

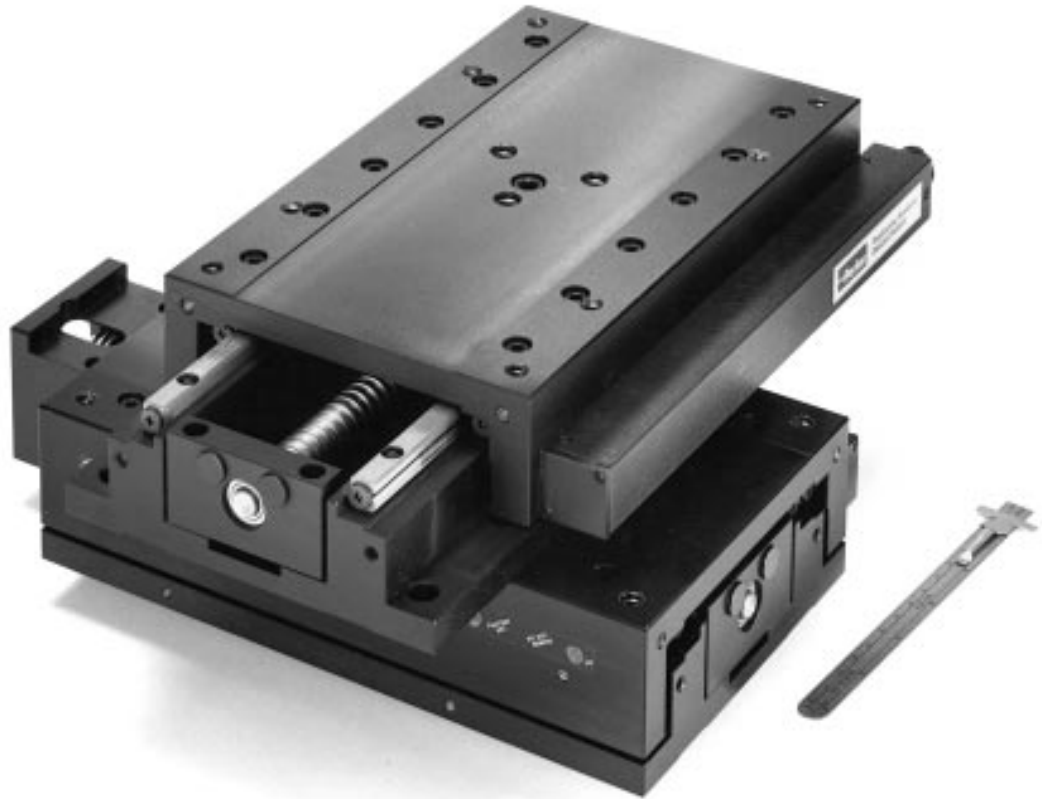
80000CT Series

Exceptional Value

With its precision ground cross roller ways, precision grade ball screw and low profile, the 80000CT series meets demanding application requirements at a price considerably less than comparable tables.

Standard or Precision Grades

Precision grade tables are equipped with a precision ground ball screw and ABEC 7 class angular contact radial bearings. The standard grade is equipped with a standard grade ground ball screw and ABEC 5 class angular contact radial bearings.



80000CT Series

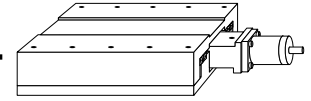
		806004CT	808004CT
Travel – inches (mm)		4	(100)
Life @ Listed Specifications – x 1 million inches (km)		100	(2540)
Positional Accuracy – x 0.001 in (µm) Over Total Table Travel	Standard Grade	0.6	(15,2)
	Precision Grade	0.32	(8)
Positional Repeatability – x 0.001 in (µm)	Standard Grade	±0.2	(±5)
	Precision Grade	±0.05	(±1,3)
Straight Line Accuracy – x 0.001 in (µm) Over Total Table Travel		0.32	(8)
Flatness Accuracy – x 0.001 in (µm) Over Total Table Travel		0.32	(8)
Max Screw Speed – rps		60	
Max Acceleration – in/sec ² (mm/sec ²)		96	(2400)
Duty Cycle – % of motion to dwell cycle		100	
Direct Loading* – lbs (kgf)	Normal	200	(90)
	Inverted	100	(45)
Axial Loading – lbs (kgf)	Smooth Operation**	200	(91)
Input Inertia*** – 10 ⁻³ oz-in-sec ² (10 ⁻⁶ kg-m-sec ²)	6" wide	2.33	(16,7)
	8" wide	2.38	(1,71)
Maximum Running Torque – oz-in (N-m)	Standard Grade	24	(0,17)
	Precision Grade	16	(0,11)
Maximum Breakaway Torque – oz-in (N-m)	Standard Grade	26.4	(0,19)
	Precision Grade	17.6	(0,12)
Drive Screw Efficiency – %	Standard Ball Screw	80	
	Precision Ball Screw	90	
Coefficient of Linear Bearing Friction		0.003	
Carriage Weight - lbs (kgf)	6" wide	5.4	(2,5)
	8" wide	7.2	(3,3)
Table Weight - lbs (kgf)	6" wide	12.4	(5,6)
	8" wide	16.6	(7,5)

