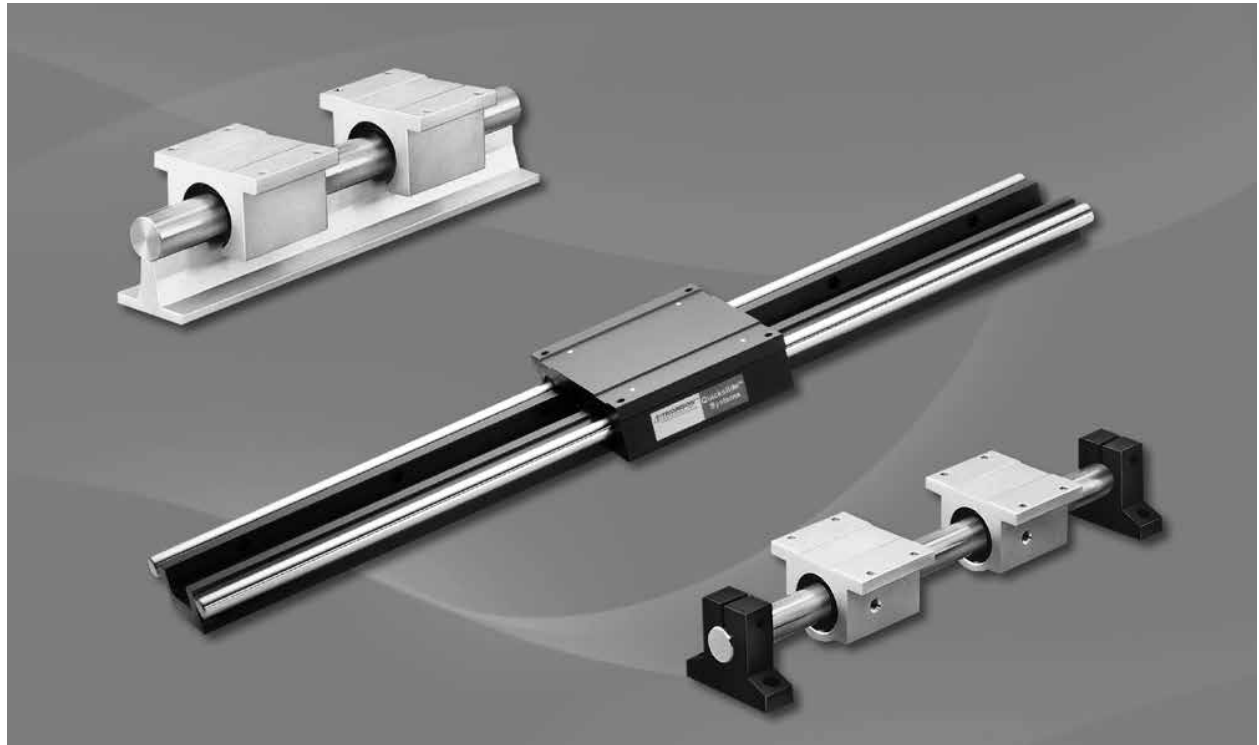




## RoundRail Linear Guides



<b>RoundRail Linear Guides</b> .....	<b>224</b>
End Support 1BA.....	227
End Support 1NA .....	229
Continuous Support 1CA .....	232
Continuous Support 1PA.....	234
FluoroNyliner 1VA.....	237
Side Mounted 1DA.....	240
Dual Shaft Rail 2DA.....	243
Twin Shaft Web 2CA.....	246
Accessories.....	248

**Thomson RoundRail Linear Guides and Components**

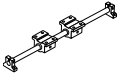
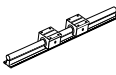
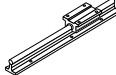
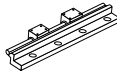
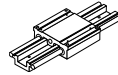
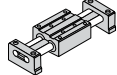
Pre-assembled, ready-to-install stages providing low friction, smooth, accurate motion for a wide range of moment or normal loading configurations. Market applications include factory automation, medical, packaging, machine tool, semiconductor, printing, automotive assembly, aerospace and food processing. Slide tables are available as customizable linear guides to multi-axis, turnkey systems complete with motors, drives, controls and electromechanical accessories.

- Applications typically on factory machinery where accurate, smooth linear positioning is required.
- Available with servo/stepper motor and drive packages.
- Max thrust to 3100 lb.
- Strokes to 120".
- Loads from 5 - 2000 lb.
- Repeatability to 0.0002".

RoundRail linear guides are the non-driven building blocks for linear slide tables. They offer the end user flexibility to fit specific envelopes by allowing customized separations between shafts and between bearings on shafts to produce higher moment capacity. When combined with ball screw assemblies, they become a driven slide table.

Because RoundRail linear guides are offered in a wide range of sizes, bearing types and mounting configurations, they are typically selected by the qualitative attributes that are most appropriate for a given application (i.e. environmental considerations, mounting footprint). For this reason, we are providing the following selection chart and selection criteria for consideration:

**Systems Quick Reference Guide**

Application Criteria	End Support	Continuous Support	FluoroNyliner	Side Mounted	Dual Shaft Rail	Twin Shaft Web
						
	<b>1BA / 1NA</b>	<b>1 CA / 1PA</b>	<b>1 VA</b>	<b>1 DA</b>	<b>2DA</b>	<b>2CA</b>
<b>High Loads</b>		•	•			
<b>Equivalent Loads in All Directions</b>	•				•	
<b>Ultra Compactness</b>	•					•
<b>Extreme Smoothness</b>	•	•		•		•
<b>End Supported</b>	•				•	•
<b>Single Rail</b>						•
<b>Harsh Environment</b>			•			
<b>Low-Cost Installation (multiple rail)</b>	•	•	•	•		
<b>Complete Axis Solution</b>						•
<b>Available Sizes:</b>	<b>Inch</b>	4 thru 24	8 thru 24	8 thru 24	•	•
	<b>Metric</b>	8 thru 40	12 thru 40		8 thru 16	8 thru 16
<b>Page Number</b>	231/233	236/238	241	244	247	250

**Linear Guide Selection Criteria**

- Load/Life
- Travel Accuracy
- Rigidity
- Smoothness of Travel
- Speed & Acceleration
- Envelope
- Environment
- Cost of Product
- Cost of Installation
- Cost of Replacement

**Application Examples**

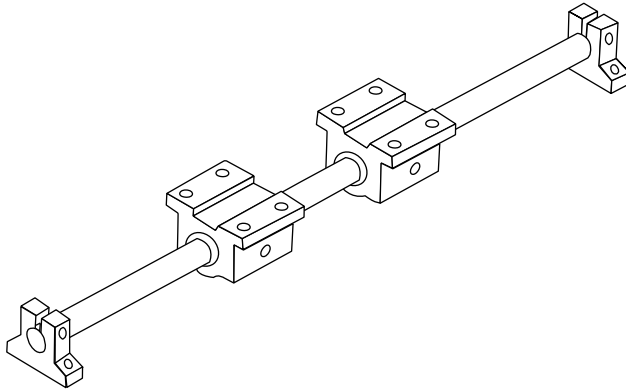
- Machine Tools
- Packaging Machinery
- Automotive Assembly Equipment
- Semiconductor Equipment
- Medical Equipment
- Food Processing Equipment

www.thomsonlinear.com



## End Support Linear Ball Guides

Easy to install, smooth operation,  
self aligning, high speed



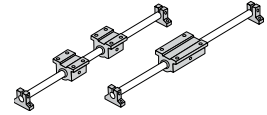
### End Support Linear Ball Guides Offer:

- Increased life within the same envelope. RoundRail linear guides feature the new patented Super Smart Ball Bushing® Bearings for up to 216X the life or 6X the load capacity of conventional bearings.
- Cost savings: save time and money preparing your mounting surfaces before bolting down RoundRail linear guides.
- End supported for gantry style or 'bridge' applications.
- The RoundRail Advantage. The inherent self-aligning-in-all-directions design of the Super Smart Ball Bushing Bearing allows for ultra-smooth travel when mounted to wider-toleranced prepared surfaces.
- The Super Smart Ball Bushing Bearing... the most technologically advanced and most robust linear bearing in the world.
- Corrosion-resistant versions for maximum performance in harsh environments.

Thomson RoundRail Linear Guides and Components

# End Support 1BA

## End-Supported, Industry Standard Dimension Inch



### Features

- Requires only one part number to specify entire linear guide.
- Available with 60 Case® LinearRace® shaft end support blocks in either lightweight aluminum or rigid iron materials.
- Used to provide increased stability or torque resistance in linear system applications.

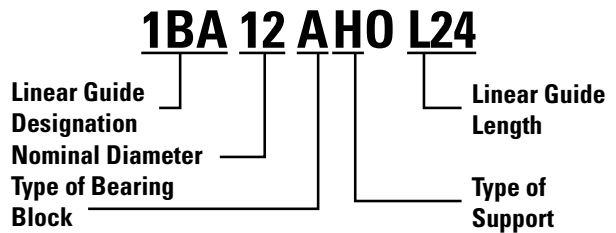
### Components

- 2 Super Smart Ball Bushing pillow blocks or 1 Super Smart Ball Bushing twin pillow block.
- 1 60 Case LinearRace shaft.
- 2 shaft end support blocks.

### Specifying this Thomson Linear Guide

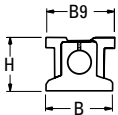
1. Determine the proper Linear Guide for your load and life requirements.
2. Select the part number.
3. Add the letter "L" followed by the overall length in inches, as a suffix to the part number.

### Part Numbering System

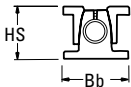


### Dimensions (Inch)

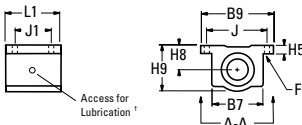
#### Type ASB End Support Block



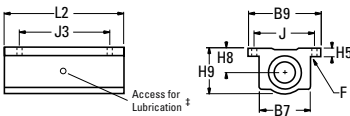
#### Type SB End Support Block



#### Type SSUPB Super Smart and SPB Super Ball Bushing Pillow Blocks

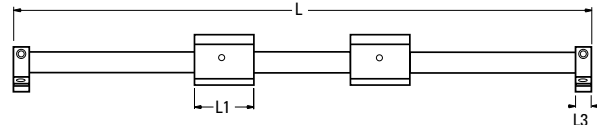


#### Type SSUTWN Super Smart and TWN Super Ball Bushing Twin Pillow Blocks

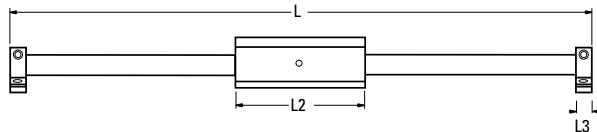


‡ Sizes .250, .375 and .500 have oil lubricant fitting. Sizes .625 and above have 1/4-28 access for lubrication.

#### Single End Supported Linear Guide with 2 Pillow Blocks

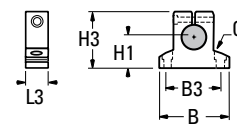


#### Single End Supported Linear Guide with 1 Twin Pillow Block



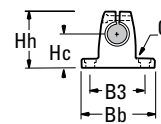
### Aluminum

#### Type ASB LinearRace Shaft End Support Block

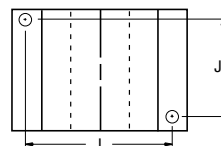


### Steel

#### Type SB LinearRace Shaft End Support Block



#### Type SPB Super Ball Bushing Pillow Block Mounting Hole Position for Sizes .250 and .375



View A-A



### End-Support Linear Guide 1BA with 2 Pillow Blocks (Dimensions in inches)

Part Number		Nominal Diameter	L1	L3	H	HS	B	Bb	B9	Pillow Block	Shaft Support	
With Type ASB Shaft Supports	With Type SB Shaft Supports										Type ASB	Type SB
1BA04AHO	–	.250	1.19	.50	.937	–	1.50	–	1.63	SPB4-XS	ASB4-XS	–
1BA06AHO	–	.375	1.31	.56	10.62	–	1.63	–	1.75	SPB6-XS	ASB6-XS	–
1BA08AHO	1BA08AJ0	.500	1.69	.63	1.562	1.687	2.00	2.00	2.00	SSUPB8-XS	ASB8-XS	SB8-XS
1BA12AHO	1BA12AJ0	.750	2.06	.75	2.062	2.187	2.50	2.75	2.75	SSUPB12-XS	ASB12-XS	SB12-XS
1BA16AHO	1BA16AJ0	1.000	2.81	1.00	2.562	2.687	3.25	3.25	3.25	SSUPB16-XS	ASB16-XS	SB16-XS
–	1BA20AJ0	1.250	3.63	1.13	–	3.250	–	–	4.00	SSUPB20-XS	–	SB20-XS
1BA24AHO	1BA24AJ0	1.500	4.00	1.25	3.750	3.750	4.75	4.75	4.75	SSUPB24-XS	ASB24-XS	SB24-XS

