# **RoundRail Linear Guides**

# 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

# <u>I</u>II

# **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 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





Load Rating and Limit by Direction



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



# **RoundRail Linear Guides**

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

Part Number	Nominal Diameter	Н	В	B1	L1	Pillow Block	Shaft Support Rail Assembly
1DA-08-J00	.500	1.562	1.44	2.61	1.50	SPB-8-0PN-MOD	SSRA-8
1DA-12-J00	.750	2.062	1.94	3.55	1.88	SSUPBO-12-MOD	SSRA-12
1DA-16-J00	1.000	2.562	2.44	4.49	2.63	SSUPBO-16-MOD	SSRA-16

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

Part Number	Nominal Diameter	Н	В	B1	L2	Maximum Stroke Length	Pillow Block	Shaft Support Rail Assembly
1DA-08-KOO	.50	1.562	1.44	2.61	3.5	L-(3.5)	TWN-8-0PN-MOD	SSRA-8
1DA-12-K00	.75	2.062	1.94	3.55	4.5	L-(4.5)	SSUTWN0-12-MOD	SSRA-12
1DA-16-K00	1.00	2.562	2.44	4.49	6.0	L-(6.0)	SSUTWNO-16-MOD	SSRA-16

#### **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.

# Replacement Component Dimensions Type SPB-OPN-MOD and SSUPBO-MOD Pillow Block (Dimensions in inches)

Part Number	Nom. Dia.	H8	H9	Α	<b>B</b> 9	L1	J	J1	F	Wt. (lb)
SPB-8-OPN-MOD	.500	.687	1.44	.67	1.12	1.50	.812	1.250	#8-32	.18
SSUPBO-12-MOD	.750	.937	1.94	.92	1.56	1.88	1.187	1.562	#10-32	.45
SSUPBO-16-MOD	1 000	1 187	2 44	1 17	2 00	2.63	1 4 3 8	2 250	1/4-20	98

Housing Material: Aluminum Alloy Black Anodized

Top plates are sold separately. Please refer to page 243 under accessories for P/N and dimensions.

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

Part Number	Nom. Dia.	114	Р		-		~	v	<b>V</b> (1)	G		Wt.
Part Number	Nom. Dia.	H1	В	n	E	D	U.	•	¥"	Bolt	Hole	(lb/ft)
SSRA-8-XS	.500	.875	1.44	.500	1.00	.49	1.06	4	2	1/4	.28	2.05
SSRA-12-XS	.750	1.125	1.94	.688	1.31	.75	1.44	6	3	5/16	.34	4.00
SSRA-16-XS	1.000	1.375	2.44	.875	1.63	.88	1.81	6	3	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.

# 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)						
1DA-08-J00	240	SPB-8-0PN-MOD	120						
1DA-12-J00	1600	SSUPBO-12-MOD	800						
1DA-16-J00	2700	SSUPBO-16-MOD	1350						
1DA-08-K00	240	TWN-8-0PN-MOD	240						
1DA-12-K00	1600	SSUTWN0-12-MOD	1600						
1DA-16-K00	2700	SSUTWNO-16-MOD	2700						

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

# Type TWN-OPN-MOD and SSUTWNO-

MOD Pillow Blocks (Dimensions in inches)

Part Number	Nom. Dia.	L2	J2	Wt. (lb)
TWN-8-0PN-MOD	.500	3.5	3.00	.39
SSUTWN0-12-MOD	.750	4.5	4.00	1.00
SSUTWNO-16-MOD	1.000	6.0	5.25	2.11

Housing Material: Aluminum Alloy Black Anodized