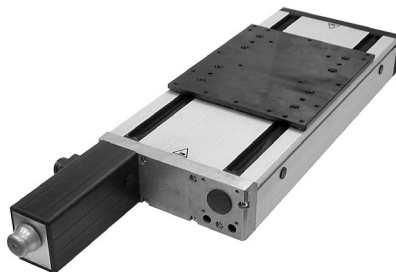




## Heavy-Duty Slide 2 for Heavy Loads

### FEATURES:

- Constructed from Series 500 Double Rail, a **single rigid aluminum extrusion profile** with aluminum end plates
- Compact, modular design with T-Slots on 3 sides for easy mounting
- Available with many motor options
- Fitted with plastic seals to guard against contaminants
- Home reference and far end limit switch with a repeatability of  $\pm 0.01$  mm ( $\pm .0004$  in)
- Four precision steel rails  $\text{\O}12\text{h6}$  with four **BEARING CARRIAGE 4 (HL46D0M223007)** steel bearing blocks all hardened to HRC 62  $\pm 2$
- Antibacklash  $\text{\O}16$  mm (.63 in) ball screw drives with pitches of 2.5 (.1), 5 (.2), 10 (.4) and 20 mm (.8 in) available



**Carriage Plate Included**  
(Shown with Stepper Motor)

XYZ configurations possible with mounting plates on pages ??? and ???.

### HEAVY-DUTY SLIDE SELECTION

#### CATALOG NUMBER

HL31HDM

#### Screw Type

- B** Ball Screw
- K** Ball Screw with Side Mount Motor

#### Motor Drive

- X** No Motor
- V** Servomotor (200W)
- B** Servomotor (200W) with 24V DC Brake
- L** Servomotor (100W)
- M** Servomotor (100W) with 24V DC Brake
- S** Stepper Motor
- A** Stepper Motor with 24V DC Brake
- C** Crank Handle

#### Pitch Code

- Blank for no screw
- 02** 2.5 mm (.1 in)
- 05** 5 mm (.2 in)
- 10** 10 mm (.4 in)
- 20** 20 mm (.8 in)

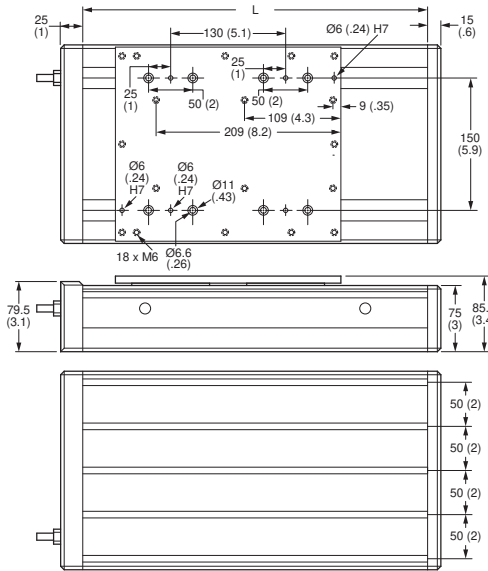
Code	L Length mm (in)	Travel mm (in)
0390	390 (15.4)	122 (4.8)
0490	490 (19.3)	222 (8.7)
0590	590 (23.2)	322 (12.7)
0690	690 (27.2)	422 (16.6)
0790	790 (31.1)	522 (20.6)
0890	890 (35.0)	622 (24.5)
0990	990 (39.0)	722 (28.4)
1090	1090 (42.9)	822 (32.4)
1190	1190 (46.9)	922 (36.3)
1290	1290 (50.8)	1022 (40.2)
1390	1390 (54.7)	1122 (44.2)
1490	1490 (58.7)	1222 (48.1)
1790	1790 (70.5)	1522 (59.9)
1990	1990 (78.3)	1722 (67.8)
2490	2490 (98.0)	2222 (87.5)
2990	2990 (117.7)	2722 (107.2)

To order a Heavy-Duty Slide 2 with 200W Servomotor (V), 10 mm pitch Ball Screw (B), and 390 mm length, the catalog number is **HL31HDM039010V**.

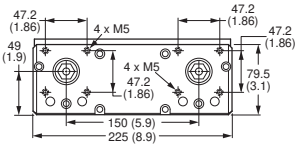
For mating connectors, cables, motor standoffs and couplings see the accessories section.



## Heavy-Duty Slide 2 for Heavy Loads



(See Web site for complete drawings)



NOTE: Dimensions in ( ) are inch.

4 T-SLOTS

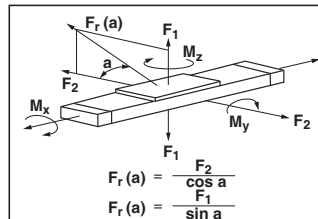
SPECIFICATIONS	
Repeatability	± 0.01 mm (± .0004 in)
Accuracy	± 0.1 mm / 300 mm (± .004 in / 12 in)

Motor Drive	Ball Screw Pitch mm (in)	Thrust Force @ Low Speeds kg (lb)	No Load Speed mm/sec (in/sec)	Resolution mm (in)
Stepper Motor	2.5 (1)	182 (400)	64 (2.5)	0.0062 (.0002)
	5 (2)	91 (200)	127 (5)	0.0125 (.0005)
	10 (4)	45 (100)	254 (10)	0.0250 (.0098)
Servomotor	20 (8)	23 (50)	508 (20)	0.0500 (.0197)
	2.5 (1)	226 (500)	77 (3)	0.0013 (.00005)
	5 (2)	113 (250)	152 (6)	0.0025 (.0001)
	10 (4)	57 (125)	305 (12)	0.0050 (.0002)
	20 (8)	28 (62)	610 (24)	0.0100 (.0004)

### LOAD and MOMENT DATA

Model	Heavy-Duty Slide 2
F1 stat	3200 N (719.4 lb)
F1 dyn	2000 N (449.6 lb)
F2 stat	3200 N (719.4 lb)
F2 dyn	2000 N (449.6 lb)
Mx stat	147 N-m (1300 lb-in)
My stat	129.6 N-m (1146 lb-in)
Mz stat	129.6 N-m (1146 lb-in)
Mx dyn	89.6 N-m (792 lb-in)
My dyn	77.6 N-m (686 lb-in)
Mz dyn	77.6 N-m (686 lb-in)

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



For notes on specifications to produce this data, refer to page xxx.