

#### **How The Service Advisor Works**

We know that your time is important! That's why the color-coding system in this catalog is designed to help you select products that fit your service needs. Products are marked to indicate the typical lead time for orders of 50 pieces or less.

Customer: How do I select my straight sections. covers, or fittings so that I get the quickest turnaround?

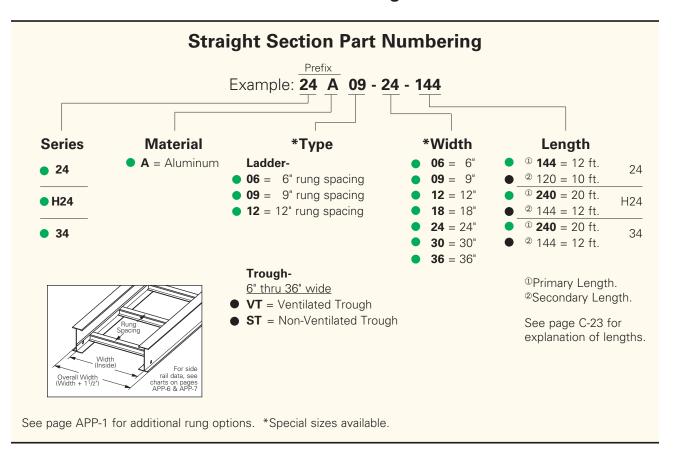
**Service Advisor:** Each part of our selection chart is shown in colors. If any section of a part number is a different color, the part will typically ship with the longer lead time represented by the colors.

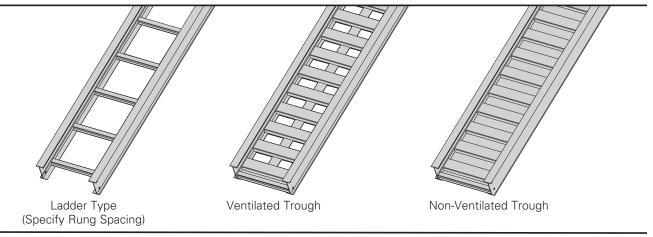
- Green = Fastest shipped items
- Black = Normal lead-time items
- Red = Normally long lead-time items

Example: 34A VT - 24 - 144

Part will have a normal lead time because of the VT bottom type.

### 3" NEMA VE 1 Loading Depth 4" Side Rail Height





Eaton

### 3" NEMA VE 1 Loading Depth 4" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the published load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	1.75	NEMA: 16A, 12C	6	487*	0.001		1.8	725*	0.017	
		CSA: 277 kg/m 3.0m	8	284	0.003	Area = $1.05 \text{ in}^2$	2.4	422	0.055	Area = $6.77 \text{ cm}^2$
24	3.05	D-3m	10	181	0.008	$Sx = 1.34 \text{ in}^3$	3.0	270	0.136	$Sx = 21.96 \text{ cm}^3$
	4.12	UL Cross-Sectional	12	126	0.016	$Ix = 2.85 in^4$	3.7	187	0.279	$Ix = 118.63 \text{ cm}^4$
		Area: 1.00 in <sup>2</sup>	14	93	0.030		4.3	138	0.618	
	<del></del>		16	71	0.052		4.9	105	0.883	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

<sup>\*</sup> When using 18" rung spacing, load capacity is limited to 394 lbs/ft (586.27 kg/m) for 30" tray width and 325 lbs/ft (483.6 kg/m) for 36" tray width.

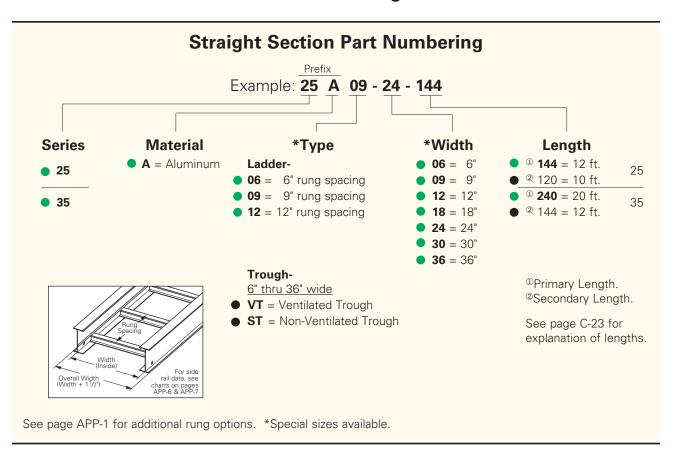
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	1.75	NEMA: 20A	10	225	0.006		3.0	330	0.106	
		CSA: 84 kg/m 6.1m	12	156	0.013	Area = $1.32 \text{ in}^2$	3.7	226	0.222	Area = $8.52 \text{ cm}^2$
H24	2.98	D-6m	14	115	0.023	$Sx = 1.57 \text{ in}^3$	4.3	171	0.400	$Sx = 25.73 \text{ cm}^3$
	4.19	UL Cross-Sectional	16	88	0.040	$1x = 3.69 \text{ in}^4$	4.9	129	0.693	$Ix = 153.59 \text{ cm}^4$
		Area: 1.00 in <sup>2</sup>	18	70	0.064		5.5	103	1.093	
	<del></del>		20	56	0.098		6.1	83	1.682	

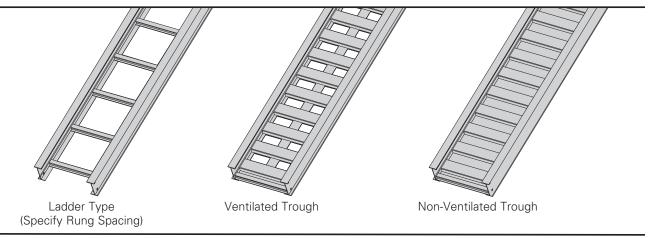
When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series		e Rail ensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	1	.75 _	NEMA: 20B, 16C	10	320	0.005		3.0	476	0.077	
		<b>-</b>	CSA: 112 kg/m 6.0m	12	222	0.009	Area = $1.82 \text{ in}^2$	3.7	331	0.160	Area = $11.74 \text{ cm}^2$
34		3.08	E-6m	14	163	0.017	$Sx = 2.10 \text{ in}^3$	4.3	243	0.296	$Sx = 34.41 \text{ cm}^3$
٠.	4.20		UL Cross-Sectional	16	125	0.030	$1x = 4.98 \text{ in}^4$	4.9	186	0.505	$1x = 207.28 \text{ cm}^4$
		·	Area: 1.50 in <sup>2</sup>	18	99	0.047		5.5	147	0.810	
				20	80	0.072		6.1	119	1.234	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

## 4" NEMA VE 1 Loading Depth 5" Side Rail Height





## 4" NEMA VE 1 Loading Depth 5" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply published load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

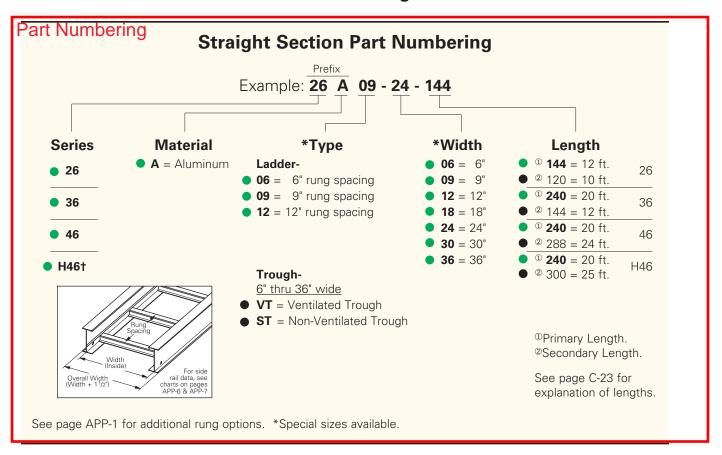
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	1.75	NEMA: 20A, 12C	10	200	0.0049		3.0	298	0.083	
		CSA: 67 kg/m 6.0m	12	139	0.010	Area = $1.24 \text{ in}^2$	3.7	207	0.172	Area = $8.00 \text{ cm}^2$
25	3.93	D-6m	14	102	0.019	$Sx = 1.80 \text{ in}^3$	4.3	152	0.319	$Sx = 29.50 \text{ cm}^3$
	5.00	UL Cross-Sectional	16	78	0.032	$1x = 4.62 \text{ in}^4$	4.9	116	0.545	$Ix = 192.30 \text{ cm}^4$
		Area: 1.00 in <sup>2</sup>	18	62	0.051		5.5	92	0.873	
	<u> </u>		20	50	0.078		6.1	74	1.330	

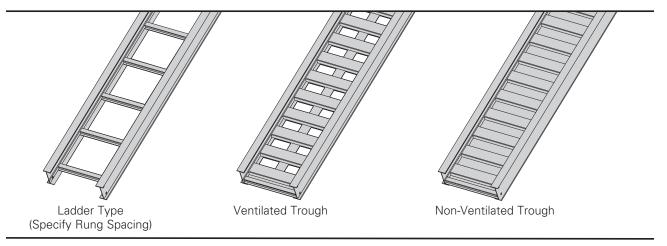
When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	1.75	NEMA: 20B, 16C	10	310	0.0036		3.0	461	0.060	
		CSA: 112 kg/m 6.0m	12	215	0.0073	Area = $1.67 \text{ in}^2$	3.7	320	0.125	Area = $10.77 \text{ cm}^2$
35	3.96	E-6m	14	158	0.014	$Sx = 2.35 \text{ in}^3$	4.3	235	0.232	$Sx = 38.51 \text{ cm}^3$
	5.06	UL Cross-Sectional	16	121	0.023	$Ix = 6.37 in^4$	4.9	180	0.395	$Ix = 265.14 \text{ cm}^4$
		Area: 1.50 in <sup>2</sup>	18	96	0.037		5.5	142	0.633	
			20	77	0.057		6.1	115	0.965	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

### 5" NEMA VE 1 Loading Depth 6" Side Rail Height





# 5" NEMA VE 1 Loading Depth 6" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support, without collapse, a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the published load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	2.00	NEMA: 20A, 16B	10	204	0.0028		3.0	304	0.049	
		CSA: 67 kg/m 6.0m	12	142	0.006	Area = $1.41 \text{ in}^2$	3.7	211	0.101	Area = $9.10 \text{ cm}^2$
26	5.04	D-6m	14	104	0.011	$Sx = 2.53 \text{ in}^3$	4.3	155	0.186	$Sx = 41.46 \text{ cm}^3$
	6.12	UL Cross-Sectional	16	80	0.019	$Ix = 7.915 in^4$	4.9	119	0.318	$1x = 329.45 \text{ cm}^4$
		Area: 1.00 in <sup>2</sup>	18	63	0.030		5.5	94	0.509	
	<u> </u>		20	51	0.045		6.1	76	0.776	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	2.00	NEMA: 20B, 16C	12	233	0.0043		3.7	269	0.073	
		CSA: 112 kg/m 6.0m	14	171	0.008	Area = $1.81 \text{ in}^2$	4.3	177	0.136	Area = $11.68 \text{ cm}^2$
36	5.06	E-6m	16	131	0.014	$Sx = 3.36 \text{ in}^3$	4.9	134	0.232	$Sx = 55.06 \text{ cm}^3$
	6.17	UL Cross-Sectional	18	104	0.022	$Ix = 10.85 in^4$	5.5	101	0.372	$Ix = 451.61 \text{ cm}^4$
		Area: 1.50 in <sup>2</sup>	20	84	0.033		6.1	81	0.566	
	+		22	69	0.049		6.7	67	0.829	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

#### Selected Tray

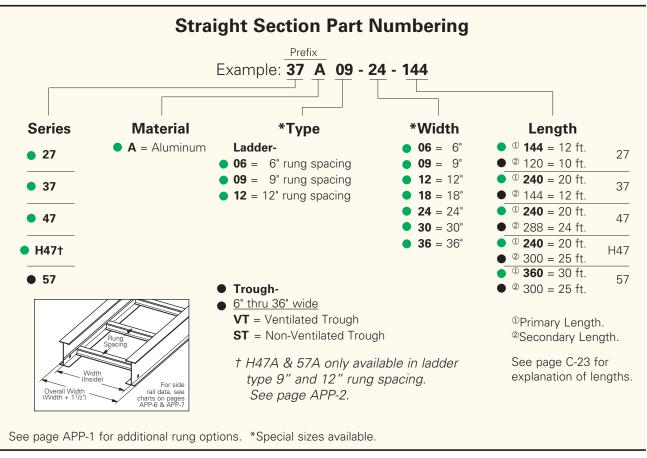
B-Line Series	Side F Dimens		NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	2.00		NEMA: 20C	14	210	0.0071		4.3	313	0.121	
			CSA: 168 kg/m 6.1m	16	161	0.012	Area = $2.06 \text{ in}^2$	4.9	239	0.207	Area = $13.29 \text{ cm}^2$
46		5.08	E-6m	18	127	0.019	$Sx = 3.59 \text{ in}^3$	5.5	189	0.331	$Sx = 58.83 \text{ cm}^3$
	6.19		UL Cross-Sectional	20	103	0.030	$Ix = 12.18 in^4$	6.1	153	0.505	$1x = 506.97 \text{ cm}^4$
	-		Area: 1.50 in <sup>2</sup>	22	85	0.043		6.7	127	0.739	
	<del></del>	-		24	72	0.061		7.3	106	1.046	

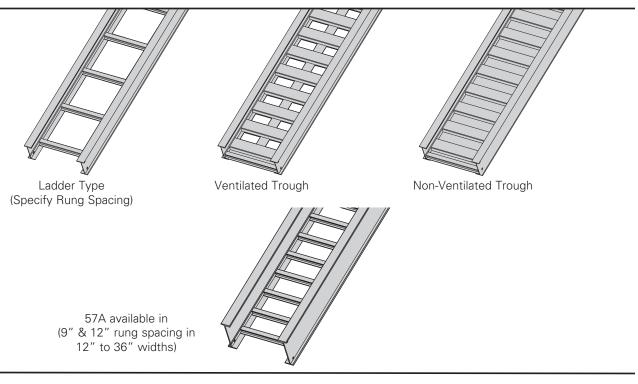
When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	→ 2.00 →	NEMA: 20C+	16	261	0.0085		4.9	388	0.145	
		CSA: 131 kg/m 7.6m	18	206	0.014	Area = $2.95 \text{ in}^2$	5.5	307	0.233	Area = 19.03 cm <sup>2</sup>
H46	5.09	E-6m	20	167	0.021	$Sx = 5.33 \text{ in}^3$	6.1	248	0.355	$Sx = 87.34 \text{ cm}^3$
	6.24	UL Cross-Sectional	22	138	0.030	$Ix = 17.30 in^4$	6.7	205	0.520	$lx = 720.08 cm^4$
		Area: 2.00 in <sup>2</sup>	24	116	0.043		7.3	173	0.737	
	<del></del>		25	88	0.051		7.6	131	0.867	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

## 6" NEMA VE 1 Loading Depth 7" Side Rail Height





● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

## 6" NEMA VE 1 Loading Depth 7" Side Rail Height

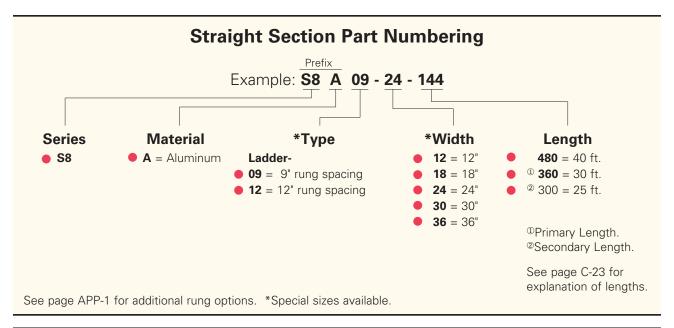
Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the published load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