* Refer to pages B76 and B77 for moment load graphs.

** For applications with vibration, consult factory for axial load capacity.

*** Based on 5 pitch (0.2 in lead) ballscrew

Cross Roller Tables



Imperial or Metric Mounting and Ball Screws

The 800000CT series is available in either Imperial or metric mounting. Additionally, either a 0.2 inch or 5 mm lead ball screw can be ordered.

Quality Design

The table housing is constructed of aluminum alloy and is protected with a black anodized surface finish. The top and bottom mounting surfaces are precision ground to assure flatness and all mounting holes are fitted with locking steel threaded inserts to prevent mounting bolts from working loose.

Options:

Motor Couplings

A wide range of coupling styles and bores are available to match your motor requirements. Bellows-style couplings are required for all precision grade tables and offer the lowest radial wind up, while the aluminum and stainless steel helix couplers offer good wind up characteristics and high durability at a lower cost.

Motor Mounts

The motor mount is designed for an industry standard NEMA 23 motor flange with shaft lengths between 0.65 to 0.85 inches.

Limit and Home Switches

The 800000CT series can be equipped with either

mechanical reed switch or optical sensor type limit and home switch assemblies. The limit switches provide a signal when the table is approaching its end of travel and is used to command the motor to stop. The Home sensor provides a fixed reference point to which the table can always return. Refer to page B78 for Limit and Home switch assembly details.

Linear Encoders

This option mounts to the side of the table and is used to give direct positional feedback of the carriage. Imperial resolution of 0.0001 inch and metric resolution of 0.001 mm are available. Refer to page B80 for linear encoder details.

