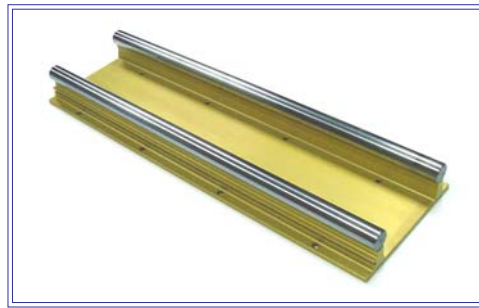
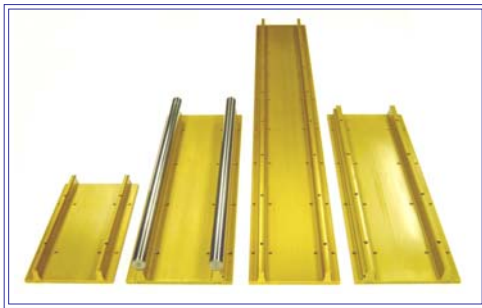


## LM76 LINEAR MOTION

### MANUFACTURER AND INTEGRATOR OF LINEAR MOTION COMPONENTS AND SYSTEMS



### DUAL SHAFT ASSEMBLIES AND SUPPORTS



#### **Product Features and Benefits:**

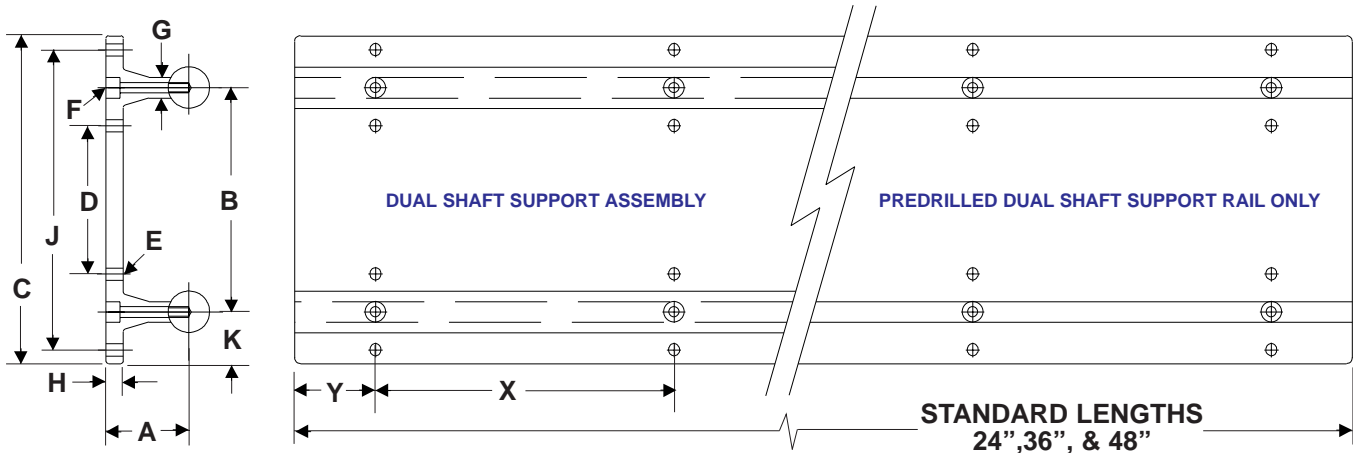
Dual shaft support assemblies and rails offer a broad range of design versatility in linear motion applications. They provide an economical means of mounting two hardened and precision ground shafts that are parallel, mounted, and aligned to a single aluminum extrusion base. Two key features of this design include a machined reference edge on one side of the dual shaft support for easy mounting and an extruded T-slot that facilitates the mounting of limit switches that are adjustable along the entire length of the support. The “SMPRA” dual shaft support assemblies are the foundation for the single and multi-axis Gold Series Systems. The “SSCA” and “TSCA” carriage assemblies are prealigned to match the dual shaft support assemblies and incorporate either linear ball bearings or self-lubricating bearings depending on the type of application. These assemblies are a quick and efficient solution that will enable you to achieve a linear system configuration suited to your particular needs. LM76 LINEAR MOTION also provides complete in-house machining capabilities offering total solutions in this product range for your linear motion requirements. Most importantly, we provide you consistently with the best delivery in the industry on standard and engineered dual shaft supports.

