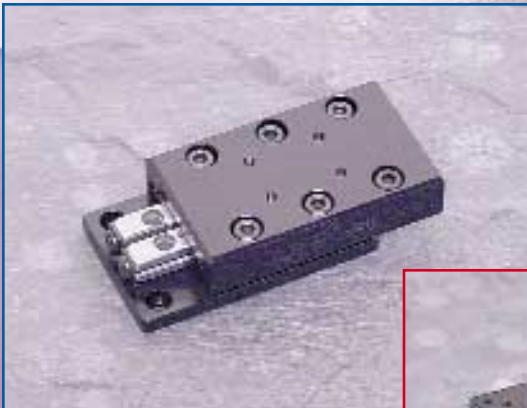




Your Source for Linear Motion
Systems & Components



Manufacturer of
*Low Cost, Interchangeable
High Precision*

Ball Slides

Cross Roller Tables

Ball Slide Positioning Stages

Precision Cross Roller Slides

**Heavy Duty
Cross Roller Positioning Stages**

SOUTHERN CALIFORNIA

22343 La Palma Ave., #112
Yorba Linda, CA 92887

Tel: 800 283 3411

714 692 7511

Fax: 714 692 7510

E-mail: sales@smi4motion.com

NORTHERN CALIFORNIA

Tel: 888 254 6327

Fax: 510 490 1370

**Ball Slide Positioning Stages (MAC Series)
Heavy Duty Cross Roller Positioning Stages (MACR Series)**

Specialty Motions, Inc. (SMI) produces a series of low cost, high precision, ball slide positioning stages and heavy duty cross roller positioning stages for versatile, smooth, accurate travel used in gauging and positioning light to heavy loads. Pre-assembled and pre-loaded for immediate installation, mounting can be done with our standard hole patterns with standard fasteners or can be created to your requirements including metrics. Our process of manufacturing eliminates unnecessary components and stack up tolerances which improves accuracy and reliability, and reduces the overall cost of the stage. Multiple axis assemblies available. Interchangeable with many popular sizes. Custom made ball slide positioning stages and heavy duty cross roller positioning stages available. Compare our price and quality, and test for yourself 'The SMI Advantage'.

MAC4-12 Specifications

Stroke: 0.25"	Load Capacity: 5 lbf
Straight Line Accuracy: 0.0005" / inch of travel	Positional Repeatability: 0.0001"
Coefficient of Friction: 0.003 typical	Drive: Micrometer 0.001" graduations, 0.01mm graduations optional.
Construction: Aluminum carriage and base, hardened steel shafts and balls, mild steel end caps.	
Finish: Black anodized.	



MACR8-42 Specifications

Stroke: 0.50"	Load Capacity: 120 lbf
Straight Line Accuracy: 0.0001" / inch of travel	Positional Repeatability: 0.0001"
Coefficient of Friction: 0.003 typical	Drive: Micrometer 0.001" graduations, 0.01mm graduations optional.
Construction: Aluminum carriage and base, hardened steel rods and rollers, mild steel end caps.	
Finish: Black anodized.	



