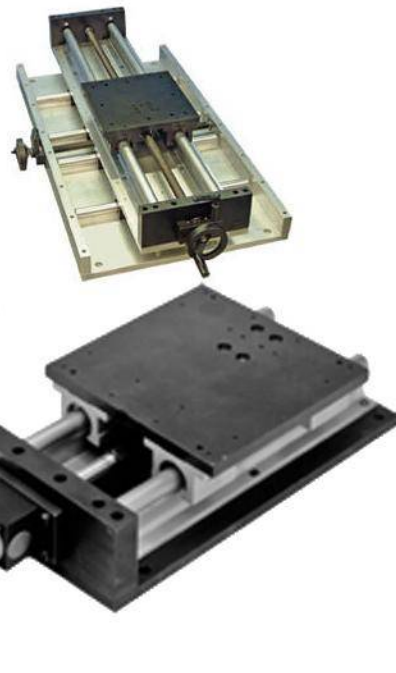


LM76

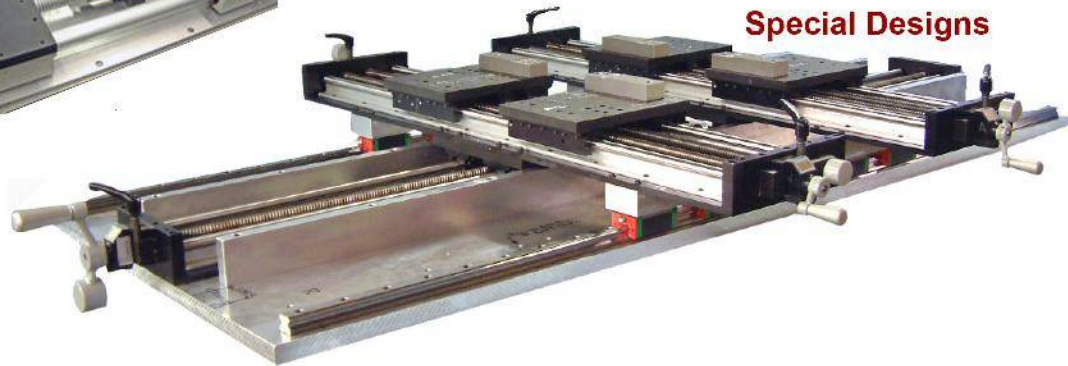
Linear Bearings

Linear Slide Division
1-800-513-3163 www.LM76.com

Pneumatic Slides



Special Designs



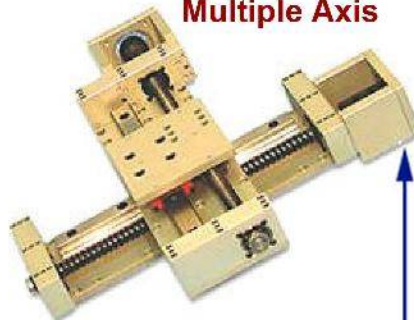
High Load/Long Travel



FDA/Washdown Stainless



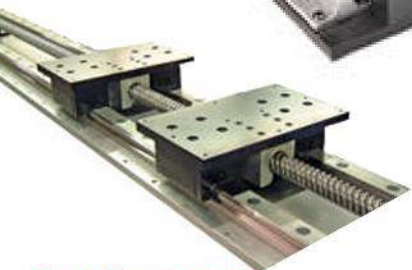
Multiple Axis



Special Coatings
Non-Magnetic



Self-Centering

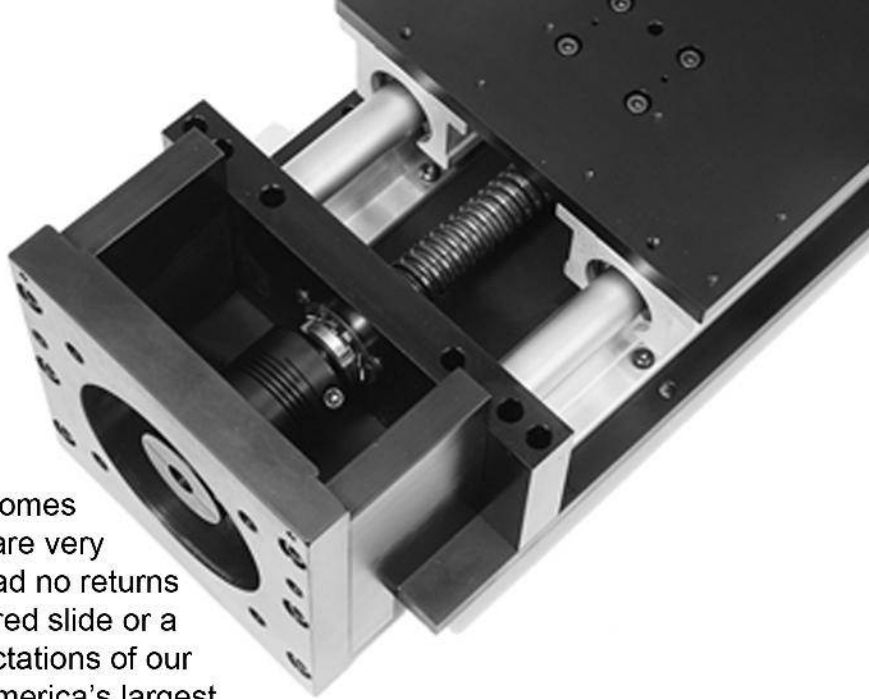


Food - Poultry - Meat - Dairy



Tooling Stations





LM76 has a long and distinguished record when it comes to the design and manufacture of linear slides. We are very proud of our record: in the last 12 years, we have had no returns and no complaints. Whether it's a simple non-powered slide or a special design in stainless, LM76 has met the expectations of our customers. Working with engineers from some of America's largest corporations, LM76 has met or exceeded design objectives, delivered on time and made budget. We work closely with customers to ensure all aspects of the application are understood and taken into account. We make sure we ask all the right questions, leaving nothing to chance - subtlety can be devastating. Lastly, we make it happen. We will stand with you during design and behind you after delivery.

Have a critical slide application that can't have problems, call **Mike Quinn 1-800-513-3163** or email me @ **mquinn@LM76.com**.

Mike Quinn
VP Sales/Marketing & Engineering



Choose the right bearing package for your application.



**Minuteman Self-Lube
PTFE Bearings**



Linear Ball Bearings



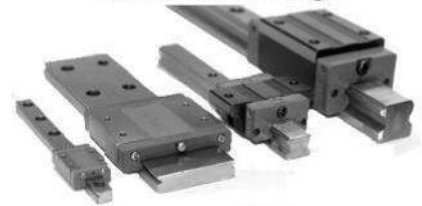
**Black Racer Ceramic
Coated Bearings**



**FDA Washdown
Linear Bearings**



**JET Rail Linear Roller
Blocks**



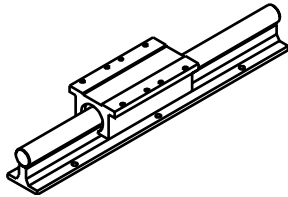
Profile Rail Bearings

Linear Slides from LM76 are designed around your application. From industry leading Self-Lube Minuteman PTFE Bearings, to FDA Washdown Bearings, to Linear Ball Bearings, to JET Rail Roller Blocks or Profile Rail Bearings, LM76 employs the most optimal bearing package available.

	Linear Ball Bushing	Teflon Composite Bushing
Load Capacity	Industry Standard	3 x Industry Standard
Speed	240 FPM = 4 FPS - Max.	140 FPM = 28 INPS Unlubed Max.
Noise	Metallic Zing	1/3 Industry Standard
Friction	.005 - .015	.09 - .12
Vibration Damping	No	Yes
Shock Loading	No	Yes
Mode of Failure	Ball Loss - Shaft Grooving	Loss of Tolerance
Overhung Load	3:1 with substantial reduction of shaft & bearing life	1.5:1 Maximum with pinching and binding occurring at more than 2:1
Contamination Resistance	No	Yes
Life Expectancy	Industry Standard	3 x Industry Standard
Temperature	-20° to 180° F	-400° to 375° F

When it comes to linear tables . . . it's the bearings. Go with **LM76** !

for further information - call 800.513.3163



M-SRBT

Minuteman Linear Rail Assembly

Preassembled Shaft, Rail, and Matched Centerline¹. LM76SL Linear Bearing(s)

PART NUMBER							
LINEAR BEARING		SERIES		SIZE		LENGTH	SST
M	-	SRB	?	08	-	XXX	SST
M	-	SRB	?	10	-	XXX	SST
M	-	SRB	?	12	-	XXX	SST
M	-	SRB	?	16	-	XXX	SST
M	-	SRB	?	20	-	XXX	SST
M	-	SRB	?	24	-	XXX	SST
M	-	SRB	?	32	-	XXX	SST

DIMENSIONS						
GUIDE BAR DIAMETER	A	B	C	D	E _T	F _T
.500	1.125	2.00	1.688	1.50	2.500	3.500
.625	1.125	2.50	2.125	1.62	3.000	4.000
.750	1.500	2.75	2.375	1.75	3.500	4.500
1.000	1.750	3.25	2.875	2.12	4.500	6.000
1.250	2.125	4.00	3.500	2.50	5.500	7.500
1.500	2.500	4.75	4.125	3.00	6.500	9.000
2.000	3.250	6.00	5.250	3.75	8.250	10.00

For "XXX" substitute "L" from standard length table, or for non-standard length (see example).
 Guide bar diameter dimension in 1/16" increments (for example 10/16 = .625" diameter).
 Pillow block style and quantity - Substitute "1", "2", or "3" etc. for the number of single bearings or "T", "T2", or "T3" etc. for the number of twin bearings per rail assembly.
Multiple bearings on an assembly will have matched centerline (H) dimensions.
 "M" for LM76SL, Minuteman linear bearings.
 303 Stainless Steel with jet finish.