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## LM76 LINEAR MOTION

### DUAL SHAFT SUPPORT ASSEMBLIES AND PREDRILLED DUAL SHAFT SUPPORT RAILS



SHAFT DIA.	DUAL SHAFT SUPPORT ASSEMBLY	PREDRILLED DUAL SHAFT SUPPORT RAIL	A +/-0.001	B +/-0.001	C	D	E BOLT	E HOLE
3/4	SMPRA-12	SMPR-12-PD	1.500	4.500	6.250	3.250	10	.221
1	SMPRA-16	SMPR-16-PD	1.750	5.250	7.375	3.750	1/4	.281
1-1/2	SMPRA-24	SMPR-24-PD	2.500	6.625	9.625	4.375	5/16	.343

SHAFT DIA.	F SCREW	F HOLE	G	H	J	K +/-0.001	X	Y	WT/FT LBS **
3/4	10-32 x 1-1/4	.221	3/8	.275	5.750	0.875	6	3	6.99
1	1/4-20 x 1-1/2	.281	1/2	.295	6.750	1.062	6	3	10.35
1-1/2	3/8-16 x 2	.406	11/16	.415	8.875	1.500	8	4*	21.68

#### NOTES:

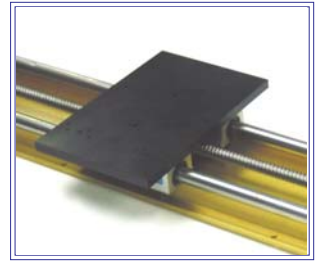
- (\*) SMPR-24-PD-36" (Y=2")
- (\*\*) WT/FT INCLUDES DUAL SHAFT SUPPORT RAIL ASSEMBLED WITH TWO (2) SHAFTS
- CUT TO LENGTH SECTIONS (AVAILABLE UPON REQUEST, MAX. INDIVIDUAL LENGTH = 72 IN.)
- MATERIAL SPECIFICATIONS: 1060 HARDENED AND PRECISION GROUND SHAFTING, CLASS "L"
- 303, 316, 440C STAINLESS STEEL HARDENED AND PRECISION GROUND SHAFT (AVAILABLE UPON REQUEST)
- STANDARD SHAFT FINISH: NONE, OPTIONAL SHAFT FINISH: CHROME, BLACK OXIDE, \*\*\*ARMOLOY®
- STANDARD SUPPORT FINISH: GOLD ANODIZED, OPTIONAL SUPPORT FINISH: UNPLATED. CLEAR, BLUE, OR BLACK ANODIZED
- INDUSTRY STANDARD HOLE SPACING FOR SHAFTING AND DUAL SHAFT SUPPORT SYSTEM
- 6061-T6 ALUMINUM DUAL SHAFT SUPPORT
- CUSTOM DUAL SHAFT SUPPORT AND ASSEMBLY INQUIRES CAN BE FAXED OR EMAILED TO: (413) 525-3735 mquinn@lm76.com
- (\*\*\*) ARMOLOY IS A REGISTERED TRADEMARK OF THE ARMOLOY CORP

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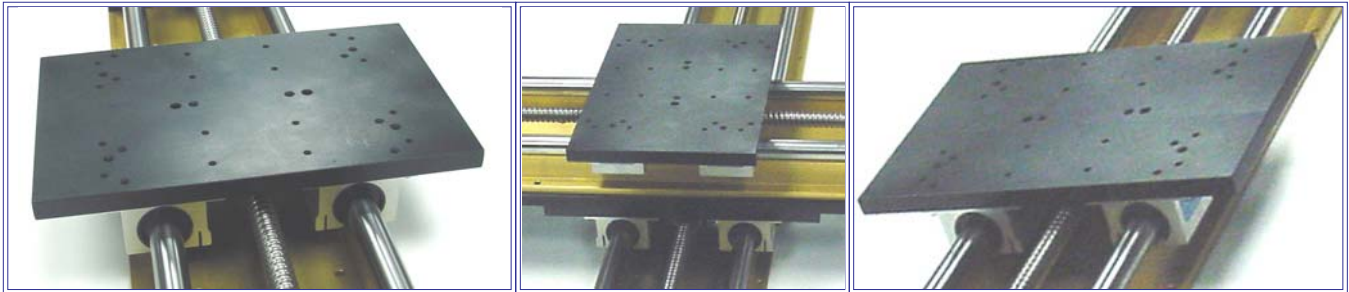
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## LM76 LINEAR MOTION

