
Nonmetallic - Cable tray

Straight lengths

Applications

Nonmetallic cable tray systems

Nonmetallic cable tray systems have been tested and proven in the harsh environment of the offshore oil and gas industry – subject to the corrosive conditions inherent in petroleum products, plus the daily punishment of exposure to wind, weather and saltwater.

Nonmetallic cable tray systems have stood up to these challenges.



Selection guide

1. Nonmetallic cable tray system.
2. Select the correct T&B® series cable tray using the load data for straight sections found on page 330-334.
3. Select the resin required. Refer to corrosion guide on page 321 of the technical information section for the effect of environmental conditions on the desired material. For the effective temperature range, see page 323 of the same section.
4. Select the rung spacing required to properly support cables in tray.
5. Select the desired width in inches.
6. Select the straight section length in inches.

Straight fittings number selection

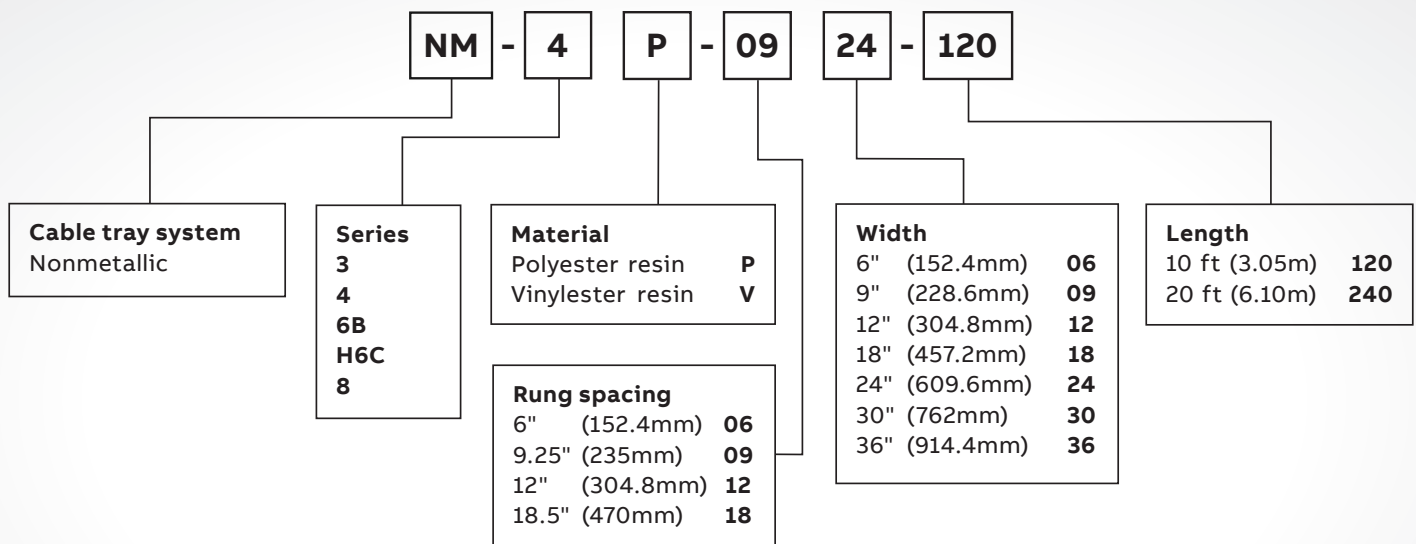
To order

To order a straight section of cable tray, select the appropriate size and material from the charts below and place those symbols in the sequence shown to form the complete catalog number.

Example:

- NM-4P0924-120 for
- 4" (101.6mm) side rail, polyester resin
- 9" (228.6mm) rung spacing
- 24" (609.6mm) wide, 120" (10 ft (36.58m)) length

NOTE: One pair of nonmetallic splice plates with SS6 hardware included with each length. For other types of splice plates, see pages 353-355.



Nonmetallic - Cable tray straight lengths

3" (76.2mm) Straight sections - Series 3



Splice plates

One pair of nonmetallic splice plates with SS6 (316 stainless steel) hardware included.

