

## FEATURES:

- Heavy cast-aluminum side plates support the axis above a work surface
- Home reference and far end limit switch with  $\pm 0.01$  mm (  $\pm 0.0004$  in) repeatability
- Features 2-patented double linear rails and 4-patented double bearing blocks
- Fitted with plastic lip seals to guard against contaminants
- All models with stepper motor option feature 125 oz · in stepper motor, model HL2600M210001
- All models with servomotor option feature motor model HZ2600M1050XY3 with line driver optical rotary encoder, 1000 line
- Standard anti-backlash ball screw and nut, 16 mm (.6 in) diameter with 5 mm (.2 in) pitch
- Work surface is flat milled aluminum 220 x 175 x 8 mm (8.7 x 6.9 x .3 in) with 8-drilled and tapped M6 mounting holes
- Choice of two travel lengths with two working heights
- Ready to accept Z-slide and standard-duty slide for XY, YZ and XYZ configurations

## CATALOG NUMBER

HL31   M242    05

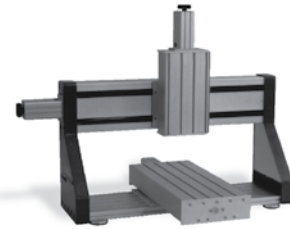
### Motor Drive

- X No Motor
- V Servomotor (216W)
- S Stepper Motor
- C Crank Handle
- L Servomotor (145W)

### Screw Type

- B Ball Screw
- X No Screw

Model
101
102
201



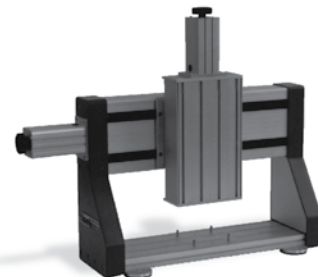
### EXAMPLE OF XYZ

Positioning system with bridge mounted Y-slide (X- & Z-slides not included)



### EXAMPLE OF XY

Positioning system with bridge mounted Y-slide (X-slide not included)



### EXAMPLE OF YZ

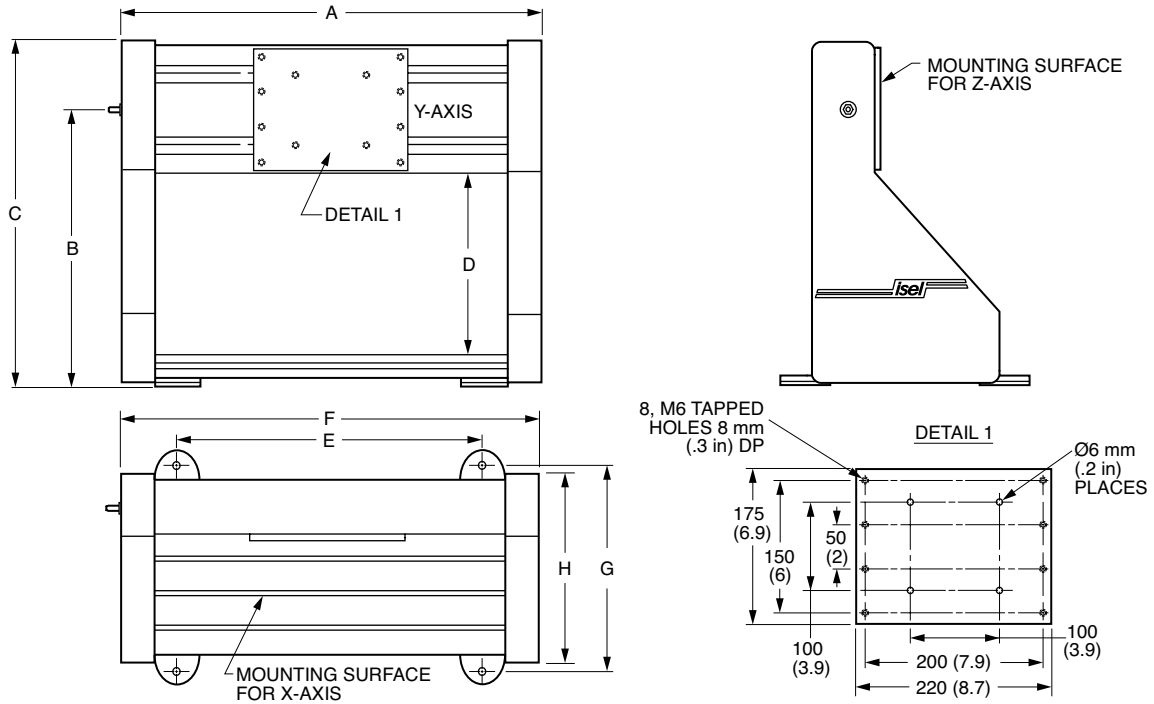
Positioning system with bridge mounted Y-slide (Z-slide not included)