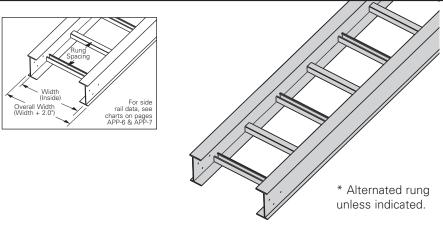
Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	2.00	NEMA: 12C	10	177	0.006		3.0	269	0.033	
		CSA: 68 kg/m 6.0m	12	123	0.013	Area = $1.63 \text{ in}^2$	3.7	177	0.073	Area = $10.52 \text{ cm}^2$
27	6.00	D-6m	14	90	0.023	$Sx = 2.93 \text{ in}^3$	4.3	134	0.131	$Sx = 48.01 \text{ cm}^3$
	7.14	UL Cross-Sectional	16	69	0.040	$Ix = 11.28 in^4$	4.9	101	0.227	$lx = 469.51 cm^4$
		Area: 1.50 in <sup>2</sup>	18	54	0.064		5.5	81	0.357	
			20	44	0.098		6.1	67	0.534	
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span	Load	Deflection	Design Factors	Span	Load	Deflection	Design Factors
Series	Dimensions 2.00		ft	lbs/ft	Multiplier	for Two Rails	meters	kg/m	Multiplier	for Two Rails
	2.00	NEMA: 20B, 16C	12	222	0.0035	4 04 : 2	3.7	331	0.059	11.00
		CSA: 101 kg/m 6.1m	14	163	0.0064	Area = $1.81 \text{ in}^2$	4.3	243	0.109	Area = $11.68 \text{ cm}^2$
37	7.14 6.05	D-6m	16	125	0.011	$Sx = 3.77 \text{ in}^3$	4.9	186	0.186	$Sx = 61.78 \text{ cm}^3$
		UL Cross-Sectional	18	99	0.017	$1x = 13.50 \text{ in}^4$	5.5	147	0.299	$Ix = 561.91 \text{ cm}^4$
		Area: 1.50 in <sup>2</sup>	20	80	0.027		6.1	119	0.455	
			22	66	0.039		6.7	98	0.666	
B-Line	Side Rail	NEMA, CSA & UL	Cman	Load	Deflection	Desire Fosters	Cman	Load	Deflection	Design Factors
Series	Dimensions	Classifications	Span ft	lbs/ft	Multiplier	Design Factors for Two Rails	Span meters	kg/m	Multiplier	for Two Rails
	2.00	NEMA: 20C	14	204	0.0048	_	4.3	305	0.083	_
		CSA: 142 kg/m 6.1m	16	156	0.0082	Area = $2.38 \text{ in}^2$	4.9	233	0.141	Area = $15.35 \text{ cm}^2$
47	7.24 6.13	E-6m	18	123	0.0132	$Sx = 4.94 \text{ in}^3$	5.5	184	0.225	$Sx = 80.95 \text{ cm}^3$
	,.24	UL Cross-Sectional	20	100	0.0201	$1x = 17.88 \text{ in}^4$	6.1	149	0.344	$1x = 744.22 \text{ cm}^4$
		Area: 2.00 in <sup>2</sup>	22	83	0.0295		6.7	123	0.503	
			24	69	0.0418		7.3	103	0.713	
			_		- a					
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
Series	2.00					IOI I WO Halls			•	101 TWO Nails
		NEMA: 20C+	16	233	0.0064	A = = 2 04 i= 2	4.9	346	0.110	A 10 C12
		CSA: 241 kg/m 6.1m	18	184	0.010	Area = 3.04 in <sup>2</sup>	5.4	274	0.176	Area = 19.61 cm <sup>2</sup>
H47	7.24 6.09	CSA: 241 kg/m 6.1m E-6m	18 20	184 149	0.010 0.016	$Sx = 6.10 \text{ in}^3$	5.4 6.1	274 222	0.176 0.268	$Sx = 99.96 \text{ cm}^3$
H47	7.24 6.09	CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional	18 20 22	184 149 123	0.010 0.016 0.023		5.4 6.1 6.7	274 222 183	0.176 0.268 0.393	
H47	7.24 6.09	CSA: 241 kg/m 6.1m E-6m	18 20 22 24	184 149 123 103	0.010 0.016 0.023 0.033	$Sx = 6.10 \text{ in}^3$	5.4 6.1 6.7 7.3	274 222 183 154	0.176 0.268 0.393 0.556	$Sx = 99.96 \text{ cm}^3$
H47	7.24 6.09	CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional	18 20 22	184 149 123	0.010 0.016 0.023	$Sx = 6.10 \text{ in}^3$	5.4 6.1 6.7	274 222 183	0.176 0.268 0.393	$Sx = 99.96 \text{ cm}^3$
	7.24	CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional Area: 2.00 in <sup>2</sup>	18 20 22 24 25	184 149 123 103 95	0.010 0.016 0.023 0.033 0.038	Sx = 6.10 in <sup>3</sup> lx = 22.91 in <sup>4</sup>	5.4 6.1 6.7 7.3 7.6	274 222 183 154 142	0.176 0.268 0.393 0.556 0.655	Sx = 99.96 cm <sup>3</sup> lx = 953.59 cm <sup>4</sup>
H47  B-Line Series	Side Rail Dimensions	CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional	18 20 22 24	184 149 123 103	0.010 0.016 0.023 0.033 0.038	$Sx = 6.10 \text{ in}^3$	5.4 6.1 6.7 7.3	274 222 183 154	0.176 0.268 0.393 0.556 0.655	$Sx = 99.96 \text{ cm}^3$ $Ix = 953.59 \text{ cm}^4$ <b>Design Factors</b>
B-Line	Side Rail	CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional Area: 2.00 in <sup>2</sup> NEMA, CSA & UL Classifications	18 20 22 24 25 <b>Span</b> ft	184 149 123 103 95 Load lbs/ft	0.010 0.016 0.023 0.033 0.038 Deflection Multiplier	$Sx = 6.10 \text{ in}^3$ $Ix = 22.91 \text{ in}^4$ <b>Design Factors</b>	5.4 6.1 6.7 7.3 7.6 <b>Span</b> <b>meters</b>	274 222 183 154 142 <b>Load</b> <b>kg/m</b>	0.176 0.268 0.393 0.556 0.655  Deflection Multiplier	Sx = 99.96 cm <sup>3</sup> lx = 953.59 cm <sup>4</sup>
B-Line	Side Rail Dimensions	CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional Area: 2.00 in <sup>2</sup> NEMA, CSA & UL Classifications NEMA: 20C+	18 20 22 24 25 <b>Span</b> ft	184 149 123 103 95 <b>Load</b> <b>lbs/ft</b>	0.010 0.016 0.023 0.033 0.038 Deflection Multiplier 0.011	Sx = 6.10 in <sup>3</sup> lx = 22.91 in <sup>4</sup> Design Factors for Two Rails	5.4 6.1 6.7 7.3 7.6 <b>Span</b> <b>meters</b> 6.1	274 222 183 154 142 <b>Load</b> <b>kg/m</b> 345	0.176 0.268 0.393 0.556 0.655 Deflection Multiplier 0.187	Sx = 99.96 cm <sup>3</sup> lx = 953.59 cm <sup>4</sup> Design Factors for Two Rails
B-Line Series	Side Rail Dimensions	CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional Area: 2.00 in <sup>2</sup> NEMA, CSA & UL Classifications NEMA: 20C+ CSA: 151 kg/m 9.1m	18 20 22 24 25 <b>Span</b> ft 20 22	184 149 123 103 95 <b>Load</b> <b>lbs/ft</b> 232 192	0.010 0.016 0.023 0.033 0.038 Deflection Multiplier 0.011 0.016	$Sx = 6.10 \text{ in}^3$ $Ix = 22.91 \text{ in}^4$ Design Factors for Two Rails $Area = 4.22 \text{ in}^2$	5.4 6.1 6.7 7.3 7.6 <b>Span</b> <b>meters</b> 6.1 6.7	274 222 183 154 142 <b>Load</b> <b>kg/m</b> 345 285	0.176 0.268 0.393 0.556 0.655 Deflection Multiplier 0.187 0.274	$Sx = 99.96 \text{ cm}^3$ $Ix = 953.59 \text{ cm}^4$ $Design Factors$ $for Two Rails$ $Area = 27.73 \text{ cm}^2$
B-Line	Side Rail Dimensions	CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional Area: 2.00 in <sup>2</sup> NEMA, CSA & UL Classifications NEMA: 20C+ CSA: 151 kg/m 9.1m E-6m	18 20 22 24 25 <b>Span</b> ft 20 22 24	184 149 123 103 95 <b>Load</b> <b>lbs/ft</b> 232 192 161	0.010 0.016 0.023 0.033 0.038 Deflection Multiplier 0.011 0.016 0.023	$Sx = 6.10 \text{ in}^3$ $Ix = 22.91 \text{ in}^4$ Design Factors for Two Rails $Area = 4.22 \text{ in}^2$ $Sx = 7.73 \text{ in}^3$	5.4 6.1 6.7 7.3 7.6 <b>Span</b> <b>meters</b> 6.1 6.7 7.3	274 222 183 154 142 <b>Load</b> <b>kg/m</b> 345 285 240	0.176 0.268 0.393 0.556 0.655 Deflection Multiplier 0.187 0.274 0.388	$Sx = 99.96 \text{ cm}^3$ $Ix = 953.59 \text{ cm}^4$ <b>Design Factors</b> <b>for Two Rails</b> $Area = 27.73 \text{ cm}^2$ $Sx = 126.67 \text{ cm}^3$
B-Line Series	Side Rail Dimensions	CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional Area: 2.00 in <sup>2</sup> NEMA, CSA & UL Classifications NEMA: 20C+ CSA: 151 kg/m 9.1m	18 20 22 24 25 <b>Span</b> ft 20 22	184 149 123 103 95 <b>Load</b> <b>lbs/ft</b> 232 192	0.010 0.016 0.023 0.033 0.038 Deflection Multiplier 0.011 0.016	$Sx = 6.10 \text{ in}^3$ $Ix = 22.91 \text{ in}^4$ Design Factors for Two Rails $Area = 4.22 \text{ in}^2$	5.4 6.1 6.7 7.3 7.6 <b>Span</b> <b>meters</b> 6.1 6.7	274 222 183 154 142 <b>Load</b> <b>kg/m</b> 345 285	0.176 0.268 0.393 0.556 0.655 Deflection Multiplier 0.187 0.274	$Sx = 99.96 \text{ cm}^3$ $Ix = 953.59 \text{ cm}^4$ $Design Factors$ $for Two Rails$ $Area = 27.73 \text{ cm}^2$

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

### 6" NEMA VE 1 Loading Depth 8" Side Rail Height





Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the published load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	3.00	NEMA: 20C+	20	363	0.007		6.1	540	0.111	
	<del>                                    </del>	CSA: 240 kg/m 9.1m	22	300	0.010		6.7	446	0.163	
S8A	6.175		24	252	0.013	Area=5.50 in <sup>2</sup>	7.3	375	0.230	Area=35.48 cm <sup>2</sup>
SOA	8.00	UL Cross-Sectional	26	215	0.019	Sx=15.39 in <sup>3</sup>	7.9	320	0.317	Sx=252.20 cm <sup>3</sup>
		Area: 2.00 in <sup>2</sup>	28	185	0.025	lx=55.35 in <sup>4</sup>	8.5	276	0.427	lx=2303.84 cm <sup>4</sup>
	<u>                                   </u>		30	161	0.033		9.1	240	0.562	
			40	101	0.146		12.2	151	2.488	

• Green = Fastest shipped items • Black = Normal lead-time items • Red = Normally long lead-time items

The following is a list of accessories and fittings that can be provided with S8A tray. For more information on these items, contact our Engineering Department.

#### Fittings

#### **Horizontal Bends**

```
30° Bends with 24", 36", or 48" radius 45° Bends with 24", 36", or 48" radius 60° Bends with 24", 36", or 48" radius 90° Bends with 24", 36", or 48" radius
```

#### **Horizontal Tees & Crosses**

With 24", 36", or 48" radius

#### **Vertical Outside Bends**

```
30° Bends with 24", 36", or 48" radius 45° Bends with 24", 36", or 48" radius 60° Bends with 24", 36", or 48" radius 90° Bends with 24", 36", or 48" radius
```

#### **Vertical Inside Bends**

```
30° Bends with 24", 36", or 48" radius 45° Bends with 24", 36", or 48" radius 60° Bends with 24", 36", or 48" radius 90° Bends with 24", 36", or 48" radius
```

#### **Reducing Fittings**

• Accessories - (standard hardware is stainless steel Type 316)

```
Splice Plate - 9A-1008
Expansion Splice Plate - 9A-1018
Horizontal Adjustable Splice Plate - 9A-1038
Vertical Adjustable Splice Plate - 9A-1028
Hold Down Clamps - 9ZN-1281, 9G-1281, 9A-1281
Guides - S9ZN-1202, S9G-1202
Step Down Splice Plate -
9A-1048 = 8" to 4"
```

```
9A-1048 = 8" to 4"

9A-1051 = 8" to 5"

9A-1050 = 8" to 6"

9A-1078 = 8" to 7"
```

#### Other Accessories Include:

Offset Splice Plates

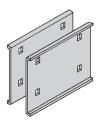
**Blind Ends** 

**Covers -** Standard aluminum cover number with S in front (Example: S807A40)

Green = Fastest shipped items
 Black = Normal lead-time items
 Red = Normally long lead-time items

#### Wedge Lock Splice Plates

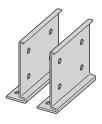
- Furnished in pairs with 1/4" hardware.
- Standard 4-hole pattern.
- Furnished in pairs, with hardware.
- One pair including hardware provided with each section. (Expansion splice quantity subtracted)
- Boxed in pairs with hardware.
- For field installation drill <sup>13</sup>/<sub>32</sub>" hole.



Catalog No.	Height
	in. mm
• 9A-1004	4 (101)
<ul><li>9A-1005</li></ul>	5 (127)
<ul><li>9A-1006</li></ul>	6 (152)
<ul><li>9A-1007</li></ul>	7 (178)

#### H46A, H47A and 57A Mid-Span Splice

- Furnished in pairs with 1/4" hardware.
- Standard for H46A, H47A and 57A straight sections.
- Six bolt design 1/2" Stainless Steel Type 316 hardware standard.
- Available on ladder bottoms only. 09 and 12" rung spacing.
- Furnished in pairs with hardware.

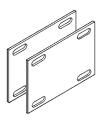


Catalog No.	Tray Series
• 9A-6006	H46A
<ul><li>9A-6007</li></ul>	H47A, 57A

#### **Expansion Splice Plates**

- Expansion plates allow for one inch expansion or contraction of the cable tray, or where expansion joints occur in the supporting structure.
- Furnished in pairs with hardware.
- Bonding Jumpers are required on each siderail.
   Order Separately.

For heavy duty expansion splice plates see page APP-3.

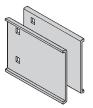


Catalog No.	Height	
	in. mm	
• 9A-1014	4 (101)	
<ul><li>9A-1015</li></ul>	5 (127)	
<ul><li>9A-1016</li></ul>	6 (152)	
9A-1017	7 (178)	

#### **Universal Splice Plates**

- Furnished in pairs with 1/4" hardware.
- UL Classified.

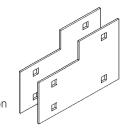
Series 2, 3, 4, & 5 Aluminum



Catalog No.	Height	
• 9A-1004- <sup>1</sup> / <sub>2</sub>	4 (101)	
• 9A-1005- <sup>1</sup> / <sub>2</sub>	5 (127)	
• 9A-1006- <sup>1</sup> / <sub>2</sub>	6 (152)	
9A-1007-1/2	7 (178)	

#### **Step Down Splice Plates**

- These splice plates are offered for connecting cable tray sections having side rails of different heights.
- Furnished in pairs with hardware.

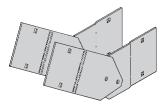


Catalog No.	Height	
	in. mm	
• 9A-1045	5 to 4 (127 to 101)	
<ul><li>9A-1046</li></ul>	6 to 4 (152 to 101)	
<ul><li>9A-1060</li></ul>	6 to 5 (152 to 127)	
<ul><li>9A-1047</li></ul>	7 to 4 (178 to 101)	
<ul><li>9A-1061</li></ul>	7 to 5 (178 to 127)	
<ul><li>9A-1062</li></ul>	7 to 6 (178 to 152)	

Requires supports within 24" on both sides, per NEMA VE 2.

#### **Vertical Adjustable Splice Plates**

- These plates provide for changes in elevation that do not conform to standard vertical fittings.
- Furnished in pairs with hardware.
- Bonding Jumpers not required.



Catalog No.	Height	
	in. mm	
• 9A-1024	4 (101)	
<ul><li>9A-1025</li></ul>	5 (127)	
<ul><li>9A-1026</li></ul>	6 (152)	
9A-1027	7 (178)	

Green = Fastest shipped items

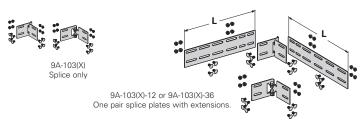
Black = Normal lead-time items

Red = Normally long lead-time items

#### **Horizontal Adjustable Splice Plates**

- Offered to adjust a cable tray run for changes in direction in a horizontal plane that do not conform to standard horizontal fittings.
- Furnished in pairs with hardware.
- Bonding jumpers not required.
- (X) Insert 4, 5, 6 or 7 for side rail height.

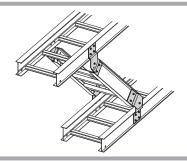
Requires supports within 24" on both sides, per NEMA VE 2.



Catalog	Cable Tray Thru Tray Width		'L'	
No.	End Cut	in.	(mm)	in. (mm)
<ul><li>9A-103(X)</li></ul>	Mitered	36	(914)	N/A (NA)
<ul><li>9A-103(X)-12</li></ul>	Not mitered	12	(305)	16 (406)
<ul><li>9A-103(X)-36</li></ul>	Not mitered	36	(914)	41 (1041)

#### **Branch Pivot Connectors**

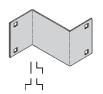
- Branch from existing cable tray runs at any point.
- Pivot to any required angle.
- UL Classified for grounding (bonding jumpers not required).
- Furnished in pairs with hardware.



Catalog No.	Height in. mm	
• 9A-2044	4 (101)	
<ul><li>9A-2045</li></ul>	5 (127)	
• 9A-2046	6 (152)	
<ul><li>9A-2047</li></ul>	7 (178)	

#### **Offset Reducing Splice Plate**

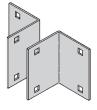
- This plate is used for joining cable trays having different widths. When used in pairs they form a straight reduction; when used singly with a standard splice plate, they form an offset reduction.
- Furnished as one plate with hardware.
- (‡) Insert reduction



Catalog No.	Height in. mm
• 9A-1064-(‡)	4 (101)
<ul><li>9A-1065-(‡)</li></ul>	5 (127)
• 9A-1066-(‡)	6 (152)
<ul><li>9A-1067-(‡)</li></ul>	7 (178)

#### Tray to Box Splice Plates

- Used to attach the end of a cable tray run to a distribution box or control panel.
- Furnished in pairs with hardware



Catalog No. Height	
	in. mm
• 9A-1054	4 (101)
<ul><li>9A-1055</li></ul>	5 (127)
<ul><li>9A-1056</li></ul>	6 (152)
<ul><li>9A-1057</li></ul>	7 (178)

#### Frame Type Box Connector

- Designed to attach the end of a cable tray run to a distribution cabinet or control center to help reinforce the box at the point of entry.
- Furnished with tray connection hardware.



Catalog No.	Height in. mm
• 9A-1074-(‡)	4 (101)
<ul><li>9A-1075-(‡)</li></ul>	5 (127)
• 9A-1076-(‡)	6 (152)
<ul><li>9A-1077-(‡)</li></ul>	7 (178)

#### **Blind End**

- This plate forms a closure for a dead end cable tray.
- Furnished as one plate with hardware.
- (‡) Insert tray width



Catalog No.	Height in. mm
• 9A-1084-(‡)	4 (101)
<ul><li>9A-1085-(‡)</li></ul>	5 (127)
9A-1086-(‡)	6 (152)
9A-1087-(‡)	7 (178)

Green = Fastest shipped items
 Black = Normal lead-time items
 Red = Normally long lead-time items

#### Standard Tray Hardware (for field installation drill 13/32" hole)

• Finish: Zinc Plated ASTM B633 SC1



Catalog No.	Description
<ul> <li>SNCB <sup>3</sup>/8" x <sup>3</sup>/4" ZN</li> </ul>	Square Neck Carriage Bolt ASTM A307 Grade A
<ul> <li>SFHN <sup>3</sup>/8"-16 ZN</li> </ul>	Serrated Flange Hex Nut ASTM A563 Grade A

#### Optional Tray Hardware (for field installation drill 13/32" hole)

 To order 316 stainless steel hardware add SS6 suffix to catalog number -Example: 9A1004SS6

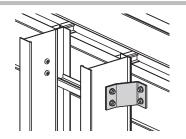


Catalog No.	Description
<ul> <li>SNCB <sup>3</sup>/8" x <sup>3</sup>/4" SS6</li> </ul>	Square Neck Carriage Bolt AISI 316 Stainless Steel
<ul> <li>SFHN <sup>3</sup>/8"-16 SS6</li> </ul>	Serrated Flange Hex Nut AISI 316 Stainless Steel

#### **Cross Connector Bracket**

- For field connecting crossing section.
- Furnished in pairs with 3/8" hardware.



