

# The 3Ruler system

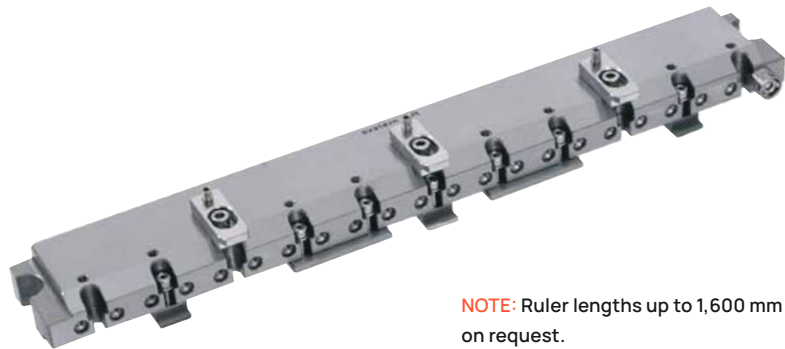
The 3Ruler system has been developed for clamping medium-sized and large workpieces in machines with parallel, U-shaped or frame tables, as well as for machines with a frame table. The system's rulers have in-built height adjustment and are used singly or in pairs.

Using this system makes it easy to position workpieces (rectangular, round, light, heavy, large or small) on the zero line with no risk of collision. A comprehensive range of accessories gives an unsurpassed range of applications.

- Machine-adapted ruler lengths
- Repeatable accuracy with the aid of reference elements
- Stable mounting of large workpieces
- A broad range of accessories gives great flexibility

## 3Ruler, 3R-239-XXX

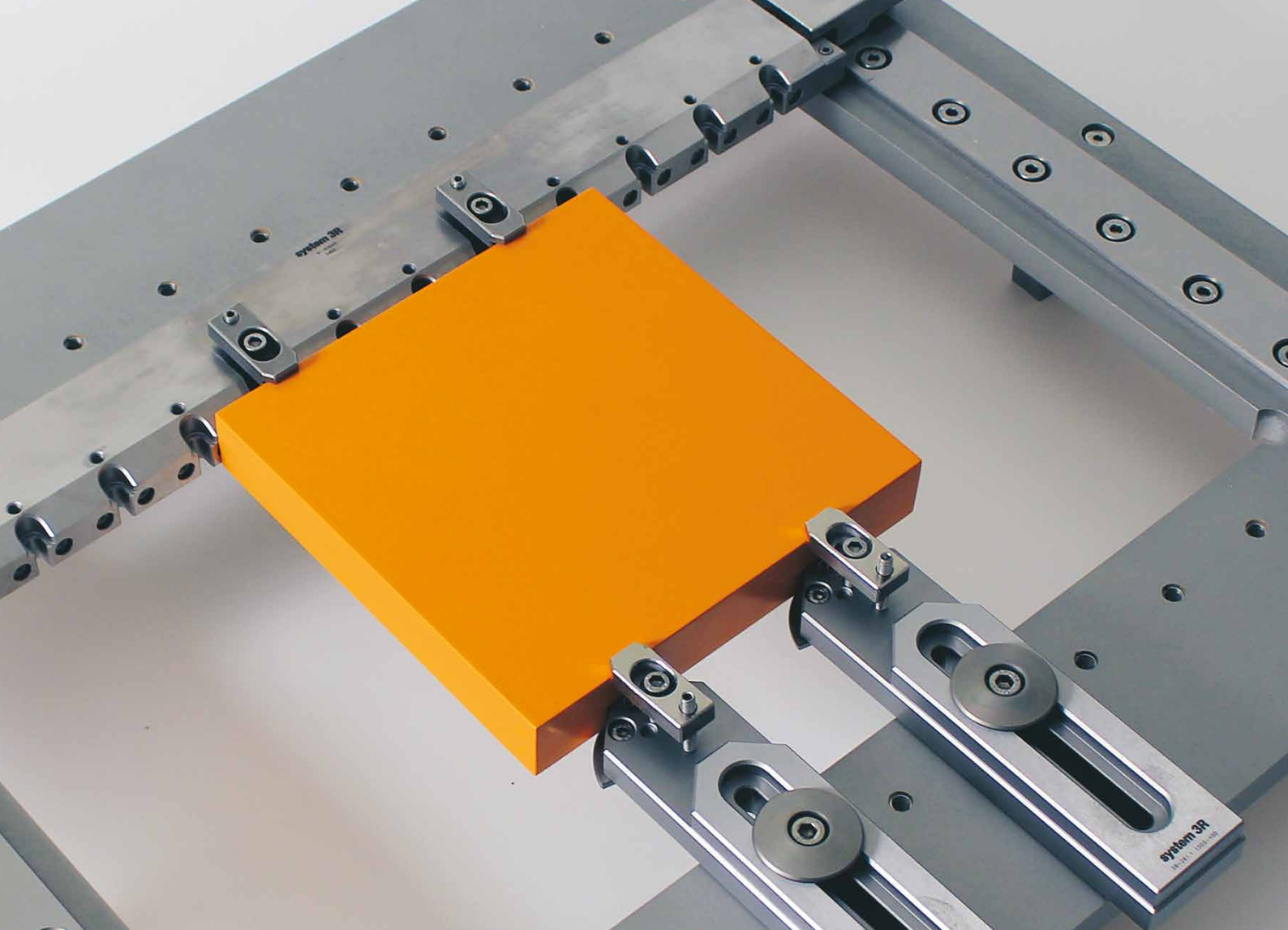
The rulers are available in various lengths (-XXX) to match different machines. To ensure optimal stability, the cross section is matched to the length.



