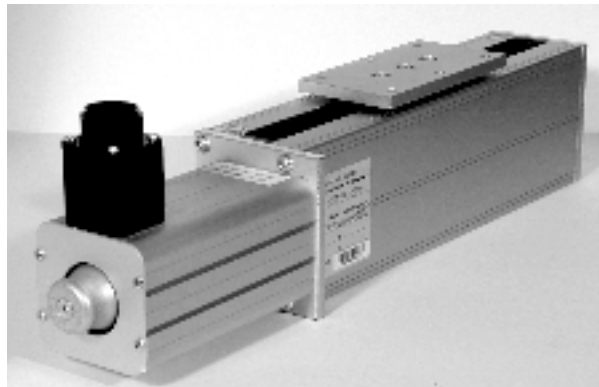


## FEATURES

- ◆ Narrow profile housing built from a single rigid, clear anodized aluminum extrusion
- ◆ Aluminum dust cover with plastic lip seals to protect against contaminants
- ◆ All models with stepper motor option feature 125 oz•in stepper motor, model HL2600M210001
- ◆ All models with servo motor option feature motor model HZ2600M1050XY3 with line driver optical rotary encoder, 1000 line
- ◆ Home reference and far end limit switch with a repeatability of  $\pm 0.01$  mm
- ◆ Patented double linear rail and patented double bearing block
- ◆ Standard anti-backlash ball screw and nut, 16 mm diameter with 5 mm pitch
- ◆ Work surface is flat milled aluminum 125 x 65 x 8 mm with 6 drilled and tapped M6 mounting holes
- ◆ Optional ball screw is 16 mm diameter, 10 mm or 20 mm pitch



2 MACHINES & SLIDES

### CATALOG NUMBER

HL31   M501

**Motor Drive**  
**X** No Motor  
**V** Servo Motor  
**S** Stepper Motor  
**C** Crank Handle

**Screw Pitch**  
**05** 5 mm  
**10** 10 mm  
**20** 20 mm

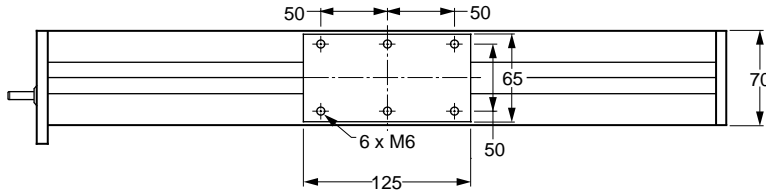
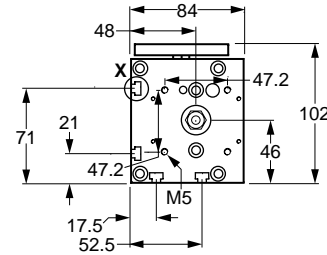
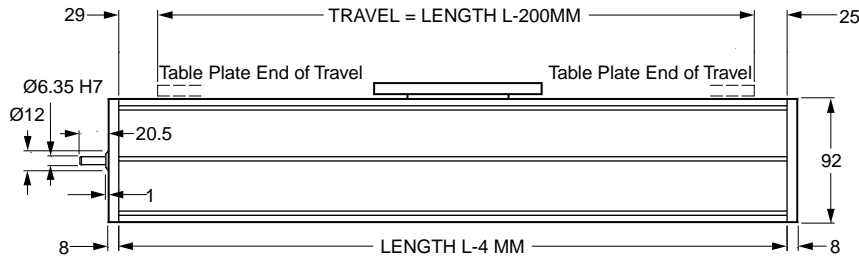
**Screw Type**  
**B** Ball Screw  
**X** No Screw

### STANDARD-DUTY SLIDE SELECTION

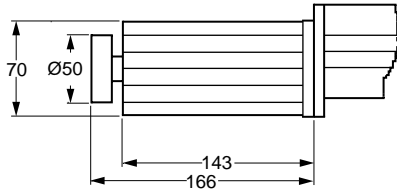
Code	Length, L1 mm (in)	Travel mm (in)	Weight kg (lb)
<b>0300</b>	300 (11.8)	100 (3.9)	2.7 (6)
<b>0400</b>	400 (15.7)	200 (7.8)	4 (9)
<b>0500</b>	500 (19.6)	300 (11.8)	5.9 (13)
<b>0600</b>	600 (23.6)	400 (15.7)	6.8 (15)
<b>0850</b>	850 (33.4)	650 (21.6)	9 (20)
<b>1000</b>	1000 (39.3)	800 (31.4)	10.4 (23)
<b>1100</b>	1100 (43.3)	900 (35.4)	11.3 (25)
<b>1250</b>	1250 (49.2)	1050 (41.3)	12.7 (28)
<b>1300</b>	1300 (53.1)	1150 (43.2)	14 (31)
<b>1500</b>	1500 (59.0)	1300 (51.1)	15 (33)

**EXAMPLE:** To order a Narrow Profile Slide with Stepper Motor (**S**), 5 mm Pitch Ball Screw (**B**) & 200 mm Travel (**0400**), the Catalog Number is **HL31SBM501040005**

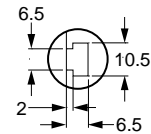
For mating connectors and cables, see page 166.  
 For motor standoffs and couplings, see page 132.



**STEPPER MOTOR MODULE**



**X1:1**



**DETAILS OF T-SLOT**

SPECIFICATIONS				
<b>Repeatability</b>		± 0.01 mm (± .0004 in)		
<b>Accuracy</b>		± 0.1 mm / 300 mm (± .004 in / 12 in)		
<b>Vertical Static Load Capacity</b>		23 kg (50 lb)		
Motor Drive	Ball Screw Pitch mm	Thrust Force at Low Speeds, kg (lb)	No Load Speed mm/sec (in/sec)	Resolution mm (in)
<b>Stepper Motor</b>	5	91 (200)	127 (5)	0.0125 (.0005)
	10	45 (100)	254 (10)	0.025 (.001)
	20	23 (50)	510 (20)	0.05 (.002)
<b>Servo Motor</b>	5	113 (250)	152 (6)	0.0025 (.0001)
	10	57 (125)	305 (12)	0.005 (.0002)
	20	28 (63)	610 (24)	0.01 (.0004)

**NOTES ON SPECIFICATIONS:** Stepper motor is model HL2600M210001 as described on page 152, operating in half step mode, with 4.5A / phase, 40V chopper driver. Servo motor is model HZ2600M1050XY3 as described on page 164, operating with 6A / 80V chopper amplifier and 1000 line encoder operating in quadrature. These figures will, of course, vary with different loads, amplifiers and acceleration profiles provided by the controller.