### End-Support Linear Guide 1BA with 1 Twin Pillow Block (Dimensions in inches)

Part Number		Nominal Diameter	L2	L3	H	HS	B	Bb	B9	Max Stroke Length	Pillow Block	Shaft Support	
With Type ASB Shaft Supports	With Type SB Shaft Supports											Type ASB	Type SB
1BA04BHO	–	.250	2.50	.50	.937	–	1.50	–	1.63	L-(3.50)	TWN4-XS	ASB4-XS	–
1BA06BHO	–	.375	2.75	.56	10.62	–	1.63	–	1.75	L-(3.88)	TWN6-XS	ASB6-XS	–
1BA08BHO	1BA08BJ0	.500	3.50	.63	1.562	1.687	2.00	2.00	2.00	L-(4.75)	SSUTWN8-XS	ASB8-XS	SB8-XS
1BA12BHO	1BA12BJ0	.750	4.50	.75	2.062	2.187	2.50	2.75	2.75	L-(6.00)	SSUTWN12-XS	ASB12-XS	SB12-XS
1BA16BHO	1BA16BJ0	1.000	6.00	1.00	2.562	2.687	3.25	3.25	3.25	L-(8.00)	SSUTWN16-XS	ASB16-XS	SB16-XS
–	1BA20BJ0	1.250	7.50	1.13	–	3.250	–	–	4.00	L-(9.75)	SSUTWN20-XS	–	SB20-XS
1BA24BHO	1BA24BJ0	1.500	9.00	1.25	3.750	3.750	4.75	4.75	4.75	L-(11.50)	SSUTWN24-XS	ASB24-XS	SB24-XS

Shaft Deflection Note: Load limit may be below the dynamic load rating due to shaft deflection. Bearings can accommodate up to 1/2° deflection. See Engineering section (page 265) for Deflection calculations.

### Dynamic Load Capacity Matrix (4 million inches travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (lb.) (Even Distribution)	Pillow Block Part Number	Pillow Block Dynamic Load Capacity (lb.)	
1BA04AHO	–	100	SPB4-XS	50
1BA06AHO	–	160	SPB6-XS	80
1BA08AHO	1BA08AJ0	800	SSUPB8-XS	400
1BA12AHO	1BA12AJ0	1800	SSUPB12-XS	900
1BA16AHO	1BA16AJ0	3000	SSUPB16-XS	1500
–	1BA20AJ0	3730	SSUPB20-XS	1865
1BA24AHO	1BA24AJ0	6160	SSUPB24-XS	3080

### Dynamic Load Capacity Matrix (4 million inches travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (lb.) (Even Distribution)	Pillow Block Part Number	Pillow Block Dynamic Load Capacity (lb.)	
1BA04BHO	–	100	TWN4-XS	100
1BA06BHO	–	160	TWN6-XS	160
1BA08BHO	1BA08BJ0	800	SSUTWN8-XS	800
1BA12BHO	1BA12BJ0	1800	SSUTWN12-XS	1800
1BA16BHO	1BA16BJ0	3000	SSUTWN16-XS	3000
–	1BA20BJ0	3730	SSUTWN20-XS	3730
1BA24BHO	1BA24BJ0	6160	SSUTWN24-XS	6160

† Super Ball Bushing Bearings are used in .250 and .375 inch size pillow blocks.

## Replacement Component Dimensions

### Type SPB and SSUPB Pillow Blocks (Dimensions in inches)

Part Number	Nom. Dia.	L1	H9	H8	H5	B9	B7	J	J1	F		Wt. (lb)
										Bolt	Hole	
SPB4-XS	.250	1.19	.81	.437	.19	1.63	1.00	1.31	.75 <sup>(2)</sup>	#6	.16	.10
SPB6-XS	.375	1.31	.94	.500	.19	1.75	1.12	1.44	.88 <sup>(2)</sup>	#6	.16	.13
SSUPB8-XS	.500	1.69	1.25	.687	.25	2.00	1.38	1.69	1.00	#6	.16	.20
SSUPB12-XS	.750	2.06	1.75	.937	.31	2.75	1.88	2.38	1.25	#8	.19	.62
SSUPB16-XS	1.000	2.81	2.19	1.187	.38	3.25	2.38	2.88	1.75	#10	.22	1.24
SSUPB20-XS	1.250	3.63	2.81	1.500	.43	4.00	3.00	3.50	2.00	#10	.22	2.57
SSUPB24-XS	1.500	4.00	3.25	1.750	.50	4.75	3.50	4.12	2.50	1/4	.28	3.94

Housing Material: Aluminum Alloy Black Anodized. (2) Two mounting holes as shown in view A-A for sizes .250 and .375.

### Type TWN and SSUTWN Pillow Blocks

Part Number	Nom. Dia.	L2	J3	Wt. (lb)
TWN4-XS	.25	2.50	2.00	.19
TWN6-XS	.375	2.75	2.25	.25
SSUTWN8-XS	.500	3.50	2.50	.40
SSUTWN12-XS	.750	4.50	3.50	1.24
SSUTWN16-XS	1.000	6.00	4.50	2.48
SSUTWN20-XS	1.250	7.50	5.50	5.14
SSUTWN24-XS	1.500	9.00	6.50	8.08

Housing Material: Aluminum Alloy Black Anodized

### Type ASB LinearRace Shaft End-Support Block (Dim. in in.)

Part Number	Nom. Dia.	L3	H3	H1	B	B3	F		Wt. (lb)
							Bolt	Hole	
ASB4-XS	.250	.50	.88	.500	1.50	1.12	#6	.16	.06
ASB6-XS	.375	.56	1.00	.562	1.62	1.25	#6	.16	.08
ASB8-XS	.500	.63	1.48	.875	2.00	1.50	#8	.19	.11
ASB12-XS	.750	.75	1.95	1.125	2.50	2.00	#10	.22	.22
ASB16-XS	1.000	1.00	2.48	1.375	3.25	2.50	1/4	.28	.44
ASB24-XS	1.500	1.25	3.50	2.000	4.75	3.50	5/16	.34	1.16

End-Support Material: Aluminum Alloy Black Anodized

### Type SB LinearRace® Shaft End-Support Block (Dim. in in.)

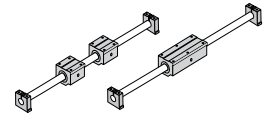
Part Number	Nom. Dia.	L3	Hh	Hc	Bb	B3	F		Wt. (lb)
							Bolt	Hole	
SB8-XS	.500	.63	1.62	1.000	2.00	1.50	#8	.16	.3
SB12-XS	.750	.75	2.12	1.250	2.75	2.00	#10	.16	.5
SB16-XS	1.000	1.00	2.56	1.500	3.25	2.50	1/4	.19	1.0
SB20-XS	1.250	1.13	3.00	1.750	4.00	3.00	5/16	.22	2.0
SB24-XS	1.500	1.25	3.50	2.000	4.75	3.50	5/16	.28	2.6

Material: Iron

Thomson RoundRail Linear Guides and Components

# End Support 1NA

## End-Supported, Industry Standard Dimension Metric



### Features

- Requires only one part number to specify entire linear guide.
- Available with 60 Case® LinearRace shaft end support blocks in either lightweight aluminum or rigid iron materials.
- Used to provide increased stability or torque resistance in linear system applications.

### Components

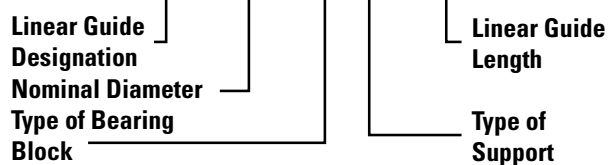
- 2 Super Smart Ball Bushing® pillow blocks or 1 Super Smart Ball Bushing twin pillow block.
- 1 60 Case LinearRace shaft.
- 2 shaft end support blocks.

### Specifying this Thomson Linear Guide

1. Determine the proper linear guide for your load and life requirements.
2. Select the part number.
3. Add the letter "L" followed by the overall length in inches, as a suffix to the part number.

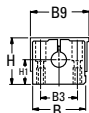
### Part Numbering System

**1NA M12 NMO L600**

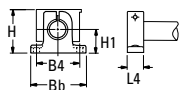


### Dimensions (Inch)

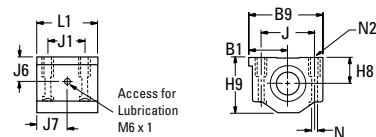
#### Type ASB End Support Block



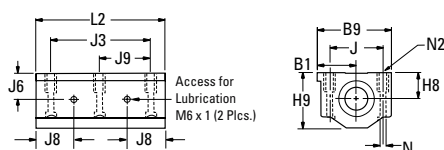
#### Type SB End Support Block



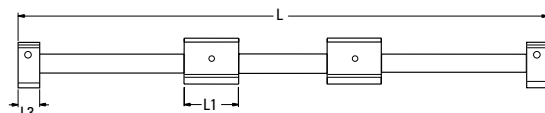
#### Type SPPB Super and SSEPB Super Smart Ball Bushing Pillow Blocks



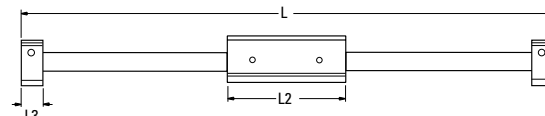
#### Type SPTWN Super and SSETWN Super Smart Ball Bushing Twin Pillow Blocks



#### Supported Linear Guide with 2 Pillow Blocks



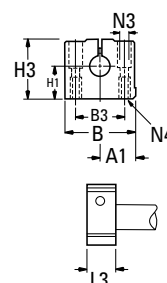
#### Supported Linear Guide with 1 Twin Pillow Block



Maximum Stroke Length is determined by subtracting pillow block length (L2) and 2x support block length (L3) or (L4) from total Linear Guide length (L).

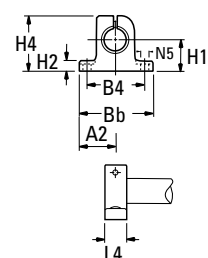
### Aluminum

Type ASB LinearRace Shaft End Support Block



### Steel

Type SB LinearRace Shaft End Support Block





**End-Support Linear Guide 1NA with 2 Pillow Blocks** (Dimensions in mm)

Part Number		Nom. Dia.	L1	L3	L4	H	H1	B	Bb	B9	Pillow Block	Shaft Support	
With Type ASB Shaft Supports	With Type SB Shaft Supports											Type ASB	Type SB
1NAM08NMO	1NAM08NNO	8	32	18	10	30	15	32	32	35	SPPBM08-XS	ASBM08-XS	SBM08-XS
1NAM12NMO	1NAM12NNO	12	39	20	12	38	20	43	42	43	SSEPBM12-XS	ASBM12-XS	SBM12-XS
1NAM16NMO	1NAM16NNO	16	43	24	16	47	25	43	50	53	SSEPBM16-XS	ASBM16-XS	SBM16-XS
1NAM20NMO	1NAM20NNO	20	54	30	20	55	30	60	60	60	SSEPBM20-XS	ASBM20-XS	SBM20-XS
1NAM25NMO	1NAM25NNO	25	67	38	25	65	35	78	74	78	SSEPBM25-XS	ASBM25-XS	SBM25-XS
1NAM30NMO	1NAM30NNO	30	79	40	28	75	40	87	84	87	SSEPBM30-XS	ASBM30-XS	SBM30-XS
1NAM40NMO	1NAM40NNO	40	91	48	32	95	50	108	108	108	SSEPBM40-XS	ASBM40-XS	SBM40-XS

**End-Support Linear Guide 1NA with 1 Twin Pillow Block** (Dimensions in mm)

Part Number		Nom. Dia.	L2	L3	L4	H	H1	B	Bb	B9	Pillow Block	Shaft Support	
With Type ASB Shaft Supports	With Type SB Shaft Supports											Type ASB	Type SB
1NAM08PMO	1NAM08PNO	8	62	18	10	30	15	32	32	35	SPTWNM08-XS	ASBM08-XS	SBM08-XS
1NAM12PMO	1NAM12PNO	12	76	20	12	38	20	43	42	43	SSETWNM12-XS	ASBM12-XS	SBM12-XS
1NAM16PMO	1NAM16PNO	16	84	24	16	47	25	43	50	53	SSETWNM16-XS	ASBM16-XS	SBM16-XS
1NAM20PMO	1NAM20PNO	20	104	30	20	55	30	60	60	60	SSETWNM20-XS	ASBM20-XS	SBM20-XS
1NAM25PMO	1NAM25PNO	25	130	38	25	65	35	78	74	78	SSETWNM25-XS	ASBM25-XS	SBM25-XS
1NAM30PMO	1NAM30PNO	30	152	40	28	75	40	87	84	87	SSETWNM30-XS	ASBM30-XS	SBM30-XS
1NAM40PMO	1NAM40PNO	40	176	48	32	95	50	108	108	108	SSETWNM40-XS	ASBM40-XS	SBM40-XS

Shaft Deflection Note: Load limit may be below the dynamic load rating due to shaft deflection. Bearings can accommodate up to 1/2° deflection. See Engineering section (page 265) for Deflection calculations.

