

Manual Stages Contents

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Precision Positioners

Manually Driven Stages and Slides

For over thirty years Parker has been the leader in supplying manual positioners to industries and laboratories around the world. Typical applications include: laser beam directing, fiber optics alignment, assembly fixturing, tooling, microscope specimen positioning, camera focusing, and many others.

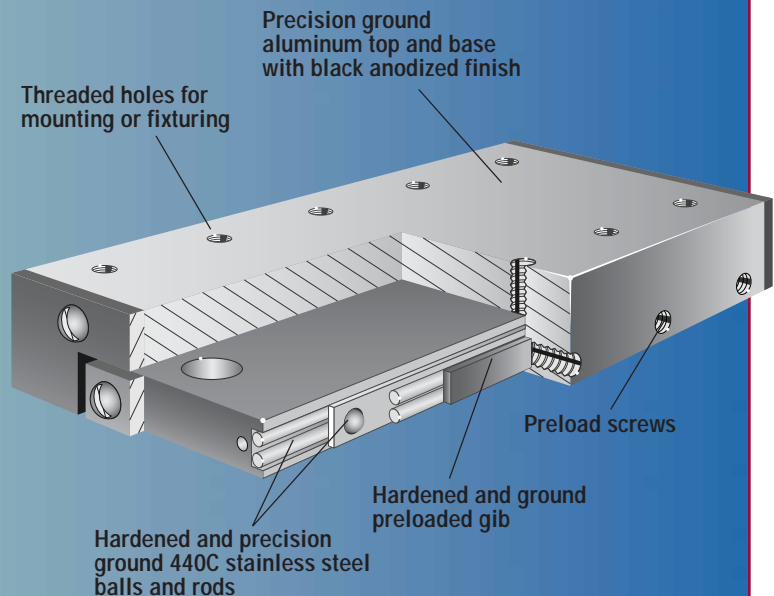
- Precision quality
- Budget friendly
- Largest selection
- Easy multi-axis configuration
- No maintenance
- Vacuum preparation and custom options

In this section you will find the largest selection of free travel linear slides and precision point-to-point positioners. Sizes range from 0.44 in to 6 in wide; travels from 1.125 inches to 12 inches; and payload capacities from 9 ounces to 280 pounds. They are available as single axis units or two and three axis systems – all offered by model number and delivered complete, with no assembly required. Rotary stages are also available for easy configuration of linear/rotary combinations. If you are unable to find a Parker catalog positioner which precisely fits your application, please call our applications department for a solution which is engineered to meet your requirement exactly.

Ball Bearing Slides

Features

- ❑ 0.00008 inch straightline accuracy—per inch of travel (0.00025 inches for miniatures)
- ❑ Nonrecirculating bearing style for smooth, low-friction motion
- ❑ Precision ground mounting surfaces to assure flatness and parallelism
- ❑ Hardened and precision ground 440C stainless steel balls and rods
- ❑ Factory preloaded to precision specifications to eliminate any side play and provide a uniform coefficient of friction



Parker linear slides are the ideal mechanisms for providing smooth, low friction, linear motion. These linear slides are mechanically simple motion devices comprised of two primary elements: a stationary base, and a moveable top carriage—separated by a row of rolling element (non-sliding) bearings. The bearings, located on each side of the base, support the carriage and provide smooth, accurate, low friction motion. Parker slides are offered with two types of linear bearings: ball bearing and cross roller bearing. The ball bearing offers smooth linear translation at the lowest cost. The cross roller bearing offers greater load carrying capability.

Because these bearing styles employ nonrecirculating rolling elements there is virtually no mechanical vibration and a very low coefficient of friction. Since there is no sliding contact between the top and bottom members, Parker slides are much more reliable than dovetail slides. They eliminate the wear problems, lubrication requirements, and “stiction” (skipping and jumping caused by the increased force needed to initiate movement) normally associated with the higher friction slides.

Each linear ball bearing is comprised of a row of hardened steel balls captured between four hardened and ground precision steel rods (two each on the base and top).



These linear ball bearing assemblies are factory preloaded to eliminate side play and meet precision specifications.

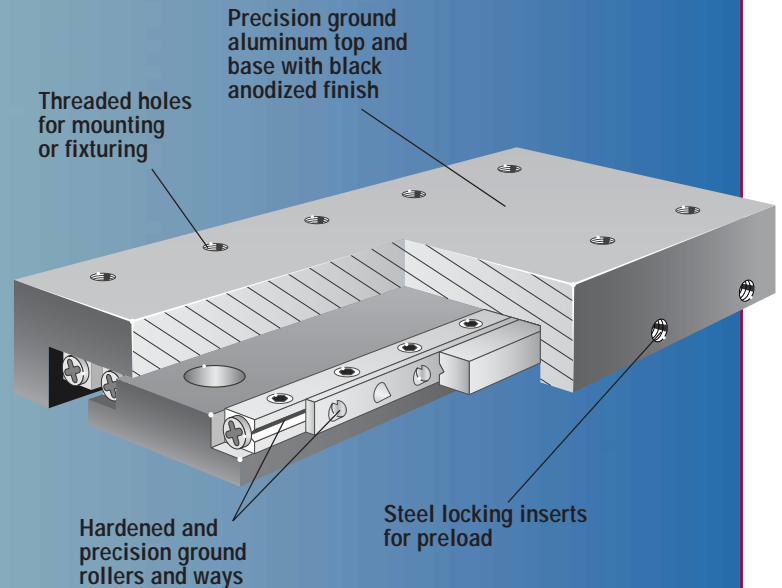
Parker ball slides are offered in many different sizes and styles. Proper sizing and selection is based on travel, load, size, mounting requirements, and open aperture or solid top construction.

Use the selection chart on page D4 to select the ball bearing slide series with the appropriate travel and load capacity. Refer to the series specification page for complete performance and mechanical information to make the final selection. To order, use corresponding model number.

Cross Roller Slides

Features

- ❑ Higher normal load and moment load capacity
- ❑ Nonrecirculating bearing style for smooth motion
- ❑ 0.00008 inch straightline accuracy (per inch of travel)
- ❑ Precision ground mounting surfaces
- ❑ Factory preload to eliminate any side play and provide a uniform coefficient of friction



The cross roller slide has nearly twice the load capacity of a ball bearing slide of comparable size. It is similar to the ball bearing slide—having two nonrecirculating bearings to support and guide the moveable top carriage over the stationary base.

The cross roller bearing, however, is comprised of two rows of cylindrical rollers instead of balls. Each roller is alternately crisscrossed (at 90°) with the next, and captured between “V” grooved bearing races—one located on the stationary base and one on the moving top carriage. Higher load capacity is achieved as a result of having a larger contact surface (line contact) than the ball bearing type (point contact).

Parker cross roller slides are constructed of corrosion-resistant black anodized aluminum and high carbon steel. These building materials provide optimized stiffness and thermal stability without excessive mass. Base and top mounting surfaces are precision ground to assure flatness and parallelism. Cross roller slides are preloaded during the manufacturing process to eliminate any side play and to provide a uniform coefficient of friction.

A variety of modifications to standard models are available to meet custom requirements. Contact our application engineering department with your design specifications.



Use the selection chart on the following page to select the cross roller slide series with the appropriate travel and load capacity. Refer to the series specification page for complete performance and mechanical information to make the final selection. To order, use corresponding model number.

Linear Slide Selection Guide

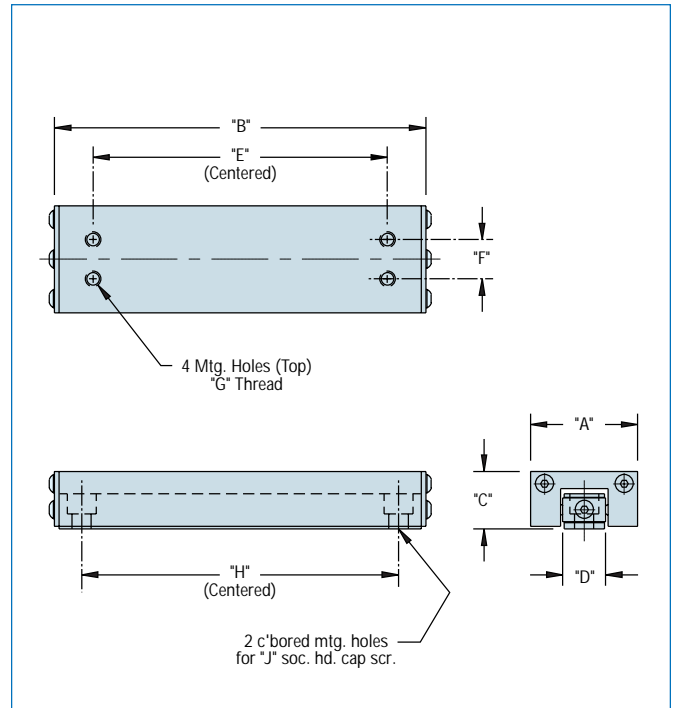
Travel		Load Capacity		Width		Bearing Type	Model		Page Number
inches	mm	lbs	kg	in	mm		English	Metric	
0.50	12.7	4	2	0.59	15.0	Ball	3505-05	—	E6
0.50	12.7	6	3	1.25	31.8	Ball	3901	M3901	E7
0.50	12.7	8	4	0.75	19.1	Ball	3507-05	—	E6
0.50	12.7	10	5	1.00	25.4	Ball	3510-05	—	E6
0.75	19.1	15	7	1.06	26.9	Ball	3511-07	—	E6
1.00	25.4	8	4	0.59	15.0	Ball	3505-10	—	E6
1.00	25.4	10	5	0.75	19.1	Ball	3507-10	—	E6
1.00	25.4	12	5	1.00	25.4	Ball	3510-10	—	E6
1.00	25.4	25	11	1.75	44.5	Ball	4001	M4001	E7
1.00	25.4	28	13	1.75	44.5	Ball	4101	M4101	E7
1.00	25.4	40	18	2.62	66.5	Ball	4501	M4501	E7
1.00	25.4	50	23	1.75	44.5	Cross Roller	CR4001	—	E7
1.00	25.4	56	25	1.75	44.5	Cross Roller	CR4101	—	E7
1.00	25.4	88	40	2.62	66.5	Cross Roller	CR4500	—	E7
1.50	38.1	18	8	1.06	26.9	Ball	3511-15	—	E6
2.00	50.8	12	5	0.59	15.0	Ball	3505-20	—	E6
2.00	50.8	12	5	0.75	19.1	Ball	3507-20	—	E6
2.00	50.8	15	7	1.00	25.4	Ball	3510-20	—	E6
2.00	50.8	20	9	1.06	26.9	Ball	3511-20	—	E6
2.00	50.8	40	18	1.75	44.5	Ball	4201	M4201	E9
2.00	50.8	60	27	1.75	44.5	Cross Roller	CR4201	—	E9
2.00	50.8	60	27	5.00	127.0	Ball	4900-02	M4900-02	E10
2.00	50.8	64	29	2.62	66.5	Ball	4601	M4601	E9
2.00	50.8	128	58	2.62	66.5	Cross Roller	CR4601	—	E9
3.00	76.2	14	6	0.59	15.0	Ball	3505-30	—	E6
3.00	76.2	14	6	0.75	19.1	Ball	3507-30	—	E6
3.00	76.2	25	11	1.06	26.9	Ball	3511-30	—	E6
3.00	76.2	55	25	1.75	44.5	Ball	4301	M4301	E9
3.00	76.2	95	43	2.62	66.5	Ball	4701	M4701	E9
3.00	76.2	95	43	5.00	127.0	Ball	4400	M4400	E7
3.00	76.2	100	45	1.75	44.5	Cross Roller	CR4301	—	E9
3.00	76.2	120	55	5.00	127.0	Cross Roller	CR4400	—	E7
3.00	76.2	190	86	2.62	66.5	Cross Roller	CR4701	—	E9
4.00	101.6	30	14	1.06	26.9	Ball	3511-40	—	E6
4.00	101.6	100	45	6.00	152.4	Ball	4900-04	M4900-04	E10
4.00	101.6	122	55	2.62	66.5	Ball	4801	M4801	E9
4.00	101.6	200	91	6.00	152.4	Cross Roller	CR4900-04	—	E10
4.00	101.6	244	111	2.62	66.5	Cross Roller	CR4801	—	E9
6.00	152.4	110	50	6.00	152.4	Ball	4900-06	M4900-06	E10
6.00	152.4	147	67	2.62	66.5	Ball	4606	—	E9
6.00	152.4	220	100	6.00	152.4	Cross Roller	CR4900-06	—	E10
8.00	203.2	120	55	6.00	152.4	Ball	4900-08	M4900-08	E10
8.00	203.2	240	109	6.00	152.4	Cross Roller	CR4900-08	—	E10
9.00	228.6	184	84	2.62	66.5	Ball	4609	—	E9
10.00	254.0	130	59	6.00	152.4	Ball	4900-10	M4900-10	E10
10.00	254.0	260	118	6.00	152.4	Cross Roller	CR4900-10	—	E10
12.00	304.8	140	64	6.00	152.4	Ball	4900-12	M4900-12	E10
12.00	304.8	205	93	2.62	66.5	Ball	4612	—	E9
12.00	304.8	280	127	6.00	152.4	Cross Roller	CR4900-12	—	E10
15.00	381.0	225	102	2.62	66.5	Ball	4615	—	E9
18.00	457.2	250	114	2.62	66.5	Ball	4618	—	E9
21.00	533.4	272	124	2.62	66.5	Ball	4621	—	E9
24.00	609.6	305	139	2.62	66.5	Ball	4624	—	E9
27.00	685.8	330	150	2.62	66.5	Ball	4627	—	E9
30.00	762.0	355	161	2.62	66.5	Ball	4630	—	E9



3500 Series Miniature Ball Bearing Slides



These miniature slides are the smallest free-travel linear ball slides offered. They are used extensively in space restricted applications.



Specifications

Straightline Accuracy: 0.00025 in/in

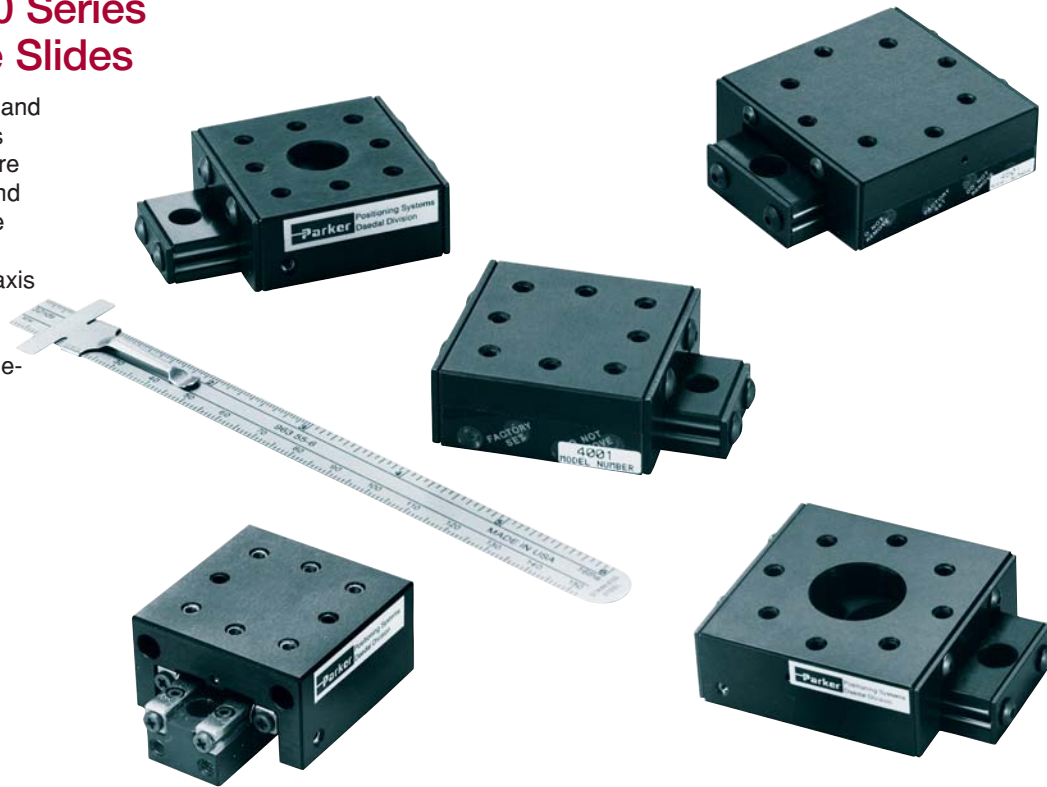
Model	Travel (inches)	Load Capacity* (lbs.)		Weight (lbs)	A	B	C	D	E (inches)	F	G	H	J
		Normal	Inverted										
3505-05	0.5	4	2	0.03	.59	1.12	.32	.24	0.63	.22	#2-56	0.75	#2
3505-10	1.0	8	4	0.04	.59	2.12	.32	.24	1.63	.22	#2-56	1.38	#2
3505-20	2.0	12	6	0.06	.59	3.12	.32	.24	2.63	.22	#2-56	2.38	#2
3505-30	3.0	14	7	0.08	.59	4.12	.32	.24	3.63	.22	#2-56	3.38	#2
3507-05	0.5	8	4	0.04	.75	1.12	.40	.28	0.63	.38	#2-56	0.75	#2
3507-10	1.0	10	5	0.06	.75	2.12	.40	.28	1.63	.38	#2-56	1.38	#2
3507-20	2.0	12	6	0.08	.75	3.12	.40	.28	2.63	.38	#2-56	2.38	#2
3507-30	3.0	14	7	0.10	.75	4.12	.40	.28	3.63	.38	#2-56	3.38	#2
3510-05	0.5	10	5	0.10	1.00	1.68	.50	.36	1.25	.44	#6-32	1.25	#4
3510-10	1.0	12	6	0.12	1.00	2.68	.50	.36	2.25	.44	#6-32	2.25	#4
3510-20	2.0	15	7	0.14	1.00	3.68	.50	.36	3.25	.44	#6-32	3.25	#4
3511-07	0.75	15	8	0.08	1.06	1.68	.53	.42	1.25	.44	#6-32	1.13	#6
3511-15	1.5	18	9	0.14	1.06	2.68	.53	.42	2.25	.44	#6-32	2.13	#6
3511-20	2.0	20	10	0.20	1.06	3.68	.53	.42	3.25	.44	#6-32	3.13	#6
3511-30	3.0	25	13	0.26	1.06	4.56	.53	.42	4.00	.44	#6-32	3.25	#6
3511-40	4.0	30	15	0.32	1.06	6.00	.53	.42	5.50	.44	#6-32	4.00	#6

*For moment load ratings, refer to Parker's web site.



3900 and 4000 Series Square Profile Slides

These linear ball bearing and cross roller bearing slides are designed with a square face mounting surface, and compatible mounting hole arrangements to facilitate easy “stacking” for multi-axis requirements. They are utilized as the primary element for Parker’s single- and multi-axis linear positioners.