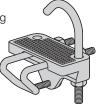


Catalog No.

9A-1240

#### **Conduit to Cable Tray Adaptor**

- For easy attachment of conduit terminating at a cable tray.
- Use on aluminum or steel cable trays.





Catalog No. Conduit Siz		ıit Size
	in.	mm
• 9G-1158- <sup>1</sup> /2, <sup>3</sup> /2	1/2, 3/4	(15, 20)
• 9G-1158-1, 1 <sup>1</sup> /4	1, 1 <sup>1</sup> / <sub>4</sub>	(25, 32)
• 9G-1158-1 <sup>1</sup> / <sub>2</sub> , 2	1 <sup>1</sup> /2, 2	(40, 50)
• 9G-1158-2 <sup>1</sup> / <sub>2</sub> , 3	$2^{1}/_{2}$ , 3	(65, 80)
• 9G-1158-3 <sup>1</sup> / <sub>2</sub> , 4	$3^{1}/_{2}$ , 4	(90, 100)

#### **Conduit to Cable Tray Adaptor**

- · Assembly required.
- Mounting hardware included.
- · Conduit clamps provided.
- $(\ddagger)$  = Insert conduit size  $(\frac{1}{2}$ " thru 4").





Catalog No.

● 9ZN-1150-(‡)

#### **Conduit to Cable Tray Adaptor**

- · Assembly required.
- Conduit clamps included.
- (‡) = Insert conduit size (1/2" thru 4").



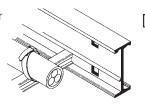


Catalog No.

● 9ZN-1155-(‡)

#### Cable Tie (Ladder Tray)

 Nylon ties provide easy attachment of cable to ladder rungs; maximum cable O.D. is 3" (76mm).





Catalog No. 99-2125-15

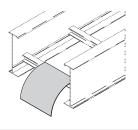
- Green = Fastest shipped items
- Black = Normal lead-time items
- Red = Normally long lead-time items

#### **Ladder Drop-Out**

 Specially-designed Ladder Drop-Outs provide a rounded surface with 4" (101 mm) radius to protect cable as it exits from the cable tray, preventing damage to insulation. The drop-out will attach to any desired rung.

• (‡) Insert tray width





Catalog No. 

• 9A-1104-(‡)

#### **Trough Drop-Out & Drop-Out Bushing**

- These devices provide a rounded surface to protect cable as it exits from the trough-type cable tray.
- Hardware is included for attachment of the trough bottom drop-out.
- (‡) Insert tray width



000L...



9A-1104T-(‡)



Loading

Depth 'H'

in. mm

4 (101)

5 (127)

6 (152)

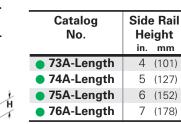
(76)

Drop-Out Snap-in i

• 99-1124

#### **Barrier - Straight Section**

- Length: Insert 120 for [120" 10 ft.] (3.0 m) or 144 for [144" 12 ft.] (3.6 m)
- Order catalog number based on loading depth.
- Furnished with four #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.



## Barrier - Horizontal Bend

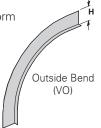
- Horizontal Bend Barriers are flexible in order to conform to any horizontal fitting radius.
   Can be cut to desired length.
- Standard length is 72" [6 ft.] (1.8 m) sold individually
- Order catalog number based on loading depth.
- Furnished with three #10 x <sup>1</sup>/<sub>2</sub>" plated self-drilling screws and a 99-9982 Barrier Strip Splice.

dually	H
Splice.	

Catalog No.	Side Rail Height	Loading Depth 'H' in. mm
• 73A-90HBFL	4 (101)	3 (76)
<ul><li>74A-90HBFL</li></ul>	5 (127)	4 (101)
<ul><li>75A-90HBFL</li></ul>	6 (152)	5 (127)
• 76A-90HBFL	7 (178)	6 (152)

#### **Barrier - Vertical Outside Bend**

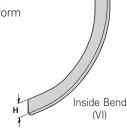
- Vertical Outside Bend Barriers are preformed to conform to a specific vertical outside bend fitting.
- Furnished with three #10 x  $^{1}$ /2" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (\*) Insert 30, 45, 60 or 90 for degrees
- (†) Insert 12, 24, 36 or 48 for radius



Catalog No.	Side Rail Height	Loading Depth 'H' in. mm
• 73A-(*)VO(†)	4 (101)	3 (76)
74A-(*)VO(†)	5 (127)	4 (101)
● 75A-(*)VO(†)	6 (152)	5 (127)
• 76A-(*)VO(†)	7 (178)	6 (152)

#### **Barrier - Vertical Inside Bend**

- Vertical Inside Bend Barriers are preformed to conform to a specific vertical inside bend fitting.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (\*) Insert 30, 45, 60 or 90 for degrees
- (†) Insert 12, 24, 36 or 48 for radius



Catalog No.	Side Rail Height	Loading Depth 'H'
• 73A-(*)VI(†)	4 (101)	3 (76)
<ul><li>74A-(*)VI(†)</li></ul>	5 (127)	4 (101)
75A-(*)VI(†)	6 (152)	5 (127)
<ul><li>76A-(*)VI(†)</li></ul>	7 (178)	6 (152)

Green = Fastest shipped items

Black = Normal lead-time items

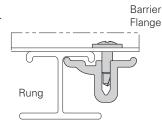
Red = Normally long lead-time items

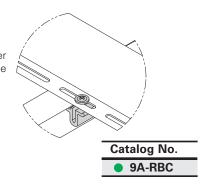
#### **Barrier Strip Clip**

- · Provides attachment to rung.
- · Allows for installed barrier adjustment.
- Asymmetrical clip provides a wide range for screw location.

· Barriers strip clips not included with barriers. (Must be ordered separately)



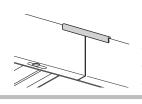




#### **Barrier Strip Splice**

- Plastic splice holds adjoining barrier strips in straight alignment.
- 3" (76mm) long.





Catalog No. 99-9982

#### **Bonding Jumper**

Use at each expansion splice and where the cable tray is not mechanically/electrically continuous to ground. Sold individually.

- · Hardware included.
- See table 392.6(B)(2) on page CTS-9 for amperage ratings required to match the UL cross-sectional area of the tray.
- See tray loading chart for UL cross-sectional area.
- Bonding jumper is 14<sup>1</sup>/2" (368mm) long.



Catalog No.	Copper Wire Size	Ampacity
99-N1	#1	600
<ul><li>99-40</li></ul>	4/0	1600
99-1620	250 MCM	2000

#### **Grounding Clamp**

Eaton's B-Line series cable tray is UL® classified as to its suitability as an equipment grounding conductor. If a separate conductor for additional grounding capability is desired, B-Line offers this clamp for bolting the conductor at least once to each cable tray section.

• Accepts #6 AWG to 250 MCM.



Catalog No.	Material	
<ul><li>9A-2130</li></ul>	Tin Plated Aluminum	

#### **Ground Wire Clamp**

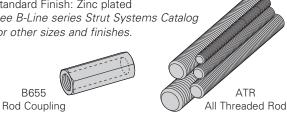
- Mechanically attaches grounding cables to cable tray.
- Hardware included.
- (\*) Insert ZN or SS4



Catalog No.	Material	
9(*)-2351	#1 thru 2/0	
9(*(-2352	3/0 thru 250 MCM	

#### Thread Rod (ATR) & Rod Couplings

Loading based on safety factor 5. Standard Finish: Zinc plated See B-Line series Strut Systems Catalog for other sizes and finishes.



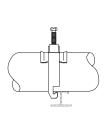
Size	Catalog No.	o. Available Length			
All Thre	All Threaded Rod				
<sup>3</sup> /8"-16	ATR <sup>3</sup> /8" x Length	36", 72", 120", 144"	730 lbs.		
<sup>1</sup> /2"-13	ATR <sup>1</sup> /2" x Length	36", 72", 120", 144"	1350 lbs.		
Rod Cou	Rod Coupling				
3/8"-16	● B655- <sup>3</sup> /8″	NA	730 lbs.		
1/2"-13	● B655- <sup>1</sup> /2″	NA	1350 lbs.		

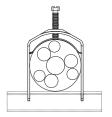
Green = Fastest shipped items

Black = Normal lead-time itemsRed = Normally long lead-time items

#### Stainless Steel Cable Clamp 'P'

- Fits with series 2, 3, & 4 rungs.
- Attaches to rung at any point.
- 14 gauge Type 316 stainless steel material to minimize corrosion and induction heating.
- Plated steel and aluminum also available.







Refer to Section CF Cable Fixing

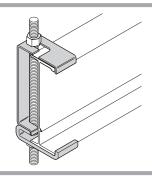
Catalog No.	Cable Size	
	in.	mm
BP081SS	.250840	(6.4 - 21.3)
BP110SS	.810 - 1.100	(20.6 - 28.0)
BP135SS	.850 - 1.350	(21.6 - 34.8)
BP175SS	1.250 - 1.750	(31.8 - 44.5)
<ul><li>BP205SS</li></ul>	1.550 - 2.050	(39.4 - 52.1)
<ul><li>BP250SS</li></ul>	2.000 - 2.500	(50.8 - 63.5)
<ul><li>BP300SS</li></ul>	2.500 - 3.000	(63.5 - 76.2)
<ul><li>BP325SS</li></ul>	2.750 - 3.250	(69.9 - 82.6)
<ul><li>BP375SS</li></ul>	3.250 - 3.750	(82.6 - 95.3)
<ul><li>BP425SS</li></ul>	3.750 - 4.250	(95.3 - 108.0)
BP475SS	4.250 - 4.750	(108.0 - 120.7)

#### **Hanger Rod Clamp**

- For 1/2" ATR.
- Furnished in pairs.
- Order ATR and hex nuts separately.
- Two-piece "J"-hanger design.
- 1500 lbs./pair capacity safety factor 3.
- (\*) Insert **ZN** or **G**



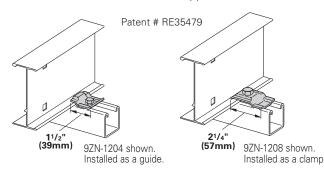




Catalog No.	Height	
	in. mm	
9(*)-5324	4 (101)	
9(*)-5325	5 (127)	
9(*)-5326	6 (152)	
9(*)-5327	7 (178)	

#### Cable Tray Clamp/Guide

- Features a no-twist design.
- Has four times the strength of the traditional design.
- Each side is labeled to ensure proper installation.
- Furnished in pairs, with or without hardware.
- Not recommended for vertical support.



Note: For heavy duty or vertical applications see 9(\*)-1241 or 9(\*)-1242 page HAT-20

Catalog No.				
Without Hardware	With Hardware	Overall Length in. (mm)	Hardware Size in.	Finish
9ZN-1204	<ul><li>9ZN-1204NB</li></ul>	1 <sup>1</sup> / <sub>2</sub> (38)	1/4"	G90
<ul><li>9ZN-1208</li></ul>	<ul><li>9ZN-1208NB</li></ul>	2 <sup>1</sup> / <sub>4</sub> (57)	3/8"	G90
<ul><li>9A-1205</li></ul>		21/4 (57)	1/2"	Alum.
9G-1205		2 <sup>1</sup> /4 (57)	1/2"	HDGAF
9SS6-1205		21/4 (57)	1/2"	316SS
<ul><li>9ZN-1205</li></ul>		21/4 (57)	1/2"	G90

#### **Isolator Pad**

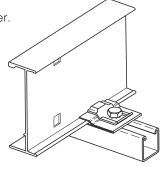
- Use as a friction reducer and/or as a dissimilar metal isolator barrier.
- UV resistant HDPE.
- Temperature range: -100 to 160° F.
- Designed to use with 9(\*)-1205 or 9(\*)-1208 clamp/guide.
- · Color White.



Isolation pad shown as when used with a guide.



Isolation pad shown with top flange doubled under for clamp application.



Catalog No. 99-PE34

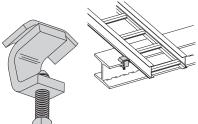


Black = Normal lead-time items

Red = Normally long lead-time items

#### **Cable Tray Clamp**

- Hold-down clamps for single or double cable tray runs.
- No drilling of support I-beam or channel is required.
- Sold in pieces two clamps are required per tray.
- Maximum beam flange thickness 1<sup>1</sup>/8" (28.58 mm).



Catalog No.	Finish	
<ul><li>9ZN-1249HD</li></ul>	Znplt	
9G-1249HD	HDGAF	

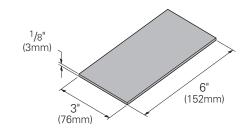
#### **Cable Tray Guide**

- Expansion guide for single or double cable tray runs.
- Guide allows for longitudinal movement of the cable tray.
- No field drilling of support I-beam or channel is required.
- Guides are required on both sides of cable tray to prevent lateral movement - can be placed on either the inside or outside flange of cable tray.
- Guides are sold in pieces two guides are required per tray.
- Maximum flange thickness 11/8" (28.58 mm).



#### **Nylon Pad**

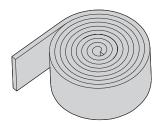
- Use for friction reduction.
- Hardness: Shore D80.
- · Low friction coefficient.
- UV resistant.
- Excellent weatherability.
- UL 94HB.



Catalog No. 99-PE36

#### Neoprene Roll

- Use for material isolation.
- 1/8" x 2" x 25' roll.
- Hardness: Shore A60.
- Good weatherability.



Catalog No. 99-NP300

#### **DURA-BLOK™ Rooftop Support Bases with B22 Channel**

- Designed as a superior rooftop support for cable tray,
- UV resistant and approved for most roofing material or other flat surfaces.

Can be used with any of B-Line series cable



Catalog No.	Height x Width x Length				
	in.	(mm)			
• DB10-28	5 <sup>5</sup> /8 x 6 x 28.0	(143 x 152 x 711)			
<ul><li>DB10-36</li></ul>	5 <sup>5</sup> /8 x 6 x 36.0	(143 x 152 x 914)			
• DB10-42	5 <sup>5</sup> /8 x 6 x 42.0	(143 x 152 x 1067)			
<ul><li>DB10-50</li></ul>	5 <sup>5</sup> /8 x 6 x 50.0	(143 x 152 x 1270)			
● DB10-60	5 <sup>5</sup> /8 x 6 x 60.0	(143 x 152 x 1524)			

LEEDS credit available, base made from 100% recycled material.

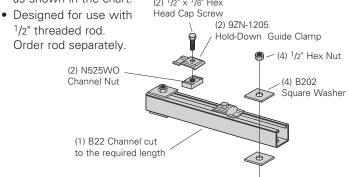
General Note: Consult roofing manufacturer or engineer for roof load capacity. The weakest point may be the insulation board beneath the rubber membrane.

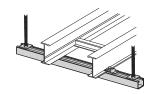
Green = Fastest shipped items

Black = Normal lead-time itemsRed = Normally long lead-time items

#### **Trapeze Support Kit**

- Eaton's B-Line series trapeze kits provide the components required for a single trapeze support in one package. These kits are available in pre-galvanized steel with zinc-plated hardware, hot dip galvanized steel with 316 stainless steel hardware, or DURA GREEN™ painted steel with zinc-plated hardware.
- The SH channel provides the convenience of pre-punched slots, which eliminate the need for field drilling.
- The illustrated hardware is sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.
   (2) 1/2" x 7/8" Hex



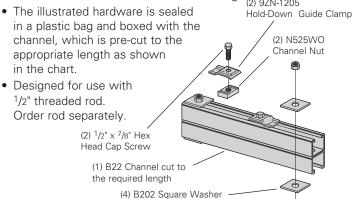


Catalog No.	Tray Width		Channel Length in. mm		Uniform Load Ibs kN	
9(*)-5506-22SH(†)	6	(152)	16	(406)	1350	(6.00)
9(*)-5509-22SH(†)	9	(229)	18	(457)	1250	(5.56)
9(*)-5512-22SH(†)	12	(305)	22	(559)	1125	(5.00)
<ul><li>9(*)-5518-22SH(†)</li></ul>	18	(457)	28	(711)	865	(3.85)
9(*)-5524-22SH(†)	24	(610)	34	(864)	700	(3.11)
<ul><li>9(*)-5530-22SH(†)</li></ul>	30	(762)	40	(1016)	590	(2.62)
9(*)-5536-22SH(†)	36	(914)	46	(1168)	510	(2.27)
9(*)-5542-22SH(†)	42	(1067)	52	(1321)	450	(2.00)

- (\*) Insert (P) (G) or (GRN)
- $\bullet$  (†) Insert  $^3/8$  for  $^3/8$ " threaded rod hardware. Safety factor of 3.0 on all loads.

#### **Heavy Duty Trapeze Support Kit**

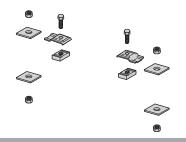
- Eaton's B-Line series trapeze kits provide the components required for a single trapeze support in one package. These kits are available in pre-galvanized steel with zinc-plated hardware, hot dip galvanized steel with 316 stainless steel hardware, or DURA GREEN™ painted steel with zinc-plated hardware.
- The SH channel provides the convenience of pre-punched slots, which eliminates the need for field drilling.
   (2) 9ZN-1205



Catalog No.	Tray Width		Channel Length in. mm		Uniform Load <sub>lbs</sub> kN	
9(*)-5506-22SHA	6	(152)	16	(406)	1350	(6.00)
9(*)-5509-22SHA	9	(229)	18	(457)	1350	(6.00)
• 9(*)-5512-22SHA	12	(305)	22	(559)	1350	(6.00)
9(*)-5518-22SHA	18	(457)	28	(711)	1350	(6.00)
• 9(*)-5524-22SHA	24	(610)	34	(864)	1350	(6.00)
9(*)-5530-22SHA	30	(762)	40	(1016)	1350	(6.00)
• 9(*)-5536-22SHA	36	(914)	46	(1168)	1350	(6.00)
• 9(*)-5542-22SHA	42	(1067)	52	(1321)	1350	(6.00)

• (\*) Insert **P G** or **GRN** Safety factor of 3.0 on all loads.