MANUFACTURER AND INTEGRATOR OF  
LINEAR MOTION COMPONENTS  
AND SYSTEMS



### CARRIAGE ASSEMBLIES INCORPORATING LINEAR BALL BEARINGS



#### Product Features and Benefits:

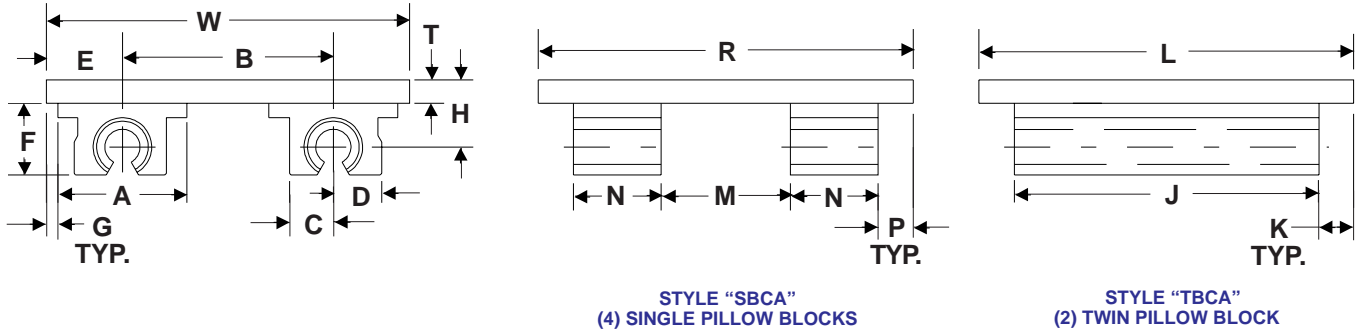
These precision machined carriage assemblies are offered in two standard styles incorporating linear ball bearings in single or twin pillow block configuration. The open pillow block bearing design provides self-alignment capabilities in all directions along with high load, long life, and low friction qualities for these engineered components. Open pillow blocks have two seals and an adjustment screw that can easily eliminate clearance between the shaft and bearing or to provide an adjustable preload. Carriage plate assemblies can be furnished with premachined mounting holes to simplify installation. The "SBCA" and "TBCA" carriage assemblies are prealigned to match the "SMPRA" dual shaft support assemblies or the "SMRA" single shaft support assemblies. LM76 LINEAR MOTION also provides complete in-house machining capabilities offering total solutions in this product range for your linear motion requirements. Most importantly, we provide you consistently with the best delivery in the industry on standard and engineered carriage assemblies.

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## LM76 LINEAR MOTION

### CARRIAGE ASSEMBLIES INCORPORATING LINEAR BALL BEARINGS FOR DUAL SHAFT SUPPORT OR SINGLE (SMRA-) TYPE SUPPORT ASSEMBLY



SHAFT DIA.	SINGLE CARRIAGE ASSEMBLY	TWIN CARRIAGE ASSEMBLY	A	B	C	D	E	F	G	H	J
1/2	SBCA-8	TBCA-8	2.00	3.000	.69	.90	1.25	1.10	.25	1.062	3.50
5/8	SBCA-10	TBCA-10	2.50	3.750	.88	1.10	1.50	1.38	.25	1.250	4.00
3/4	SBCA-12	TBCA-12	2.75	4.500	.94	1.16	1.62	1.54	.25	1.437	4.50
1	SBCA-16	TBCA-16	3.25	5.250	1.19	1.46	1.88	1.98	.25	1.687	6.00
1-1/4	SBCA-20	TBCA-20	4.00	6.000	1.50	1.83	2.25	2.48	.25	2.250	7.50
1-1/2	SBCA-24	TBCA-24	4.75	6.625	1.75	2.09	2.69	2.91	.31	2.750	9.00
2	SBCA-32	TBCA-32	6.00	7.250	2.25	2.64	3.38	3.66	.38	3.375	10.00