Specifications

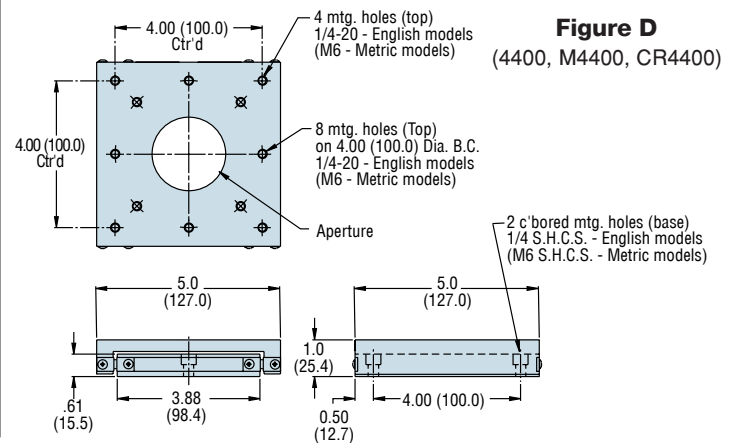
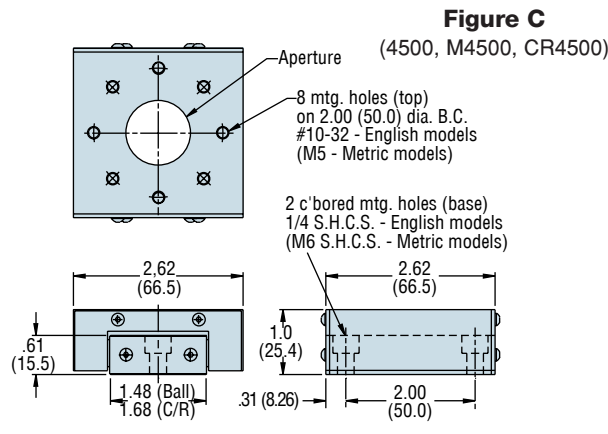
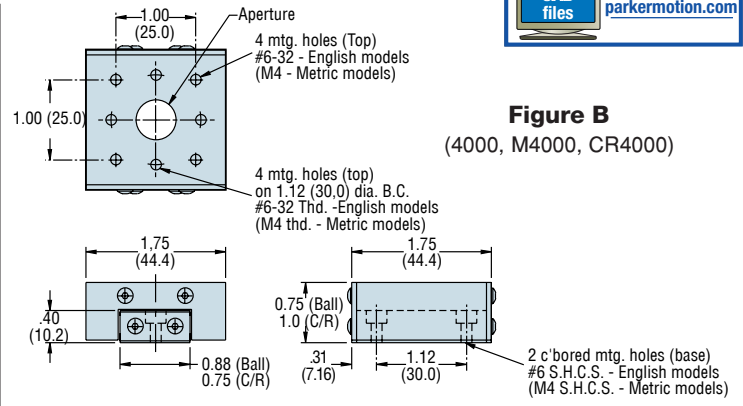
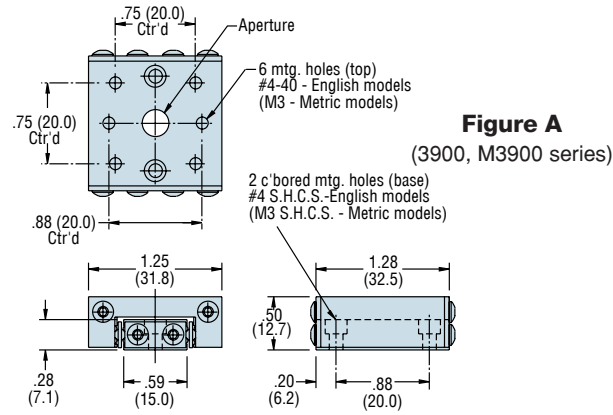
Straightline Accuracy: English 0.00008 in/in Metric 2 µm/25 mm

Ball Bearing								
	Model	Travel	Size-(Square)	Load Capacity		Aperture Diameter	Weight	Figure
				Normal	Inverted			
English	3901	0.5 in	1.25 in	6 lb	3 lb	0.25 in	0.10 lb	A
	3905	0.5 in	1.25 in	6 lb	3 lb	none	0.10 lb	A
	4001	1.0 in	1.75 in	25 lb	13 lb	none	0.20 lb	B
	4005	1.0 in	1.75 in	25 lb	13 lb	0.50 in	0.20 lb	B
	4501	1.0 in	2.62 in	40 lb	20 lb	none	0.60 lb	C
	4505	1.0 in	2.62 in	40 lb	20 lb	1.00 in	0.50 lb	C
	4410	3.0 in	5.00 in	95 lb	48 lb	none	2.20 lb	D
	4450	3.0 in	5.00 in	95 lb	48 lb	2.00 in	1.70 lb	D
Metric	M3901	12.5 mm	31.8 mm	2.7 kg	1.4 kg	6.2 mm	0.05 kg	A
	M3905	12.5 mm	31.8 mm	2.7 kg	1.4 kg	none	0.05 kg	A
	M4001	25.0 mm	44.4 mm	11.0 kg	6.0 kg	none	0.09 kg	B
	M4005	25.0 mm	44.4 mm	11.0 kg	6.0 kg	12.5 mm	0.09 kg	B
	M4501	25.0 mm	66.5 mm	18.2 kg	9.1 kg	none	0.27 kg	C
	M4505	25.0 mm	66.5 mm	18.2 kg	9.1 kg	25.4 mm	0.23 kg	C
	M4410	75.0 mm	127.0 mm	43.2 kg	21.8 kg	none	1.00 kg	D
	M4450	75.0 mm	127.0 mm	43.2 kg	21.8 kg	50.0 mm	0.77 kg	D

Cross Roller Bearing								
	Model	Travel	Size-(Square)	Load Capacity		Aperture Diameter	Weight	Figure
				Normal	Inverted			
English	CR4001	1.0 in	1.75 in	50 lb	25 lb	none	0.20 lb	B
	CR4501	1.0 in	2.62 in	88 lb	44 lb	none	0.80 lb	C
	CR4505	1.0 in	2.62 in	88 lb	44 lb	1.00 in	0.70 lb	C
	CR4410	3.0 in	5.00 in	120 lb	60 lb	none	2.20 lb	D
	CR4450	3.0 in	5.00 in	120 lb	60 lb	2.00 in	1.70 lb	D

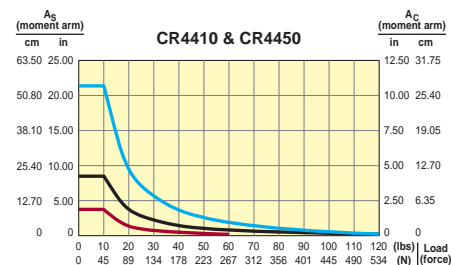
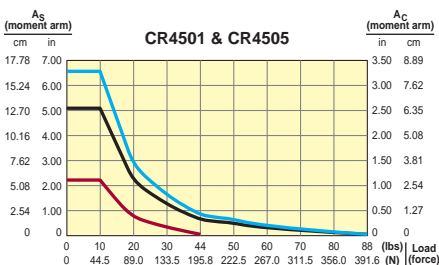
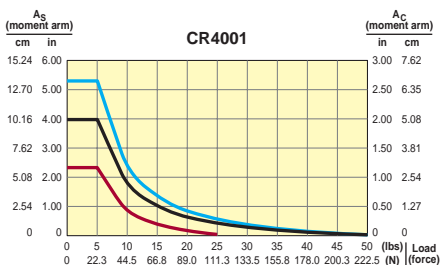
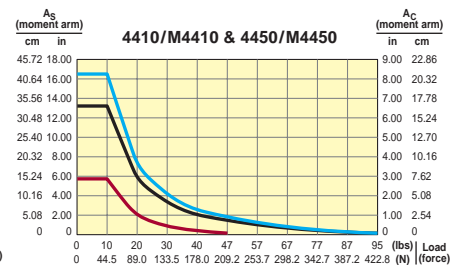
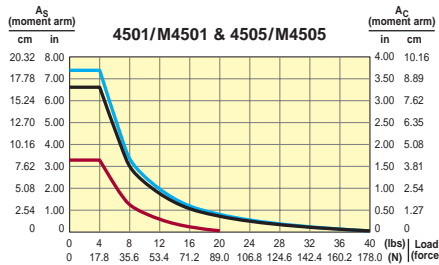
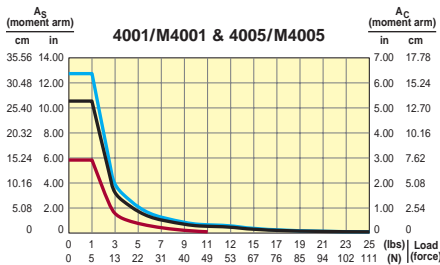
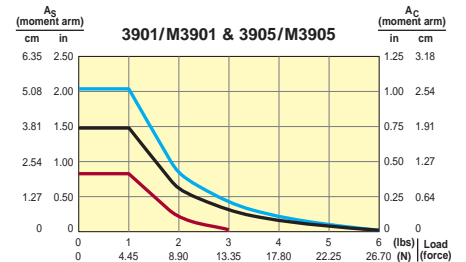
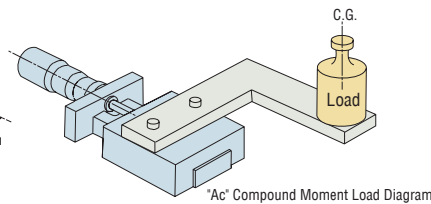
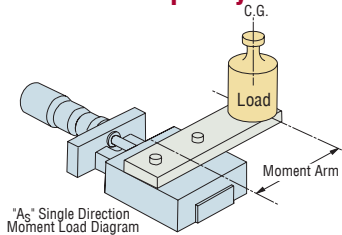
3900 and 4000 Series Square Profile Slide Dimensions inches (mm)

Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).



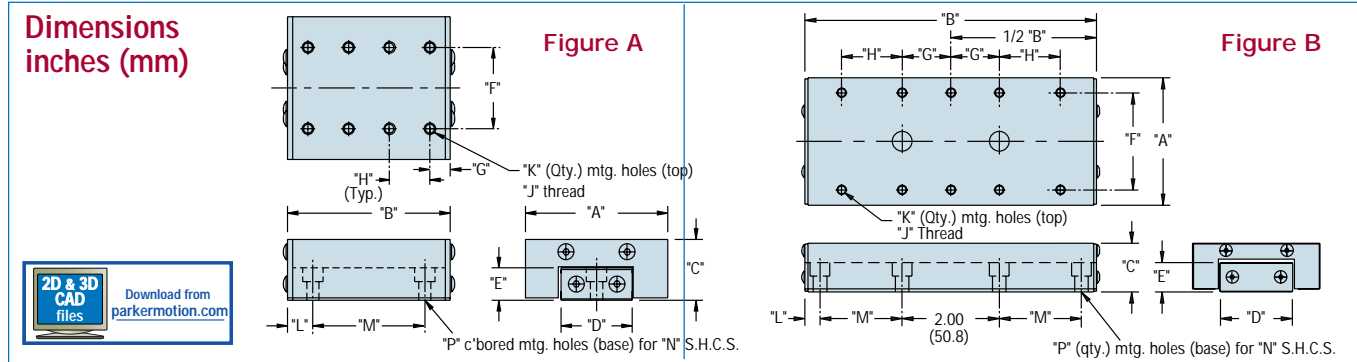
Moment Load Capacity

Yaw Pitch Roll



4000 Series Extended Travel Slides

These linear ball bearing and cross roller bearing slides have the same cross sectional sizes as the square profile slides, but offer longer travels and heavier load capacity.



Specifications*

Straightline Accuracy: English 0.00008 in/in Metric 2 µm/25 mm

Ball Bearing					Dimensions															
Model	Travel in	Load Capacity Normal lb	Inverted lb	Weight lb	Figure	A	B	C	D	E	F	G	H	J	K	L	M	N	P	
					units: inches															
English	4101	1.0	28	14	0.2	A	1.75	2.00	0.75	0.88	0.40	1.00	0.25	0.50	6-32	8	0.31	1.38	#6	2
	4201	2.0	40	20	0.4	A	1.75	3.00	0.75	0.88	0.40	1.00	0.25	0.50	6-32	12	0.31	2.38	#6	2
	4301	3.0	55	28	0.6	A	1.75	4.00	0.75	0.88	0.40	1.00	0.25	0.50	6-32	16	0.31	3.38	#6	2
	4601	2.0	64	32	0.9	B	2.62	4.00	1.00	1.48	0.61	2.00	0.50	—	10-32	6	0.31	0.69	.25	4
	4701	3.0	95	47	1.1	B	2.62	5.00	1.00	1.48	0.61	2.00	1.00	—	10-32	6	0.31	1.19	.25	4
	4801	4.0	122	61	1.4	B	2.62	6.00	1.00	1.48	0.61	2.00	0.50	1.00	10-32	10	0.31	1.69	.25	4
	4606	6.0	147	74	2.3	A	2.62	9.00	1.00	0.94	0.69	2.00	1.50	2.00	10-32	8	1.00	3.50	.25	3
	4609	9.0	184	92	3.1	A	2.62	12.00	1.00	0.94	0.69	2.00	1.00	2.00	10-32	12	1.00	5.00	.25	3
	4612	12.0	205	103	3.9	A	2.62	15.00	1.00	0.94	0.69	2.00	1.50	2.00	10-32	14	1.00	3.25	.25	5
	4615	15.0	225	113	4.7	A	2.62	18.00	1.00	0.94	0.69	2.00	1.00	2.00	10-32	18	1.00	4.00	.25	5
	4618	18.0	250	125	5.6	A	2.62	21.00	1.00	0.94	0.69	2.00	1.50	2.00	10-32	20	1.00	4.75	.25	5
	4621	21.0	272	136	6.5	A	2.62	24.00	1.00	0.94	0.69	2.00	1.00	2.00	10-32	24	1.00	5.50	.25	5
	4624	24.0	305	153	7.3	A	2.62	27.00	1.00	0.94	0.69	2.00	1.50	4.00	10-32	14	1.50	4.00	.25	7
	4627	27.0	330	165	8.2	A	2.62	30.00	1.00	0.94	0.69	2.00	1.00	4.00	10-32	16	1.50	4.50	.25	7
4630	30.0	355	178	8.9	A	2.62	33.00	1.00	0.94	0.69	2.00	0.50	4.00	10-32	18	1.50	5.00	.25	7	
					units: millimeters															
Metric	M4101	25.0	13	7	0.09	A	44.4	50.8	19.0	22.3	10.1	25.0	12.9	12.5	M4	6	7.8	35.0	M4	2
	M4201	50.0	18	9	0.18	A	44.4	76.2	19.0	22.3	10.1	25.0	13.1	12.5	M4	10	8.1	60.0	M4	2
	M4301	75.0	25	13	0.27	A	44.4	101.6	19.0	22.3	10.1	25.0	13.3	12.5	M4	14	8.3	85.0	M4	2
	M4601	50.0	29	15	0.41	B	66.5	101.6	25.4	37.6	15.5	50.0	12.5	—	M5	6	13.3	12.5	M6	4
	M4701	75.0	43	22	0.50	B	66.5	127.0	25.4	37.6	15.5	50.0	25.0	—	M5	6	13.5	25.0	M6	4
	M4801	100.0	55	28	0.64	B	66.5	152.4	25.4	37.6	15.5	50.0	12.5	25.0	M5	10	26.2	25.0	M6	4

Cross Roller Bearing					Dimensions															
Model	Travel in	Load Capacity Normal lb	Inverted lb	Weight lb	Figure	A	B	C	D	E	F	G	H	J	K	L	M	N	P	
					units: inches															
English	CR4101	1.0	56	28	0.2	A	1.75	2.00	1.00	0.75	0.50	1.00	0.25	0.50	6-32	8	0.31	1.38	#6	2
	CR4201	2.0	60	30	0.4	A	1.75	3.00	1.00	0.75	0.50	1.00	0.25	0.50	6-32	8	0.31	2.38	#6	2
	CR4301	3.0	100	50	0.6	A	1.75	4.00	1.00	0.75	0.50	1.00	0.25	0.50	6-32	8	0.31	3.38	#6	2
	CR4601	2.0	128	64	0.9	B	2.62	4.00	1.00	1.68	0.61	2.00	0.50	—	10-32	6	0.31	0.69	.25	4
	CR4701	3.0	190	95	1.1	B	2.62	5.00	1.00	1.68	0.61	2.00	1.00	—	10-32	6	0.31	1.19	.25	4
	CR4801	4.0	244	122	1.4	B	2.62	6.00	1.00	1.68	0.61	2.00	0.50	1.00	10-32	10	0.31	1.69	.25	4

* For additional specifications, including moment loading capacities and other engineering references, please refer to product information on Parker's web site.

4900 Series Heavy Duty Slides

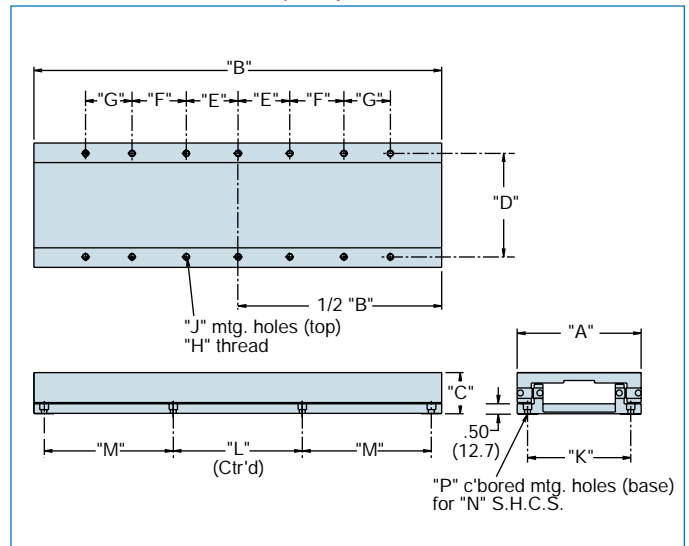


These linear slides are the larger, more rugged versions of Parker's nonrecirculating ball bearing and cross roller bearing slides. A wider

footprint combined with larger bearing elements permit precise, effortless, linear translation of payloads as great as 280 pounds.



Dimensions inches (mm)[†]



[†] Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Specifications*

Straightline Accuracy: English 0.0008 in/in Metric 2 μm/25 mm

Ball Bearing		Load Capacity				Dimensions													
Model	Travel in	Normal lb	Inverted lb	Weight lb	A	B	C	D	E	F	G	H	J	K	L	M	N	P	
English	4900-02	2.0	60	30	3.0	5.00	5.00	1.75	4.00	2.00	—	—	.25-20	6	4.00	4.00	—	.25	4
	4900-04	4.0	100	50	5.0	6.00	6.00	2.00	5.00	2.50	—	—	.25-20	6	5.00	5.00	—	.25	4
	4900-06	6.0	110	55	7.0	6.00	9.00	2.00	5.00	2.50	1.50	—	.25-20	10	5.00	5.00	1.50	.25	8
	4900-08	8.0	120	60	9.0	6.00	12.00	2.00	5.00	2.50	2.50	—	.25-20	10	5.00	5.00	3.00	.25	8
	4900-10	10.0	130	65	11.0	6.00	15.00	2.00	5.00	2.50	2.50	2.00	.25-20	14	5.00	6.00	4.00	.25	8
	4900-12	12.0	140	70	13.0	6.00	18.00	2.00	5.00	2.50	5.00	1.00	.25-20	14	5.00	7.00	5.00	.25	8
Metric		mm	kg	kg	kg														
	M4900-02	50.0	27	13	1.4	127.0	127.0	44.5	100	50	—	—	M6	6	100	100	—	M6	4
	M4900-04	100.0	45	23	2.3	152.4	152.4	50.8	125	62.5	—	—	M6	6	125	125	—	M6	4
	M4900-06	150.0	50	25	3.0	152.4	228.6	50.8	125	62.5	37.5	—	M6	10	125	125	37.5	M6	8
	M4900-08	200.0	55	27	4.0	152.4	304.8	50.8	125	62.5	62.5	—	M6	10	125	125	75.0	M6	8
	M4900-10	250.0	59	28	5.0	152.4	381.0	50.8	125	62.5	62.5	50.0	M6	14	125	150	100.0	M6	8
M4900-12	300.0	64	32	6.0	152.4	457.2	50.8	125	62.5	125.0	25.0	M6	14	125	175	125.0	M6	8	

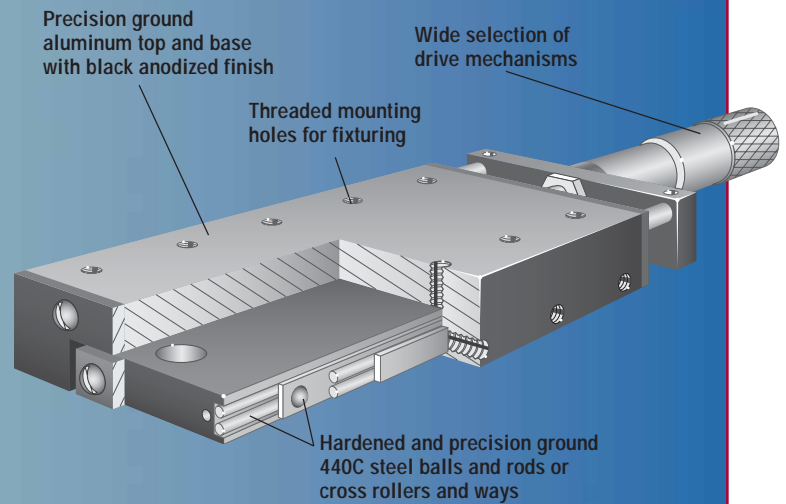
Cross Roller Bearing		Load Capacity				Dimensions													
Model	Travel in	Normal lb	Inverted lb	Weight lb	A	B	C	D	E	F	G	H	J	K	L	M	N	P	
English	CR4900-04	4.0	200	100	5.0	6.00	6.00	2.00	5.00	2.50	—	—	.25-20	6	5.00	5.00	—	.25	4
	CR4900-06	6.0	220	110	7.5	6.00	9.00	2.00	5.00	2.50	1.50	—	.25-20	10	5.00	5.00	1.50	.25	8
	CR4900-08	8.0	240	120	9.0	6.00	12.00	2.00	5.00	2.50	2.50	—	.25-20	10	5.00	5.00	3.00	.25	8
	CR4900-10	10.0	260	130	11.0	6.00	15.00	2.00	5.00	2.50	2.50	2.00	.25-20	14	5.00	6.00	4.00	.25	8
	CR4900-12	12.0	280	140	13.0	6.00	18.00	2.00	5.00	2.50	5.00	1.00	.25-20	14	5.00	7.00	5.00	.25	8

* For additional specifications, including moment loading capacities and other engineering references, please refer to product information on Parker's web site.