Material:

Rail supports, pillow blocks - aluminum alloy. Screws, retaining rings, spring pins - steel.
 Guide shafts - RC60 case hardened steel or 303 stainless steel with jet finish (SST).
 Bearings - composite Teflon® and aluminum Alloy

Ordering Examples:

Standard Lengths -

To order a shaft, rail and linear bearing assembly with a .750" diameter stainless shaft, support rail, and one twin bearing, with a length over all of 96" - - - - - Specify part number: M-SRBT-12-096SST

Non-standard Lengths -

To order a shaft, rail and linear bearing assembly with a .625" diameter shaft, support rail, and two single open bearings, with a length over all of 73.25" - - - - - Specify part number: M-SRB2-10-73.25

Note: For specifying fractional lengths, carry two digits after the decimal point.

Note: For maximum standard lengths and under, shafts will be continuous, but rail supports will have a minimum of one break every 48".

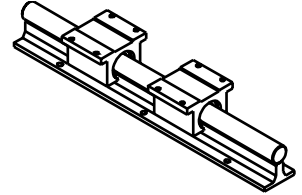
²Non-standard lengths are also available - see non-standard lengths ordering example

STANDARD LENGTH TABLE																									
SIZE	AVAILABLE LENGTHS - L ² (IN INCHES)																								
08	008	012	016		020	024	028		032	036	040		044	048	052		056	060	064		068	072	076		080
10	008	012	016		020	024	028		032	036	040		044	048	052		056	060	064		068	072	076		080
12		012		018		024		030		036		042		048		054		060		066		072		078	
16		012		018		024		030		036		042		048		054		060		066		072		078	
20		012		018		024		030		036		042		048		054		060		066		072		078	
24			016			024			032		040			048			056		064			072			080
32						024			032		040			048			056		064			072			080

M-SRB2

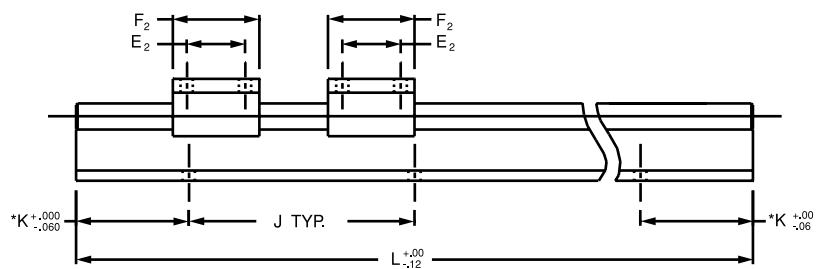
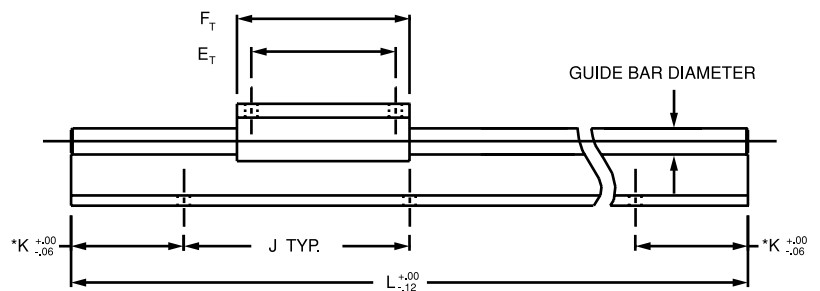
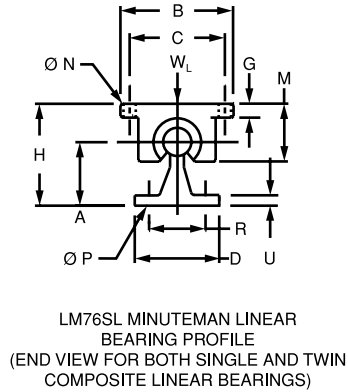
Minuteman Linear Rail Assembly

Preassembled Shaft, Rail, and Matched Centerline¹. LM76SL Linear Bearing(s)



DIMENSIONS (Continued)

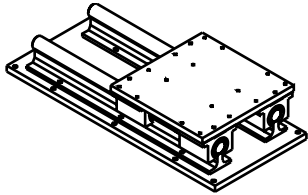
E ₂	F ₂	G	H	J	K	M	N	P	R	U
1.000	1-11/16	.250	1.812	4.00	2.00	1-1/8	.156	.169	1.000	.188
1.125	1-15/16	.281	2.000	4.00	2.00	1-7/16	.188	.193	1.125	.250
1.250	2-1/16	.312	2.438	6.00	3.00	1-9/16	.188	.221	1.250	.250
1.750	2-13/16	.375	2.938	6.00	3.00	2	.219	.281	1.500	.250
2.000	3-5/8	.437	3.625	6.00	3.00	2-1/2	.219	.343	1.875	.312
2.500	4	.500	4.250	8.00	4.00	2-7/8	.281	.343	2.250	.375
3.250	5	.625	5.375	8.00	4.00	2-5/8	.406	.406	2.750	.500



³ Longer lengths are also available - Consult Factory

STANDARD LENGTH TABLE (Continued)

SIZE	AVAILABLE LENGTHS - L ³ (IN INCHES)																						
08	084	088		092	096	100		104	108	112		116	120	124		128	132	136		140	144	148	152
10	084	088		092	096	100		104	108	112		116	120	124		128	132	136		140	144	148	152
12	084		090		096		102		108		114		120		126		132		138		144		150
16	084		090		096		102		108		114		120		126		132		138		144		150
20	084		090		096		102		108		114		120		126		132		138		144		150
24		088			096			104		112			120			128		136			144		152
32		088			096			104		112			120			128		136			144		152



M-RPS

Minuteman Linear Rail Mounted Plate Supported Slide Assembly

PART NUMBER						
LINEAR BEARING		SERIES		SIZE		L
M	-	RPS	-	08	-	???
M	-	RPS	-	10	-	???
M	-	RPS	-	12	-	???
M	-	RPS	-	16	-	???
M	-	RPS	-	20	-	???
M	-	RPS	-	24	-	???
M	-	RPS	-	32	-	???

DIMENSIONS					
GUIDE BAR DIAMETER	W	H	A	B	C
.500	6.00	2.000	.563	2.00	3.500
.625	7.00	2.313	.688	2.50	4.000
.750	8.00	2.688	.750	2.75	4.500
1.000	9.00	3.188	1.000	3.25	5.500
1.250	11.00	4.188	1.188	4.00	6.500
1.500	13.00	4.625	1.375	4.75	8.000
2.000	18.00	5.875	1.750	6.00	10.000

Substitute "L" from standard length table for "???".

Guide bar diameter diameter in 1/16" increments (for example 10/16 = .625" diameter).

"M" for LM76SL, Minuteman linear bearings.

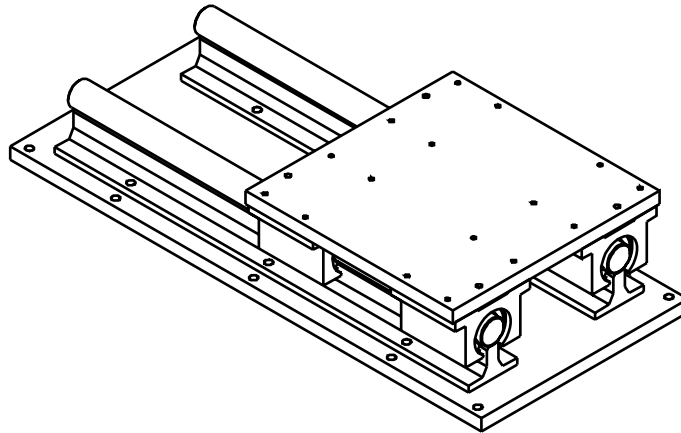
Material:

Aluminum Alloy: Top plate, bottom plate, rail supports, pillow blocks

Guide shafts: RC60 case hardened steel or 303 stainless steel with jet finish (SST).

Ordering Examples:

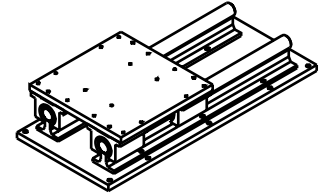
To order a slide with LM76SL, Minuteman, linear bearings, .625" diameter shafting, 21.00" travel, without a ball screw - - - - - Specify part number: M-RPS-10-028