SHAFT DIA.	K	M	N	P	T	W	R	L	SBCA LOAD (LBS)	SBCA WEIGHT (LBS)	TBCA LOAD (LBS)	TBCA WEIGHT (LBS)
1/2	1.25	8.50	1.50	.25	.375	5.50	12.00	6.00	720	3.29	740	2.01
5/8	1.00	8.00	1.75	.25	.375	6.75	12.00	6.00	1280	4.60	1280	3.08
3/4	.75	7.75	1.88	.25	.500	7.75	12.00	6.00	1880	6.61	1500	4.27
1	.00	6.25	2.62	.25	.500	9.00	12.00	6.00	3120	9.95	2720	6.63
1-1/4	.25	4.75	3.38	.25	.750	10.50	12.00	8.00	4680	18.73	3940	14.54
1-1/2	1.50	10.00	3.75	.25	1.000	12.00	18.00	12.00	6240	35.34	4740	27.44
2	1.00	8.00	4.75	.25	1.250	14.00	18.00	12.00	9400	58.07	4320	48.04

**NOTES:**

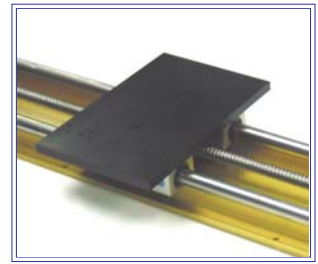
- ALL LOAD RATINGS BASED ON APPLICATION POINT APPLIED AT CENTER OF CARRIAGE PLATE.
- MATERIAL SPECIFICATIONS (CARRIAGE PLATE ): 6061-T6 ALUMINUM, STAINLESS STEEL
- STANDARD CARRIAGE PLATE FINISH: BLACK ANODIZED, OPTIONAL CARRIAGE PLATE FINISH: UNPLATED, CLEAR , BLUE, OR GOLD ANODIZED ALUMINUM
- CUSTOM CARRIAGE PLATE ASSEMBLY INQUIRES CAN BE FAXED OR EMAILED TO: (413) 525-3735 mquinn@lm76.com

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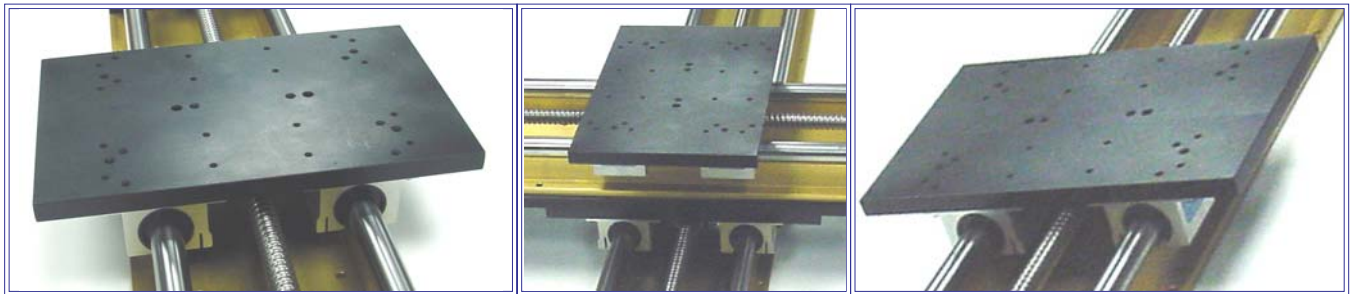
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## LM76 LINEAR MOTION