Linear Positioning Stages Introduction

Features

- ❑ Aluminum top and base with precision ground mounting surfaces and black anodize protective finish
- ❑ Low friction linear adjustment with no backlash or sideplay
- ❑ Factory preloaded to provide dynamic stability and minimum runout
- ❑ Locking screw to positively lock stage without affecting position (standard on most models)
- ❑ Straightline accuracy of 0.00008 in/in of travel
- ❑ Selectable bearing systems: ball bearings for economy and cross roller bearings for greater load capacity
- ❑ Selectable drive mechanisms: Micrometer (English or Metric) Fine screw (64 pitch) Differential screw Digital micrometers
- ❑ Selectable drive locations: Center drive or Side drive (for space constraints)



Parker precision linear stages provide controlled, precise point-to-point positioning along a linear axis. Stages are comprised of two basic components: a precision Parker linear slide (ball or cross roller) which serves as a linear bearing and guide, and a drive mechanism which accurately moves and positions the slide top along the linear axis.

Four types of drive mechanisms are available: a fine screw, a graduated micrometer, a digital micrometer, and a differential screw. The fine screw is used for fine resolution positioning.

A micrometer is used whenever a position readout is required. The differential screw is used for applications requiring extremely fine resolution positioning.

Positioning stages are available in a straight center-drive configuration or a side-drive configuration. They are offered in English or Metric versions.

Principles of Operation

The linear positioner operates in a simple manner: a drive screw is attached to the fixed slide base. The end of the drive screw rests against the end of the moveable top. There are two extended springs "pulling" the slide top toward the screw so that the top will always be held firmly against the screw end. When the screw is turned clockwise, it advances and pushes the slide top along the linear axis. When turned counter clockwise, the screw

retracts and the slide top follows because of the spring pressure holding the top against the screw end. The result is a very smooth linear motion, accurately controlled by rotation of the drive mechanism.

How to Order:

Stages are available in single- or multi-axis configurations (XY, XZ, and XYZ). The Selection Guide

on the following page enables the desired travel and load requirements to be matched with the corresponding stage(s). From the chart, find the series specification page for complete performance and dimensional information.

NOTE:
Refer to www.parkermotion.com for additional information, technical data and accessories.

Stage Series Selection Guide

Travel		Load Capacity		Width		Multi-Axis	Series		Page Number
inches	mm	lbs	kg	in	mm		English	Metric	
0.50	12.7	6	3	1.25	31.8	yes	3900	M3900	E15
0.50	12.7	25	11	1.75	44.5	yes	4000	M4000	E17
0.50	12.7	28	13	1.75	44.5	no	4100	M4100	E23
0.50	12.7	40	18	1.75	44.5	no	4200	M4100	E23
0.50	12.7	44	20	2.62	66.5	yes	4500	M4500	E19
0.50	12.7	50	23	1.75	44.5	yes	CR4000	—	E21
0.50	12.7	55	25	1.75	44.5	no	4300	M4300	E23
0.50	12.7	56	25	1.75	44.5	no	CR4100	—	E23
0.50	12.7	60	27	1.75	44.5	no	CR4200	—	E23
0.50	12.7	64	29	2.62	66.5	yes	4600	M4600	E25
0.50	12.7	88	40	2.62	66.5	yes	CR4500	—	E19
0.50	12.7	95	43	2.62	66.5	yes	4700	M4700	E25
0.50	12.7	100	45	1.75	44.5	no	CR4300	—	E23
0.50	12.7	122	55	2.62	66.5	yes	4800	M4800	E25
0.50	12.7	128	58	2.62	66.5	no	CR4600	—	E25
0.50	12.7	190	86	2.62	66.5	no	CR4700	—	E25
0.50	12.7	248	113	2.62	66.5	no	CR4800	—	E25
1.00	25.4	25	11	1.75	44.5	yes	4000	M400	E17
1.00	25.4	28	13	1.75	44.5	no	4100	M4100	E23
1.00	25.4	40	18	1.75	44.5	no	4200	M4200	E23
1.00	25.4	44	20	2.62	66.5	yes	4500	M4300	E19
1.00	25.4	55	25	1.75	44.5	no	4300	—	E23
1.00	25.4	56	25	1.75	44.5	no	CR4100	—	E23
1.00	25.4	60	27	1.75	44.5	no	CR4200	—	E23
1.00	25.4	64	29	2.62	66.5	yes	4600	M4600	E25
1.00	25.4	88	40	2.62	66.5	yes	CR4500	—	E19
1.00	25.4	95	43	2.62	66.5	yes	4700	M4700	E25
1.00	25.4	95	43	5.00	127.0	yes	4400	M4400	E21
1.00	25.4	100	45	1.75	44.5	no	CR4300	—	E23
1.00	25.4	100	45	6.00	152.4	no	4900	M4900	E27
1.00	25.4	120	55	5.00	127.0	yes	CR4400	—	E21
1.00	25.4	122	55	2.62	66.5	yes	4800	M4800	E25
1.00	25.4	128	58	2.62	66.5	no	CR4600	—	E25
1.00	25.4	150	68	6.00	152.4	no	CR4900	—	E27
1.00	25.4	190	86	2.62	66.5	no	CR4700	—	E25
1.00	25.4	248	113	2.62	66.5	no	CR4800	—	E24
2.00	50.8	95	43	5.00	127.0	yes	4400	M4400	E21
2.00	50.8	100	45	6.00	152.4	no	4900	M4900	E27
2.00	50.8	120	55	5.00	127.0	yes	CR4400	—	E21
2.00	50.8	150	68	6.00	152.4	no	CR4900	—	E27
4.00	101.6	100	45	6.00	152.4	no	4900	M4900	E28
4.00	101.6	200	91	6.00	152.4	no	CR4900	—	E28
6.00	152.4	110	50	6.00	152.4	no	4900	M4900	E28
6.00	152.4	220	100	6.00	152.4	no	CR4900	—	E28
8.00	203.2	120	55	6.00	152.4	no	4900	M4900	E28
8.00	203.2	240	109	6.00	152.4	no	CR4900	—	E28
10.00	254.0	130	59	6.00	152.4	no	4900	M4900	E28
10.00	254.0	260	118	6.00	152.4	no	CR4900	—	E28
12.00	304.8	140	64	6.00	152.4	no	4900	M4900	E28
12.00	304.8	280	127	6.00	152.4	no	CR4900	—	E28





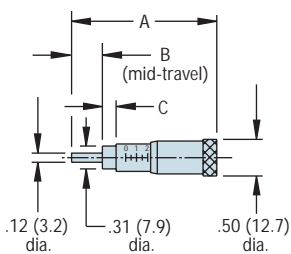
Drive Mechanisms

Parker positioning stages are offered with four types of drive mechanisms: graduated micrometer, digital micrometer, fine screw, and

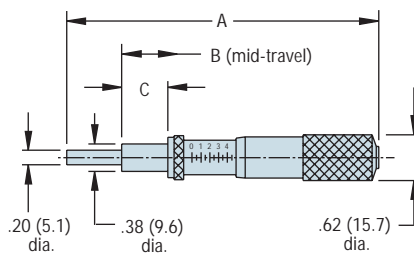
differential screw. These drives, shown here, are offered separately for use in any application requiring precisely controlled linear adjustment.

Graduated Micrometers

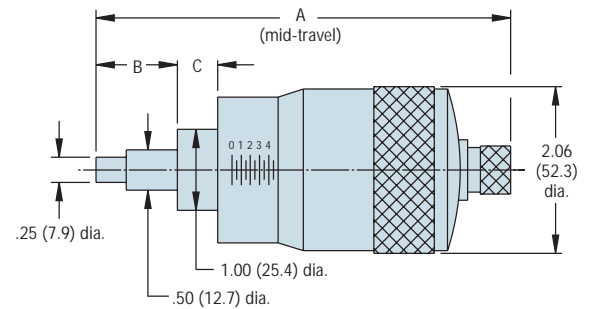
Model Number	Fig	Travel	Graduations	A	B	C
9511E	A	0.50 in	0.001 in	2.00 in	0.50 in	0.187 in
9511M	A	13 mm	0.01 mm	51 mm	13 mm	4.7 mm
9512E	B	0.50 in	0.001 in	2.61 in	0.05 in	0.375 in
9512M	B	13 mm	0.01 mm	66 mm	13 mm	9.5 mm
9524E	B	1.00 in	0.001 in	4.27 in	0.75 in	0.65 in
9524M	B	25 mm	0.01 mm	108 mm	19 mm	15.9 mm
9526E	B	2.00 in	0.001 in	6.18 in	1.25 in	0.625 in
9526M	B	50 mm	0.01 mm	157 mm	32 mm	15.9 mm
9531E	C	1.00 in	0.0001 in	5.12 in	0.88 in	0.55 in
9531M	C	25 mm	0.002 mm	130 mm	22 mm	14.2 mm
9532E	C	2.00 in	0.0001 in	7.13 in	1.46 in	0.55 in
9532M	C	50 mm	0.002 mm	158 mm	37 mm	14.2 mm



Mini-Micrometer
Figure A



Standard Micrometer
Figure B

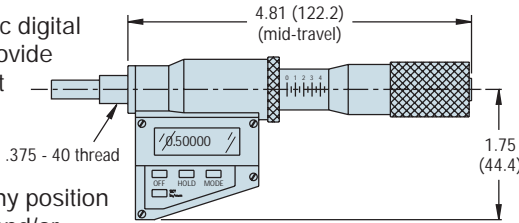


Large Thimble Micrometer
Figure C

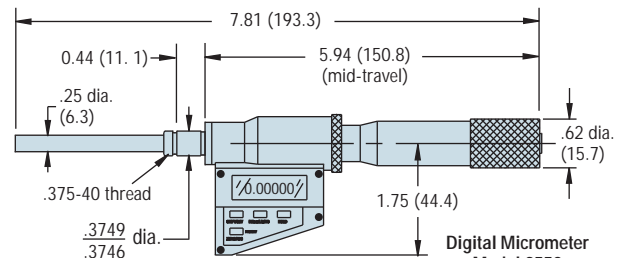
These electronic digital micrometers provide an LCD readout to 0.00005 inch resolution.

Features:

- Zero set at any position
- Incremental and/or absolute positioning
- inch/mm setting



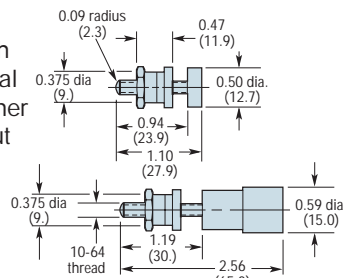
Digital Micrometer
Model 9551
1" Travel



Digital Micrometer
Model 9552
2" Travel

These steel adjustment screws feature a 64-pitch thread, making them ideal for applications where finer resolution is required, but positional readout is not.

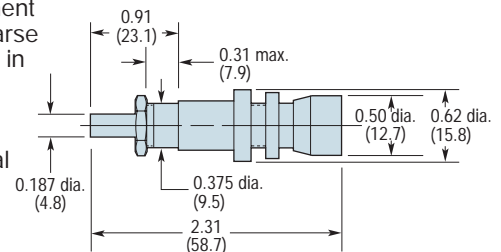
Model	Range
9570	0.75 in
9575	0.50 in



Fine Adjustment Screws
Models 9570, 9575

The 9560 differential screw offers two linear adjustment ranges in one unit: a coarse adjustment range of 0.31 in (8 mm) with a 48 pitch thread and a fine adjustment range of 0.078 in (2 mm) with a pitch equal to 336 threads per inch.

Model	Range
9560	0.75 in



Differential Screws
Models 9560

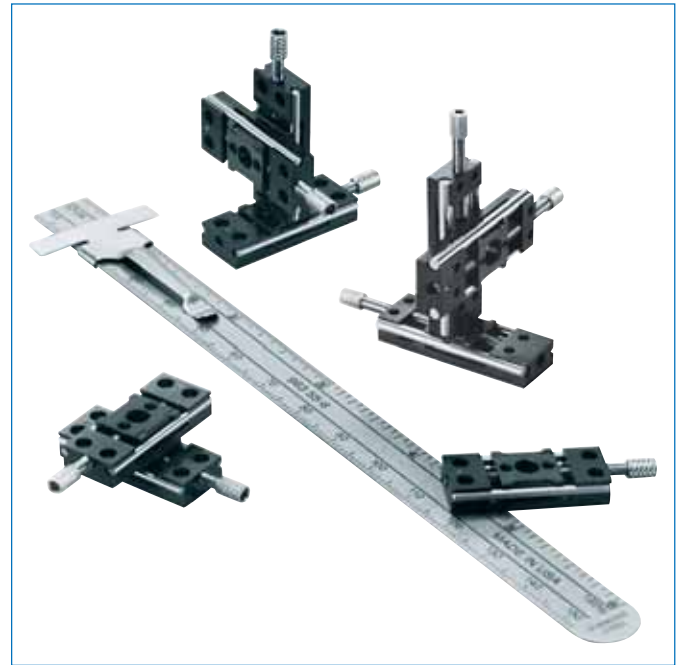




MM Series Subminiature Stages

Parker precision sub-miniature linear stages provide controlled, precise point-to-point positioning along a linear axis at a micron level of accuracy. Our smallest MM Series are driven along stainless steel rails by a fine 2-80 thread drive screw. Parker sub-

miniature positioning stages are a dimensional breakthrough in miniature positioning. The 0.125" travel MM-1 and 0.5" travel MM-3 are precision instruments designed to eliminate many research and design problems for space-limited applications.



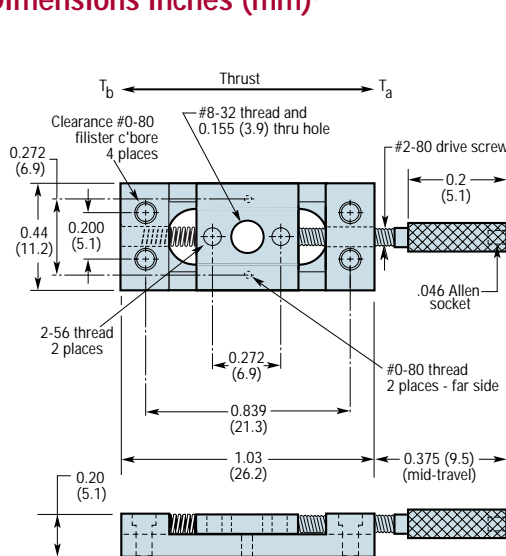
Specifications

	MM-1	MM-3
Travel	0.125 in	0.5 in
Load Capacity:		
Normal	9 oz	12 oz
Thrust T_a	1 - 6 oz	2 - 24 oz
T_b	2.2 lbs	2.2 lbs
Moment		
Yaw	1.5 in-oz	3.0 in-oz
Pitch	3.0 in-oz	6.0 in-oz
Roll	3.0 in-oz	6.0 in-oz
Straightline Accuracy	1 μ m	1.5 μ m
Maximum Wobble	0.01 mrad	0.01 mrad
Weight	3 gms/axis	16 gms/axis

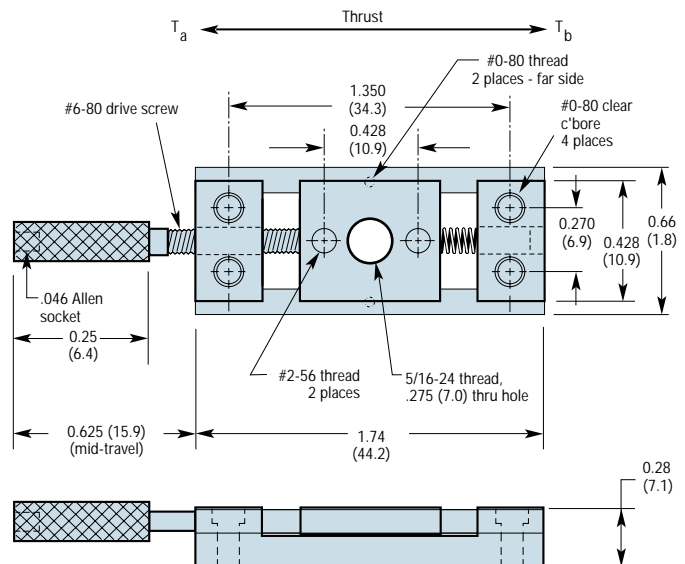
Selection:

Model	Description
MM-1	Single axis
MM-1 X-Y	Two axis
MM-1 X-Y-Z	Three axis
MM-3	Single axis
MM-3 X-Y	Two axis
MM-3 X-Y-Z	Three axis

Dimensions inches (mm)[†]



MM-1



MM-3

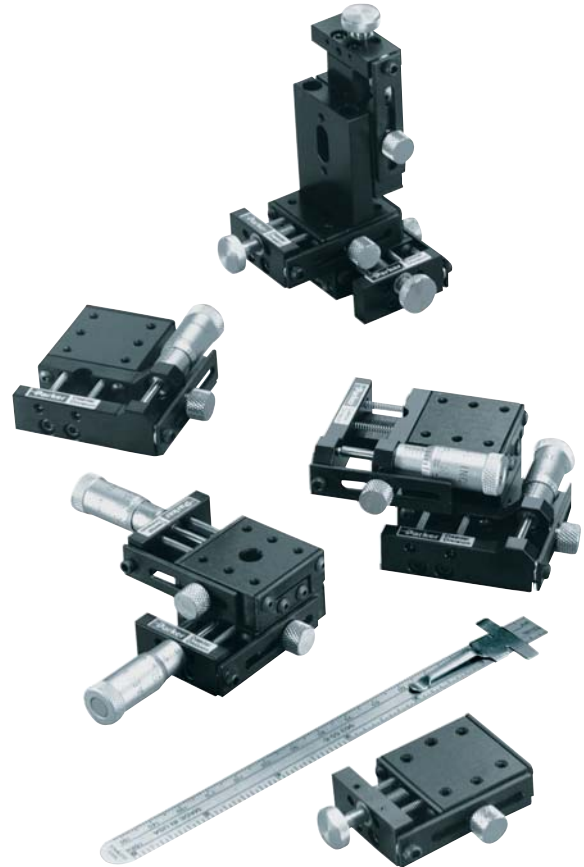
[†] Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).



**3900 Series (1.25 inches wide)
 Miniature Stages**

3900 stages are ideal as single or multi-axis units in space restricted applications. These compact positioning stages feature a low friction linear ball bearing system and two selectable drive mechanisms: a micrometer drive (English or Metric) offers fine adjustment with a

graduated position readout; a 64-pitch fine screw drive offers increased sensitivity, for finer resolution control. A positive position lock, included as standard on all units, locks the stage carriage and prevents drift when the stage is idle.



Specifications

	English	Metric
Travel - Maximum (selectable)	0.5 in	12.5 mm
Load Capacity:*		
Normal	6 lb – See table.	3 kg – See table.
Thrust T _a	10 lbs	4.5 kgs
T _b	3 lbs	1.4 kgs
Straightline Accuracy	0.00008 in (per inch of travel)	2 μm (per 25 mm travel)
Resolution/Graduations:		
English Micrometer	0.001 in	n/a
Metric Micrometer	n/a	0.01 mm
Fine Screw	64 pitch	0.4 mm

* Refer to linear slide component for moment load charts.

