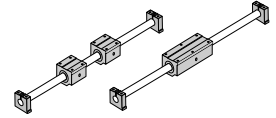


RoundRail Linear Guides

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 light weight aluminum or rigid iron materials
- Used to provide increased stability or torque resistance in linear system applications

Components

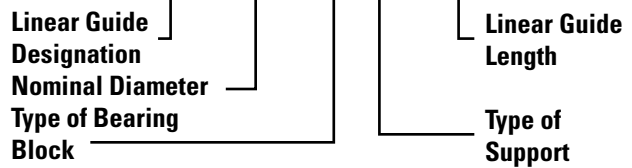
- 2 Super Smart Ball Bushing pillow blocks or 1 Super Smart Ball Bushing twin pillow block.
- 1 60 Case LinearRace shaft
- 2 shaft end support blocks

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.

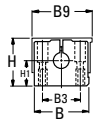
Part Numbering System

1NA-M12-NMO L600

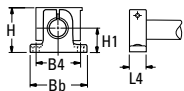


Dimensions (Inch)

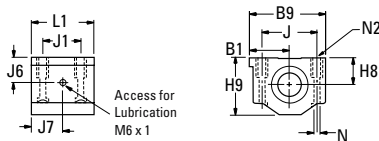
Type ASB End Support Block



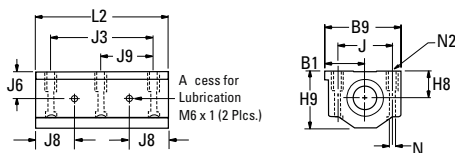
Type SB End Support Block



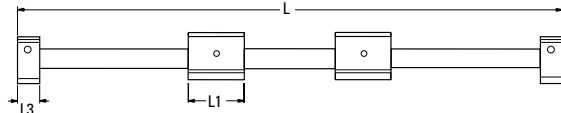
Type SPPB Super Plus and SSEPB Super Smart Ball Bushing Pillow Blocks



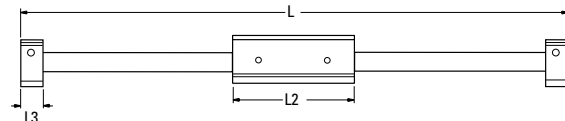
Type SPTWN Super Plus and SSETWN Super Smart Ball Bushing Twin Pillow Blocks



Supported Linear Guide with 2 Pillow Blocks



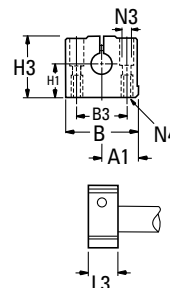
Supported Linear Guide with 1 Twin Pillow Block



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).

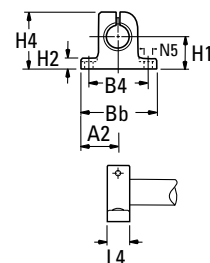
Aluminum

Type ASB LinearRace Shaft End Support Block



Steel

Type SB LinearRace Shaft End Support Block



RoundRail Linear Guides

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
1NA-M08-NMO	1NA-M08-NNO	8	32	18	10	30	15	32	32	35	SPPB-M08-XS	ASB-M08-XS	SB-M08-XS
1NA-M12-NMO	1NA-M12-NNO	12	39	20	12	38	20	43	42	43	SSEPBM12-XS	ASB-M12-XS	SB-M12-XS
1NA-M16-NMO	1NA-08-NNO	16	43	24	16	47	25	43	50	53	SSEPBM16-XS	ASB-M16-XS	SB-M16-XS
1NA-M20-NMO	1NA-12-NNO	20	54	30	20	55	30	60	60	60	SSEPBM20-XS	ASB-M20-XS	SB-M20-XS
1NA-M25-NMO	1NA-16-NNO	25	67	38	25	65	35	78	74	78	SSEPBM25-XS	ASB-M25-XS	SB-M25-XS
1NA-M30-NMO	1NA-20-NNO	30	79	40	28	75	40	87	84	87	SSEPBM30-XS	ASB-M30-XS	SB-M30-XS
1NA-M40-NMO	1NA-24-NNO	40	91	48	32	95	50	108	108	108	SSEPBM40-XS	ASB-M40-XS	SB-M40-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
1NA-M08-PMO	1NA-M08-PNO	8	62	18	10	30	15	32	32	35	SPTWN-M08-XS	ASB-M08-XS	SB-M08-XS
1NA-M12-PMO	1NA-M12-PNO	12	76	20	12	38	20	43	42	43	SSETWN-M12-XS	ASB-M12-XS	SB-M12-XS
1NA-M16-PMO	1NA-08-PNO	16	84	24	16	47	25	43	50	53	SSETWN-M16-XS	ASB-M16-XS	SB-M16-XS
1NA-M20-PMO	1NA-12-PNO	20	104	30	20	55	30	60	60	60	SSETWN-M20-XS	ASB-M20-XS	SB-M20-XS
1NA-M25-PMO	1NA-16-PNO	25	130	38	25	65	35	78	74	78	SSETWN-M25-XS	ASB-M25-XS	SB-M25-XS
1NA-M30-PMO	1NA-20-PNO	30	152	40	28	75	40	87	84	87	SSETWN-M30-XS	ASB-M30-XS	SB-M30-XS
1NA-M40-PMO	1NA-24-PNO	40	176	48	32	95	50	108	108	108	SSETWN-M40-XS	ASB-M40-XS	SB-M40-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 257) 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.)
1NA-M08-NMO 1NA-M08-NNO	100	SPPB-M08-XS	50
1NA-M12-NMO 1NA-M12-NNO	160	SSEPBM12-XS	80
1NA-M16-NMO 1NA-08-NNO	800	SSEPBM16-XS	400
1NA-M20-NMO 1NA-12-NNO	1800	SSEPBM20-XS	900
1NA-M25-NMO 1NA-16-NNO	3000	SSEPBM25-XS	1500
1NA-M30-NMO 1NA-20-NNO	3730	SSEPBM30-XS	1865
1NA-M40-NMO 1NA-24-NNO	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.)
1NA-M08-PMO 1NA-M08-PNO	100	SPTWN-M08-XS	100
1NA-M12-PMO 1NA-M12-PNO	160	SSETWN-M12-XS	160
1NA-M16-PMO 1NA-08-PNO	800	SSETWN-M16-XS	800
1NA-M20-PMO 1NA-12-PNO	1800	SSETWN-M20-XS	1800
1NA-M25-PMO 1NA-16-PNO	3000	SSETWN-M25-XS	3000
1NA-M30-PMO 1NA-20-PNO	3730	SSETWN-M30-XS	3730
1NA-M40-PMO 1NA-24-PNO	6160	SSETWN-M40-XS	6160