MANUFACTURER AND INTEGRATOR OF  
LINEAR MOTION COMPONENTS  
AND SYSTEMS



### CARRIAGE ASSEMBLIES INCORPORATING LINEAR SELF-LUBRICATING BEARINGS



#### Product Features and Benefits:

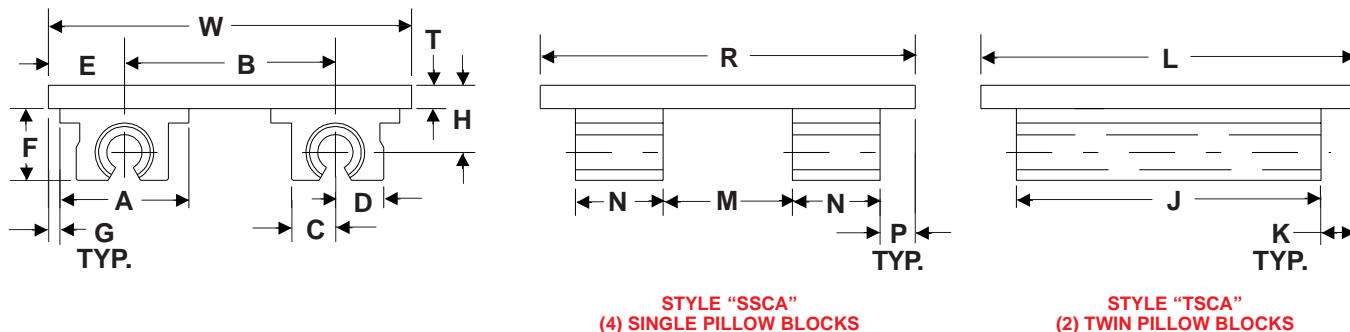
These precision machined carriage assemblies are offered in two standard styles incorporating self-lubricating bearings in single or twin pillow block configuration. The open pillow block bearing design provides self-alignment capabilities in all directions along with higher load capacities compared to linear ball bearings. Self-lubricating bearings offer consistent friction characteristics that do not increase over life and maintain close fits resulting in shaft wiping which eliminates the need for seals. The self-lubricating bearings can also embed hard particulate matter preventing galling and shaft damage. Carriage plate assemblies can be furnished with premachined mounting holes to simplify installation. The “SSCA” and “TSCA” carriage assemblies are prealigned to match the “SMPRA” dual shaft support assemblies or the “SMRA” single shaft support assemblies. LM76 LINEAR MOTION also provides complete in-house machining capabilities offering total solutions in this product range for your linear motion requirements. Most importantly, we provide you consistently with the best delivery in the industry on standard and engineered carriage assemblies.

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## LM76 LINEAR MOTION

### CARRIAGE ASSEMBLIES INCORPORATING LINEAR SELF-LUBRICATING BEARINGS FOR DUAL SHAFT SUPPORT OR SINGLE (SMRA-) TYPE SUPPORT ASSEMBLY



SHAFT DIA.	SINGLE CARRIAGE ASSEMBLY	TWIN CARRIAGE ASSEMBLY	A	B	C	D	E	F	G	H	J
1/2	SSCA-8	TSCA-8	2.00	3.000	.69	.90	1.25	1.10	.25	1.062	3.50
5/8	SSCA-10	TSCA-10	2.50	3.750	.88	1.10	1.50	1.38	.25	1.250	4.00
3/4	SSCA-12	TSCA-12	2.75	4.500	.94	1.16	1.62	1.54	.25	1.437	4.50
1	SSCA-16	TSCA-16	3.25	5.250	1.19	1.46	1.88	1.98	.25	1.687	6.00
1-1/4	SSCA-20	TSCA-20	4.00	6.000	1.50	1.83	2.25	2.48	.25	2.250	7.50
1-1/2	SSCA-24	TSCA-24	4.75	6.625	1.75	2.09	2.69	2.91	.31	2.750	9.00
2	SSCA-32	TSCA-32	6.00	7.250	2.25	2.64	3.38	3.66	.38	3.375	10.00

SHAFT DIA.	K	M	N	P	T	W	R	L	SSCA LOAD (LBS)	SSCA WEIGHT (LBS)	TSCA LOAD (LBS)	TSCA WEIGHT (LBS)
1/2	1.25	8.50	1.50	.25	.375	5.50	12.00	6.00	3900	3.29	3900	2.01
5/8	1.00	8.00	1.75	.25	.375	6.75	12.00	6.00	5880	4.60	5880	3.08
3/4	.75	7.75	1.88	.25	.500	7.75	12.00	6.00	7620	6.61	7620	4.27
1	.00	6.25	2.62	.25	.500	9.00	12.00	6.00	14100	9.95	14100	6.63
1-1/4	.25	4.75	3.38	.25	.750	10.50	12.00	8.00	20580	18.73	20580	14.54
1-1/2	1.50	10.00	3.75	.25	1.000	12.00	18.00	12.00	28200	35.34	28200	27.44
2	1.00	8.00	4.75	.25	1.250	14.00	18.00	12.00	50100	58.07	50100	48.04