Selection Guide

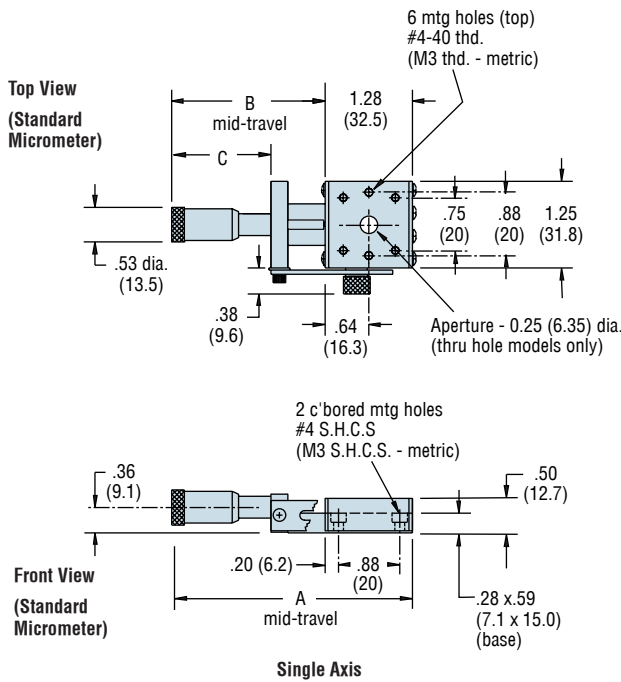
Description								Model Number*							
								Center Drive Models				Side Drive Models			
Type	Travel	Load Capacity	Drive Type (Normal)	Aperture	Linear Slide Number	Brg. Type	Unit Weight	1 Axis (X)	2 Axis (XY)	Low Profile Standard 3 Axis (XYZ)		1 Axis (X)	2 Axis (XY)	Low Profile Standard 3 Axis (XYZ)	
English	0.50 in	6 lb	English Mic	no	3905	Ball	0.16 lb	3902	3922	3932	3942	3952	3972	3982	3992
English	0.50 in	6 lb	English Mic	yes	3901	Ball	0.16 lb	3906	3926	3936	3946	3956	3976	3986	3996
English	0.50 in	6 lb	Metric Mic	no	3905	Ball	0.16 lb	3902M	3922M	3932M	3942M	3952M	3972M	3982M	3992M
English	0.50 in	6 lb	Metric Mic	yes	3901	Ball	0.16 lb	3906M	3926M	3936M	3946M	3956M	3976M	3986M	3996M
English	0.50 in	6 lb	Fine Screw	no	3905	Ball	0.16 lb	3903	3923	3933	3943	—	—	—	—
English	0.50 in	6 lb	Fine Screw	yes	3901	Ball	0.16 lb	3907	3927	3937	3947	—	—	—	—
Metric	13 mm	3 kg	Metric Mic	no	M3905	Ball	0.078 kg	M3902M	M3922M	M3932M	M3942M	M3952M	M3972M	M3982M	M3992M
Metric	13 mm	3 kg	Metric Mic	yes	M3901	Ball	0.078 kg	M3906M	M3926M	M3936M	M3946M	M3956M	M3976M	M3986M	M3996M
Metric	13 mm	3 kg	Fine Screw	no	M3905	Ball	0.078 kg	M3903	M3923	M3933	M3943	—	—	—	—
Metric	13 mm	3 kg	Fine Screw	yes	M3901	Ball	0.078 kg	M3907	M3927	M3937	M3947	—	—	—	—

*Position lock is standard on all models.

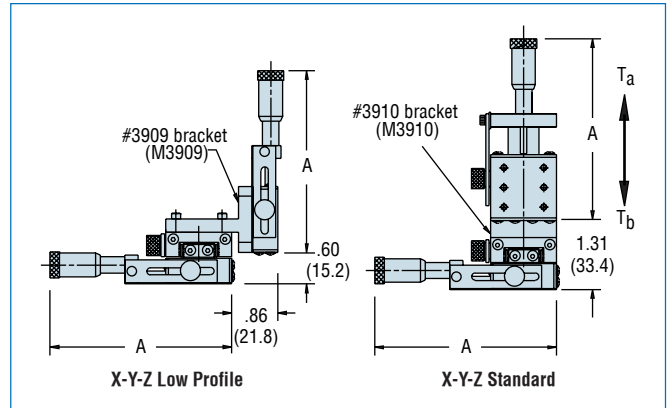
Figure A Dimensions inches (mm)†



Center Drive



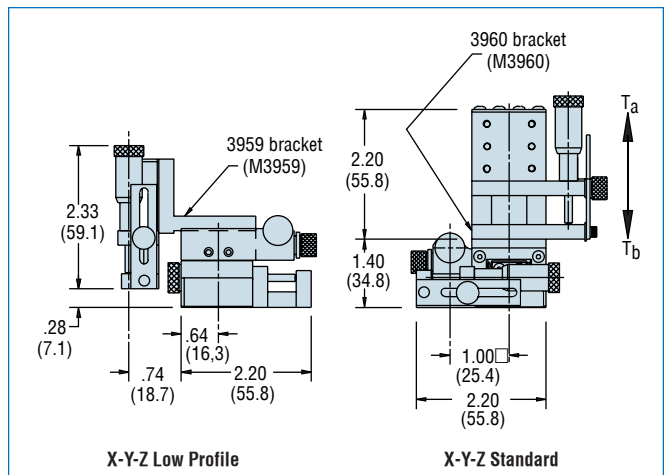
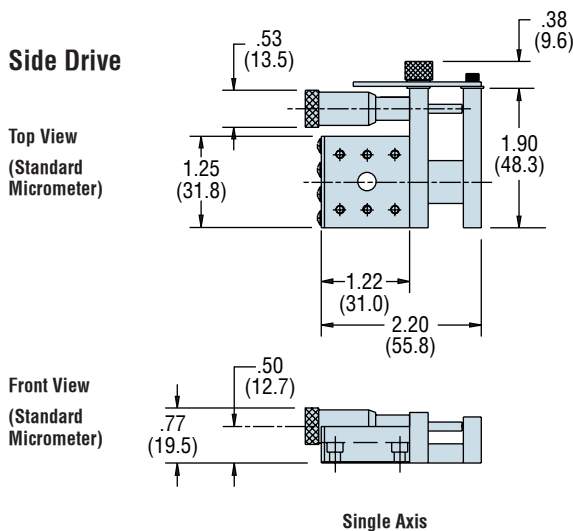
	English Mic. (in)	Metric Mic. (mm)	Fine Screw (in)
A	3.35	85.0	2.30
B	2.06	52.4	1.02
C	1.35	34.2	0.30



† Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Figure B – Dimensions inches (mm)†

Side Drive



† Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

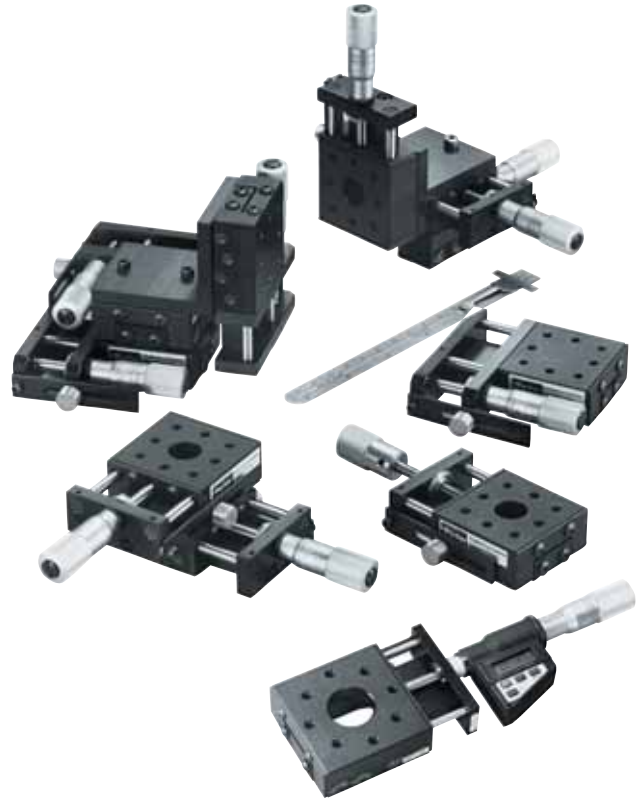


4000 Series (1.75 inches wide) Square Face, Multi-Axis Stages

These positioning stages are larger, stronger, and offer more selectable features than the miniature stages. Their square geometry mounting surfaces permit easy "stacking" to form multi-axis units. Features include four drive mechanisms (micrometer, digital micrometer, fine screw, and differential screw) and two bearing types (ball or cross roller).

Specifications	English	Metric
Travel - Maximum (selectable)	1.0 in	25 mm
Load Capacity:*		
Normal	50 lb – see table	11 kg – see table
Thrust T_a	10 lbs	4.5 kgs
T_b	5 lbs	2.3 kgs
Straightline Accuracy	0.00008 in (per inch of travel)	2 μ m (per 25 mm travel)
Resolution/Graduations:		
English Micrometer	0.001 in	n/a
Metric Micrometer	n/a	0.01 mm
Digital Micrometer	0.00005 in	n/a
Fine Screw	64 pitch	n/a
Differential Screw:		
Coarse Adjustment	48 pitch	n/a
Fine Adjustment	336 pitch	n/a

* Refer to linear slide component for moment load charts.



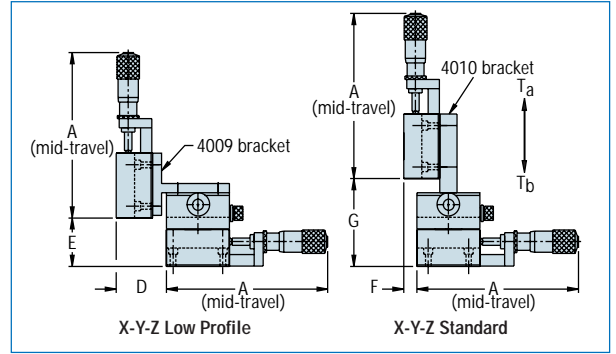
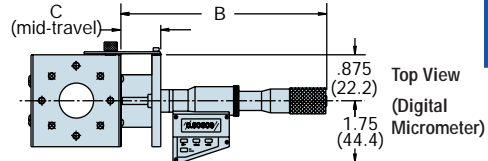
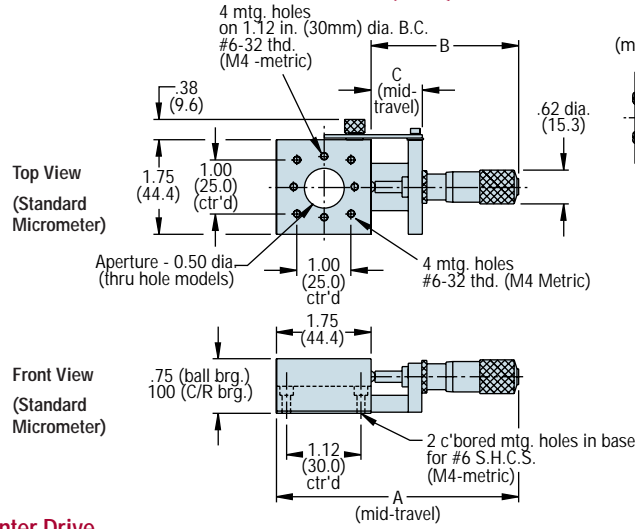
Selection Guide

Description								Model Number*							
								Center Drive Models				Side Drive Models			
Type	Travel	Load Capacity	Drive Type (Normal)	Aperture	Linear Slide Number	Brg. Type	Unit Weight	Low Profile		Standard		Low Profile		Standard	
								1 Axis (X)	2 Axis (XY)	3 Axis (XYZ)	3 Axis (XYZ)	1 Axis (X)	2 Axis (XY)	3 Axis (XYZ)	3 Axis (XYZ)
English	0.30* in	25 lb	Diff. Screw	no	4001	Ball	0.5 lb	4002D	4022D	4032D	4042D	4052D	4072D	4082D	4092D
English	0.30* in	25 lb	Diff. Screw	yes	4005	Ball	0.5 lb	4006D	4026D	4036D	4046D	4056D	4076D	4086D	4096D
English	0.30* in	50 lb	Diff. Screw	no	CR4001	C/R	0.5 lb	CR4002D	CR4022D	CR4032D	CR4042D	CR4052D	CR4072D	CR4082D	CR4092D
English	0.50 in	25 lb	English Mic	no	4001	Ball	0.5 lb	4002	4022	4032	4042	4052	4072	4082	4092
English	0.50 in	25 lb	English Mic	yes	4005	Ball	0.5 lb	4006	4026	4036	4046	4056	4076	4086	4096
English	0.50 in	25 lb	Metric Mic	no	4001	Ball	0.5 lb	4002M	4022M	4032M	4042M	4052M	4072M	4082M	4092M
English	0.50 in	25 lb	Metric Mic	yes	4005	Ball	0.5 lb	4006M	4026M	4036M	4046M	4056M	4076M	4086M	4096M
English	0.50 in	50 lb	English Mic	no	CR4001	C/R	0.5 lb	CR4002	CR4022	CR4032	CR4042	CR4052	CR4072	CR4082	CR4092
English	0.50 in	50 lb	Metric Mic	no	CR4001	C/R	0.5 lb	CR4002M	CR4022M	CR4032M	CR4042M	CR4052M	CR4072M	CR4082M	CR4092M
English	0.75 in	25 lb	Fine Screw	no	4001	Ball	0.5 lb	4003	4023	4033	4043	4053	4073	4083	4093
English	0.75 in	25 lb	Fine Screw	yes	4005	Ball	0.5 lb	4007	4027	4037	4047	4057	4077	4087	4097
English	1.00 in	25 lb	English Mic	no	4001	Ball	0.5 lb	4004	4024	4034	4044	4054	4074	4084	4094
English	1.00 in	25 lb	Metric Mic	no	4001	Ball	0.5 lb	4004M	4024M	4034M	4044M	4054M	4074M	4084M	4094M
English	1.00 in	25 lb	Digital Mic	no	4001	Ball	1.0 lb	4004-DM	—	—	—	n/a	n/a	n/a	n/a
English	1.00 in	25 lb	Digital Mic	yes	4005	Ball	1.0 lb	4008-DM	—	—	—	n/a	n/a	n/a	n/a
English	1.00 in	50 lb	Digital Mic	no	CR4001	C/R	1.0 lb	CR4004-DM	—	—	—	n/a	n/a	n/a	n/a
Metric	13 mm	11 kg	Metric Mic	yes	M4001	Ball	0.23 kg	M4002M	M4022M	M4032M	M4042M	M4052M	M4072M	M4082M	M4092M
Metric	25 mm	11 kg	Digital Mic	yes	M4001	Ball	0.45 kg	M4004-DM	—	—	—	—	—	—	—
Metric	25 mm	11 kg	Metric Mic	yes	M4001	Ball	0.23 kg	M4004M	M4024M	M4034M	M4044M	M4054M	M4074M	M4084M	M4094M
Metric	13 mm	11 kg	Metric Mic	no	M4005	Ball	0.23 kg	M4006M	M4026M	M4036M	M4046M	M4056M	M4076	M4086M	M4096M
Metric	25 mm	11 kg	Digital Mic	no	M4005	Ball	0.45 kg	M4008-DM	—	—	—	n/a	n/a	n/a	n/a

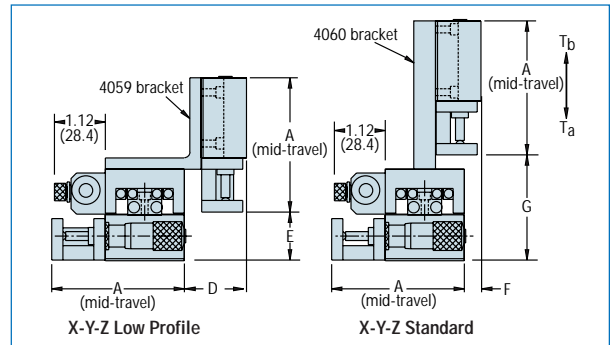
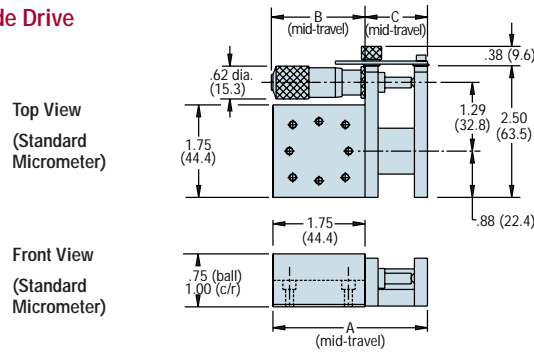
* 0.3 in = coarse resolution range; 0.08 in = fine resolution range

*Position lock is standard on all models.

4000 Series Dimensions inches (mm)[†]



Side Drive



Dimensions

[†] Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Model Reference	Center Drive Models							Inches	Side Drive Models							Model Reference
	A	B	C	D	E	F	G		A	B	C	D	E	F	G	
4002D	4.12	2.37	0.88	1.12	0.9	0.12	1.88	Inches	2.87	1.44	1.19	1.12	0.68	0.12	1.88	4052D
4006D	4.12	2.37	0.88	1.12	0.9	0.12	1.88		2.87	1.44	1.19	1.12	0.68	0.12	1.88	4056D
CR4002D	4.12	2.37	0.88	1.36	1.30	0.36	2.37		2.87	1.73	1.19	1.38	0.94	0.38	2.38	CR4052D
4002	4.37	2.68	0.90	1.12	0.9	0.12	1.88		2.87	1.73	1.19	1.12	0.68	0.12	1.88	4052
4006	4.37	2.68	0.90	1.12	0.9	0.12	1.88		2.87	1.73	1.19	1.12	0.68	0.12	1.88	4056
4002M	4.37	2.68	0.90	1.12	0.9	0.12	1.88		2.87	1.73	1.19	1.12	0.68	0.12	1.88	4052M
4006M	4.37	2.68	0.90	1.12	0.9	0.12	1.88		2.87	1.73	1.19	1.12	0.68	0.12	1.88	4056M
CR4002	4.37	2.62	0.90	1.36	1.30	0.36	2.37		2.87	1.73	1.19	1.38	0.94	0.38	2.38	CR4052
CR4002M	4.37	2.62	0.90	1.36	1.30	0.36	2.37		2.87	1.73	1.19	1.38	0.94	0.38	2.38	CR4052M
4003	4.33	2.57	0.88	1.12	0.9	0.12	1.88		2.87	1.62	1.19	1.12	0.68	0.12	1.88	4053
4007	4.33	2.57	0.88	1.12	0.9	0.12	1.88		2.87	1.62	1.19	1.12	0.68	0.12	1.88	4057
4004	6.03	4.28	1.15	1.12	0.9	0.12	2.13		3.12	3.10	1.37	1.12	0.45	0.12	1.63	4054
4004M	6.03	4.28	1.15	1.12	0.9	0.12	2.13		3.12	3.10	1.37	1.12	0.45	0.12	1.63	4054M
4004-DM	7.74	5.99	1.18	—	—	—	—		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4008-DM	7.74	5.99	1.18	—	—	—	—		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CR4004-DM	7.74	5.99	1.18	—	—	—	—		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
M4002M	111	68	23	28.5	22.6	3.1	47.8	Millimeters	72	44	30	33	15	3.0	47.8	M4052
M4004-DM	196.5	152.1	29.91	—	15.7	—	—		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
M4004M	153	109	29	28.5	22.6	3.1	54.1		115	79	36	28	11	3.0	47.8	M4054
M4006M	111	68	23	28.5	22.6	3.1	47.8		72	44	30	33	15	3.0	47.8	M4056
M4008-DM	196.5	152.1	29.91	—	15.7	—	—		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a



4500 Series (2.62 inches wide) Square Face, Multi-Axis Stages

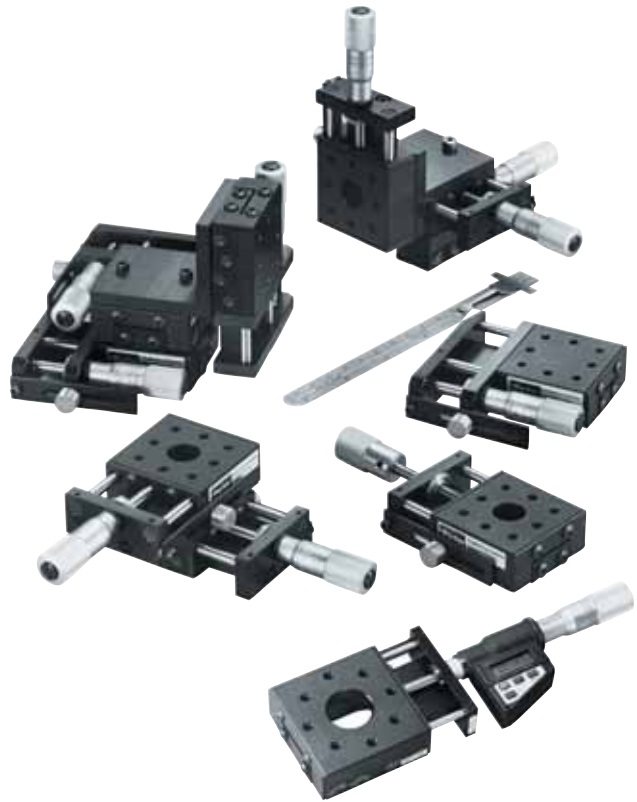
These positioning stages provide a larger mounting surface and greater load capacity than the 4000 Series stages. They are offered in a variety of selections including: English or Metric Style (size and mounting);

two bearing types (ball or cross roller); and four drive mechanisms (micrometer, digital micrometer, fine screw, and differential screw). They can be ordered as single- or multi-axis units.