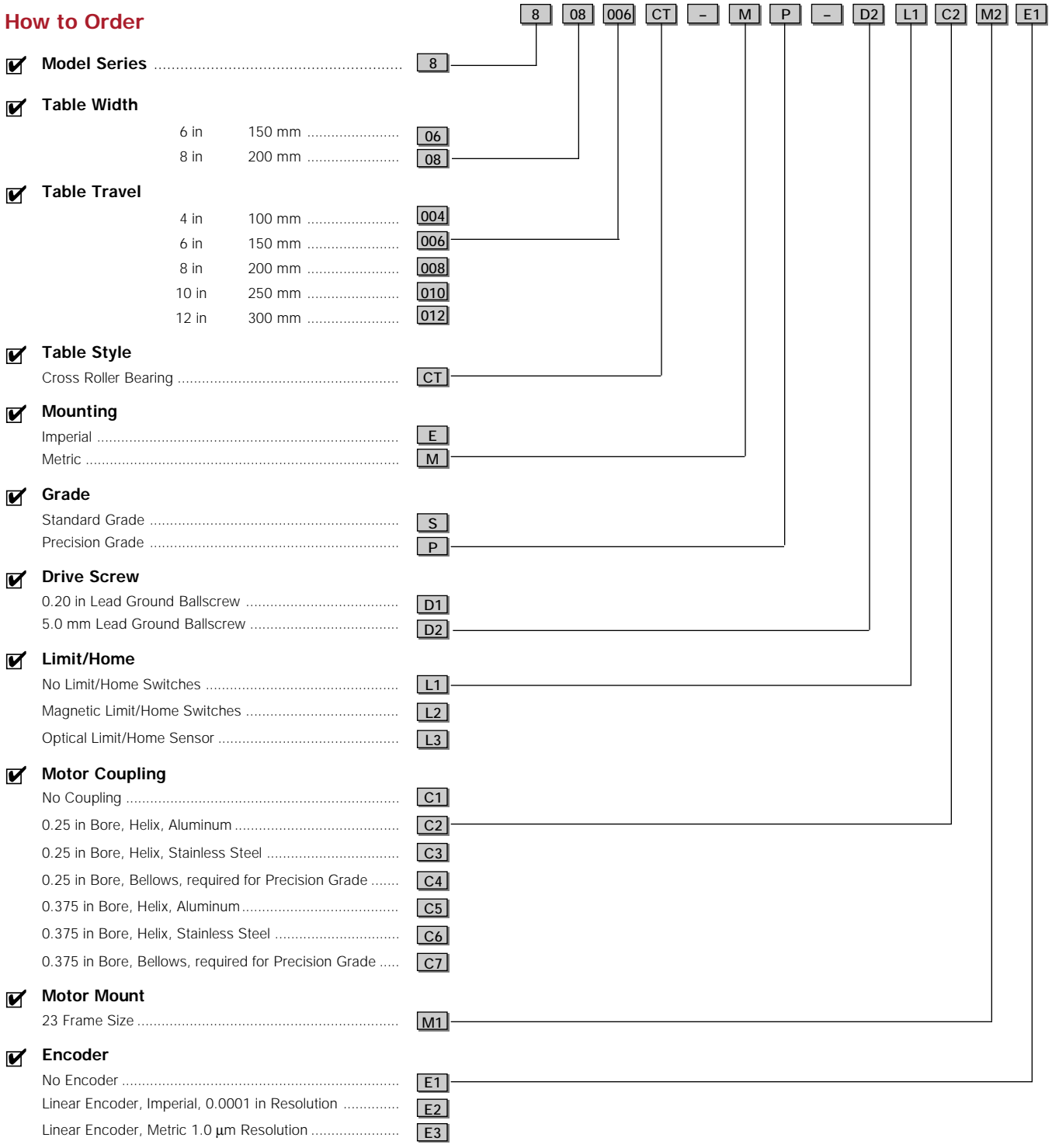
800000CT

806006CT 808006CT		806008CT 808008CT		806010CT 808010CT		806012CT 808012CT	
6	(150)	8	(200)	10	(250)	12	(300)
100	(2540)	100	(2540)	100	(2540)	100	(2540)
0.9	(22,8)	1.0	(25)	1.0	(25)	1.0	(25)
0.48	(12)	0.6	(15)	0.6	(15)	0.6	(15)
±0.2	(±5)	±0.2	(±5)	±0.2	(±5)	±0.2	(±5)
±0.05	(±1,3)	±0.05	(±1,3)	±0.05	(±1,3)	±0.05	(±1,3)
0.48	(12)	0.64	(16)	0.8	(20)	0.96	(24)
0.48	(12)	0.64	(16)	0.8	(20)	0.96	(24)
60		60		60		60	
96	(2400)	96	(2400)	96	(2400)	96	(2400)
100		100		100		100	
220	(100)	240	(108)	260	(118)	280	(128)
110	(50)	120	(54)	130	(59)	140	(64)
200	(91)	200	(91)	200	(91)	200	(91)
2.73	(1,97)	3.14	(2,25)	3.55	(2,55)	3.95	(2,84)
2.8	(2,02)	3.23	(2,32)	3.64	(2,62)	4.06	(2,93)
24	(0,17)	24	(0,17)	24	(0,17)	24	(0,17)
16	(0,11)	16	(0,11)	16	(0,11)	16	(0,11)
26.4	(0,19)	26.4	(0,19)	26.4	(0,19)	26.4	(0,19)
17.6	(0,12)	17.6	(0,12)	17.6	(0,12)	17.6	(0,12)
80		80		80		80	
90		90		90		90	
0.003		0.003		0.003		0.003	
6.6	(3,0)	7.6	(3,5)	8.7	(3,9)	10	(4,5)
9.2	(4,2)	10.8	(4,9)	12.5	(5,7)	14.1	(6,4)
14.6	(6,6)	15.8	(7,2)	19.8	(8,6)	21.6	(9,8)
20	(9,1)	23.3	(10,6)	26.7	(12,1)	30	(13,7)