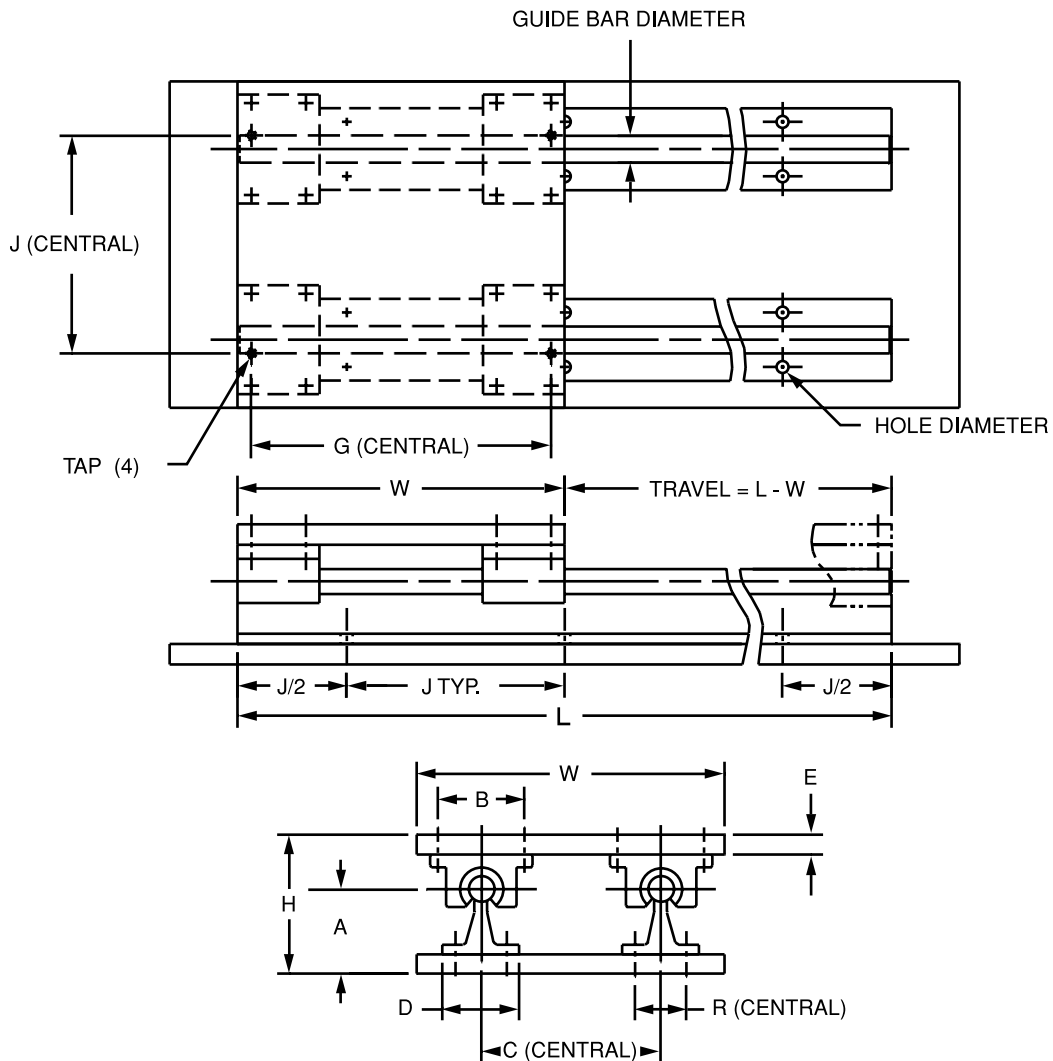
STANDARD LENGTH TABLE																														
SIZE	AVAILABLE LENGTHS - L ² (IN INCHES)																													
08	008	012	016		020	024	028		032	036	040		044	048	052		056	060	064		068	072	076		080	084	088		092	096
10	008	012	016		020	024	028		032	036	040		044	048	052		056	060	064		068	072	076		080	084	088		092	096
12		012		018		024		030		036		042		048		054		060		066		072		078		084		090		096
16		012		018		024		030		036		042		048		054		060		066		072		078		084		090		096
20		012		018		024		030		036		042		048		054		060		066		072		078		084		090		096
24			016			024			032		040			048			056		064			072			080		088			096
32						024			032		040			048			056		064			072			080		088			096

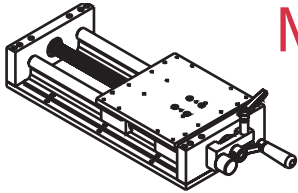
M-RPS

Minuteman Rail Mounted Plate Supported Slide Assembly



DIMENSIONS (Continued)							
D	E	F	G	J	TAP	HOLES	SIZE
1.50	.375	.75	5.50	4.00	10-24	.22	08
1.650	.375	.75	6.31	4.00	1/4-20	.28	10
1.750	.500	1.00	7.12	6.00	1/4-20	.28	12
2.125	.500	1.00	8.31	6.00	1/4-20	.28	16
2.500	.750	1.25	10.00	6.00	5/16-18	.34	20
3.00	.750	1.25	12.00	8.00	5/16-18	.34	24
3.750	1.000	1.50	15.88	8.00	3/8-16	.41	32





M-2HCR

M-2HWL

Minuteman Slide Assembly with Handcrank and Lock

PART NUMBER				
LINEAR BEARING	SERIES	SIZE	L	LEAD
M	- 2H?? -	08	- ??? -	???
M	- 2H?? -	10	- ??? -	???
M	- 2H?? -	12	- ??? -	???
M	- 2H?? -	16	- ??? -	???
M	- 2H?? -	20	- ??? -	???
M	- 2H?? -	24	- ??? -	???
M	- 2H?? -	32	- ??? -	???

DIMENSIONS										
GUIDE BAR DIA	W	H	A	B	C	D	E	F	G	J
.500	6.00	2.562	1.125	2.00	3.500	1.50	.375	.75	5.50	4.00
.625	7.00	2.750	1.125	2.50	4.000	1.62	.375	.75	6.31	4.00
.750	8.00	3.438	1.500	2.75	4.500	1.75	.500	1.00	7.12	6.00
1.000	9.00	3.938	1.750	3.25	5.500	2.12	.500	1.00	8.31	6.00
1.250	11.00	5.125	2.125	4.00	6.500	2.50	.750	1.25	10.00	6.00
1.500	13.00	5.750	2.500	4.75	8.000	3.00	.750	1.25	12.00	8.00
2.000	18.00	7.375	3.250	6.00	10.00	3.75	1.000	1.50	15.88	8.00

Material

Aluminum Alloy: Top & bottom plates, rail supports, pillow blocks, and coupling
Guide shafts: 303 Stainless Steel with jet finish, rolled ball screw and ball nut assembly.

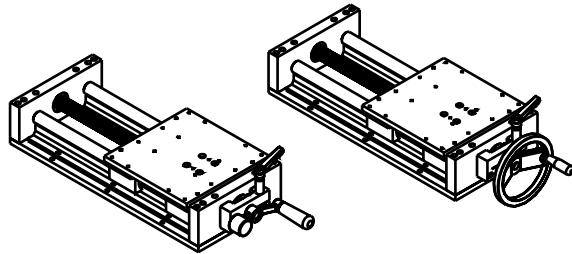
Ordering Example: **M 2HWL-10-056-AR1**

"M" for LM76SL, Minuteman, liner bearings.
Guide bar diameter in 1/16" increments (10/16 = .625")

SERIES	HANDLE DESCRIPTION
HCR	-STANDARD MODEL -CAST ALUMINUM COUNTERBALANCED HAND CRANK
HWL	-DELUXE MODEL - ALUMINUM HANDWHEEL WITH FOLD-AWAY HANDLE

Ordering Example:

To order a slide assembly with 1/2" diameter guide bars, 90" stroke, a standard model handcrank, and a .200" lead right handed select ball screw-----Specify part number: **M-2HCR-08-096-AR1**



M-2HCR-16-024-BR0 M-2HWL-16-024-BR0

* Longer lengths are available - Consult Factory

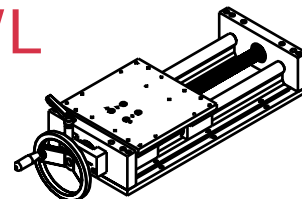
LEAD CODE TABLE										
SIZE	AVAILABLE LEAD CODE								LEAD CODES	
08	AR?	AL?							AR?=	.200 RIGHT HAND
10	AR?	AL?							AL?=	.200 LEFT HAND
12	AR?	AL?							BR?=	.250 RIGHT HAND
16			BR?	BL?	CR?	DR?			BL?=	.250 LEFT HAND
20			BR?	BL?	CR?	DR?			CR?=	.500 RIGHT HAND
24			BR?	BL?	CR?	DR?	DL?	ER?	DR?=	1.000 RIGHT HAND
32			BR?	BL?	CR?	DR?	DL?	ER?	DK?=	1.000 LEFT HAND
REPLACE ? WITH 0 FOR STANDARD LEAD- LESS THAN .007" PER FOOT ACCUMULATIVE									ER?=	1.875 RIGHT HAND
REPLACE ? WITH 1 FOR SELECT LEAD- LESS THAN .003" PER FOOT ACCUMULATIVE										

STANDARD LENGTH TABLE																														
SIZE	AVAILABLE LENGTHS - L * (IN INCHES)																													
08	008	012	016		020	024	028		032	036	040		044	048	052		056	060	064		068	072	076		080	084	088		092	096
10	008	012	016		020	024	028		032	036	040		044	048	052		056	060	064		068	072	076		080	084	088		092	096
12		012		018		024		030		036		042		048		054		060		066		072		078		084		090		096
16		012		018		024		030		036		042		048		054		060		066		072		078		084		090		096
20		012		018		024		030		036		042		048		054		060		066		072		078		084		090		096
24			016			024		032		040			048			056		064			072			080		088				096
32						024		032		040			048			056		064			072			080		088				096

