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

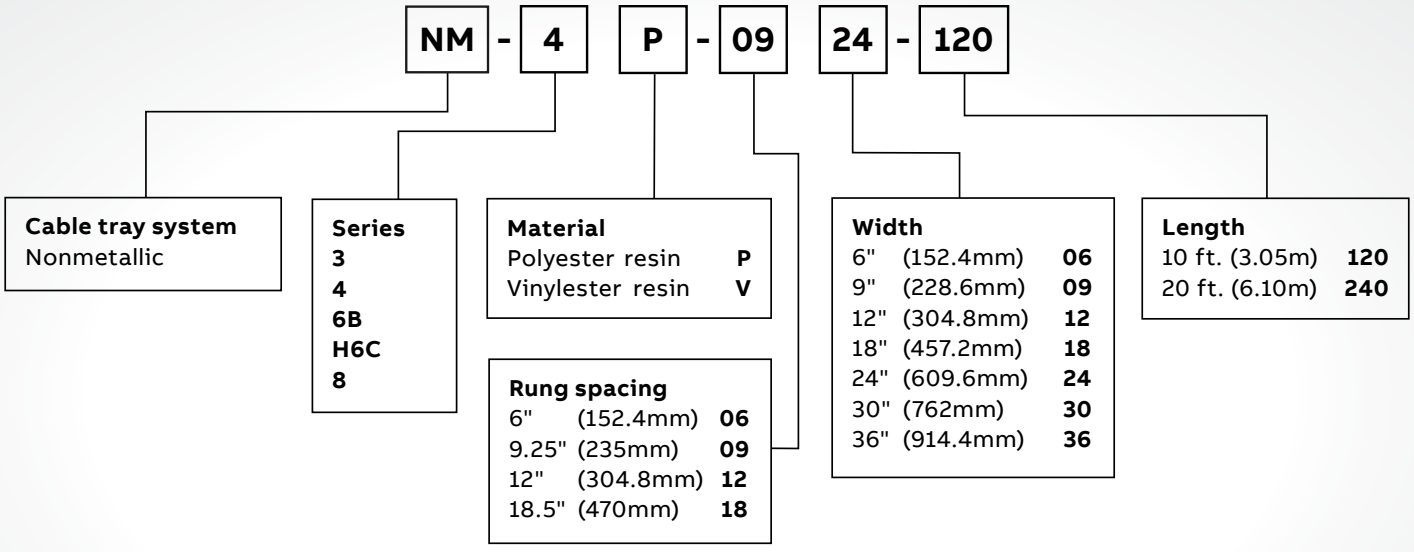
1. Nonmetallic cable tray system.
2. Select the correct T&B series cable tray using the load data for straight sections found on page B16-B20.
3. Select the resin required. Refer to corrosion guide on page B7 of the technical information section for the effect of environmental conditions on the desired material. For the effective temperature range, see page B9 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 B38-B41.



Series 3 cable tray does not have UL listing.

Nonmetallic - Cable tray straight lengths

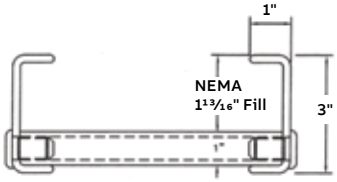
3" (76.2mm) Straight sections - Series 3

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: A/3M
- NEMA 8A

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

	Series		Safety Factor	Support span ft. (m) 8' (2.4m)
Side rail height: 3" (76.2mm) (1 13/16" (46.04mm) loading depth) 	**3**	**Load (lb)/ft.**	1.5	50
		Load (kg)/m	1.5	74
		Deflection (in.)	1.5	2.35
		Deflection (mm)	1.5	59.69
		K factor	1.5	0.0162

Straight section number selection

NM - **3** **P** - **09** **24** - **120**

Cable tray system	Series	Material	Rung spacing	Width	Length
Nonmetallic **NM**	**3**	Polyester resin **P** Vinylester resin **V**	6" (152.4mm) **06** 9.25" (235mm) **09** 12" (304.8mm) **12** 18.5" (470mm) **18**	6" (152.4mm) **06** 9" (228.6mm) **09** 12" (304.8mm) **12** 18" (457.2mm) **18** 24" (609.6mm) **24** 30" (762mm) **30** 36" (914.4mm) **36**	10 ft. (3.05m) **120** 20 ft. (6.10m) **240**

Series 3 cable tray does not have UL listing.

