Newport compatible translation stage

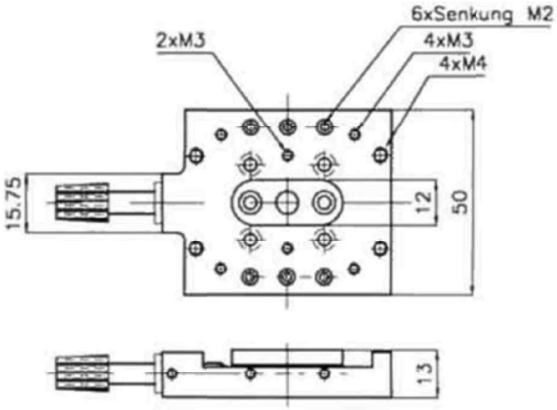
Made of aluminium with high precision *"Schneeberger"* crossed roller way guides.

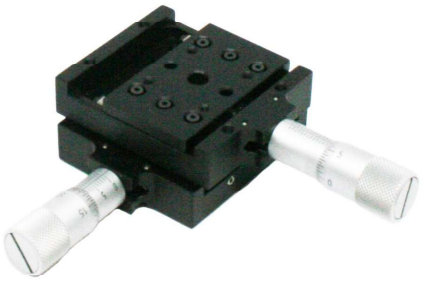
With this kind of longitudinal guide we can offer a high precision guiding system with extremely low height (13 mm). The use of cross roller way guides ensures a well fitted guide with a very smooth operation. These translation stages are equipped with a fine thread screw (thread pitch 0.25mm). The dimensions of the drill holes are designed in that way that two stages are easily mounted to one XY-unit. Using a special adapter it is possible to realise a XYZ-unit.

RD-KRU-NP-15-01 -02 -03
Translation stage with fine thread screws:
- 0.25 mm per turn
- 0.15 mm per turn

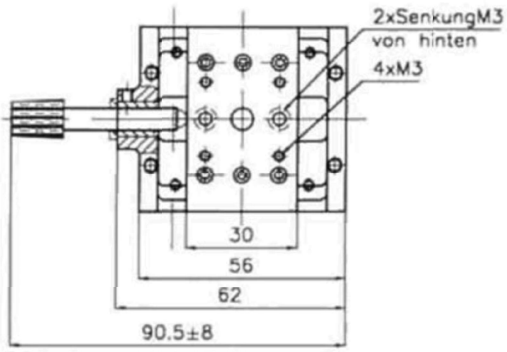
Translation stage with micrometer screws:
- 0.5 mm per turn
- 0.25 mm per turn

RD-KRU-NP-15-01





RD-KRU-NP-15-02



RD-KRU-NP-15-03

Also available with fine thread screws

Different adapter plates for all our translation stages available.

Adapter angle X-Y-Z

Translation stage with crossed roller way guides 15 mm adjustment line

With this kind of longitudinal guide we can offer a high precision guide system for high loading with well fitted guide and extremely smooth operation. The lateral guidance offers the possibility to build in a passage notch, f.e. for a laser beam.

RD-KRU-15-01 -02 -03

With fine thread screws:
- 0.25 mm per turn

- 0.15 mm per turn

With micrometer screws:
- 0.5 mm per turn
- 0.25 mm per turn

RD-KRU-15-01-piezodrive

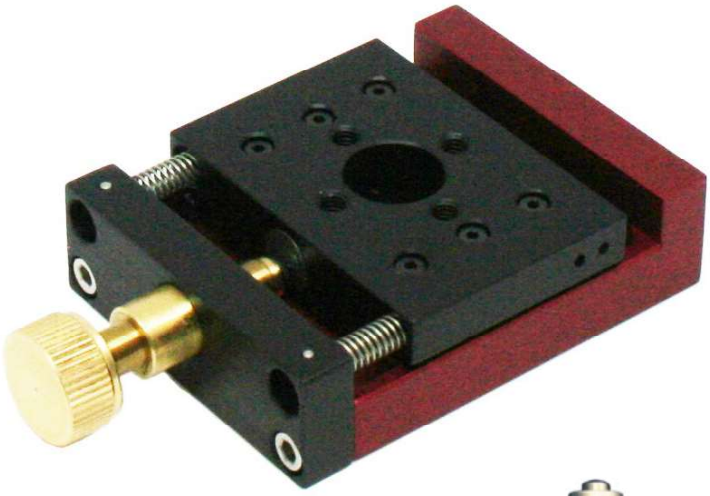
With fine thread screws:
- 0.25 mm per turn

