



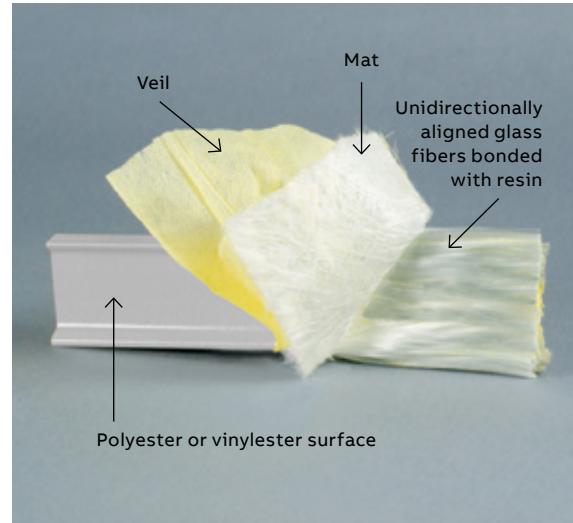
Nonmetallic - Cable tray

Overview

Why specify our cable tray?

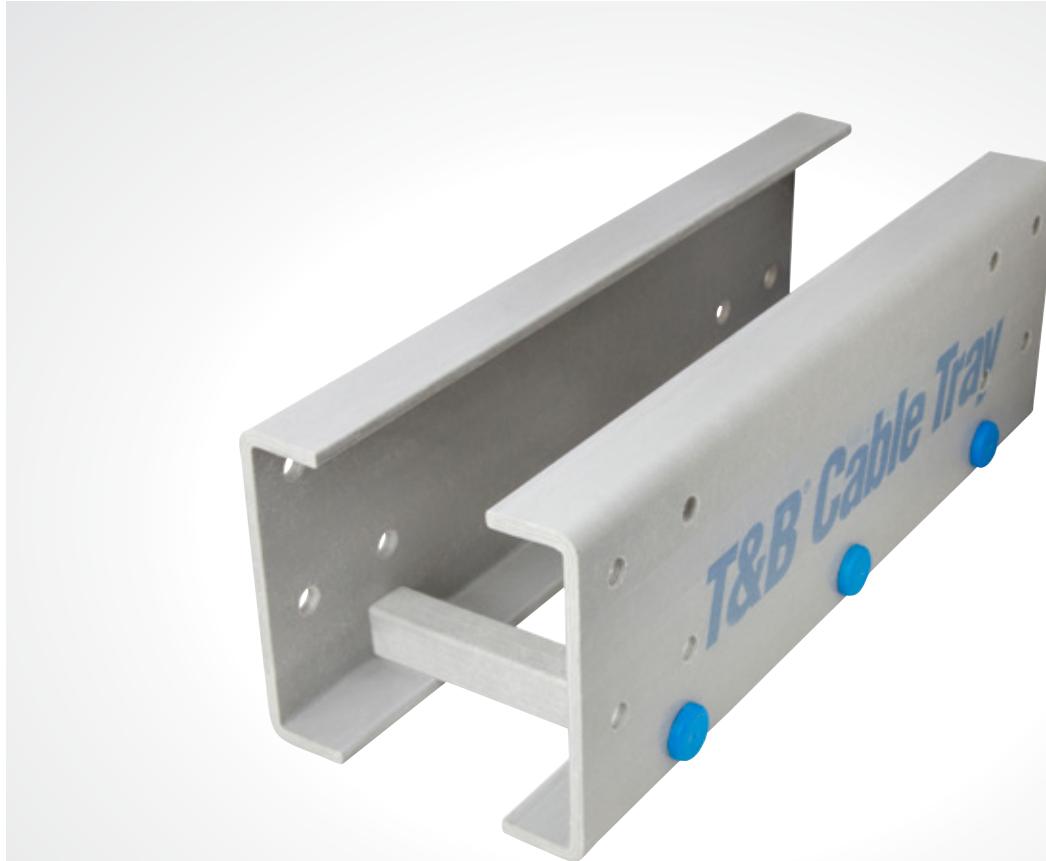
Nonmetallic cable tray systems have been tested and proven in the harsh environment of the offshore oil and gas industry. This tray is ideally suited to withstand the corrosive conditions inherent in the petroleum, mining, and fertilizer industries. In these applications, nonmetallic tray is exposed daily to wind, weather, and saltwater.