Nonmetallic - Cable tray straight lengths

4" (101.6mm) Straight sections - Series 4

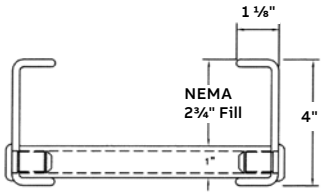
Splice plates
One pair of nonmetallic splice plates with SS6 (316 stainless steel) hardware included.

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%.

Loading
- CSA load class: D/3M
- NEMA 12C
- UL Listing load class C

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

	Series		Safety Factor	Support span ft (m) 8' (2.4m)	10' (3m)	12' (3.7m)
Side rail height: 4" (101.6mm) (2¾" (69.85mm) loading depth)	4	**Load (lb)/ft.**	1.5	205	144	100
		Load (kg)/m	1.5	303	214	148
		Deflection (in.)	1.5	1.18	2.03	2.92
		Deflection (mm)	1.5	29.972	51.562	74.168
		K factor	1.5	0.005	0.014	0.029



Straight section number selection

NM - **4** **P** - **09** **24** - **120**

Cable tray system		Series	Material		Rung spacing		Width		Length	
Nonmetallic	**NM**	**4**	Polyester resin	**P**	6" (152.4mm)	**06**	6" (152.4mm)	**06**	10 ft. (3.05m)	**120**
			Vinylester resin	**V**	9.25" (235mm)	**09**	9" (228.6mm)	**09**	20 ft. (6.10m)	**240**
					12" (304.8mm)	**12**	12" (304.8mm)	**12**		
					18.5" (470mm)	**18**	18" (457.2mm)	**18**		
							24" (609.6mm)	**24**		
							30" (762mm)	**30**		
							36" (914.4mm)	**36**		

Nonmetallic - Cable tray straight lengths

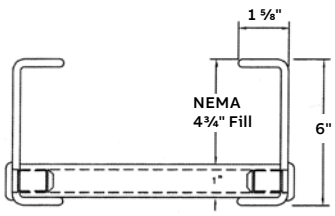
6" (152.4mm) Straight sections - Series 6

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%.

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

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

	Series		Safety Factor	Support span ft. (m) 14' (4.3m)	16' (4.9m)	18' (5.5m)	20' (6.1m)
Side rail height: 6" (152.4mm) (4¾" (120.65mm) loading depth) 	**6B**	**Load (lb)/ft.**	1.5	204	156	123	100
		Load (kg)/m	1.5	304	233	184	149
		Deflection (in.)	1.5	2.59	3.4	4.3	5.28
		Deflection (mm)	1.5	86.36	86.36	109.22	134.112
		K factor	1.5	0.0139	0.0237	0.038	0.058

Straight section number selection

NM - 6B P - 09 24 - 120

Cable tray system	Series	Material	Rung spacing	Width	Length
Nonmetallic **NM**	**6B**	Polyester resin **P** Vinylester resin **V**	6" (152.4mm) **06** 9.25" (235mm) **09** 12" (304.8mm) **12** 18.5" (470mm) **18**	6" (152.4mm) **06** 9" (228.6mm) **09** 12" (304.8mm) **12** 18" (457.2mm) **18** 24" (609.6mm) **24** 30" (762mm) **30** 36" (914.4mm) **36**	10 ft. (3.05m) **120** 20 ft. (6.10m) **240**

Nonmetallic - Cable tray straight lengths

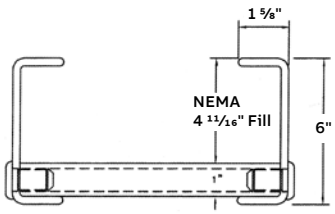
6" (152.4mm) Straight sections - Series H6C

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%.

