		
Part number	Description	Windows
<b>M4 multi-hole plates</b>		
R-PV-13150150-10-4	Multi-hole acrylic plate 12.0 mm x 150.0 mm x 150.0 mm	1
R-PV-13200200-10-4	Multi-hole acrylic plate 12.0 mm x 200.0 mm x 200.0 mm	1
R-PV-13250150-10-4	Multi-hole acrylic plate 12.0 mm x 250.0 mm x 150.0 mm	1
R-PV-13250250-10-4	Multi-hole acrylic plate 12.0 mm x 250.0 mm x 250.0 mm	1
R-PV-13300200-10-4	Multi-hole acrylic plate 12.0 mm x 300.0 mm x 200.0 mm	1
R-PV-13300300-10-4	Multi-hole acrylic plate 12.0 mm x 300 mm x 300.0 mm	1
R-PV-13400400-10-4	Multi-hole acrylic plate 12.0 mm x 400.0 mm x 400.0 mm	1
<b>M4 multi-window plates</b>		
R-PV-W-13250150-10-4	Multi-window acrylic plate 12.0 mm x 250.0 mm x 150.0 mm	3
R-PV-W-13200200-10-4	Multi-window acrylic plate 12.0 mm x 200.0 mm x 200.0 mm	5
R-PV-W-13250250-10-4	Multi-window acrylic plate 12.0 mm x 250.0 mm x 250.0 mm	5
R-PVW-13300200-10-4	Multi-window acrylic plate 12.0 mm x 300.0 mm x 200.0 mm	3
R-PVW-13300300-10-4	Multi-window acrylic plate 12.0 mm x 300.0 mm x 300.0 mm	8
R-PV-W-13400400-10-4	Multi-window acrylic plate 12.0 mm x 400.0 mm x 400.0 mm	7
<b>M6 multi-hole plates</b>		
R-PV-13150150-12-6	Multi-hole acrylic plate 12.0 mm x 150.0 mm x 150.0 mm	1
R-PV-13250250-12-6	Multi-hole acrylic plate 12.0 mm x 250.0 mm x 250.0 mm	1
<b>M6 multi-window plates</b>		
R-PV-W-13250150-12-6	Multi-window acrylic plate 12.0 mm x 250.0 mm x 150.0 mm	4
R-PV-W-13250250-12-6	Multi-window acrylic plate 12.0 mm x 250.0 mm x 250.0 mm	5
R-PV-W-13400400-12-6	Multi-window acrylic plate 12.0 mm x 400.0 mm x 400.0 mm	7

Plate options		
Part number	Description	Windows
<b>¼-20 multi-hole plates</b>		
R-PV-5066-50-20	Multi-hole acrylic plate 0.47 in × 6.00 in × 6.00 in	1
R-PV-501010-50-20	Multi-hole acrylic plate 0.47 in × 10.00 in × 10.00 in	1
R-PV-50128-50-20	Multi-hole acrylic plate 0.47 in × 12.00 in × 8.00 in	1
R-PV-501616-50-20	Multi-hole acrylic plate 0.47 in × 16.00 in × 16.00 in	1
<b>¼-20 multi-window plates</b>		
R-PV-W-50106-50-20	Multi- window acrylic plate 0.47 in × 10.00 in × 6.00 in	4
R-PV-W-501010-50-20	Multi- window acrylic plate 0.47 in × 10.00 in × 10.00 in	5
R-PVW-50128-50-20	Multi- window acrylic plate 0.47 in × 12.00 in × 8.00 in	4
R-PV-W-501616-50-20	Multi- window acrylic plate 0.47 in × 16.00 in × 16.00 in	7

### 3 Component sets

There are several M4, M6 and ¼-20 component sets for fixturing your parts on the base plate.

Additional components can be added to complement your component set, contact your local sales representative for more information.



M4 vision component set B:  
R-FSV-B-4

M4 component sets			
Part number	Description	Set A Part no. R-FSV-A-4	Set B Part no. R-FSV-B-4
R-S-65-4*	Ø6.0 mm × 5.0 mm aluminium standoff	-	3
R-S-610-4*	Ø6.0 mm × 10.0 mm aluminium standoff	3	6
R-S-625-4*	Ø6.0 mm × 25.0 mm aluminium standoff	3	6
R-S-95-4*	Ø9.0 mm × 5.0 mm aluminium standoff	3	3
R-S-910-4	Ø9.0 mm × 10.0 mm aluminium standoff	3	6
R-S-920-4	Ø9.0 mm × 20.0 mm aluminium standoff	3	6
R-S-925-4	Ø9.0 mm × 25.0 mm aluminium standoff	3	6
R-S-1210-4	Ø12.0 mm × 10.0 mm aluminium standoff	3	6
R-S-1225-4	Ø12.0 mm × 25.0 mm aluminium standoff	3	6
R-SP-610-4	Ø6 mm × 10 mm aluminium pin standoff	2	4
R-SP-910-4	Ø9.0 mm × 10.0 mm steel pin standoff	2	4
R-CTT-40-25-4	36.2 mm tension clamp with coated soft tip and 25.0 mm post	2	4
R-CWT-25-25-4	31.3 mm wire clamp with coated soft tip and 25.0 mm post	2	4
R-CWT-50-50-4	49.7 mm wire clamp with coated soft tip and 50.0 mm post	2	4
R-CP-4	Pusher clamp	1	1
R-CVM-B-4	Micro vice clamp with base	1	1
R-CSPS-1210-4	Ø12.0 mm × 10.0 mm spring pusher standoff clamp	1	1
R-RPA-4	Ø6.4 mm × 5.0 mm aluminium resting pin	4	4
R-VC-5050-4	50.0 mm × 50.0 mm corner viewer	1	1
R-AJ-9-4	Ø9.5 mm adjustable aluminium jack stand	1	2
R-AS-30-4	30.1 mm long adjustable slide	1	2
R-ASA-45-4	45.0 mm long adjustable acrylic slide base	1	2
R-TB-1619-4	41.3 mm × 15.9 mm × 25.0 mm tower block	1	1
R-TC-300190-4	305 mm × 190 mm × 25 mm component tray	1	1
R-BC10	143 mm × 190 mm × 40 mm compartment box (not shown)	1	1
<b>Total number of components in each set</b>		<b>48</b>	<b>85</b>