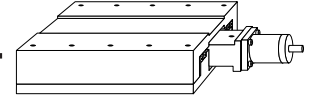
800000CT Series

Order Example

How to Order

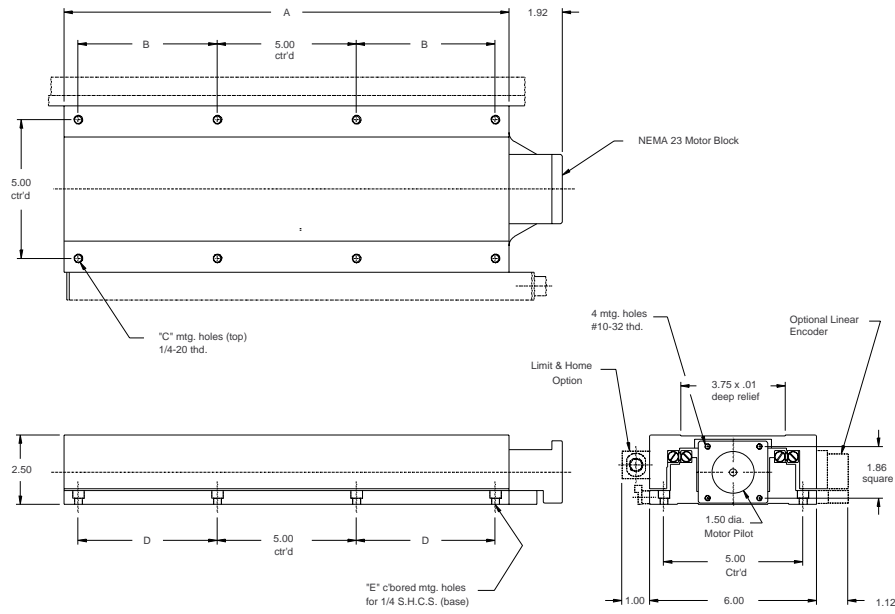


Cross Roller Tables



806000CT-E Series Imperial Dimensions

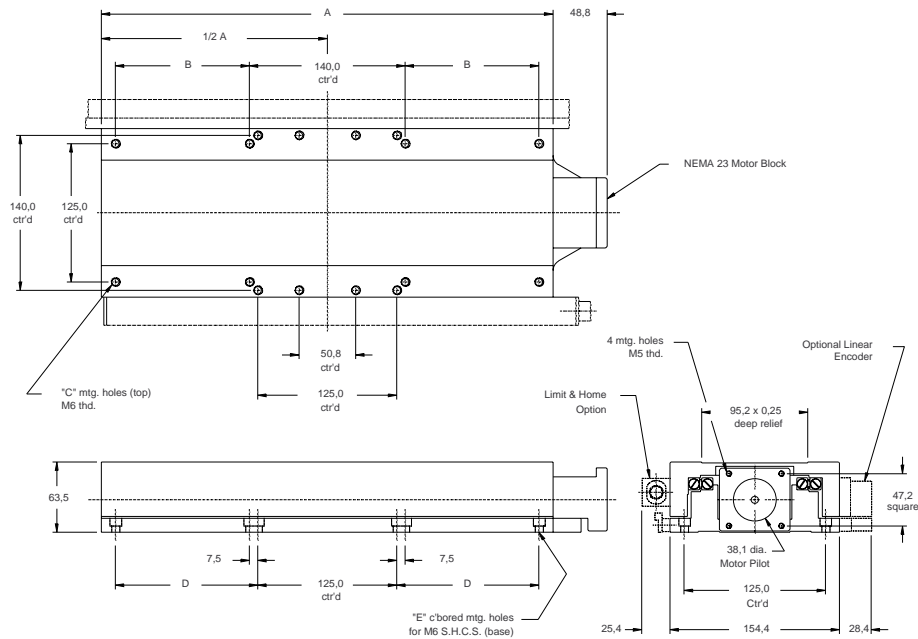
in



Imperial	Model	Travel	A	B	Quantity	D	Quantity
					C		E
	806004CT-E	4.0 in	8.0 in	—	4	—	4
	806006CT-E	6.0 in	10.0 in	2.0 in	8	2.0 in	8
	806008CT-E	8.0 in	12.0 in	3.0 in	8	3.0 in	8
	806010CT-E	10.0 in	14.0 in	4.0 in	8	4.0 in	8
	806012CT-E	12.0 in	16.0 in	5.0 in	8	5.0 in	8