**NOTES:**

- ALL LOAD RATINGS BASED ON APPLICATION POINT APPLIED AT CENTER OF CARRIAGE PLATE.
- MATERIAL SPECIFICATIONS (CARRIAGE PLATE ): 6061-T6 ALUMINUM, STAINLESS STEEL
- STANDARD CARRIAGE PLATE FINISH: BLACK ANODIZED, OPTIONAL CARRIAGE PLATE FINISH: UNPLATED, CLEAR , BLUE, OR GOLD ANODIZED ALUMINUM
- CUSTOM CARRIAGE PLATE ASSEMBLY INQUIRES CAN BE FAXED OR EMAILED TO: (413) 525-3735 mquinn@lm76.comLM76L

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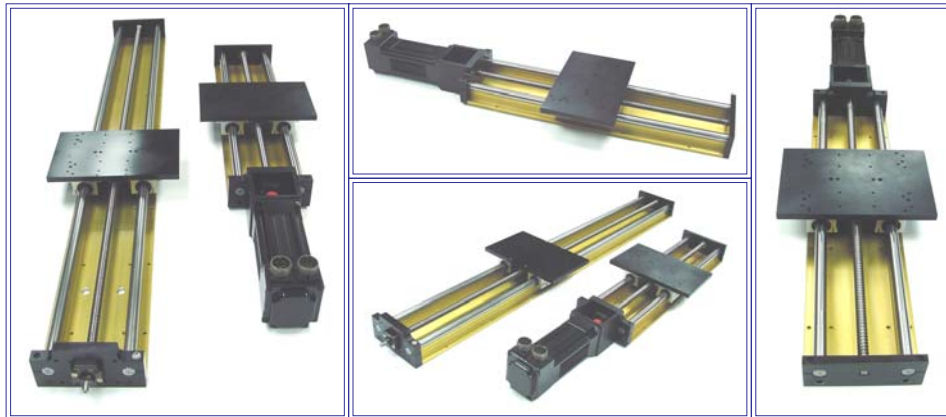
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## LM76 LINEAR MOTION

MANUFACTURER AND INTEGRATOR OF  
LINEAR MOTION COMPONENTS  
AND SYSTEMS



### SINGLE AXIS LINEAR GOLD SERIES SYSTEMS



#### Product Features and Benefits:

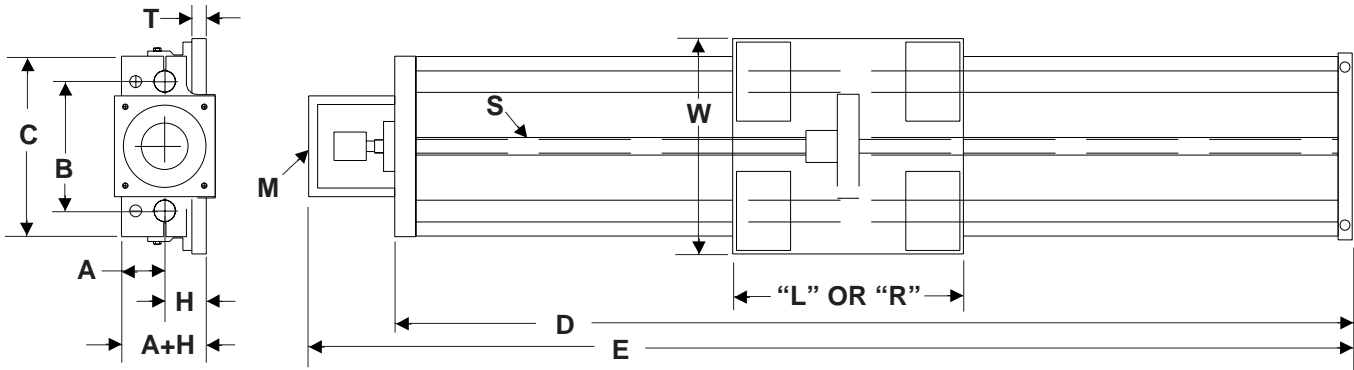
Single axis GOLD SERIES systems deliver an integrated linear motion package. These slides are based on the “SMPRA” dual shaft support assemblies and are offered with options that can be tailored to your specific requirements. **Key standard features include: prealigned carriage assemblies, machined acme or ball screw assemblies, drive and support end bearing plates, and extruded motor mounting plates. Optional features based on application type include: stepper or servo motor, preloaded nut assembly for drive screw, encoders, limit switches, and waycovers.** LM76 LINEAR MOTION also provides complete in-house machining capabilities offering total solutions in this product range for your linear motion requirements. Most importantly, we provide you consistently with the best delivery in the industry on standard and engineered single axis slides.

