

3" NEMA VE 1 Loading Depth  
Actual Loading Depth = 3.077"

Straight Section Part Numbering

Example: 

Prefix

148 P 09 - 24 - 144

Series

148

Material

P = Pre-Galvanized Steel

G = Hot Dip Galvanized After Fabrication Steel

Type

Ladder-

06 = 6" rung spacing

09 = 9" rung spacing

12 = 12" rung spacing

Trough-

6" thru 24" wide

04 = Vented Bottom

SB = Non-Ventilated Bottom

Width

06 = 6"

09 = 9"

12 = 12"

18 = 18"

24 = 24"

30 = 30"

36 = 36"

Length

144 = 12 ft.

120 = 10 ft.

Primary Length.

Secondary Length.

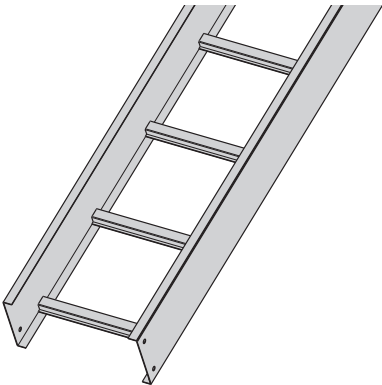
See page C-23 for explanation of lengths.

Rung Spacing

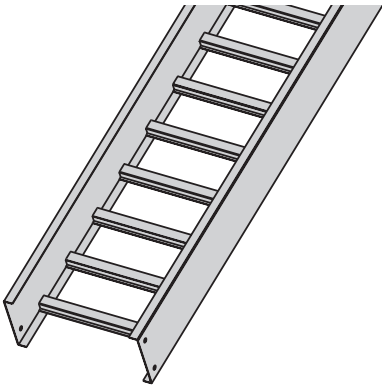
Overall Width (Width + 1/8")

For side rail & rung data, see chart on pages APP-6 & APP-7

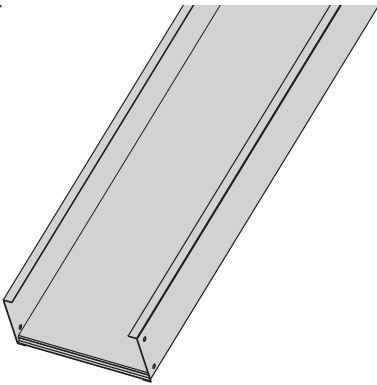
See page APP-1 for additional rung options. \*SB available for all widths.



Ladder Type  
(Specify Rung Spacing)



Ventilated Bottom



Non-Ventilated

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. The 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.

B-Line Series Slide 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
<div>148</div> <div><div><div>.875</div><div>3.625</div><div>3.077</div><div>18 gauge</div></div></div>	NEMA: 12A, 8C	6	204*	0.0011	Area = 0.510 in <sup>2</sup>	1.8	304*	0.019	Area = 3.290 cm <sup>2</sup>
	CSA: C1-3m	8	115	0.0036	Sx = 0.480 in <sup>3</sup>	2.4	171	0.061	Sx = 7.870 cm <sup>3</sup>
	UL Cross-Sectional	10	73	0.0087	Ix = 0.890 in <sup>4</sup>	3.0	109	0.149	Ix = 37.04 cm <sup>4</sup>
	Area: 0.40 in <sup>2</sup>	12	51	0.0181		3.7	76	0.309	

\*When using 12" rung spacing load capacity is limited to 195 lbs/ft (290.16 kg/m) for 36" 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: Ix = Moment of Inertia, Sx = Section Modulus.