**NOTE:** Ruler lengths up to 1,600 mm produced on request.

XXX = length (mm)	< 370	371-544	545-645	646-950	951-1600
Width (mm)	45	60	60 or 86*	86	86
Height (mm)	30	30	36	36	50
Eccentric stops supplied	1	1	1	1	1
Quick fasteners supplied	2	2	2	2	2
Zero line tabs supplied	2	2	2 or 3	3	5*
5 mm tabs supplied	2	2	2	2	3*
Clamps supplied	2	2	2 or 3*	3	5*

\*Always ask. Please consult the 3Ruler for your machine on [www.system3R.com](http://www.system3R.com)



### 3Ruler, double-sided, 3R-239-XXX-D

Double-sided rulers are available in various lengths (-XXX) to match different machines. To ensure optimal stability, the cross section is matched to the length. Accessories can be clamped on both sides of these rulers.



XXX = length (mm)	<370	371-595	596-950	>951
Width (mm)	45	60	86	86
Height (mm)	30	30	36	56
Eccentric stops supplied	2	2	2	2
Quick fasteners supplied	2	2	2	2
Zero line tabs supplied	4	4	6	10
5 mm tabs supplied	4	4	4	6
Clamps supplied	4	4	6	10

# System 3R basic equipment for rigid, stable & accurate clamping of workpieces

## Reference element WEDM

Fitting a reference element to your machine table gives you fixed references in all three directions and One Minute set-up.