M806000CT-M Series Metric Dimensions

mm



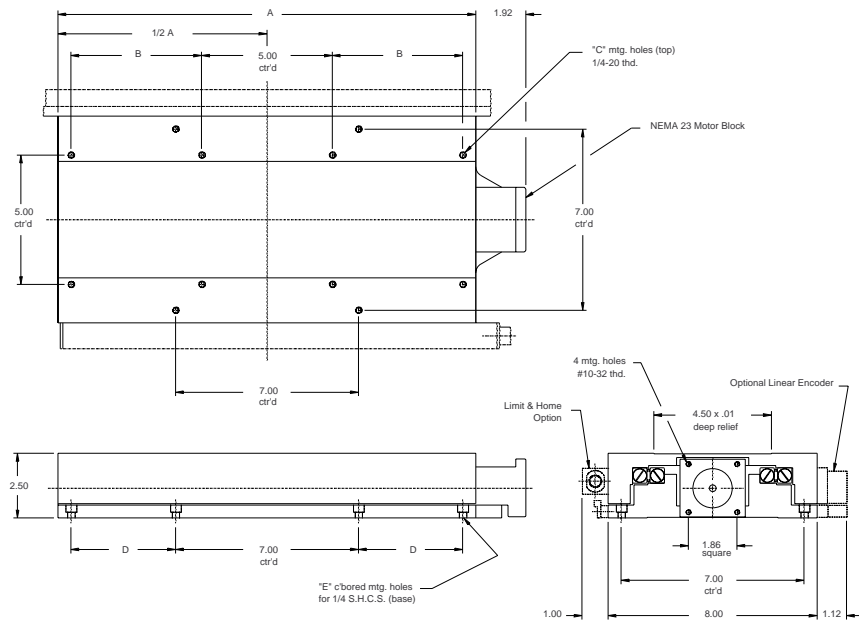
Metric	Model	Travel	A	B	Quantity	D	Quantity
					C		E
	806004CT-M	100 mm	203,2 mm	—	12	—	4
	806006CT-M	150 mm	254,0 mm	—	12	50 mm	8
	806008CT-M	200 mm	304,8 mm	75 mm	16	75 mm	8
	806010CT-M	250 mm	355,6 mm	100 mm	16	100 mm	8
	806012CT-M	300 mm	406,4 mm	125 mm	16	125 mm	8

800000CT

80000CT Series

80800CT-E Series Imperial Dimensions

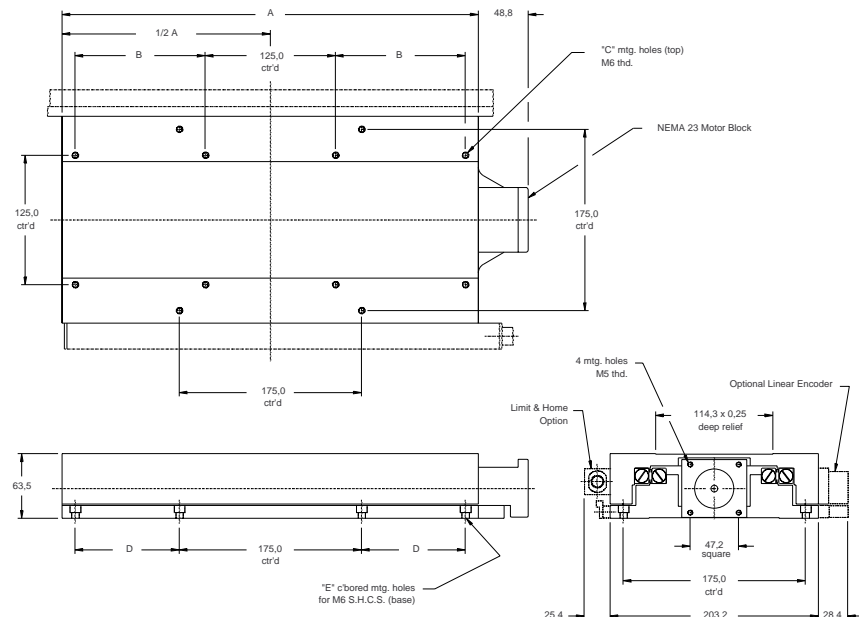
in



Imperial	Model	Travel	A	B	Quantity	
					C	E
	808004CT-E	4.0 in	8.0 in	—	8	4
	808006CT-E	6.0 in	10.0 in	2.0 in	12	8
	808008CT-E	8.0 in	12.0 in	3.0 in	12	8
	808010CT-E	10.0 in	14.0 in	4.0 in	12	8
	808012CT-E	12.0 in	16.0 in	5.0 in	12	8

