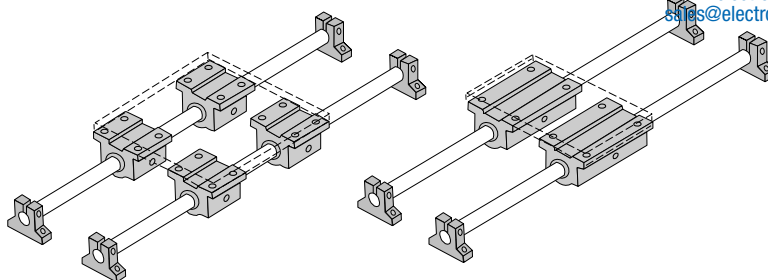


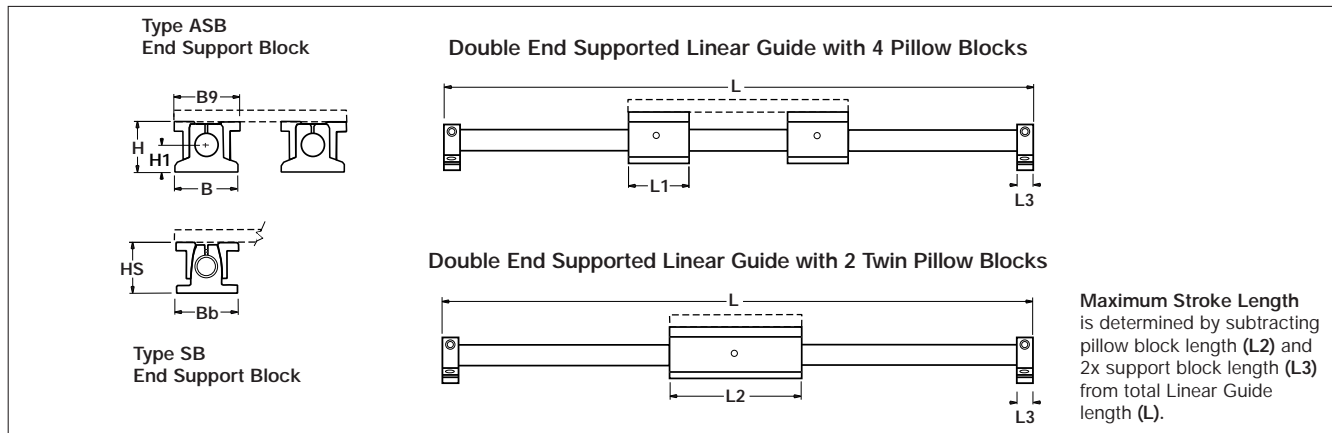
End Support 1BB

Linear Guide #9

End Supported,
Industry Standard Dimension



INCH



End Support Linear Guide 1BB with 4 Pillow Blocks (Dimensions in inches)

Part Number		Nominal Diameter	L1	L3	H	HS	B	Bb	B9	Pillow Block	Shaft Support	
W/ Type ASB Shaft Supports	W/ Type SB Shaft Supports										Type ASB	Type SB
1BB-04-AHO	-	.250	1.19	.50	.937	-	1.50	-	1.63	SPB-4-XS	ASB-4-XS	-
1BB-06-AHO	-	.375	1.31	.56	1.062	-	1.63	-	1.75	SPB-6-XS	ASB-6-XS	-
1BB-08-AHO	1BB-08-AJO	.500	1.69	.63	1.562	1.687	2.00	2.00	2.00	SSUPB-8-XS	ASB-8-XS	SB-8-XS
1BB-12-AHO	1BB-12-AJO	.750	2.06	.75	2.062	2.187	2.50	2.75	2.75	SSUPB-12-XS	ASB-12-XS	SB-12-XS
1BB-16-AHO	1BB-16-AJO	1.000	2.81	1.00	2.562	2.687	3.25	3.25	3.25	SSUPB-16-XS	ASB-16-XS	SB-16-XS
-	1BB-20-AJO	1.250	3.63	1.13	-	3.250	-	-	4.00	SSUPB-20-XS	-	SB-20-XS
1BB-24-AHO	1BB-24-AJO	1.500	4.00	1.25	3.750	3.750	4.75	4.75	4.75	SSUPB-24-XS	ASB-24-XS	SB-24-XS

