

Product data sheet

Specifications



Linear table, Lexium TAS, model range 4, profile size, 100 x 39 mm, ball screw, lead 2 mm per revolution, double ball guide

TAS41SBA

Main

Range Of Product	Lexium TAS
Product Or Component Type	Linear table
Product Specific Application	For 1 direction
Load Position	On carriage
Drive Type	Ball screw
Guide Type	Double ball

Complementary

Operating Position	Horizontal
Function Available	Different types of motor mounting options Belt drive with different mounting orientations
Distance Per Revolution	0.08 in (2 mm)
Diameter	For ball screw 0.47 in (12 mm)
Axial Backlash	0.00 in (0.04 mm) for ball screw
Operating Force	500 N for Fx 1720 N for Fy 2155 N for Fz positive 2155 N for Fz negative
Maximum Speed	0.33 ft/s (0.1 m/s)
Acceleration	2.62 ft/s² (0.8 m/s²)
Max. Drive Torque	3.54 lbf.in (0.4 N.m)
Max. Torque	<424.84 lbf.in (48 N.m) for Mx <796.57 lbf.in (90 N.m) for My <637.25 lbf.in (72 N.m) for Mz
Min. ... Max. Stroke	0.28...23.62 in (7...600 mm)
Repeat Accuracy	+/- 0.02 mm
Profile Dimension	100 x 50 mm
Service Life	5000 km

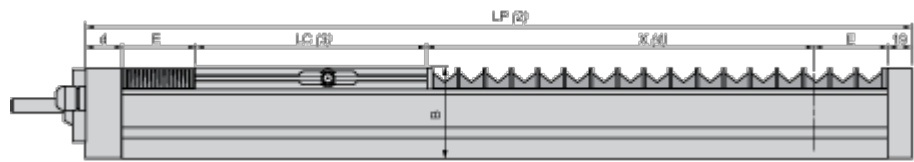
Contractual warranty

Warranty	18 months
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Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Dimensions Drawings

Dimensions

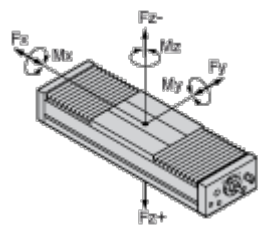


- (2) LP : total length of axis. Length rounded down to the nearest whole number. Using the example of a Lexium TAS 41 linear table and a desired stroke of 500 mm / 19.68 in. : $LP = 205\text{ mm} / 8.07\text{ in.} + (500\text{ mm} / 19.68\text{ in.} \times 1.38532) = 897.66$; 897.66 rounded down to the nearest whole number gives $LP = 897\text{ mm} / 35.31\text{ in.}$
- (3) LC : length of carriage
- (4) X : stroke, depending on application

B		d		E	LC		LP
mm	in.	mm	in.		mm	in.	
50	1.97	24	0.94	$= (LP - 163\text{ mm} / 6.42\text{ in.} - X)/2$	120	4.72	$= 205\text{ mm} / 8.07\text{ in.} + (X \text{ multiplied by } 1.38532)$

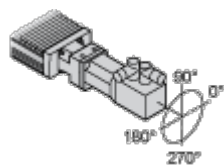
Technical Description

Forces and Torques Exerted on the Lexium TAS Linear Table

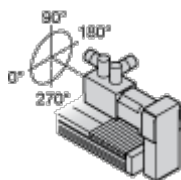


Possible Types of Interface for the Drive Element and Motor Orientations

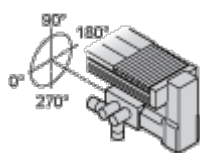
Motor in the Table Axis, Driven Directly



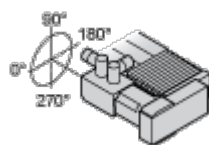
Motor Above Table, Driven by Belt



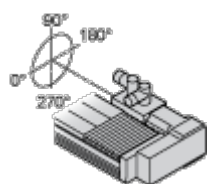
Motor Below Table, Driven by Belt



Motor to Left of Table, Driven by Belt



Motor to Right of Table, Driven by Belt



With Shaft (Without Connection, Without Motor)