**Dynamic Load Capacity Matrix** (100 km travel)

Linear Guide Assembly Part Number		Dynamic Load Capacity (lb.) (Even Distribution)	Pillow Block Part Number	Pillow Block Dynamic Load Capacity (lb.)
1NAM08NMO	1NAM08NNO	100	SPPBM08-XS	50
1NAM12NMO	1NAM12NNO	160	SSEPBM12-XS	80
1NAM16NMO	1NAM16NNO	800	SSEPBM16-XS	400
1NAM20NMO	1NAM20NNO	1800	SSEPBM20-XS	900
1NAM25NMO	1NAM25NNO	3000	SSEPBM25-XS	1500
1NAM30NMO	1NAM30NNO	3730	SSEPBM30-XS	1865
1NAM40NMO	1NAM40NNO	6160	SSEPBM40-XS	3080

**Dynamic Load Capacity Matrix** (100 km travel)

Linear Guide Assembly Part Number		Dynamic Load Capacity (lb.) (Even Distribution)	Pillow Block Part Number	Pillow Block Dynamic Load Capacity (lb.)
1NAM08PMO	1NAM08PNO	100	SPTWNM08-XS	100
1NAM12PMO	1NAM12PNO	160	SSETWNM12-XS	160
1NAM16PMO	1NAM16PNO	800	SSETWNM16-XS	800
1NAM20PMO	1NAM20PNO	1800	SSETWNM20-XS	1800
1NAM25PMO	1NAM25PNO	3000	SSETWNM25-XS	3000
1NAM30PMO	1NAM30PNO	3730	SSETWNM30-XS	3730
1NAM40PMO	1NAM40PNO	6160	SSETWNM40-XS	6160

† Super Ball Bushing® Bearings are used in 8 mm size pillow blocks.

**Replacement Component Dimensions**

**Type SPPB and SSEPB Pillow Blocks** (Dimensions in mm)

Part Number	Nom. Dia.	L1	H8	H9	B1	B9	J	J1	J6	J7	N Dia.	N2	Mass (kg)
SPPBM08-XS	8	32	15	28	17.5	35	25	20	15	19.5	3.3	M4	0.07
SSEPBM12-XS	12	39	18	35	21.5	43	32	23	18	23.0	4.3	M5	0.13
SSEPBM16-XS	16	43	22	42	26.5	53	40	26	22	25.0	5.3	M6	0.20
SSEPBM20-XS	20	54	25	50	30.0	60	45	32	25	30.5	6.6	M8	0.35
SSEPBM25-XS	25	67	30	60	39.0	78	60	40	30	37	8.4	M10	0.66
SSEPBM30-XS	30	79	35	70	43.5	87	68	45	35	43	8.4	M10	0.99
SSEPBM40-XS	40	91	45	90	54.0	108	86	58	45	49	10.5	M12	1.83

Housing Material: Aluminum Alloy Grey Anodized.

**Type SPTWN and SSETWN Pillow Blocks**

Part Number	Nom. Dia.	L2	J3	J8	J9	Mass (kg)
SPTWNM08-XS	8	62	50	19.5	25	0.15
SSETWNM12-XS	12	76	56	23.0	28	0.27
SSETWNM16-XS	16	84	64	25.0	32	0.41
SSETWNM20-XS	20	104	76	30.5	38	0.73
SSETWNM25-XS	25	130	94	37.0	47	1.37
SSETWNM30-XS	30	152	106	43.0	53	2.04
SSETWNM40-XS	40	176	124	49.0	62	3.73

Housing Material: Aluminum Alloy Grey Anodized

**Type ASB LinearRace Shaft End Support Block** (Dim. in mm)

Part Number	Nom. Dia.	A1	B	B3	H1	H3	L3	N3 Bolt	N4	Mass (kg)
ASBM08-XS	8	16.0	32	22	15	28	18	3.5	M4	0.04
ASBM12-XS	12	21.5	43	30	20	36	20	5.3	M6	0.10
ASBM16-XS	16	26.5	53	38	25	43	24	6.6	M8	0.15
ASBM20-XS	20	30.0	60	42	30	51	30	8.4	M10	0.23
ASBM25-XS	25	39.0	78	56	35	61	38	10.5	M12	0.41
ASBM30-XS	30	43.5	87	64	40	71	40	10.5	M12	0.53
ASBM40-XS	40	54.0	108	82	50	88	48	13.5	M16	0.99

End Support Material: Aluminum Alloy Grey Anodized

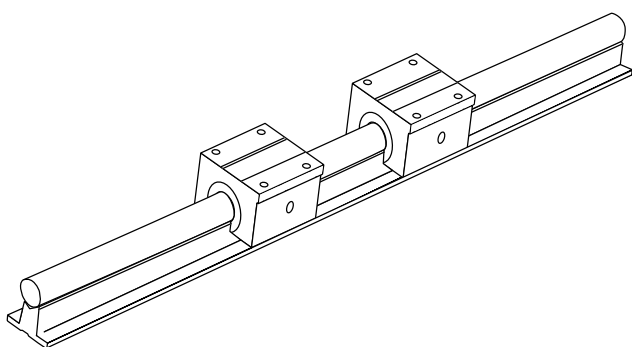
**Type SB LinearRace Shaft End Support Block** (Dim. in mm)

Part Number	Nom. Dia.	A2	B4	Bb	H1	H2	H4	L4	N5 Dia.	Mass (kg)
SBM08-XS	8	16	25	32	15	5.2	27	10	4.5	0.03
SBM12-XS	12	21	32	42	20	5.5	35	12	5.5	0.06
SBM16-XS	16	25	40	50	25	6.5	42	16	5.5	0.11
SBM20-XS	20	30	45	60	30	8.0	50	20	5.5	0.21
SBM25-XS	25	37	60	74	35	9.0	58	25	6.6	0.35
SBM30-XS	30	42	68	84	40	10.0	68	28	9.0	0.52
SBM40-XS	40	54	86	108	50	12.0	86	32	11.0	0.92

End Support Material: Iron

## Continuous Support Linear Ball Guides

**High speed, smooth operation,  
easy to install**



### Continuous Support Linear Ball Guides Offer:

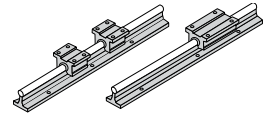
- Increased life within the same envelope. RoundRail linear guides feature the new patented Super Smart Ball Bushing® Bearings for up to 216X the life or 6X the load capacity of conventional bearings.
- Cost savings: save time and money preparing your mounting surfaces before bolting down RoundRail linear guides.
- Superior performance. Continuously supported for maximum down- and side-load applications without concerns for shaft deflection.
- The RoundRail Advantage. The inherent self-aligning-in-all-directions design of the Super Smart Ball Bushing Bearing allows for ultra-smooth travel when mounted to wider-toleranced prepared surfaces.
- Unlimited travel lengths without concerns for machined reference edges or butt joint alignment.
- The Super Smart Ball Bushing Bearing... the most technologically advanced and most robust linear bearing in the world.





# Continuous Support 1CA

Fully Supported, Highest Performance, Industry Standard Dimension Inch



## Features

- Requires only one part number to specify the entire linear guide.
- Used as a load support, transport and guidance solution.
- Used in continuously supported applications when rigidity is required.

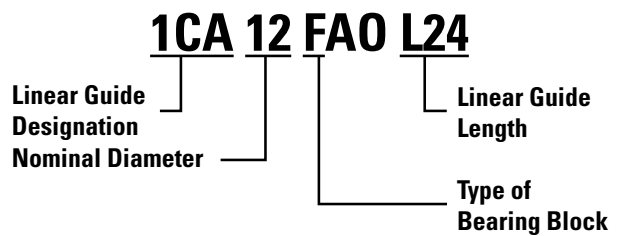
## Components

- 2 Super Smart Ball Bushing® open type pillow blocks or 1 Super Smart Ball Bushing open twin pillow blocks.
- 1 60 Case® LinearRace® shaft support rail assembly.

## Specifying this Thomson Linear Guide

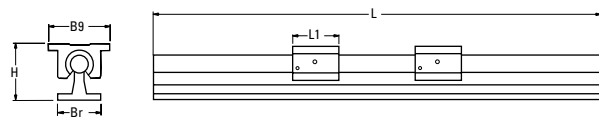
1. Determine the proper linear guide for your load and life requirements.
2. Select the part number.
3. Add the letter "L" followed by the overall length in inches, as a suffix to the part number.

## Part Numbering System

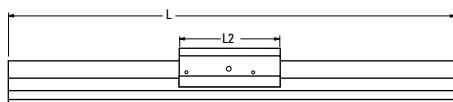


## Dimensions (Inch)

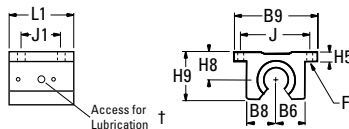
### Single Continuously Supported Linear Guide with 2 Pillow Blocks



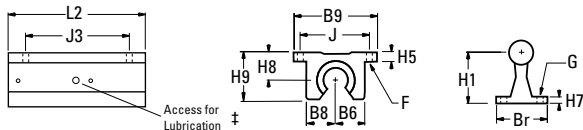
### Single Continuously Supported Linear Guide with 1 Twin Pillow Block



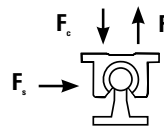
### Type SSUPBO Open Type Super Smart and SPB-OPN Open Type Ball Bushing Pillow Blocks



### Type SSUTWN Open Type Super Smart and TWN-OPN Open Type Ball Bushing Twin Pillow Blocks



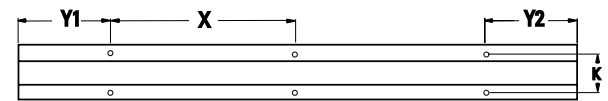
## Load Rating and Limit by Direction



	Dynamic Load Rating	Load Limit
$F_c$	C	C
$F_t$	0.5C	0.5C
$F_s$	C	0.5C

Dynamic Load Rating: Load value used in life calculation.  
Load Limit: Maximum allowable load applied to bearing.

## Type SRA LinearRace Shaft Support Rail Assembly



‡ Size .500 inch has oil lubricant fitting.  
Sizes .625 and above have 1/4-28 access for lubrication.

## Thomson RoundRail Linear Guides and Components

**Continuously Supported Linear Guide 1CA Single with 2 Pillow Blocks** (Dimensions in inches)

Part Number	Nominal Diameter	L1	H	Br	B9	Pillow Block	Shaft Support Rail Assembly
1CA08FAO	.500	1.50	1.812	1.50	2.00	SPB80PN-XS	SRA8-XS
1CA12FAO	.750	1.88	2.437	1.75	2.75	SSUPB012-XS	SRA12-XS
1CA16FAO	1.000	2.63	2.937	2.13	3.25	SSUPB016-XS	SRA16-XS
1CA20FAO	1.250	3.38	3.625	2.50	4.00	SSUPB020-XS	SRA20-XS
1CA24FAO	1.500	3.75	4.250	3.00	4.75	SSUPB024-XS	SRA24-XS

**Continuously Supported Linear Guide 1CA Single with 1 Twin Pillow Block** (Dimensions in inches)

Part Number	Nominal Diameter	L2	H	Br	B9	Maximum Stroke Length	Pillow Block	Shaft Support Rail Assembly
1CA08HAO	.50	3.5	1.812	1.50	2.00	L-(3.5)	TWN80PN-XS	SRA8-XS
1CA12HAO	.75	4.5	2.437	1.75	2.75	L-(4.5)	SSUTWNO12-XS	SRA12-XS
1CA16HAO	1.00	6.0	2.937	2.13	3.25	L-(6.0)	SSUTWNO16-XS	SRA16-XS
1CA20HAO	1.25	7.5	3.625	2.50	4.00	L-(7.5)	SSUTWNO20-XS	SRA20-XS
1CA24HAO	1.50	9.0	4.250	3.00	4.75	L-(9.0)	SSUTWNO24-XS	SRA24-XS

**Dynamic Load Capacity Matrix** (4 million inches travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (lb <sub>r</sub> ) (Even Distribution)	Pillow Block Part Number	Pillow Block Dynamic Load Capacity (lb <sub>r</sub> )
1CA08FAO	290	SPB80PN-XS	400
1CA12FAO	1800	SSUPB012-XS	900
1CA16FAO	3000	SSUPB016-XS	1500
1CA20FAO	3730	SSUPB020-XS	1865
1CA24FAO	6160	SSUPB024-XS	3080

**Dynamic Load Capacity Matrix** (4 million inches travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (lb <sub>r</sub> ) (Even Distribution)	Pillow Block Part Number	Pillow Block Dynamic Load Capacity (lb <sub>r</sub> )
1CA08HAO	290	TWN80PN-XS	800
1CA12HAO	1800	SSUTWNO12-XS	1800
1CA16HAO	3000	SSUTWNO16-XS	3000
1CA20HAO	3730	SSUTWNO20-XS	3730
1CA24HAO	6160	SSUTWNO24-XS	6160

† Super Ball Bushing Bearings are used in .500 inch size pillow blocks.