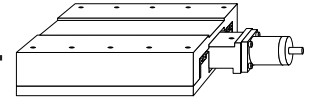
80800CT-M Series Metric Dimensions

mm



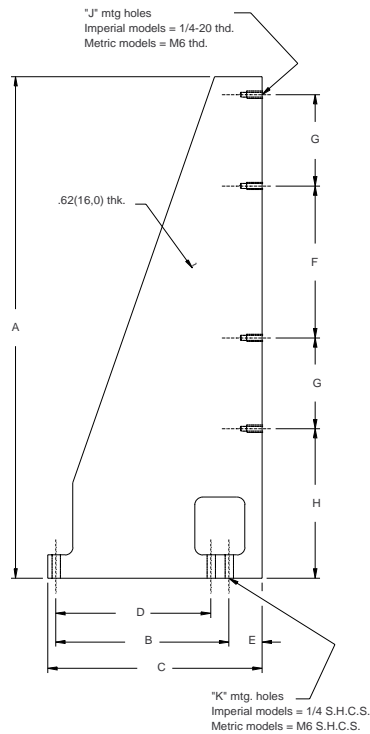
Metric	Model	Travel	A	B	Quantity	
					C	E
	808004CT-M	100 mm	203,2 mm	—	8	4
	808006CT-M	150 mm	254,0 mm	50 mm	12	8
	808008CT-M	200 mm	304,8 mm	75 mm	12	8
	808010CT-M	250 mm	355,6 mm	100 mm	12	8
	808012CT-M	300 mm	406,4 mm	125 mm	12	8

Cross Roller Tables

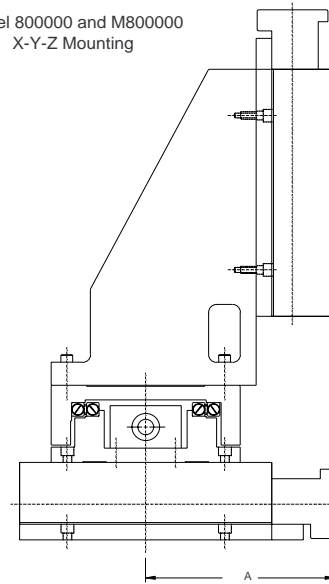


800000 Z-Axis Bracket

in (mm)