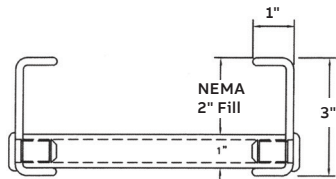
Deflection factor: To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

Loading

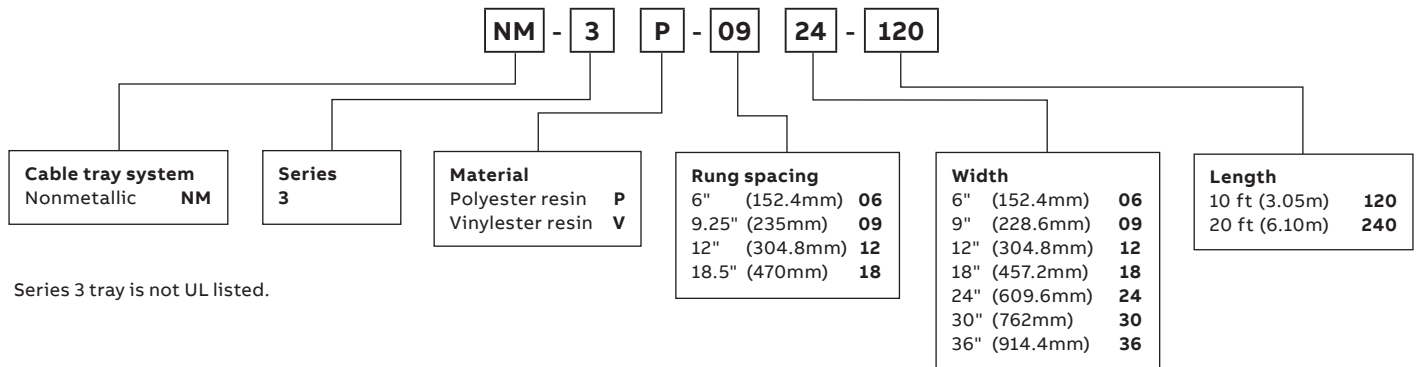
- CSA load class: E/6M
- NEMA 8C

3" (76.2mm) Straight sections – Series 3: Loading - NEMA 8C

Series	Safety Factor	Support span ft (m)					
		6' (1.83m)	8' (2.44m)	10' (3.05m)	12' (3.66m)	14' (4.27m)	
Side rail height: 3" (76.2mm) (2" (50.8mm) loading depth)	Load (lb)/ft	1.5	257	145	93	64	47
	Load (kg)/m		382.46	215.78	138.4	95.24	69.94
	Deflection (in)		1.5	2.7	4.2	6.1	8.2
	Deflection (mm)		38.1	68.58	106.68	154.94	208.28
	K factor		0.006	0.019	0.046	0.095	0.175



Straight section number selection



Nonmetallic - Cable tray straight lengths

4" (101.6mm) Straight sections - Series 4



Splice plates

One pair of nonmetallic splice plates with SS6 (316 stainless steel) hardware included.

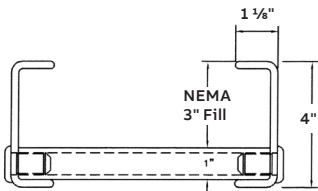
Deflection factor: To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

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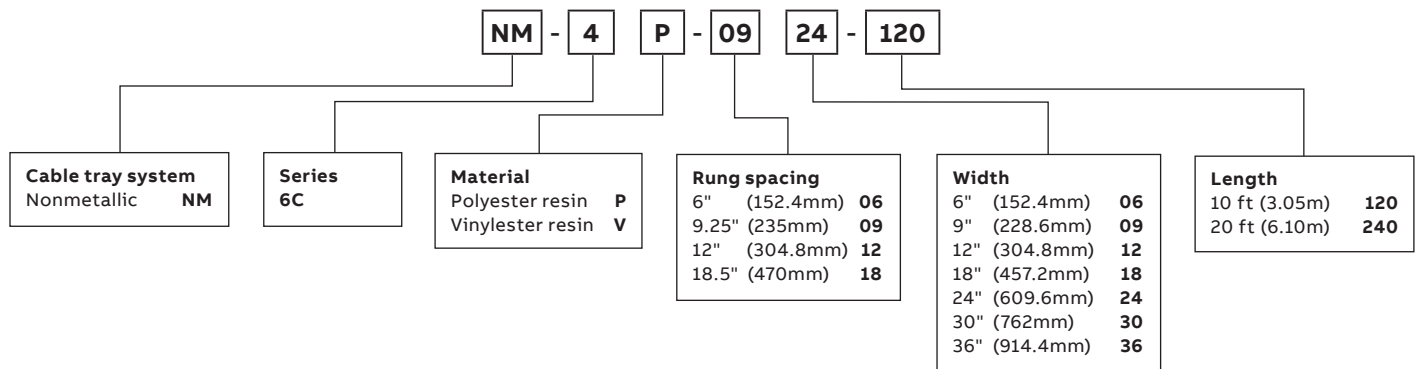
- CSA load class: E/6M
- NEMA 12C