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

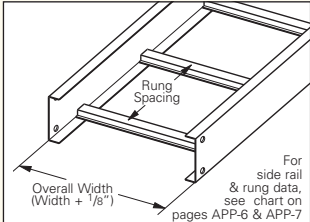
## 4" NEMA VE 1 Loading Depth Actual Loading Depth = 3.628"

### Straight Section Part Numbering

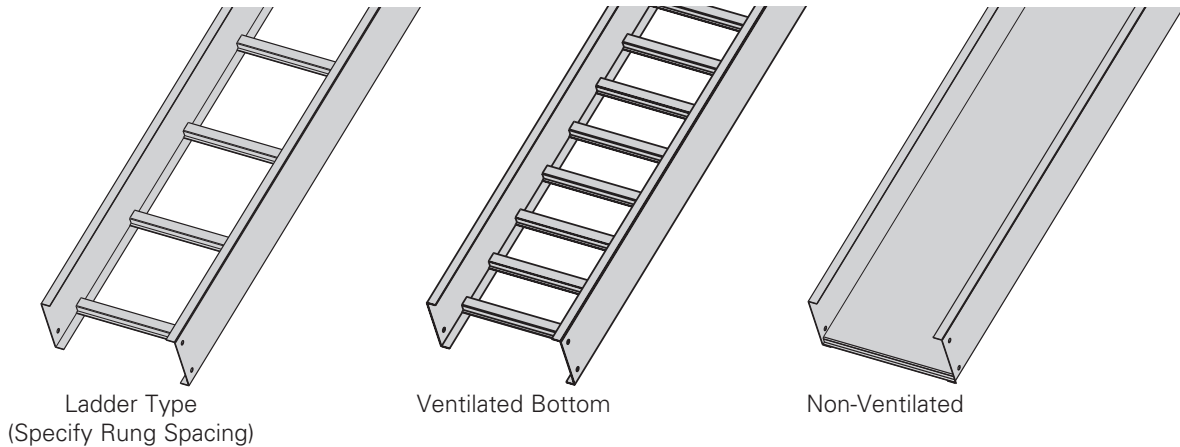
Example: **156 P 09 - 24 - 144**

**Prefix**

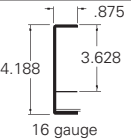
Series	Material	Type	Width	Length
<b>156</b>	<ul style="list-style-type: none"> <li>● <b>P</b> = Pre-Galvanized Steel</li> <li>● <b>G</b> = Hot Dip Galvanized After Fabrication Steel</li> </ul>	<b>Ladder-</b> <ul style="list-style-type: none"> <li>● <b>06</b> = 6" rung spacing</li> <li>● <b>09</b> = 9" rung spacing</li> <li>● <b>12</b> = 12" rung spacing</li> </ul> <b>Trough-</b> 6" thru 24" wide <ul style="list-style-type: none"> <li>● <b>04</b> = Vented Bottom</li> <li>● <b>SB</b> = Non-Ventilated Bottom</li> </ul>	<ul style="list-style-type: none"> <li>● <b>06</b> = 6"</li> <li>● <b>09</b> = 9"</li> <li>● <b>12</b> = 12"</li> <li>● <b>18</b> = 18"</li> <li>● <b>24</b> = 24"</li> <li>● <b>30</b> = 30"</li> <li>● <b>36</b> = 36"</li> </ul>	<ul style="list-style-type: none"> <li>● ① <b>144</b> = 12 ft.</li> <li>● ② <b>120</b> = 10 ft.</li> </ul> <p>①Primary Length. ②Secondary Length.</p> <p>See page C-23 for explanation of lengths.</p>



See page APP-1 for additional rung options. \*SB available for all widths.



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 the published loads. The 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.

B-Line Series Slide 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>156</b> 	NEMA: 12B, 8C CSA: C1-3m UL Cross-Sectional Area: 0.40 in <sup>2</sup>	6	304*	0.0007	Area = 0.690 in <sup>2</sup> Sx = 0.724 in <sup>3</sup> Ix = 1.517 in <sup>4</sup>	1.8	452*	0.011	Area = 4.390 cm <sup>2</sup> Sx = 11.860 cm <sup>3</sup> Ix = 63.140 cm <sup>4</sup>
		8	171	0.0021		2.4	254	0.036	
		10	109	0.0051		3.0	163	0.087	
		12	76	0.0111		3.7	113	0.181	

\*When using 12" rung spacing, load capacity is limited to 234 lbs/ft (348.192 kg/m) for 30" tray width and 195 lbs/ft (290.16 kg/m) for 36" tray width. 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.

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

All dimensions in parentheses are millimeters unless otherwise specified.