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## LM76 LINEAR MOTION

### SINGLE AXIS LINEAR GOLD SERIES SYSTEMS



SHAFT DIA.	SINGLE AXIS SYSTEM	A +/- .001	B +/- .001	C	D	E	H
3/4	SALS-12	1.500	4.500	6.250	PER APPLICATION	PER APPLICATION	1.437
1	SALS-16	1.750	5.250	7.375	PER APPLICATION	PER APPLICATION	1.687
1-1/2	SALS-24	2.500	6.625	9.625	PER APPLICATION	PER APPLICATION	2.750

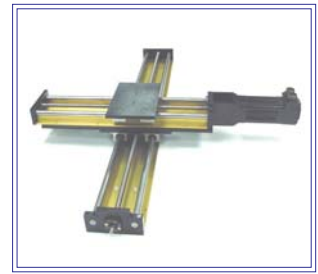
SHAFT DIA.	A + H	L (4) SINGLE PILLOW BLOCK BEARINGS	R (2) TWIN PILLOW BLOCK BEARINGS	M NEMA FRAME	S DRIVE SCREW	T	W
3/4	2.937	6.00	12.00	23, 34, 42	BALL OR ACME	.500	7.75
1	3.438	6.00	12.00	23, 34, 42	BALL OR ACME	.500	9.00
1-1/2	5.250	12.00	18.00	23, 34, 42	BALL OR ACME	1.000	12.00

**NOTES:**

- ALL SYSTEM DIMENSIONS AND SPECIFICATIONS ARE FOUND ON "DUAL SHAFT ASSEMBLIES AND SUPPORTS" AND "CARRIAGE ASSEMBLIES" DATA SHEETS FOUND ON PAGES 10 thru 15 OF THIS CATALOG.
- THESE SINGLE AXIS GOLD SERIES SYSTEMS CAN BE COMBINED TO ACHIEVE MULTI-AXIS POSITIONING SYSTEMS.
- CUSTOM SINGLE AXIS GOLD SERIES SYSTEM INQUIRES CAN BE FAXED OR EMAILED TO: (413) 525-3735 [mquinn@lm76.com](mailto:mquinn@lm76.com)