Specifications

	English	Metric
Travel - Maximum (selectable)	1.0 in	25 mm
Load Capacity:*		
Normal	88 lb – See table.	20 kg – See table.
Thrust T_a	10 lbs	4.5 kgs
T_b	2 lbs	0.9 kgs
Straightline Accuracy	0.00008 in (per inch of travel)	2 μ m (per 25 mm travel)
Resolution/Graduations:		
English Micrometer	0.001 in	n/a
Metric Micrometer	n/a	0.01 mm
Digital Micrometer	0.00005 in	0.001 mm
Fine Screw	64 pitch	n/a
Differential Screw:		
Coarse Adjustment	48 pitch	0.40 mm
Fine Adjustment	336 pitch	0.08 mm

* Refer to linear slide component for moment load charts.



Selection Guide

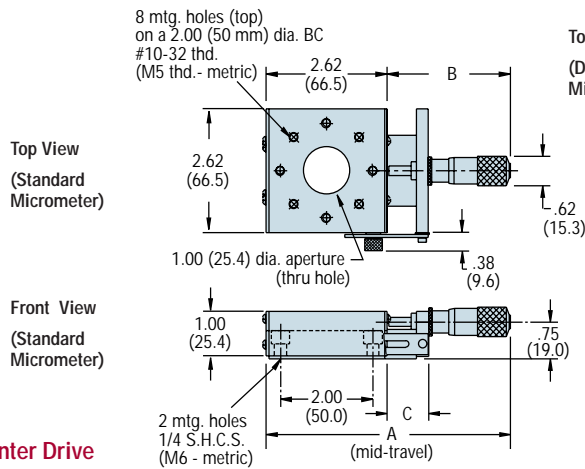
Description								Model Number*								
								Center Drive Models				Side Drive Models				
Type	Travel	Load Capacity	Drive Type	Aperture	Slide Type	Linear Brg.	Unit Weight		1 Axis (X)	2 Axis (XY)	Low Profile Standard		1 Axis (X)	2 Axis (XY)	Low Profile Standard	
							Center Drive	Side Drive			3 Axis (XYZ)	3 Axis (XYZ)			3 Axis (XYZ)	3 Axis (XYZ)
English	0.30*in	44 lb	Diff. Screw	no	4501	Ball	0.7 lb	0.9 lb	4502D	4522D	4532D	4542D	4552D	4572D	4582D	4592D
English	0.30*in	44 lb	Diff. Screw	yes	4505	Ball	0.7 lb	0.9 lb	4506D	4526D	4536D	4546D	4556D	4576D	4586D	4596D
English	0.30*in	88 lb	Diff. Screw	no	CR4501	C/R	0.9 lb	0.9 lb	CR4502D	CR4522D	CR4532D	CR4542D	CR4552D	CR4572D	CR4582M	CR4592D
English	0.50 in	44 lb	English Mic	no	4501	Ball	0.7 lb	0.9 lb	4502	4522	4532	4542	4552	4572	4582	4592
English	0.50 in	44 lb	English Mic	yes	4505	Ball	0.7 lb	0.9 lb	4506	4526	4536	4546	4556	4576	4586	4596
English	0.50 in	44 lb	Metric Mic	no	4501	Ball	0.7 lb	0.9 lb	4502M	4522M	4532M	4542M	4552M	4572M	4582M	4592M
English	0.50 in	44 lb	Metric Mic	yes	4505	Ball	0.7 lb	0.9 lb	4506M	4526M	4536M	4546M	4556M	4576M	4586M	4596M
English	0.50 in	88 lb	English Mic	no	CR4501	C/R	0.9 lb	1.0 lb	CR4502	CR4522	CR4532	CR4542	CR4552	CR45072	CR45082	CR45092
English	0.50 in	88 lb	English Mic	yes	CR4505	C/R	0.9 lb	1.0 lb	CR4506	CR4526	CR4536	CR4546	CR4556	CR4576	CR4586	CR4596
English	0.50 in	88 lb	Metric Mic	no	CR4501	C/R	0.9 lb	1.0 lb	CR4502M	CR4522M	CR4532M	CR4542M	CR4552M	CR4572M	CR4582M	CR4592M
English	0.50 in	88 lb	Metric Mic	yes	CR4505	C/R	0.9 lb	1.0 lb	CR4506M	CR4526M	CR4536M	CR4546M	CR4556M	CR4576M	CR4586M	CR4596M
English	0.75 in	44 lb	Fine Screw	no	4501	Ball	0.7 lb	0.9 lb	4503	4523	4533	4543	4553	4573	4583	4593
English	0.75 in	44 lb	Fine Screw	yes	4505	Ball	0.7 lb	0.9 lb	4507	4527	4537	4547	4557	4577	4587	4597
English	1.00 in	44 lb	English Mic	no	4501	Ball	0.7 lb	0.9 lb	4504	4524	4534	4544	4554	4574	4584	4594
English	1.00 in	44 lb	Metric Mic	no	4501	Ball	0.7 lb	0.9 lb	4504M	4524M	4534M	4544M	4554M	4574M	4584M	4594M
English	1.00 in	44 lb	Digital Mic	no	4501	Ball	1.6 lb	n/a	4504-DM	—	—	—	n/a	n/a	n/a	n/a
English	1.00 in	44 lb	Digital Mic	yes	4505	Ball	1.5 lb	n/a	4508-DM	—	—	—	n/a	n/a	n/a	n/a
English	1.00 in	88 lb	English Mic	no	CR4501	C/R	0.9 lb	1.0 lb	CR4504	CR4524	CR4534	CR4544	CR4554	CR4574	CR4584	CR4594
English	1.00 in	88 lb	Metric Mic	no	CR4501	C/R	0.9 lb	1.0 lb	CR4504M	CR4524M	CR4534M	CR4544M	CR4554M	CR4574M	CR4584M	CR4594M
Metric	13 mm	20 kg	Metric Mic	no	M4501	Ball	0.33 kg	0.42 kg	M4502M	M4522M	M4532M	M4542M	M4552M	M4572M	M4582M	M4592M
Metric	25 mm	20 kg	Digital Mic	no	M4501	Ball	0.63 kg	n/a	M4504-DM	—	—	—	—	—	—	—
Metric	25 mm	20 kg	Metric Mic	no	M4501	Ball	0.33 kg	0.42 kg	M4504M	M4524M	M4534M	M4544M	M4554M	M4574M	M4584M	M4594M
Metric	13 mm	20 kg	Metric Mic	yes	M4505	Ball	0.33 kg	0.42 kg	M4506M	M4526M	M4536M	M4546M	M4556M	M4576M	M4586M	M4596M
Metric	25 mm	20 kg	Digital Mic	yes	M4505	Ball	0.63 kg	n/a	M4508-DM	—	—	—	n/a	n/a	n/a	n/a

* 0.3 in= coarse resolution range; 0.08 in= fine resolution range

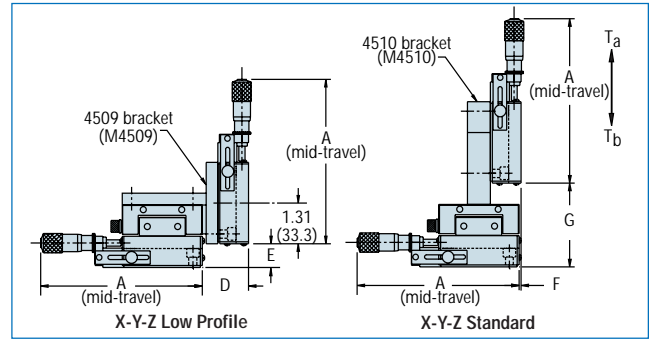
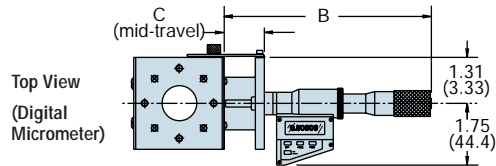
*Position lock is standard on all models.



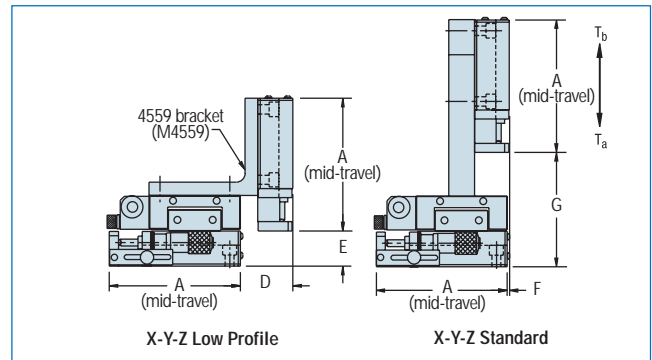
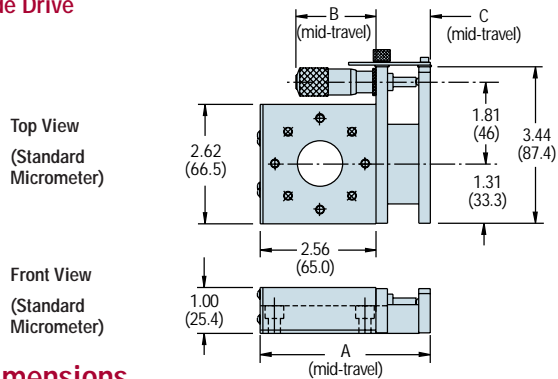
4500 Series Dimensions inches (mm)†



Center Drive



Side Drive



† Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Dimensions

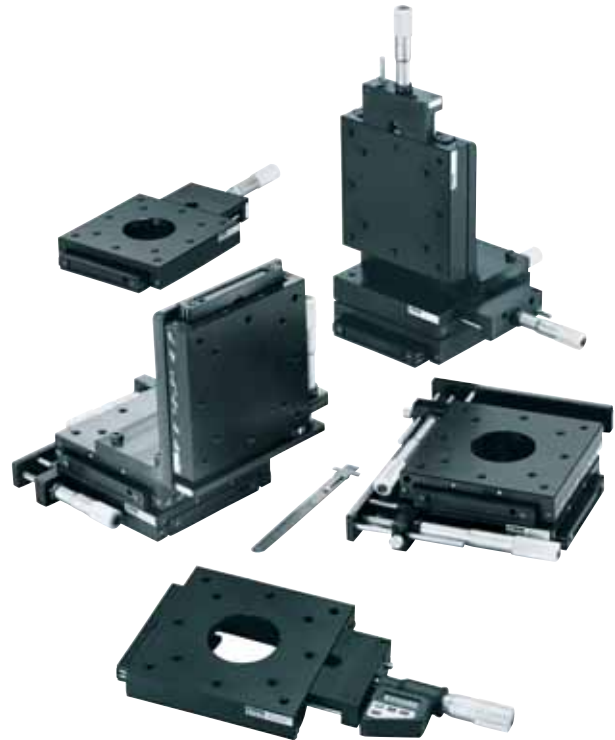
Model Reference	Center Drive Models							Side Drive Models							Model Reference
	A	B	C	D	E	F	G	A	B	C	D	E	F	G	
4502D	5.00	2.37	0.9	1.50	1.12	.06	2.70	3.75	1.44	1.19	1.50	1.00	.06	3.25	4552D
4506D	5.00	2.37	0.9	1.50	1.12	.06	2.70	3.75	1.44	1.19	1.50	1.00	.06	3.25	4556D
CR4502D	5.00	2.37	0.9	1.50	1.12	.06	2.70	3.75	1.44	1.19	1.50	0.94	.06	3.17	CR4552D
4502	5.25	2.62	0.9	1.50	1.12	.06	2.70	3.75	1.73	1.19	1.50	1.00	.06	3.25	4552
4506	5.25	2.62	0.9	1.50	1.12	.06	2.70	3.75	1.73	1.19	1.50	1.00	.06	3.25	4556
4502M	5.25	2.62	0.9	1.50	1.12	.06	2.70	3.75	1.73	1.19	1.50	1.00	.06	3.25	4552M
4506M	5.25	2.62	0.9	1.50	1.12	.06	2.70	3.75	1.73	1.19	1.50	1.00	.06	3.25	4556M
CR4502	5.25	2.62	0.9	1.50	1.12	.06	2.70	3.75	1.73	1.19	1.50	0.94	.06	3.17	CR4552
CR4506	5.25	2.62	0.9	1.50	1.12	.06	2.70	3.75	1.73	1.19	1.50	0.94	.06	3.17	CR4556
CR4502M	5.25	2.62	0.9	1.50	1.12	.06	2.70	3.75	1.73	1.19	1.50	0.94	.06	3.17	CR4552M
CR4506M	5.25	2.62	0.9	1.50	1.12	.06	2.70	3.75	1.73	1.19	1.50	0.94	.06	3.17	CR4556M
4503	5.12	2.50	0.9	1.50	1.12	.06	2.70	3.75	1.44	1.19	1.50	1.00	.06	3.25	4553
4507	5.12	2.50	0.9	1.50	1.12	.06	2.70	3.75	1.44	1.19	1.50	1.00	.06	3.25	4557
4504	6.90	4.28	1.18	1.50	1.12	.06	2.70	4.03	3.10	1.47	1.50	1.00	.06	2.12	4554
4504M	6.90	4.28	1.18	1.50	1.12	.06	2.70	4.03	3.01	1.47	1.50	1.00	.06	2.12	4554M
4504-DM	8.62	6.00	1.18	—	—	—	—	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4508-DM	8.62	6.00	1.18	—	—	—	—	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CR4504	6.90	4.28	1.18	1.50	1.12	.06	2.70	4.03	3.10	1.47	1.50	1.00	.06	2.12	CR4554
CR4504M	6.90	4.28	1.18	1.50	1.12	.06	2.70	4.03	3.01	1.47	1.50	1.00	.06	2.12	CR4554M
M4502M	133	67	23	38.1	28.4	1.5	68.6	95	44	30	38.1	25.4	1.5	82.6	M4552M
M4504-DM	219	152	30	—	—	—	—	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
M4504M	175	109	30	38.1	28.4	1.5	68.6	102	79	37	38.1	25.4	1.5	82.6	M4554M
M4506M	133	67	23	38.1	28.4	1.5	68.6	95	44	30	38.1	25.4	1.5	82.6	M4556M
M4508-DM	219	152	30	—	—	—	—	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a



4400 Series (5.0 inches wide) Square Face, Multi-Axis Stages

The 4400 positioning stage provides a large five inch square mounting surface on a relatively low profile (1.0 inch) and can be selected with or without a two inch diameter clear aperture. The 4400 series offers a variety of selections including: English or Metric Style (size and mounting); two

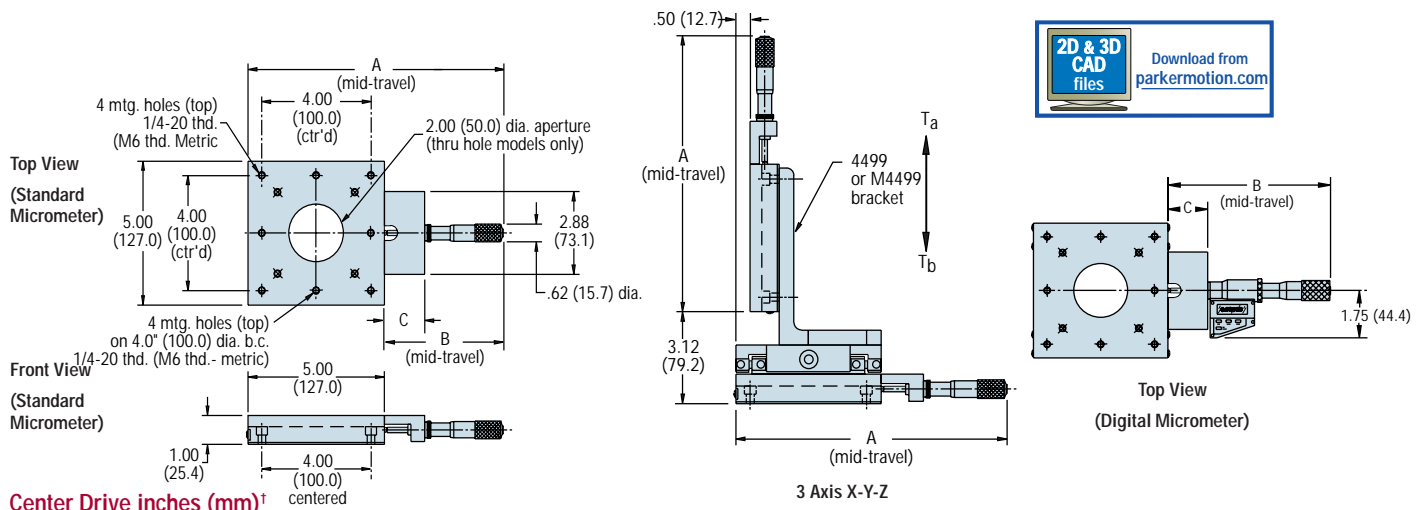
bearing types (ball or cross roller); and three drive mechanisms (English micrometer, Metric micrometer or digital micrometer). Position locks are also available as a separate option when ordering. Three axis units can precisely lift payloads weighing up to thirty pounds.



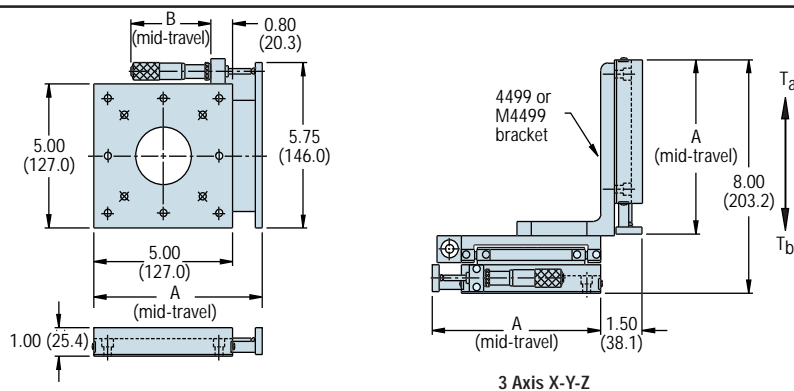
Specifications

	English	Metric
Travel - Maximum (selectable)	2.0 in	50 mm
Load Capacity:*		
Normal	95 lb – See table.	43 kg – See table.
Thrust T_a	2.5 lbs	1.1 kgs
T_b	30 lbs	13.5 kgs
Straightline Accuracy	0.00008 in (per inch of travel)	2 μ m (per 25 mm travel)
Resolution/Graduations:		
English Micrometer	0.001 in	n/a
Metric Micrometer	n/a	0.01 mm
Digital Micrometer	0.00005 in	0.001 mm

* Refer to linear slide component for moment load charts.



Side Drive inches (mm)[†]



[†] Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).