**Replacement Component Dimensions****Type SPB-OPN and SSUPB0 Pillow Blocks** (Dimensions in inches)

Part Number	Nom. Dia.	L1	H9	H8	H5	B9	B8	B6	J	J1	F		Wt. (lb)
											Bolt	Hole	
SPB80PN-XS	.500	1.69	1.25	.687	.25	2.00	.75	.69	1.69	1.00	#6	.16	.20
SSUPB012-XS	.750	2.06	1.75	.937	.31	2.75	1.00	.94	2.38	1.25	#8	.19	.62
SSUPB016-XS	1.000	2.81	2.19	1.187	.38	3.25	1.25	1.19	2.88	1.75	#10	.22	1.24
SSUPB020-XS	1.250	3.63	2.81	1.500	.43	4.00	1.63	1.50	3.50	2.00	#10	.22	2.57
SSUPB024-XS	1.500	4.00	3.25	1.750	.50	4.75	1.88	1.75	4.12	2.50	1/4	.28	3.94

**Type TWN-OPN and SSUTWNO****Pillow Blocks** (Dimensions in inches)

Part Number	Nom. Dia.	L2	J3	Wt. (lb)
TWN80PN-XS	.500	3.50	2.50	.40
SSUTWNO12-XS	.750	4.50	3.50	1.24
SSUTWNO16-XS	1.000	6.00	4.50	2.48
SSUTWNO20-XS	1.250	7.50	5.50	5.14
SSUTWNO24-XS	1.500	9.00	6.50	8.08

Housing Material: Aluminum Alloy Black Anodized

**Type SRA LinearRace Shaft Support Rail Assembly** (Dimensions in inches)

Part Number	Nom. Dia.	H1	H7	Br	K	X	G		Wt. (lb/ft)
							Bolt	Hole	
SRA8-XS	.500	1.125	.19	1.50	1.00	4	#8	.17	1.26
SRA12-XS	.750	1.500	.25	1.75	1.25	6	#10	.22	2.50
SRA16-XS	1.000	1.750	.25	2.13	1.50	6	1/4	.28	4.06
SRA20-XS	1.250	2.125	.31	2.50	1.88	6	5/16	.34	6.30
SRA24-XS	1.500	2.500	.38	3.00	2.25	8	5/16	.34	8.60

LinearRace Shaft Support Rail Material: Aluminum Alloy Black Anodized

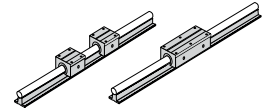
Support rails are supplied in 24 inch lengths unless quoted otherwise. Maximum length of LinearRace Shaft Support Rail is 72 inches. If longer continuous one-piece LinearRace Shaft Support Rails are required, contact the Thomson Linear Guides Application Engineering department.

Y = distance from end of rail to the center of first mounting hole, Y1 = Y2 unless specified.



# Continuous Support 1PA

## Fully Supported, Highest Performance, Industry Standard Dimension Metric



### Features

- Requires only one part number to specify the entire linear guide.
- Used as a load support, transport and guidance solution.
- Used in continuously supported applications when rigidity is required.

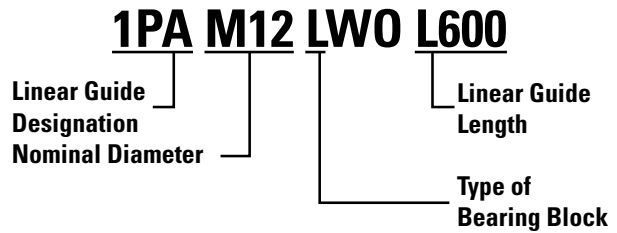
### Components

- 2 Super Smart Ball Bushing open type pillow blocks or 1 Super Smart Ball Bushing open twin pillow blocks.
- 1 60 Case LinearRace shaft support rail assembly.

### Specifying this Thomson Linear Guide

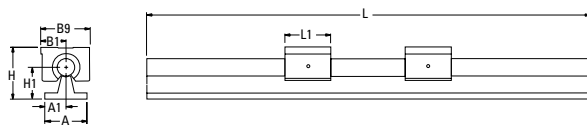
1. Determine the proper linear guide for your load and life requirements.
2. Select the part number.
3. Add the letter "L" followed by the overall length in inches, as a suffix to the part number.

### Part Numbering System

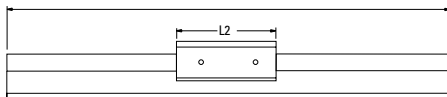


### Dimensions (Inch)

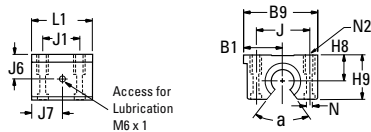
#### Single Continuously Supported Linear Guide with 2 Pillow Blocks



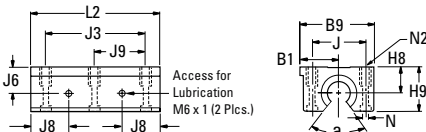
#### Single Continuously Supported Linear Guide with 1 Twin Pillow Block



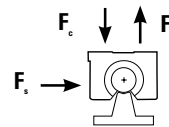
#### Type SSEPBO Open Type Super Smart Ball Bushing Pillow Blocks



#### Type SSETWNO Open Type Super Smart Ball Bushing Twin Pillow Blocks



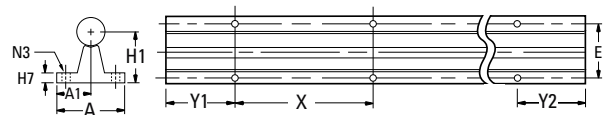
### Load Rating and Limit by Direction



	Dynamic Load Rating	Load Limit
$F_c$	C	C
$F_t$	0.5C	0.5C
$F_s$	C	0.5C

Dynamic Load Rating: Load value used in life calculation.  
Load Limit: Maximum allowable load applied to bearing.

### Type SRA LinearRace Shaft Support Rail Assembly



Thomson RoundRail Linear Guides and Components

Continuously Supported Linear Guide 1PA Single with 2 Pillow Blocks (Dimensions in mm)

Part Number	Nominal Diameter	L1	H	H1	A	A1	B1	B9	Pillow Block	Shaft Support Rail Assembly
1PAM12LWO	12	39	46	28	43	21.5	21.5	43	SPPBOM12-XS <sup>†</sup>	SRAM12-XS
1PAM16LWO	16	43	52	30	48	24.0	26.5	53	SSEPBO16-XS	SRAM16-XS
1PAM20LWO	20	54	63	38	56	28.0	30.0	60	SSEPBO20-XS	SRAM20-XS
1PAM25LWO	25	67	72	42	60	30.0	39.0	78	SSEPBO25-XS	SRAM25-XS
1PAM30LWO	30	79	88	53	74	37.0	43.5	87	SSEPBO30-XS	SRAM30-XS
1PAM40LWO	40	91	105	60	78	39.0	54.0	108	SSEPBO40-XS	SRAM40-XS

Continuously Supported Linear Guide 1PA Single with 1 Twin Pillow Block (Dimensions in mm)

Part Number	Nominal Diameter	L2	H	H1	A	A1	B1	B9	Maximum Stroke Length	Pillow Block	Shaft Support Rail Assembly
1PAM12MWO	12	76	46	28	43	21.5	21.5	43	L-(76)	SPTWNOM12-XS <sup>†</sup>	SRAM12-XS
1PAM16MWO	16	84	52	30	48	24.0	26.5	53	L-(84)	SSETWNOM16-XS	SRAM16-XS
1PAM20MWO	20	104	63	38	56	28.0	30.0	60	L-(104)	SSETWNOM20-XS	SRAM20-XS
1PAM25MWO	25	130	72	42	60	30.0	39.0	78	L-(130)	SSETWNOM25-XS	SRAM25-XS
1PAM30MWO	30	152	88	53	74	37.0	43.5	87	L-(152)	SSETWNOM30-XS	SRAM30-XS
1PAM40MWO	40	176	105	60	78	39.0	54.0	108	L-(176)	SSETWNOM40-XS	SRAM40-XS

Dynamic Load Capacity Matrix (100 km travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (N) (Even Distribution)	Pillow Block Part Number	Pillow Block Dynamic Load Capacity (N)
1PAM12LWO	1500	SPPBOM12-XS	750
1PAM16LWO	4400	SSEPBO16-XS	2200
1PAM20LWO	8000	SSEPBO20-XS	4000
1PAM25LWO	13400	SSEPBO25-XS	6700
1PAM30LWO	16600	SSEPBO30-XS	8300
1PAM40LWO	27400	SSEPBO40-XS	13700

Dynamic Load Capacity Matrix (100 km travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (N) (Even Distribution)	Pillow Block Part Number	Pillow Block Dynamic Load Capacity (N)
1PAM12MWO	1220	SPTWNOM12-XS	1500
1PAM16MWO	4400	SSETWNOM16-XS	4400
1PAM20MWO	8000	SSETWNOM20-XS	8000
1PAM25MWO	13400	SSETWNOM25-XS	13400
1PAM30MWO	16600	SSETWNOM30-XS	16600
1PAM40MWO	27400	SSETWNOM40-XS	27400

† Super Ball Bushing Bearings are used in 12 mm size pillow blocks.

Replacement Component Dimensions

Type SSEPBO Pillow Blocks (Dimensions in mm)

Part Number	Nom. Dia.	L1	H8	H9	B1	B9	J6	J7	J	J1	N Dia.	N2	a Deg.	Mass (kg)
SPPBOM12-XS	12	39	18	28	215	43	16.7	19.5	32	23	43	M5	66	0.11
SSEPBO16-XS	16	43	22	35	265	53	22.0	21.5	40	26	53	M6	66	0.17
SSEPBO20-XS	20	54	25	41	300	60	25.0	27.0	45	32	66	M8	60	0.30
SSEPBO25-XS	25	67	30	50	390	78	31.5	33.5	46	40	84	M10	60	0.57
SSEPBO30-XS	30	79	35	60	435	87	33.0	39.5	68	45	84	M10	60	0.87
SSEPBO40-XS	40	91	45	77	540	108	43.5	45.5	86	58	105	M12	60	1.62

Housing Material: Aluminum Alloy Grey Anodized.

Type SSETWNO Pillow Blocks (Dim. in mm)

Part Number	Nom. Dia.	L2	J3	J8	J9	Mass (kg)
SPTWNOM12-XS	12	76	56	19.5	28	0.22
SSETWNOM16-XS	16	84	64	21.5	32	0.34
SSETWNOM20-XS	20	104	76	27.0	38	0.63
SSETWNOM25-XS	25	130	94	33.6	47	1.18
SSETWNOM30-XS	30	152	106	39.5	53	1.70
SSETWNOM40-XS	40	176	124	45.5	62	3.18

Housing Material: Aluminum Alloy Grey Anodized

Type SRA LinearRace Shaft Support Rail Assembly (Dimensions in mm)

Part Number	Nom. Dia.	H1	H7	A	A1	E	X	N3 Dia.	Mass (kg/m)
SRAM12-XS	12	28	5	43	21.5	29	75	4.5	4.1
SRAM16-XS	16	30	5	48	24.0	33	100	5.5	6.2
SRAM20-XS	20	38	6	56	28.0	37	100	6.6	9.5
SRAM25-XS	25	42	6	60	30.0	42	120	6.6	13.7
SRAM30-XS	30	53	8	74	37.0	51	150	8.6	20.0
SRAM40-XS	40	60	8	78	39.0	55	200	8.6	32.5

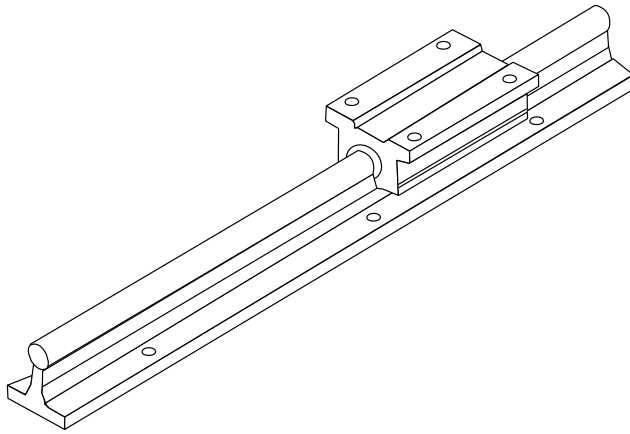
LinearRace Shaft Support Rail Material: Aluminum Alloy Grey Anodized

Support rails are supplied in 600mm lengths unless quoted otherwise. Maximum length of LinearRace Shaft Support Rail is 600mm. If longer continuous one-piece LinearRace Shaft Support Rails are required, contact the Thomson Linear Guides Application Engineering department.