Model 800000 and M800000
X-Y-Z Mounting



Model	A
806000	6.00"
808000	7.00"
M806000	150,0mm
M808000	175,0mm

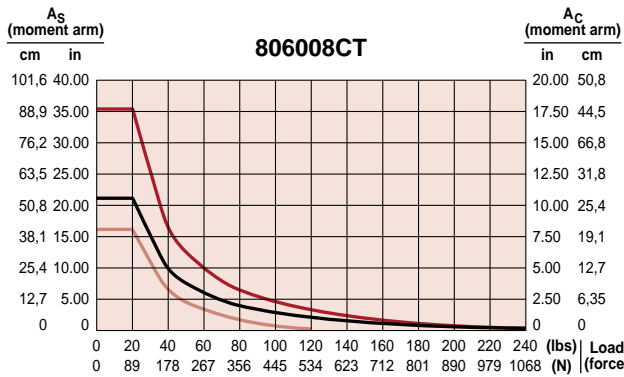
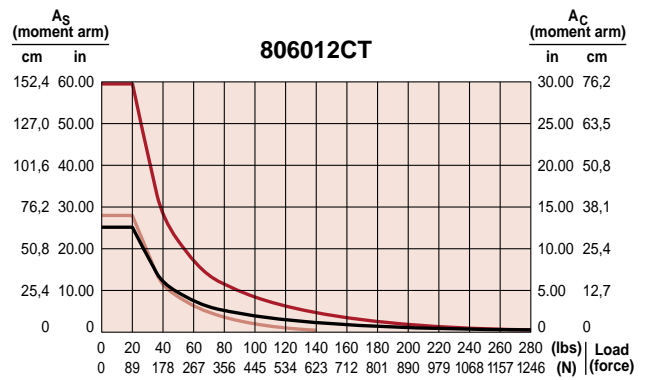
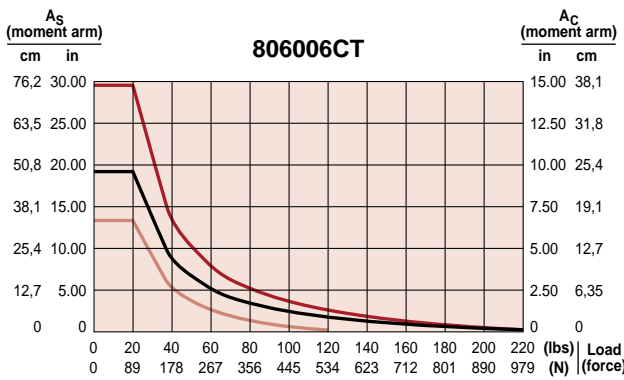
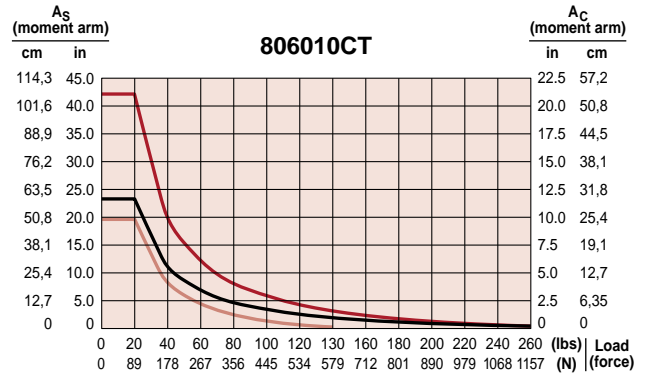
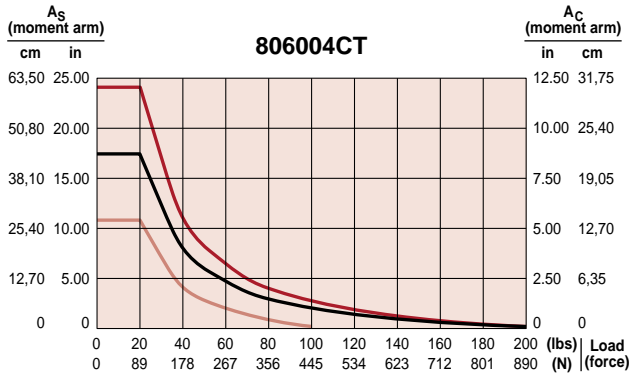
Z-Bracket		Z-Travel	A	B	C	D	E	F	G	H	Quantity J	Quantity K	
Imperial	806000-04	4.0 in	10.25 in	5.0 in	6.5 in	—	1.0 in	5.0 in	—	3.75 in	2	2	
	806000-06	6.0 in	13.25 in	5.0 in	6.5 in	—	1.0 in	5.0 in	2.0 in	3.75 in	4	2	
	806000-08	8.0 in	16.25 in	5.0 in	6.5 in	—	1.0 in	5.0 in	3.0 in	4.75 in	4	2	
	806000-10	10.0 in	19.25 in	5.0 in	6.5 in	—	1.0 in	5.0 in	4.0 in	5.75 in	4	2	
	806000-12	12.0 in	22.25 in	5.0 in	6.5 in	—	1.0 in	5.0 in	5.0 in	6.75 in	4	2	
	808000-04	4.0 in	10.25 in	7.0 in	8.5 in	—	1.0 in	7.0 in	—	2.75 in	2	2	
	808000-06	6.0 in	13.25 in	7.0 in	8.5 in	—	1.0 in	7.0 in	—	4.75 in	2	2	
	808000-08	8.0 in	16.25 in	7.0 in	8.5 in	—	1.0 in	7.0 in	2.0 in	4.75 in	4	2	
	808000-10	10.0 in	19.25 in	7.0 in	8.5 in	—	1.0 in	7.0 in	3.0 in	5.75 in	4	2	
	808000-12	12.0 in	22.25 in	7.0 in	8.5 in	—	1.0 in	7.0 in	4.0 in	6.75 in	4	2	
	Metric	M806000-04	100 mm	260,3 mm	140 mm	172,7 mm	125 mm	26,7 mm	125 mm	—	96,2 mm	2	3
		M806000-06	150 mm	336,5 mm	140 mm	172,7 mm	125 mm	26,7 mm	125 mm	50 mm	97,0 mm	4	3
M806000-08		200 mm	412,7 mm	140 mm	172,7 mm	125 mm	26,7 mm	125 mm	75 mm	122,8 mm	4	3	
M806000-10		250 mm	488,9 mm	140 mm	172,7 mm	125 mm	26,7 mm	125 mm	100 mm	148,6 mm	4	3	
M806000-12		300 mm	565,1 mm	140 mm	172,7 mm	125 mm	26,7 mm	125 mm	125 mm	174,4 mm	4	3	
M808000-04		100 mm	260,3 mm	175 mm	213,1 mm	125 mm	24,0 mm	175 mm	—	71,2 mm	2	3	
M808000-06		150 mm	336,5 mm	175 mm	213,1 mm	125 mm	24,0 mm	175 mm	—	122,0 mm	2	3	
M808000-08		200 mm	412,7 mm	175 mm	213,1 mm	125 mm	24,0 mm	175 mm	50 mm	122,8 mm	4	3	
M808000-10		250 mm	488,9 mm	175 mm	213,1 mm	125 mm	24,0 mm	175 mm	75 mm	148,6 mm	4	3	
M808000-12		300 mm	565,1 mm	175 mm	213,1 mm	125 mm	24,0 mm	175 mm	100 mm	174,4 mm	4	3	