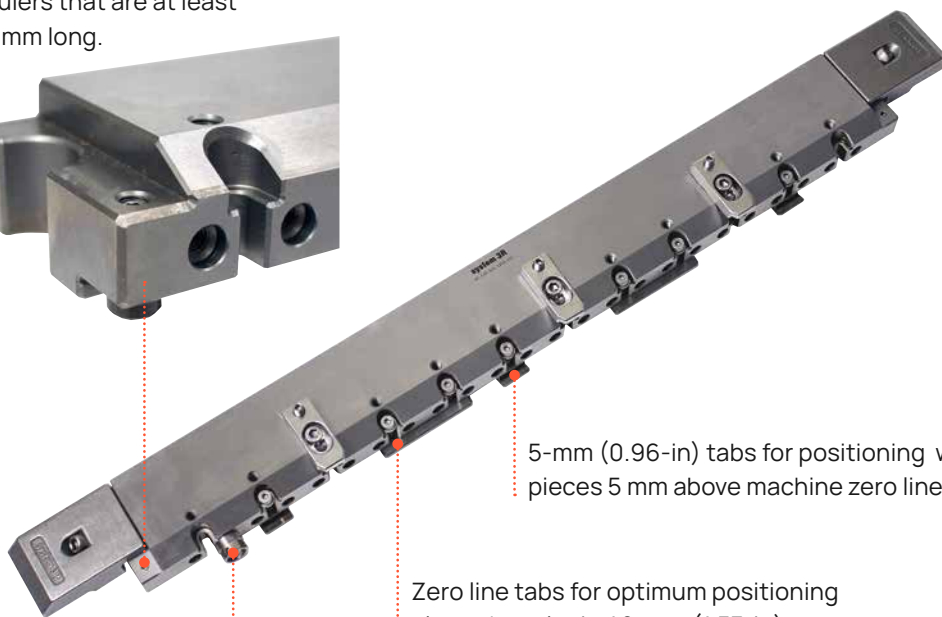


- Exceptional flexibility
- Accurately ground-in references
- Repeatable accuracy
- Double-sided parallel references
- Fits all machine tables with 25 or 50 mm pitch

## 3Ruler

This system makes it easy to position workpieces (small, large, light or heavy) on the zero line with no risk of collision.

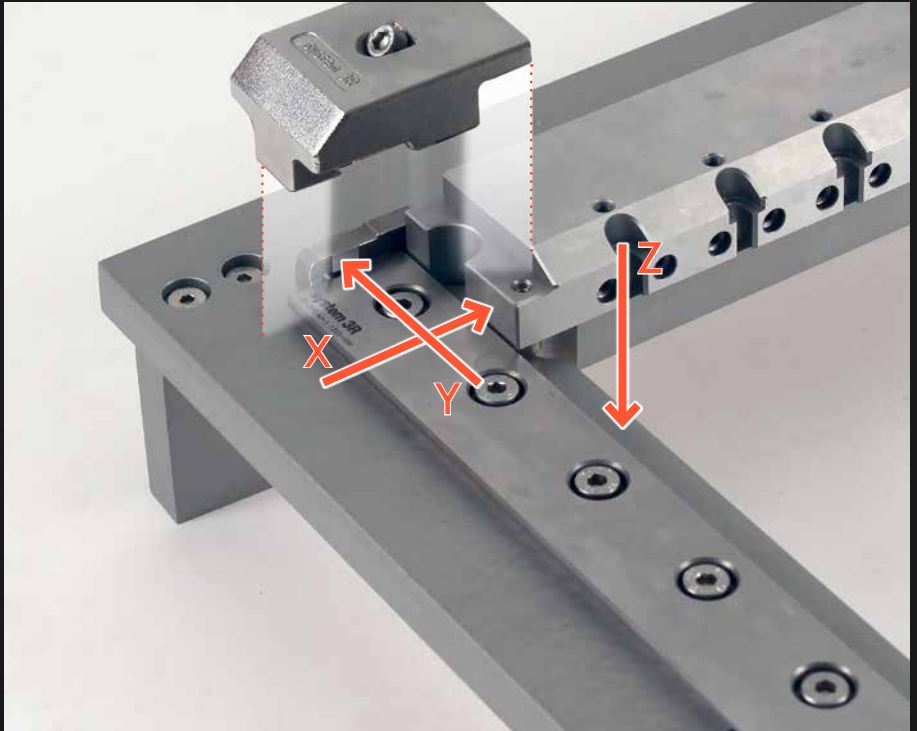
In-built height adjustment on rulers that are at least 385 mm long.



5-mm (0.96-in) tabs for positioning workpieces 5 mm above machine zero line.

Zero line tabs for optimum positioning along the ruler in 40-mm (1.57-in) steps.