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

6" (152.4mm) Straight sections – Series H6C: Loading - NEMA 20C

				Support span ft. (m)			
	Series		Safety Factor	14' (4.3m)	16' (4.9m)	18' (5.5m)	20' (6.1m)
Side rail height: 6" (152.4mm) (4 11/16" (119.1mm) loading depth) 	H6C	**Load (lb)/ft.**	1.5	272	208	164	133
		Load (kg)/m	1.5	405	310	244	198
		Deflection (in.)	1.5	3.64	4.76	6.01	7.45
		Deflection (mm)	1.5	92.456	120.904	152.654	189.23
		K factor	1.5	0.0129	0.022	0.0352	0.0536

Straight section number selection

NM - **H6C** **P** - **09** **24** - **120**

Cable tray system	
Nonmetallic	**NM**

Series
H6C

Material	
Polyester resin	**P**
Vinylester resin	**V**

Rung spacing		
6"	(152.4mm)	**06**
9.25"	(235mm)	**09**
12"	(304.8mm)	**12**
18.5"	(470mm)	**18**

Width		
6"	(152.4mm)	**06**
9"	(228.6mm)	**09**
12"	(304.8mm)	**12**
18"	(457.2mm)	**18**
24"	(609.6mm)	**24**
30"	(762mm)	**30**
36"	(914.4mm)	**36**

Length	
10 ft. (3.05m)	**120**
20 ft. (6.10m)	**240**

Nonmetallic - Cable tray straight lengths

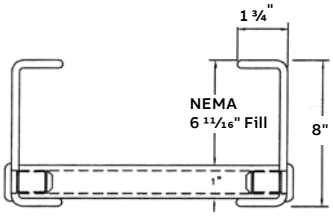
8" (203.2mm) Straight sections - Series 8

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%.

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

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

				Support span ft. (m)			
	Series		Safety Factor	14' (4.3m)	16' (4.9m)	18' (5.5m)	20' (6.1m)
Side rail height: 8" (203.2mm) (6 11/16" (119.1mm) loading depth) 	8	**Load (lb)/ft.)**	1.5	204	156	123	100
		Load (kg)/m)	1.5	304	233	184	149
		Deflection (in.)	1.5	2.03	3.47	5.47	7.02
		Deflection (mm)	1.5	51.562	88.138	138.938	178.308
		K factor	1.5	0.0057	0.0097	0.0155	0.0236

