

FLEXDRIVE-4

Screw Driven Linear Stage

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The flexdrive-6 Series linear positioning tables, has a small compact size and its modular design makes it an ideally suited translation module for a large number of applications requiring precision, reliability and ease of integration.

Screw Driven Stages

The flexdrive™-4 series is an expansion of the product line to a small compact size and the modular design makes it an ideally suited translation module for a larger number of applications requiring precision, reliability and ease of integration. Engineers, system integrators and designer prefer the flexdrive-4 for their superb performance, flexibility to match to the application and assured longevity.

Superior Mechanical Design

The flexdrive-4 series is a very compact precision stage based on a monolithic high strength aluminum alloy with a 48 x 100 mm envelope and travel range from 50-450 mm. The payload capability is rated at 25 kg (55 lbs). The superb positioning performance is supported by square rails with recirculating low noise linear ball bearings and a precision ground ball screw drive.

- Environmentally hardened.
- Travel 50-450mm.
- Precision Ground Ball Screw.
- Optional side motor mounting.
- Engineered for easy Integration.
- 3 year warranty.

Applications

The flexdrive-series positioning tables have been a very successful translator product for two decades and are recognized for their sustained positioning performance and longevity in many applications like laser machining systems, bio-medical, metrology, instrumentation and automation. The outstanding selection criteria are the reason why professionals prefer the clean, modern international metric design of the flexdrive-series stages by NUTEC. The designer's preference for these modular concept positioners can be attributed to configurability for specific application requirements, the excellent specifications and the sustained performance coupled with longevity.

Sensor Options

For limit of travel and home position there are 3 LED sensors available, mounted internal to the stage. The electrical connection is at the motor end bulkhead with a DB connector.

FLEXDRIVE-4 Specifications

	FD-4-SP
Travel	150 – 600 mm
Motor Interface	BSM 40 or BSM 60 optional
Maximum Acceleration	Payload Dependent
Max. Axial Load	300 N
Recommended Payload Limit	25 kg
Drive Efficiency	80-90 %
Parasitic Torque Max.	0.15 Nm
Drive Screw Max.	3000 RPM

	Standard	Precision		
Travel Length	150 – 600 mm	150 – 600 mm		
Accuracy				
Ball Screw Drive	6 μ m + 2.5 μ m / 25mm	5 μ m + 2 μ m / 25mm		
Linear Encoder	N/A	3 μ m + 1 μ m / 25mm		
Servo & LIBEC	N/A	\pm 0.25 μ m		
Drive Screw				
Ball Screw	Max. RPM 3000	2000		
	Repeatability \pm 2 μ m	\pm 1.5 μ m		
	Diameter 12 mm	12 mm		
Ball Screw Lead				
Standard	5 mm	5 mm		
Optional	1 mm	1 mm		
Stroke	Flatness	Straightness	Flatness	Straightness
50 mm	8 μ m	4 μ m	5 μ m	3 μ m
100 mm	10 μ m	4 μ m	7 μ m	4 μ m
150 mm	12 μ m	6 μ m	8 μ m	5 μ m
200 mm	12 μ m	8 μ m	10 μ m	5 μ m
250 mm	15 μ m	10 μ m	10 μ m	6 μ m
300 mm	20 μ m	12 μ m	10 μ m	6 μ m
350 mm	22 μ m	15 μ m	12 μ m	7 μ m
400 mm	25 μ m	15 μ m	15 μ m	8 μ m
450 mm	30 μ m	15 μ m	15 μ m	8 μ m

FLEXDRIVE-4 Dimensions