- 0.15 mm per turn

With micrometer screws:
- 0.5 mm per turn
- 0.25 mm per turn

-piezo drive 27/35µm

RD-KRU-15-01



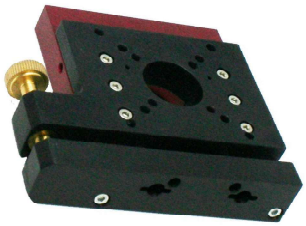
RD-KRU-15-01- piezo drive

Also available:

RD-KRU-15-02

RD-KRU-15-03

Also available with micrometer screws



RD-KRU-15-01-S

Also available:

RD-KRU-15-02-S

RD-KRU-15-03-S

Different adapter plates for all our translation stages available.

Translation stage with crossed roller way guides 25 mm adjustment line

RD-KRU-25-01 –02 –03

With fine thread screws:
- 0.25 mm per turn
- 0.15 mm per turn

With micrometer screws:
- 0.5 mm per turn

RD-KRU-25-01 -02 –03
-piezo drive

With fine thread screws:
- 0.25mm per turn
- 0.15 mm per turn

With micrometer screws:
- 0.5 mm per turn

-piezo drive 27/35µm

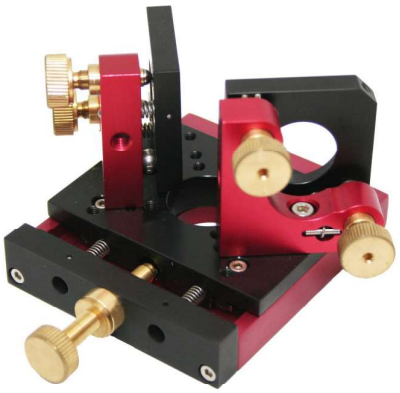
Also available with fine thread screws

RD-KRU-25-01-S
RD-KRU-25-02-S
RD-KRU-25-03-S

RD-KRU-25-01-S

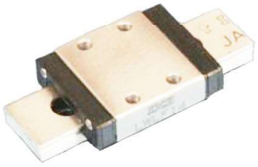
Different adapter plates for all our translation stages available.

Variable Delay-Line
- 2 mirror mounts
- 1 RD-KRU-25-01



Translation stage with linear roller way guides 15 mm adjustment line

The linear roller way guides are commercial systems which we built in our sliding stages. We are in the position to offer inexpensive but high quality systems, because of the simple assembly and the high precision. The linear roller way guides are delivered well fitted and with high rigidity. The sliding units are also available for custom-made units in different lengths. The adjustment of the sliding stages is carried out by fine thread or micrometer screws, stepper motor control on request.



Different adapter plates for all our translation stages available.

RD-KUL-15-01 -02 -03

Translation stage with fine thread screws:
- 0.25 mm per turn
- 0.15 mm per turn

Translation stage with micrometer screws:
- 0.5 mm per turn
- 0.25 mm per turn

Also available with micrometer screws

RD-KUL-15-01S -02S -03S

Translation stage with fine thread screws:
- 0.25 mm per turn
- 0.15 mm per turn

Translation stage with micrometer screws:
- 0.5 mm per turn
- 0.25 mm per turn

Translation stage with linear roller way guides 25 mm adjustment line

RD-KUL-25-01
RD-KUL-25-02
RD-KUL-25-03

Translation Stage with Piezo Drive

The new MDI-H with piezo drive is a mirror mount which is controlled by a piezo system with our own electronics. Besides a manual adjustment by 0.15 mm/0.25 mm per turn, the systems can be adjusted electronically within a µm-range.
The piezoelectric actuator is built into the translation stage. Specifications:
The operation voltage range is -10 V.....+150 V, leading to maximum stroke of > 20 µm
(typically 23 µm).

