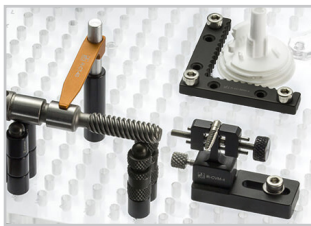# Vision fixtures for Nikon systems

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 the 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.
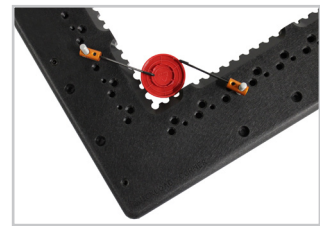

Hold virtually anything

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.

Part number	Machine model
Current machine models	
R-QLC-NIN-VMA2520	iNEXIV VMA-2520
R-QLC-NVMR15-30-H30	NEXIV VMZ-S3020, VMZ-R3020, VMZ-H3030
R-QLC-NVMR4540-6555	iNEXIV VMA-4540, VMA-6555; NEXIV VMZ-R4540, VMZ-R6555
Legacy machine models	
R-QLC-NN-VMR-10080	NEXIV VMR-10080
R-QLC-NVMR15-30-H30	NEXIV VMR-1515, VMR-3020, VMR-H3030
R-QLC-NVMR4540-6555	NEXIV VMR-6555

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.
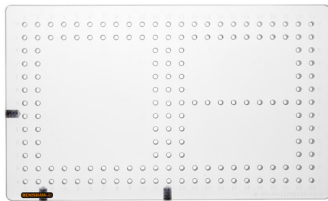
2   Plate options

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.
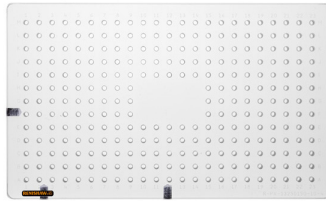
Quick slide plates

Quick slide plates attach to the QuickLoad corner giving you the ability to secure your parts on or between the slide plates using various Renishaw fixturing components.

Be mindful of your probe rack and artifacts that may limit the potential plate size used on your machine.

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

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

Quick slide plates:
R-PSQ-2042-4 and R-PSQ-3272-4

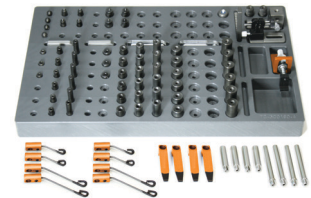| Part number	Description	Windows
Quick slide plates		
R-PSQ-2042-4	M4 17.6 mm × 20 mm × 79 mm quick slide plate	-
R-PSQ-3272-4	M4 17.6 mm × 32 mm × 109 mm quick slide plate	-
M4 Multi-hole plates		
R-PV-13150150-10-4	Multi-hole acrylic plate 13 mm × 150 mm × 150 mm	-
R-PV-13200200-10-4	Multi-hole acrylic plate 13 mm × 200 mm × 200 mm	-
R-PV-13250150-10-4	Multi-hole acrylic plate 13 mm × 250 mm × 150 mm	-
R-PV-13250250-10-4	Multi-hole acrylic plate 13 mm × 250 mm × 250 mm	-
R-PV-13300150-10-4	Multi-hole acrylic plate 13 mm × 300 mm × 150 mm	-
R-PV-13300200-10-4	Multi-hole acrylic plate 13 mm × 300 mm × 200 mm	-
R-PV-13300300-10-4	Multi-hole acrylic plate 13 mm × 300 mm × 300 mm	-
R-PV-13400400-10-4	Multi-hole acrylic plate 13 mm × 400 mm × 400 mm	-
M4 Multi-window plates		
R-PV-W-13150150-10-4	Multi-window acrylic plate 13 mm × 150 mm × 150 mm	4
R-PV-W-13250150-10-4	Multi-window acrylic plate 13 mm × 250 mm × 150 mm	3
R-PV-W-13200200-10-4	Multi-window acrylic plate 13 mm × 200 mm × 200 mm	5
R-PV-W-13250250-10-4	Multi-window acrylic plate 13 mm × 250 mm × 250 mm	5
R-PVW-13300200-10-4	Multi-window acrylic plate 13 mm × 300 mm × 200 mm	3
R-PVW-13300300-10-4	Multi-window acrylic plate 13 mm × 300 mm × 300 mm	8
R-PV-W-13400400-10-4	Multi-window acrylic plate 13 mm × 400 mm × 400 mm	7

