NFP Series Crossed-Roller Manual Linear Stages, 13/25 mm Travel, ≤1 µm

Model NFP Series · waveqvanta.com/products/nfp-series-crossed-roller-manual-linear-stages

Stainless steel micrometer linear stages with crossed-roller guides for sub-micron manual adjustment.



NFP series stages are single-axis manual linear stages made of 304 stainless steel, guided by precision crossed-roller guides and driven by a micrometer. They achieve a sensitivity of 1 µm or better with smooth, runout-free motion and are suited to fine adjustment of fiber coupling and waveguide devices and DPSS laser components; they can also be used in vacuum.

Key features

- Sensitivity ≤1 µm and straightness ≤3 µm
- 304 stainless steel body, sandblasted, for stability and corrosion resistance; also usable in vacuum
- Precision crossed-roller guide
- Micrometer drive on every model, 0.01 mm minimum micrometer reading
- Two sizes: 40 × 40 mm with 13 mm travel (NFP-1461) and 65 × 65 mm with 25 mm travel (NFP-1462)
- Four drive locations: center (C), right (SR), left (SL), center and vertical (CZ)

Specifications

Axes of Travel	X (single axis)
Travel Range	13 mm (NFP-1461); 25 mm (NFP-1462)
Stage Surface Size	40 × 40 mm (NFP-1461); 65 × 65 mm (NFP-1462)
Thickness	19.5 mm (NFP-1461); 23 ± 0.1 mm (NFP-1462)
Guide Mechanism	Precision crossed-roller guide
Drive Type	Micrometer
Drive Location	C: center; SR: right; SL: left; CZ: center and vertical
Sensitivity	≤1 µm
Micrometer Minimum Reading	0.01 mm
Straightness	≤3 µm
Load Capacity	5 kg (NFP-1461), 7 kg (NFP-1462); CZ versions 1.5 kg / 2.5 kg
Weight	0.28 kg (NFP-1461); 0.85 kg (NFP-1462)
Body Material and Finish	304 stainless steel, sandblasted

Model overview

Model	Travel (mm)	Stage Size (mm)	Thickness (mm)	Drive Location	Load (kg)	Weight (kg)
NFP-1461C	13	40 × 40	19.5	Center	5	0.28
NFP-1461SR	13	40 × 40	19.5	Right	5	0.28
NFP-1461SL	13	40 × 40	19.5	Left	5	0.28
NFP-1461CZ	13	40 × 40	19.5	Center and vertical	1.5	0.28
NFP-1462C	25	65 × 65	23 ± 0.1	Center	7	0.85
NFP-1462SR	25	65 × 65	23 ± 0.1	Right	7	0.85
NFP-1462SL	25	65 × 65	23 ± 0.1	Left	7	0.85
NFP-1462CZ	25	65 × 65	23 ± 0.1	Center and vertical	2.5	0.85

Typical applications

- Fiber coupling adjustment
- Optical waveguide device alignment
- DPSS laser component adjustment
- Precision manual positioning in vacuum