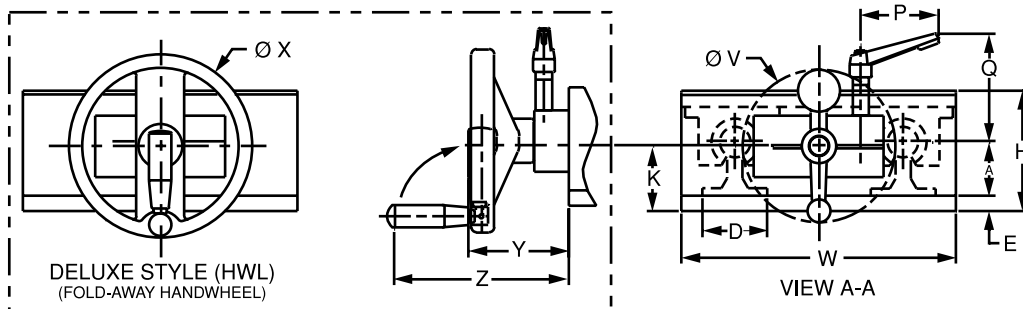
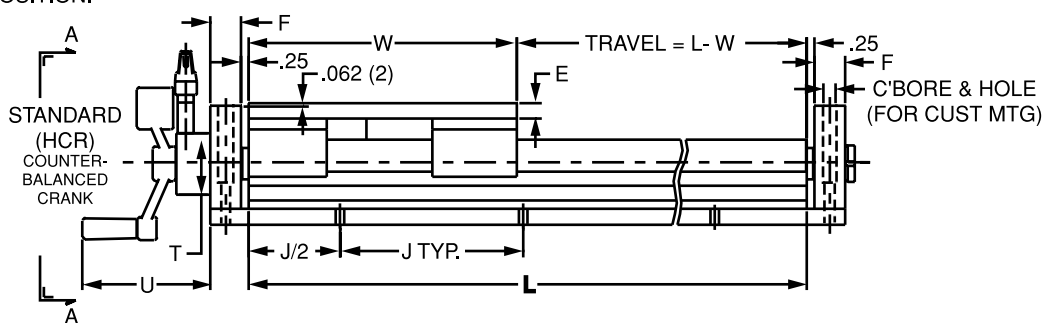
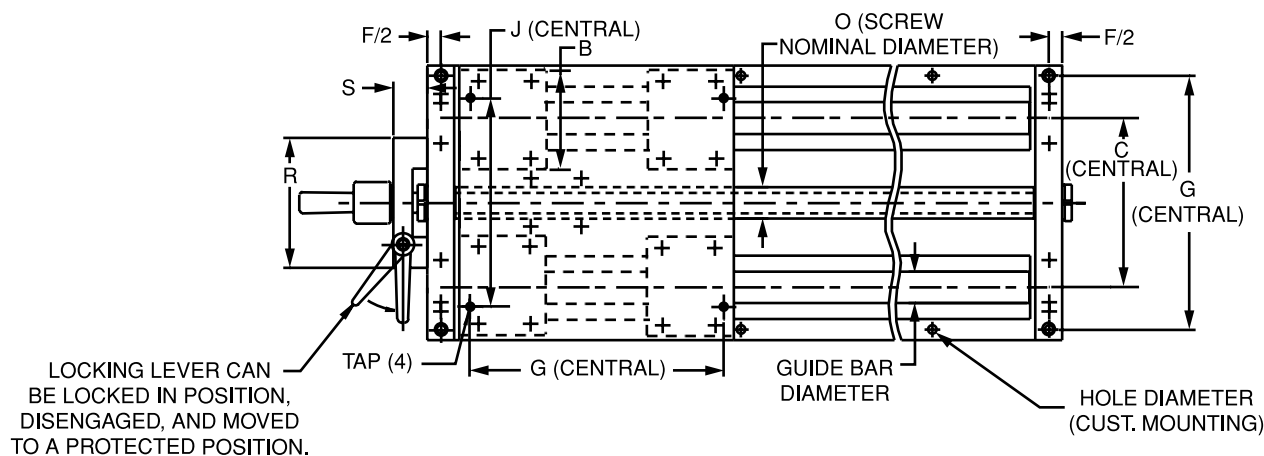
M-2HCR

M-2HWL

Minuteman Slide Assembly with Handcrank and Lock



DIMENSIONS (Continued)																
K	M	N	O	P	Q	R	S	T	U	V	X	Y	Z	TAP	HOLE	SIZE
1.38	.375	1.45	.631	2.56	2.66	3.000	.875	1.312	3.885	4.000	4.00	2.655	4.855	10-24	.22	08
1.38	.375	1.45	.631	2.56	2.48	3.000	.875	1.312	3.885	4.000	4.00	2.655	4.855	1/4-20	.28	10
1.50	.375	1.45	.631	2.56	1.91	3.000	.875	1.312	3.885	4.000	4.00	2.655	4.855	1/4-20	.28	12
2.12	.625	1.76	1.000	2.56	1.87	4.250	1.125	2.000	4.180	5.000	6.00	3.185	5.745	1/4-20	.28	16
2.38	.625	1.76	1.000	2.56	.95	4.250	1.125	2.000	4.180	5.000	6.00	3.185	5.745	5/16-18	.34	20
2.88	1.000	2.31	1.500	3.15	2.54	6.500	1.500	3.000	5.455	7.000	10.00	4.310	7.460	5/16-18	.34	24
3.88	1.000	2.31	1.500	3.15	1.92	6.500	1.500	3.000	5.455	7.000	10.00	4.310	7.460	3/8-16	.41	32



Slide Selection

Determining Specifications and Requirements

LM76 - 1-800-513-3163

Fax: 413-525-3735

www.LM76.com

1. Determine the size and stroke of slide required.
2. Is a lube system required?
3. Please furnish the following to the factory:

- a. Model designation
- b. Lube system requirements
- c. Mounting orientation, saddle position if mounted at an angle
- d. Load to be carried and approximate center of gravity from saddle center

Model Number

TRPS - - -

- e. The location and magnitude of any force which resists the motion of the slide
- f. Acceleration rate and maximum velocity of the saddle

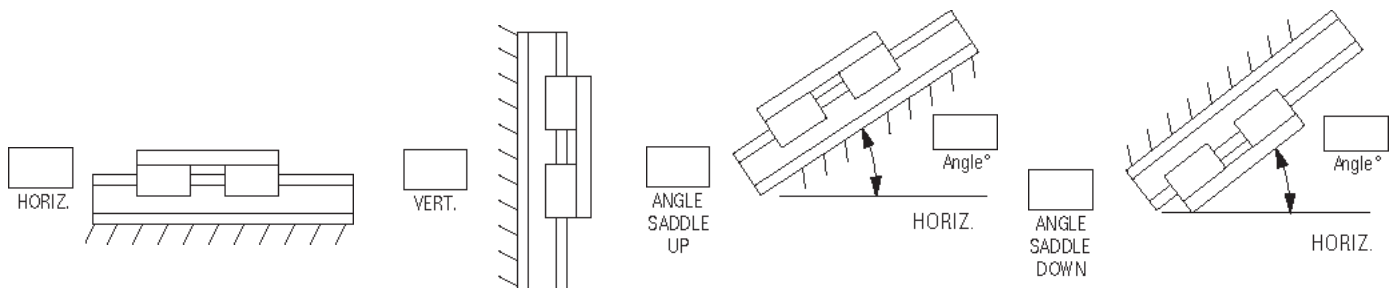
Series Code

Size Code

Length

Ball

Mounting Orientation:



Please fill in the boxes for your application.

Cycle Rate: Per Hour Per Minute

Max Saddle Velocity: Inches/Second

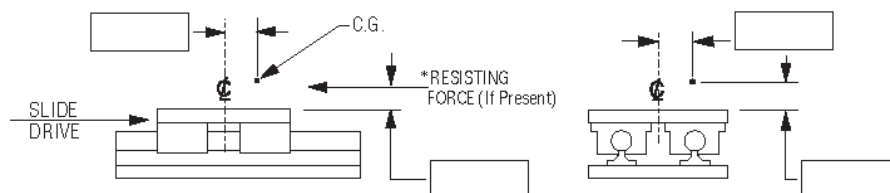
Acceleration Rate: Inches/Second²

Deceleration Rate: Inches/Second²

Load: lbs.

Location of Center of Gravity from Saddle Center

Please fill in the boxes for your application.



* Example of Resisting Force would be tool thrust for a drill head mounted on slide.

Resisting Force: lbs.

Life Requirement: Strokes Hours

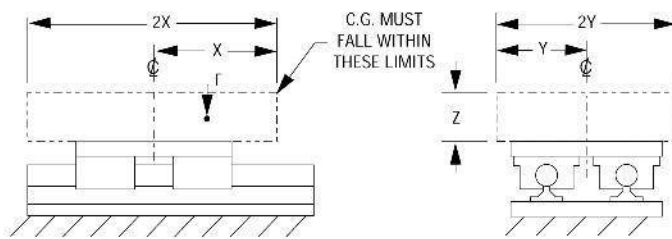
PTFE Self Lubricating Composite Bearing Slides

Load Capacity for Minuteman and Black Racer Ceramic Coated Bearings Only

Recommended Safe Loading

For unlubricated slide applications where speeds are less than 90 feet/minute (18 inches/second).

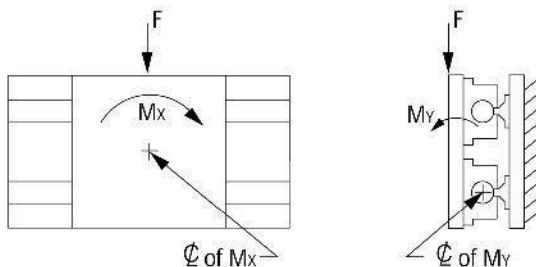
Standard Mounting



Recommended Safe Loading

Size	F Max. (lbs.)	X (In.)	Y (In.)	Z (In.)
08	1450	4.00	2.37	3.00
10	2200	4.75	2.76	3.50
12	2850	5.00	2.85	4.00
16	5275	5.50	3.37	4.50
20	7750	6.75	4.05	5.50
24	10600	7.86	4.90	6.50
32	18750	10.75	6.00	9.00

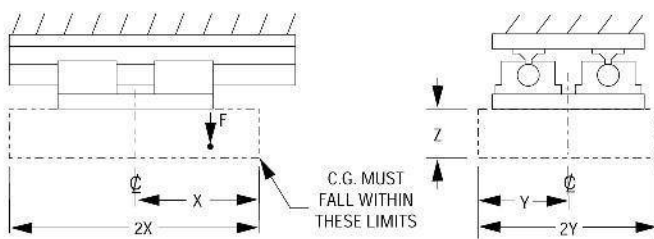
Side Mounting



Recommended Safe Loading

Size	F Max (lbs.)	M _x (In-lb.)	M _y (In-lb.)
08	540	910	1500
10	760	1680	2750
12	840	1710	2875
16	1050	3300	4430
20	1750	6175	8750
24	2100	9600	12600
32	3300	19000	28050

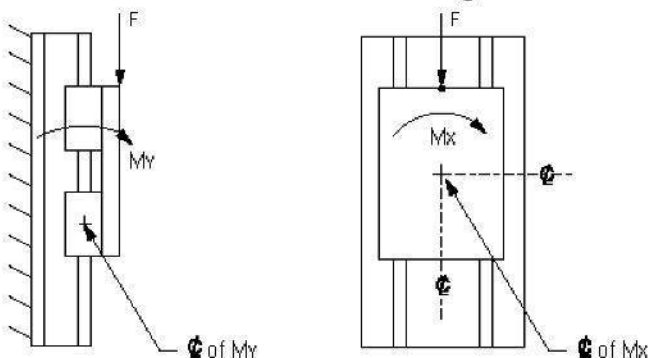
Inverted Mounting



Recommended Safe Loading

Size	F Max. (lbs.)	X (In.)	Y (In.)	Z (In.)
08	195	4.85	2.91	3.00
10	285	5.69	3.33	3.50
12	315	6.52	3.75	4.00
16	450	7.31	4.58	4.50
20	712	8.84	5.42	5.50
24	900	10.50	6.67	6.50
32	1425	14.67	8.33	9.00

Vertical Mounting



Recommended Safe Loading

Size	F Max (lbs.) ^Δ	M _x (In-lb.) ^Δ	M _y (In-lb.)
08	260	1445	1500
10	300	2750	2750
12	300	2875	2875
16	600	5000	4430
20	675	9500	8750
24	710	14400	12600
32	900	32300	28050

^Δ - Applies only when using T1RPS or T2RPS & T1LRPS or T2LRPS slides

^Δ - If F is exceeded consult factory.

