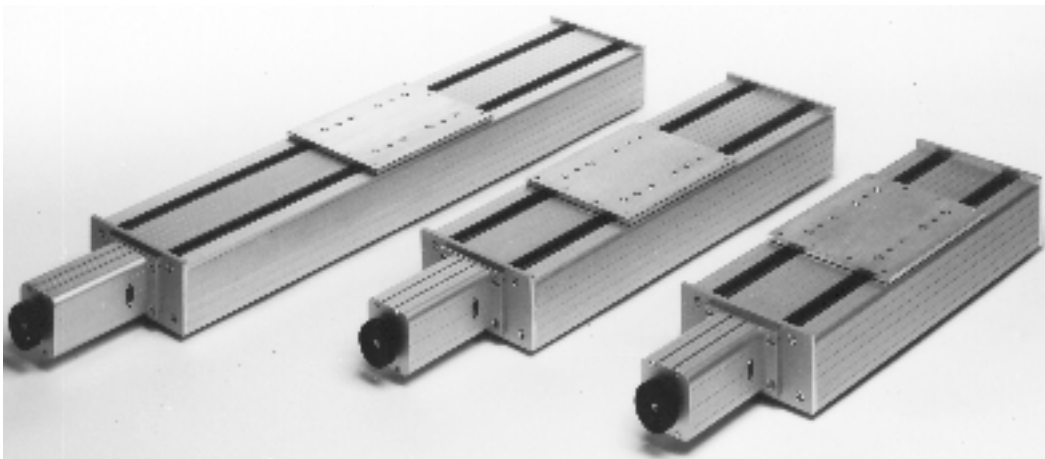


# Standard-Duty Slide

## FEATURES

- ◆ 30 x 175 mm base plate
- ◆ Home reference switch and far end limit switch with  $\pm 0.01$  mm repeatability
- ◆ Aluminum dust cover with plastic lip seals to protect against contaminants
- ◆ Features 2 patented double linear rails and 4 patented double bearing blocks
- ◆ All models with stepper motor option feature 125 oz·in stepper motor, model KO4822P432223
- ◆ All models with servo motor option feature motor model KC4822P3272AB5 with line driver optical rotary encoder, 1000 line
- ◆ Standard anti-backlash ball screw and nut, 16 mm diameter with 5 mm pitch for play-free, precise motion
- ◆ Work surface is flat milled aluminum 220 x 175 x 8 mm with 8 drilled and tapped M6 mounting holes
- ◆ Optional ball screw is 16 mm diameter, 10 mm or 20 mm pitch



**CATALOG NUMBER**

KO53   P823

**Motor Drive**

- A No Motor
- Y Servo Motor
- V Stepper Motor
- F Crank Handle

**Screw Type**

- E Ball Screw
- A No Screw

**Screw Pitch**

- 27 5 mm
- 32 10 mm
- 42 20 mm

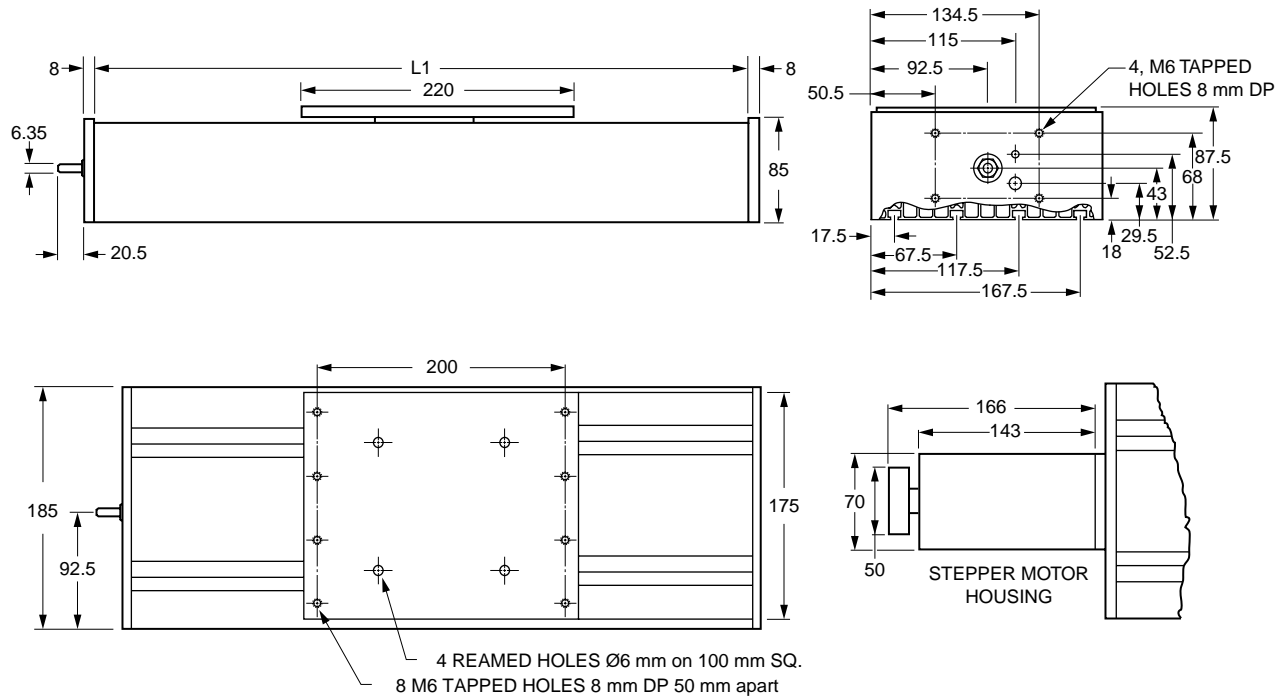
XYZ configurations possible with mounting plates