Y = distance from end of rail to the center of first mounting hole, Y1 = Y2 unless specified.



## FluoroNyliner® Linear Guides



**Corrosion resistant, smooth, quiet,  
industry standard envelope**

### FluoroNyliner Linear Guides Offer:

- Thomson FluoroNyliner Bushing® Bearings that are made from the most advanced polymer components to achieve maximum performance levels
- Contamination resistance. The FluoroNyliner linear guides are practically immune to adverse environments, such as water washdown conditions and magnetic interference.
- Self-aligning pillow blocks for ease of use.
- Increased bearing load capacities (or 'PV' ratings) and obtainable travel life when used with Thomson 60 Case® LinearRace® shaft, and when compared to competitive assemblies.
- Specification conformance with FDA and non-lubricated applications.
- Use in linear and rotary motion applications.
- Operates in temperatures from -400 to 550°F (-240 to 287°C).

Thomson RoundRail Linear Guides and Components

# FluoroNyliner 1VA

## Corrosive/Contaminated Environments Inch

### Features

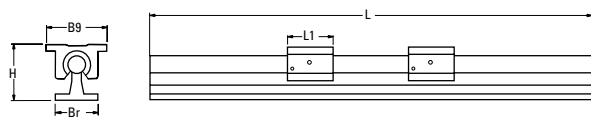
- Requires only one part number to specify the entire linear guide.
- Used as a load support, transport and guidance solution.
- Used in continuously supported applications when rigidity is required.

### Components

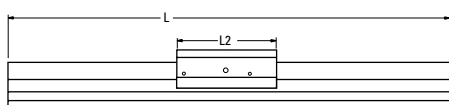
- 2 self-aligning FluoroNyliner Bushing Bearing open pillow blocks or
- 1 self-aligning FluoroNyliner Bushing Bearing open twin pillow block
- 1 stainless steel 60 Case LinearRace shaft support rail assembly

### Dimensions (Inch)

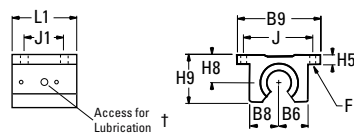
#### Single Continuously Supported Linear Guide with 2 Pillow Blocks



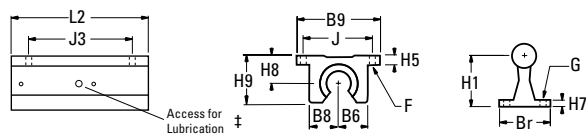
#### Single Continuously Supported System with 1 Twin Pillow Block



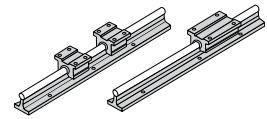
#### FluoroNyliner Linear Guide Pillow Block Dimensions



#### FluoroNyliner Linear Guide Twin Pillow Block Dimensions



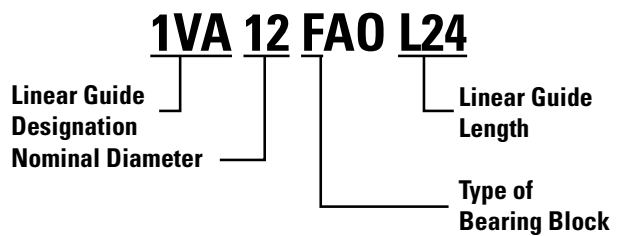
www.thomsonlinear.com



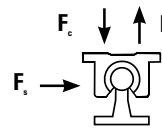
### Specifying this Thomson Linear Guide

1. Determine the proper linear guide for your load and life requirements.
2. Select the part number.
3. Add the letter "L" followed by the overall length in inches as a suffix to the part number.

### Part Numbering System



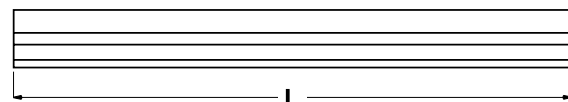
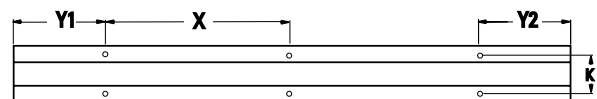
### Load Rating and Limit by Direction



	Dynamic Load Rating	Load Limit
F <sub>c</sub>	C	C
F <sub>t</sub>	0.5C	0.5C
F <sub>s</sub>	C	0.5C

Dynamic Load Rating: PV value used in life calculation.  
Load Limit: Maximum allowable PV applied to bearing.

### Type SRA LinearRace Shaft Support Rail Assembly





**FluoroNyliner® Linear Guide 1VA Single Continuously Supported with 2 Pillow Blocks** (Dimensions in inches)

Part Number	Nominal Diameter	L1	H	Br	B9	Pillow Block	Shaft Support Rail Assembly
1VA08FAO	.500	1.50	1.812	1.50	2.00	FNYBUPB008A-XS	SRA8-SS-XS
1VA12FAO	.750	1.88	2.437	1.75	2.75	FNYBUPB012A-XS	SRA12-SS-XS
1VA16FAO	1.000	2.63	2.937	2.13	3.25	FNYBUPB016A-XS	SRA16-SS-XS
1VA20FAO	1.250	3.38	3.625	2.50	4.00	FNYBUPB020A-XS	SRA20-SS-XS
1VA24FAO	1.500	3.75	4.250	3.00	4.75	FNYBUPB024A-XS	SRA24-SS-XS

**FluoroNyliner Linear Guide 1VA Single Continuously Supported with 1 Twin Pillow Block** (Dimensions in inches)

Part Number	Nominal Diameter	L2	H	Br	B9	Maximum Stroke Length	Pillow Block	Shaft Support Rail Assembly
1VA08HAO	.50	3.5	1.812	1.50	2.00	L-(3.5)	FNYBUTWNO08A-XS	SRA8-SS-XS
1VA12HAO	.75	4.5	2.437	1.75	2.75	L-(4.5)	FNYBUTWNO12A-XS	SRA12-SS-XS
1VA16HAO	1.00	6.0	2.937	2.13	3.25	L-(6.0)	FNYBUTWNO16A-XS	SRA16-SS-XS
1VA20HAO	1.25	7.5	3.625	2.50	4.00	L-(7.5)	FNYBUTWNO20A-XS	SRA20-SS-XS
1VA24HAO	1.50	9.0	4.250	3.00	4.75	L-(9.0)	FNYBUTWNO24A-XS	SRA24-SS-XS

**Maximum Operating Parameters per Bearing**

Characteristic	Limit
Linear Temperature Range	-240°C to 288°C (-400°F to 550°F)
Velocity, dry	42.7 m/min. Continuous
Velocity, dry	122 m/min. Intermittent
Velocity, lubricated	122 m/min. Continuous
Pressure	10.35 MPa
PV	21 MPa/m/min

**Replacement Component Dimensions**

**Self-Aligning Pillow Blocks** (Dimensions in inches)

Part Number	Nom. Dia.	L1	H9	H8	H5	B9	B8	B7	J	J1	F		Wt. (lb)
											Bolt	Hole	
FNYBUPB008A-XS	.500	1.69	1.25	.687	.25	2.00	.75	.69	1.69	1.00	#6	.16	.20
FNYBUPB012A-XS	.750	2.06	1.75	.937	.31	2.75	1.00	.94	2.38	1.25	#8	.19	.51
FNYBUPB016A-XS	1.000	2.81	2.19	1.187	.38	3.25	1.25	1.19	2.88	1.75	#10	.22	1.03
FNYBUPB020A-XS	1.250	3.63	2.81	1.500	.43	4.00	1.63	1.50	3.50	2.00	#10	.22	2.15
FNYBUPB024A-XS	1.500	4.00	3.25	1.750	.50	4.75	1.88	1.75	4.12	2.50	1/4	.28	3.29

Housing Material: Aluminum Alloy Black Anodized

**Self-Aligning Pillow Blocks** (Dim. in in.)

Part Number	Nom. Dia.	L2	J3	Wt. (lb)
FNYBUTWNO08A-XS	.500	3.50	2.50	.40
FNYBUTWNO12A-XS	.750	4.50	3.50	1.02
FNYBUTWNO16A-XS	1.000	6.00	4.50	2.06
FNYBUTWNO20A-XS	1.250	7.50	5.50	4.30
FNYBUTWNO24A-XS	1.500	9.00	6.50	6.88

Housing Material: Aluminum Alloy Black Anodized

Performance Note: For detailed explanations of FluoroNyliner Linear Guide Dynamic and Static Load Capacities, Frictional Characteristics, Wear Rates, Speeds, and Life Expectancy please contact the Thomson Linear Guides Applications Engineering department.

Product Note: FluoroNyliner linear guides are shipped free of all lubricants. It is the responsibility of the product user to determine lubricant compatibility with the FluoroNyliner bearing material.

Product Options: FluoroNyliner linear guides are available with various inner race materials and platings to accommodate different environments.

**Type SRA LinearRace Shaft Support Rail Assembly** (Dimensions in inches)

Part Number	Nom. Dia.	H1	H7	Br	K	X	G		Wt. (lb/ft)
							Bolt	Hole	
SRA8-XS	.500	1.125	.19	1.50	1.00	4	#8	.17	1.26
SRA12-XS	.750	1.500	.25	1.75	1.25	6	#10	.22	2.50
SRA16-XS	1.000	1.750	.25	2.13	1.50	6	1/4	.28	4.06
SRA20-XS	1.250	2.125	.31	2.50	1.88	6	5/16	.34	6.30
SRA24-XS	1.500	2.500	.38	3.00	2.25	8	5/16	.34	8.60

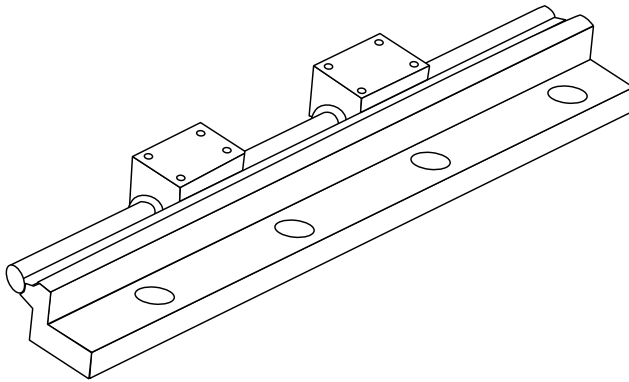
LinearRace® Shaft Support Rail Material: Aluminum Alloy Black Anodized

Support rails are supplied in 24 inch lengths unless quoted otherwise. Maximum length of LinearRace Shaft Support Rail is 72 inches. If longer continuous one-piece LinearRace Shaft Support Rails are required, contact the Thomson Linear Guide Application Engineering department.

Y = distance from end of rail to the center of first mounting hole, Y1 = Y2 unless specified.

## Side-Mounted Linear Ball Guides

**Low profile, high loads in all directions,  
easy to install**



### Side-Mounted Linear Ball Guides Offer:

- Increased life within the same envelope. RoundRail linear guides feature the patented Super Smart Ball Bushing® Bearings for up to 216X the life or 6X the load capacity of conventional bearings.
- Cost savings: save time and money preparing your mounting surfaces before bolting down RoundRail linear guides.
- Side-mounted geometry for increased mounting flexibility.
- Superior performance. Continuously supported for maximum (down- and side-) load applications without concerns for shaft deflection.
- The RoundRail Advantage. The inherent self-aligning-in-all-directions design of the Super Smart Ball Bushing Bearing allows for ultra-smooth travel when mounted to wider-toleranced, prepared surfaces.
- Unlimited travel lengths without concerns for machined reference edges or butt joint alignment.
- The Super Smart Ball Bushing Bearing... the most technologically advanced and robust linear bearing in the world.
- Corrosion-resistant versions for maximum performance in harsh environments.