4" (101.6mm) Straight sections - Series 4: Loading - NEMA 12C

Series	Safety Factor	Support span ft (m)					
		10' (3.05m)	12' (3.66m)	14' (4.27m)	16' (4.88m)	18' (5.49m)	
Side rail height: 4" (101.6mm) (3" (76.2mm) loading depth)	Load (lb)/ft	1.5	157	109	80	61	48
	Load (kg)/m		71.21	49.44	36.29	27.67	21.77
	Deflection (in)		2.6	3.7	5.0	6.5	8.2
	Deflection (mm)		66.04	93.98	127	165.1	208.28
	K factor		0.017	0.034	0.063	0.107	0.171



Straight section number selection



Nonmetallic - Cable tray straight lengths

6" (152.4mm) Straight sections - Series 6



Splice plates

One pair of nonmetallic splice plates with stainless hardware included.

Deflection factor: To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

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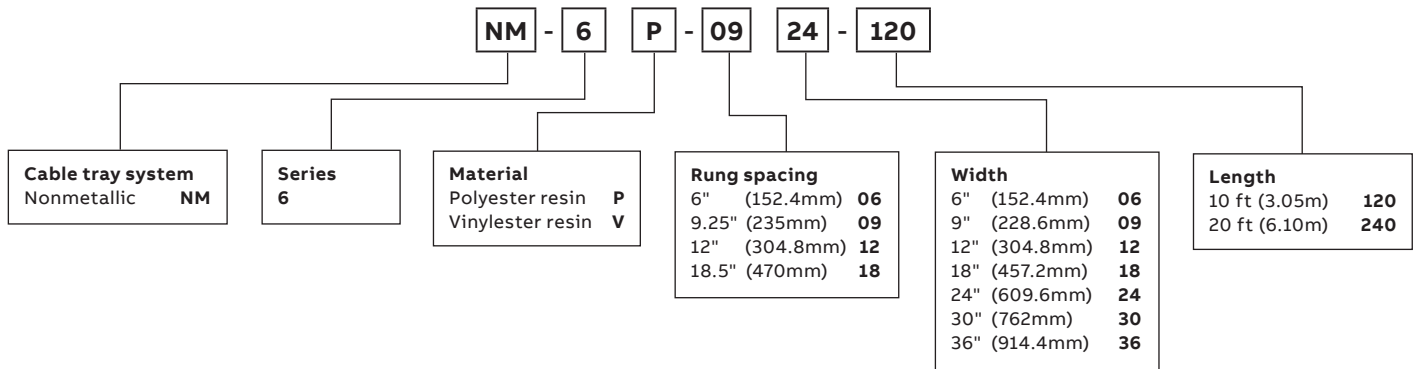
- CSA load class: E/6M
- NEMA 20B

6" (152.4mm) Straight sections - Series 6B: Loading - NEMA 20B

Series	Safety Factor	Support span ft (m)					
		12' (3.66m)	14' (4.27m)	16' (4.88m)	18' (5.49m)	20' (6.10m)	
6B	Load (lb)/ft	1.5	254	186	143	113	91
	Load (kg)/m		115.21	84.37	64.86	51.26	41.28
	Deflection (in)		2.2	3.0	3.9	5.0	6.1
	Deflection (mm)		55.88	76.2	99.06	127	154.94
	K factor		0.009	0.016	0.027	0.044	0.067

Side rail height: 6" (152.4mm)
5" (127mm) loading depth

Straight section number selection



Nonmetallic - Cable tray straight lengths

6" (152.4mm) Straight sections - Series H6C



Splice plates

One pair of nonmetallic splice plates with SS6 (316 stainless steel) hardware included.