## 5" NEMA VE 1 Loading Depth Actual Loading Depth = 4.628"

### Straight Section Part Numbering

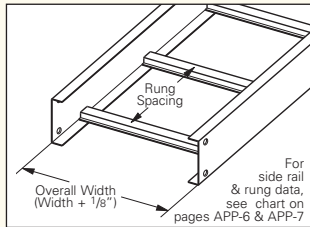
Example: **166 P 09 - 24 - 144**

#### Series

**166**

#### Material

- **P** = Pre-Galvanized Steel
- **G** = Hot Dip Galvanized After Fabrication Steel



#### Type

##### Ladder-

- **06** = 6" rung spacing
- **09** = 9" rung spacing
- **12** = 12" rung spacing

##### Trough-

6" thru 24" wide

- **04** = Vented Bottom
- **SB** = Non-Ventilated Bottom

#### Width

- **06** = 6"
- **09** = 9"
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

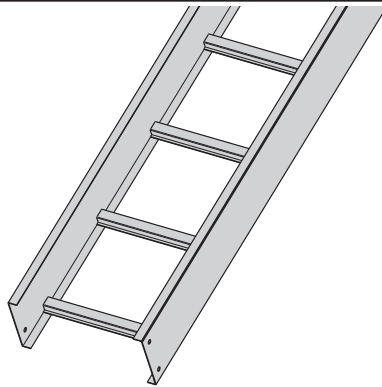
#### Length

- **① 144** = 12 ft.
- **② 120** = 10 ft.

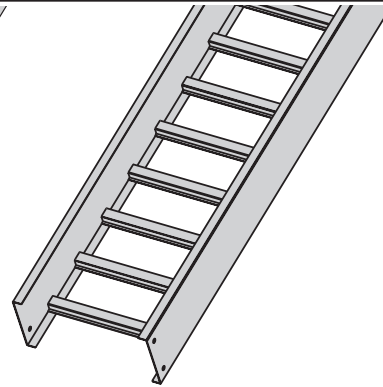
① Primary Length.  
② Secondary Length.

See page C-23 for explanation of lengths.

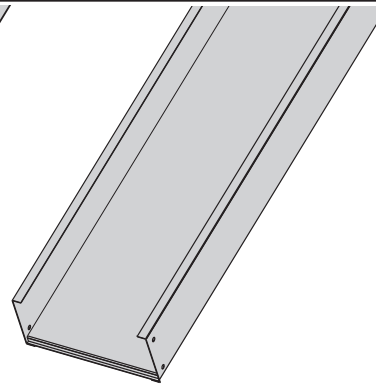
See page APP-1 for additional rung options. \*SB available for all widths.



Ladder Type  
(Specify Rung Spacing)



Ventilated Bottom



Non-Ventilated

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. The 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.

B-Line Series Slide 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>166</b> 	NEMA: 12B, 8C CSA: C1-3m UL Cross-Sectional Area: 0.70 in <sup>2</sup>	6	308*	0.0004	Area = 0.770 in <sup>2</sup> Sx = 0.930 in <sup>3</sup> Ix = 2.400 in <sup>4</sup>	1.8	458*	0.007	Area = 4.970 cm <sup>2</sup> Sx = 15.240 cm <sup>3</sup> Ix = 99.900 cm <sup>4</sup>
		8	173	0.0013		2.4	258	0.023	
		10	111	0.0032		3.0	165	0.055	
		12	77	0.0067		3.7	115	0.114	

\*When using 12" rung spacing, the load capacity is limited to 234 lbs/ft (348.192 kg/m) for 30" tray width and 195 lbs/ft (290.16 kg/m) for 36" tray width. 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.

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

All dimensions in parentheses are millimeters unless otherwise specified.

