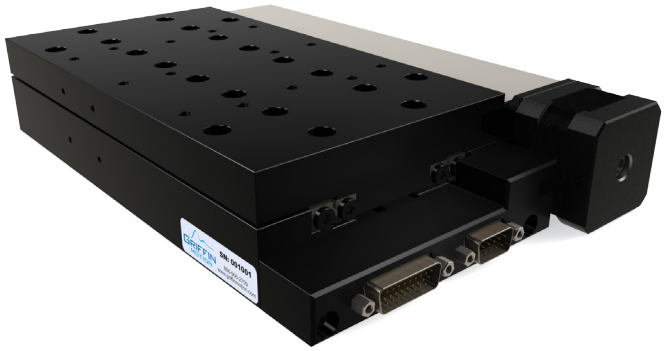
1040 CLASSIC ROAD | APEX, NC 27539
P: 866.906.2709 | F: 919.882.1430
www.griffinmotion.com

Precision Linear Motion Platform

FEATURES

- Compact Low-Profile Design
- 100mm Travel
- Lead screw
- Optical limit switches with home
- Stepper motor drive
- Crossed Roller Bearings

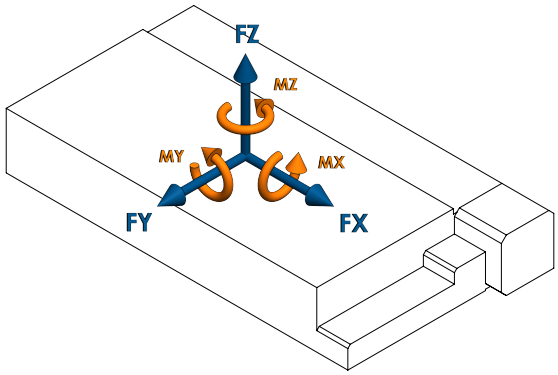


The LNS-HS Series stages are designed for a variety of applications. This compact low profile stage offers cost effective motion for laboratory and automation needs. This stage offers the same levels of flatness and straightness as the BS series tables. The hybrid stepper drive and crossed roller bearings provide smooth motion. The drive has an inherent braking action allowing it to maintain position when the motors are not powered. The LNS-BS Series stages can be stacked to create X, Y and Z motion. The stage can operate in any orientation.

1040 CLASSIC ROAD | APEX, NC 27539
P: 866.906.2709 | F: 919.882.1430
www.griffinmotion.com

Product Specifications

Force X (N)	75
Force Y (N)	250
Force Z (N)	500
Flatness (µm)	10
Height (mm)	45
Length (mm)	240
Limit Switches	Yes
Linear Accuracy (µm)	25
Linear Repeatability (µm)	5
Linear Velocity (mm/s)	25
Moment X (N·m)	60
Moment Y (N·m)	275
Moment Z (N·m)	110
Moving Mass X (kg)	1.67
Pitch +/- (arc-sec)	12
Screw Lead (mm)	3.175
Stage Mass (kg)	3.67
Stepper Motor Resolution (Whole Steps/rev)	200
Straigtness (µm)	10
Width (mm)	155
Yaw +/- (arc-sec)	12