Eccentric stop, movable along the ruler in 20-mm (0.78-in) steps

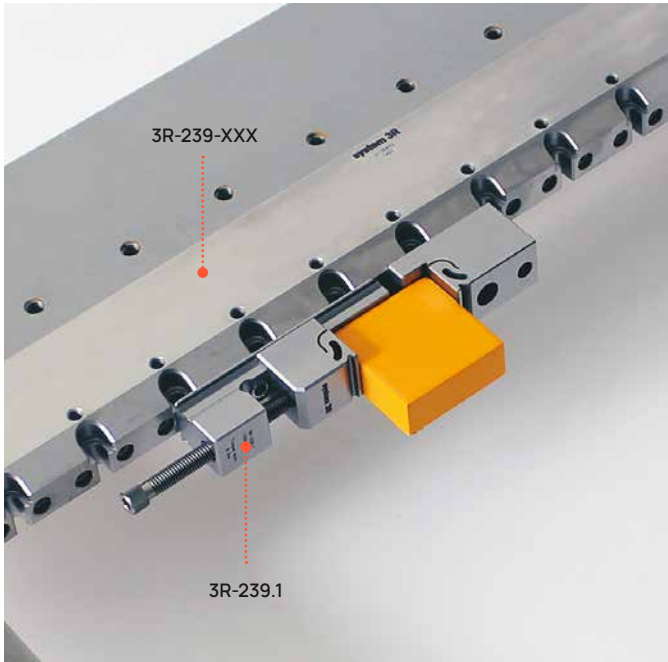


Quick-fasteners facilitate simple fitting/removal of rulers

Clearance for wire between workpiece and ruler.



## 3Ruler accessories



### Ruler vice, 3R-239.1

Our SuperVice design jaws provide a wide clamping range for rectangular workpieces. Detachable Z-support tabs ensure simple setting-up.

- Recommended maximum workpiece weight with one vice 15 kg
- Recommended maximum workpiece weight with two vices 200 kg
- Tightening torque 8 Nm
- Weight 0.7 kg



### Low-profile holder, 3R-239.2

For clamping thin workpieces.

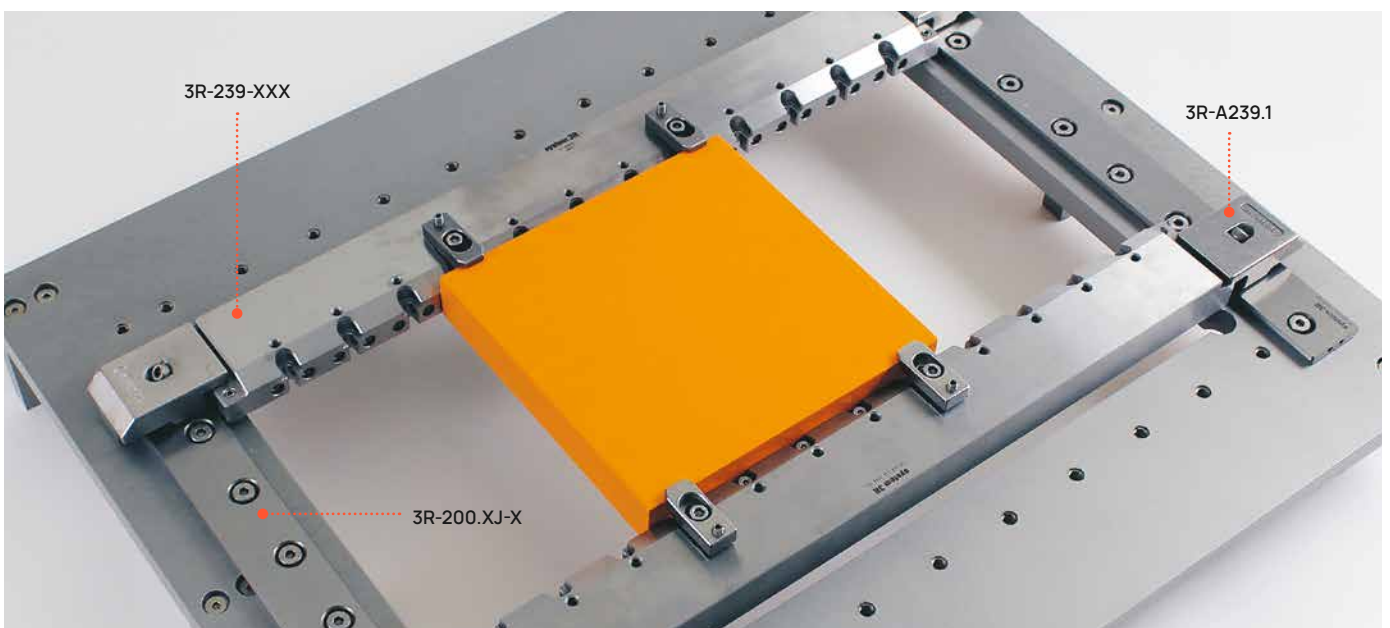
- Clamping range 0-27 mm
- Supplied in sets of 4
- Weight per set 0.6 kg



### V-holder, 3R-239.3

For clamping round workpieces. To be mounted on ruler or holder 3R-237.2, 3R-292.66HP or 3R-239-XXX.