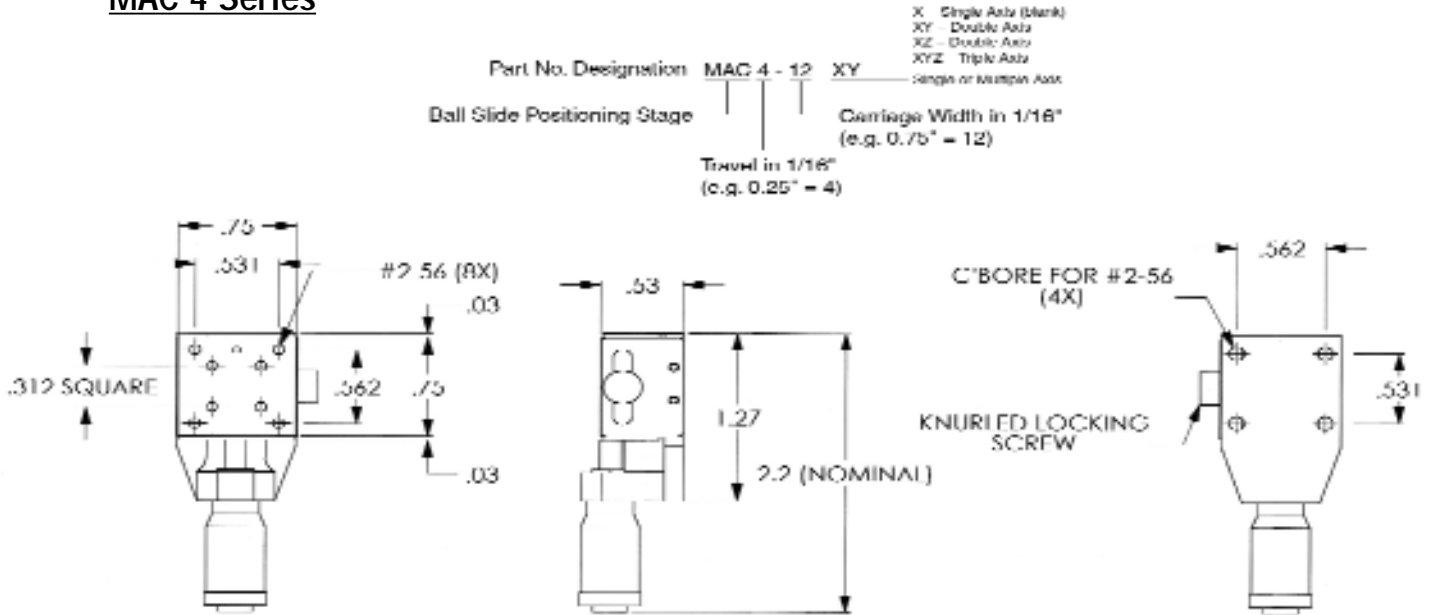
POSITIONING STAGES



BALL SLIDE POSITIONING STAGE

Unit: inch

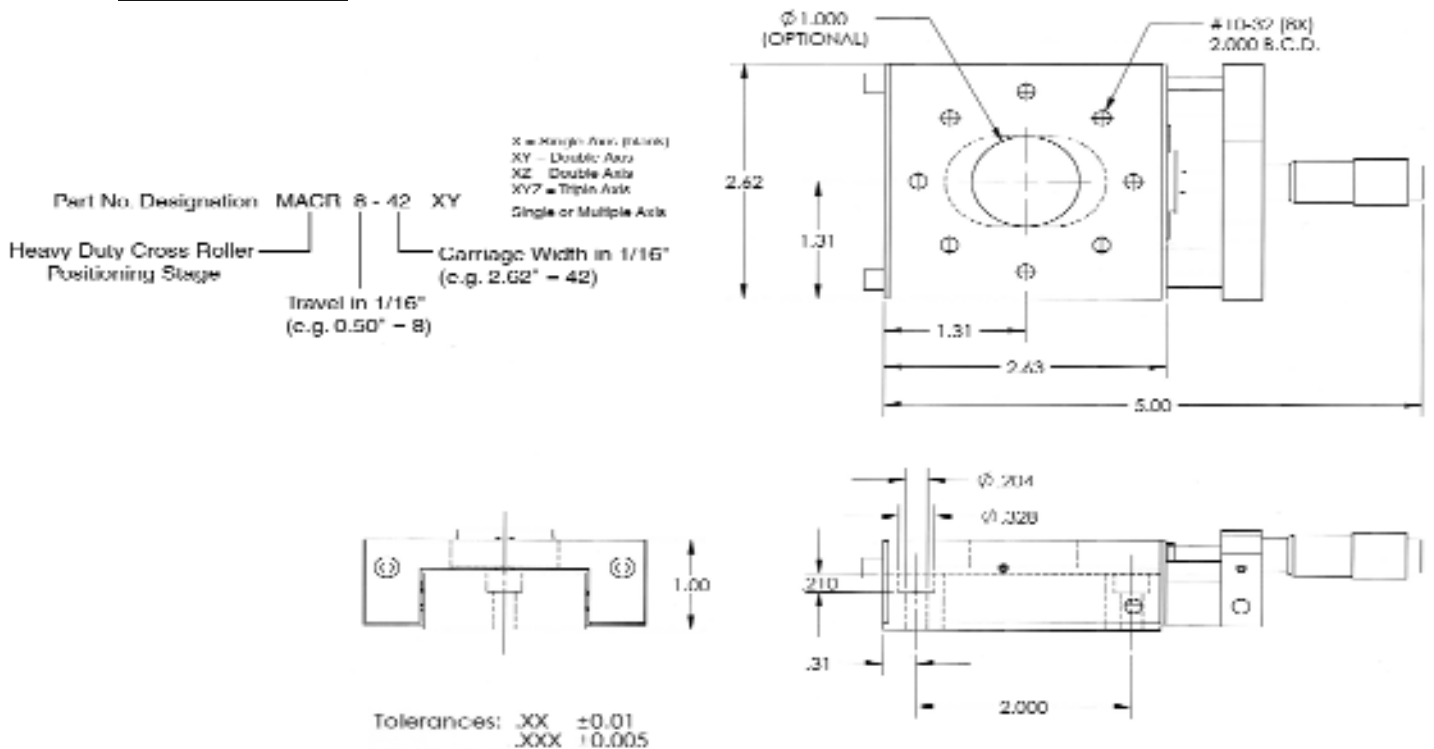
MAC 4 Series



HEAVY DUTY CROSS ROLLER POSITIONING STAGE

Unit: inch

MACR 8 Series



Ball Slides (BS Series)

SMI ball slides utilize hardened and ground wire race technology combined with precision grade ball bearings which produce long, extremely smooth and predictable life. SMI ball slides incorporate fewer components in its construction which gives a higher degree of reliability and reduces costs. Pre-assembled and pre-loaded for immediate installation, mounting can be done with our standard hole patterns with standard fasteners or can be created to your requirements including metrics. Center holes are standard and are a unique feature found only on SMI ball slides (for travel 1" and over). Mounting with a center hole will eliminate any bow on the slide and add greater mounting security. Interchangeable with many popular sizes. Custom made ball slides available.

