

**FEATURES:**

- 4 T-Slots on 50 mm (1.97 in) centers are provided to mount tooling
- Home reference switch and far end limit switch with  $\pm 0.01$  mm ( $\pm .0004$  in) repeatability
- Aluminum dust cover with plastic lip seals to provide protection against contaminants
- All models with stepper motor option feature 1.6 N·m (14.16 lbf·in) stepper motor, model HL2600M210100
- All models with 216W servomotor option feature motor model HZ2600M0242610 with line driver optical rotary encoder, 1000 line. 145W servomotors use HZ2600M0243610
- Features 2-patented double linear rails and 4-patented double bearing blocks
- Standard anti-backlash ball screw and nut, 16 mm (.6 in) diameter with 5 mm (.2 in) pitch
- Slide-to-slide mounting surface is flat milled aluminum 220 x 175 x 8 mm ( 8.7 x 6.9 x .3 in) with 4-holes counterbored for M6 cap screws
- Self-locking magnetic brake to maintain carriage position when power to the motor is turned off or interrupted. 200 mA, 24V DC is required to disengage brake
- Slide can be ordered with side-mounted motor



**Z-AXIS SLIDE SELECTION**

**CATALOG NUMBER**  
 HL31   M5120    05

- Motor Drive**
- X** No Motor
  - V** Servomotor (216W)
  - L** Servomotor (145W)
  - S** Stepper motor

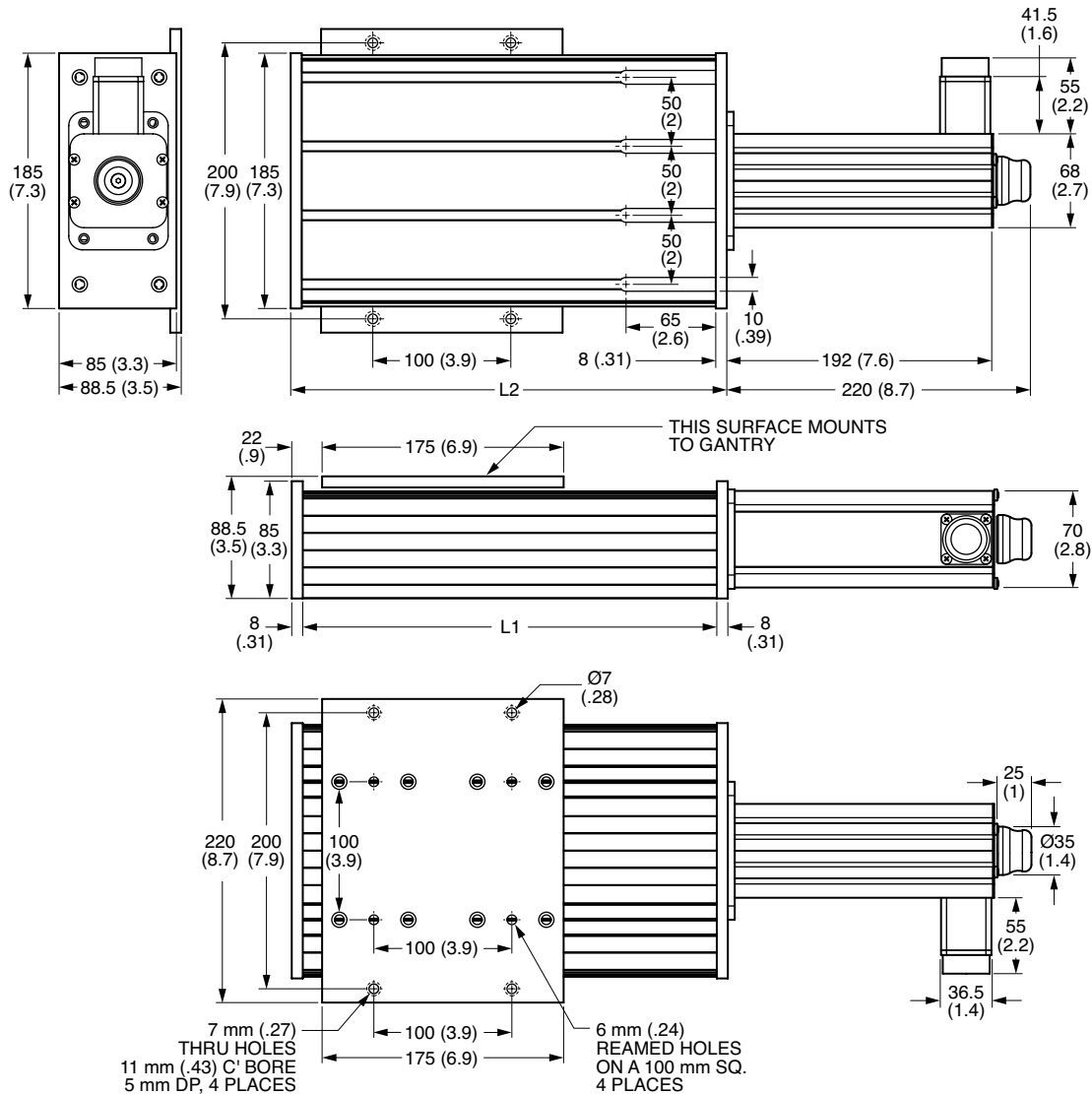
- Motor Mount Type**
- B** Inline
  - K** Side Mount

Code
300
400
500
700

Code	L1 Length mm (in)	L2 Length mm (in)	Travel mm (in)	Weight kg (lb)	
				Stepper	Servo
300	300 (11.8)	316 (12.4)	80 (3.1)	9 (20)	9.5 (21)
400	400 (15.7)	416 (16.4)	175 (6.9)	11.3 (25)	11.8 (26)
500	500 (19.7)	516 (20.3)	275 (10.8)	15.9 (35)	16.3 (36)
700	700 (27.6)	716 (28.2)	475 (18.7)	20 (44)	20.4 (45)

**EXAMPLE:** To order a Z-Axis Slide with a 216W Servomotor (V), Inline Motor Mount Type (B) with 275 mm (10.8 in) Travel, the Catalog Number is **HL31VBM512050005**.

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



(Shown with Stepper Motor option)

See Web site for complete CAD drawings

**SPECIFICATIONS**

<b>Repeatability</b>	±0.01 mm (±.0004 in)	
<b>Accuracy</b>	±0.1 mm / 300 mm (±.004 in / 12 in)	
<b>Max. Z-Axis Load</b>	22.5 kg (50 lb)	
<b>Motor Drives</b>	<b>Stepper</b>	<b>Servo</b>
<b>No Load Speed</b>	127 mm / sec (5 in / sec)	152 mm / sec (6 in / sec)
<b>Thrust Force at Low Speed</b>	91 kg (200 lb)	113 kg (250 lb)
<b>Resolution</b>	0.0125 mm (.0005 in)	0.00125 mm (.00005 in)

NOTE: Dimensions in ( ) are inch