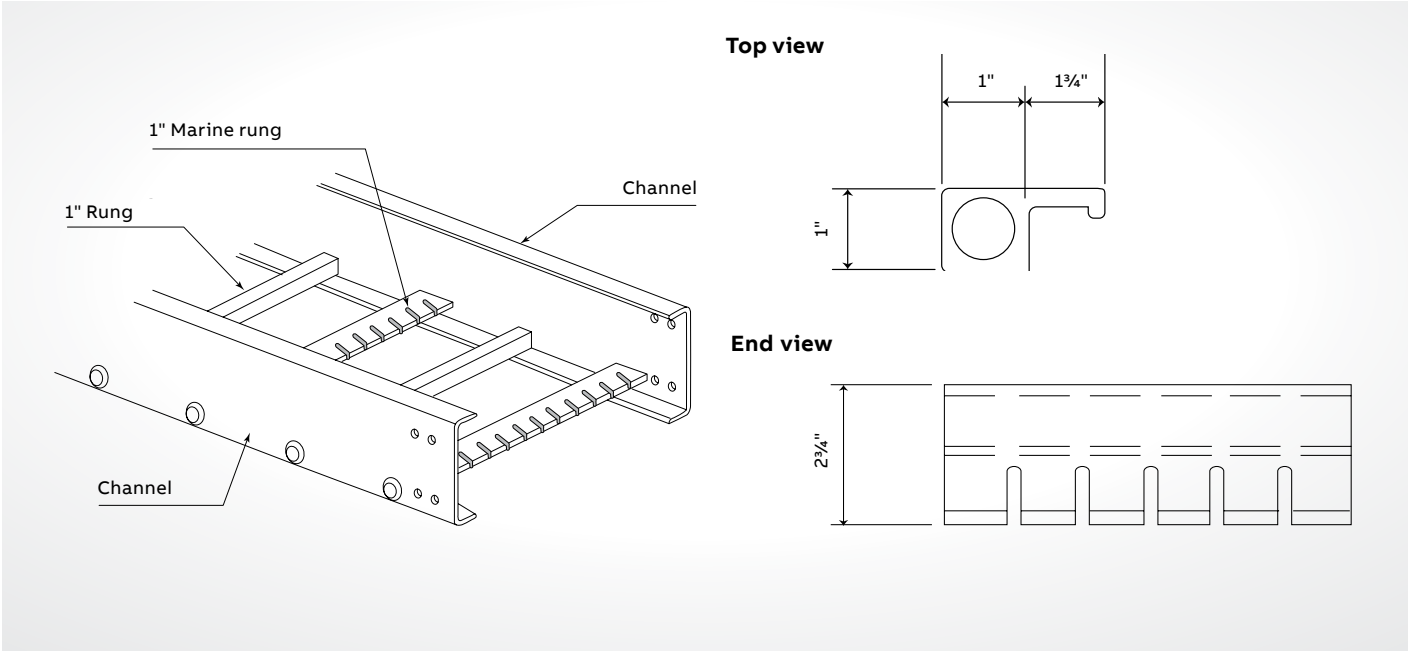
Straight section number selection

NM - 8 P - 09 24 - 120

Cable tray system		Series	Material		Rung spacing		Width		Length	
Nonmetallic	**NM**	**8**	Polyester resin	**P**	6" (152.4mm)	**06**	6" (152.4mm)	**06**	10 ft. (3.05m)	**120**
			Vinylester resin	**V**	9.25" (235mm)	**09**	9" (228.6mm)	**09**	20 ft. (6.10m)	**240**
					12" (304.8mm)	**12**	12" (304.8mm)	**12**		
					18.5" (470mm)	**18**	18" (457.2mm)	**18**		
							24" (609.6mm)	**24**		
							30" (762mm)	**30**		
							36" (914.4mm)	**36**		

Nonmetallic - Cable tray straight lengths

Marine rung & strut rung cable tray



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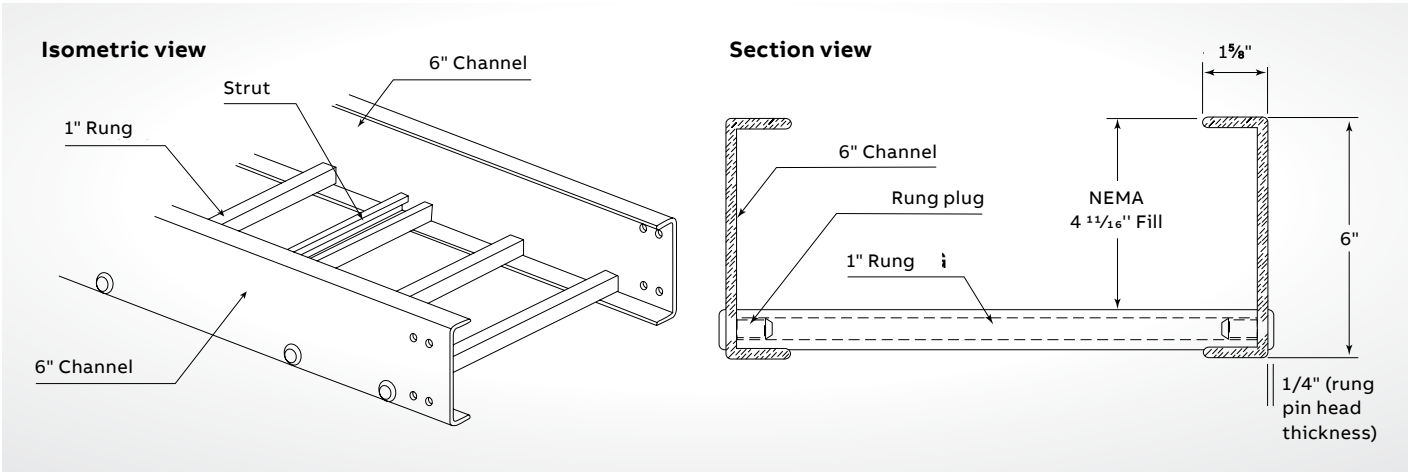

02

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 ABB representative for documentation

Strut rung cable tray

- **Catalog Number:** Add SR after rung spacing
- Call your ABB representative for documentation