- Suitable for horizontal or vertical mounting
- Clamping range  $\varnothing 25-130$  mm
- Additional support < 300 mm
- Weight 0.9 kg





## 3Ruler accessories

### Double ruler vice, 3R-239.11

Movable jaws for mounting two rectangular workpieces at the same time. Detachable Z-support tabs ensure simple setting-up.

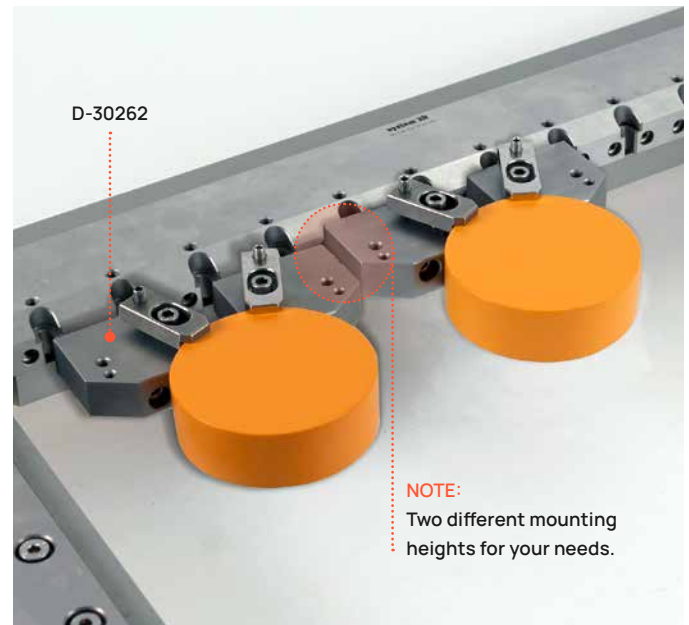
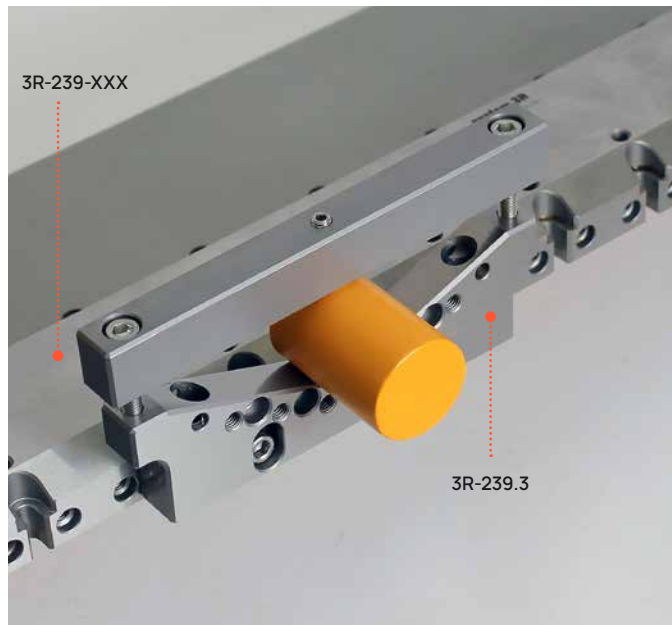
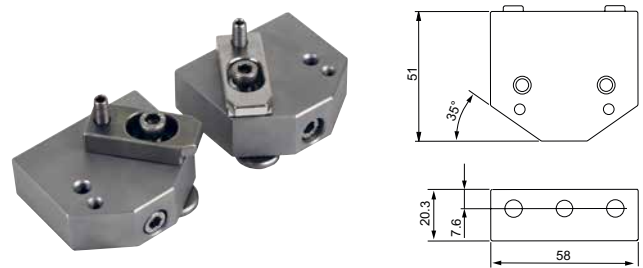
- Recommended maximum workpiece weight 7 kg
- Tightening torque 8 Nm
- Weight 1 kg



### Modular V-holder, EconoRuler, D-30262

Zero-line support is required by tabs that comes with these units or add additional support by accessory for and with 3Ruler or by other means. Fits onto any 3Ruler and EconoRuler.