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

Replacement Component Dimensions

Type SPB and SSUPB Pillow Blocks (Dimensions in mm)

Part Number	Nom. Dia.	L1	H9	H8	H5	B9	B7	J	J1	F		Wt. (lb)
										Bolt	Hole	
SPPB-M08-XS	.250	1.19	.81	.437	.19	1.63	1.00	1.31	.75 ⁽²⁾	#6	.16	.10
SSEPBM12-XS	.375	1.31	.94	.500	.19	1.75	1.12	1.44	.88 ⁽²⁾	#6	.16	.13
SSEPBM16-XS	.500	1.69	1.25	.687	.25	2.00	1.38	1.69	1.00	#6	.16	.20
SSEPBM20-XS	.750	2.06	1.75	.937	.31	2.75	1.88	2.38	1.25	#8	.19	.62
SSEPBM25-XS	1.000	2.81	2.19	1.187	.38	3.25	2.38	2.88	1.75	#10	.22	1.24
SSEPBM30-XS	1.250	3.63	2.81	1.500	.43	4.00	3.00	3.50	2.00	#10	.22	2.57
SSEPBM40-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 Grey Anodized.

Top plates are sold separately. Please refer to page 243 under Accessories.

Type TWN and SSUTWN Pillow Blocks

Part Number	Nom. Dia.	L2	J3	Wt. (lb)
SPTWN-M08-XS	.25	2.50	2.00	.19
SSETWN-M12-XS	.375	2.75	2.25	.25
SSETWN-M16-XS	.500	3.50	2.50	.40
SSETWN-M20-XS	.750	4.50	3.50	1.24
SSETWN-M25-XS	1.000	6.00	4.50	2.48
SSETWN-M30-XS	1.250	7.50	5.50	5.14
SSETWN-M40-XS	1.500	9.00	6.50	8.08

Housing Material: Aluminum Alloy Black 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)
ASB-M08-XS	8	16,0	32	22	15	28	18	3,5	M4	0,04
ASB-M12-XS	12	21,5	43	30	20	36	20	5,3	M6	0,10
ASB-M16-XS	16	26,5	53	38	25	43	24	6,6	M8	0,15
ASB-M20-XS	20	30,0	60	42	30	51	30	8,4	M10	0,23
ASB-M25-XS	25	39,0	78	56	35	61	38	10,5	M12	0,41
ASB-M30-XS	30	43,5	87	64	40	71	40	10,5	M12	0,53
ASB-M40-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)
SB-M08-XS	8	16	25	32	15	5,2	27	10	4,5	0,03
SB-M12-XS	12	21	32	42	20	5,5	35	12	5,5	0,06
SB-M16-XS	16	25	40	50	25	6,5	42	16	5,5	0,11
SB-M20-XS	20	30	45	60	30	8,0	50	20	5,5	0,21
SB-M25-XS	25	37	60	74	35	9,0	58	25	6,6	0,35
SB-M30-XS	30	42	68	84	40	10,0	68	28	9,0	0,52
SB-M40-XS	40	54	86	108	50	12,0	86	32	11,0	0,92

End Support Material: Iron