\* Component does not have a threaded top

M6 component set		
Part number	Description	Set A Part no. R-FSV-A-6
R-S-610-6*	Ø6.0 mm × 10.0 mm steel standoff	3
R-S-625-6*	Ø6.0 mm × 25.0 mm steel standoff	3
R-S-95-6*	Ø9.5 mm × 5.0 mm steel standoff	3
R-S-910-6	Ø9.5 mm × 10.0 mm steel standoff	3
R-S-920-6	Ø9.5 mm × 20.0 mm steel standoff	3
R-S-925-6	Ø9.5 mm × 25.0 mm steel standoff	3
R-S-1310-6	Ø12.7 mm × 10.0 mm steel standoff	3
R-S-1320-6	Ø12.7 mm × 20.0 mm steel standoff	3
R-SP-610-6	Ø6.4 mm × 10.0 mm steel pin standoff	2
R-SP-910-6	Ø9.5 mm × 10.0 mm steel pin standoff	2
R-CTT-40-30-6	36.2 mm tension clamp with coated soft tip and 30.0 mm post	4
R-CWT-25-25-6	31.3 mm wire clamp with coated soft tip and 23.9 mm post	4
R-CWT-50-50-6	49.7 mm wire clamp with coated soft tip and 50.0 mm post	4
R-CP-6	Pusher clamp	1
R-CVM-B-6	Micro vice clamp with base	1
R-CSPS-1925-6	Ø19.0 mm × 25.0 mm spring pusher standoff clamp	1
R-RPS-6	Ø9.5 mm × 10.0 mm steel resting pin	4
R-VC-7575-6	82.6 mm × 82.6 mm corner viewer	1
R-AJ-13-6	Ø15.9 mm adjustable jackstand	1
R-AS-45-6	44.5 mm long adjustable slide	1
R-ASA-45-6	50.8 mm long adjustable acrylic slide base	1
R-TB-2025-6	70 mm × 20 mm × 35 mm tower block	1
R-TC-300190-6	305 mm × 190 mm × 35 mm component tray	1
R-BC10	143 mm × 190 mm × 40 mm compartment box (not shown)	1
<b>Total number of components in each set</b>		<b>54</b>

\* Component does not have a threaded top

¼-20 component sets			
Part number	Description	Set A Part no. R-FSV-QLCA-20	Set B Part no. R-FSV-QLCB-20
R-S-2550-20*	Ø0.25 in × 0.50 in steel standoff	3	3
R-S-251-20*	Ø0.25 in × 1.00 in steel standoff	3	6
R-S-37525-20*	Ø0.375 in × 0.25 in steel standoff	3	6
R-S-37550-20	Ø0.375 in × 0.50 in steel standoff	3	6
R-S-37575-20	Ø0.375 in × 0.75 in steel standoff	3	6
R-S-3751-20	Ø0.375 in × 1.00 in steel standoff	3	6
R-S-5050-20	Ø0.50 in × 0.50 in steel standoff	3	6
R-S-5075-20	Ø0.50 in × 0.75 in steel standoff	3	6
R-S-501-20	Ø0.50 in × 1.00 in steel standoff	-	6
R-SP-2550-20	Ø0.25 in × 0.50 in steel pin standoff	2	4
R-SP-37550-20	Ø0.375 in × 0.50 in steel pin standoff	2	4
R-CTT-160-125-20	1.42 in tension clamp with rubber coated tip with 1.26 in post	4	4
R-CWT-1-1-20	1.23 in wire clamp with rubber coated tip with 0.94 in post	4	4
R-CWT-2-2-20	1.96 in wire clamp with rubber coated tip with 1.76 in post	4	4
R-RPS-20	Steel resting pin	4	4
R-VC-33-20	3.25 in × 3.25 in corner viewer	1	1
R-AJ-50-20	Ø0.63 in adjustable jackstand	1	2
R-CP-20	Pusher clamp	1	1
R-CSPS-751-20	Ø0.75 in × 1.0 in spring pusher standoff clamp	1	1
R-AS-1-20	1.37 in long adjustable slide	1	2
R-ASA-2-20	2.00 in long adjustable acrylic slide	1	2
R-TB-751-20	0.75 in × 0.75 in × 1.25 in tower block	1	2
R-CVM-B-20	Micro vice clamp with base	1	1
R-TC-300190-20	6 in × 7 in × 2 in component tray	1	1
<b>Total number of components in each set</b>		<b>54</b>	<b>89</b>

\* Component does not have a threaded top

**NOTE:** To discuss metrology fixtures for your vision machine, please contact your local sales representative or visit [www.renishaw.com/contact](http://www.renishaw.com/contact).

## 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.



---



**NOTE:** Ask your local sales representative about a custom fixture today or visit [www.renishaw.com/customfixture](http://www.renishaw.com/customfixture).


---

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



#renishaw

**UK**  +44 (0) 1453 524524  [uk@renishaw.com](mailto:uk@renishaw.com)

**USA**  +1 847 286 9953

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

© 2019–2024 Renishaw plc. All rights reserved. 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.

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-1000-9988-02-B  
Issued: 01.2024