#### **Trapeze Hardware Kit**



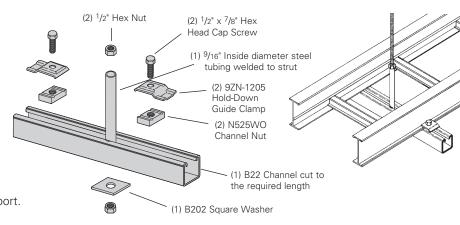
(4) 1/2" Hex Nut

Catalog No.	• 9ZN-5500- <sup>1</sup> / <sub>2</sub>	• 9G-5500- <sup>1</sup> / <sub>2</sub>
In plastic bag	1 pr. 9ZN-1205 2 HHC Screw <sup>1</sup> / <sub>2</sub> x <sup>7</sup> / <sub>8</sub> ZN 2 N525 WO ZN 4 B202 ZN <sup>1</sup> / <sub>2</sub> " sq washer 4 HN <sup>1</sup> / <sub>2</sub> ZN	1 pr. 9G-1205 2 HHC Screw <sup>1</sup> / <sub>2</sub> x <sup>7</sup> / <sub>8</sub> SS6 2 N525 WO SS6 4 B202 HDG <sup>1</sup> / <sub>2</sub> " sq washer 4 HN <sup>1</sup> / <sub>2</sub> " SS6

• Green = Fastest shipped items • Black = Normal lead-time items • Red = Normally long lead-time items

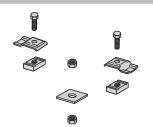
#### **Center Hung Tray Support**

- Center Hung Cable Tray Support allows cable to be laid-in from both sides.
- Eliminates costly cable pulling and field cutting of cable tray supports. Labor costs are dramatically reduced.
- Required hardware and threaded rod material for trapeze assemblies are reduced by up to 50%.
- Designed for use with 1/2" threaded rod. (Order rod separately)
- · Use with all aluminum and steel cable trays through 24" width.
- Load capacity is 700 lbs. (311kN) per support. Safety factor of 3.0. Eccentric loading is not to exceed a 60% vs. 40% load differential.
- The maximum recommended unsupported span length is 144"/12 ft. (3.66 m).
- · Hardware shown is furnished.
- Finish available: Zinc Plated



Catalog No.	,	Channel Length		
	in.	in.	(mm)	
9ZN-5212	6", 9", 12"	(152, 228, 305)	18"	(457)
<ul><li>9ZN-5224</li></ul>	18", 24"	(457, 609)	30"	(762)

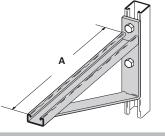
#### Center Hung Support Hardware Kit



Catalog No.	<ul><li>9ZN-5200</li></ul>
In plastic bag	1 pr. 9ZN-1205 2 HHC Screw <sup>1</sup> / <sub>2</sub> x <sup>7</sup> / <sub>8</sub> ZN 2 N525 WO ZN 1 B202 ZN <sup>1</sup> / <sub>2</sub> " sq washer 4 HN <sup>1</sup> / <sub>2</sub> ZN

#### **Bracket**

- (\*) Insert available finish:
- ZN GRN or HDG
- Safety Load Factor 2.5



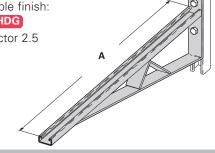
Catalog No.	Uniform Load	Tray Width	'A'
	lbs kN	in. mm	in. mm
B494-12	1580 (7.02)	6 & 9 (152 & 229)	12 (305)
B494-18	1000 (4.45)	12 (305)	18 (457)
B494-24	996 (4.43)	18 (457)	24 (610)

#### **Bracket**

Series 2, 3, 4, & 5 Aluminum



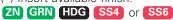




Catalog No.	Uniform Load	Tray Width	'A'	
	lbs kN	in. mm	in. mm	
B494-30	924 (4.11)	24 (610)	30 (762)	
B494-36	864 (3.84)	30 (762)	36 (914)	
B494-42	580 (2.58)	36 (914)	42 (1067)	
B494-48	500 (2.22)	42 (1067)	48 (1219)	

#### **Cantilever Bracket**

• (\*) Insert available finish:



Safety Load Factor 2.5



Catalog No.	Uniform Load		Tray Width		'A'	
	lbs	kN	in.	mm	in.	mm
B409-12	960	(4.27)	6 & 9	(152 & 229)	12	(305)
B409-18	640	(2.84)	12	(305)	18	(457)
B409-24	480	(2.13)	18	(457)	24	(610)

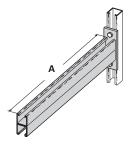
Green = Fastest shipped items

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#### **Cantilever Bracket**

• (\*) Insert available finish: ZN GRN HDG or SS4

• Safety Load Factor 2.5

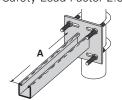


Catalog No.	Uniform Load		Tray Width		'A'	
	lbs	kN	in.	mm	in.	mm
B297-12	1660	(7.38)	6 & 9	(152 & 229)	12	(305)
B297-18	1100	(4.89)	12	(305)	18	(457)
B297-24	835	(3.71)	18	(457)	24	(610)
B297-30	665	(2.93)	24	(610)	30	(762)
B297-36	550	(2.44)	30	(762)	36	(914)
B297-42	465	(2.06)	36	(914)	42	(1067)

#### Underfloor Support (U-Bolts not included)

• Finishes available: ZN

• Safety Load Factor 2.5

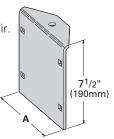


U-Bolt Size	Fits Pipe O.D.
B501- <sup>3</sup> /4	.841 - 1.050
B501-1	1.051 - 1.315
B501-1 <sup>1</sup> / <sub>4</sub>	1.316 - 1.660
B501-1 <sup>1</sup> / <sub>2</sub>	1.661 - 1.900
B501-2	1.901 - 2.375
B501-2 <sup>1</sup> / <sub>2</sub>	2.376 - 2.875

Catalog No.	Uniform Load		Tray	y Width	'A'		
	lbs	(kN)	in.	(mm)	in.	(mm)	
B409UF-12	800	(3.56)	6 & 9	(152 & 229)	12	(305)	
B409UF-21	450	(2.00)	12 & 18	(305 & 457)	21	(533)	

#### **Vertical Hanger Splice Plates**

- Design load is 1500 lbs (6.67kN) per pair.
- Safety Factor of 2.5
- Furnished in pairs.
- Hole size: 9/16" (14mm) for 1/2" threaded rod.

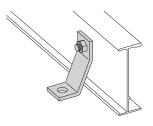




Catalog No.	Outside	'A'		
	Cable Tray Ht.	in.	(mm)	
● 9A-1224	4"	3.84	(97.54)	
<ul><li>9A-1225</li></ul>	5"	4.73	(120.14)	
● 9A-1226	6"	5.84	(148.34)	
• 9A-1227	7"	6.84	(173.74)	

#### **Heavy Duty Hold Down Bracket**

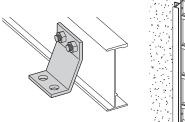
- Design load is 2000 lbs (8.89kN) per pair.
- Two bolt design.
- Sold in pairs.
- 3/8" cable tray attachment hardware provided.
- 1/2" support attachment hardware **not** provided.
- (\*) Insert ZN SS4 or SS6
- · Recommended for support of vertical trays.

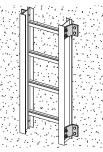


Catalog No. 9(\*)-1241

#### **Heavy Duty Hold Down Bracket**

- Design load is 4000 lbs (17.79kN) per pair.
- Four bolt design.
- · Sold in pairs.
- 3/8" cable tray attachment hardware provided
- 1/2" support attachment hardware **not** provided.
- (\*) Insert ZN SS4 or SS6
- Recommended for support of vertical trays.





Catalog No. 9(\*)-1242

#### **Beam Clamp**

- Finishes available: ZN GRN HDG or SS4
- · Sold in pieces.
- Design load is 1200 lbs (5.34kN) per pair.
- Safety Load Factor 5.0.
- Order HHCS and Channel Nuts separately.

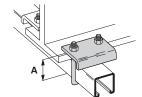


Catalog No. **B355** 

Green = Fastest shipped items
 Black = Normal lead-time items
 Red = Normally long lead-time items

#### **Beam Clamp**

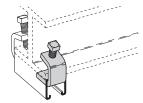
- Finishes available: ZN or HDG
- Sold in pieces.
- \*Design load when used in pairs. Safety Load Factor 5.0



Catalog No.	Design Load lbs (kN)	'A' in. (mm)
B441-22	1200 (5.34)	3 <sup>3</sup> /8 (86)
B441-22A	1200 (5.34)	5 (127)

#### **Beam Clamp**

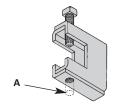
- Finishes available: ZN GRN or HDG
- · Sold in pieces.
- \*Design load when used in pairs. Safety Load Factor 5.0

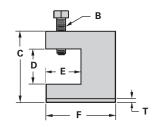


Catalog No.	B212- <sup>1</sup> /4	B212- <sup>3</sup> /8
Design Load *	600 lbs. (2.67kN)	1000 lbs. (4.45 kN)
Max. Flange Thick	<sup>3</sup> /4" (19 mm)	1 <sup>1</sup> /8" (28.6 mm)
Mat'l. Thickness	<sup>1</sup> /4" (6.3 mm)	<sup>3</sup> /8" (9.5 mm)

#### B305 Thru B308 & B321 Series Beam Clamps

- Finishes available: ZN or HDG
- · Setscrew included.
- Safety Load Factor 5.0

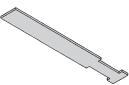




Catalog	Rod	В		)	[	D		E		F	٦	Γ	Desig	1 Load
No.	Size A		in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	lbs	(kN)
B305	<sup>3</sup> /8"-16	<sup>3</sup> /8"-16	2 <sup>5</sup> /16	(58.7)	7/8	(22.2)	1 <sup>1</sup> /8	(28.6)	21/2	(63.5)	11 Ga	. (3.0)	600	(2.67)
B306	<sup>3</sup> /8"-16	<sup>1</sup> /2"-13	2 <sup>7</sup> /16	(61.9)	<sup>7</sup> /8	(22.2)	1 <sup>1</sup> /8	(28.6)	2 <sup>1</sup> /2	(63.5)	7 Ga.	(4.5)	1100	(4.90)
B307	1/2"-13	<sup>1</sup> /2"-13	2 <sup>7</sup> /16	(61.9)	7/8	(22.2)	1 <sup>1</sup> /8	(28.6)	21/2	(63.5)	7 Ga.	(4.5)	1100	(4.90)
B308	<sup>1</sup> /2"-13	<sup>1</sup> /2"-13	2 <sup>9</sup> /16	(65.1)	7/8	(22.2)	1 <sup>1</sup> /8	(28.6)	21/2	(63.5)	1/4	(6.3)	1500	(6.68)
B321-1	<sup>3</sup> /8"-16	<sup>1</sup> /2"-13	3 <sup>9</sup> /16	(90.5)	1 <sup>11</sup> /16	(42.9)	1 <sup>5</sup> /8	(41.3)	3 <sup>1</sup> / <sub>4</sub>	(82.5)	1/4	(6.3)	1300	(5.79)
B321-2	<sup>1</sup> /2"-13	<sup>1</sup> /2"-13	3 <sup>9</sup> /16	(90.5)	1 <sup>11</sup> /16	(42.9)	1 <sup>5</sup> /8	(41.3)	3 <sup>1</sup> / <sub>4</sub>	(82.5)	1/4	(6.3)	1400	(6.23)

#### Anchor Strap - for B305 thru B308 & B321 Series

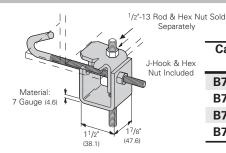
- Finish available: ZN
- For a maximum beam thickness of <sup>3</sup>/<sub>4</sub>" (19mm).
- For thicker beams, step up one flange width size.



Catalog No.	Flange Width in. (mm)				
B312-6	Up to 6	(Up to 152)			
B312-9	6 - 9	(152 to 228)			
B312-12	9 - 12	(228 to 305)			

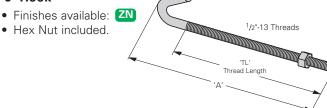
#### **Beam Clamp**

- Finish available: ZN
- Design Load 500 lbs. (2.22 kN)
- Safety Load Factor 5.0
- Recommended torque: 'J'-Hook Nut 125 In.-Lbs. (14.1 kN/m)
- Maximum flange thickness of 3/4" (19mm).



Catalog	For Fla	ange Width	Wt./C		
No.	in.	in. (mm)		(kg)	
B750-J4	3 - 6	(76.2 - 152.4)	109	(49.4)	
B750-J6	5 - 9	(127.0 - 288.6)	124	(56.2)	
B750-J9	8 - 12	(203.2 - 304.8)	135	(61.,2)	
B750-J12	11 - 15	(279.4 - 381.0)	147	(66.7)	

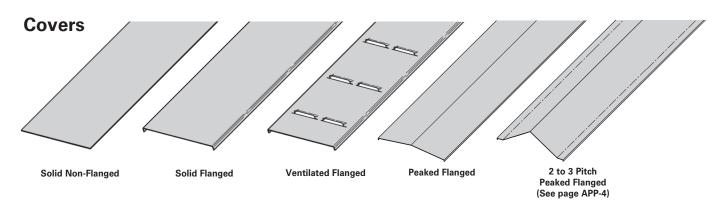
#### 'J'-Hook



Catalog	'A'			'TL'		t./ <b>C</b>
No.	in.	(mm )	in.	(mm)	lbs	(kg)
B700-J4	8 <sup>1</sup> / <sub>2</sub>	(215.9)	5	(127.0)	44	(19.9)
B700-J6	11 <sup>1</sup> /2	(292.1)	6	(152.4)	53	(24.0)
B700-J9	12 <sup>1</sup> /4	(368.3)	6	(152.4)	63	(28.6)
B700-J12	17 <sup>1</sup> /2	(444.5)	6	(152.4)	78	(35.4)

Green = Fastest shipped items

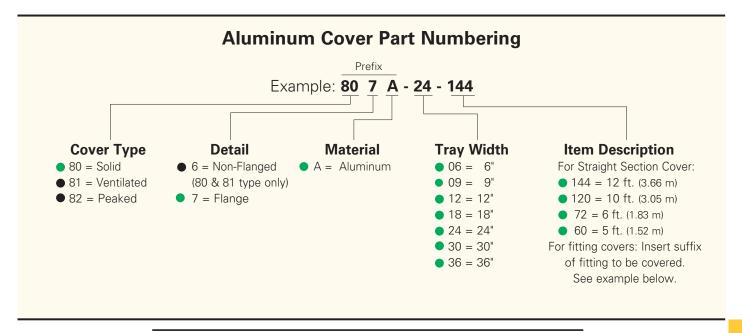
Black = Normal lead-time itemsRed = Normally long lead-time items

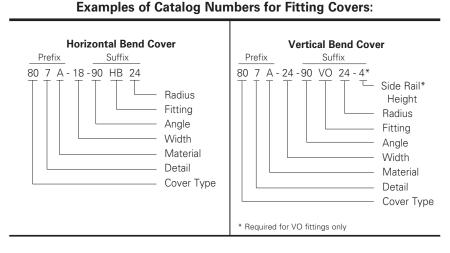


#### A full range of covers is available for straight sections and fittings.

**Solid covers** should be used when maximum enclosure of the cable is desired and no accumulation of heat is expected. **Ventilated covers** provide an overhead cable shield, yet allow heat to escape.

We recommend that covers be placed on vertical cable tray runs to a height of 6 ft. (1.83 m) to 8 ft. (2.44 m) above the floor to isolate both cables and personnel. **Flanged covers** have a <sup>1</sup>/<sub>2</sub> in. (13 mm) flange. Cover clamps are <u>not included</u> with the cover and must be ordered separately. All **peaked covers** are flanged. Standard peaked covers have <sup>1</sup>/<sub>2</sub>" peak. Special purpose peaked covers, having a 2 to 3 pitch, provide additional slope and material thickness. The 2 to 3 pitch fitting covers are of multiple piece, welded construction.

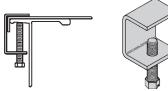




● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

#### **Standard Cover Clamp**

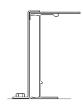
- For indoor service only.
- Setscrew included.
- Sold per piece.

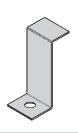


Tray Type	Catalog No.	Side Rail Height
Aluminum	<ul><li>9ZN-9012</li></ul>	All Sizes
Aluminum	<ul><li>9A-9012</li></ul>	All 01263

#### **Combination Cover and Hold Down Clamp**

- Sold per piece.
- For indoor service only.

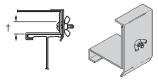




Tray Type	Catalog No.	Side Rail Height
		in. (mm)
	<ul><li>9A-9043</li></ul>	4 (101)
Aluminum	<ul><li>9A-9053</li></ul>	5 (127)
, warriinarri	<ul><li>9A-9063</li></ul>	6 (152)
	<ul><li>9A-9073</li></ul>	7 (78)

#### **Raised Cover Clamp**

- For indoor service only.
- For use with flanged covers only. † Specify gap of 1", 2", 3" or 4".

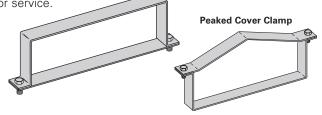


Tray Type	Catalog No.	Side Rail Height
Aluminum	• 9ZN-9112-†	4 & 5 Deep
	• 9ZN-9113-†	6 & 7 Deep

#### **Heavy Duty Cover Clamp**

• Recommended for outdoor service.

• (‡) Insert tray width † Add P to Catalog No. for peaked cover clamp.



Catalog No.	Side Rail Height							
	in.	mm						
• 9A-(‡)-9044†	4	(101)						
<ul><li>9A-(‡)-9054†</li></ul>	5	(127)						
9A-(‡)-9064†	6	(152)						
<ul><li>9A-(‡)-9074†</li></ul>	7	(178)						

#### **Quantity of Standard Cover Clamps Required**

Notes:

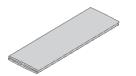
When using the Heavy Duty Cover Clamp, only on-half the number of clamps stated above is required.