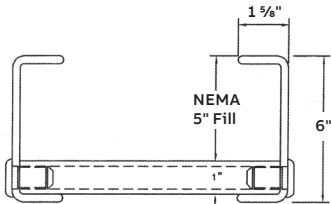
Deflection factor: To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

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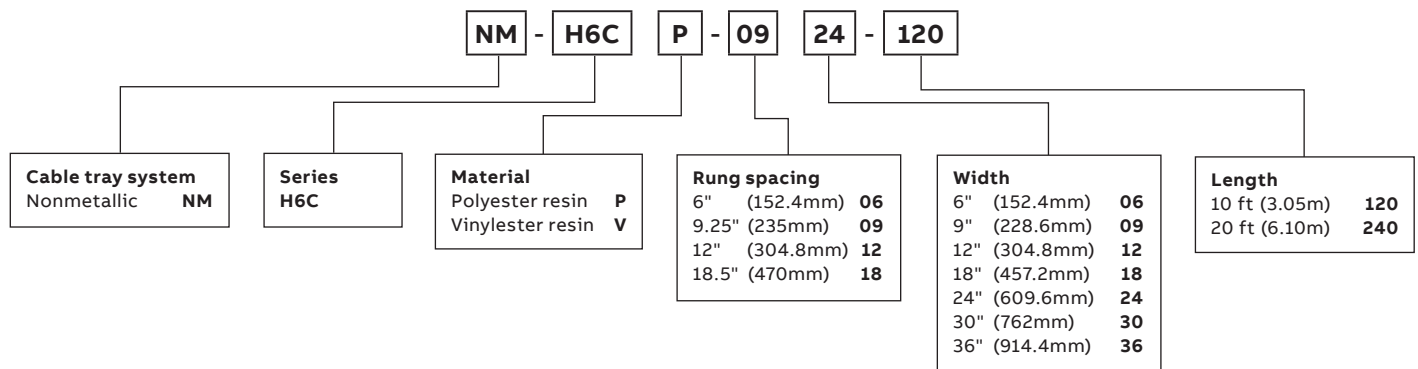
- CSA load class: E/6M
- NEMA 20C

6" (152.4mm) Straight sections - Series H6C: Loading - NEMA 20C-S.F.2.0

Series	Safety Factor	Support span ft (m)					
		12' (3.66m)	14' (4.27m)	16' (4.88m)	18' (5.49m)	20' (6.10m)	
Side rail height: 6" (152.4mm) (5" (127mm) loading depth)	1.5	Load (lb)/ft	386	283	217	171	139
		Load (kg)/m	175.09	128.37	98.43	77.56	63.05
		Deflection (in)	3.1	4.2	5.5	6.9	8.6
		Deflection (mm)	78.74	106.68	139.7	175.26	218.44
		K factor	0.008	0.015	0.025	0.040	0.062
	2.0	Load (lb)/ft	289	212	163	129	104
		Load (kg)/m	131.09	96.16	73.94	58.51	47.17
		Deflection (in)	2.3	3.1	4.1	5.2	6.4
		Deflection (mm)	58.42	78.74	101.6	132.08	162.56
		K factor	0.008	0.015	0.025	0.040	0.062



Straight section number selection



Nonmetallic - Cable tray straight lengths

8" (203.2mm) Straight sections - Series 8



Splice plates

One pair of nonmetallic splice plates with SS6 (316 stainless steel) hardware included.