## Side-Mounted 1DA Side-Mounted for Low-Profile Inch

### Features

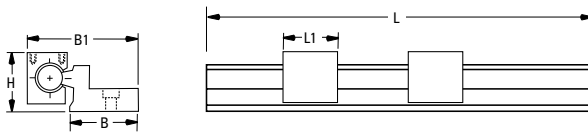
- Continuously supported design increases rigidity and provides for unlimited linear guide travel lengths.
- Versatile side support rail assembly geometry for optimizing mounting ability.
- Side-mounted design provides an increase in pull-off load capacity.

### Components

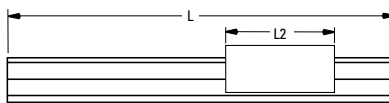
- 2 Super Smart Ball Bushing® modified open type pillow blocks or 1 Super Smart Ball Bushing modified open type twin pillow block.
- 1 60 Case LinearRace shaft side mounted support rail assembly

### Dimensions (Inch)

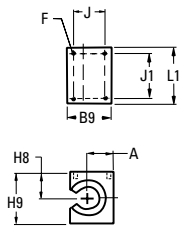
#### Single Side Mounted Linear Guide with 2 Pillow Blocks



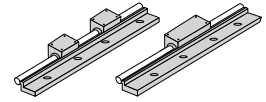
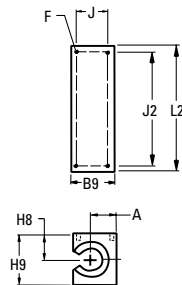
#### Single Side-Mounted Linear Guide with 1 Twin Pillow Block



#### Type SSUPBO-MOD and SPB-OPN-MOD Open Type Pillow Blocks



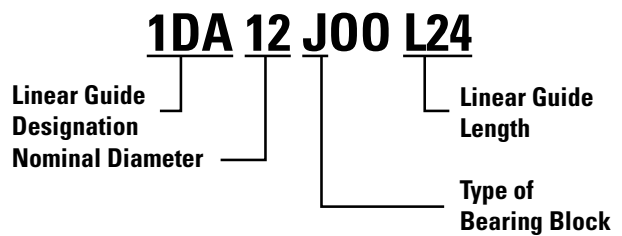
#### Type SSUTWNO-MOD and TWN-OPN-MOD Pillow Blocks



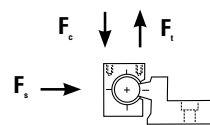
### Specifying this Thomson Linear Guide

1. Determine the proper linear guide for your load and life requirements.
2. Select the part number.
3. Add the letter "L" followed by the overall length in inches as a suffix to the part number.

### Part Numbering System



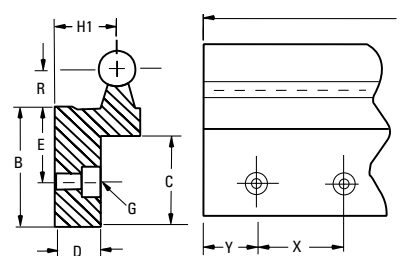
### Load Rating and Limit by Direction



	Dynamic Load Rating	Load Limit
$F_c$	C	C
$F_i$	0.5C	0.5C
$F_s$	C	0.5C

Dynamic Load Rating: Load value used in life calculation.  
Load Limit: Maximum allowable load applied to bearing.

### Type SSRA Side-Mounted LinearRace® Shaft Support Rail Assembly



Thomson RoundRail Linear Guides and Components

Side-Mounted Linear Guide 1DA Single Side-Mounted with 2 Pillow Blocks (Dimensions in inches)

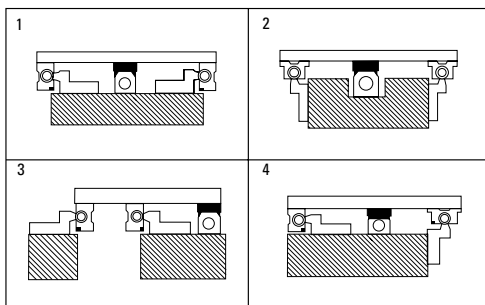
Part Number	Nominal Diameter	H	B	B1	L1	Pillow Block	Shaft Support Rail Assembly
1DA08J00	.500	1.562	1.44	2.61	1.50	SPB80PN-MOD	SSRA08
1DA12J00	.750	2.062	1.94	3.55	1.88	SSUPB012-MOD	SSRA12
1DA16J00	1.000	2.562	2.44	4.49	2.63	SSUPB016-MOD	SSRA16

Side-Mounted Linear Guide 1DA Single Side-Mounted with 1 Twin Pillow Block (Dimensions in inches)

Part Number	Nominal Diameter	H	B	B1	L2	Maximum Stroke Length	Pillow Block	Shaft Support Rail Assembly
1DA08K00	.50	1.562	1.44	2.61	3.5	L-(3.5)	TWN80PN-MOD	SSRA08
1DA12K00	.75	2.062	1.94	3.55	4.5	L-(4.5)	SSUTWNO12-MOD	SSRA12
1DA16K00	1.00	2.562	2.44	4.49	6.0	L-(6.0)	SSUTWNO16-MOD	SSRA16

Mounting Configurations

The following mounting configurations depict ideas for combining the side-mounted continuously supported linear guides into your linear motion application. If you need further information, contact the Thomson Application Engineering Department.



Pillow blocks shown are the standard SSUPBO or SPB-OPN style. To order System 1DA with standard pillow blocks, order the side-mounted shaft rail assembly (SSRA) and the SSUPBO or SPB-OPN separately.

Dynamic Load Capacity Matrix (4 million inches travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (N) (Even Distribution)	Pillow Block Part Number	Pillow Block Dynamic Load Capacity (N)
1DA08J00	240	SPB80PN-MOD	120
1DA12J00	1600	SSUPB012-MOD	800
1DA16J00	2700	SSUPB016-MOD	1350
1DA08K00	240	TWN80PN-MOD	240
1DA12K00	1600	SSUTWNO12-MOD	1600
1DA16K00	2700	SSUTWNO16-MOD	2700

† Super Ball Bushing Bearings are used in .500 inch size pillow blocks.

Replacement Component Dimensions

Type SPBOPN-MOD and SSUPBO-MOD Pillow Block (Dimensions in inches)

Part Number	Nom. Dia.	H8	H9	A	B9	L1	J	J1	F	Wt. (lb)
SPB80PN-MOD	.500	.687	1.44	.67	1.12	1.50	.812	1.250	#8-32	.18
SSUPB012-MOD	.750	.937	1.94	.92	1.56	1.88	1.187	1.562	#10-32	.45
SSUPB016-MOD	1.000	1.187	2.44	1.17	2.00	2.63	1.438	2.250	1/4-20	.98

Housing Material: Aluminum Alloy Black Anodized

Type TWNOPN-MOD and SSUTWNO-MOD Pillow Blocks (Dimensions in inches)

Part Number	Nom. Dia.	L2	J2	Wt. (lb)
TWN80PN-MOD	.500	3.5	3.00	.39
SSUTWNO12-MOD	.750	4.5	4.00	1.00
SSUTWNO16-MOD	1.000	6.0	5.25	2.11

Housing Material: Aluminum Alloy Black Anodized

Type SSRA LinearRace Shaft Support Rail Assembly (Dimensions in inches)

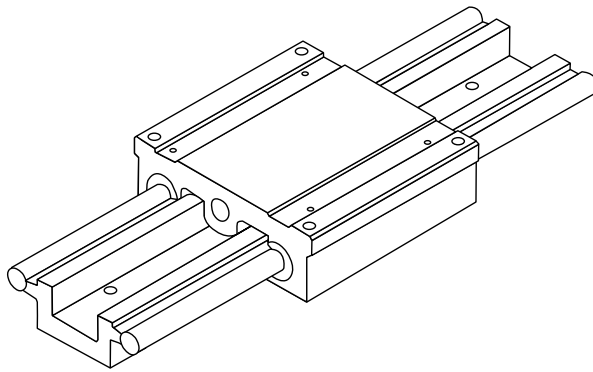
Part Number	Nom. Dia.	H1	B	R	E	D	C	X	G		Wt. (lb/ft)
									Bolt	Hole	
SSRA08	.500	.875	1.44	.500	1.00	.49	1.06	4	1/4	.28	2.05
SSRA12	.750	1.125	1.94	.688	1.31	.75	1.44	6	5/16	.34	4.00
SSRA16	1.000	1.375	2.44	.875	1.63	.88	1.81	6	3/8	.41	6.25

(1) For standard lengths LinearRace Shaft Support Rail Material: Aluminum Black Anodized  
Support rails are supplied in 24 inch lengths unless quoted otherwise. Maximum length of LinearRace Shaft Support Rail is 72 inches. If longer continuous one-piece LinearRace Shaft Support Rails are required, contact the Thomson Linear Guides Application Engineering department.  
Y = distance from end of rail to the center of first mounting hole, Y1 = Y2 unless specified.



## Dual Shaft

**Low profile, high loads in all directions, easy to install**

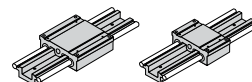


### Dual Shafts Offer:

- This performance proven linear guide has an extremely low profile and features external rails with maximum bearing spacing. This provides the user with high pitch, yaw and roll moment capability. The load capacity is the same when mounted in the inverted position.
- Corrosion-resistant options are also available for demanding environmental conditions. These include chrome-plated or stainless steel shafting and corrosion-resistant bearings.
- The inherent, self-aligning design of the Super Smart Ball Bushing® Bearings allow for more deviation in the flatness of the mounting surface. This can dramatically reduce the installed cost of the linear guide.
- The base extrusion has a reference edge for registration in your machine. Unlimited travel lengths can be realized by combining base and shaft segments. The shafts and bases are staggered to allow keying of the subsequent stage.

Thomson RoundRail Linear Guides and Components

# Dual Shaft Rail 2DA with Integrated Carriage Unpack and Install Inch



### Features

- Used in continuously supported applications when rigidity is required.
- Adaptable to any drive system.
- Pre-aligned and pre-assembled for immediate installation and use.
- Designed for medium to heavy loads.

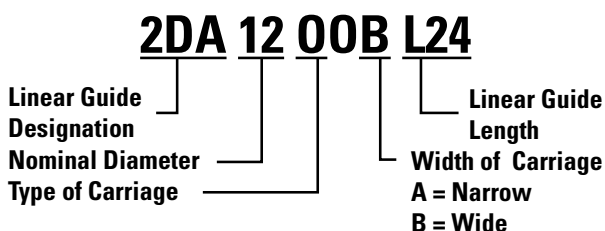
### Components

- 1 Dual LinearRace® shaft rail assembly
- 1 integrated carriage with 4 open type Super Smart Ball Bushing Bearings

### Specifying this Thomson Linear Guide

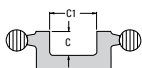
1. Determine the proper linear guide for your load and life requirements.
2. Select the part number.
3. Add the letter "L" followed by the overall length in inches as a suffix to the part number.

### Part Numbering System

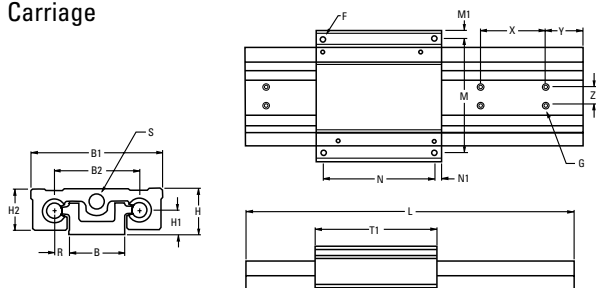


### Dimensions (Inch)

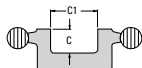
2DA XX 00B  
Rail Cross Section



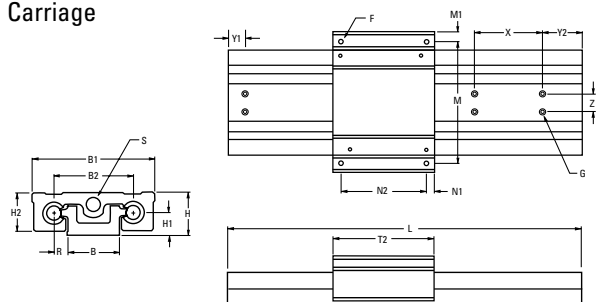
Dual Shaft Rail Linear Guide with Integrated Full Length Carriage



2DA XX 00A  
Rail Cross Section



Dual Shaft Rail Linear Guide with Integrated Short Length Carriage



### Load Rating and Limit by Direction

	Dynamic Load Rating	Load Limit
$F_c$	C	0.5C
$F_t$	C	0.5C
$F_s$	0.5C	0.5C

Dynamic Load Rating: load value used in life calculation.  
Load Limit: Maximum allowable load applied to bearing.