## BRIDGE MOUNTED SLIDE SELECTION

Model	Length mm (in)	Travel mm (in)	Height mm (in)
101	620 (24.4)	290 (11.4)	189 (7.4)
102	620 (24.4)	290 (11.4)	257 (10.1)
201	970 (38.2)	500 (19.7)	257 (10.1)

**EXAMPLE:** To order a Bridge Mounted Slide with Stepper Motor (S), 5 mm (.2 in) Pitch Ball Screw (B) & 500 mm (19.7 in) Travel (201), the Catalog Number is HL31SBM24220105.

For mating connectors and cables, see page 119. For motor standoffs and couplings, see page 107.



See Web site for complete CAD drawings

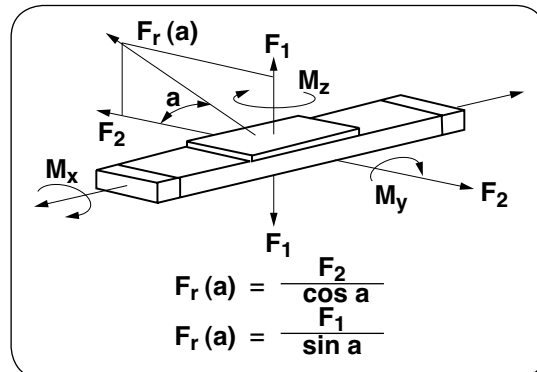
Model	Travel mm (in)	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H mm (in)
101	290 (11.4)	610 (24)	325 (12.8)	422 (16.6)	189 (7.4)	445 (17.5)	610 (24)	215 (8.5)	194 (7.6)
102	290 (11.4)	610 (24)	393 (15.5)	490 (19.3)	257 (10.1)	445 (17.5)	610 (24)	296 (11.7)	270 (10.6)
201	500 (19.7)	820 (32.3)	393 (15.5)	490 (19.3)	257 (10.1)	655 (25.8)	820 (32.3)	296 (11.7)	270 (10.6)

SPECIFICATIONS		
Repeatability	± 0.01 mm (± .0004 in)	
Accuracy	± 0.1 mm / 300 mm (± .004 in / 12 in)	
Motor Drives	Stepper	Servo
No Load Speed	127 mm / sec (5 in / sec)	152 mm / sec (6 in / sec)
Thrust Force at Low Speed	91 kg (200 lb)	113 kg (250 lb)
Resolution	0.0125 mm (.0005 in)	0.0025 mm (.0001 in)

### Bridge Mounted Slide

LOAD and MOMENT DATA	
F1 Stat	3200 N (719.4 lbs)
F1 Dyn	1600 N (357.7 lbs)
F2 Stat	3200 N (719.4 lbs)
F2 Dyn	1600 N (357.7 lbs)
Mx Stat	79 N·m (700 lb·in)
Mx Dyn	56 N·m (500 lb·in)
My Stat	79 N·m (700 lb·in)
My Dyn	56 N·m (500 lb·in)
Mz Stat	79 N·m (700 lb·in)
Mz Dyn	56 N·m (500 lb·in)

NOTE: See formulas in load bearing mechanisms' section of technical section.



NOTE: Dimensions in ( ) are inch