- Clamping range round  $\varnothing 30-75$  mm (closest apart)
- Recommended torque 7 Nm
- Weight 0.9 kg



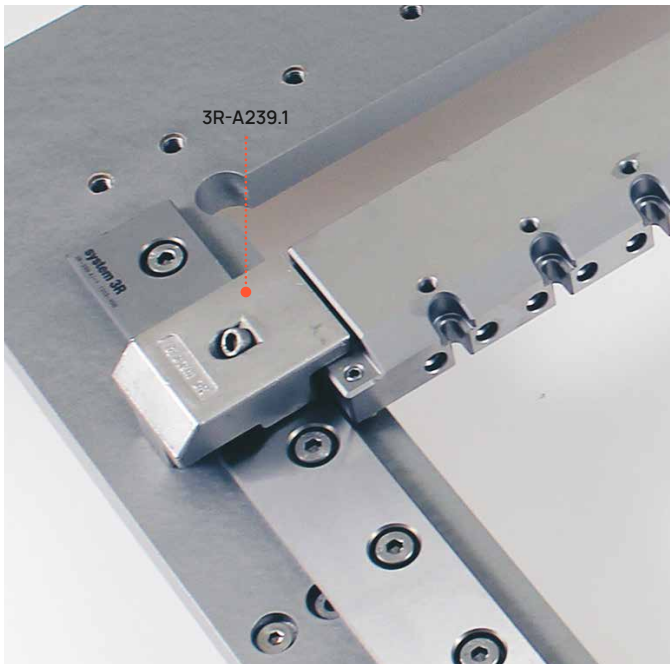
### 3Ruler kit, 3R-239.20

Kit for clamping rectangular, round or thin workpieces.

3R-239.1	Ruler vice	x1
3R-239.2	Low-profile holder	x1
3R-239.3	V-holder	x1
3R-914-10L	Torque wrench, 8 Nm	x1
3R-333-03	Allen key, 3 mm	x1
45600-N039	Allen key, 4 mm	x1



## 3Ruler accessories



### Clamps, 3R-A239.1

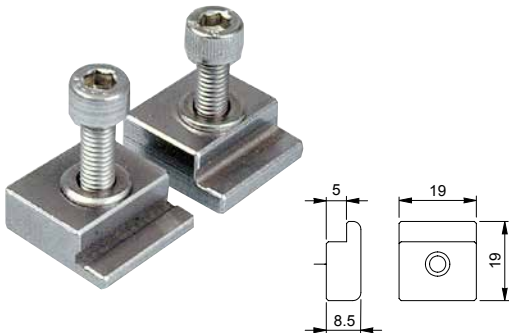
Clamps for clamping rulers on reference elements.

- Supplied in sets of 2



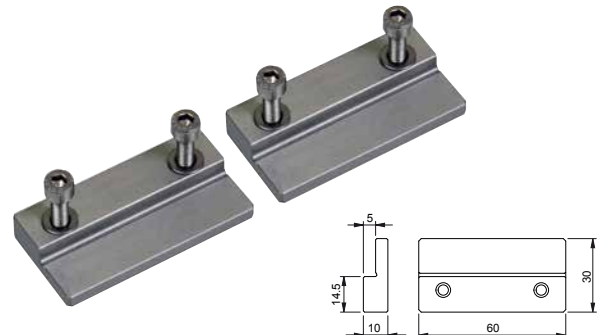
### Zero-line support tab 5 mm, 3R-239.22

- Recommended maximum workpiece weight per tab 50 kg
- Supplied in sets of 2



### Zero-line support tab 5 mm, 3R-239.26

- Recommended maximum workpiece weight per tab 50 kg
- Supplied in sets of 2



### Miniclamps, 3R-239.24

For clamping thin workpieces. To be fitted together with zero-line support tab.

- Recommended maximum workpiece weight per tab 1 kg
- Supplied in sets of 2



### Clamps, 3R-A239

Aluminium clamps for mounting a ruler directly on the machine table without reference elements.