BALL SLIDES

Unit: inch

Part No.	Stroke	Load Capacity (lbf)	Carriage Attachment Holes			W	H	L	Base			Bd	b	d
			Lc	Wc	Th				Wb	Hb	P			
BS8-6	0.50	1.5	0.375	0.156	#2-56 UNC	0.38	0.23	0.75	0.156	0.147	0.375	-	#2-56 UNC	-
BS16-6	1.00	1.5	0.875	0.156	#2-56 UNC	0.38	0.23	1.25	0.156	0.147	0.875	-	#2-56 UNC	-
BS24-6	1.50	1.5	1.375	0.156	#2-56 UNC	0.38	0.23	1.75	0.156	0.147	1.375	-	#2-56 UNC	-
BS8-9	0.50	4	0.625	0.218	#2-56 UNC	0.56	0.32	1.06	0.250	0.187	0.750	0.144	0.101	0.100
BS16-9	1.00	8	1.625	0.218	#2-56 UNC	0.56	0.32	2.06	0.250	0.187	1.375	0.144	0.101	0.100
BS32-9	2.00	12	2.625	0.218	#2-56 UNC	0.56	0.32	3.06	0.250	0.187	2.375	0.144	0.101	0.100
BS48-9	3.00	14	3.625	0.218	#2-56 UNC	0.56	0.32	4.06	0.250	0.187	3.375	0.144	0.101	0.100
BS64-9	4.00	16	4.625	0.218	#2-56 UNC	0.56	0.32	5.06	0.250	0.187	3.500	0.144	0.101	0.100
BS8-12	0.50	8	0.625	0.375	#4-40 UNC	0.75	0.41	1.06	0.375	0.250	0.750	0.198	0.125	0.125
BS16-12	1.00	10	1.625	0.375	#4-40 UNC	0.75	0.41	2.06	0.375	0.250	1.375	0.198	0.125	0.125
BS32-12	2.00	12	2.625	0.375	#4-40 UNC	0.75	0.41	3.06	0.375	0.250	2.375	0.198	0.125	0.125
BS48-12	3.00	14	3.625	0.375	#4-40 UNC	0.75	0.41	4.06	0.375	0.250	3.375	0.198	0.125	0.125
BS64-12	4.00	16	4.625	0.375	#4-40 UNC	0.75	0.41	5.06	0.375	0.250	3.500	0.198	0.125	0.125
BS80-12	5.00	18	5.625	0.375	#4-40 UNC	0.75	0.41	6.06	0.375	0.250	4.500	0.198	0.125	0.125
BS8-16	0.50	10	1.250	0.437	#6-32 UNC	1.00	0.50	1.56	0.500	0.250	1.250	0.198	0.125	0.125
BS16-16	1.00	12	2.250	0.437	#6-32 UNC	1.00	0.50	2.56	0.500	0.250	2.250	0.198	0.125	0.125
BS24-16	1.50	13	2.750	0.437	#6-32 UNC	1.00	0.50	3.06	0.500	0.250	2.750	0.198	0.125	0.125
BS32-16	2.00	15	3.250	0.437	#6-32 UNC	1.00	0.50	3.56	0.500	0.250	3.250	0.198	0.125	0.125
BS48-16	3.00	18	4.250	0.437	#6-32 UNC	1.00	0.50	4.56	0.500	0.250	4.250	0.198	0.125	0.125
BS12-17	0.75	15	1.250	0.437	#6-32 UNC	1.06	0.53	1.56	0.500	0.312	1.125	0.244	0.157	0.150