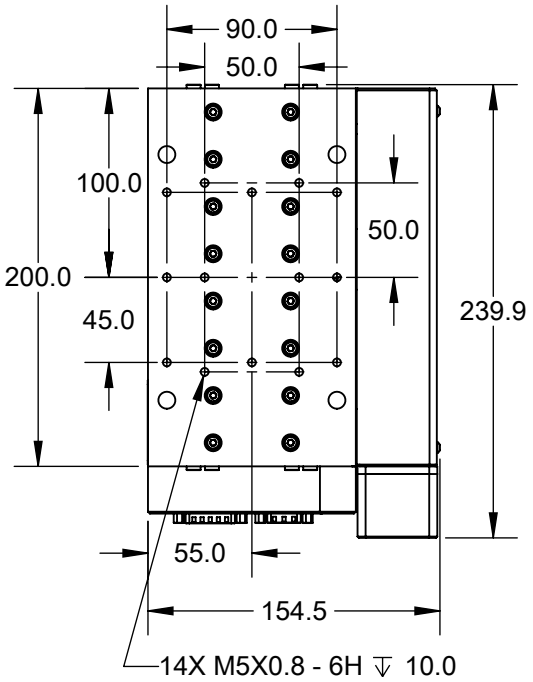
LOAD DIRECTIONS

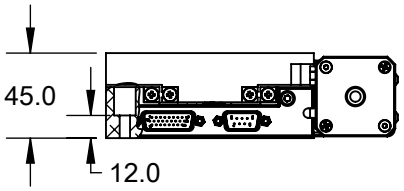
Part Number Description

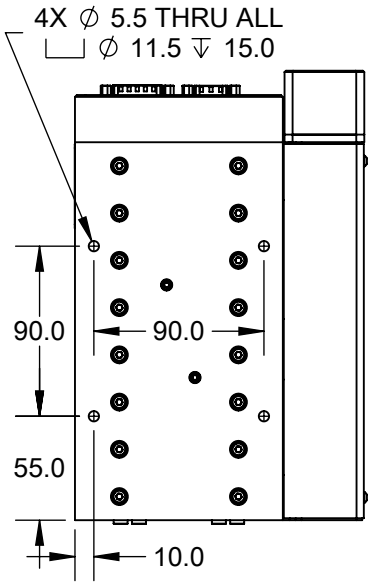
LNS	LNS Series
100	100mm Travel
HS	Hybrid Stepper Leadscrew
C	Hybrid Stepper Leadscrew
N	Limit and Home Switch Only
S	Standard Precision
0	No Additional Options
00	Standard Product (Call for custom)

1040 CLASSIC ROAD | APEX, NC 27539
P: 866.906.2709 | F: 919.882.1430
www.griffinmotion.com

Mechanical Specifications



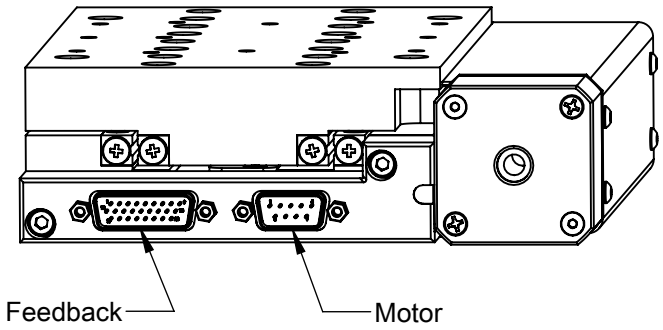




1040 CLASSIC ROAD | APEX, NC 27539
P: 866.906.2709 | F: 919.882.1430
www.griffinmotion.com

Electrical Pinout

Feedback Connector (DSUB26HD MALE)	
PIN	NAME
1	+5V
2	*
3	*
4	*
5	LIM+
6	*
7	*
8	*
9	*
10	*
11	*
12	*
13	*
14	LIM-
15	*
16	*
17	*
18	*
19	GND
20	*
21	*
22	*
23	HOME
24	*
25	*
26	*
* Reserved	



Motor Connector (DSUB9 MALE)	
PIN	NAME
1	*
2	*
3	*
4	*
5	*
6	PHASE A+
7	PHASE A-
8	PHASE B+
9	PHASE B-
* Reserved	

Motor Specifications	
Motor Type	Bipolar Stepper
Winding Voltage (VDC)	2.33
Current/phase (A)	1.5
Resistance/phase (Ω)	1.56
Induction/phase(mH)	1.9
Power Consumption (W)	7.0

Feedback Specifications	
Supply Voltage (V)	5.0±10%
Supply Current (mA)	250
Encoder Feedback	No
Limit Switches	Yes
Limit Switch Output Type	CMOS
Limit Switch Output current (mA)	±20.0
Home Switch	Yes
Home Switch Output Type	CMOS
Home Switch Output current (mA)	±20.0

A home switch is provided near center mechanical travel and a limit switch at each end of travel. The limit switches will be pulled low throughout the travel range of the stage. The output will swing high at the end of travel and remain high until the mechanical limit is reached.