Additional clamps may be necessary in extreme wind applications.

Straight Section 60" or 72" 4 pcs	3.
Straight Section 120" or 144" 6 pcs	<b>3</b> .
Horizontal/Vertical Bends4 pcs	<b>3</b> .
Tees 6 pcs	<b>3</b> .
Crosses 8 pcs	<b>)</b> .

#### **Conduit to Cable Tray Adaptor**

- Used to join covers
- Plastic
- (‡) Insert tray width



Catalog No. 99-9980-(‡)

#### **Cable Cleats**

(see pages O-1 thru O-5) Standard







Single Cable Cleats



Green = Fastest shipped items

Black = Normal lead-time itemsRed = Normally long lead-time items

## Series 2, 3, 4, & 5 Aluminum - Specifications

#### **Section 1- Acceptable Manufacturers**

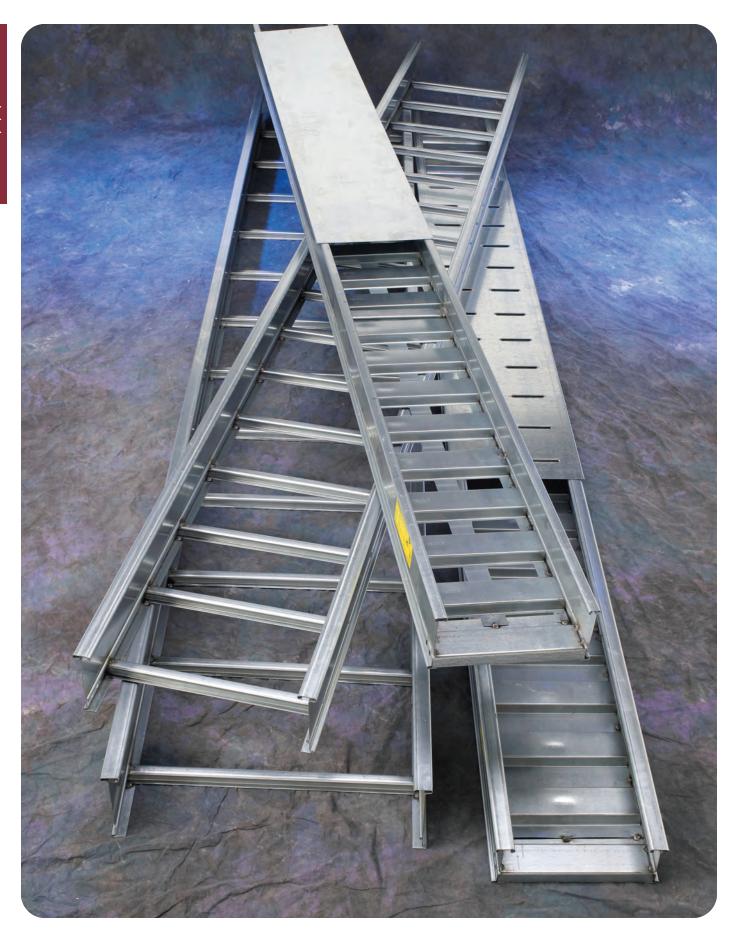
1.01 Manufacturer: Subject to compliance with these specifications, Eaton's B-Line series cable tray systems shall be as manufactured by Eaton.

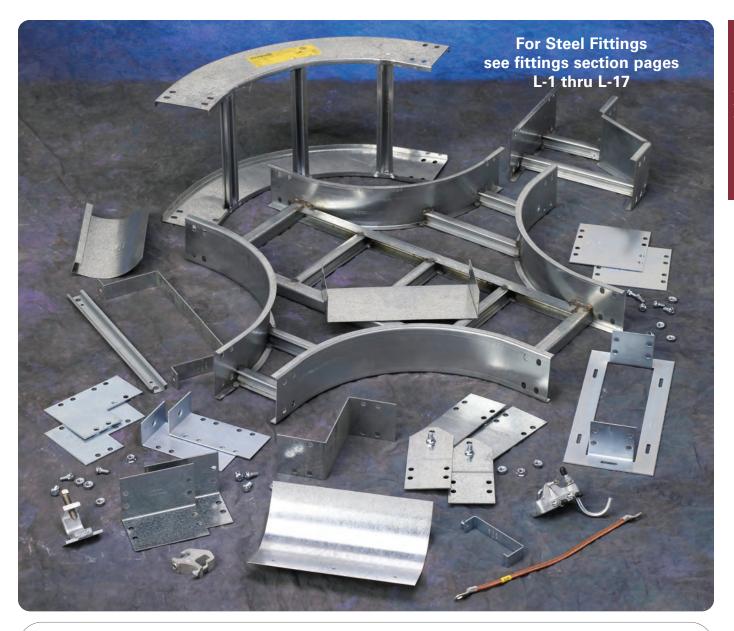
#### **Section 2- Cable Tray Sections and Components**

- 2.01 General: Except as otherwise indicated, provide metal cable trays, of types, classes and sizes indicated; with splice plates, bolts, nuts and washers for connecting units. Construct units with rounded edges and smooth surfaces; in compliance with applicable standards; and with the following additional construction features. Cable tray shall be installed according to the latest revision of NEMA VE 2.
- 2.02 Materials and Finish: Straight section and fitting side rails and rungs shall be extruded from Aluminum Association Alloy 6063. All fabricated parts shall be made from Aluminum Association Alloy 5052.
- 2.03 Ladder Cable Trays shall consist of two longitudinal members (side rails) with transverse members (rungs) welded to the side rails. Rungs shall be spaced [6] [9] [12] inches on center. Rung spacing in radiused fittings shall be industry standard 9" and measured at the center of the tray's width. Each rung must be capable of supporting a 200 lb. concentrated load at the center of the cable tray over and above the cable load with a safety factor of 1.5.
- 2.04 Ventilated Trough Cable Trays shall consist of two longitudinal members (side rails) with a corrugated bottom welded to the side rails or rungs spaced 4" on center. The peaks of the corrugated bottom shall have a minimum flat cable bearing surface of 23/4" and shall be spaced on 6" centers. To provide ventilation in the tray, the valleys of the corrugated bottom shall have 21/4" x 4" rectangular holes punched along the width of the bottom.
- 2.05 Non-Ventilated Bottom Trough Cable Trays shall consist of two longitudinal members (side rails) with a corrugated bottom welded to the side rails or a solid sheet over rungs. The peaks of the corrugated bottom shall have a minimum flat cable bearing surface of 23/4" and shall be spaced on 6" centers.
- 2.06 Cable tray loading depth shall be [3] [4] [5] [6] inches per NEMA VE 1.
- 2.07 Straight sections shall have side rails fabricated as I-beams. Straight sections shall be supplied in standard [12 foot] [24 foot] [10 foot (3 m)] [20 foot (6 m)] lengths.
- 2.08 Cable tray widths shall be [6] [9] [12] [18] [24] [30] [36] inches or as shown on drawings.
- 2.09 Splice plates shall be the Wedge-Lock design with 4 nuts and bolts per plate. The resistance of fixed splice connections between an adjacent section of tray shall not exceed 0.00033 ohm.
- 2.10 All fittings must have a minimum radius of [12] [24] [36] [48] inches.

#### **Section 3- Loading Capacities and Testing**

- 3.01 Cable tray shall be capable of carrying a uniformly distributed load of \_\_\_\_\_\_ lbs./ft. on a \_\_\_\_\_\_ ft. support span with a safety factor of 1.5 when supported as a simple span and tested per NEMA VE 1 5.2. In addition to the uniformly distributed load the cable tray shall support 200 lbs. concentrated load at mid-point of span. Load and safety factors specified are applicable to both the side rails and rung capacities. Cable tray shall be made to manufacturing tolerances as specified by NEMA.
- 3.02 Upon request, manufacturer shall provide test reports in accordance with the latest revision of NEMA VE 1 or CSA C22.2 No. 126.





#### **How The Service Advisor Works**

We know that your time is important! That's why the color-coding system in this catalog is designed to help you select products that fit your service needs. Products are marked to indicate the typical lead time for orders of 50 pieces or less.

Customer: How do I select my straight sections. covers, or fittings so that I get the quickest turnaround?

**Service Advisor:** Each part of our selection chart is shown in colors. If any section of a part number is a different color, the part will typically ship with the longer lead time represented by the colors.

- Green = Fastest shipped items
- Black = Normal lead-time items
- Red = Normally long lead-time items

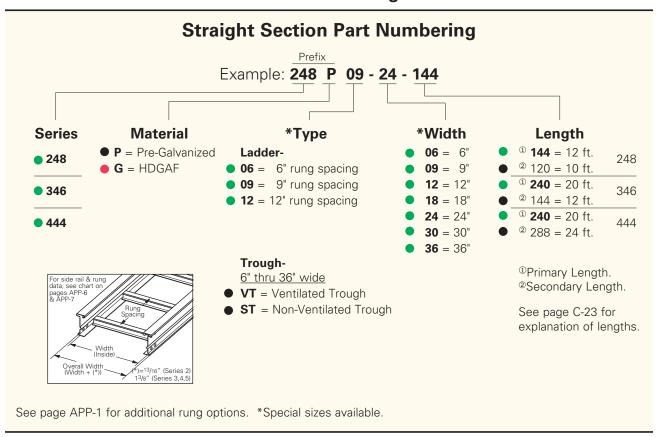
Example:

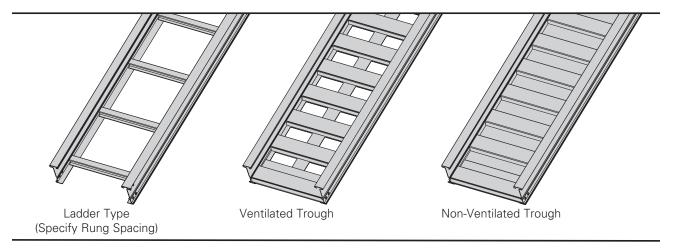
258G 12 - 24 - 144

Part will have a long lead time because of the 258G material.

Changing the part number from 258G to 258P will change the coding to black and reduce lead time.

### 3" NEMA VE 1 Loading Depth 4" Side Rail Height





### 3" NEMA VE 1 Loading Depth 4" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply publish load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

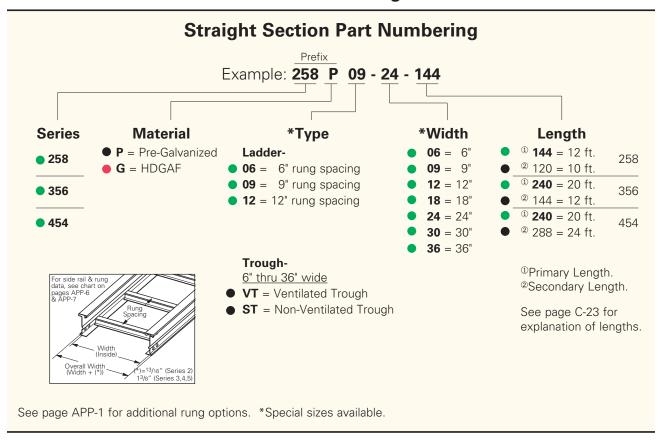
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	1.00	NEMA: 16A, 12C	6	412*	0.0007		1.8	613*	0.012	
	177	CSA: D1-3m	8	232	0.0022	Area = $0.62 \text{ in}^2$	2.4	345	0.038	Area = $4.00 \text{ cm}^2$
248	4.188 3.14		10	148	0.0054	$Sx = 0.64 \text{ in}^3$	3.0	221	0.093	$Sx = 10.49 \text{ cm}^3$
	4.188	UL Cross-Sectional	12	103	0.011	$1x = 1.43 \text{ in}^4$	3.7	153	0.192	$Ix = 59.52 \text{ cm}^4$
		Area: 0.40 in <sup>2</sup>	14	76	0.021		4.3	113	0.356	
	18 gauge		16	58	0.036		4.9	86	0.607	

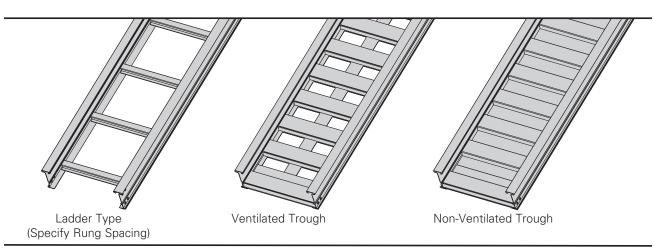
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	→ 1.50	NEMA: 20A, 16B	10	252	0.0036		3.0	375	0.060	
		CSA: D1-6m	12	175	0.0072	Area = $0.89 \text{ in}^2$	3.7	260	0.124	Area = $5.74 \text{ cm}^2$
346	3.13		14	129	0.013	$Sx = 0.96 \text{ in}^3$	4.3	191	0.229	$Sx = 15.73 \text{ cm}^3$
0.0	4.188	UL Cross-Sectional	16	98	0.023	$Ix = 2.22 in^4$	4.9	146	0.391	$Ix = 92.40 \text{ cm}^4$
		Area: 0.70 in <sup>2</sup>	18	78	0.037		5.5	116	0.626	
	16 gauge		20	63	0.056		6.1	94	0.955	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	→ 1.50	NEMA: 20B, 16C	12	253	0.0055		3.7	376	0.093	_
	<u> </u>	CSA: E-3m	16	142	0.027	Area = $1.19 \text{ in}^2$	4.9	212	0.295	Area = $7.68 \text{ cm}^2$
444	3.11		18	112	0.028	$Sx = 1.27 \text{ in}^3$	5.5	167	0.473	$Sx = 20.81 \text{ cm}^3$
	4.188	UL Cross-Sectional	20	91	0.042	$Ix = 2.94 in^4$	6.1	135	0.721	$Ix = 122.37 \text{ cm}^4$
		Area: 1.00 in <sup>2</sup>	22	75	0.062		6.7	112	1.055	
	14 gauge		24	63	0.088		7.3	94	1.495	

\*When using 18" rung spacing, load capacity is limited to 394 lbs/ft (586.272 kg/m) for 30" cable tray width and 325 lbs/ft (483.6 kg/m) for 36" cable tray width. When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: lx = Moment of Inertia, Sx = Section Modulus.

## 4" NEMA VE 1 Loading Depth 5" Side Rail Height





# 4" NEMA VE 1 Loading Depth 5" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply publish load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

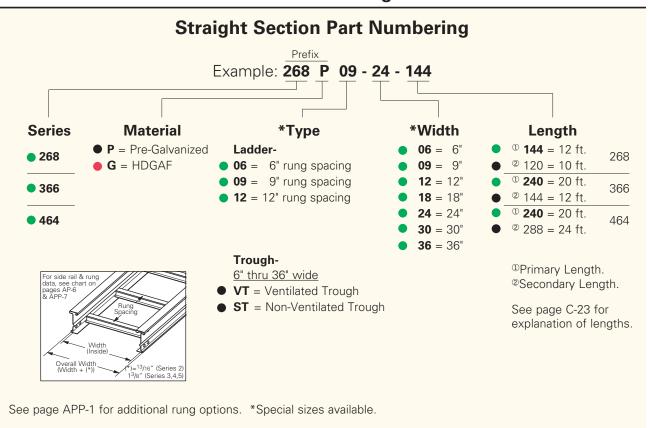
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	1.00	NEMA: 16A, 12C	6	436*	0.0004		1.8	649*	0.007	
	177	CSA: D1-3m	8	245	0.0013	Area = $0.71 \text{ in}^2$	2.4	365	0.022	Area = $4.58 \text{ cm}^2$
258	4.14		10	157	0.0032	$Sx = 0.89 \text{ in}^3$	3.0	234	0.054	$Sx = 14.58 \text{ cm}^3$
	5.188	UL Cross-Sectional	12	109	0.0066	$1x = 2.44 \text{ in}^4$	3.7	162	0.113	$Ix = 101.56 \text{ cm}^4$
		Area: 0.40 in <sup>2</sup>	14	80	0.012		4.3	119	0.209	
	18 gauge		16	61	0.021		4.9	91	0.356	

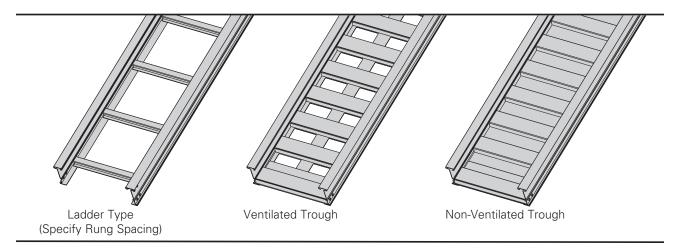
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	→ 1.50	NEMA: 20A, 16C	10	276	0.0021		3.0	411	0.036	
	<u> </u>	CSA: D1-6m	12	192	0.0043	Area = $1.00 \text{ in}^2$	3.7	285	0.074	Area = $6.45 \text{ cm}^2$
356	4.13		14	141	0.0080	$Sx = 1.31 \text{ in}^3$	4.3	210	0.136	$Sx = 21.47 \text{ cm}^3$
000	5.188	UL Cross-Sectional	16	108	0.014	$Ix = 3.73 in^4$	4.9	160	0.233	$lx = 155.25 cm^4$
		Area: 0.70 in <sup>2</sup>	18	85	0.022		5.5	127	0.373	
	16 gauge		20	69	0.033		6.1	103	0.568	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	<b>→  -</b> 1.50	NEMA: 20C	12	294	0.0032		3.7	438	0.055	
	1 77	CSA: E-6m	16	166	0.010	Area = $1.34 \text{ in}^2$	4.9	246	0.175	Area = $8.65 \text{ cm}^2$
454	4.11		18	131	0.016	$Sx = 1.75 \text{ in}^3$	5.5	195	0.280	$Sx = 28.68 \text{ cm}^3$
	5.188	UL Cross-Sectional	20	106	0.026	$1x = 4.96 \text{ in}^4$	6.1	158	0.427	$Ix = 206.45 \text{ cm}^4$
	}	Area: 1.00 in <sup>2</sup>	22	88	0.037		6.7	130	0.625	
	14 gauge		24	74	0.052		7.3	110	0.886	

\*When using 18" rung spacing, load capacity is limited to 394 lbs/ft (586.272 kg/m) for 30" cable tray width and 325 lbs/ft (483.6 kg/m) for 36" cable tray width. When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: lx = Moment of Inertia, Sx = Section Modulus.