**STANDARD-DUTY SLIDE SELECTION**

Code	Length, L1 mm (in)	Travel mm (in)	Weight kg (lb)
2522	300 (11.8)	75 (2.9)	7.3 (16)
2622	400 (15.7)	175 (6.8)	9.5 (21)
2722	500 (19.6)	275 (10.8)	11.8 (26)
2822	600 (23.6)	375 (14.7)	13.6 (30)
2072	850 (33.4)	625 (24.6)	19.0 (42)
3222	1000 (39.3)	775 (30.4)	20.0 (44)
3322	1100 (43.3)	875 (34.4)	22.2 (49)
3472	1250 (49.2)	1025 (40.3)	25.0 (55)
3572	1350 (53.1)	1130 (44.5)	27.2 (60)
3722	1500 (59.0)	1275 (50.1)	30.0 (66)

**EXAMPLE:** To order a Standard-Duty Slide with Stepper Motor (V), 5 mm Pitch Ball Screw (E) & 175 mm Travel (2622), the Catalog Number is **KO53VEP823262227**.

# Standard-Duty Slide



## SPECIFICATIONS

<b>Repeatability</b>	$\pm 0.01$ mm ( $\pm .0004$ in)
<b>Accuracy</b>	$\pm 0.1$ mm / 300 mm ( $\pm .004$ in / 12 in)
<b>Vertical Static Load Capacity</b>	113 kg (250 lb)

Motor Drive	Ball Screw Pitch mm	Thrust Force at Low Speeds, kg (lb)	No Load Speed mm/sec (in/sec)	Resolution mm (in)
Stepper Motor	5	91 (200)	127 (5)	0.0125 (.0005)
	10	45 (100)	254 (10)	0.025 (.001)
	20	23 (50)	510 (20)	0.05 (.002)
Servo Motor	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 KO4822P432223, operating in half step mode, with 4.5A / phase, 40V chopper driver.

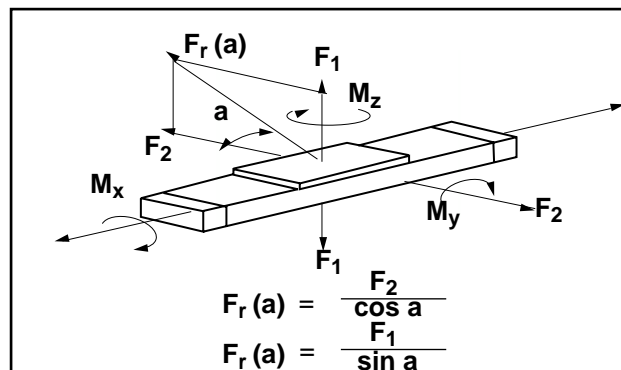
Servo motor is model KC4822P3272AB5, operating with 6A / 80V chopper amplifier and 1000 line encoder operating in quadrature.

These figures will, of course, vary with different loads, amplifiers and acceleration profiles provided by the controller.

## Ball Screw Actuator Specifications

### Load and Moment Data for Ball Screw Driven Slides

Model	Standard Duty	KG4 Slide	QS4 Slide	
# of carriages	4 carriages	4 carriages	1 or 2 carriages	
Carriage type	Series 1 Carriage 1	Bearing Carriage 4	Bearing Carriage 4	
F1 stat [N]	430	800	800	
F1 dyn [N]	400	500	500	
F2 stat [N]	430	800	800	
F2 dyn [N]	400	500	500	
Mx stat [N·m]	7.3	12.6	12.6	
My stat [N·m]	3.7	22	22	
Mz stat [N·m]	3.7	12.6	12.6	
Mx dyn [N·m]	7.3	7.4	7.4	
My dyn [N·m]	3.7	13	13	
Mz dyn [N·m]	3.7	7.4	7.4	



## No-Load Torque Charts

### Standard-Duty Slides

No-Load Speed (rpm)	No-Load Torque (N • m) Screw Pitch		
	5	10	20
500	0.18	0.2	0.21
1500	0.22	0.24	0.25
3000	0.26	0.29	0.3

### KG4 Slides

No-Load Speed (rpm)	No-Load Torque (N • m) Screw Pitch			
	2.5	5	10	20
500	0.18	0.2	0.21	0.22
1500	0.24	0.24	0.25	0.26
3000	0.26	0.29	0.3	0.32

### QS4Slides

No-Load Speed (rpm)	No-Load Torque (N • m) Screw Pitch			
	2.5	5	10	20
500	0.15	0.16	0.17	0.18
1500	0.19	0.19	0.2	0.21
3000	0.23	0.24	0.25	0.26