Piezo Controller

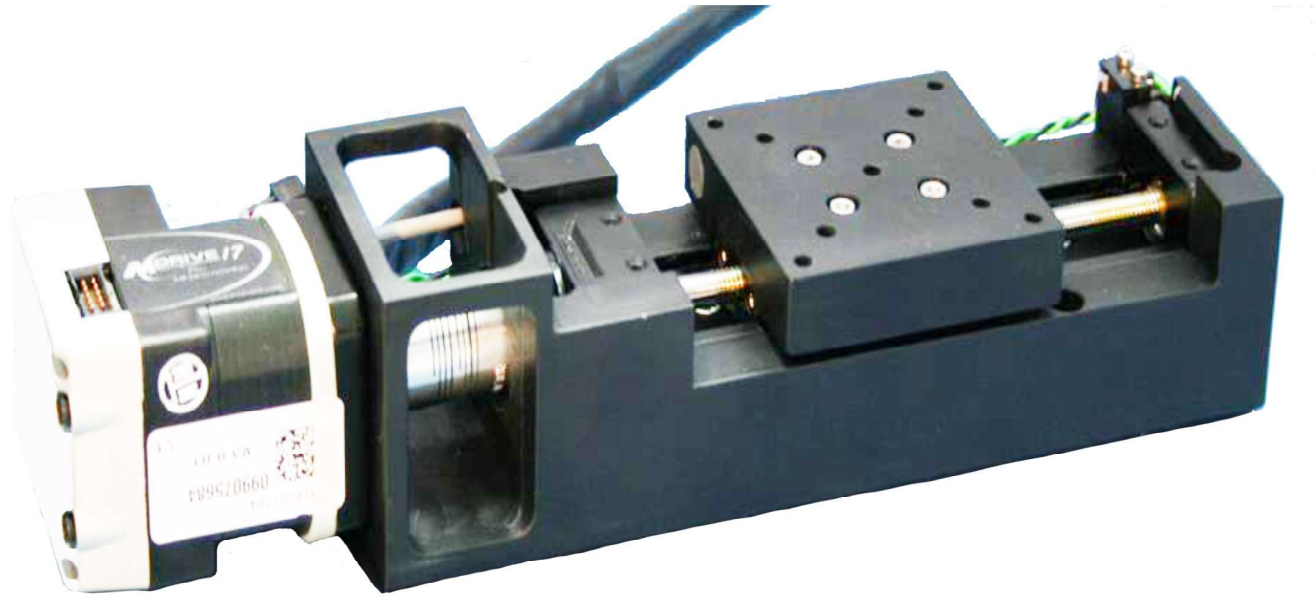
For further information please see on page 43

Translation Stage with Stepper Motor

RD Stepper motor drive 55	55 mm travel range xy and xyz available
RD Stepper motor drive 130	130 mm travel range
RD Stepper motor drive 180	180 mm travel range

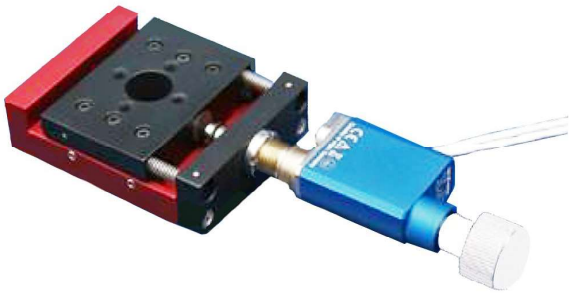
Specifications:

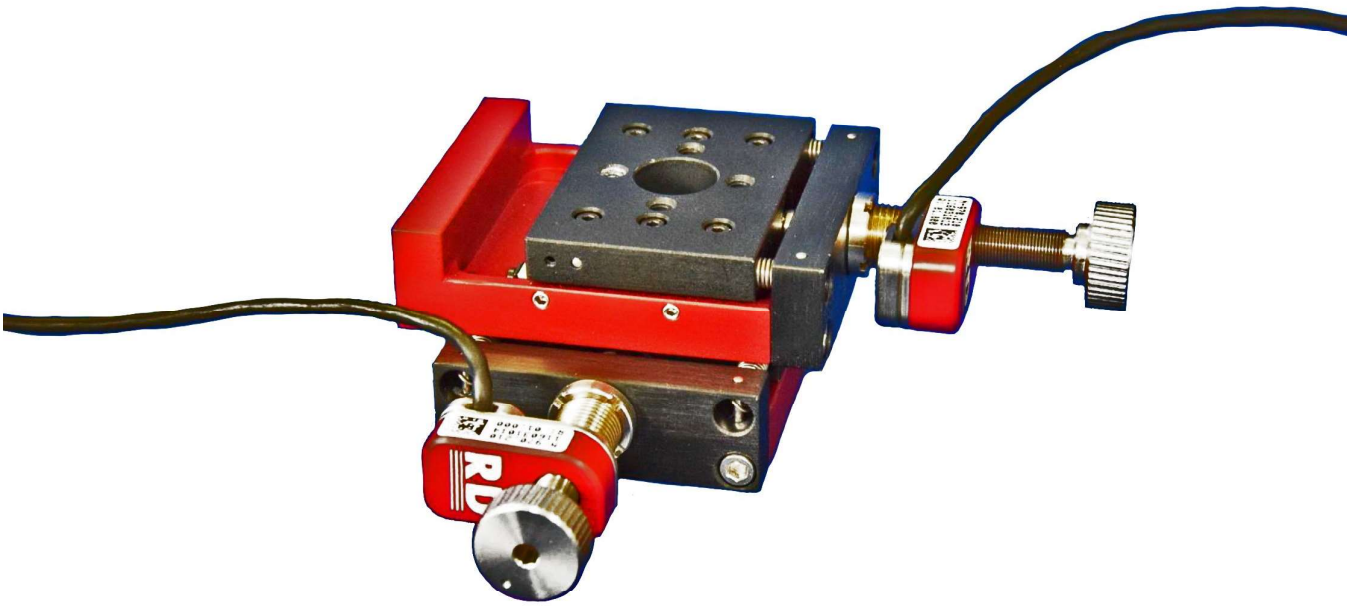
- Preloaded lead screw
- Min. incremental motion 0,1µm low cost version 0,3 µm
  (Higher resolution on request)
- Max. load 200N
- Limit and reference switches
- Control unit for three motors
- low cost version: control unit for 16 motors