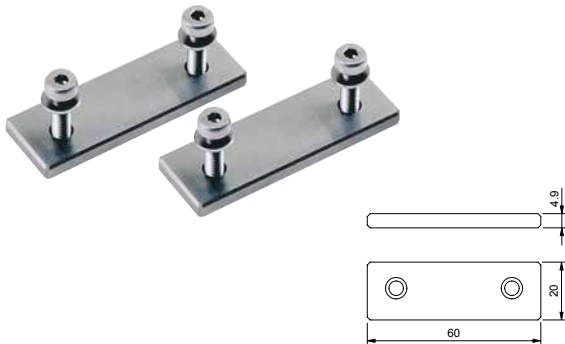
- Supplied in sets of 2
- Weight per set 0.3 kg



## 3Ruler accessories

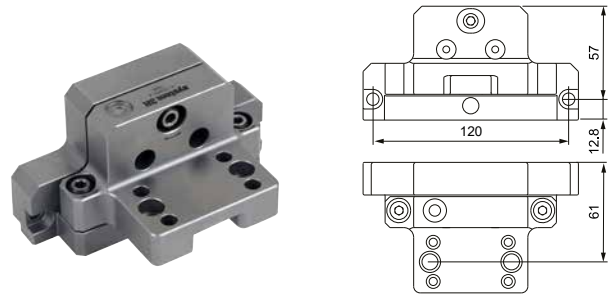
### Zero-line support tab 5 mm, 3R-239.25

- Recommended maximum workpiece weight per tab 50 kg
- Supplied in sets of 2



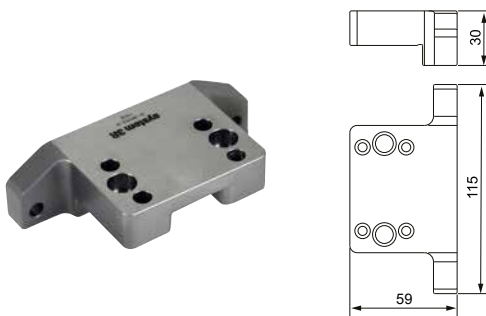
### Levelling head, 3Ruler, D-30253-A

- Enables use of regular vices in combination with 3Ruler.
- Weight 2.1 kg



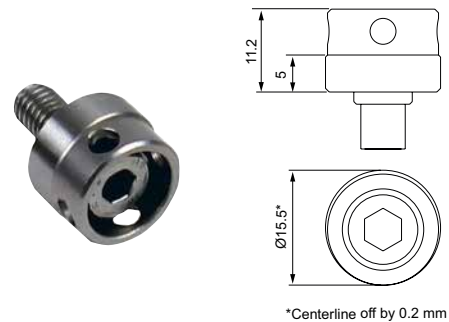
### Fixed head, 3Ruler, D-30253-B

- Enables use of regular vices in combination with 3Ruler.
- Weight 0.8 kg



### Eccentric stop, 3Ruler, 3R-239.27

- Adjustable eccentric stop for mounting on 3Ruler or EconoRuler in 20-mm steps.
- Weight 0.02 kg



### Reference stop, 3R-225.2

- For positioning 3Ruler anywhere on the reference elements. The stops have adjusting screws for accurate alignment.

- Tightening torque 7 Nm
- Supplied in sets of 2
- Weight per set 0.6 kg



### Clamp kit M6, 3R-230.1

- For clamping workpieces on rulers, etc.

- Weight 1.8 kg



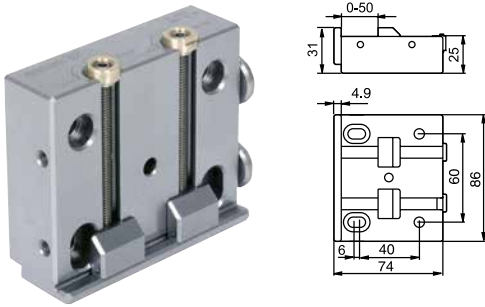


## 3Ruler accessories

### Vice, 3R-294.2

Mounts on: 3R-237.2; 3R-292.66HP; 3R-294; any ruler in the 3Ruler system; and, Macropallet 54x54.