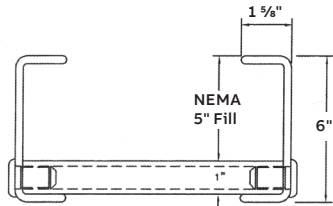
Deflection factor: To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

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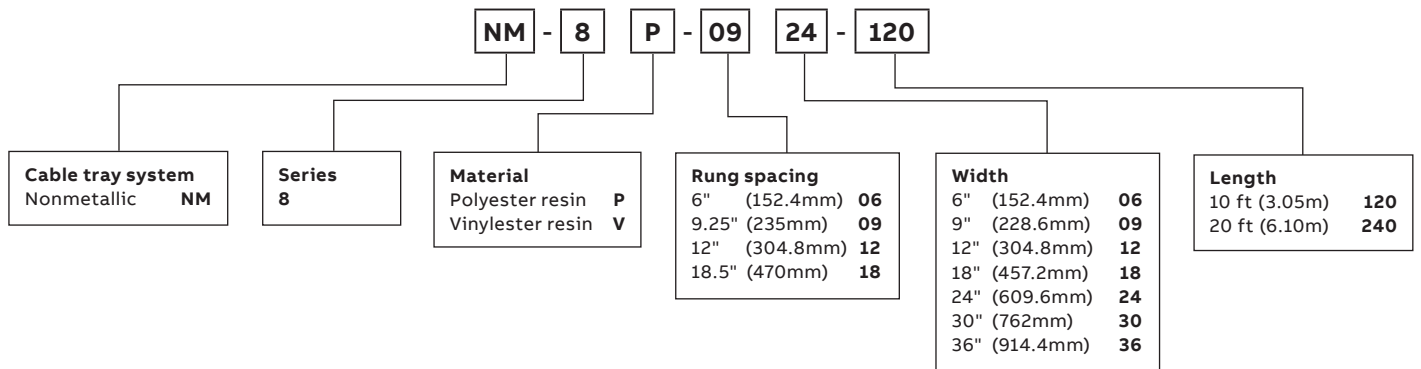
- CSA load class: E/6M
- NEMA 20C

8" (203.2mm) Straight sections – Series 8: Loading - NEMA 20C

Series	Safety Factor	Support span ft (m)					
		14' (4.27m)	16' (4.88m)	18' (5.49m)	20' (6.10m)	22' (6.10m)	
Side rail height: 6" (152.4mm) (5" (127mm) loading depth)	Load (lb)/ft	1.5	358	358	353	297	253
	Load (kg)/m		532.76	532.76	525.32	441.99	376.5
	Deflection (in)		2.3	4.0	6.3	8.1	10.1
	Deflection (mm)		58.42	101.6	160.02	205.74	256.54
	K factor		0.006	0.011	0.018	0.027	0.040