Translation stage with Piezo Drive

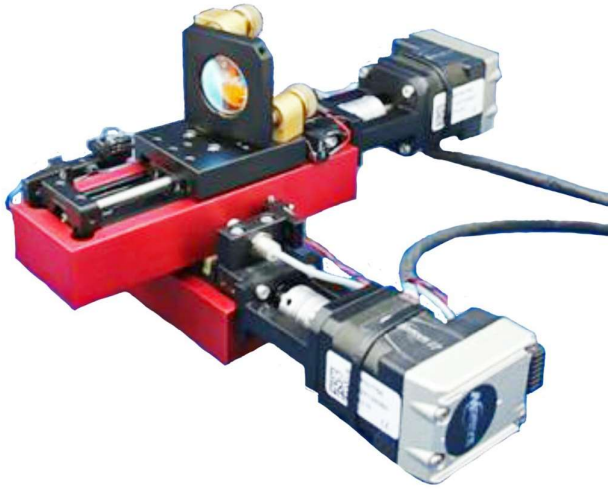
- Can be delivered with Piezo Prive
- **Examples:**
- our RD-KRU-15-01 Piezo Drive with tolerances of an accuracy of +/- 1 hundredth mm over the whole sliding range
- the 25 mm translation of +/- 2 hundredth mm





Translation stage with stepper motor

- our extremely precise laser control as standalone unit as x, xy and xyz version with the different travel ranges between 50 and 180 mm
- These are our translation elements on the basis of a pre-stressed linear roller way, combined with a translation stage with linear roller way, free from play. The accuracy and reproducibility is of highest precision.



Specifications

Min. incremental motion 0,1 µm
Max. 64.000 steps per turn
Max. speed: 16.000 steps per second
Max. load: 200 N
Limit and reference switches

A special feature is that the stepper motor can be controlled directly over a PC as the control card is installed inside the stepper motor. We can also offer a complete control box.

4-Axis Linear Stage RD-LSA-4

Our 4-Axis Linear Stage offers you the possilibilty to align optical tubes which contain an input and output (for lenses or modulators). While one end is focused on the laser beam, you can simply adjust the other one until the beam arises.
Every motion is stand-alone and conjoined to a single base, so you will not create a linked motion during your adjustments.

- Available for M4 and M6 threads
- Because of fine thread screws and the strong springs, you can adjust the stage very precise
- Available with 250 µm/turn and 150 µm/turn fine thread screws

5-Axis Linear Stage RD-LSA-5

Our 5-Axis Linear Stage offers you the possilibilty to align optical tubes which contain an input and output (for lenses or modulators). While one end is focused on the laser beam, you can simply adjust the other one until the beam arises.
Every motion is stand-alone and conjoined to a single base, so you will not create a linked motion during your adjustments.

- Available for M4 and M6 threads
- BEcause of fine thread screws and the strong springs, you can adjust the stage very precise
- Available with 250 µm/turn and 150 µm/turn fine thread screws