## LM76 LINEAR MOTION

MANUFACTURER AND INTEGRATOR OF  
LINEAR MOTION COMPONENTS  
AND SYSTEMS



## MULTI-AXIS LINEAR GOLD SERIES SYSTEMS



### Product Features and Benefits:

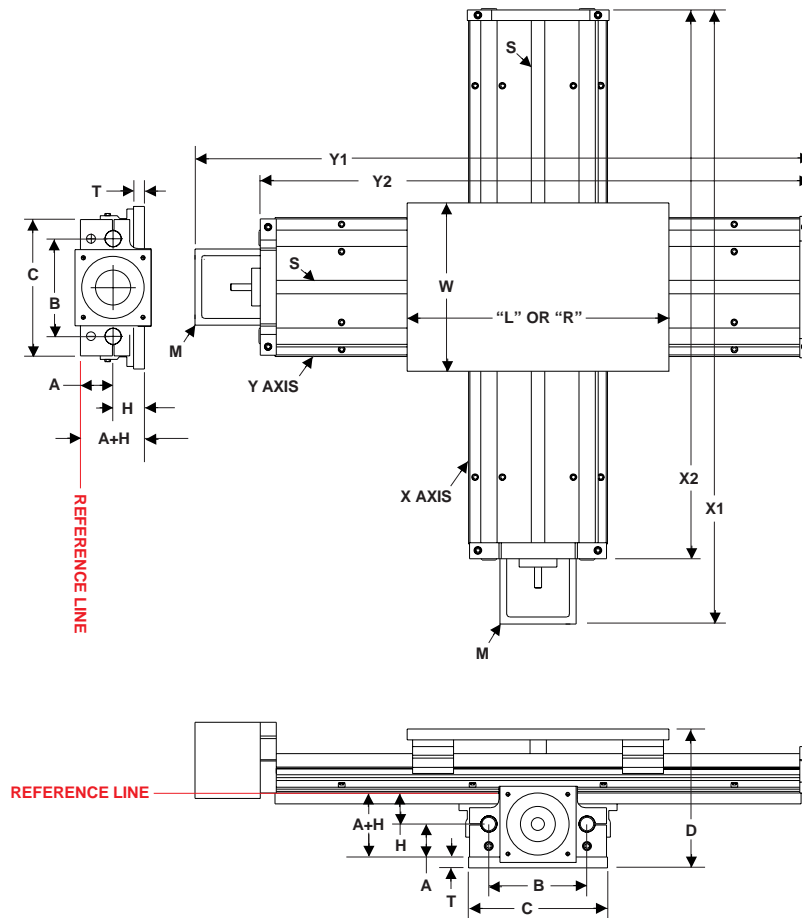
Multi-axis Gold Series Systems deliver an advanced linear motion package. These slides are based on the single axis Gold Series Systems and are offered with options that can be tailored to your specific requirements. These systems can also integrate a third axis when required. Key standard features include: prealigned carriage assemblies, machined acme or ball screw assemblies, drive and support end bearing plates, and extruded motor mounting plates. Optional features based on application type include: stepper or servo motor, preloaded nut assembly for drive screw, encoders, limit switches, and waycovers. LM76 LINEAR MOTION also provides complete in-house machining capabilities offering total solutions in this product range for your linear motion requirements. Most importantly, we provide you consistently with the best delivery in the industry on standard and engineered multi-axis slides.

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# LM76 LINEAR MOTION

## MULTI-AXIS LINEAR GOLD SERIES SYSTEMS



SHAFT DIA.	MULTI-AXIS SYSTEM <sup>M</sup>	A +/-0.001	B +/-0.001	C	*D	H	A + H
3/4	MALS-12	1.500	4.500	6.250	5.875	1.437	2.937
1	MALS-16	1.750	5.250	7.375	6.875	1.687	3.438
1-1/2	MALS-24	2.500	6.625	9.625	10.500	2.750	5.250

SHAFT DIA.	X1, X2, Y1, & Y2	L (4) SINGLE PILLOW BLOCK BEARINGS	R (2) TWIN PILLOW BLOCK BEARINGS	M NEMA FRAME	S DRIVE SCREW	T	W
3/4	PER APPLICATION	6.00	12.00	23, 34, 42	BALL OR ACME	.500	7.75
1	PER APPLICATION	6.00	12.00	23, 34, 42	BALL OR ACME	.500	9.00
1-1/2	PER APPLICATION	12.00	18.00	23, 34, 42	BALL OR ACME	1.000	12.00

### NOTES:

- (\*) THE "D" DIMENSION IS BASED ON BOTH THE "X" AND "Y" AXIS HAVING THE SAME SHAFT DIAMETER DUAL SUPPORT
- ALL SYSTEM DIMENSIONS AND SPECIFICATIONS ARE FOUND ON "DUAL SHAFT ASSEMBLIES AND SUPPORTS" AND "CARRIAGE ASSEMBLIES" DATA SHEETS FOUND ON PAGES 10 thru 15 OF THIS CATALOG.
- CUSTOM MULTI-AXIS GOLD SERIES SYSTEM INQUIRES CAN BE FAXED OR EMAILED TO: (413) 525-3735 [mquinn@lm76.com](mailto:mquinn@lm76.com)

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