4400 Series Model Selection Guide

Description								Center Drive Models						Side Drive Models					
Type	Travel	Load Capacity	Mic Type	Aperture	Slide (Ref.)	Brg. Type	Unit Wt.	Model Number			Dimensions			Model Number			Dimensions		
								1 Axis (X)	2 Axis (XY)	3 Axis (XYZ)	A	B	C	1 Axis (X)	2 Axis (XY)	3 Axis (XYZ)	A	B	
English	1.0 in	95 lb	English Mic	no	4410	Ball	2.7 lb	4411	4421	4431	9.28	4.28	1.47	4416	4426	4436	6.0	2.88	
English	1.0 in	95 lb	English Mic	yes	4450	Ball	2.7 lb	4451	4461	4471	9.28	4.28	1.47	4456	4466	4476	6.0	2.88	
English	1.0 in	95 lb	Metric Mic	no	4410	Ball	2.7 lb	4413	4423	4433	9.28	4.28	1.47	4418	4428	4438	6.0	2.88	
English	1.0 in	95 lb	Metric Mic	yes	4450	Ball	2.7 lb	4453	4463	4473	9.28	4.28	1.47	4458	4468	4478	6.0	2.88	
English	1.0 in	95 lb	Digital Mic	no	4410	Ball	3.1 lb	4410-DM	—	—	11.28	6.28	1.47	—	—	—	—	—	
English	1.0 in	95 lb	Digital Mic	yes	4450	Ball	3.1 lb	4450-DM	—	—	11.28	6.28	1.47	—	—	—	—	—	
English	1.0 in	120 lb	English Mic	no	CR4410	C/R	2.7 lb	CR4411	CR4421	CR4431	9.28	4.28	1.47	CR4416	CR4426	CR4436	6.0	2.88	
English	1.0 in	120 lb	English Mic	yes	CR4450	C/R	2.7 lb	CR4451	CR4461	CR4471	9.28	4.28	1.47	CR4456	CR4466	CR4476	6.0	2.88	
English	1.0 in	120 lb	Metric Mic	no	CR4410	C/R	2.7 lb	CR4413	CR4423	CR4433	9.28	4.28	1.47	CR4418	CR4428	CR4438	6.0	2.88	
English	1.0 in	120 lb	Metric Mic	yes	CR4450	C/R	2.7 lb	CR4453	CR4463	CR4473	9.28	4.28	1.47	CR4458	CR4468	CR4478	6.0	2.88	
English	1.0 in	120 lb	Digital Mic	no	CR4410	C/R	3.1 lb	CR4411-DM	—	—	11.28	6.28	1.47	—	—	—	—	—	
English	1.0 in	120 lb	Digital Mic	yes	CR4450	C/R	3.1 lb	CR4451-DM	—	—	11.28	6.28	1.47	—	—	—	—	—	
English	2.0 in	95 lb	English Mic	no	4410	Ball	2.7 lb	4412	4422	4432	11.28	6.28	2.00	4417	4427	4437	6.5	4.38	
English	2.0 in	95 lb	English Mic	yes	4450	Ball	2.7 lb	4452	4462	4472	11.28	6.28	2.00	4457	4467	4477	6.5	4.38	
English	2.0 in	95 lb	Metric Mic	no	4410	Ball	2.7 lb	4414	4424	4434	11.28	6.28	2.00	4419	4429	4439	6.5	4.38	
English	2.0 in	95 lb	Metric Mic	yes	4450	Ball	2.7 lb	4454	4464	4474	11.28	6.28	2.00	4459	4469	4479	6.5	4.38	
English	2.0 in	95 lb	Digital Mic	no	4410	Ball	3.1 lb	4412-DM	—	—	12.81	7.81	2.00	—	—	—	—	—	
English	2.0 in	95 lb	Digital Mic	yes	4450	Ball	3.1 lb	4452-DM	—	—	12.81	7.81	2.00	—	—	—	—	—	
English	2.0 in	120 lb	English Mic	no	CR4410	C/R	2.7 lb	CR4412	CR4422	CR4432	11.28	6.28	2.00	CR4417	CR4427	CR4437	6.5	4.38	
English	2.0 in	120 lb	English Mic	yes	CR4450	C/R	2.7 lb	CR4452	CR4462	CR4472	11.28	6.28	2.00	CR4457	CR4467	CR4477	6.5	4.38	
English	2.0 in	120 lb	Metric Mic	no	CR4410	C/R	2.7 lb	CR4414	CR4424	CR4434	11.28	6.28	2.00	CR4419	CR4429	CR4439	6.5	4.38	
English	2.0 in	120 lb	Metric Mic	yes	CR4450	C/R	3.1 lb	CR4454	CR4464	CR4474	11.28	6.28	2.00	CR4459	CR4469	CR4479	6.5	4.38	
English	2.0 in	120 lb	Digital Mic	no	CR4410	C/R	3.1 lb	CR4412-DM	—	—	12.81	7.81	2.00	—	—	—	—	—	
English	2.0 in	120 lb	Digital Mic	yes	CR4450	C/R	3.1 lb	CR4452-DM	—	—	12.81	7.81	2.00	—	—	—	—	—	
Metric	25 mm	43 kg	Metric Mic	no	4410	Ball	1.2 kg	M4413	M4423	M4433	236	109	38	M4418	M4428	M4438	152	73	
Metric	25 mm	43 kg	Metric Mic	yes	4450	Ball	1.2 kg	M4453	M4463	M4473	236	109	38	M4458	M4468	M4478	152	73	
Metric	50 mm	43 kg	Metric Mic	no	4410	Ball	1.2 kg	M4414	M4424	M4434	286	159	50	M4419	M4429	M4439	165	111	
Metric	50 mm	43 kg	Metric Mic	yes	4450	Ball	1.2 kg	M4454	M4464	M4474	286	159	50	M4459	M4469	M4479	165	111	
Metric	25 mm	43 kg	Digital Mic	no	4410	Ball	1.4 kg	M4410-DM	—	—	286	159	50	—	—	—	—	—	
Metric	25 mm	43 kg	Digital Mic	yes	4450	Ball	1.4 kg	M4450-DM	—	—	286	159	50	—	—	—	—	—	
Metric	50 mm	43 kg	Digital Mic	no	4410	Ball	1.4 kg	M4412-DM	—	—	—	—	—	—	—	—	—	—	
Metric	50 mm	43 kg	Digital Mic	yes	4450	Ball	1.4 kg	M4452-DM	—	—	—	—	—	—	—	—	—	—	

NOTE: For the optional position lock, add "-L" to the desired part number when ordering.
 Available on all models except the digital micrometer (-DM).

**4100, 4200, 4300 Series (1.75 inches wide)
 Extended Length Stages**

These positioning stages are longer versions of the 4000 series square faced linear positioners. Their extended length permit more rolling elements in the bearing system which provides increased load capacity

with the same cross section. Like the 4000 series, they offer three drive mechanisms (micrometer, digital micrometer, and fine screw) and two bearing types (ball or cross roller).

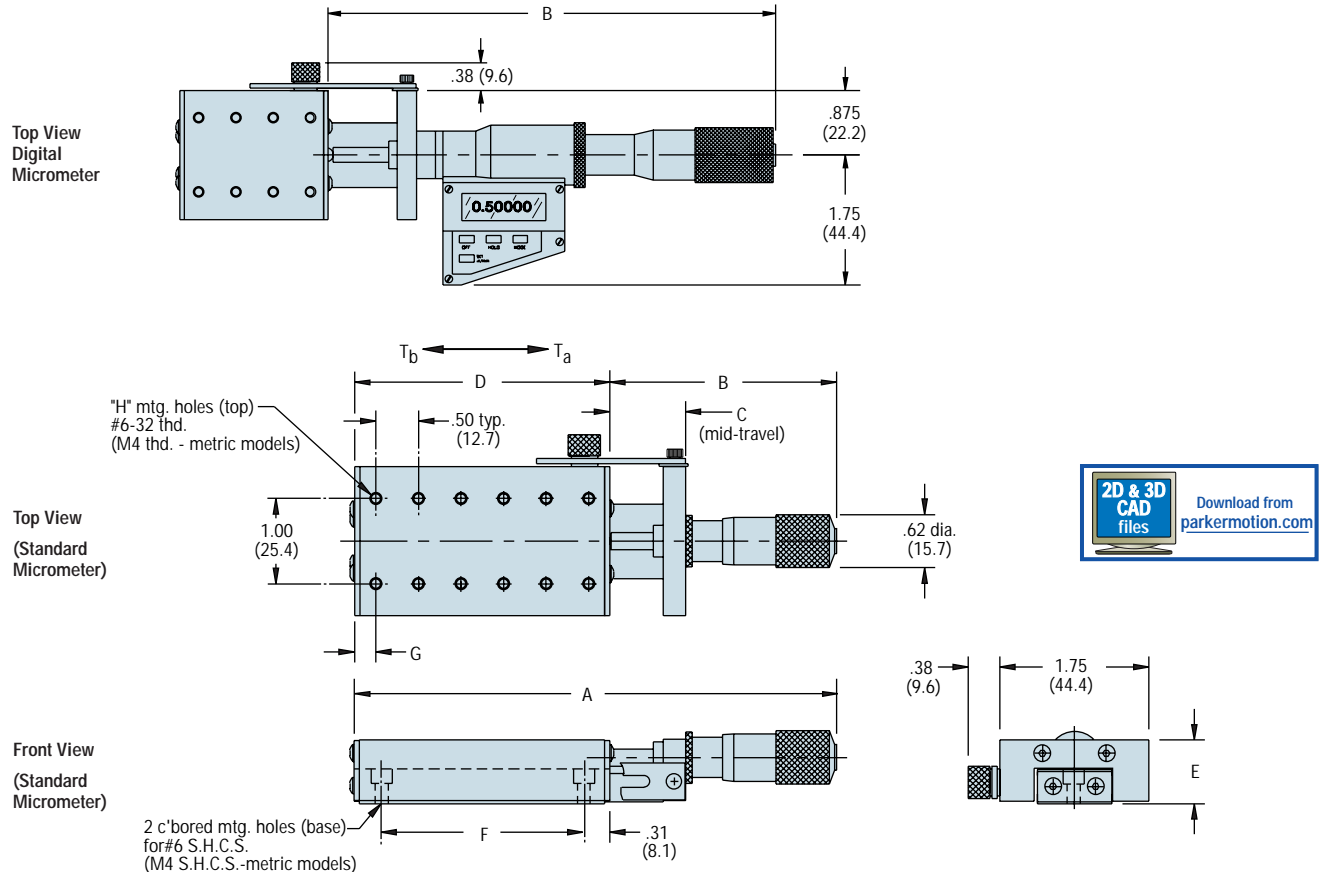


Specifications

	English	Metric
Travel - Maximum (selectable)	1.0 in	25 mm
Load Capacity:*		
Normal	100 lb – See table.	25 kg – See table.
Thrust T_a	10 lbs	4.5 kgs
T_b	3 lbs	1.4 kgs
Straightline Accuracy	0.00008 in (per inch of travel)	2 μ m (per 25 mm travel)
Resolution/Graduations:		
English Micrometer	0.001 in	n/a
Metric Micrometer	n/a	0.01 mm
Digital Micrometer	0.00005 in	0.001 mm
Fine Screw	64 pitch	n/a mm

* Refer to linear slide component for moment load charts.

Dimensions inches (mm)†



† Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Model Selection Guide

Description							Model Number*	Dimensions								
Type	Travel	Load Capacity	Drive Type	Linear Slide Number	Bearing Type	Unit Weight		A	B	C	D	E	F	G	H	
English	0.50 in	28 lb	English Mic	4101	Ball	0.5 lb	4102	4.62	2.62	0.93	2.0	0.75	1.38	0.25	8	Inches
English	0.50 in	28 lb	Metric Mic	4101	Ball	0.5 lb	4102M	4.62	2.62	0.93	2.0	0.75	1.38	0.25	8	
English	0.50 in	40 lb	English Mic	4201	Ball	0.6 lb	4202	5.62	2.62	0.93	3.0	0.75	2.38	0.25	12	
English	0.50 in	40 lb	Metric Mic	4201	Ball	0.6 lb	4202M	5.62	2.62	0.93	3.0	0.75	2.38	0.25	12	
English	0.50 in	55 lb	English Mic	4301	Ball	0.8 lb	4302	6.62	2.62	0.93	4.0	0.75	3.38	0.25	16	
English	0.50 in	55 lb	Metric Mic	4301	Ball	0.8 lb	4302M	6.62	2.62	0.93	4.0	0.75	3.38	0.25	16	
English	0.50 in	56 lb	English Mic	CR4101	C/R	0.5 lb	CR4102	4.62	2.62	0.93	2.0	1.00	1.38	0.25	8	
English	0.50 in	56 lb	Metric Mic	CR4101	C/R	0.5 lb	CR4102M	4.62	2.62	0.93	2.0	1.00	1.38	0.25	8	
English	0.50 in	60 lb	English Mic	CR4201	C/R	0.8 lb	CR4202	5.62	2.62	0.93	3.0	1.00	2.38	0.25	12	
English	0.50 in	60 lb	Metric Mic	CR4201	C/R	0.8 lb	CR4202M	5.62	2.62	0.93	3.0	1.00	2.38	0.25	12	
English	0.50 in	100 lb	English Mic	CR4301	C/R	1.0 lb	CR4302	6.62	2.62	0.93	4.0	1.00	3.38	0.25	16	
English	0.50 in	100 lb	Metric Mic	CR4301	C/R	1.0 lb	CR4302M	6.62	2.62	0.93	4.0	1.00	3.38	0.25	16	
English	0.75 in	28 lb	Fine Screw	4101	Ball	0.5 lb	4103	4.50	2.50	0.88	2.0	0.75	1.38	0.25	8	
English	0.75 in	40 lb	Fine Screw	4201	Ball	0.6 lb	4203	5.50	2.50	0.88	3.0	0.75	2.38	0.25	12	
English	0.75 in	55 lb	Fine Screw	4301	Ball	0.8 lb	4303	6.50	2.50	0.88	4.0	0.75	3.38	0.25	16	
English	0.75 in	56 lb	Fine Screw	CR4101	C/R	0.5 lb	CR4103	4.50	2.50	0.88	2.0	1.00	1.38	0.25	8	
English	0.75 in	60 lb	Fine Screw	CR4201	C/R	0.8 lb	CR4203	5.50	2.50	0.88	3.0	1.00	2.38	0.25	12	
English	0.75 in	100 lb	Fine Screw	CR4301	C/R	1.0 lb	CR4303	6.50	2.50	0.88	4.0	1.00	3.38	0.25	16	
English	1.00 in	28 lb	English Mic	4101	Ball	0.5 lb	4104	6.28	4.28	1.18	2.0	0.75	1.38	0.25	8	
English	1.00 in	28 lb	Metric Mic	4101	Ball	0.5 lb	4104M	6.28	4.28	1.18	2.0	0.75	1.38	0.25	8	
English	1.00 in	28 lb	Digital Mic	4101	Ball	0.9 lb	4104-DM	8.0	6.0	1.18	2.0	0.75	1.38	0.25	8	
English	1.00 in	40 lb	English Mic	4201	Ball	0.6 lb	4204	7.28	4.28	1.18	3.0	0.75	2.38	0.25	12	
English	1.00 in	40 lb	Metric Mic	4201	Ball	0.6 lb	4204M	7.28	4.28	1.18	3.0	0.75	2.38	0.25	12	
English	1.00 in	40 lb	Digital Mic	4201	Ball	1.0 lb	4204-DM	9.0	6.0	1.18	3.0	0.75	2.38	0.25	12	
English	1.00 in	55 lb	English Mic	4301	Ball	0.8 lb	4304	8.28	4.28	1.18	4.0	0.75	3.38	0.25	16	
English	1.00 in	55 lb	Metric Mic	4301	Ball	0.8 lb	4304M	8.28	4.28	1.18	4.0	0.75	3.38	0.25	16	
English	1.00 in	55 lb	Digital Mic	4301	Ball	1.3 lb	4304-DM	10.0	6.0	1.18	4.0	0.75	3.38	0.25	16	
English	1.00 in	56 lb	English Mic	CR4101	C/R	0.5 lb	CR4104	6.28	4.28	1.18	2.0	1.0	1.38	0.25	8	
English	1.00 in	56 lb	Metric Mic	CR4101	C/R	0.5 lb	CR4104M	6.28	4.28	1.18	2.0	1.0	1.38	0.25	8	
English	1.00 in	56 lb	Digital Mic	CR4101	C/R	1.0 lb	CR4104-DM	8.0	6.0	1.18	2.0	1.0	1.38	0.25	8	
English	1.00 in	60 lb	English Mic	CR4201	C/R	0.8 lb	CR4204	7.28	4.28	1.18	3.0	1.0	2.38	0.25	12	
English	1.00 in	60 lb	Metric Mic	CR4201	C/R	0.8 lb	CR4204M	7.28	4.28	1.18	3.0	1.0	2.38	0.25	12	
English	1.00 in	60 lb	Digital Mic	CR4201	C/R	1.1 lb	CR4204-DM	9.0	6.0	1.18	3.0	1.0	2.38	0.25	12	
English	1.00 in	100 lb	English Mic	CR4301	C/R	1.0 lb	CR4304	8.28	4.28	1.18	4.0	1.0	3.38	0.25	16	
English	1.00 in	100 lb	Metric Mic	CR4301	C/R	1.0 lb	CR4304M	8.28	4.28	1.18	4.0	1.0	3.38	0.25	16	
English	1.00 in	100 lb	Digital Mic	CR4301	C/R	1.3 lb	CR4304-DM	10.0	6.0	1.18	4.0	1.0	3.38	0.25	16	
Metric	13 mm	13 kg	Metric Mic	M4101	Ball	0.2 kg	M4102M	117.3	66.5	23.6	50.8	19.0	35.0	12.9	6	Millimeters
Metric	13 mm	18 kg	Metric Mic	M4201	Ball	0.3 kg	M4202M	142.7	66.5	23.6	76.2	19.0	60.0	13.1	10	
Metric	13 mm	25 kg	Metric Mic	M4301	Ball	0.4 kg	M4302M	168.1	66.5	23.6	101.6	19.0	85.0	13.3	14	
Metric	25 mm	13 kg	Metric Mic	M4101	Ball	0.2 kg	M4104M	159.5	108.7	29.9	50.8	19.0	35.0	12.9	6	
Metric	25 mm	13 kg	Digital Mic	M4101	Ball	0.4 kg	M4104-DM	202.9	152.1	29.9	50.8	19.0	35.0	12.9	6	
Metric	25 mm	18 kg	Metric Mic	M4201	Ball	0.3 kg	M4204M	184.9	108.7	29.9	76.2	19.0	60.0	13.1	10	
Metric	25 mm	18 kg	Digital Mic	M4201	Ball	0.5 kg	M4204-DM	228.3	152.1	29.9	76.2	19.0	60.0	13.1	10	
Metric	25 mm	25 kg	Metric Mic	M4301	Ball	0.4 kg	M4304M	210.3	108.7	29.9	101.6	19.0	85.0	13.3	14	
Metric	25 mm	25 kg	Digital Mic	M4301	Ball	0.6 kg	M4304-DM	253.7	152.1	29.9	101.6	19.0	85.0	13.3	14	

*Position lock is standard on all models.



**4600, 4700, 4800 Series (2.62 inches wide)
 Extended Length Stages**

These positioning stages are longer versions of the 4500 series square faced linear positioners. They offer a larger mounting area, and their extended length permits more rolling elements in the bearing system which provides increased load

capacity with the same cross section (1.00" x 2.62"). They are offered with three drive mechanisms (micrometer, digital micrometer, and fine screw) and two bearing types (ball or cross roller).