BS24-17	1.50	18	2.250	0.437	#6-32 UNC	1.06	0.53	2.56	0.500	0.312	2.125	0.244	0.157	0.150
BS29-17	1.81	18	2.165	0.551	M3x.5	1.06	0.47	2.95	0.500	0.312	2.360	0.250	0.157	0.150
BS32-17	2.00	20	3.250	0.437	#6-32 UNC	1.06	0.53	3.56	0.500	0.312	3.125	0.244	0.157	0.150
BS48-17	3.00	25	4.000	0.437	#6-32 UNC	1.06	0.53	4.56	0.500	0.312	3.250	0.244	0.157	0.150
BS64-17	4.00	30	5.500	0.437	#6-32 UNC	1.06	0.53	6.00	0.500	0.312	4.000	0.244	0.157	0.150
BS16-24	1.00	15	1.375	0.625	#6-32 UNC	1.50	0.62	2.00	0.750	0.340	1.500	0.244	0.157	0.150
BS32-24	2.00	20	2.375	0.625	#6-32 UNC	1.50	0.62	3.00	0.750	0.340	2.500	0.244	0.157	0.150
BS48-24	3.00	25	3.375	0.625	#6-32 UNC	1.50	0.62	4.00	0.750	0.340	3.500	0.244	0.157	0.150
BS56-24	3.50	30	4.375	0.625	#6-32 UNC	1.50	0.62	5.00	0.750	0.340	3.500	0.244	0.157	0.150
BS64-24	4.00	35	5.375	0.625	#6-32 UNC	1.50	0.62	6.00	0.750	0.340	4.000	0.244	0.157	0.150
BSM64-24 (metric)	4.00	35	5.354	0.630	M4x.7	1.50	0.62	6.00	0.750	0.340	3.938	0.320	0.183	0.176
BS16-28	1.00	20	1.375	0.875	#6-32 UNC	1.75	0.75	2.00	0.875	0.400	1.625	0.244	0.157	0.150
BS24-28	1.50	30	2.125	0.875	#6-32 UNC	1.75	0.75	2.75	0.875	0.400	2.250	0.244	0.157	0.150
BS32-28	2.00	42	2.625	0.875	#6-32 UNC	1.75	0.75	3.25	0.875	0.400	2.750	0.244	0.157	0.150
BS48-28	3.00	52	3.375	0.875	#6-32 UNC	1.75	0.75	4.00	0.875	0.400	3.500	0.244	0.157	0.150
BS64-28	4.00	60	5.500	0.875	#6-32 UNC	1.75	0.75	6.00	0.875	0.400	4.000	0.244	0.157	0.150
BS16-42	1.00	30	2.125	1.250	#10-32 UNF	2.62	1.00	2.62	1.500	0.625	2.125	0.328	0.204	0.205
BS24-42	1.50	35	1.625	1.250	#10-32 UNF	2.62	1.00	2.62	1.500	0.625	1.875	0.328	0.204	0.205
BS32-42	2.00	62	3.000	1.250	#10-32 UNF	2.62	1.00	4.00	1.500	0.625	3.375	0.328	0.204	0.205
BS48-42	3.00	88	4.000	1.250	#10-32 UNF	2.62	1.00	5.00	1.500	0.625	4.375	0.328	0.204	0.205
BS64-42	4.00	118	5.000	1.250	#10-32 UNF	2.62	1.00	6.00	1.500	0.625	5.375	0.328	0.204	0.205