Note: w/TRPS, F Max. is dependent upon customer s



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LINEAR BEARING STYLE
T = TEFELON COMPOSITE
B = RECYCLING BALL
C = CROSS ROLLER

BALL SCREW SUPPORT
1 = JOURNAL BLOCK AT DRIVE END
2 = JOURNAL BLOCK AT BOTH ENDS

RAIL SUPPORT
BLANK = FULL PROFILE
L = LOW PROFILE

T2LRPS-08-016-AR0Z

SIZE (DIA)
08 = .500
10 = .625
12 = .750
16 = 1.000
20 = 1.250
24 = 1.500
32 = 2.000

SIZE (DIA)	STANDARD 1" DIMENSIONS	MAX
08	0.008, 0.012, 0.016, ETC. IN 4.000 (J) INCREMENTS TO 1.40	1.40
10	0.008, 0.012, 0.016, ETC. IN 4.000 (J) INCREMENTS TO 1.40	1.40
12	0.012, 0.016, 0.024, ETC. IN 6.000 (J) INCREMENTS TO 1.36	1.36
16	0.012, 0.016, 0.024, ETC. IN 6.000 (J) INCREMENTS TO 1.36	1.36
20	0.012, 0.016, 0.024, ETC. IN 6.000 (J) INCREMENTS TO 1.36	1.36
24	0.016, 0.024, 0.032, ETC. IN 8.000 (J) INCREMENTS TO 1.36	1.36
32	0.024, 0.032, 0.040, ETC. IN 8.000 (J) INCREMENTS TO 1.36	1.36

RPS = STANDARD SLIDE WITHOUT ANY ATTACHED DRIVE OPTION.

BASIC NEMA 23 MOUNTING KIT (INCLUDES RISERS, MOTOR PLATE, AND LOW BACKLASH COUPLING)

23A = FOR NEMA 23 MOTOR (REF. 280" DIA MOTOR SHAFT)

23B = FOR NEMA 23 MOTOR (REF. 312" DIA MOTOR SHAFT)

23C = FOR NEMA 23 MOTOR (REF. 375" DIA MOTOR SHAFT)

Y01 = FOR SGM-A3, -A5, OR -01 MOTORS (REF. 8MM DIA MOTOR SHAFT)

Y02 = FOR SGM-A2, -03, OR -04 MOTORS (REF. 14MM DIA MOTOR SHAFT)

BASIC NEMA 34 MOUNTING KIT (INCLUDES RISERS, MOTOR PLATE, AND LOW BACKLASH COUPLING)

34C = FOR NEMA 34 MOTOR (REF. 375" DIA MOTOR SHAFT)

34D = FOR NEMA 34 MOTOR (REF. 500" DIA MOTOR SHAFT)

Y01 = FOR SGM-P1 MOTOR (REF. 8MM DIA MOTOR SHAFT)

Y02 = FOR SGM-P2, -03, OR -04 MOTORS (REF. 14MM DIA MOTOR SHAFT)

MANY OTHER STANDARD DRIVE CONFIGURATIONS AVAILABLE (IE. INDURAMAT, FAUUC, PACIFIC SCIENTIFIC, ALLEN BRADLEY, YASKAWA, BALDOR, ETC.)

HAND POWERED OPTIONS (INCLUDES HAND CRANK AND BALL SCREW ROTATIONAL LOCK ASSY)

HCR = CAST ALUMINUM HAND CRANK (RIGID CAST IRON HANDWHEEL FOR SIZES 24 & 32)

HML = DELUXE HAND WHEEL WITH FLIP-AWAY HANDLE

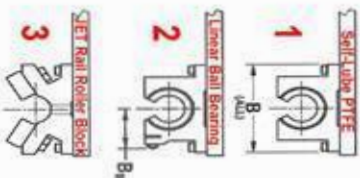
SIZE	AVAILABLE LEAD CODES	LEAD CODES
08	AR7 AL7	CR7
10	AR7 AL7	CR7
12	AR7 AL7	CR7
16	BR7 BL7	CR7 DR7
20	BR7 BL7	CR7 DR7
24	BR7 BL7	CR7 DR7
32	BR7 BL7	CR7 DR7

SIZE	AVAILABLE LEAD CODES	LEAD CODES
08	AR7 AL7	CR7
10	AR7 AL7	CR7
12	AR7 AL7	CR7
16	BR7 BL7	CR7 DR7
20	BR7 BL7	CR7 DR7
24	BR7 BL7	CR7 DR7
32	BR7 BL7	CR7 DR7

SIZE	AVAILABLE LEAD CODES	LEAD CODES
08	AR7 AL7	CR7
10	AR7 AL7	CR7
12	AR7 AL7	CR7
16	BR7 BL7	CR7 DR7
20	BR7 BL7	CR7 DR7
24	BR7 BL7	CR7 DR7
32	BR7 BL7	CR7 DR7

BLANK = STANDARD SINGLE NUT
Z = ZERO BACKLASH DOUBLE
OR INTEGRAL, PRE-LOADED NUT

3 Pillow Block Options:

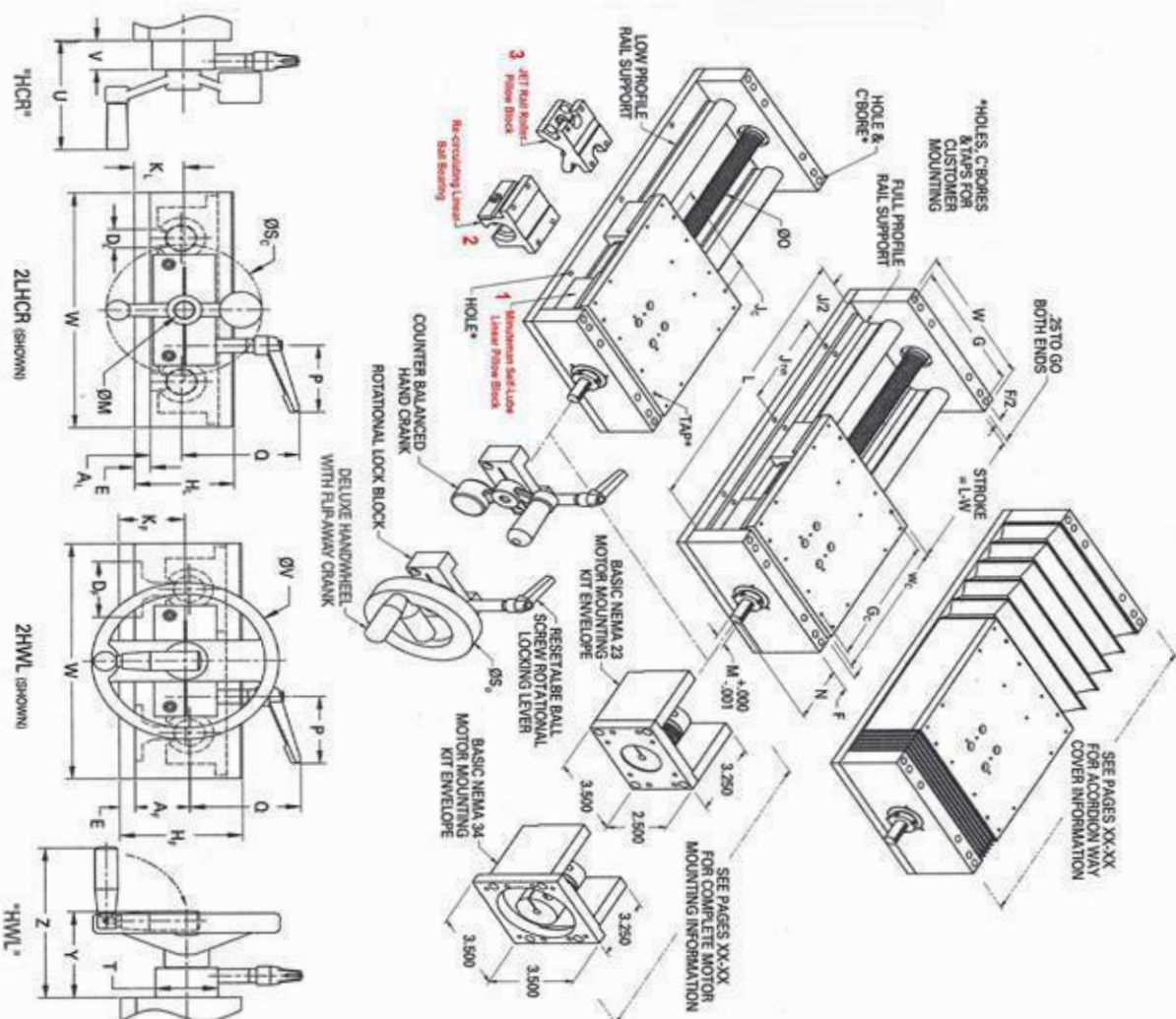


DIMENSIONS																			
SIZE	GUIDE	W _s	H _s	A _s	A _t	B	B _s	C	D _s	D _t	E	F	G _s	J _s	K _s	K _t	M	N	
	BAR DIA	W _c	H _c	A _c	A _t	B	B _s	C	D _s	D _t	E	F	G _c	J _c	K _c	K _t	M	N	
08	.500	6.000	2.562	2.000	1.125	.688	2.50	.30	3.500	1.50	.37	.375	.75	5.50	4.000	1.375	1.000	.375	1.45
10	.625	7.000	2.750	2.312	1.125	.688	2.50	.30	4.000	1.62	.45	.375	.75	6.31	4.000	1.375	1.156	.375	1.45
12	.750	8.000	3.438	2.688	1.500	.750	2.75	1.16	4.500	1.75	.51	.500	1.00	7.12	6.000	1.500	1.344	.375	1.45
16	1.000	9.000	3.938	3.188	1.750	1.000	3.25	1.46	5.500	2.12	.69	.500	1.00	8.31	6.000	2.125	1.594	.625	1.76
20	1.250	11.00	5.125	4.188	2.125	1.188	4.00	1.83	6.500	2.50	.78	.750	1.25	10.00	6.000	2.375	2.094	.625	1.76
24	1.500	13.00	5.750	4.625	2.500	1.375	4.75	2.09	8.000	3.00	.93	.750	1.25	12.00	6.000	2.875	2.312	.625	1.76
32	2.000	18.00	7.375	5.875	3.250	1.750	6.00	2.64	10.00	3.75	1.18	1.000	1.50	15.88	8.000	3.875	2.937	.625	1.76