### 5" NEMA VE 1 Loading Depth 6" Side Rail Height





# 5" NEMA VE 1 Loading Depth 6" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply publish load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

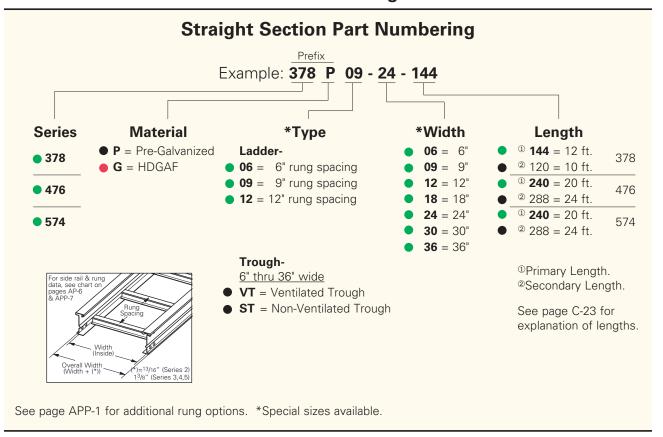
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	1.00	NEMA: 16A, 12C	6	440*	0.0003		1.8	655*	0.005	_
		CSA: D1-3m	8	248	0.0008	Area = $0.80 \text{ in}^2$	2.4	368	0.014	Area = $5.16 \text{ cm}^2$
268	5.14		10	158	0.0020	$Sx = 1.18 \text{ in}^3$	3.0	236	0.035	$Sx = 19.34 \text{ cm}^3$
	6.188	UL Cross-Sectional	12	110	0.0042	$Ix = 3.81 in^4$	3.7	164	0.072	$Ix = 158.58 \text{ cm}^4$
		Area: 0.70 in <sup>2</sup>	14	81	0.0078		4.3	120	0.134	
	18 gauge		16	62	0.013		4.9	92	0.228	

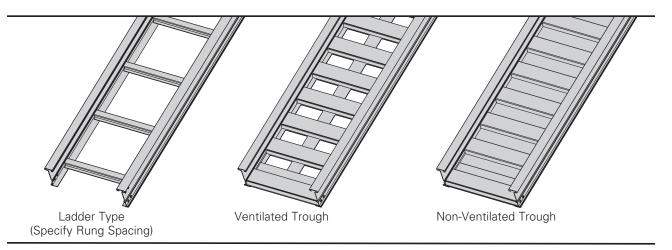
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	- 1.50	NEMA: 20B, 16C	10	300	0.0014		3.0	446	0.023	
	1,2,1	CSA: E-6m	12	208	0.0028	Area = $1.11 \text{ in}^2$	3.7	310	0.048	Area = $7.16 \text{ cm}^2$
366	5.14		14	153	0.0052	$Sx = 1.71 \text{ in}^3$	4.3	228	0.089	$Sx = 28.02 \text{ cm}^3$
000	6.188	UL Cross-Sectional	16	117	0.0089	$Ix = 5.74 in^4$	4.9	174	0.151	$Ix = 238.92 \text{ cm}^4$
		Area: 1.00 in <sup>2</sup>	18	93	0.014		5.5	138	0.242	
	16 gauge		20	75	0.022		6.1	112	0.369	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	<b>→</b> 1.50	NEMA: 20C	12	342*	0.002		3.7	508*	0.035	_
	127	CSA: E-6m	16	192	0.007	Area = $1.49 \text{ in}^2$	4.9	286	0.113	Area = $9.61 \text{ cm}^2$
464	5.11		18	152	0.011	$Sx = 2.27 \text{ in}^3$	5.5	226	0.182	$Sx = 37.36 \text{ cm}^3$
	6.188	UL Cross-Sectional	20	123	0.016	$Ix = 7.65 in^4$	6.1	183	0.277	$Ix = 318.42 \text{ cm}^4$
		Area: 1.00 in <sup>2</sup>	22	102	0.024		6.7	151	0.406	
	14 gauge		24	85	0.034		7.3	127	0.574	

\*When using 18" rung spacing, load capacity is limited to 394 lbs/ft (586.272 kg/m) for 30" cable tray width and 325 lbs/ft (483.6 kg/m) for 36" cable tray width. When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: lx = Moment of Inertia, Sx = Section Modulus.

## 6" NEMA VE 1 Loading Depth 7" Side Rail Height





## 6" NEMA VE 1 Loading Depth 7" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply publish load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
	→ 1.50		8	319	0.0006		2.4	474	0.009	
		NEMA: 20A, 16B	10	204	0.0014		3.0	304	0.023	
378	6.14	CSA: D1-3m	12	142	0.0028	Area = $1.01 \text{ in}^2$	3.7	211	0.048	Area = $6.52 \text{ cm}^2$
	7.188		14	104	0.0052	$Sx = 1.77 \text{ in}^3$	4.3	155	0.089	$Sx = 29.01 \text{ cm}^3$
		UL Cross-Sectional	16	80	0.0089	$Ix = 6.90 in^4$	4.9	119	0.151	$Ix = 287.20 \text{ cm}^4$
	18 gauge	Area: 0.70 in <sup>2</sup>	18	63	0.014		5.5	94	0.242	
			20	51	0.022		6.1	76	0.369	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
476	7.188	NEMA: 20B, 16C	12	214	0.0019		3.7	318	0.033	Area = 7.87 cm <sup>2</sup>
		CSA: D1-6m	16	129	0.0061	Area = $1.22 \text{ in}^2$	4.9	179	0.105	
			18	95	0.010	$Sx = 2.14 \text{ in}^3$	5.5	141	0.168	$Sx = 35.07 \text{ cm}^3$
		UL Cross-Sectional	20	77	0.015	$Ix = 8.30 \text{ in}^4$	6.1	115	0.255	$Ix = 345.47 \text{ cm}^4$
		Area: 1.00 in <sup>2</sup>	22	64	0.022		6.7	95	0.374	
	16 gauge		24	53	0.031		7.3	80	0.529	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
574	7.188 6.11 14 gauge	NEMA: 20C	12	361	0.0014	Area = 1.64 in <sup>2</sup>	3.7	537	0.025	Area = 10.58 cm <sup>2</sup>
		CSA: E-6m	16	203	0.0046		4.9	302	0.078	
			18	160	0.0073	$Sx = 2.87 \text{ in}^3$	5.5	239	0.125	$Sx = 47.03 \text{ cm}^3$
		UL Cross-Sectional	20	130	0.011	lx = 11.10 in <sup>4</sup>	6.1	193	0.191	$Ix = 462.02 \text{ cm}^4$
		Area: 1.50 in <sup>2</sup>	22	107	0.016		6.7	160	0.280	
			24	90	0.023		7.3	134	0.396	

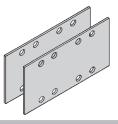
When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

## **Splice Plates**

- Standard 8-hole pattern for all steel splice plates.
- Furnished in pairs with hardware.
- One pair including hardware provided with straight section. (Expansion splice quantity subtracted)
- Boxed in pairs with hardware.

• (\*) Insert ZN or G





Height	
in. mm	
4 (101)	
5 (127)	
6 (152)	
7 (178)	

## **Expansion Splice Plates**

- Expansion plates allow for one inch expansion or contraction of the cable tray, or where expansion joints occur in the support structure.
- Furnished in pairs with hardware.
- Bonding Jumpers are required on each siderail. Order Separately.
- (\*) Insert ZN or G





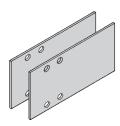
Catalog No.	Height
	in. mm
9(*)-8014	4 (101)
9(*)-8015	5 (127)
9(*)-8016	6 (152)
9(*)-8017	7 (178)

## **Universal Splice Plates**

- Used to splice to existing cable tray systems.
- Furnished in pairs with hardware.
- (\*) Insert ZN or G



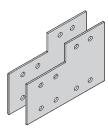




Catalog No.	Height	
	in. mm	
9(*)-8004-1/2	4 (101)	
9(*)-8005- <sup>1</sup> / <sub>2</sub>	5 (127)	
9(*)-8006 - <sup>1</sup> / <sub>2</sub>	6 (152)	
9(*)-8007 - <sup>1</sup> /2	7 (178)	

### **Step Down Splice Plates**

- These splice plates are offered for connecting cable tray sections having side rails of different heights.
- Furnished in pairs with hardware.
- (\*) Insert ZN or G

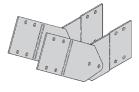


Catalog No.	Height		
	in. mm		
9(*)-8045	5 to 4 (127 to 101)		
9(*)-8046	6 to 4 (152 to 101)		
9(*)-8060	6 to 5 (152 to 127)		
9(*)-8047	7 to 4 (178 to 101)		
9(*)-8061	7 to 5 (178 to 127)		
9(*)-8062	7 to 6 (178 to 152)		

### **Vertical Adjustable Splice Plates**

- These plates provide for changes in elevation that do not conform to standard vertical fittings.
- Furnished in pairs with hardware.
- · Bonding Jumpers not required.
- (\*) Insert **(** or **(** )



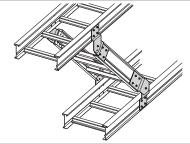


Requires supports within 24"	on both sides, per NEMA VE	2.
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Catalog No.	Height	
	in. mm	
9(*)-8024	4 (101)	
9(*)-8025	5 (127)	
9(*)-8026	6 (152)	
9(*)-8027	7 (178)	

#### **Branch Pivot Connectors**

- Branch from existing cable tray runs at any point.
- Pivot to any required angle.
- UL Classified for grounding (bonding jumpers not required).
- Furnished in pairs with hardware.
- (\*) Insert ZN or 6



Catalog No.	Height	
	in. mm	
9(*)-8244	4 (101)	
9(*)-8245	5 (127)	
9(*)-8246	6 (152)	
9(*)-8247	7 (178)	

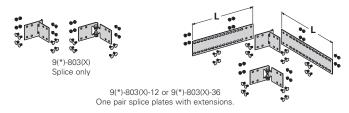
Green = Fastest shipped items

Black = Normal lead-time items

Red = Normally long lead-time items

#### **Horizontal Adjustable Splice Plates**

- Offered to adjust a cable tray run for changes in direction in a horizontal plane that do not conform to standard horizontal fittings.
- Furnished in pairs with hardware.
- Bonding jumpers not required.
- (\*) Insert ZN or G
- (X) Insert 4, 5, 6 or 7 for side rail height.



Catalog	Cable Tray	Thru Tra	ay Width	'L'
No.	End Cut	in.	(mm)	in. (mm)
9(*)-803(X)	Mitered	36	(914)	N/A (NA)
9(*)-803(X)-12	Not mitered	12	(305)	16 (406)
9(*)-803(X)-36	Not mitered	36	(914)	41 (1041)

Requires supports within 24" on both sides, per NEMA VE 2.

#### **Offset Reducing Splice Plate**

- This plate is used for joining cable trays having different widths. When used in pairs they form a straight reduction; when used singly with a standard splice plate, they form an offset reduction.
- Furnished as one plate with hardware.
- (‡) Insert reduction
- (\*) Insert **(** or **(** )



Catalog No.	Height	
	in. mm	
9(*)-8064-(‡)	4 (101)	
9(*)-8065-(‡)	5 (127)	
9(*)-8066-(‡)	6 (152)	
9(*)-8067-(‡)	7 (178)	

## **Tray to Box Splice Plates**

- Used to attach the end of a cable tray run to a distribution box or control panel.
- Furnished in pairs with hardware.
- (\*) Insert G or P



Catalog No.	Height	
	in. mm	
9(*)-8054	4 (101)	
9(*)-8055	5 (127)	
9(*)-8056	6 (152)	
9(*)-8057	7 (178)	

#### Frame Type Box Connector

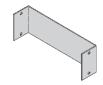
- Designed to attach the end of a cable tray run to a distribution cabinet or control center to help reinforce the box at the point of entry.
- Furnished with tray connection hardware.
- (\*) Insert **ZN** or **G**
- (‡) Insert tray width



Catalog No.	Height	
	in. mm	
9(*)-8074-(‡)	4 (101)	
9(*)-8075-(‡)	5 (127)	
9(*)-8076-(‡)	6 (152)	
9(*)-8077-(‡)	7 (178)	

#### **Blind End**

- This plate forms a closure for a dead end cable tray.
- Furnished as one plate with hardware.
- (\*) Insert (6) or (12)
- (‡) Insert tray width

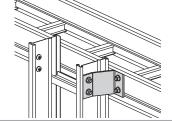


Catalog No.	Height	
	in. mm	
9(*)-8084-(‡)	4 (101)	
9(*)-8085-(‡)	5 (127)	
9(*)-8086-(‡)	6 (152)	
9(*)-8087-(‡)	7 (178)	

#### **Cross Connector Bracket**

- For field connecting crossing section.
- Furnished in pairs with 3/8" hardware.
- (\*) Insert ZN or G





Catalog No. 9(\*)-1240

- Green = Fastest shipped items Black = Normal lead-time items
- Red = Normally long lead-time items

#### Standard Tray Hardware (for field installation drill 13/32" hole)

 Finishes: [ZN] Zinc Plated ASTM B633 SC1 for pre-galvanized tray [CZ] Chromium Zinc Plated F1136-88 Grade A for hot dip galvanized tray



Catalog No.	Description
<ul> <li>RNCB <sup>3</sup>/8" x <sup>3</sup>/4" ZN</li> </ul>	Ribbed Neck Carriage Bolt ASTM A307 Grade A
<ul> <li>SFHN <sup>3</sup>/8"-16 ZN</li> </ul>	Serrated Flange Hex Nut ASTM A563 Grade A
• RNCB 3/8" x 3/4" CZ	Ribbed Neck Carriage Bolt ASTM F1136-88 Grade 3
<ul> <li>SFHN <sup>3</sup>/8"-16 CZ</li> </ul>	Serrated Flange Hex Nut ASTM F1136-88 Grade A

## Optional Tray Hardware (for field installation drill 13/32" hole)

 To order 316 stainless steel hardware add SS6 suffix to catalog number -Example: 9G-8004SS6



Catalog No.	Description	
<ul> <li>RNCB <sup>3</sup>/8" x <sup>3</sup>/4" SS6</li> </ul>	Ribbed Neck Carriage Bolt AISI 316 Stainless Steel	
<ul> <li>SFHN <sup>3</sup>/8"-16 SS6</li> </ul>	Serrated Flange Hex Nut AISI 316 Stainless Steel	

#### **Conduit to Cable Tray Adaptor**

• For easy attachment of conduit terminating at a cable tray.

• Use on aluminum or steel cable trays.



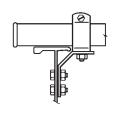


Catalog No.	Conduit Size	
	in.	mm
• 9G-1158- <sup>1</sup> /2, <sup>3</sup> /2	1/2, 3/4	(15, 20)
• 9G-1158-1, 1 <sup>1</sup> / <sub>4</sub>	1, 1 <sup>1</sup> / <sub>4</sub>	(25, 32)
• 9G-1158-1 <sup>1</sup> / <sub>2</sub> , 2	1 <sup>1</sup> /2, 2	(40, 50)
• 9G-1158-2 <sup>1</sup> / <sub>2</sub> , 3	$2^{1}/_{2}$ , 3	(65, 80)
• 9G-1158-3 <sup>1</sup> / <sub>2</sub> , 4	$3^{1}/_{2}$ , 4	(90, 100)

# **Conduit to Cable Tray Adaptor**

- Assembly required.
- Mounting hardware included.
- Conduit clamps provided.
- (‡) = Insert conduit size (1/2" thru 4").





Catalog No.

● 9ZN-1150-(‡)

#### **Conduit to Cable Tray Adaptor**

- · Assembly required.
- Conduit clamps included.
- (‡) = Insert conduit size (1/2" thru 4").





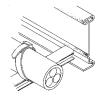
Catalog No.

• 9ZN-1155-(‡)

#### Cable Tie (Ladder Tray)

 Nylon ties provide easy attachment of cable to ladder rungs; maximum cable O.D. is 3" (76mm).





Catalog No. 99-2125-15

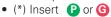
Green = Fastest shipped items

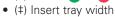
■ Black = Normal lead-time items

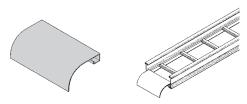
Red = Normally long lead-time items

#### **Ladder Drop-Out**

 Specially-designed Ladder Drop-Outs provide a rounded surface with 4" (101 mm) radius to protect cable as it exits from the cable tray, preventing damage to insulation.
 The drop-out will attach to any desired rung.







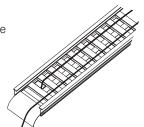
Catalog No.

• 9(\*)-1104-(‡)

#### **Trough Drop-Out & Drop-Out Bushing**

• These devices provide a rounded surface to protect cable as it exits from the trough-type cable tray.

- Hardware is included for attachment of the trough bottom drop-out.
- (\*) Insert (P) or (G)
- (‡) Insert tray width







Catalog No.

Snap-In Plastic Bushing

Catalog No.