Precision Cross Roller Slides (XRS Series)

SMI precision cross roller slides are built with the same advanced technology and cost saving technique as our ball slides. The bearing design utilizes a bearing system containing cylindrical steel rollers offering engineers an option for high load carrying capacity with extremely smooth and predictable life. Pre-assembled and pre-loaded for immediate installation, mounting can be done with our standard hole patterns with standard fasteners or can be created to your requirements including metrics. Center holes are standard and are a unique feature found only on SMI precision cross roller slides (for travel 1" and over). Mounting with a center hole will eliminate any bow on the slide and add greater mounting security. Interchangeable with many popular sizes. Custom made cross roller slides available.

Precision Cross Roller Slide Specifications

Straight Line Accuracy: 0.0001"/inch of travel
Positional Repeatability: 0.0001"

Coefficient of Friction: 0.003 typical

Construction:
 Aluminum carriage and base, hardened steel rods and rollers, mild steel end caps.
 Center hole standard for strokes 1" and over.

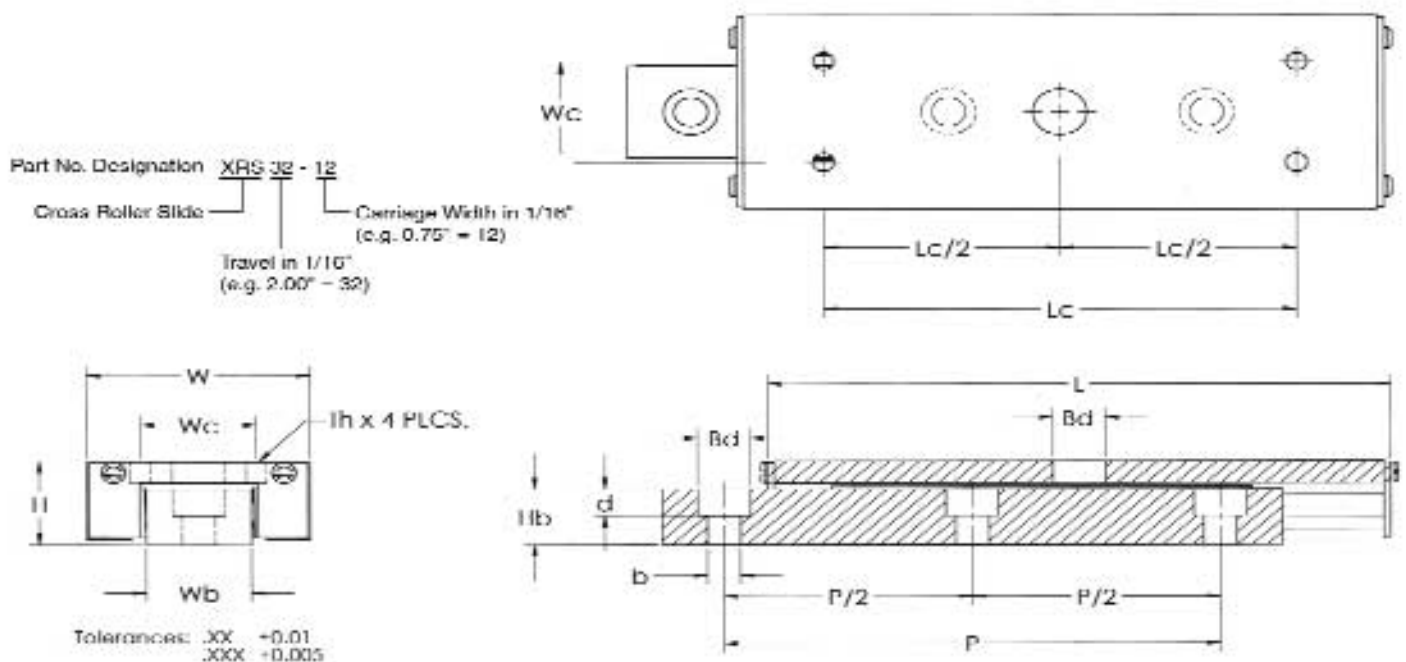
Finish:
 Black anodized.



PRECISION CROSS ROLLER SLIDES

Unit: inch

Part No.	Stroke	Load Capacity (lbf)	Carriage Attachment Holes			W	H	L	Base			Bd	b	d
			Lc	Wc	Th				Wb	Hb	P			
XRS48-9	3.00	71	3.625	0.218	#2-56 UNC	0.56	0.32	4.06	0.250	0.187	3.375	0.144	0.101	0.100
XRS32-12	2.00	94	2.625	0.375	#4-40 UNC	0.75	0.41	3.06	0.375	0.250	2.375	0.198	0.125	0.125



CROSS ROLLER TABLES



Cross Roller Tables (XRT Series)

Features and Benefits

1. Lower cost.
2. High accuracy and load capacity.
3. Interchangeable.
4. Alternately crossed rollers withstands force in any direction.
5. Corrosion resistant.
6. Lightweight aluminum base and carriage.
7. Factory assembled and ready to install.
8. Low friction and smooth linear motion.
9. Long and predictable life.
10. Customs welcome.

Cross Roller Table Specifications

Straight Line Accuracy: 0.0001"/inch of travel

Positional Repeatability: 0.0001"

Coefficient of Friction: 0.003 typical

Construction: Aluminum carriage and base, hardened steel crossed roller rail sets.