### Load Rating and Limit by Direction

	Dynamic Load Rating	Load Limit
$F_c$	C	0.5C
$F_t$	C	0.5C
$F_s$	0.5C	0.5C

Dynamic Load Rating: load value used in life calculation.  
Load Limit: Maximum allowable load applied to bearing.



### Dual Shaft Rail Linear Guide 2DA with Integrated Carriage (Dimensions in inches)

Part Number	Nominal Diameter	T1	H	H1	H2	B	R	B1	B2	C	C1
2DA0800B	.500	4.5	1.625	.875	1.43	2.00	.500	4.6	3.0	.64	1.25
2DA1200B	.750	6.0	2.125	1.125	1.93	2.63	.688	6.1	4.0	.75	1.662
2DA1600B	1.000	7.5	2.625	1.375	2.44	3.25	.875	7.6	5.0	.99	2.00

### Dual Shaft Rail Linear Guide 2DA with Integrated Carriage (Dimensions in inches)

Part Number	N	N1	M	M1	X	Z	S As Extruded	F	G		Maximum Stroke Length	Carriage	Dual Shaft Rail Assembly
									Bolt	Hole			
2DA0800B	4.00	.25	4.00	.30	4.0	.75	.50	#10-32	1/4	.28	L-(4.5)	DSRC08SB	DSRA08
2DA1200B	5.25	.37	5.25	.42	6.0	1.0.	.70	1/4-20	5/16	.34	L-(6.0)	DSRC12SB	DSRA12
2DA1600B	6.75	.37	6.75	.42	6.0	1.25	.90	5/16-18	3/8	.41	L-(7.5)	DSRC16SB	DSRA16

Support rails are supplied in 24 inch lengths unless quoted otherwise.

Dual Shaft Rail Support Material: Black Anodized Aluminum Alloy

Maximum continuous length of support rails is 72". If longer continuous shaft support rails are required, please contact the Thomson Linear Guides Application Engineering department.

Y = distance from end of rail to the center of first mounting hole, Y1 = Y2 unless specified.

### Dynamic Load Capacity Matrix (4 million inches travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (lb.) (Even Distribution)	Dynamic Roll Moment (in-lb.)
2DA0800B	480	720
2DA1200B	3200	6400
2DA1600B	5400	13500

Note: Above load ratings used for life calculations. Load limit of assembly 50%.

### Dual Shaft Rail Linear Guide 2DA with Integrated Carriage (Dimensions in inches)

Part Number	Nominal Diameter	T2	H	H1	H2	B	R	B1	B2	C	C1
2DA0800A	.500	3.5	1.625	.875	1.43	2.00	.500	4.6	3.0	.64	1.25
2DA1200A	.750	4.5	2.125	1.125	1.93	2.63	.688	6.1	4.0	.75	1.662
2DA1600A	1.000	6.0	2.625	1.375	2.44	3.25	.875	7.6	5.0	.99	2.00

### Dual Shaft Rail Linear Guide 2DA with Integrated Carriage (Dimensions in inches)

Part Number	N	N2	M	M1	X	Z	S As Extruded	F	G		Maximum Stroke Length	Carriage	Dual Shaft Rail Assembly
									Bolt	Hole			
2DA0800A	.25	3.00	4.00	.30	4.0	.75	.50	#10-32	1/4	.28	L-(3.5)	DSRC08SA	DSRA08
2DA1200A	.37	3.75	5.25	.42	6.0	1.0.	.70	1/4-20	5/16	.34	L-(4.5)	DSRC12SA	DSRA12
2DA1600A	.37	5.25	6.75	.42	6.0	1.25	.90	5/16-18	3/8	.41	L-(6.0)	DSRC16SA	DSRA16

Support rails are supplied in 24 inch lengths unless quoted otherwise.

Dual Shaft Rail Support Material: Black Anodized Aluminum Alloy

Maximum continuous length of support rails is 72". If longer continuous shaft support rails are required, please contact the Thomson Linear Guides Application Engineering department.

Y = distance from end of rail to the center of first mounting hole, Y1 = Y2 unless specified.

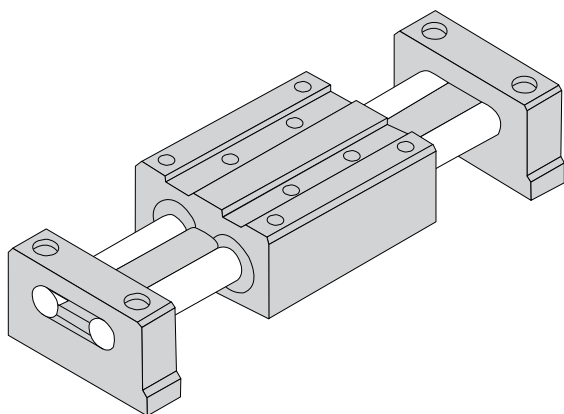
† Super Ball Bushing Bearings are used in 500 inch size carriages.

### Dynamic Load Capacity Matrix (4 million inches travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (lb.) (Even Distribution)	Dynamic Roll Moment (in-lb.)
2DA0800A	480	720
2DA1200A	3200	6400
2DA1600A	5400	13500

Note: Above load ratings used for life calculations. Load limit of assembly 50%.

## Twin Shaft Web



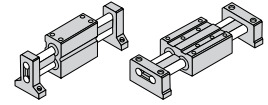
**High roll moment torque resistance,  
high rigidity, smooth, easy to install**

### **Twin Shaft Web Linear Ball Guides Offer:**

- Twin shaft web design for high roll moment capacity, high rigidity and ultra smooth travel.
- Pre-aligned shafts, end supported for gantry style or 'bridge' applications.
- Available in horizontal and vertical orientations for increased mounting flexibility.
- End supported for quicker and easy installation.
- The Super Smart Ball Bushing® Bearing... the most technologically advanced and most robust linear bearing in the world.
- The RoundRail Advantage. The inherent, self-aligning-in-all-directions design of the Super Smart Ball Bushing Bearing allows for ultra-smooth travel when mounted to wider-toleranced prepared surfaces.
- Cost savings: save time and money preparing your mounting surfaces before bolting down RoundRail linear guides.
- Corrosion-resistant versions for maximum performance in harsh environments.



## Twin Shaft Web 2CA with Universal Carriage Unpack and Install Inch



### Features

- Used when spanning or bridging a gap.
- Double LinearRace® shaft and welded integral web design maximizes torque and dramatically improves deflection characteristics.
- Pre-aligned for quick and easy installation.
- Designed to move medium loads with virtually frictionless travel.

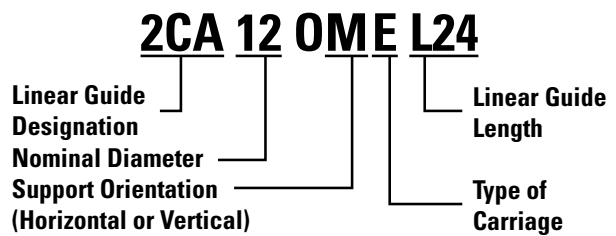
### Components

- Universal integrated carriage with four open-type Super Smart Ball Bushing Bearings.
- Twin welded 60 Case® LinearRace shafts with integral web.
- 2 vertical or horizontal double end supports.

### Specifying this Thomson Linear Guide

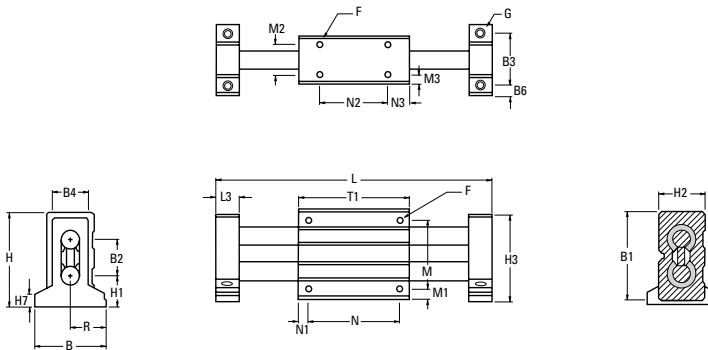
1. Determine the proper linear guide for your load and life requirements.
2. Select the part number.
3. Add the letter "L" followed by the overall length in inches as a suffix to the part number.

### Part Numbering System

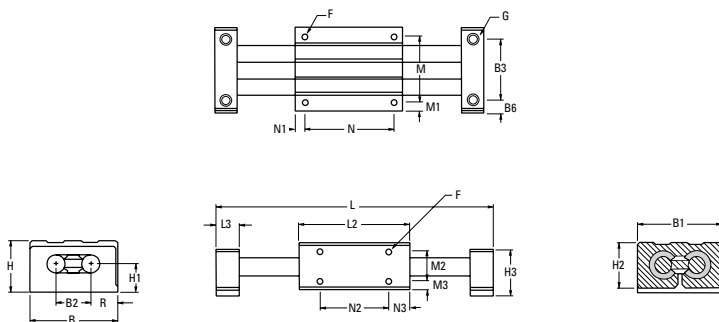


### Dimensions (Inch)

Twin Shaft Web Linear Guide with Universal Carriage (Vertical Configuration)



Twin Shaft Web Linear Guide with Universal Carriage (Horizontal Configuration)



## Thomson RoundRail Linear Guides and Components

**Twin Shaft Web Linear Guide End Supported 2CA (Vertical Configuration)** (Dimensions in inches)

Part Number	Nominal Diameter	L3	H	H1	H3	H7	B	R	B2	B3	B4	B6	T1	N
2CA080KE	.500	.63	2.750	.875	2.56	.38	2.25	1.125	1.13	1.63	1.12	.31	3.5	3.00
2CA120KE	.750	.75	3.625	1.125	3.44	.56	3.00	1.500	1.50	2.25	1.63	.38	4.5	4.00
2CA160KE	1.000	1.00	4.625	1.375	4.50	.75	4.00	2.00	2.00	3.00	2.25	.50	6.0	5.25

**Twin Shaft Web Linear Guide End Supported 2CA (Vertical Configuration)** (Dimensions in inches)

Part Number	N1	N2	N3	H2	B1	M	M1	M2	M3	F	G		Maximum Stroke Length	Dual Shaft Rail Assembly
											Bolt	Hole		
2CA080KE	.25	2.5	.50	1.5	2.62	2.00	.31	.88	.31	#10-32	#10	.22	L-(4.75)	TSWA08
2CA120KE	.25	3.5	.50	2.0	3.50	2.87	.31	1.38	.31	1/4-20	1/4	.28	L-(6.00)	TSWA12
2CA160KE	.38	4.5	.75	2.5	4.50	3.62	.44	1.62	.44	5/16-18	5/16	.34	L-(8.00)	TSWA16

Maximum Length is 72 inches.

**2CA (Vertical Config.) Carriage and End Support Part No.**

Linear Guide Part Number	Carriage Part Number	End Support Part Number
2CA080KE	WC08	WSB08V
2CA120KE	WC12	WSB12V
2CA160KE	WC16	WSB16V

Shaft Deflection Note:

Load limit may be below the dynamic load rating due to shaft deflection.

Bearings can accommodate up to 1/2° deflection.

See Engineering section (page 265) for Deflection calculations.

**Dynamic Load Capacity Matrix** (4 million inches travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (lb.) (Even Distribution)	Pillow Block Dynamic Load Capacity (lb.)
2CA080KE	290	165
2CA120KE	1800	1350
2CA160KE	3000	3000

† Super Ball Bushing Bearings are used in .500 inch size carriages.

**Twin Shaft Web Linear Guide End Supported 2CA (Horizontal Configuration)** (Dimensions in inches)

Part Number	Nominal Diameter	L3	H	H1	H3	B	R	B2	B3	B6	T1	N
2CA080ME	.500	.63	1.625	.875	1.50	2.62	.75	1.13	2.00	.31	3.5	3.00
2CA120ME	.750	.75	2.125	1.125	2.00	3.50	1.00	1.50	2.75	.37	4.5	4.00
2CA160ME	1.000	1.00	2.625	1.375	2.50	4.50	1.25	2.00	3.62	.50	6.0	5.25

**Twin Shaft Web Linear Guide End Supported 2CA (Horizontal Configuration)** (Dimensions in inches)

Part Number	N1	N2	N3	H2	B1	M	M1	M2	M3	F	G		Maximum Stroke Length	Dual Shaft Rail Assembly
											Bolt	Hole		
2CA080ME	.25	2.5	.50	1.5	2.62	2.00	.31	.88	.31	#10-32	#10	.22	L-(4.75)	TSWA08
2CA120ME	.25	3.5	.50	2.0	3.50	2.87	.31	1.38	.31	1/4-20	1/4	.28	L-(6.00)	TSWA12
2CA160ME	.38	4.5	.75	2.5	4.50	3.62	.44	1.62	.44	5/16-18	5/16	.34	L-(8.00)	TSWA16

Maximum Length is 72 inches.