End Support Linear Guide 1BB with 2 Twin Pillow Blocks (Dimensions in inches)

Part Number		Nom. Dia.	L2	L3	H	HS	B	Bb	B9	Max. Stroke Length	Pillow Block	Shaft Support	
W/ Type ASB Shaft Supports	W/ Type SB Shaft Supports											Type ASB	Type SB
1BB-04-BHO	-	.250	2.50	.50	.937	-	1.50	-	1.63	L-(3.50)	TWN-4-XS	ASB-4-XS	-
1BB-06-BHO	-	.375	2.75	.56	1.062	-	1.63	-	1.75	L-(3.88)	TWN-6-XS	ASB-6-XS	-
1BB-08-BHO	1BB-08-BJO	.500	3.50	.63	1.562	1.687	2.00	2.00	2.00	L-(4.75)	SSUTWN-8-XS	ASB-8-XS	SB-8-XS
1BB-12-BHO	1BB-12-BJO	.750	4.50	.75	2.062	2.187	2.50	2.75	2.50	L-(6.00)	SSUTWN-12-XS	ASB-12-XS	SB-12-XS
1BB-16-BHO	1BB-16-BJO	1.000	6.00	1.00	2.562	2.687	3.25	3.25	3.25	L-(8.00)	SSUTWN-16-XS	ASB-16-XS	SB-16-XS
-	1BB-20-BJO	1.250	7.50	1.13	-	3.250	-	4.00	4.00	L-(9.75)	SSUTWN-20-XS	-	SB-20-XS
1BB-24-BHO	1BB-24-BJO	1.500	9.00	1.25	3.750	3.750	4.75	4.75	4.75	L-(11.50)	SSUTWN-24-XS	ASB-24-XS	SB-24-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 (pg 204) for Deflection calculations.

End Support Linear Guide

1BB Benefits:

- Requires only one part number to specify entire linear guide.
- Available with 60 Case* LinearRace* Shaft end support blocks in either light weight aluminum or rigid iron
- Used in end supported applications when spanning or bridging a gap.

End Support Linear Guide

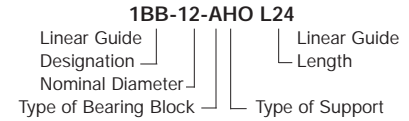
1BB Components: †

- 4 Super Smart Ball Bushing* pillow blocks or Super Smart Ball Bushing twin pillow blocks.
- 2 60 Case LinearRace shafts.
- 4 Shaft End Support Blocks.

Specifying a Thomson Linear Guide:

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

Part Numbering System



Type SSUPB Super Smart Ball Bushing Pillow Block
Type SPB Super Ball Bushing Pillow Block

Access for Lubrication†

Type ASB LinearRace Shaft End Support Block

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

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

Type SPB and SSUPB Pillow Blocks (Dimensions in Inches)												Type TWN and SSUTWN Pillow Blocks					
Part Number	Nom. Dia.	L1	H9	H8	H5	B9	B7	J	J1	F		Wt. lb	Part Number	Nom. Dia.	L2	J3	Wt. lb
										Bolt	Hole						
SPB-4-XS	.250	1.19	.81	.437	.19	1.63	1.00	1.31	.75 ⁽²⁾	#6	.16	.10	TWN-4-XS	.250	2.50	2.00	.19
SPB-6-XS	.375	1.31	.94	.500	.19	1.75	1.12	1.44	.88 ⁽²⁾	#6	.16	.13	TWN-6-XS	.375	2.75	2.25	.25
SSUPB-8-XS	.500	1.69	1.25	.687	.25	2.00	1.38	1.69	1.00	#6	.16	.20	SSUTWN-8-XS	.500	3.50	2.50	.40
SSUPB-12-XS	.750	2.06	1.75	.937	.31	2.75	1.88	2.38	1.25	#8	.19	.62	SSUTWN-12-XS	.750	4.50	3.50	1.24
SSUPB-16-XS	1.000	2.81	2.19	1.187	.38	3.25	2.38	2.88	1.75	#10	.22	1.24	SSUTWN-16-XS	1.000	6.00	4.50	2.48
SSUPB-20-XS	1.250	3.63	2.81	1.500	.43	4.00	3.00	3.50	2.00	#10	.22	2.57	SSUTWN-20-XS	1.250	7.50	5.50	5.14
SSUPB-24-XS	1.500	4.00	3.25	1.750	.50	4.75	3.50	4.12	2.50	1/4	.28	3.94	SSUTWN-24-XS	1.500	9.00	6.50	8.08

