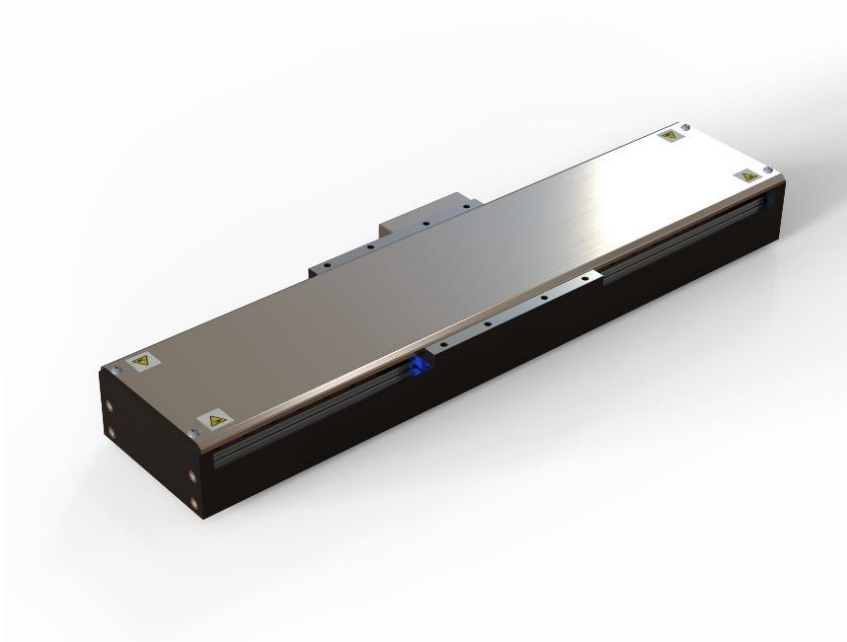




Linear Stage LS100

Datasheet

Product description

LS100 is a motion system platform. Through its robust and reliable stacked architecture, designed with modularity and scalability in mind, it is recognised as a cost-effective entry point for many turn-key motion solutions.

- ✓ Standard strokes of 415 mm, 615 mm and 815 mm
- ✓ Compact footprint and design suitable for space-limited applications
- ✓ Extremely low profile
- ✓ Up to 8 kg payload
- ✓ Built-in vacuum supply and customer signal cables option at carriage level
- ✓ Direct drive

Product description

Thanks to its low settling time and high dynamic performance, the LS100 linear axis is perfectly suited for a wide range of applications

- ✓ Inspection
- ✓ Packaging
- ✓ Electronic and industrial assembly
- ✓ Laser welding
- ✓ Precision automation
- ✓ Robotics

Motion	Unit	LS100-400	LS100-600	LS100-800
Travel range	mm	415	615	815
Maximum velocity	mm/s			
Maximum acceleration	mm/s ²	30	30	30
Rated payload	kg	8	8	8
Straightness error in Y	um	±10	±15	±15
Straightness error in Z	um	±10	±15	±15
Positioning accuracy	um	±15	±18	±20
Bidirectional repeatability	um	2	3	3
Sensor	-	Incremental linear encoder	Incremental linear encoder	Incremental linear encoder
Sensor signal	-	Sin/cos 1Vpp	Sin/cos 1Vpp	Sin/cos 1Vpp
Sensor resolution	nm	1	1	1

Mechanical data	Unit	LS100-400	LS100-600	LS100-800
Stage width	mm	183	183	183
Stage length	mm	624	824	1024
Stage height	mm	67	67	67
Overall mass	kg	12	15	18
Guide	-	Ball bearing	Ball bearing	Ball bearing
Baseplate material	-	Aluminium	Aluminium	Aluminium
Carriage material	-	Aluminium	Aluminium	Aluminium

Electrical specification	Unit	LS100-400	LS100-600	LS100-800
Motor type	-	Ironless 3-ph motor	Ironless 3-ph motor	Ironless 3-ph motor
Peak force	N	85	85	85
Continuous force	N	39	39	39
Motor constant	N/Arms	12.3	12.3	12.3
Peak current	Arms	6.9	6.9	6.9
Continuous current	Arms	3.2	3.2	3.2
Back EMF constant	V/m/s	10.1	10.1	10.1
Resistance per phase	Ω	1.8	1.8	1.8
Magnetic period	mm	24	24	24