DIMENSIONS

SIZE	O	P	Q	R	S _c	S _b	T	U	V	Y	Z	HOLE	KEY	TAP
08	.631	2.56	3.85	3.000	4.00	4.00	1.312	4.000	.875	2.665	4.655	.22	3/32 sq x .508 sq	10-24
10	.631	2.56	3.85	3.000	4.00	4.00	1.312	4.000	.875	2.665	4.655	.28	3/32 sq x .508 sq	14-20
12	.631	2.56	3.85	3.000	4.00	4.00	1.312	4.000	.875	2.665	4.655	.28	3/32 sq x .508 sq	14-20
16	1.000	2.56	3.85	4.250	6.00	5.00	2.000	4.250	1.125	3.185	5.745	.28	3/16 sq x 1.0 sq	14-20
20	1.000	2.56	3.85	4.250	6.00	5.00	2.000	4.250	1.125	3.185	5.745	.34	3/16 sq x 1.0 sq	16-18
24	1.000	3.15	5.81	6.500	8.00	8.00	3.000	6.500	1.500	4.310	7.460	.34	1/4 sq x 1.62 sq	16-18
32	1.000	3.15	5.81	6.500	8.00	8.00	3.000	6.500	1.500	4.310	7.460	.41	1/4 sq x 1.62 sq	30-36

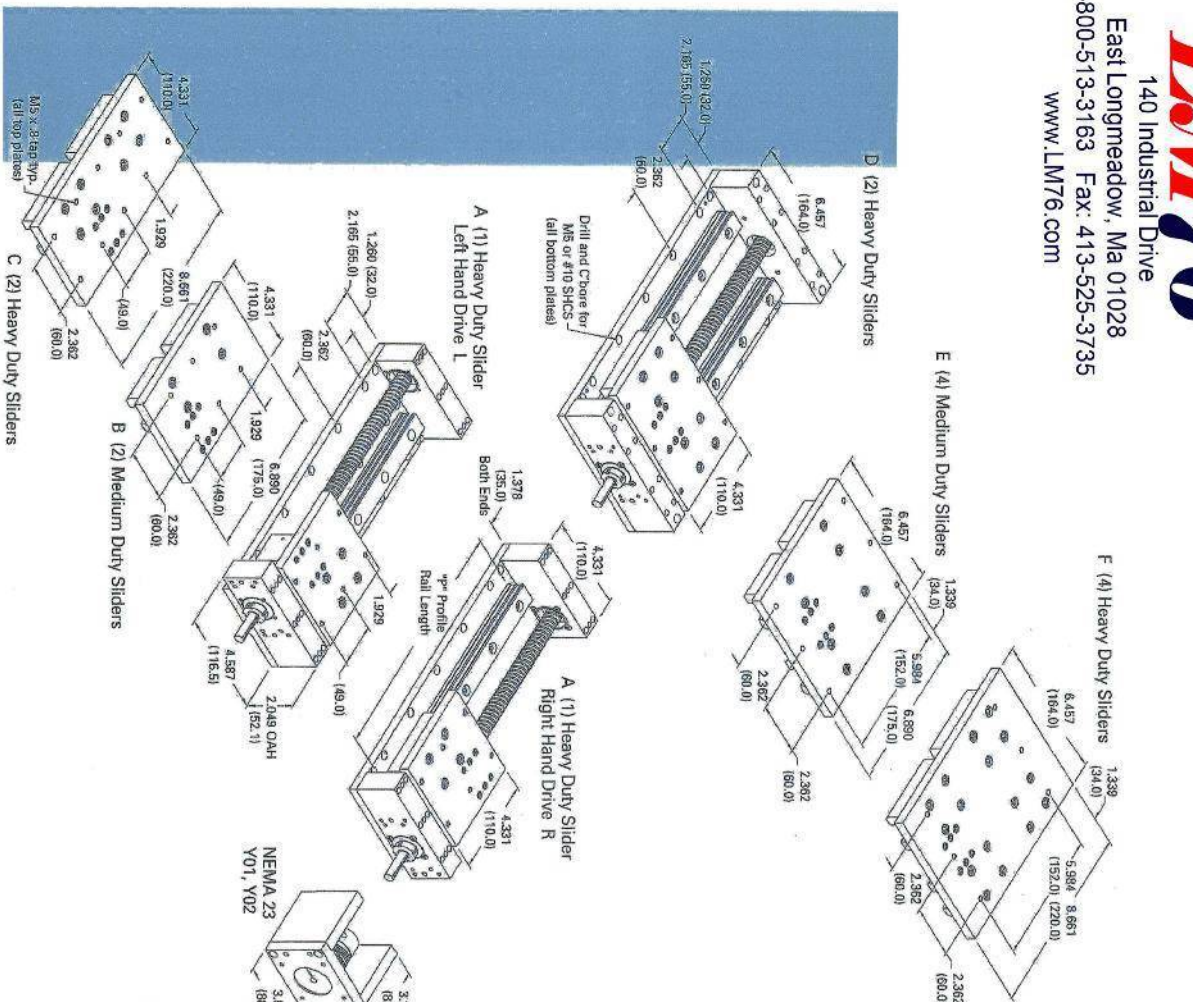
DIMENSIONS



LM76

140 Industrial Drive
East Longmeadow, Ma 01028
1-800-513-3163 Fax: 413-525-3735
www.LM76.com

PART NUMBERS



23A R 2 A LM25 - 0160 - ARO

Linear Rail & Slider Size Designation

Linear Rail & Slider Combinations
A = (1) Profiled rail & (1) heavy duty slider
B = (1) Profiled rail & (2) medium duty sliders
C = (1) Profiled rail & (2) heavy duty sliders
D = (2) Profiled rails & (2) heavy duty sliders
E = (2) Profiled rails & (4) medium duty sliders
F = (2) Profiled rails & (4) heavy duty sliders

Leave blank for no drive

Motor Mounting Kit (includes Risers, Motor Plate, and Coupling)
Z3A = for NEMA 23 motor (ref. .250" dia motor shaft)
Z3B = for NEMA 23 motor (ref. .312" dia motor shaft)
Z3C = for NEMA 23 motor (ref. .375" dia motor shaft)
Z3D = for NEMA 34 motor (ref. .375" dia motor shaft)
Y01 = for NEMA 34 motor (ref. .500" dia motor shaft)
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Y99 = for NEMA 34 motor (ref. .500" dia motor shaft)
Y00 = for NEMA 34 motor (ref. .500" dia motor shaft)

Hand Powered options (includes hand crank and ball screw lock)
HCR = Cast aluminum hand crank (64.00 swing)
HWL = Deluxe hand wheel with flip-away handle (64.00 swing)

Drive mounting position (viewing drive end)

R = Drive to right of linear rail
L = Drive to left of linear rail
Blank for 2 rail systems

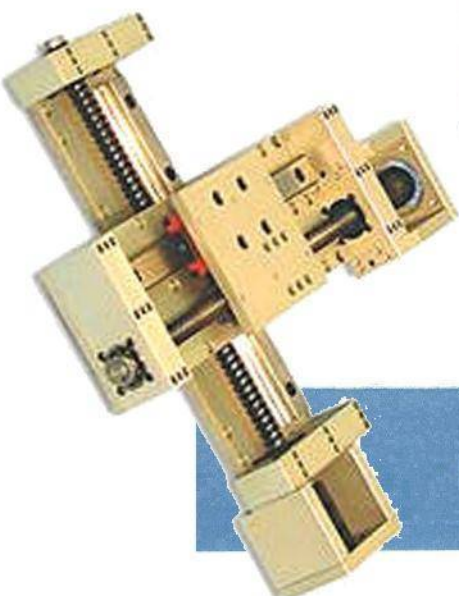
Rail Screw Support
1 = Journal block at one end
2 = Journal block at both ends

Linear Profile Rail Length "P"

Standard lengths 160 - 1600mm in 60mm increments
for clear span rails - and up to 3580mm long
with one rail break and clear span bottom plate
*Stroke = Linear rail length - carriage length