9(\*)-1104T-(‡) 99-1124

# **Barrier - Straight Section**

- Length: Insert 120 for [120" 10 ft.] (3.0 m) or 144 for [144" - 12 ft.] (3.6 m)
- Order catalog number based on loading depth.
- Furnished with four #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (\*) Insert (P) or (G)

Catalog No.	Side Rail Height	Loading Depth 'H'
73(*)-Length	4 (101)	3 (76)
74(*)-Length	5 (127)	4 (101)
75(*)-Length	6 (152)	5 (127)
76(*)-Length	7 (178)	6 (152)

#### **Barrier - Horizontal Bend**

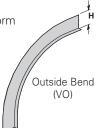
- Horizontal Bend Barriers are flexible in order to conform to any horizontal fitting radius.
   Can be cut to desired length.
- Standard length is 72" [6 ft.] (1.8 m) sold individually
- Order catalog number based on loading depth.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (\*) Insert (P) or (G)

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Splice.	H

Catalog No.	Side Rail Height	Loading Depth 'H'
73(*)-90HBFL	4 (101)	3 (76)
74(*)-90HBFL	5 (127)	4 (101)
75(*)-90HBFL	6 (152)	5 (127)
76(*)-90HBFL	7 (178)	6 (152)

### **Barrier - Vertical Outside Bend**

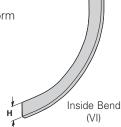
- Vertical Outside Bend Barriers are preformed to conform to a specific vertical outside bend fitting.
- Furnished with three #10 x  $^{1}$ Z" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (\*) Insert (P) or (G)
- (\*\*) Insert 30, 45, 60 or 90 for degrees
- (†) Insert 12, 24, 36 or 48 for radius



Catalog No.	Side Rail Height	Loading Depth 'H' in. mm
73(*)-(**)VO(†)	4 (101)	3 (76)
74(*)-(**)VO(†)	5 (127)	4 (101)
75(*)-(**)VO(†)	6 (152)	5 (127)
76(*)-(**)VO(†)	7 (178)	6 (152)

### **Barrier - Vertical Inside Bend**

- Vertical Inside Bend Barriers are preformed to conform to a specific vertical inside bend fitting.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (\*) Insert (P) or (G)
- (\*\*) Insert 30, 45, 60 or 90 for degrees
- (†) Insert 12, 24, 36 or 48 for radius



Catalog No.	Side Rail Height	Loading Depth 'H'
73(*)-(**)VI(†)	4 (101)	3 (76)
74(*)-(**)VI(†)	5 (127)	4 (101)
75(*)-(**)VI(†)	6 (152)	5 (127)
76(*)-(**)VI(†)	7 (178)	6 (152)

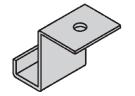
Green = Fastest shipped items

Black = Normal lead-time items

Red = Normally long lead-time items

## **Barrier Strip Clip**

- Zinc plated steel barrier clip fastens to either aluminum or steel ladder rung.
- Furnished with one #10 x <sup>1</sup>/2" zinc plated self-drilling screw.



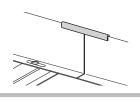


Catalog No. **9ZN-9002** 

#### **Barrier Strip Splice**

- Plastic splice holds adjoining barrier strips in straight alignment.
- 3" (76mm) long.



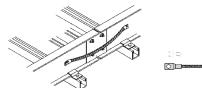


Catalog No. 99-9982

## **Bonding Jumper**

Use at each expansion splice and where the cable tray is not mechanically/electrically continuous to ground. Sold individually.

- · Hardware included.
- See table 392.7(B)(2) on page CTS-9 for amperage ratings required to match the UL cross-sectional area of the tray.
- See tray loading chart for UL cross-sectional area.
- Bonding jumper is 14<sup>1</sup>/2" (368mm) long.



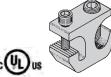


Catalog No.	Copper Wire Size	Ampacity
99-N1	#1	600

# **Grounding Clamp**

B-Line series cable tray is UL® classified as to its suitability as an equipment grounding conductor. If a separate conductor for additional grounding capability is desired, we offer this clamp for bolting the conductor at least once to each cable tray section.

• Accepts #6 AWG to 250 MCM.



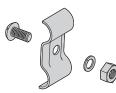
Catalog No.	Material	
<ul><li>9A-2130</li></ul>	Tin Plated Aluminum	

#### **Ground Wire Clamp**

- Mechanically attaches grounding cables to cable tray.
- · Hardware included.

Rod Coupling

• (\*) Insert ZN or SS4



Catalog No. Material	
<b>9(*)-2351</b> #1 thru 2/0	
9(*)-2352	3/0 thru 250 MCM

#### Thread Rod (ATR) & Rod Couplings



Size	Catalog No.	Available Length	Loading	
All Threaded Rod				
3/8"-16	<ul> <li>ATR <sup>3</sup>/8" x Length</li> </ul>	36", 72", 120", 144"	730 lbs.	
<sup>1</sup> /2"-13	<ul> <li>ATR <sup>1</sup>/<sub>2</sub>" x Length</li> </ul>	36", 72", 120", 144"	1350 lbs.	
Rod Coupling				
3/8"-16	● B655- <sup>3</sup> /8″	NA	730 lbs.	
<sup>1</sup> /2"-13	● B655- <sup>1</sup> /2"	NA	1350 lbs.	

Green = Fastest shipped items

All Threaded Rod

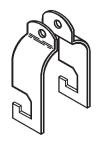
Black = Normal lead-time itemsRed = Normally long lead-time items

#### **Stainless Steel Cable Clamp**

- Fits with series 2, 3, 4 & 5 standard steel rungs.
- Shipped flat. Field form around the cable at the time of installation.





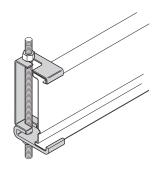


Refer to Section CF Cable Fixing

Catalog No.	Cable Size		
	in.	mm	
9SS4-4050	0.50 - 0.75	(13 - 19)	
9SS4-4075	0.75 - 1.00	(19 - 25)	
9SS4-4100	1.00 - 1.25	(25 - 32)	
9SS4-4125	1.25 - 1.50	(32 - 38)	
9SS4-4150	1.50 - 1.75	(38 - 45)	
9SS4-4175	1.75 - 2.00	(45 - 51)	
9SS4-4200	2.00 - 2.25	(51 - 57)	
9SS4-4225	2.25 - 2.50	(57 - 64)	
9SS4-4250	2.50 - 2.75	(64 - 70)	
9SS4-4275	2.75 - 3.00	(70 - 76)	
9SS4-4300	3.00 - 3.25	(76 - 82)	
9SS4-4325	3.25 - 3.50	(82 - 89)	
9SS4-4350	3.50 - 3.75	(89 - 95)	
9SS4-4375	3.75 - 4.00	(95 - 100)	
<b>9</b> 9\$\$4-4400	4.00 - 4.25	(100 - 106)	
9SS4-4425	4.25 - 4.50	(106 - 113)	
<b>9</b> 9\$\$4-4450	4.50 - 4.75	(113 - 121)	
<b>9</b> SS4-4475	4.75 - 5.00	(121 - 125)	

#### **Hanger Rod Clamp**

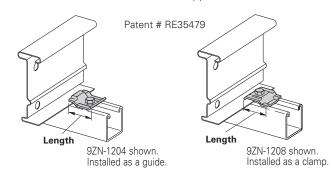
- For 1/2" ATR.
- Furnished in pairs.
- Order ATR and hex nuts separately.
- Two-piece "J"-hanger design.
- 1500 lbs./pair capacity safety factor 3.
- (\*) Insert **ZN** or **G**



Catalog No.	Height
	in. mm
9(*)-5324	4 (101)
9(*)-5325	5 (127)
9(*)-5326	6 (152)
9(*)-5327	7 (178)

## Cable Tray Clamp/Guide

- Features a no-twist design.
- Has four times the strength of the traditional design.
- Each side is labeled to ensure proper installation.
- Furnished in pairs, with or without hardware.
- Not recommended for vertical support.



When installing this device as an expansion guide on the outside flange of Steel Side Rail, use the Catalog No. B202 Square Washer in order to properly elevate the guide.

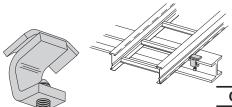
Note: For heavy duty or vertical applications see 9(\*)-1241 or 9(\*)-1242 page HAT-20

Catalog No.				
Without Hardware	With Hardware	Overall Length in. (mm)	Hardware Size in.	Finish
9ZN-1204	<ul><li>9ZN-1204NB</li></ul>	1 <sup>1</sup> / <sub>2</sub> (38)	1/4"	G90
<ul><li>9ZN-1208</li></ul>	<ul><li>9ZN-1208NB</li></ul>	2 <sup>1</sup> /4 (57)	3/8"	G90
<ul><li>9A-1205</li></ul>		21/4 (57)	1/2"	Alum.
9G-1205		2 <sup>1</sup> /4 (57)	1/2"	HDGAF
<b>9</b> SS6-1205		21/4 (57)	1/2"	316SS
9ZN-1205		2 <sup>1</sup> /4 (57)	1/2"	G90

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 Black = Normal lead-time items
 Red = Normally long lead-time items

## **Cable Tray Clamp**

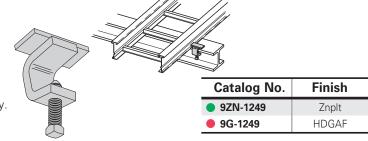
- Hold-down clamps for single or double cable tray runs.
- No drilling of support I-beam or channel is required.
- Sold in pieces two clamps are required per tray.
- Maximum beam flange thickness 11/8" (28.58 mm).



Catalog No.	Finish
<ul><li>9ZN-1249HD</li></ul>	Znplt
9G-1249HD	HDGAF

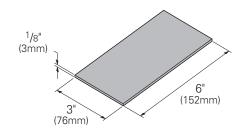
## **Cable Tray Guide**

- Expansion guide for single or double cable tray runs.
- Guide allows for longitudinal movement of the cable tray.
- No field drilling of support I-beam or channel is required.
- Guides are required on both sides of cable tray to prevent lateral movement - can be placed on either the inside or outside flange of cable tray.
- Guides are sold in pieces two guides are required per tray.
- Maximum flange thickness 11/8" (28.58 mm).



## **Nylon Pad**

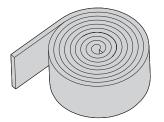
- Use for friction reduction.
- Hardness: Shore D80.
- · Low friction coefficient.
- UV resistant.
- Excellent weatherability.
- UL 94HB.



Catalog No. 99-PE36

#### Neoprene Roll

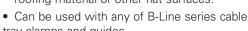
- Use for material isolation.
- <sup>1</sup>/8" x 2" x 25' roll.
- Hardness: Shore A60.
- · Good weatherability.



Catalog No. 99-NP300

### **DURA-BLOK™ Rooftop Support Bases with B22 Channel**

- Designed as a superior rooftop support for cable tray,
- UV resistant and approved for most roofing material or other flat surfaces.





Catalog No.	Height x Width x Length				
	in.	(mm)			
• DB10-28	5 <sup>5</sup> /8 x 6 x 28.0	(143 x 152 x 711)			
<ul><li>DB10-36</li></ul>	5 <sup>5</sup> /8 x 6 x 36.0	(143 x 152 x 914)			
• DB10-42	5 <sup>5</sup> /8 x 6 x 42.0	(143 x 152 x 1067)			
<ul><li>DB10-50</li></ul>	5 <sup>5</sup> /8 x 6 x 50.0	(143 x 152 x 1270)			
● DB10-60	5 <sup>5</sup> /8 x 6 x 60.0	(143 x 152 x 1524)			

LEEDS credit available, base made from 100% recycled material.

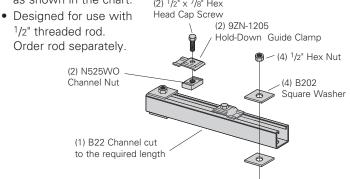
General Note: Consult roofing manufacturer or engineer for roof load capacity. The weakest point may be the insulation board beneath the rubber membrane.

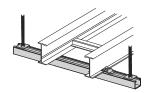
Green = Fastest shipped items

Black = Normal lead-time itemsRed = Normally long lead-time items

#### **Trapeze Support Kit**

- Eaton's B-Line series trapeze kits provide the components required for a single trapeze support in one package. These kits are available in pre-galvanized steel with zinc-plated hardware, hot dip galvanized steel with 316 stainless steel hardware, or DURA GREEN™ painted steel with zinc-plated hardware.
- The SH channel provides the convenience of pre-punched slots, which eliminate the need for field drilling.
- The illustrated hardware is sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.
   (2) 1/2" x 7/8" Hex



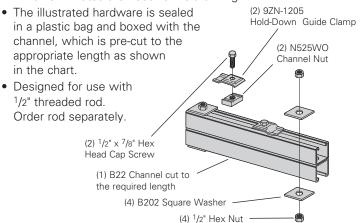


Catalog No.		ray idth mm		annel ength		form ad kN
9(*)-5506-22SH(†)	6	(152)	16	(406)	1350	(6.00)
9(*)-5509-22SH(†)	9	(229)	18	(457)	1250	(5.56)
• 9(*)-5512-22SH(†)	12	(305)	22	(559)	1125	(5.00)
<ul><li>9(*)-5518-22SH(†)</li></ul>	18	(457)	28	(711)	865	(3.85)
9(*)-5524-22SH(†)	24	(610)	34	(864)	700	(3.11)
<ul><li>9(*)-5530-22SH(†)</li></ul>	30	(762)	40	(1016)	590	(2.62)
9(*)-5536-22SH(†)	36	(914)	46	(1168)	510	(2.27)
• 9(*)-5542-22SH(†)	42	(1067)	52	(1321)	450	(2.00)

- (\*) Insert P G or GRN
- (†) Insert <sup>3</sup>/8 for <sup>3</sup>/8" threaded rod hardware. Safety factor of 3.0 on all loads.

#### **Heavy Duty Trapeze Support Kit**

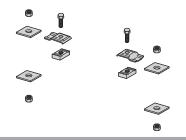
- Eaton's B-Line series trapeze kits provide the components required for a single trapeze support in one package. These kits are available in pre-galvanized steel with zinc-plated hardware, hot dip galvanized steel with 316 stainless steel hardware, or DURA GREEN™ painted steel with zinc-plated hardware.
- The SH channel provides the convenience of pre-punched slots, which eliminates the need for field drilling.



Catalog No.		ray idth mm		annel ength mm		form ad kN
9(*)-5506-22SHA	6	(152)	16	(406)	1350	(6.00)
9(*)-5509-22SHA	9	(229)	18	(457)	1350	(6.00)
• 9(*)-5512-22SHA	12	(305)	22	(559)	1350	(6.00)
• 9(*)-5518-22SHA	18	(457)	28	(711)	1350	(6.00)
• 9(*)-5524-22SHA	24	(610)	34	(864)	1350	(6.00)
• 9(*)-5530-22SHA	30	(762)	40	(1016)	1350	(6.00)
• 9(*)-5536-22SHA	36	(914)	46	(1168)	1350	(6.00)
• 9(*)-5542-22SHA	42	(1067)	52	(1321)	1350	(6.00)

• (\*) Insert **P G** or **GRN** Safety factor of 3.0 on all loads.

## **Trapeze Hardware Kit**

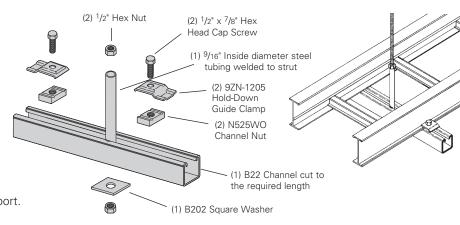


Catalog No.	• 9ZN-5500- <sup>1</sup> / <sub>2</sub>	● 9G-5500- <sup>1</sup> / <sub>2</sub>
In plastic bag	1 pr. 9ZN-1205 2 HHC Screw <sup>1</sup> / <sub>2</sub> x <sup>7</sup> / <sub>8</sub> ZN 2 N525 WO ZN 4 B202 ZN <sup>1</sup> / <sub>2</sub> " sq washer 4 HN <sup>1</sup> / <sub>2</sub> ZN	1 pr. 9G-1205 2 HHC Screw <sup>1</sup> / <sub>2</sub> x <sup>7</sup> / <sub>8</sub> SS6 2 N525 WO SS6 4 B202 HDG <sup>1</sup> / <sub>2</sub> " sq washer 4 HN <sup>1</sup> / <sub>2</sub> " SS6

• Green = Fastest shipped items • Black = Normal lead-time items • Red = Normally long lead-time items

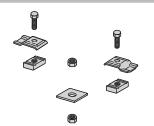
## **Center Hung Tray Support**

- Center Hung Cable Tray Support allows cable to be laid-in from both sides.
- Eliminates costly cable pulling and field cutting of cable tray supports. Labor costs are dramatically reduced.
- Required hardware and threaded rod material for trapeze assemblies are reduced by up to 50%.
- Designed for use with 1/2" threaded rod. (Order rod separately)
- Use with all aluminum and steel cable trays through 24" width.
- Load capacity is 700 lbs. (311kN) per support. Safety factor of 3.0. Eccentric loading is not to exceed a 60% vs. 40% load differential.
- The maximum recommended unsupported span length is 144"/12 ft. (3.66 m).
- · Hardware shown is furnished.
- Finish available: Zinc Plated



Catalog No.		Tray Width		
	in.	(mm)	in.	(mm)
9ZN-5212	6", 9", 12"	(152, 228, 305)	18"	(457)
<ul><li>9ZN-5224</li></ul>	18", 24"	(457, 609)	30"	(762)

## **Center Hung Support Hardware Kit**



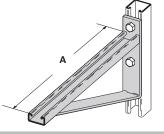
Catalog No.	<ul><li>9ZN-5200</li></ul>
In plastic bag	1 pr. 9ZN-1205 2 HHC Screw <sup>1</sup> / <sub>2</sub> x <sup>7</sup> / <sub>8</sub> ZN 2 N525 WO ZN 1 B202 ZN <sup>1</sup> / <sub>2</sub> " sq washer 4 HN <sup>1</sup> / <sub>2</sub> ZN

## **Bracket**

• (\*) Insert available finish:

ZN GRN or HDG

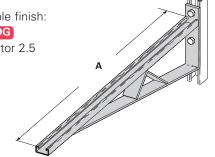
• Safety Load Factor 2.5



Catalog No.	Uniform Load	Tray Width	'A'
	lbs kN	in. mm	in. mm
B494-12	1580 (7.02)	6 & 9 (152 & 229)	12 (305)
B494-18	1000 (4.45)	12 (305)	18 (457)
B494-24	996 (4.43)	18 (457)	24 (610)

#### **Bracket**





Catalog No.	Uniform Load	Tray Width	'A'
	lbs kN	in. mm	in. mm
B494-30	924 (4.11)	24 (610)	30 (762)
B494-36	864 (3.84)	30 (762)	36 (914)
B494-42	580 (2.58)	36 (914)	42 (1067)
B494-48	500 (2.22)	42 (1067)	48 (1219)

#### **Cantilever Bracket**

• (\*) Insert available finish: ZN GRN or HDG

Safety Load Factor 2.5



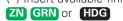
Catalog No.	Uniform Load		Tra	y Width	'A'		
	lbs	kN	in.	mm	in.	mm	
B409-12	960	(4.27)	6 & 9	(152 & 229)	12	(305)	
B409-18	640	(2.84)	12	(305)	18	(457)	
B409-24	480	(2.13)	18	(457)	24	(610)	

Green = Fastest shipped items

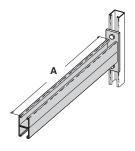
Black = Normal lead-time items
Red = Normally long lead-time items

## **Cantilever Bracket**

• (\*) Insert available finish:





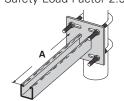


Catalog No.	Uniform Load		Tra	y Width	'A'	
	lbs	kN	in.	mm	in.	mm
B297-12	1660	(7.38)	6 & 9	(152 & 229)	12	(305)
B297-18	1100	(4.89)	12	(305)	18	(457)
B297-24	835	(3.71)	18	(457)	24	(610)
B297-30	665	(2.93)	24	(610)	30	(762)
B297-36	550	(2.44)	30	(762)	36	(914)
B297-42	465	(2.06)	36	(914)	42	(1067)

#### **Underfloor Support** (U-Bolts not included)

• Finishes available: ZN

• Safety Load Factor 2.5

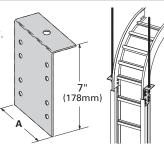


U-Bolt Size	Fits Pipe O.D.
B501- <sup>3</sup> /4	.841 - 1.050
B501-1	1.051 - 1.315
B501-1 <sup>1</sup> / <sub>4</sub>	1.316 - 1.660
B501-1 <sup>1</sup> /2	1.661 - 1.900
B501-2	1.901 - 2.375
B501-2 <sup>1</sup> / <sub>2</sub>	2.376 - 2.875

Catalog No.	Uniform Load		Tray	'A'		
	lbs	(kN)	in.	(mm)	in.	(mm)
B409UF-12	800	(3.56)	6 & 9	(152 & 229)	12	(305)
B409UF-21	450	(2.00)	12 & 18	(305 & 457)	21	(533)

## **Vertical Hanger Splice Plates**

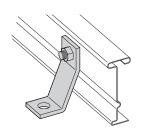
- Design load is 1500 lbs (6.67kN) per pair.
- Safety Factor of 2.5
- Furnished in pairs.
- Hole size: 9/16" (14mm) for 1/2" threaded rod.
- (\*) Insert **ZN** or **G**



Catalog No.	Outside	'A'		
	Cable Tray Ht.	in.	(mm)	
● 9(*)-8224	4"	3.84	(97.54)	
● 9(*)-8225	5"	4.73	(120.14)	
● 9(*)-8226	6"	5.84	(148.34)	
● 9(*)-8227	7"	6.84	(173.74)	

## **Heavy Duty Hold Down Bracket**

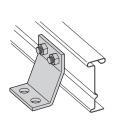
- Design load is 2000 lbs (8.89kN) per pair.
- Two bolt design.
- Sold in pairs.
- 3/8" cable tray attachment hardware provided.
- 1/2" support attachment hardware **not** provided.
- (\*) Insert ZN or G
- Recommended for support of vertical trays.