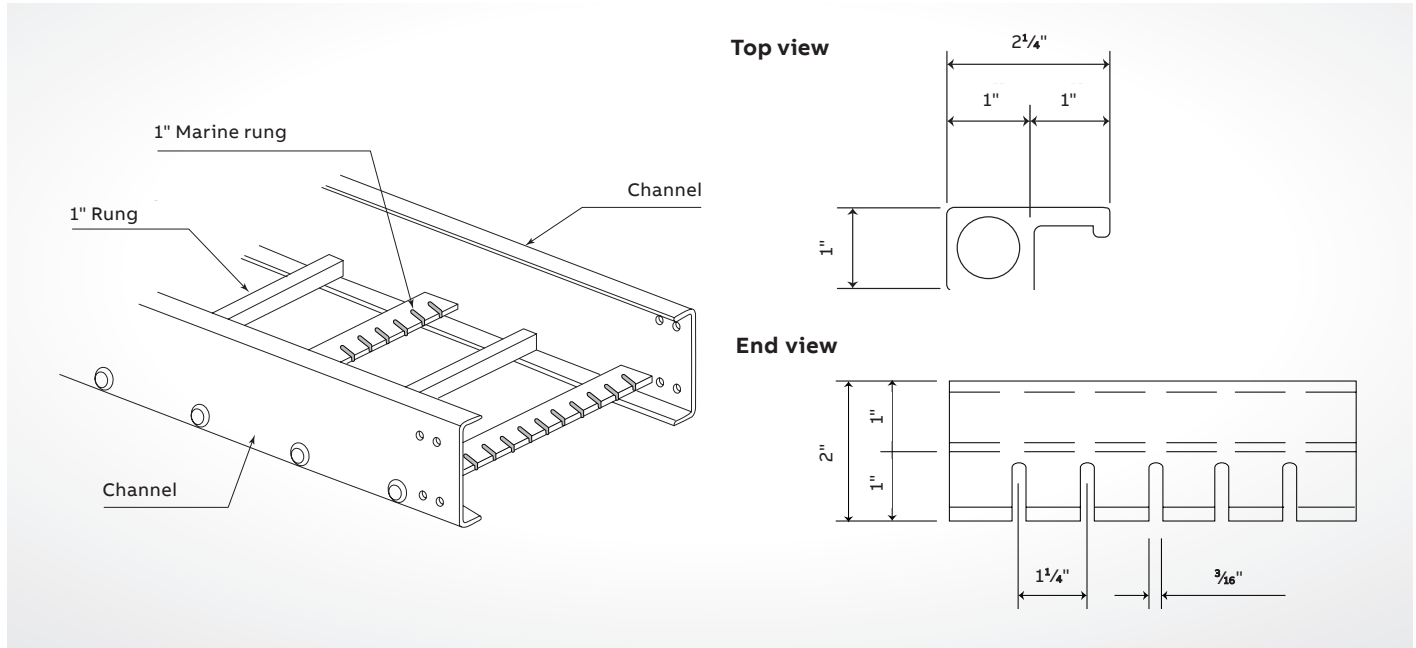


Straight section number selection

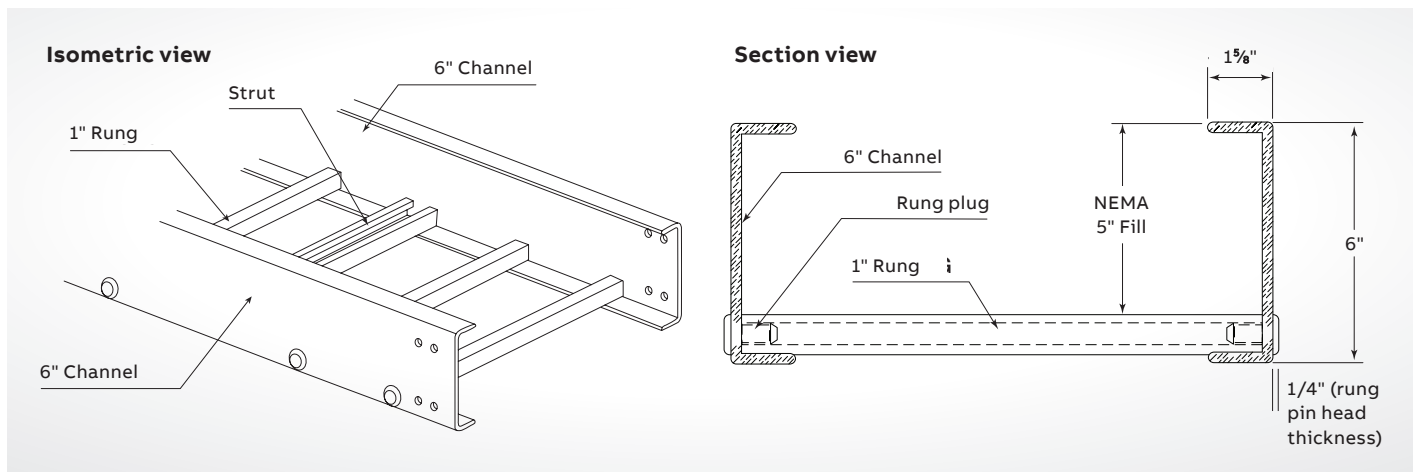


Nonmetallic - Cable tray straight lengths

Marine rung & strut rung cable tray



01



02

01 Marine rung cable tray
02 Strut rung cable tray

Marine rung cable tray

- Meets U.S. Coast Guard requirements
- **Catalog Number:** Add MR after rung spacing
- **Example:** NM-4P-09MR-24-120
- Call your T&B representative for documentation

Strut rung cable tray

- **Catalog Number:** Add SR after rung spacing
- Call your T&B representative for documentation