Roller Ball Screw Variations

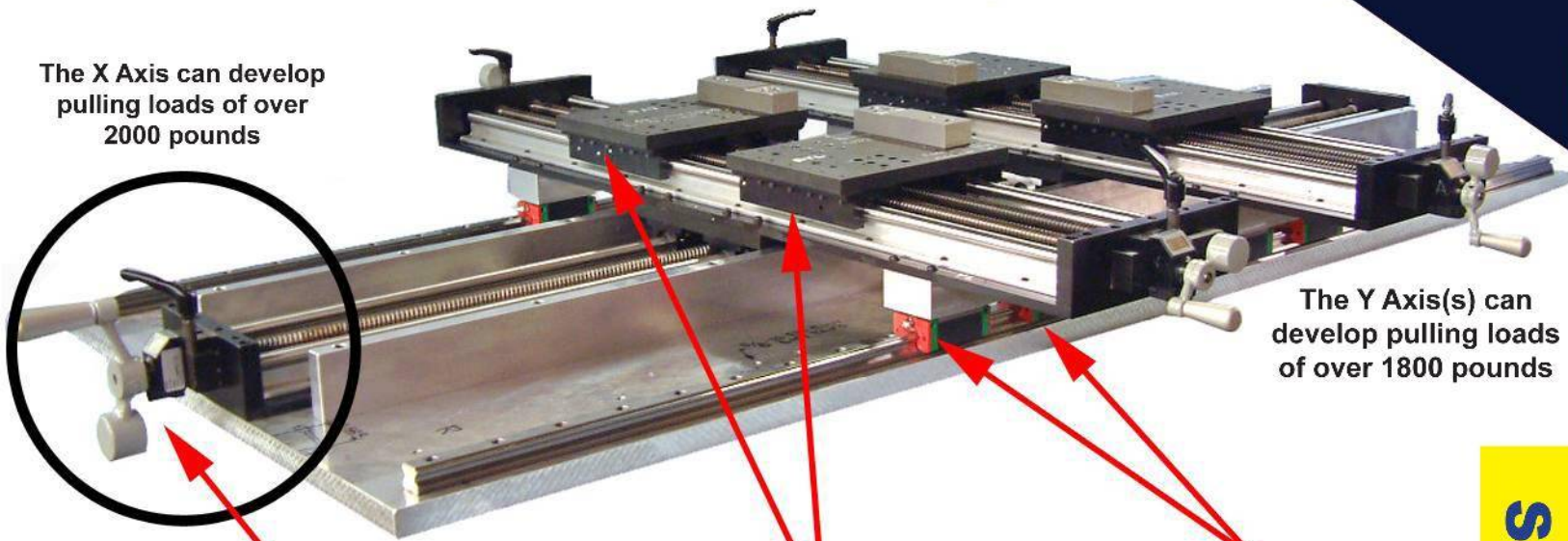
Standard lead accuracy (.004-.007"/ft)
ARO = 631 Nominal Dia x .200 RH lead
AL0 = 631 Nominal Dia x .200 LH lead
CR0 = 631 Nominal Dia x .500 RH lead
Select lead accuracy (.002-.0037"/ft)
AR1 = 631 Nominal Dia x .200 RH lead
AL1 = 631 Nominal Dia x .200 LH lead
*Other screw variations available:
*precision ground (.001"/ft)
*metric diameters and leads
*modified acme profile lead screws
with leads from .062 - 3.000" rev



Linear Slide Notes from *LM76*

The X Axis can develop
pulling loads of over
2000 pounds

The Y Axis(s) can
develop pulling loads
of over 1800 pounds



Hand Crank, Locking
Mechanism and Position
Indicator

LM76 Minuteman High Load,
Self-Lubricating Bearings

Size 25 Profile Rail
Blocks

September 4, 2013

LM76 was asked by an international leader in the manufacture of metal products for a solution to their manual manufacturing process. This system allows for the shaping, under extreme loads and pressures, of super metals like inconel, hastelloy, monel and titanium into a variety of shapes and sizes. Because this isn't a high volume business, it requires great flexibility and constant tooling changes. The nature of this product-line does not justify a very expensive, wholly automated system.

We knew the loads and stresses being applied to the base plate, bearings and ball screws would be severe so all components were designed with this in mind. So operators could easily change-out tooling and set-up for the next job, we included position indicators and quick-change anchor blocks. Lastly, so all positions can be maintained during fabrication, we included locking mechanisms and anti-backlash nuts on each axis.

**When you have an application,
LM76 has an answer...*that works!***

Call Mike Quinn 1-800-513-3163 or email your
ideas and application notes to mquinn@lm76.com

www.LM76.com

Self-Centering Slide Technology

LM76

Linear Slide Division

1-800-513-3163

3

Z (vertical) axis had to support a 150 pound load 65" out from the carriage plate

*Slides are not shown mounted in their final x, z arrangement

X Slide
Horizontal

117"

Z Slide
Vertical

68"

High Load/Washdown X & Z Axis System

Special features common to both Slides

1. Washdown/decontamination solution = 30% Hydrogen Peroxide
2. All aluminum parts are ceramic coated
3. Lead screws- 303 stainless steel, .200" RH lead, with radiused crest & root threads, X- = 1.500 Dia., -Z- = 1.000 Dia. Lead Nuts- double, pre-loaded, zero-backlash type. Stainless Nut bodies with cast polymatrix threads
4. Lead screw angular contact, ball ball bearing, journals protected by PTFE, rotary seal cartridges.
5. All fasteners i.e. screws, nuts, lock washers, snap rings, etc. are Stainless Steel

Special features specific to X Axis - Horizontal Slide

1. Shafts: 1.500 Dia. x 117" long, fully supported 303 stainless assemblies, with hard chrome plating
2. Special washdown, "Minuteman" PTFE Linear, Self-lube Bearing, Open Pillow Blocks.

Special features specific to Z Axis - Vertical Slide

1. Substantial over-turning moment tooling load.
2. Linear Motion Bearing Elements all stainless steel
 - A. High Load Monorace Assemblies - Six rollers per side = twelve total
 - B. Two Mating formed female/internal guide tracks mounted to trap stainless steel stiffeners.

For more information call: Mike Quinn or email: mquinn@LM76.com

www.LM76.com

High Load Multi-Axis Systems



Teflon Seal

LM76

Linear Motion Bearings

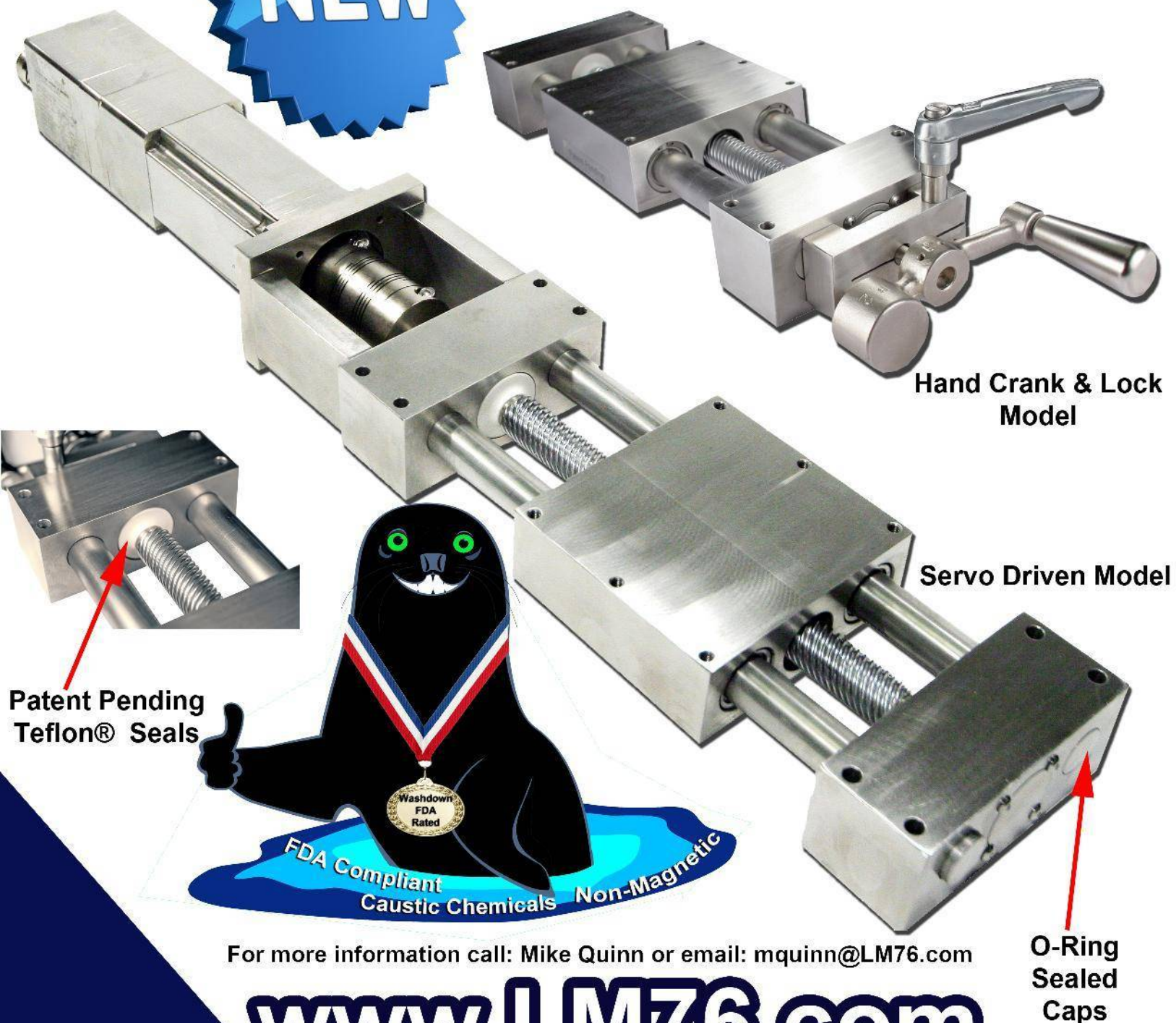
1-800-513-3163

All Stainless Seal Slides are made for applications where FDA Compliance, Caustic Washdown and non-magnetic requirements are critical to the success of your application.

The 300 Series Stainless design is enhanced with Patent Pending Teflon® Seals and O-ring Sealed Shaft Caps.