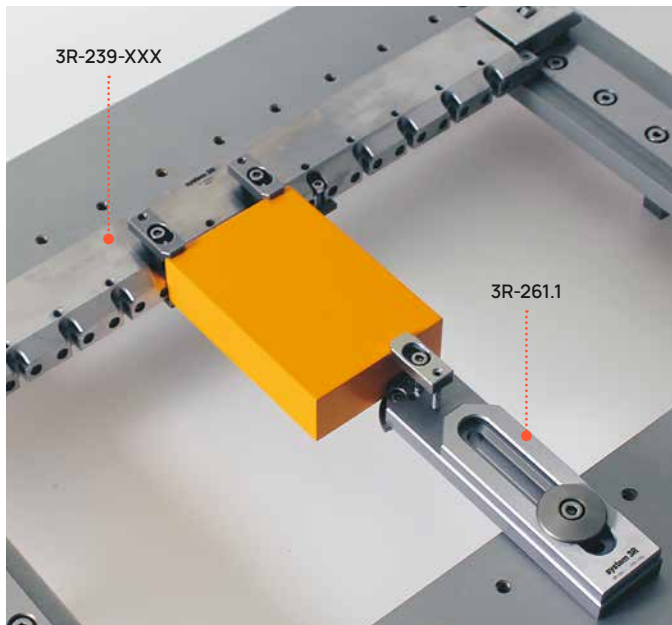
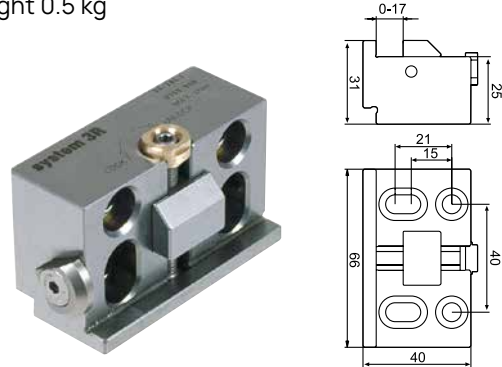
- Clamping range 0-50 mm
- Recommended maximum workpiece weight 5 kg
- Tightening torque 3 Nm
- Weight 1.2 kg



### Vice, 3R-294.1

Mounts on: 3R-237.2; 3R-292.66HP; 3R-294; and, any ruler in the 3Ruler system.

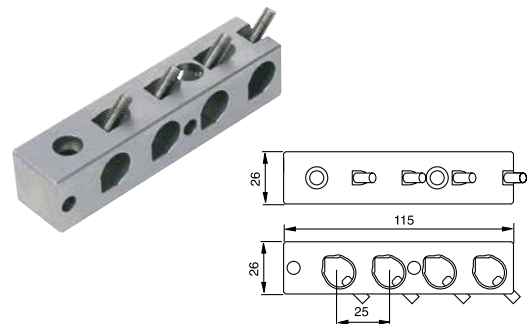
- Clamping range 0-17 mm
- Recommended maximum workpiece weight 2.5 kg
- Tightening torque 3 Nm
- Weight 0.5 kg



### Multiple holder, 3R-294.6

For mounting four workpieces ( $\varnothing$  5-13 mm) at the same time. Mounts on: 3R-237.2; 3R-292.66HP; 3R-294; and, any ruler in the 3Ruler system.

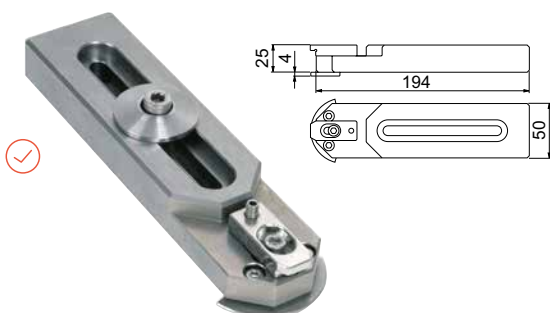
- Tightening torque 3 Nm
- Weight 0.6 kg



### Support, 3R-261.1

For mounting directly on the machine table.

- Adjustable length 35-135 mm
- Includes 5 mm spacer for collision free set-up
- Recommended maximum workpiece weight 20 kg
- Weight 1.5 kg



### Adjustable support WEDM, 3R-261

- Adjustable length 38-138 mm
- Adjustable height 0-0.2 mm
- Recommended maximum workpiece weight 20 kg