Housing Material: Aluminum Alloy Black Anodized

⁽²⁾Two mounting holes as shown in view A-A for sizes .250 and .375

Housing Material: Aluminum Alloy Black Anodized

Anodized

Type ASB LinearRace Shaft End Support Block										Type SB LinearRace Shaft End Support Block									
Part Number	Nom. Dia.	L3	H3	H1	B	B3	G		Wt. lb	Part Number	Nom. Dia.	L3	Hh	Hc	Bb	B3	G		Wt. lb
							Bolt	Hole									Bolt	Hole	
ASB-04-XS	.250	.50	.88	.500	1.50	1.12	#6	.16	.06	SB-8-XS	.500	.63	1.62	1.000	2.00	1.50	#8	.19	.3
ASB-06-XS	.375	.56	1.00	.562	1.62	1.25	#6	.16	.08	SB-12-XS	.750	.75	2.12	1.250	2.75	2.00	#10	.22	.5
ASB-08-XS	.500	.63	1.48	.875	2.00	1.50	#8	.19	.11	SB-16-XS	1.000	1.00	2.56	1.500	3.25	2.50	1/4	.28	1.0
ASB-12-XS	.750	.75	1.95	1.125	2.50	2.00	#10	.22	.22	SB-20-XS	1.250	1.13	3.00	1.750	4.00	3.00	5/16	.34	2.0
ASB-16-XS	1.000	1.00	2.48	1.375	3.25	2.50	1/4	.28	.44	SB-24-XS	1.500	1.25	3.50	2.000	4.75	3.50	5/16	.34	2.6
ASB-24-XS	1.500	1.250	3.50	2.000	4.75	3.50	5/16	.34	1.16	Material: Iron									

End Support Material: Aluminum Alloy Black Anodized

Dynamic Load Capacity Matrix (4 million inches travel)					Dynamic Load Capacity Matrix (4 million inches travel)				
Linear Guide Assembly Part No.	Dynamic Load Capacity (lb _f) (Even Distribution)	Pillow Block Part No.	Pillow Block Dynamic Load Capacity (lb _f)		Linear Guide Assembly Part No.	Dynamic Load Capacity (lb _f) (Even Distribution)	Pillow Block Part No.	Pillow Block Dynamic Load Capacity (lb _f)	
1BB-04-AHO	-	200	SPB-4-XS	50	1BB-04-BHO	-	200	TWN-4-XS	100
1BB-06-AHO	-	320	SPB-6-XS	80	1BB-06-BHO	-	320	TWN-6-XS	160
1BB-08-AHO	1BB-08-AJO	1600	SSUPB-8-XS	400	1BB-08-BHO	1BB-08-BJO	1600	SSUTWN-8-XS	800
1BB-12-AHO	1BB-12-AJO	3600	SSUPB-12-XS	900	1BB-12-BHO	1BB-12-BJO	3600	SSUTWN-12-XS	1800
1BB-16-AHO	1BB-16-AJO	6000	SSUPB-16-XS	1500	1BB-16-BHO	1BB-16-BJO	6040	SPSTWN-16-XS	3020
-	1BB-20-AJO	7460	SSUPB-20-XS	1865	-	1BB-20-BJO	7460	SSUTWN-20-XS	3730
1BB-24-AHO	1BB-24-AJO	12320	SSUPB-24-XS	3080	1BB-24-BHO	1BB-24-BJO	12320	SSUTWN-24-XS	6160

† Super Ball Bushing* bearings are used in .250 and .375 inch pillow blocks.