Part number	Description	Windows
M6 multi-hole plates		
R-PV-13150150-12-6	Multi-hole acrylic plate 13 mm × 150 mm × 150 mm	-
R-PV-13250250-12-6	Multi-hole acrylic plate 13 mm × 250 mm × 250 mm	-
M6 multi-window plates		
R-PV-W-13250150-12-6	Multi-window acrylic plate 13 mm × 150 mm × 150 mm	3
R-PV-W-13250250-12-6	Multi-window acrylic plate 13 mm × 250 mm × 250 mm	5
R-PV-W-13400400-12-6	Multi-window acrylic plate 13 mm × 400 mm × 400 mm	7
¼-20 Multi-hole plates		
R-PV-5066-50-20	Multi-hole acrylic plate 0.50 in × 6 in × 6 in	-
R-PV-501010-50-20	Multi-hole acrylic plate 0.50 in × 10 in × 10 in	-
R-PV-50128-50-20	Multi-hole acrylic plate 0.50 in × 12 in × 8 in	-
R-PV-501616-50-20	Multi-hole acrylic plate 0.50 in × 16 in × 16 in	-
¼-20 Multi-window plates		
R-PV-W-50106-50-20	Multi-window acrylic plate 0.50 in × 10 in × 6 in	4
R-PV-W-501010-50-20	Multi-window acrylic plate 0.50 in × 10 in × 10 in	5
R-PVW-50128-50-20	Multi-window acrylic plate 0.50 in × 12 in × 8 in	4
R-PV-W-501616-50-20	Multi-window acrylic plate 0.50 in × 16 in × 16 in	7

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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*	6 mm dia. × 5 mm standoff	-	3
R-S-610-4*	6 mm dia. × 10 mm standoff	3	6
R-S-625-4*	6 mm dia. × 25 mm standoff	3	6
R-S-95-4*	9 mm dia. × 5 mm standoff	3	3
R-S-910-4	9 mm dia. × 10 mm standoff	3	6
R-S-920-4	9 mm dia. × 20 mm standoff	3	6
R-S-925-4	9 mm dia. × 25 mm standoff	3	6
R-S-1210-4	12 mm dia. × 10 mm standoff	3	6
R-S-1225-4	12 mm dia. × 25 mm standoff	3	6
R-SP-610-4	6 mm dia. × 10 mm pin standoff	2	4
R-SP-910-4	9 mm dia. × 10 mm pin standoff	2	4
R-CTT-40-25-4	40 mm tension clamp with coated soft tip with 25 mm post	2	4
R-CWT-25-25-4	25 mm wire clamp with coated soft tip with 25 mm post	2	4
R-CWT-50-50-4	50 mm wire clamp with coated soft tip with 50 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	Spring pusher standoff clamp	1	1
R-RPA-4	Aluminium resting pin	4	4
R-VC-5050-4	50 mm × 50 mm corner viewer	1	1
R-AJ-9-4	9 mm dia. adjustable jackstand	1	2
R-AS-30-4	30 mm long adjustable slide	1	2
R-ASA-45-4	45 mm long adjustable acrylic slide base	1	2
R-TB-1619-4	Tower block with base 16 mm² × 19 mm	1	1
R-TC-300190-4	300 mm × 190 mm × 25 mm component tray	1	1
R-BC10	50 mm × 200 mm × 150 mm compartment box (not shown)	1	1
Total number of components in each set		**48**	**85**

