



LYNX HD XY Lead Screw Drive Handwh

Handwheel/Bellows Option



Load Capacity Data

Dynamic Load Capacity per Carriage = 45.9 kN x 4 runner blocks = 183.6 kN per carriage = 41,275 lbf **Static Load Capacity per Carriage** = 82.9 kN x 4 runner blocks = 331.6 kN per carriage = 74,547 lbf The Load capacity chart to the right provides a correction factor based on the direction of the load. The load capacity in the 0 or 180 deg direction is 100%.

The Formula Diagram below will guide you in determining the resultant load at each runner block once you determine the actual location of the Cg of the load.

Example:

L0 = 175 mm (7 in.) L1 = 125 mm (5 in.) L2 = 0 L3 = 200 mm (8 in) mg = 3559 N (800 lb)

If L2 = 0 then P1 and P2 = 3.737 kN 45.9 kN/3.737 kN = 12x Safety Factor

If L2 = 0 then P3 and P4 = -1.957 kN 45.9 kN/1.957 kN = 23.45x Safety Factor

Theoretical numbers should be verified based on user empirical conditions.

Note: The maximum distance the centerline of the X-axis carriage can travel passed the centerline of the Y-axis carriage is 200 mm.











Other LYNX Series Solutions

Rapid System Prototyping, also known as **breadboarding**, is a highly effective approach for developing multi-axis systems. It allows engineers to design, test, and refine complex motion platforms in a modular and flexible environment. Breadboarding solutions provide the foundation for assembling and iterating on system designs, enabling efficient integration of components like actuators, controllers, and sensors.



Concept Design



Motion Control

Let us select a Modusystems Preengineered motor and control solution for your next Screw Drive





Stepper or Servo Controls Stepper or Servo Motors Integrated Motor Options

LSA/BSA with Inline motor Mount: The actuator is a nice addition to any multi-axis configuration. The Z-axis shown is the LSA-Lead Screw actuator with Inline motor.

SBA with Linear Encoder Option: SBA is available with 0.1 μ Resolution magnetic encoder. Perfect for high-speed repeatable motion.