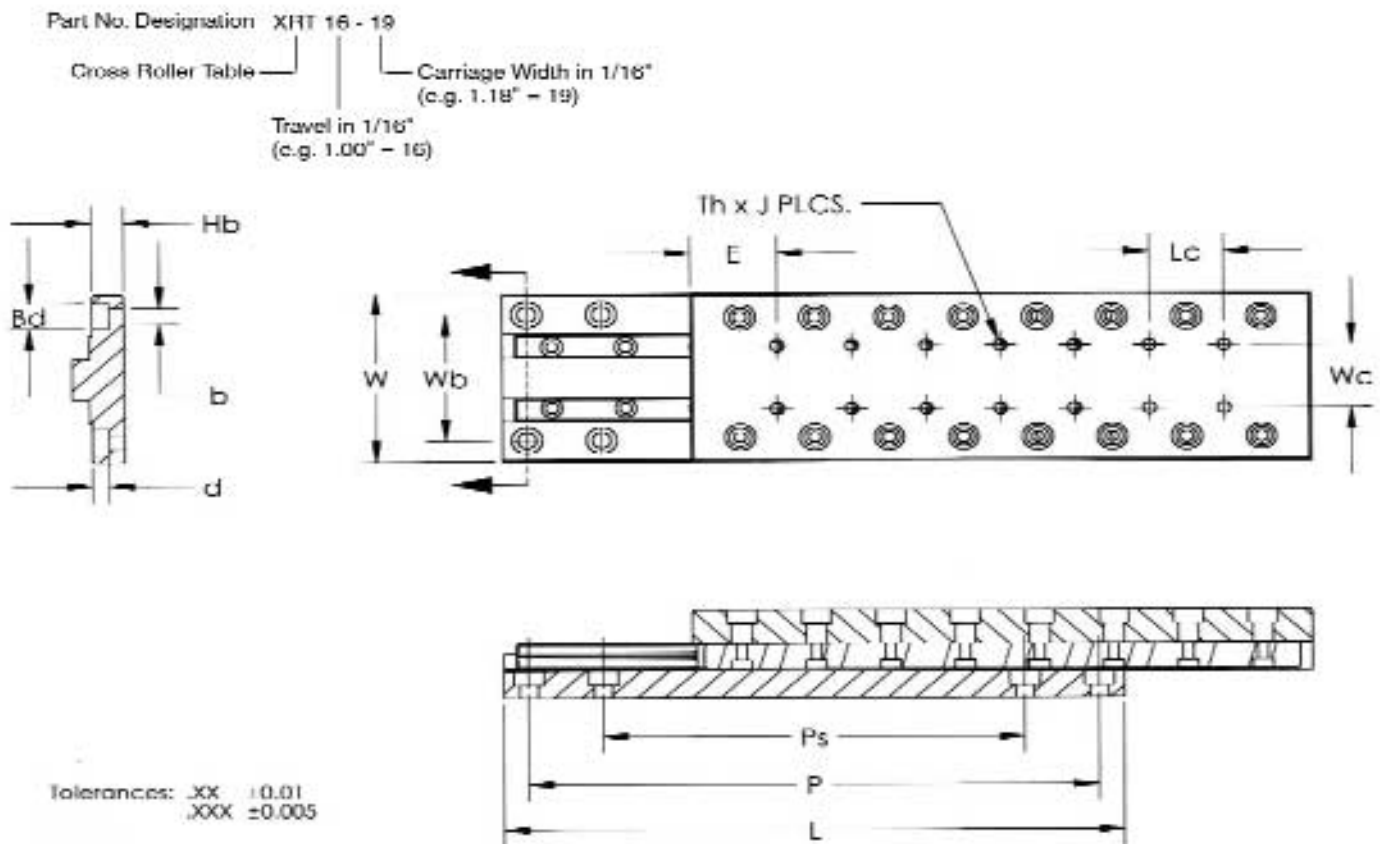
Finish: Black anodized.



CROSS ROLLER TABLES

Unit: inch

Part No.	Stroke	Load Capacity (lbf)	Carriage Attachment Holes			W	H	L	Base			Ps	Bd	b	d	
			E	Lc	Wc				Th x J	Wb	Hb					P
XRT16-19	1.00	96	0.689	0.5906	0.394	#4-40 UNC x 4	1.18	0.59	1.97	0.866	0.160	1.575	-	0.198	0.125	0.130
XRT32-19	2.00	145	0.689	0.5906	0.394	#4-40 UNC x 8	1.18	0.59	3.15	0.866	0.160	2.756	1.575	0.198	0.125	0.130
XRT40-19	2.50	162	0.689	0.5906	0.394	#4-40 UNC x 10	1.18	0.59	3.74	0.866	0.160	3.346	2.165	0.198	0.125	0.130
XRT48-25	3.00	198	0.689	0.5906	0.591	#6-32 UNC x 14	1.58	0.83	4.92	1.181	0.256	4.528	3.346	0.241	0.149	0.150



