RoundRail Linear Guides

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

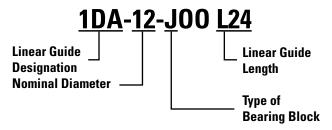
Components

- 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

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.

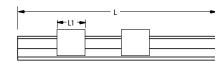
Part Numbering System



Dimensions (Inch)

Single Side Mounted Linear Guide with 2 Pillow Blocks

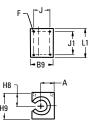




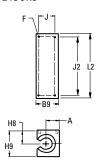
Single Side Mounted Linear Guide with 1 Twin Pillow Block



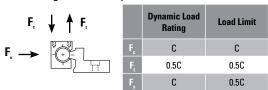
Type SSUPBO-MOD and SPB-OPN-MOD Open Type Pillow Blocks



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

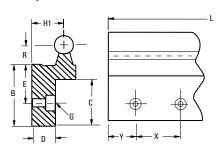


Load Rating and Limit by Direction



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



www.thomsonlinear.com 233

RoundRail Linear Guides

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

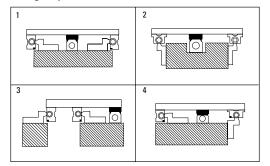
| Part Number | Nominal Diameter | Н | В | B1 | L1 | Pillow Block | Shaft Support Rail Assembly |
|-------------|------------------|-------|------|------|------|---------------|--------------------------------|
| 1DA-08-J00 | .500 | 1.562 | 1.44 | 2.61 | 1.50 | SPB-8-OPN-MOD | SSRA-8 |
| 1DA-12-J00 | .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 | ······ H R R1 12 | | Maximum Stroke Length Pillow Block | | Shaft Support Rail Assembly | | |
|-------------|---------------------|------------------|------|---------------------------------------|-----|--------------------------------|----------------|---------|
| 1DA-08-K00 | .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-M0D | SSRA-12 |
| 1DA-16-K00 | 1.00 | 2.562 | 2.44 | 4.49 | 6.0 | L-(6.0) | SSUTWN0-16-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.

Dynamic Load Capacity Matrix (4 million inches travel)

| Jimino Loud Supusity Matrix (4 minion menes naven) | | | | | | | | | | |
|--|---|-----------------------------|--|--|--|--|--|--|--|--|
| 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-OPN-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-M0D | 1600 | | | | | | | |
| 1DA-16-K00 | 2700 | SSUTWNO-16-MOD | 2700 | | | | | | | |
| | | | | | | | | | | |

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

Replacement Component Dimensions

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

| Part Number | Nom. Dia. | Н8 | Н9 | Α | B9 | L1 | J | J1 | F | Wt. (lb) |
|---------------|--------------|-------|------|------|------|------|-------|-------|--------|-------------|
| SPB-8-0PN-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 | 1.438 | 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 TWN-OPN-MOD and SSUTWNO-MOD Pillow Blocks (Dimensions in inches)

| | Part Number | Nom. Dia. | L2 | J2 | Wt. (lb) |
|---|----------------|--------------|-----|------|-------------|
| ı | TWN-8-0PN-MOD | .500 | 3.5 | 3.00 | .39 |
| | SSUTWN0-12-M0D | .750 | 4.5 | 4.00 | 1.00 |
| | SSUTWN0-16-M0D | 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. | Nom. Dia. H1 | В | | _ | _ | _ | v | V (1) | G | | Wt. |
|-------------|-----------|--------------|------|------|------|-----|------|---|--------------|------|------|---------|
| Part Number | Nom. Dia. | п | В | n | _ | U | L L | ^ | ¥*** | 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.

234 www.thomsonlinear.com