800000CT

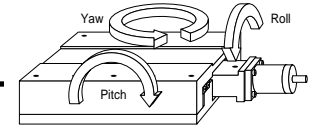
80000CT Series

Yaw, Pitch and Roll

Yaw Pitch Roll

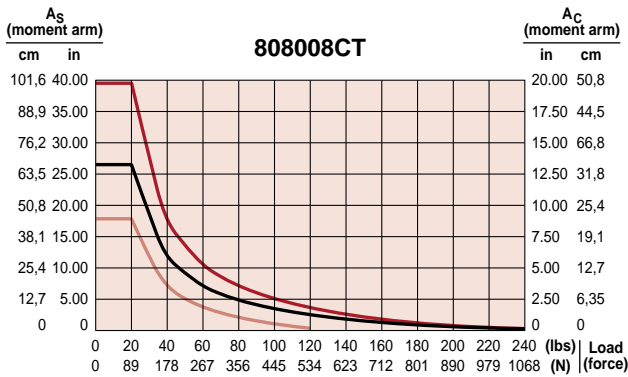
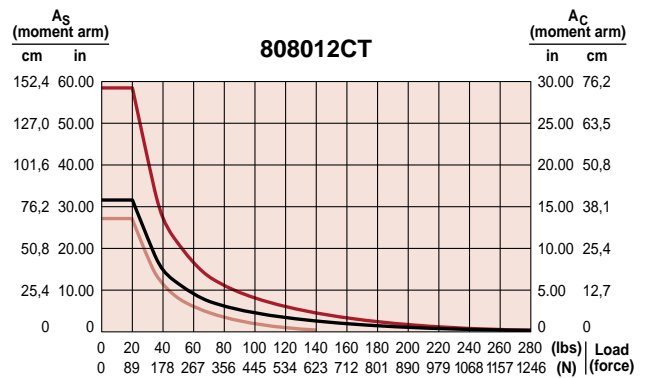
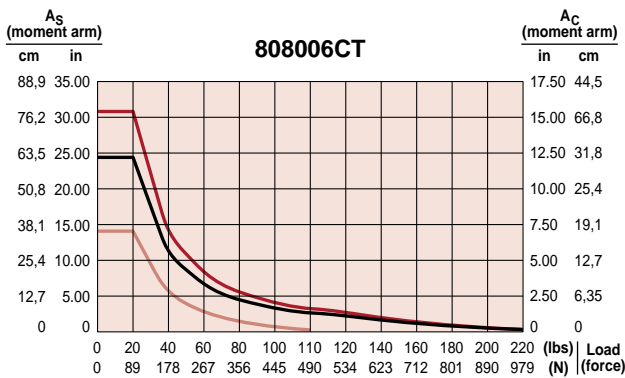
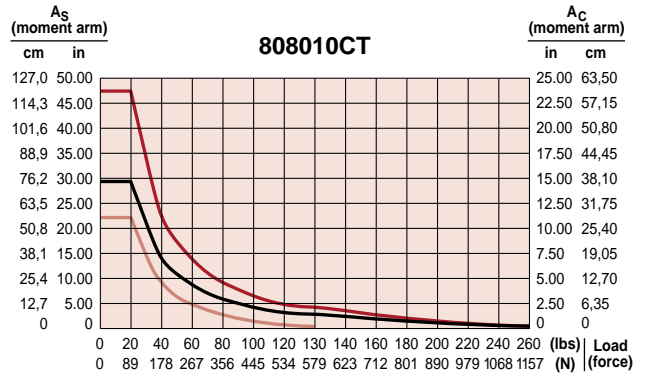
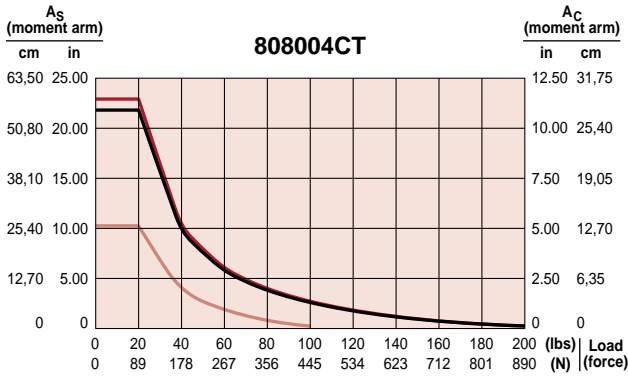


Cross Roller Tables



Yaw, Pitch and Roll

Yaw **Pitch** **Roll**



800000CT