**2CA (Horizontal Config.) Carriage and End Support Part No.**

Linear Guide Part Number	Carriage Part Number	End Support Part Number
2CA080ME	WC08	WSB08H
2CA120ME	WC12	WSB12H
2CA160ME	WC16	WSB16H

Shaft Deflection Note:

Load limit may be below the dynamic load rating due to shaft deflection.

Bearings can accommodate up to 1/2° deflection.

See Engineering section (page 269) for Deflection calculations.

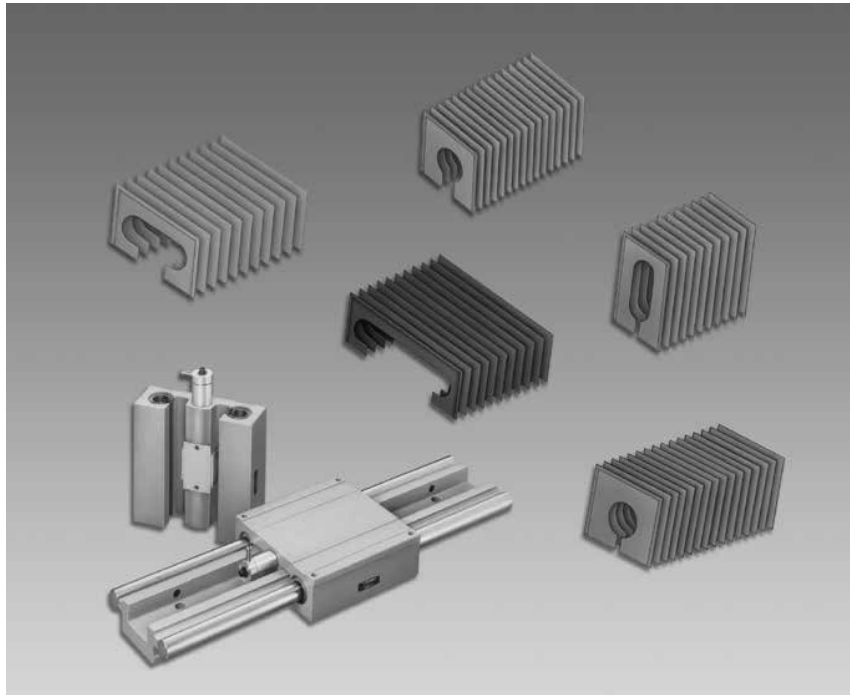
**Dynamic Load Capacity Matrix** (4 million inches travel)

Linear Guide Assembly Part Number	Dynamic Load Capacity (lb.) (Even Distribution)	Pillow Block Dynamic Load Capacity (lb.)
2CA080ME	290	165
2CA120ME	1800	1350
2CA160ME	3000	3000

† Super Ball Bushing Bearings are used in .500 inch size carriages.



## Accessories



**We offer a variety of accessories for the Thomson line of RoundRail linear guides.**

- \* Protective bellows are available on select models for applications where protection of the RoundRail guides and carriage bearings are required within harsh or dirty operating environments.
- \* Some linear guide models are available with manually operated locking brakes for vertical applications and operations requiring unlimited carriage position alignment in the available range of stroke.
- \* We encourage you to inquire about linear guide accessories not shown here or any custom application needs that you may have.

**For a full list of available accessories, including Table Tops, visit [www.thomsonlinear.com](http://www.thomsonlinear.com).**

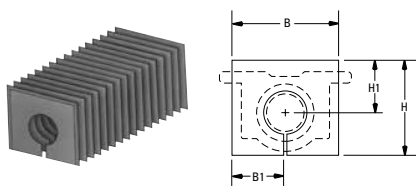
## Collapsible Bellows

Bellows will reduce available stroke length of slide by approximately 28%.  
Bellows P/N should be succeeded by a length when ordering.

Bellows Materials:

- Polyester Cover
- PVC Stiffeners

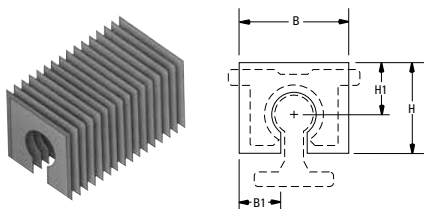
### BEL-1B (For 1BA) Moveable Protective Bellows (Dimensions in inches)



Part Number	Nominal Shaft Diameter	H	H1	B	CR
BEL1B04	1/4	1.187	.906	1.182	.163
BEL1B06	3/8	1.312	.968	1.937	.108
BEL1B08	1/2	1.687	1.156	2.062	.160
BEL1B12	3/4	2.000	1.156	2.312	.108
BEL1B16	1	2.375	1.281	2.625	.163
BEL1B24	1 1/2	3.062	1.531	3.125	.108

Each moveable bellows comes with 1 section of bellows and 2 pairs of Velcro® fasteners.

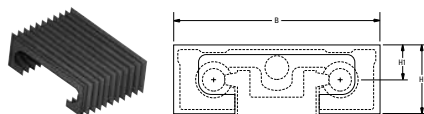
### BEL-1C (For 1CA) Moveable Protective Bellows (Dimensions in inches)



Part Number	Nominal Shaft Diameter	H	H1	B	CR
BEL1C08	1/2	1.375	.968	2.062	.088
BEL1C12	3/4	1.812	1.062	2.312	.120
BEL1C16	1	2.375	1.218	2.625	.088
BEL1C24	1 1/2	3.125	1.531	3.125	.088

Each moveable bellows comes with 1 section of bellows and 2 pairs of Velcro fasteners.

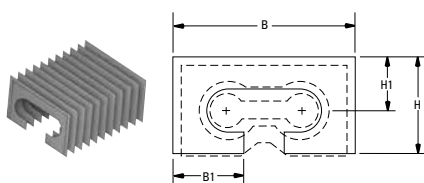
### BEL-2D (For QuickSlide System 2DA) Dual Shaft Rail Bellows (Dimensions in inches)



Part Number	Nominal Shaft Diameter	H	H1	B
BEL2DA08	1/2	1.50	.85	4.60
BEL2DB08	1/2	1.89	1.34	5.13
BEL2D12	3/4	2.406	1.437	6.00
BEL2D16	1	2.875	1.687	7.50

Each moveable bellows comes with 1 section of bellows and 2 mounting brackets and mounting screws (1/2" comes with Velcro fastener). Appropriate arrangements for affixing the bellows at each end of the QuickSlide 2DA System are required.

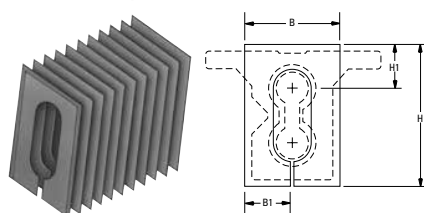
### BEL-2C-H (For Horizontal Twin Shaft Web QuickSlide System 2CA) Moveable Protective Bellows (Dimensions in inches)



Part Number	Nominal Shaft Diameter	H	H1	B	CR
BEL2C08H	1/2	1.688	1.031	3.250	.108
BEL2C12H	3/4	2.062	1.156	3.812	.108
BEL2C16H	1	2.437	1.281	4.62	.108

Each moveable bellows comes with 1 section of bellows and 2 pairs of Velcro fasteners.

### BEL-2C-V (For Vertical Twin Shaft Web QuickSlide System 2CA) Dual Shaft Rail Bellows (Dim. in in.)



Part Number	Nominal Shaft Diameter	H	H1	B	CR
BEL2C08V	1/2	2.750	1.000	2.125	.163
BEL2C12V	3/4	3.750	1.125	2.375	.163
BEL2C16V	1	4.375	1.250	2.625	.108

Each moveable bellows comes with 1 section of bellows and 2 pairs of Velcro fasteners.

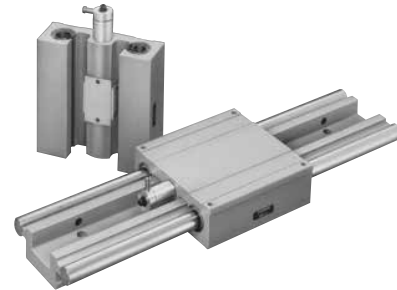


## 2DA QuickSlide System with Brake

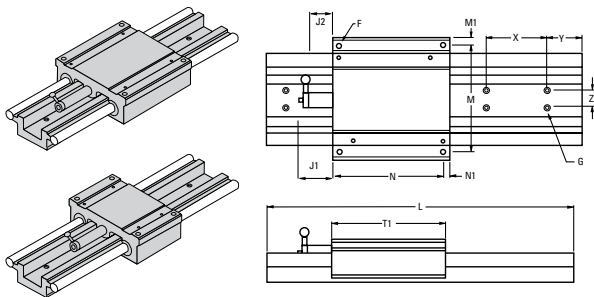
### A manual locking mechanism for the Dual Shaft Rail System

#### 2DA QuickSlide System with Brake offers:

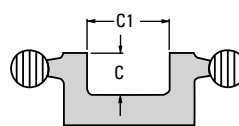
- A manual locking mechanism with infinite positioning capability.
- No carriage mounting surface deflection when the locking mechanism is activated.
- Immediate off-the-shelf availability in 1/2-, 3/4- and 1-inch sizes.
- A locking mechanism that, when activated, will not apply an increase in load on the system's Ball Bushing® Bearing.
- Zero axial movement during the activation of the locking mechanism.
- A fully supported dual shaft assembly for maximum rigidity and unlimited travel.
- High load capacity in any direction.



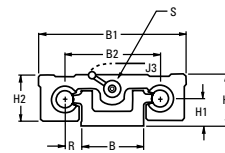
#### Dual Shaft Rail Fully Supported System with Integrated Carriage



#### Dual Shaft Rail Supported Cross-Section



Maximum stroke length is determined by subtracting the carriage length (T1 or T2) plus the brake handle length (J1) from the total system length.



#### Dual Shaft Rail Fully Supported System with Integrated Carriage (Long Style) (Dimensions in inches)

Part Number	Nominal Shaft Diameter	Max. Load on System <sup>(1)</sup> (lb.)	Max. Load on One Bearing <sup>(1)</sup> (lb.)	T1	H	H1	H2	B	R	B1	B2	C	C1
2DA0800L	1/2	600	150	4.50	1.625	0.875	1.43	2.00	0.500	4.60	3.00	.64	1.25
2DA1200L	3/4	1880	470	6.00	2.125	1.125	1.93	2.63	0.688	6.10	4.00	.75	1.62
2DA1600L	1	3120	780	7.50	2.625	1.375	2.44	3.25	0.875	7.60	5.00	.99	2.00

(1) For rated travel life of 2 million inches. Note: Manual Brake can be adjusted in order to position handle to any radial location. Dual Shaft Rail Support Material: Aluminum Alloy Black Anodized. Standard length of one-piece Aluminum Dual Shaft Rails is 72".

#### Dual Shaft Rail Fully Supported System with Integrated Carriage (Long Style) (Dimensions in inches)

Part Number	N	N1	M	M1	X	Y	Z	J1	J2	J3	F	G		Max. Stroke Length	Carriage Part Number
												Bolt	Hole		
2DA0800L	4.00	.25	4.00	.30	4.00	2.00	.75	1.63	1.19	.88	#10-32	1/4	.28	L-(6.13)	DSRC08SL
2DA1200L	4.25	.37	5.25	.42	6.00	3.00	1.00	1.63	1.19	1.00	1/4-20	5/16	.34	L-(7.63)	DSRC12SL
2DA1600L	6.75	.37	6.75	.42	6.00	3.00	1.25	1.63	1.19	1.00	5/16-18	3/8	.41	L-(9.13)	DSRC16SL

#### Dual Shaft Rail Fully Supported System with Integrated Carriage (Short Style) (Dim. in inches)

Part Number	Nom. Shaft Diameter	T2	N2	Max. Stroke Length	Carriage Part Number
2DA0800M	1/2	3.50	3.00	L-(5.13)	DSRC08SM
2DA1200M	3/4	4.50	3.75	L-(6.13)	DSRC12SM
2DA1600M	1	6.00	5.25	L-(7.63)	DSRC16SM

#### System 2DA Standard Lengths (Dim. in inches)

System	8"	12"	16"	18"	20"	24"	28"	30"	32"	36"	40"	42"	44"	48"
2DA08	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2DA12	•	•	•	•	•	•	•	•	•	•	•	•	•	•

#### Quick Slide Brake Holding Force

System	Axial Holding Force (lb.)
2DA08	125
2DA12	130
2DA16	140

#### Custom Lengths and Delivery Information

Custom length systems are available. For special requirements, please contact the Thomson Systems application engineering department.