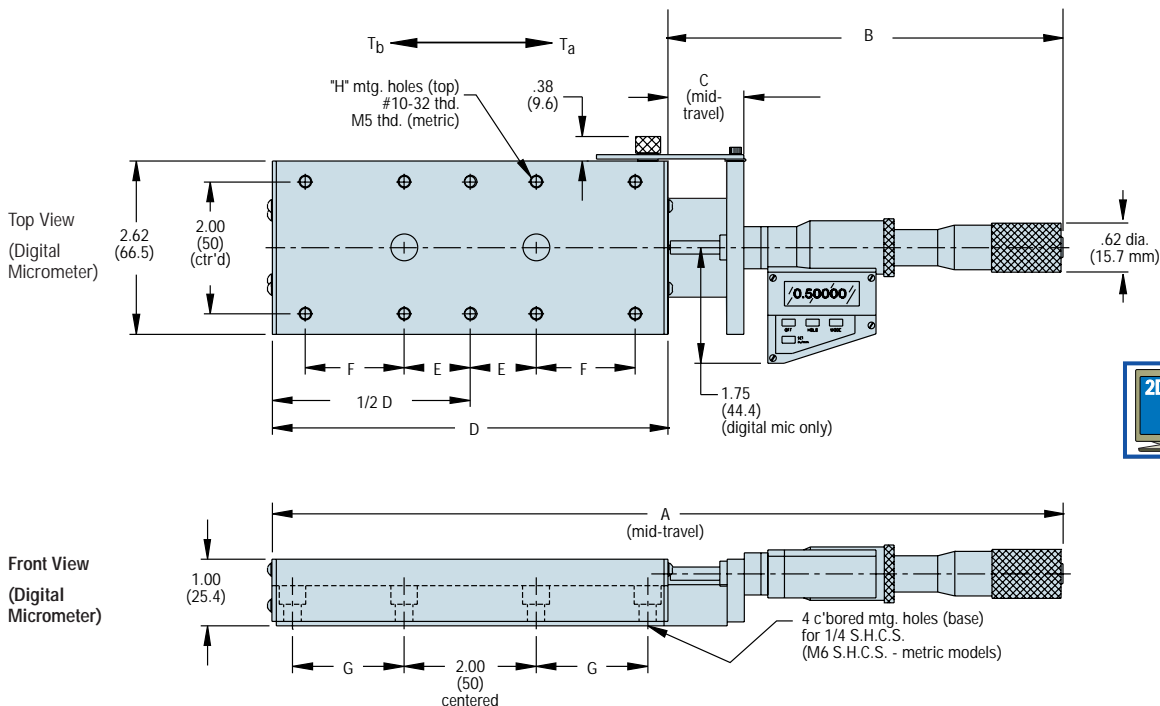


Specifications

	English	Metric
Travel - Maximum (selectable)	1.0 in	25 mm
Load Capacity:*		
Normal	248 lb – See table.	55 kg – See table.
Thrust T_a	10 lbs	4.5 kgs
T_b	5 lbs	2.3 kgs
Straightline Accuracy		
	0.00008 in (per inch of travel)	2 μ m (per 25 mm travel)
Resolution/Graduations:		
English Micrometer	0.001 in	n/a
Metric Micrometer	n/a	0.01 mm
Digital Micrometer	0.00005 in	0.001 mm
Fine Screw	64 Pitch	n/a

* Refer to linear slide component for moment load charts.

Dimensions inches (mm)†



† Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Model Selection Guide

Description							Model Number*	Dimensions								
Type	Travel	Load Capacity	Drive Type (Normal)	Linear Slide Number	Brg. Type	Unit Weight		A	B	C	D	E	F	G	H	
English	0.50 in	64 lb	English Mic	4601	Ball	0.5 lb	4602	6.62	2.62	0.93	4.0	0.5	—	0.69	6	Inches
English	0.50 in	64 lb	Metric Mic	4601	Ball	0.5 lb	4602M	6.62	2.62	0.93	4.0	0.5	—	0.69	6	
English	0.50 in	95 lb	English Mic	4701	Ball	0.6 lb	4702	7.62	2.62	0.93	5.0	1.0	—	1.19	6	
English	0.50 in	95 lb	Metric Mic	4701	Ball	0.6 lb	4702M	7.62	2.62	0.93	5.0	1.0	—	1.19	6	
English	0.50 in	122 lb	English Mic	4801	Ball	0.8 lb	4802	8.62	2.62	0.93	6.0	0.5	1.0	1.69	10	
English	0.50 in	122 lb	Metric Mic	4801	Ball	0.8 lb	4802M	8.62	2.62	0.93	6.0	0.5	1.0	1.69	10	
English	0.50 in	128 lb	English Mic	CR4601	C/R	1.1 lb	CR4602	6.62	2.62	0.93	4.0	0.5	—	0.69	6	
English	0.50 in	128 lb	Metric Mic	CR4601	C/R	1.1 lb	CR4602M	6.62	2.62	0.93	4.0	0.5	—	0.69	6	
English	0.50 in	190 lb	English Mic	CR4701	C/R	1.3 lb	CR4702	7.62	2.62	0.93	5.0	1.0	—	1.19	6	
English	0.50 in	190 lb	Metric Mic	CR4701	C/R	1.3 lb	CR4702M	7.62	2.62	0.93	5.0	1.0	—	1.19	6	
English	0.50 in	248 lb	English Mic	CR4801	C/R	1.5 lb	CR4802	8.62	2.62	0.93	6.0	0.5	1.0	1.69	10	
English	0.50 in	248 lb	Metric Mic	CR4801	C/R	1.5 lb	CR4802M	8.62	2.62	0.93	6.0	0.5	1.0	1.69	10	
English	0.75 in	64 lb	Fine Screw	4601	Ball	0.5 lb	4603	6.50	2.50	0.88	4.0	0.5	—	0.69	6	
English	0.75 in	95 lb	Fine Screw	4701	Ball	0.6 lb	4703	7.50	2.50	0.88	5.0	1.0	—	1.19	6	
English	0.75 in	122 lb	Fine Screw	4801	Ball	0.8 lb	4803	8.50	2.50	0.88	6.0	0.5	1.0	1.69	10	
English	0.75 in	128 lb	Fine Screw	CR4601	C/R	1.1 lb	CR4603	6.50	2.50	0.88	4.0	0.5	—	0.69	6	
English	0.75 in	190 lb	Fine Screw	CR4701	C/R	1.3 lb	CR4703	7.50	2.50	0.88	5.0	1.0	—	1.19	6	
English	0.75 in	248 lb	Fine Screw	CR4801	C/R	1.5 lb	CR4803	8.50	2.50	0.88	6.0	0.5	1.0	1.69	10	
English	1.00 in	64 lb	English Mic	4601	Ball	0.5 lb	4604	8.28	4.28	1.18	4.0	0.5	—	0.69	6	
English	1.00 in	64 lb	Metric Mic	4601	Ball	0.5 lb	4604M	8.28	4.28	1.18	4.0	0.5	—	0.69	6	
English	1.00 in	64 lb	Digital Mic	4601	Ball	1.6 lb	4604-DM	10.0	6.0	1.18	4.0	0.5	—	0.69	6	
English	1.00 in	95 lb	English Mic	4701	Ball	0.6 lb	4704	9.28	4.28	1.18	5.0	1.0	—	1.19	6	
English	1.00 in	95 lb	Metric Mic	4701	Ball	0.6 lb	4704M	9.28	4.28	1.18	5.0	1.0	—	1.19	6	
English	1.00 in	95 lb	Digital Mic	4701	Ball	1.8 lb	4704-DM	11.0	6.0	1.18	5.0	1.0	—	1.19	6	
English	1.00 in	122 lb	English Mic	4801	Ball	0.8 lb	4804	10.28	4.28	1.18	6.0	0.5	1.0	1.69	10	
English	1.00 in	122 lb	Metric Mic	4801	Ball	0.8 lb	4804M	10.28	4.28	1.18	6.0	0.5	1.0	1.69	10	
English	1.00 in	122 lb	Digital Mic	4801	Ball	2.0 lb	4804-DM	12.0	6.0	1.18	6.0	0.5	1.0	1.69	10	
English	1.00 in	128 lb	English Mic	CR4601	C/R	1.1 lb	CR4604	8.28	4.28	1.18	4.0	0.5	—	0.69	6	
English	1.00 in	128 lb	Metric Mic	CR4601	C/R	1.1 lb	CR4604M	8.28	4.28	1.18	4.0	0.5	—	0.69	6	
English	1.00 in	128 lb	Digital Mic	CR4601	C/R	1.7 lb	CR4604-DM	10.0	6.0	1.18	4.0	0.5	—	0.69	6	
English	1.00 in	190 lb	English Mic	CR4701	C/R	1.3 lb	CR4704	9.28	4.28	1.18	5.0	1.0	—	1.19	6	
English	1.00 in	190 lb	Metric Mic	CR4701	C/R	1.3 lb	CR4704M	9.28	4.28	1.18	5.0	1.0	—	1.19	6	
English	1.00 in	190 lb	Digital Mic	CR4701	C/R	1.9 lb	CR4704-DM	11.0	6.0	1.18	5.0	1.0	—	1.19	6	
English	1.00 in	248 lb	English Mic	CR4801	C/R	1.5 lb	CR4804	10.28	4.28	1.18	6.0	0.5	1.0	1.69	10	
English	1.00 in	248 lb	Metric Mic	CR4801	C/R	1.5 lb	CR4804M	10.28	4.28	1.18	6.0	0.5	1.0	1.69	10	
English	1.00 in	248 lb	Digital Mic	CR4801	C/R	2.1 lb	CR4804-DM	12.0	6.0	1.18	6.0	0.5	1.0	1.69	10	
Metric	13 mm	29 kg	Metric Mic	M4601	Ball	0.5 kg	M4602M	168.1	66.5	23.6	101.6	12.5	—	12.5	6	Millimeters
Metric	13 mm	43 kg	Metric Mic	M4701	Ball	0.6 kg	M4702M	193.5	66.5	23.6	127.0	25.0	—	25.0	6	
Metric	13 mm	55 kg	Metric Mic	M4801	Ball	0.7 kg	M4802M	218.9	66.5	23.6	152.4	12.5	25.0	12.5	10	
Metric	25 mm	29 kg	Metric Mic	M4601	Ball	0.5 kg	M4604M	210.3	108.7	29.9	101.6	12.5	—	12.5	6	
Metric	25 mm	29 kg	Digital Mic	M4601	Ball	0.7 kg	M4604-DM	253.9	152.3	29.9	101.6	12.5	—	12.5	6	
Metric	25 mm	43 kg	Metric Mic	M4701	Ball	0.6 kg	M4704M	235.7	108.7	29.9	127.0	25.0	—	25.0	6	
Metric	25 mm	43 kg	Digital Mic	M4701	Ball	0.8 kg	M4704-DM	279.3	152.3	29.9	127.0	25.0	—	25.0	6	
Metric	25 mm	55 kg	Metric Mic	M4801	Ball	0.7 kg	M4804M	261.1	108.7	29.9	152.4	12.5	25.0	12.5	10	
Metric	25 mm	55 kg	Digital Mic	M4801	Ball	0.9 kg	M4804-DM	304.7	152.3	29.9	152.4	12.5	25.0	12.5	10	

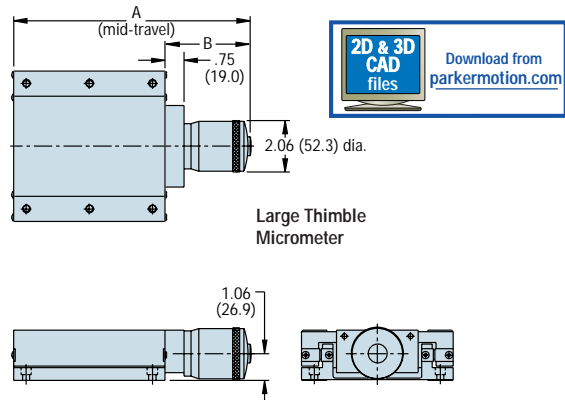
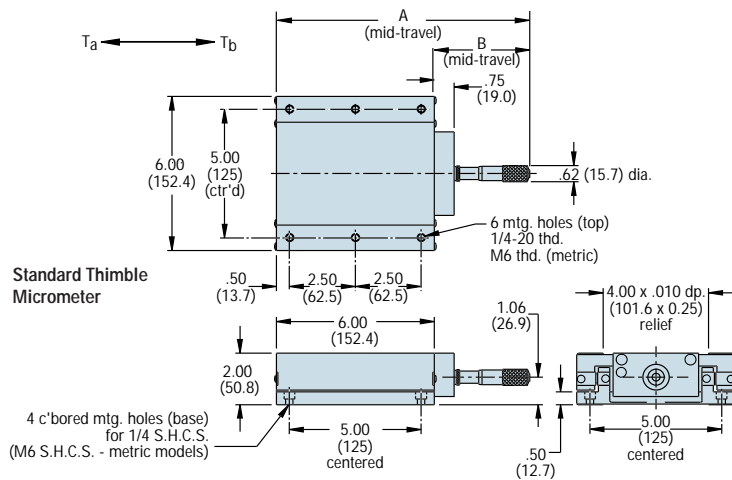
*Position lock is standard on all models.



4900 Series (6.0 inches wide) Micrometer Driven

Specifications	English	Metric
Travel:	1.0 - 2.0 in	25 - 50 mm
Load Capacity:*		
Normal Thrust (Standard Thimble)	150 lbs*	45 kg*
T_a	30 lbs	22.7 kg
T_b	3 lbs	1.36 kg
Normal Thrust (Large Thimble)	50 lbs	22.7 kg
T_a	3 lbs	1.36 kg
T_b		
Straightline Accuracy	0.00008 in (per inch of travel)	2 μ m (per 25 mm travel)
Resolution/Graduations:		
Standard Thimble	0.001 in	0.01 mm
Large Thimble	0.0001 in	0.002 mm

* Refer to table below for actual value by model.



2D & 3D CAD files
 Download from parkermotion.com

Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Selection Guide

Description								Dimensions		
Type	Travel	Load Capacity	Type	Thimble Size	Linear Slide (Ref.)	Bearing Type	Unit Weight	Model Number*	A	B
English	1.00 in	100 lb	English Mic	Large	4900-04	Ball	7.9 lb	4910	10.40	4.40
English	1.00 in	100 lb	English Mic	Standard	4900-04	Ball	7.0 lb	4914	9.62	3.62
English	1.00 in	100 lb	Metric Mic	Large	4900-04	Ball	7.9 lb	4912	10.40	4.40
English	1.00 in	100 lb	Metric Mic	Standard	4900-04	Ball	7.0 lb	4916	9.62	3.62
English	1.00 in	150 lb	English Mic	Large	CR4900-04	C/R	7.9 lb	CR4910	10.40	4.40
English	1.00 in	150 lb	English Mic	Standard	CR4900-04	C/R	7.0 lb	CR4914	9.62	3.62
English	1.00 in	150 lb	Metric Mic	Large	CR4900-04	C/R	7.9 lb	CR4912	10.40	4.40
English	1.00 in	150 lb	Metric Mic	Standard	CR4900-04	C/R	7.0 lb	CR4916	9.62	3.62
English	2.00 in	100 lb	English Mic	Large	4900-04	Ball	7.9 lb	4911	11.88	5.88
English	2.00 in	100 lb	English Mic	Standard	4900-04	Ball	7.0 lb	4915	11.12	5.12
English	2.00 in	100 lb	Metric Mic	Large	4900-04	Ball	8.2 lb	4913	11.88	5.88
English	2.00 in	100 lb	Metric Mic	Standard	4900-04	Ball	7.1 lb	4917	11.12	5.12
English	2.00 in	150 lb	English Mic	Large	CR4900-04	C/R	8.2 lb	CR4911	11.88	5.88
English	2.00 in	150 lb	English Mic	Standard	CR4900-04	C/R	7.1 lb	CR4915	11.12	5.12
English	2.00 in	150 lb	Metric Mic	Large	CR4900-04	C/R	8.2 lb	CR4913	11.88	5.88
English	2.00 in	150 lb	Metric Mic	Standard	CR4900-04	C/R	7.1 lb	CR4917	11.12	5.12
Metric	25 mm	45 kg	Metric Mic	Large	M4900-04	Ball	7.9 lb	M4912	264.1	111.7
Metric	50 mm	45 kg	Metric Mic	Large	M4900-04	Ball	8.2 lb	M4913	301.4	149

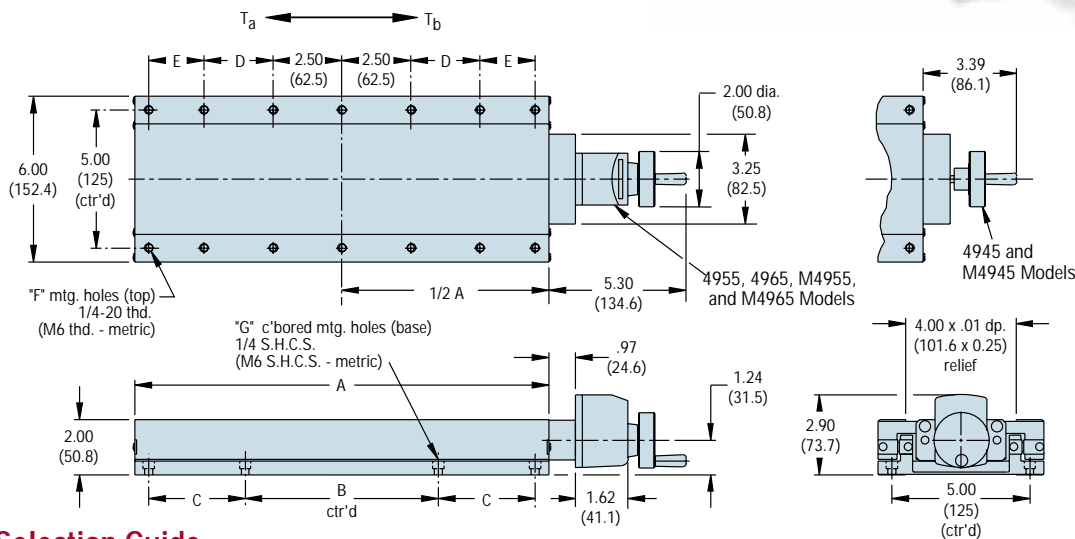
*For the optional position lock, add "-L" to the desired part number.



4900 Series (6.0 inches wide – Extended Length) Leadscrew Driven

Specifications	English	Metric
Travel:	4.0 - 12.0 in	100 - 300 mm
Load Capacity:*		
Normal	280 lbs	127.3 kg
Thrust		
T _a	30 lbs	13.6 kg
T _b	30 lbs	13.6 kg
Straightline Accuracy	0.00008 in (per inch of travel)	2 μm (per 25 mm travel)
Readout Graduations	0.001 in	0.01 mm

* Refer to table below for actual value by model.



Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Selection Guide

Description		Model Number*			Dimensions										
Type	Travel	Load Capacity	Slide (Ref.)	Brg. Type	Unit Wt.	Readout			A	B	C	D	E	F	G
						None	English	Metric							
English	4.0 in	100 lb	4900-04	Ball	4.0 lb	4945-04	4955-04	4965-04	6.0	5.0	—	—	—	6	4
English	4.0 in	200 lb	CR4900-04	C/R	4.0 lb	CR4945-04	CR4955-04	CR4965-04	6.0	5.0	—	—	—	6	4
English	6.0 in	100 lb	4900-06	Ball	6.0 lb	4945-06	4955-06	4965-06	9.0	5.0	1.5	1.5	—	10	8
English	6.0 in	220 lb	CR4900-06	C/R	6.0 lb	CR4945-06	CR4955-06	CR4965-06	9.0	5.0	1.5	1.5	—	10	8
English	8.0 in	100 lb	4900-08	Ball	8.0 lb	4945-08	4955-08	4965-08	12.0	5.0	3.0	2.5	—	10	8
English	8.0 in	240 lb	CR4900-08	C/R	8.0 lb	CR4945-08	CR4955-08	CR4965-08	12.0	5.0	3.0	2.5	—	10	8
English	10.0 in	100 lb	4900-10	Ball	10.0 lb	4945-10	4955-10	4965-10	15.0	6.0	4.0	2.5	2.0	14	8
English	10.0 in	260 lb	CR4900-10	C/R	10.0 lb	CR4945-10	CR4955-10	CR4965-10	15.0	6.0	4.0	2.5	2.0	14	8
English	12.0 in	150 lb	4900-12	Ball	12.0 lb	4945-12	4955-12	4965-12	18.0	7.0	5.0	5.0	1.0	14	8
English	12.0 in	280 lb	CR4900-12	C/R	12.0 lb	CR4945-12	CR4955-12	CR4965-12	18.0	7.0	5.0	5.0	1.0	14	8
Metric	100 mm	45 kg	M4900-04	Ball	1.8 kg	M4945-04	M4955-04	M4965-04	152.4	125.0	—	—	—	6	4
Metric	150 mm	45 kg	M4900-06	Ball	2.7 kg	M4945-06	—	M4965-06	228.6	125.0	37.5	37.5	—	10	8
Metric	200 mm	45 kg	M4900-08	Ball	3.6 kg	M4945-08	—	M4965-08	304.8	125.0	75.0	62.5	—	10	8
Metric	250 mm	45 kg	M4900-10	Ball	4.5 kg	M4945-10	—	M4965-10	381.0	150.0	100.0	62.5	50.0	14	8
Metric	300 mm	45 kg	M4900-12	Ball	5.4 kg	M4945-12	—	M4965-12	457.2	175.0	125.0	125.0	25.0	14	8

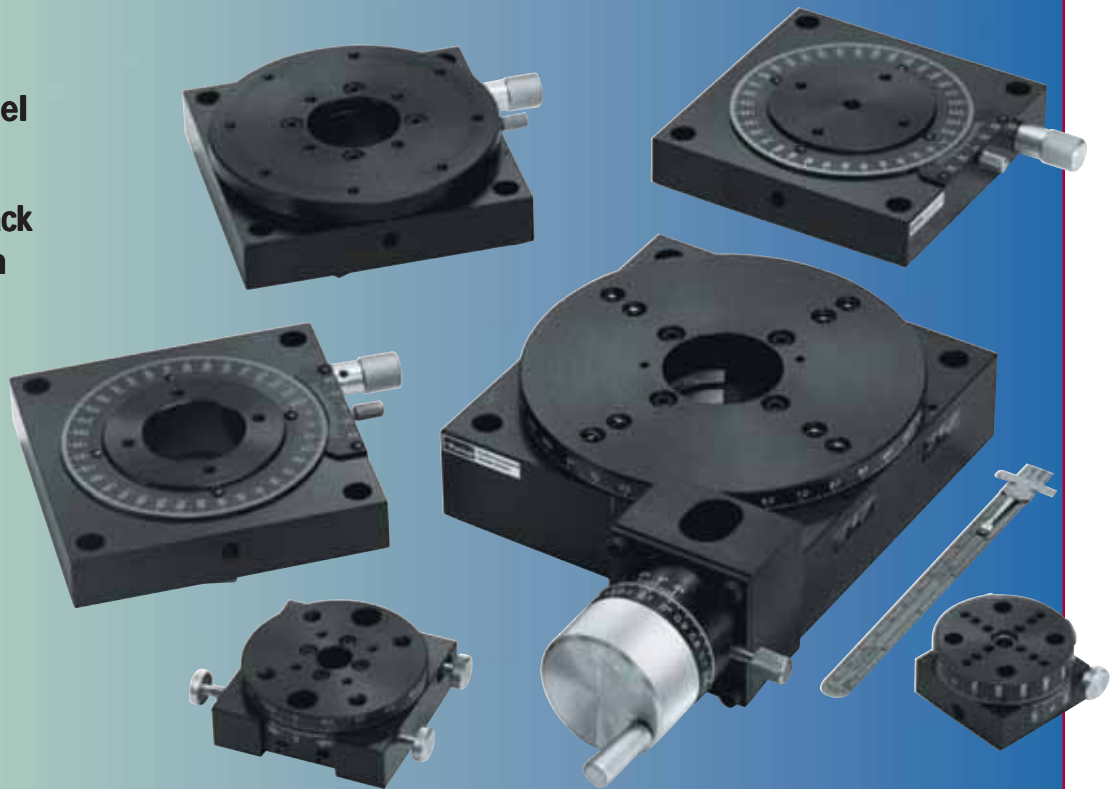
*For the optional position lock, add "-L" to the desired part number.



Rotary Positioning Stages Introduction

Features

- ❑ Aluminum/steel construction
- ❑ Protective black anodize finish
- ❑ Low-friction rotary adjustment
- ❑ Precise/accurate movement
- ❑ Trouble-free operation



Parker manual rotary stages offer controlled rotation with precise angular positioning. Primary components include: a stationary base; a main bearing; a drive mechanism and a rotating top (payload platform).

The main bearing, which is housed in the base, is a high-precision low-friction ball bearing that supports the rotating top. The top is driven by the drive mechanism which controls the rate of rotation and positional accuracy of the top.

Drive Mechanisms

Tangent Arm Drive

The drive mechanism for model 2520, 2525, and 4575 stages is the tangent arm drive. With this drive, angular rotation is controlled by three control knobs. The release knob disengages the shaft from the drive, freeing the table to be rotated continuously by hand to any desired location. The release knob when tightened will re-engage the drive mechanism and transfer

control to an adjustment knob which, when rotated, produces precise angular positioning of the shaft and table top. The locking knob can then be used to positively lock the table at the desired setting.

Precision Worm Gear Drive

A precision worm gear drive is employed as the drive mechanism for the other Parker stages. A worm wheel (gear), which is attached to the table shaft, meshes with the

worm drive, whose shaft extends out of the housing. Controlled rotation of the worm shaft creates precise angular rotation of the worm wheel and table shaft. The worm gear and shaft are preloaded to remove backlash. This type of drive provides high resolution (180:1) and continuous angular positioning over a full 360 degree range.

Selection Guide

Model Series	Table Diameter	Drive Mechanism	Normal Load	Mounting	Page
2500 M2500	1.88-2.62 in 47.7-66.5 mm	Tangent Arm Drive	10 lbs 4.5 kgs	English Metric	E30 E30
4575* M4575*	2.38 in 60.5 mm	Tangent Arm Drive	5 lbs 2.25 kgs	English Metric	E33 E33
10000-20000 M10000-M20000	2.75-4.75 in 69.8-305.0 mm	Worm Gear Drive	50 lbs 22.0 kgs	English Metric	E29 E29
30000 M30000	5.00-12.00 in 127.0-305.0 mm	Worm Gear Drive	25-200 lbs 11.5-90.0 kgs	English Metric	E31 E31

*Models 4575 and M4575 are combination rotary and linear stages which also provide 0.50 in (12.7 mm) of linear travel.

2500 Series Tangent Arm Drive Miniature Stage

Series 2500 rotary stages are tangential drive units which offer low-friction rotary positioning, quick manual table top rotation, precise angular adjustment at any selected position, and positive locking. These miniature units have a preloaded angular contact ball bearing system which provides smooth, continuous rotary movement.

Models 2525/M2525 and 2535/M2535 include a dial and vernier for direct position readout (readable to six arc-minutes).

These stages can be mounted in a horizontal or vertical position, and can be combined with compatible linear stages for linear-rotary applications.

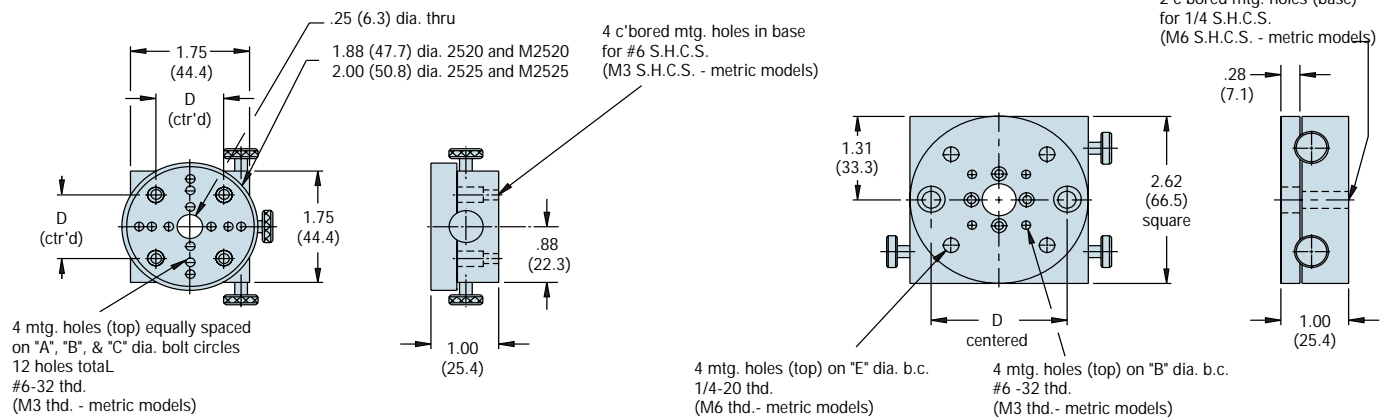


Specifications	English	Metric
Load Capacity:		
Normal	10 lb	4.5 kg
Moment	See note.	See note.
Range	360°(free rotation) 10° (fine positioning)	
Weight	1.0 - 1.8 lbs	0.5 - 0.8 kg
Resolution	6 arc-min (vernier readout)	

NOTE: For moment loads refer to www.parkermotion.com



Dimensions inches (mm)[†]



Models 2520, 2525 and M2520, M2525

Models 2530, 2535 and M2530, M2535

[†] Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Selection Guide

	Model	Diameter	Vernier Readout	Thru Hole Diameter	Weight	A	B	C	D	E
English	2520	1.88 in	No	0.25 in	1.0 lb	0.625 in	1.125 in	1.5 in	1.0 in	—
	2525	2.00 in	Yes	0.25 in	1.0 lb	0.625 in	1.125 in	1.5 in	1.0 in	—
	2530	2.62 in	No	0.50 in	1.8 lb	—	1.125 in	—	2.0 in	2.0 in
	2535	2.62 in	Yes	0.50 in	1.8 lb	—	1.125 in	—	2.0 in	2.0 in
Metric	M2520	47.7 mm	No	6.3 mm	0.5 kg	15.0 mm	25.0 mm	35.0 mm	25.0 mm	—
	M2525	50.8 mm	Yes	6.3 mm	0.5 kg	15.0 mm	25.0 mm	35.0 mm	25.0 mm	—
	M2530	66.5 mm	No	12.7 mm	0.8 kg	—	25.0 mm	—	50.0 mm	50.0 mm
	M2535	66.5 mm	Yes	12.7 mm	0.8 kg	—	25.0 mm	—	50.0 mm	50.0 mm



10000/20000 Low Profile Stage – Worm Gear Drive

The 10000/M10000 and 20000/M20000 series rotary positioning stages provide smooth, continuous adjustment over a full 360° travel range. The drive mechanism features a worm gear drive. A position locking knob allows the stage to be positively locked in place. The 10000 and 20000 models offer a 2.75 inch (69,8 mm) diameter stage with a calibrated dial and

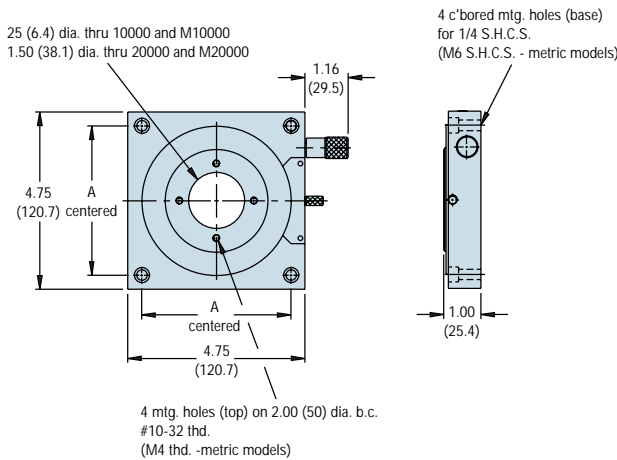
vernier, readable to 6.00 arc minutes. The 10001 and 20001 models, which do not include the vernier readout, offer a larger 4.75 inch (120.6 mm) diameter mounting surface. These versatile low-cost units can be combined with linear positioning stages having 4.00 inch (English) or 100.0 mm (Metric) mounting hole centers for multi-axis polar set-ups.



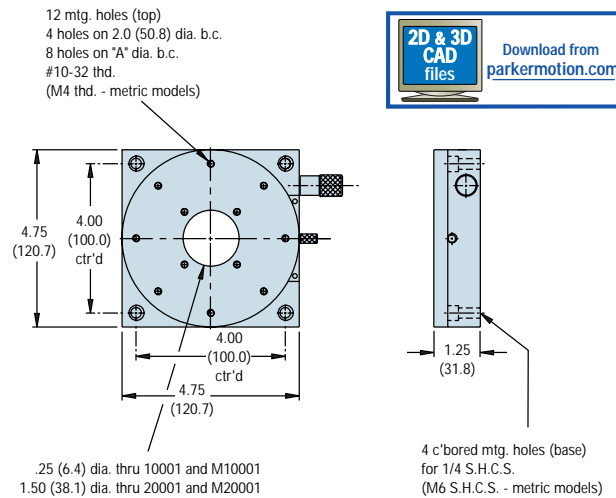
Specifications

	English	Metric
Load Capacity:		
Normal	50 lb	22 kg
Moment	Consult factory.	
Rotational Range:	360°continuous	
Drive Ratio	120:1	120:1
Weight	2.0 lbs	1.0 kg
Vernier:	6 arc-min	

Dimensions inches (mm)†



Models 10000, M10000 and 20000, M20000



Models 10001, 20001 and M10001, M20001



Selection Guide

	Model	Diameter	Vernier Readout	Thru Hole Diameter	A
English	10000	2.75 in	Yes	0.25 in	—
	20000	2.75 in	Yes	1.50 in	—
	10001	4.75 in	No	0.25 in	4.0 in
	20001	4.75 in	No	1.50 in	4.0 in
Metric	M10000	69.8 mm	Yes	6.3 mm	—
	M20000	69.8 mm	Yes	38.1 mm	—
	M10001	120.6 mm	No	6.3 mm	100.0 mm
	M20001	120.6 mm	No	38.1 mm	100.0 mm

† Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

30000 Worm Gear Drive Heavy Load-Carrying Stage

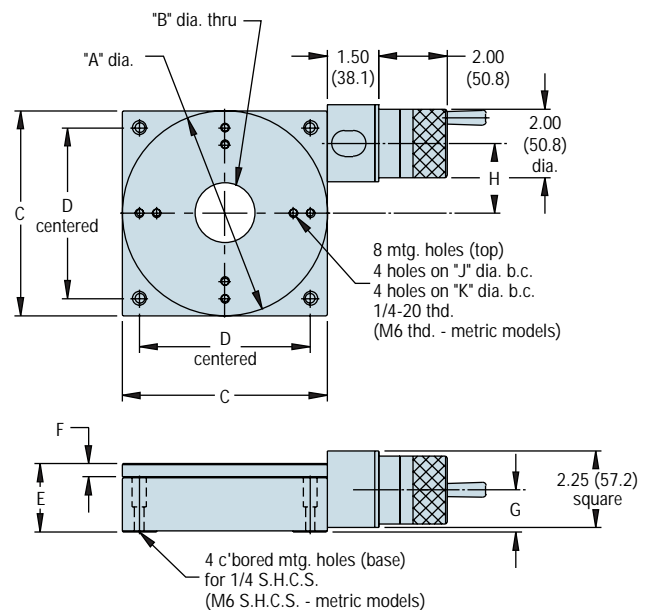
Parker rotary indexing tables provide accurate rotational positioning with a heavy load-carrying capability. Tables feature an angular contact ball bearing system which is stiffly preloaded to produce precise rotation of the table top. The drive mechanism is a precision worm gear drive which provides precise rotational positioning. An angular readout – graduated in degrees – is provided around the circumference of the table top, while a finer position readout dial, found on the control knob, reads directly in 0.01° increments, with the vernier providing even higher (0.002°) resolution. A thumbscrew lock is included to lock the table at the desired setting. For customer convenience, threaded mounting holes with locking threaded inserts are provided as well as a clearance hole through the center of the table to allow easy access from below. If desired, the table top can easily be removed to permit custom modification. These units can be mounted in any orientation and are compatible with Parker linear tables.



Specifications

	English	Metric
Load Capacity:		
Normal	25 - 200 lb	11.5 - 90 kg
Moment	See note	See note
Runout:		
Standard Grade	0.003 in	75 μm
Precision Grade	0.001 in	25 μm
Concentricity:		
Standard Grade	0.0005 in	1.3 μm
Precision Grade	0.0001 in	0.3 μm
Rotational Range:	360° continuous	
Vernier Resolution:	0.002°½	

NOTE: For moment loads refer to www.parkermotion.com



Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).

Selection Guide

	Table	Normal	Output	Weight	Model Number		A	B	C	D	E	F	G	H	J	K
English	5.00 in	25 lbs	25 in-lb	6.0 lbs	30005-S	30005-P	5.00	1.00	5.00	4.00	1.80	0.31	1.11	1.66	3.00	4.00
	6.00 in	150 lbs	40 in-lb	8.0 lbs	30006-S	30006-P	6.00	1.75	6.00	5.00	2.00	0.38	1.23	2.04	4.00	5.00
	8.00 in	75 lbs	40 in-lb	15.0 lbs	30008-S	30008-P	8.00	1.75	8.00	6.00	2.50	0.50	1.57	2.04	4.00	6.00
	10.00 in	200 lbs	190 in-lb	27.0 lbs	30010-S	30010-P	10.00	2.00	10.00	9.00	3.00	0.75	1.81	3.03	6.00	8.00
	12.00 in	200 lbs	190 in-lb	31.0 lbs	30012-S	30012-P	12.00	2.00	10.00	9.00	3.00	0.75	1.81	3.03	8.00	10.00
Metric	127.0 mm	11.5 kg	2.8 Nm	2.7 kg	M30005-S	M30005-P	127.0	25.4	127.0	100.0	44.5	7.9	28.2	42.2	75.0	100.0
	152.0 mm	68.0 kg	4.5 Nm	3.6 kg	M30006-S	M30006-P	152.4	44.5	152.4	125.0	50.8	9.7	31.2	51.8	100.0	125.0
	203.0 mm	34.0 kg	4.5 Nm	6.8 kg	M30008-S	M30008-P	203.2	44.5	203.2	175.0	63.5	12.7	39.9	51.8	100.0	175.0
	254.0 mm	90.0 kg	21.5 Nm	12.2 kg	M30010-S	M30010-P	254.0	50.8	254.0	225.0	76.2	19.1	46.0	77.0	150.0	200.0
	305.0 mm	90.0 kg	21.5 Nm	14.1 kg	M30012-S	M30012-P	304.8	50.8	254.0	225.0	76.0	19.1	46.0	77.0	200.0	250.0



Model 4575/M4575 Combination Linear/Rotary Stage

The model 4575 combines both linear and rotary motion into one compact unit. It is designed for applications where space restrictions do not allow stacking a linear stage and a rotary stage. The mounting surface is 2.44" diameter with a 0.75" diameter thru hole, with (4) #10-32 threaded mounting holes on 2.00" centers.

Linear travel is provided by a fine resolution micrometer. Rotary travel is provided by a tangent arm drive offering both a coarse and a fine adjustment. This feature allows quick rotation over a continuous 360° range, plus precise angular adjustment at any selected position.



Specifications

	English	Metric
Load Capacity:		
Normal	5 lb	2.25 kg
Moment	See note.	See note.
Rotational range	360° (free rotation) 10° (fine positioning)	
Linear range	0.50 in	12.7 mm
Straightline accuracy	0.00008 in	2.5 µm
Micrometer gradations	0.001 in	0.01 mm
Weight	1.0 lb	0.5 kg

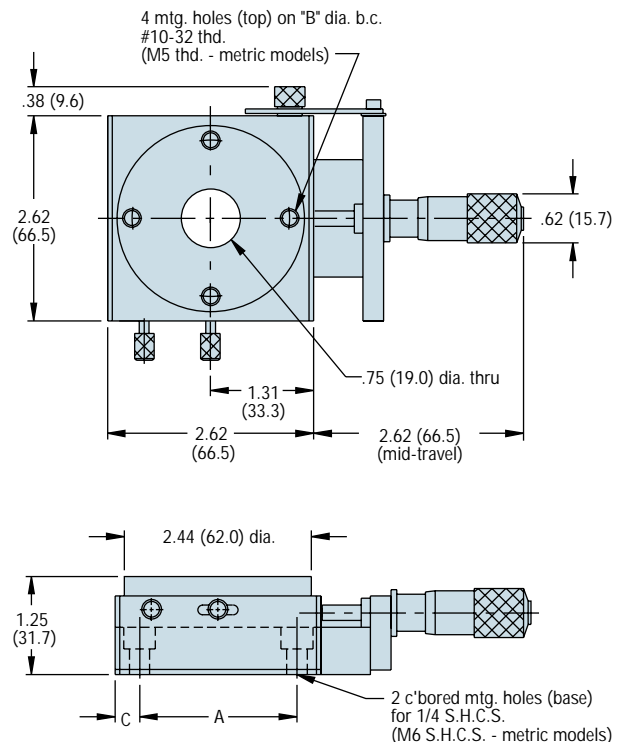
NOTE: For moment loads refer to www.parkermotion.com

Selection Guide

	Model No.	A	B	C
English	4575	2.0 in	2.0 in	0.31 in
Metric	M4575	50 mm	50 mm	8.3 mm



Dimensions inches (mm)†



† Note: Values shown in parentheses are actual metric dimensions for metric models (not conversions).