4

NEW



Hand Crank & Lock Model

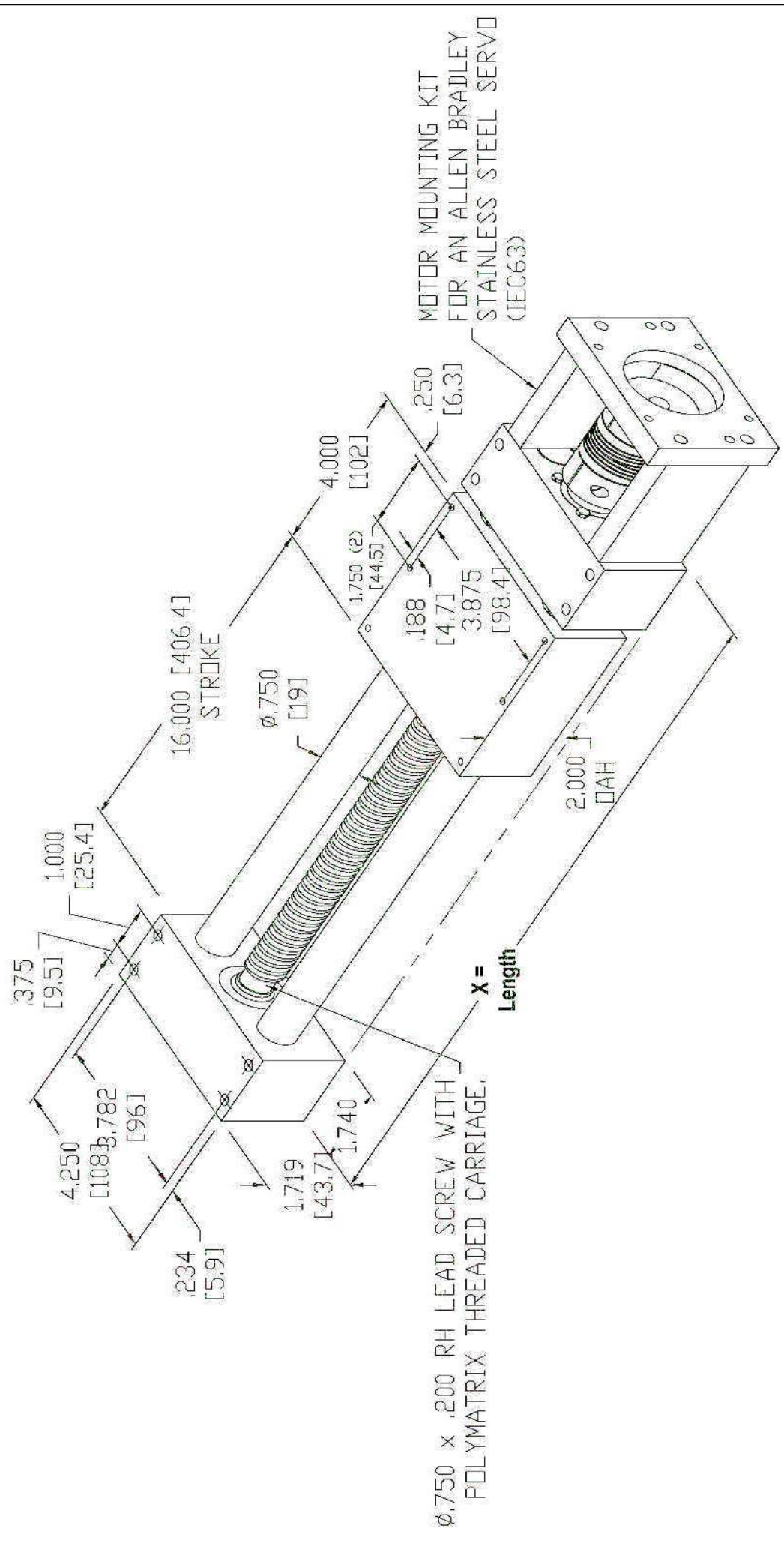
Servo Driven Model

Patent Pending Teflon® Seals

O-Ring Sealed Caps

For more information call: Mike Quinn or email: mquinn@LM76.com

www.LM76.com

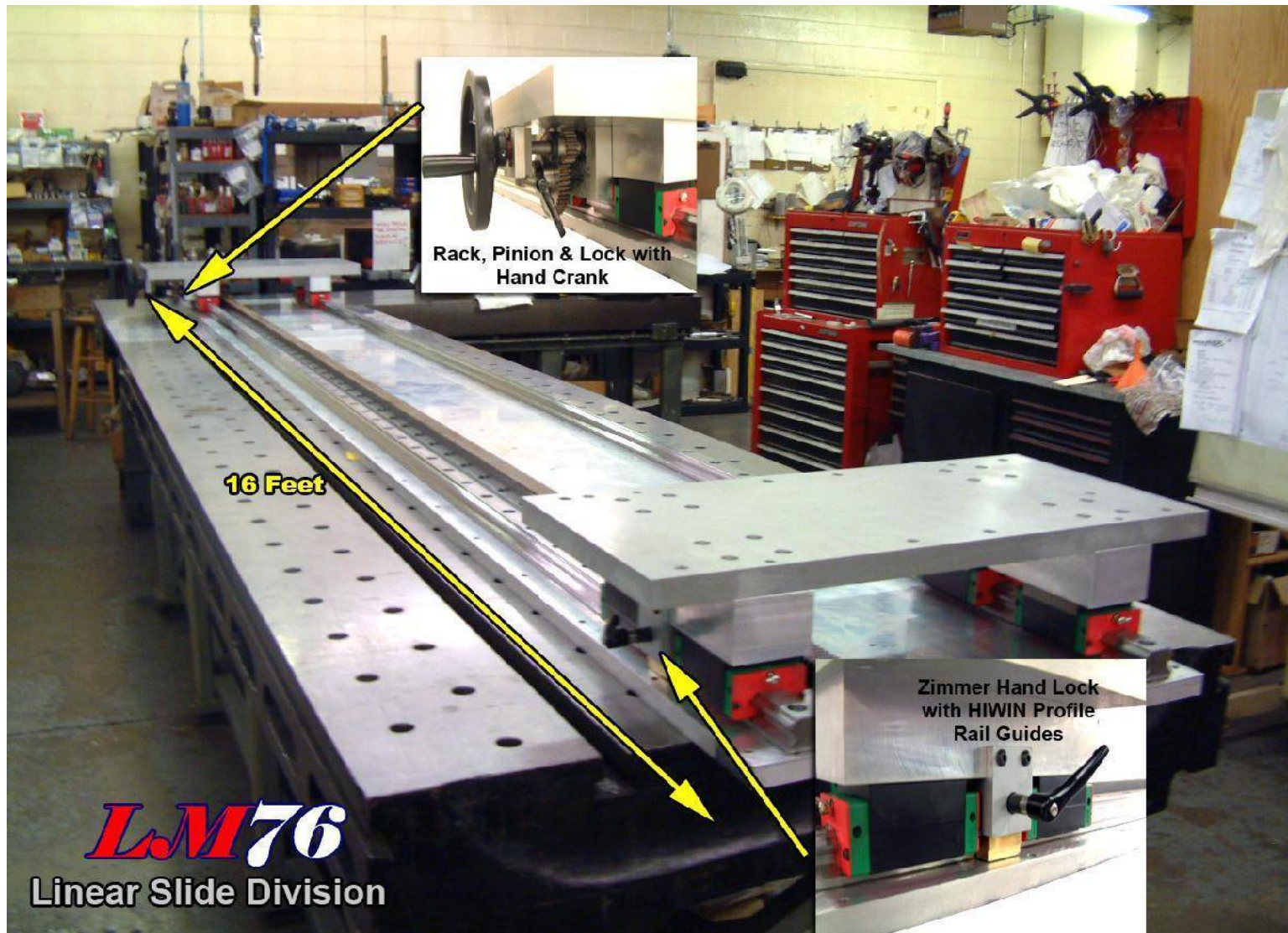


ALL EXPOSED PARTS ARE 303 STAINLESS STEEL.
ALL FASTENERS, ETC ARE STAINLESS STEEL.

[0.0] = mm

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LM ARBELL		DESCRIPTION		SHEET 1 OF 1	
140 INDUSTRIA DRIVE, FAST ONCMFADOW, MA		UNSUPPORTED STAINLESS STEEL SLIDE ASSEMBLY WITH AN IEC 63 MOTOR MOUNTING KIT		CUSTOMER:	
PH: (800)513-3163 FAX: (413)525-3735		DATE DRAWN		ASSEMBLY NO. or PROJECT NO.	
www.m76.com		4/12/07		1:2	
		SCALE		IEC63-XUV-12-024-AR0	



LM76 designs slides with you... and we stand behind them. Over the years, we have supplied hundreds of slides and ***not one has been returned because it was less than our customer expected.*** Not one. Here we have a large, 1300 pound slide that was designed from the ground-up around a very specific, aerospace application. Because this base is only a section of a much larger, proprietary system, we cannot show the upper section of the system.

LM76 was chosen from a field of competitors because our team had proven itself on 2 prior applications. Moreover, LM76's technical interface with engineering, competitive pricing, on-time delivery and level of service made our customer certain LM76 was the right design/build partner.

If you have a challenging application where an engineered solution is paramount to ***your*** success, **Call Mike Quinn 1-800-513-3163 or email your application details to: mquinn@LM76.com**



1-800-513-3163 www.LM76.com



*LM-Tarbell's modern facility in East Longmeadow Massachusetts
Home of the MINUTEMAN Linear/Rotary Bearing*

LM-Tarbell is the combination of two internationally prominent manufacturers of sleeve bearings:

J.C. Tarbell Associates

Founded in 1938, J.C. Tarbell Associates was one of the first exclusive regional distributors for Chrysler's oil impregnated bronze bearing line - a technological innovation at the time. Over the past 60 years, Tarbell has engineered this material into every product conceivable from sewing machines to jet engines. Today, Tarbell supplies engineering expertise, standard products and machined specials to companies throughout the world.

LM76

Founded in 1976, LM76 found its genesis in combating traditional problems which plagued linear ball bushings: mechanical cage/ball failure and shaft brinelling or grooving. LM76's response was their ceramic coated, direct drop-in replacement linear bearing line which was hailed as a genuine innovation by engineers and maintenance personnel alike. LM76's latest product innovation is its **MINUTEMAN Self Lubricating Linear/Rotary bearing line**. This line offers outstanding load carrying capability coupled with a remarkably low coefficient of friction.

Add these two companies together and you get a singular wealth of sleeve bearing experience. Moreover, you can be confident that our recommendations/products are solid, proven and the best your company can purchase.