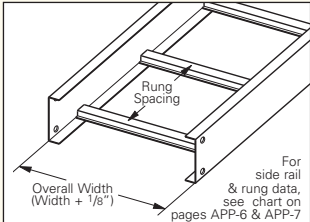
## 6" NEMA VE 1 Loading Depth Actual Loading Depth = 5.628"

### Straight Section Part Numbering

Example: **176 P 09 - 24 - 144**

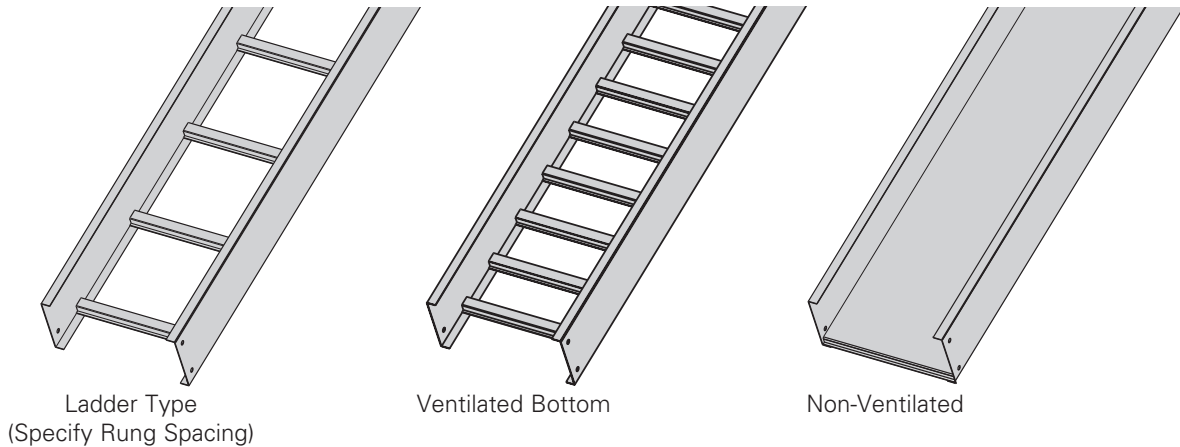
**Prefix**

Series	Material	Type	Width	Length
<b>176</b>	<ul style="list-style-type: none"> <li>● <b>P</b> = Pre-Galvanized Steel</li> <li>● <b>G</b> = Hot Dip Galvanized After Fabrication Steel</li> </ul>	<b>Ladder-</b> <ul style="list-style-type: none"> <li>● <b>06</b> = 6" rung spacing</li> <li>● <b>09</b> = 9" rung spacing</li> <li>● <b>12</b> = 12" rung spacing</li> </ul> <b>Trough-</b> 6" thru 24" wide <ul style="list-style-type: none"> <li>● <b>04</b> = Vented Bottom</li> <li>● <b>SB</b> = Non-Ventilated Bottom</li> </ul>	<ul style="list-style-type: none"> <li>● <b>06</b> = 6"</li> <li>● <b>09</b> = 9"</li> <li>● <b>12</b> = 12"</li> <li>● <b>18</b> = 18"</li> <li>● <b>24</b> = 24"</li> <li>● <b>30</b> = 30"</li> <li>● <b>36</b> = 36"</li> </ul>	<ul style="list-style-type: none"> <li>● ① <b>144</b> = 12 ft.</li> <li>● ② <b>120</b> = 10 ft.</li> </ul> <p>①Primary Length. ②Secondary Length.</p> <p>See page C-23 for explanation of lengths.</p>

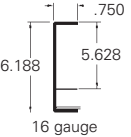


For side rail & rung data, see chart on pages APP-6 & APP-7

See page APP-1 for additional rung options. \*SB available for all widths.



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. The 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.

B-Line Series Slide 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>176</b> 	NEMA: <b>12B</b> , 8C CSA: 137 kg/m 3.7m UL Cross-Sectional Area: 0.70 in <sup>2</sup>	8	194	0.0008	Area = 0.890 in <sup>2</sup>	2.4	458*	0.014	Area = 5.740 cm <sup>2</sup>
		10	124	0.0020	Sx = 1.230 in <sup>3</sup>	3.0	258	0.035	Sx = 20.160 cm <sup>3</sup>
		12	86	0.0042	Ix = 3.800 in <sup>4</sup>	3.7	165	0.072	Ix = 158.200 cm <sup>4</sup>

When cable 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.

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

All dimensions in parentheses are millimeters unless otherwise specified.