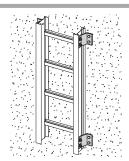


Catalog No.	
9(*)-1241	

### **Heavy Duty Hold Down Bracket**

- Design load is 4000 lbs (17.79kN) per pair.
- Four bolt design.
- · Sold in pairs.
- 3/8" cable tray attachment hardware provided
- 1/2" support attachment hardware **not** provided.
- (\*) Insert ZN or G
- Recommended for support of vertical trays.

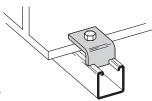




Catalog No. 9(\*)-1242

#### **Beam Clamp**

- Finishes available: ZN GRN HDG or SS4
- · Sold in pieces.
- Design load is 1200 lbs (5.34kN) per pair.
- Safety Load Factor 5.0.
- Order HHCS and Channel Nuts separately.

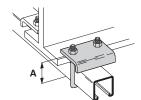


Catalog No. **B355** 

Green = Fastest shipped items
 Black = Normal lead-time items
 Red = Normally long lead-time items

#### **Beam Clamp**

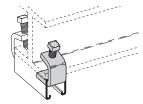
- Finishes available: ZN or HDG
- · Sold in pieces.
- \*Design load when used in pairs. Safety Load Factor 5.0



Catalog No.	Design Load lbs (kN)	'A' in. (mm)		
B441-22	1200 (5.34)	3 <sup>3</sup> /8 (86)		
B441-22A	1200 (5.34)	5 (127)		

### **Beam Clamp**

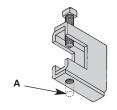
- Finishes available: ZN GRN or HDG
- · Sold in pieces.
- \*Design load when used in pairs. Safety Load Factor 5.0

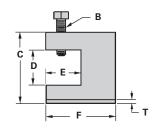


Catalog No.	B212- <sup>1</sup> /4	B212- <sup>3</sup> /8			
Design Load *	600 lbs. (2.67kN)	1000 lbs. (4.45 kN)			
Max. Flange Thick	<sup>3</sup> /4" (19 mm)	1 <sup>1</sup> /8" (28.6 mm)			
Mat'l. Thickness	<sup>1</sup> /4" (6.3 mm)	<sup>3</sup> /8" (9.5 mm)			

### B305 Thru B308 & B321 Series Beam Clamps

- Finishes available: ZN or HDG
- · Setscrew included.
- Safety Load Factor 5.0

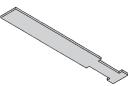




Catalog	Rod	В		)	[	D		E		F	٦	Γ	Desig	1 Load
No.	Size A		in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	lbs	(kN)
B305	<sup>3</sup> /8"-16	<sup>3</sup> /8"-16	2 <sup>5</sup> /16	(58.7)	7/8	(22.2)	1 <sup>1</sup> /8	(28.6)	21/2	(63.5)	11 Ga	. (3.0)	600	(2.67)
B306	<sup>3</sup> /8"-16	<sup>1</sup> /2"-13	2 <sup>7</sup> /16	(61.9)	7/8	(22.2)	1 <sup>1</sup> /8	(28.6)	2 <sup>1</sup> /2	(63.5)	7 Ga.	(4.5)	1100	(4.90)
B307	1/2"-13	<sup>1</sup> /2"-13	2 <sup>7</sup> /16	(61.9)	7/8	(22.2)	1 <sup>1</sup> /8	(28.6)	21/2	(63.5)	7 Ga.	(4.5)	1100	(4.90)
B308	<sup>1</sup> /2"-13	<sup>1</sup> /2"-13	2 <sup>9</sup> /16	(65.1)	7/8	(22.2)	1 <sup>1</sup> /8	(28.6)	21/2	(63.5)	1/4	(6.3)	1500	(6.68)
B321-1	<sup>3</sup> /8"-16	<sup>1</sup> /2"-13	3 <sup>9</sup> /16	(90.5)	1 <sup>11</sup> /16	(42.9)	1 <sup>5</sup> /8	(41.3)	3 <sup>1</sup> / <sub>4</sub>	(82.5)	1/4	(6.3)	1300	(5.79)
B321-2	<sup>1</sup> /2"-13	<sup>1</sup> /2"-13	3 <sup>9</sup> /16	(90.5)	1 <sup>11</sup> /16	(42.9)	1 <sup>5</sup> /8	(41.3)	3 <sup>1</sup> / <sub>4</sub>	(82.5)	1/4	(6.3)	1400	(6.23)

## Anchor Strap - for B305 thru B308 & B321 Series

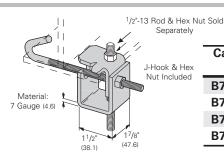
- Finish available: ZN
- For a maximum beam thickness of <sup>3</sup>/<sub>4</sub>" (19mm).
- For thicker beams, step up one flange width size.



Catalog No.	Flange Width in. (mm)				
B312-6	Up to 6	(Up to 152)			
B312-9	6 - 9	(152 to 228)			
B312-12	9 - 12	(228 to 305)			

### **Beam Clamp**

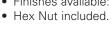
- Finish available: ZN
- Design Load 500 lbs. (2.22 kN)
- Safety Load Factor 5.0
- Recommended torque: 'J'-Hook Nut 125 In.-Lbs. (14.1 kN/m)
- Maximum flange thickness of 3/4" (19mm).

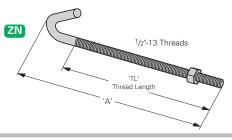


Catalog	For Fla	ange Width	Wt./C		
No.	No. in. (mm)				
B750-J4	3 - 6	(76.2 - 152.4)	109	(49.4)	
B750-J6	5 - 9	(127.0 - 288.6)	124	(56.2)	
B750-J9	8 - 12	(203.2 - 304.8)	135	(61.,2)	
B750-J12	11 - 15	(279.4 - 381.0)	147	(66.7)	

#### 'J'-Hook

Finishes available: ZN

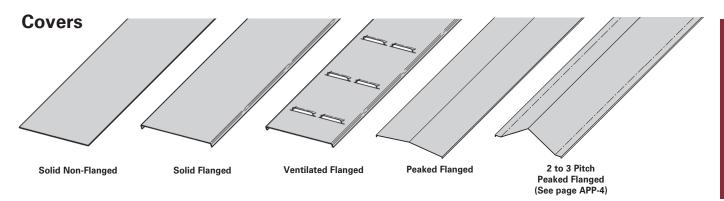




Catalog	'A'			'TL'	Wt./C		
No.	in.	(mm )	in.	(mm)	lbs	(kg)	
B700-J4	8 <sup>1</sup> / <sub>2</sub>	(215.9)	5	(127.0)	44	(19.9)	
B700-J6	11 <sup>1</sup> /2	(292.1)	6	(152.4)	53	(24.0)	
B700-J9	12 <sup>1</sup> /4	(368.3)	6	(152.4)	63	(28.6)	
B700-J12	17 <sup>1</sup> /2	(444.5)	6	(152.4)	78	(35.4)	

Green = Fastest shipped items

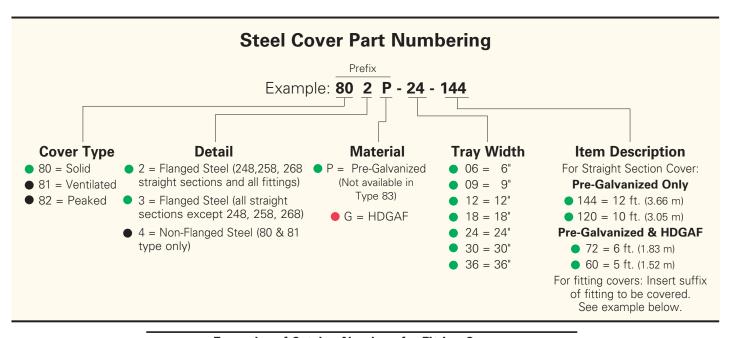
Black = Normal lead-time itemsRed = Normally long lead-time items

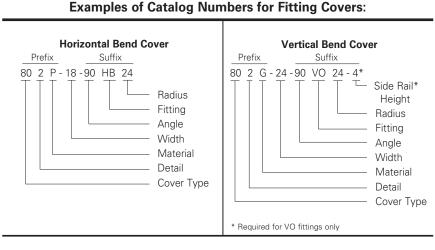


#### A full range of covers is available for straight sections and fittings.

**Solid covers** should be used when maximum enclosure of the cable is desired and no accumulation of heat is expected. **Ventilated covers** provide an overhead cable shield, yet allow heat to escape.

We recommend that covers be placed on vertical cable tray runs to a height of 6 ft. (1.83 m) to 8 ft. (2.44 m) above the floor to isolate both cables and personnel. **Flanged covers** have a <sup>1</sup>/<sub>2</sub> in. (13 mm) flange. Cover clamps are not included with the cover and must be ordered separately. All **peaked covers** are flanged. Standard peaked covers have <sup>1</sup>/<sub>2</sub>" peak. Special purpose peaked covers, having a 2 to 3 pitch, provide additional slope and material thickness. The 2 to 3 pitch fitting covers are of multiple piece, welded construction.





All dimensions in parentheses are millimeters unless otherwise specified.

Green = Fastest shipped items

Black = Normal lead-time itemsRed = Normally long lead-time items

### **Standard Cover Clamp**

- For indoor service only.
- Screw included.
- Sold per piece.
- (\*) Insert **ZN** or **G**





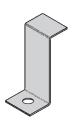
Tray Type	Catalog No.	Side Rail Height	
		in. (mm)	
Steel	9(*)-9014	4 (101)	
	9(*)-9015	5 (127)	
	9(*)-9016	6 (152)	
	9(*)-9017	7 (78)	

#### **Combination Cover and Hold Down Clamp**

- Sold per piece.
- For indoor service only.
- (\*) Insert (P) or (G)







Tray Type	Catalog No.	Side Rail Height	
		in.	(mm)
Steel	9(*)-9043	4	(101)
	9(*)-9053	5	(127)
	9(*)-9063	6	(152)
	9(*)-9073	7	(78)

#### **Raised Cover Clamp**

- For indoor service only.
- · For use with flanged covers only. † Specify gap of 1", 2", 3" or 4".



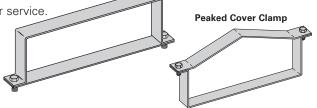


Tray Type	Catalog No.	Tray Type
• 9ZN-9114-†	Series 2 Steel Straight Section	
<ul><li>9ZN-9115-†</li></ul>	Series 3 & 4 Steel Straight Section	
● 9ZN-910†	All Steel Fittings (Also Series 1 Steel Straight Sections)	

## **Heavy Duty Cover Clamp**

- · Recommended for outdoor service.
- (‡) Insert tray width † Add P to Catalog No. for peaked cover clamp.
- (\*) Insert (P) or (G)





Catalog No.	Side Rail Height	
	in.	mm
9(*)-(‡)-9044†	4	(101)
9(*)-(‡)-9054†	5	(127)
9(*)-(‡)-9064†	6	(152)
9(*)-(‡)-9074†	7	(178)

### **Quantity of Standard Cover Clamps Required**

Notes:

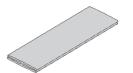
When using the Heavy Duty Cover Clamp, only on-half the number of clamps stated above is required.

Additional clamps may be necessary in extreme wind applications.

Straight Section 60" or 72" 4 pcs.
Straight Section 120" or 144" 6 pcs.
Horizontal/Vertical Bends 4 pcs.
Tees 6 pcs.
Crosses 8 pcs.

### **Conduit to Cable Tray Adaptor**

- Used to join covers
- Plastic
- (‡) Insert tray width



Catalog No. 99-9980-(‡)

#### **Cable Cleats**

(see pages O-1 thru O-5) Standard







Single Cable Cleats



• Green = Fastest shipped items

Black = Normal lead-time itemsRed = Normally long lead-time items

# Series 2, 3, 4, & 5 Steel - Specifications

#### **Section 1- Acceptable Manufacturers**

1.01 Manufacturer: Subject to compliance with these specifications, Eaton's B-Line series cable tray systems shall be as manufactured by Eaton.

#### **Section 2- Cable Tray Sections and Components**

- 2.01 General: Except as otherwise indicated, provide metal cable trays, of types, classes and sizes indicated; with splice plates, bolts, nuts and washers for connecting units. Construct units with rounded edges and smooth surfaces; in compliance with applicable standards; and with the following additional construction features. Cable tray shall be installed according to the latest revision of NEMA VE 2.
- 2.02 Pre-Galvanized Steel: Straight sections, fitting side rails, rungs, and covers shall be made from structural quality steel meeting the minimum mechanical properties and mill galvanized in accordance with ASTM A653 SS, Grade 33, coating designation G90. Hardware finish shall be electrogalvanized zinc per ASTM B633.
- 2.03 Hot Dip Galvanized Steel: All side rails, covers, splice plates, and rungs shall be made from structural quality steel meeting the minimum mechanical properties of ASTM A1011 SS, Grade 33 for 14 gauge and heavier, ASTM A1008, Grade 33 Type 2 for 16 gauge and lighter, and shall be hot dip galvanized after fabrication in accordance with ASTM A123. Mill galvanized covers are not acceptable for hot dip galvanized cable tray. Hardware finish shall be chromium zinc per ASTM F-1136-88.
- 2.04 Ladder Cable Trays shall consist of two longitudinal members (side rails) with transverse members (rungs) welded to the side rails. Rungs shall be spaced [6] [9] [12] inches on center. Rung spacing in radiused fittings shall be industry standard 9" and measured at the center of the tray's width. No portion of the rungs shall protrude below the bottom plane of the side rails. Each rung must be capable of supporting a 200 lb. concentrated load at the center of the cable tray over and above the cable load with a safety factor of 1.5.
- 2.05 Ventilated Trough Cable Trays shall consist of two longitudinal members (side rails) with a corrugated bottom welded to the side rails or rungs spaced 4" on center. The peaks of the corrugated bottom shall have a minimum flat cable bearing surface of 23/4" and shall be spaced on 6" centers. To provide ventilation in the tray, the valleys of the corrugated bottom shall have 21/4" x 4" rectangular holes punched along the width of the bottom.
- 2.06 Non-Ventilated Bottom Trough Cable Trays shall consist of two longitudinal members (side rails) with a corrugated bottom welded to the side rails or a solid sheet over rungs. The peaks of the corrugated bottom shall have a minimum flat cable bearing surface of 2<sup>3</sup>/4" and shall be spaced on 6" centers.
- 2.07 Cable tray loading depth shall be [3] [4] [5] [6] inches per NEMA VE 1.
- 2.08 Straight sections shall have side rails fabricated as I-beams. Straight sections shall be supplied in standard [12 foot] [24 foot] [10 foot (3 m)] [20 foot (6 m)] lengths.
- 2.09 Cable tray widths shall be [6] [9] [12] [18] [24] [30] [36] inches or as shown on drawings.
- 2.10 Splice plates shall be manufactured of high strength steel, meeting the minimum mechanical properties of ASTM A1011 HSLAS, Grade 50, Class 1 and be secured with 8 nuts and bolts per plate. The resistance of fixed splice connections between an adjacent section of tray shall not exceed 0.00033 ohm.
- 2.11 All fittings must have a minimum radius of [12] [24] [36] [48] inches.

## **Section 3- Loading Capacities and Testing**

- 3.01 Cable tray shall be capable of carrying a uniformly distributed load of \_\_\_\_\_\_ lbs./ft. on a \_\_\_\_\_\_ ft. support span with a safety factor of 1.5 when supported as a simple span and tested per NEMA VE 1 5.2. In addition to the uniformly distributed load the cable tray shall support 200 lbs. concentrated load at mid-point of span. Load and safety factors specified are applicable to both the side rails and rung capacities. Cable tray shall be made to manufacturing tolerances as specified by NEMA.
- 3.02 Upon request, manufacturer shall provide test reports in accordance with the latest revision of NEMA VE 1 or CSA C22.2 No. 126.