BALL SLIDES

SMI Part No.	Del-Tron Part No.	Stroke
BS8-6	C-1	0.50
BS16-6	C-2	1.00
BS24-6	C-3	1.50
BS8-9	D-1	0.50
BS16-9	D-2	1.00
BS32-9	D-3	2.00
BS48-9	D-4	3.00
BS64-9	D-5	4.00
BS8-12	E-1	0.50
BS16-12	E-2	1.00
BS32-12	E-3	2.00
BS48-12	E-4	3.00
BS64-12	E-5	4.00
BS80-12	E-6	5.00
BS8-16	M-1	0.50
BS16-16	M-2	1.00
BS24-16	M-2.5	1.50
BS32-16	M-3	2.00
BS48-16	M-4	3.00
BS12-17	N-1	0.75
BS24-17	N-2	1.50
BS29-17	-	1.81
BS32-17	N-3	2.00
BS48-17	N-4	3.00
BS64-17	N-6	4.00
BS16-24	S1-1	1.00
BS32-24	S1-2	2.00
BS48-24	S1-3	3.00
BS56-24	S1-3.5	3.50
BS64-24	S1-4	4.00
BSM64-24 (metric)	SA1-4	4.00
BS16-28	S2-1	1.00
BS24-28	S2-1.5	1.50
BS32-28	S2-2	2.00
BS48-28	S2-3	3.00
BS64-28	S2-4	4.00
BS16-42	S3-1	1.00
BS24-42	S3-1.5	1.50
BS32-42	S3-2	2.00
BS48-42	S3-3	3.00
BS64-42	S3-4	4.00

PRECISION CROSS ROLLER SLIDES

SMI Part No.	Del-Tron Part No.	Stroke
XRS48-9	RD-4	3.00
XRS32-12	RE-3	2.00

BALL SLIDE POSITIONING STAGES

SMI Part No.	Del-Tron Part No.	Stroke
MAC4-12	99-X	0.25
MAC8-20	101-X	0.50
MAC8-28	201-X	0.50
MAC16-50	1201-X	1.00

HEAVY DUTY CROSS ROLLER POSITIONING STAGE

SMI Part No.	Del-Tron Part No.	Stroke
MACR8-42	R753-X	0.50

CROSS ROLLER TABLES

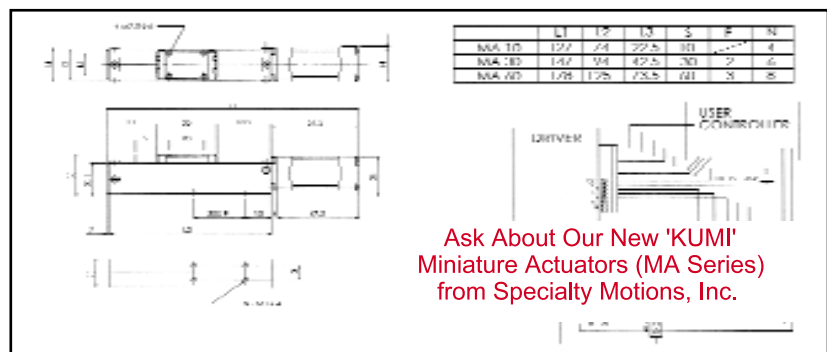
SMI Part No.	Del-Tron Part No.	Stroke
XRT16-19	NBT-1050A	1.00
XRT32-19	NBT-1080A	2.00
XRT40-19	NBT-1095A	2.50
XRT48-25	NBT-2125A	3.00

Ask Us About Our Other Linear Motion Systems / Components & Capabilities

ACTuate Now, Call Toll Free or E-mail Us:
800 283 3411, sales@smi4motion.com



Credit Cards Welcome



Ask About Our New 'KUMI' Miniature Actuators (MA Series) from Specialty Motions, Inc.