* 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*	6 mm dia. × 10 mm standoff	3
R-S-625-6*	6 mm dia. × 25 mm standoff	3
R-S-95-6*	9 mm dia. × 5 mm standoff	3
R-S-910-6	9 mm dia. × 10 mm standoff	3
R-S-920-6	9 mm dia. × 20 mm standoff	3
R-S-925-6	9 mm dia. × 25 mm standoff	3
R-S-1310-6	13 mm dia. × 10 mm standoff	3
R-S-1320-6	13 mm dia. × 20 mm standoff	3
R-SP-610-6	6 mm dia. × 10 mm pin standoff	2
R-SP-910-6	9 mm dia. × 10 mm pin standoff	2
R-CTT-40-30-6	40 mm tension clamp with coated soft tip with 30 mm post	4
R-CWT-25-25-6	25 mm wire clamp with coated soft tip with 25 mm post	4
R-CWT-50-50-6	50 mm wire clamp with coated soft tip with 50 mm post	4
R-CP-6	Pusher clamp	1
R-CVM-B-6	Micro vice clamp with base	1
R-CSPS-1925-6	19 mm dia. × 25 mm spring pusher standoff clamp	1
R-RPS-6	Steel resting pin	4
R-VC-7575-6	75 mm × 75 mm corner viewer	1
R-AJ-13-6	13 mm dia. adjustable jackstand	1
R-AS-45-6	45 mm long adjustable slide	1
R-ASA-45-6	45 mm long adjustable acrylic slide base	1
R-TB-2025-6	Tower block with base 20 mm² × 30 mm	1
R-TC-300190-6	300 mm × 190 mm × 25 mm component tray	1
R-BC10	50 mm × 200 mm × 150 mm compartment box (not shown)	1
Total number of components in each set		**54**

* 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*	0.25 in dia. × 0.50 in standoff	3	3
R-S-251-20*	0.25 in dia. × 1.0 in standoff	3	6
R-S-37525-20*	0.375 in dia. × 0.25 in standoff	3	6
R-S-37550-20	0.375 in dia. × 0.50 in standoff	3	6
R-S-37575-20	0.375 in dia. × 0.75 in standoff	3	6
R-S-3751-20	0.375 in dia. × 1.0 in standoff	3	6
R-S-5050-20	0.50 in dia. × 0.50 in standoff	3	6
R-S-5075-20	0.50 in dia. × 0.75 in standoff	3	6
R-S-501-20	0.50 in dia. × 1.0 in standoff	-	6
R-SP-2550-20	0.25 in dia. × 0.50 in pin standoff	2	4
R-SP-37550-20	0.375 in dia. × 0.50 in pin standoff	2	4
R-CTT-160-125-20	1.6 in tension clamp with rubber coated tip with 1.25 in post	4	4
R-CWT-1-1-20	1.0 in wire clamp with rubber coated tip with 1.0 in post	4	4
R-CWT-2-2-20	2.0 in wire clamp with rubber coated tip with 2.0 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	0.50 in dia. adjustable jackstand	1	2
R-CP-20	Pusher clamp	1	1
R-CSPS-751-20	0.75 in dia. × 1.0 in spring pusher standoff clamp	1	1
R-AS-1-20	1.0 in long adjustable slide	1	2
R-ASA-2-20	2.0 in long adjustable acrylic slide	1	2
R-TB-751-20	Tower block with base 0.75 in² × 1.0 in	1	2
R-CVM-B-20	Micro vice clamp with base	1	1
R-TC-300190-20	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		**54**	**89**

* Component does not have a threaded top

To discuss metrology fixtures for your vision machine, please contact your local sales representative or visit www.renishaw.com/contact

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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 a custom fixture today or visit
www.renishaw.com/customfixture

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Part no.: H-1000-9850-03-A

Issued: 01.2021