Nonmetallic cable tray gives you the load capacity of steel plus the inherent characteristics afforded by our pultrusion technology: non-conductive, non-magnetic and corrosion-resistant. Although light in weight, their strength-to-weight ratio surpasses that of equivalent steel products.



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01 A surface veil is applied during the pultrusion process to ensure a resin rich surface for superior corrosion resistance as well as an ultraviolet exposure barrier.



Nonmetallic - Cable tray

Overview (continued)



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Table 1 – Typical properties of pultruded components gland

Properties	Test method	Unit/value	Isophthalic Polyester	
			Longitudinal	Transverse
Tensile strength	ASTM D638	psi	30,000	7,000
Tensile modulus	ASTM D638	psi x 10 ⁶	2.5	0.8
Flexural strength	ASTM D790	psi	30,000	10,000
Flexural modulus	ASTM D790	psi x 10 ⁶	1.6	0.8
Izod impact	ASTM D256	ft.-lbs/in	25	4
Compressive strength	ASTM D695	psi	30,000	15,000
Compressive modulus	ASTM D695	psi x 10 ⁶	2.5	1.0
Barcol hardness	ASTM D2583	–	50	45
Shear strength	ASTM D732	psi	5,500	5,500
Density	ASTM D1505	lbs/in ³	0.065	–
Coefficient of thermal expansion	ASTM D696	in/in/°F	5.0 x 10 ⁻⁶	–
Water absorption	ASTM D570	Max %	0.5	–
Dielectric strength	ASTM D149	V/mil (vpm)	200	–
Flammability classification	UL94	VO (both resins)	–	–
Flame spread	ASTM E-84	20 Max (both resins)	–	–

T&B nonmetallic cable tray systems are manufactured from glass fiber-reinforced plastic shapes that meet the ASTM E-84 Class 1 flame rating and self-extinguishing requirements of ASTM D-635. A surface veil is applied during pultrusion to ensure a resin-rich surface and ultraviolet resistance.

Table 1 – Typical properties of pultruded components gland

Properties	Ignition	Burning	Rating	Avg. Extent of Burning
Flame resistance (FTMS 406-2023)	75 seconds	75 seconds	–	–
Intermittent flame test (HLT- 15)	–	–	100	–
Flammability test (ASTM D635)	–	5 seconds	–	15mm

Technical information

Corrosion guide

The information shown in this corrosion guide is based on full immersion laboratory tests and data generated from resin manufacturers. It should be noted that in some of the environments listed, splashes and spills may result in a more corrosive situation than indicated due to the evaporation of water. Regular wash down is recommended in these situations.

Chemical resistance

Chemical environment	75°F (24°C)	160F° (71°C)
Acetic Acid 5%	FR-P	FR-P
Acetic Acid 25%	FR-P	FR-VE-210° (*)
Aluminum Potassium Sulfate 5%	FR-P	FR-P
Ammonium Hydroxide 10%	FR-P	FR-VE-150°
Ammonium Nitrate	FR-P	FR-P
Benzenesulfonic Acid 5%	FR-P	FR-P
Calcium Chloride	FR-P	FR-P
Carbon Tetrachloride	FR-VE	FR-VE-100° (*)
Chlorine Dioxide 15%	FR-P	FR-VE-150° (*)
Chromic Acid 5%	FR-P	FR-VE-150° (*call)
Copper Sulfate	FR-P	FR-P
Diesel Fuel No. 1	FR-P	FR-P
Diesel Fuel No. 2	FR-P	FR-P
Ethylene Glycol	FR-P	FR-P
Fatty Acids 100%	FR-P	FR-P
Ferrous Sulfate	FR-P	FR-P
Fluosilicic Acid 0-20%	FR-VE	FR-VE (call)
Hydrochloric Acid 1%	FR-P	FR-P
Hydrochloric Acid 15%	FR-P	FR-VE-180° (*)
Hydrochloric Acid 37%	FR-P	FR-VE-150° (*)
Hydrogen Sulfide	FR-P-140°	FR-VE-210°
Kerosene	FR-P	FR-P
Magnesium Chloride	FR-P	FR-P

Chemical environment	75°F (24°C)	160F° (71°C)
Methyl Alcohol 10%	FR-P	FR-VE-150° (*)
Naphtha	FR-P	FR-P
Nitric Acid 5%	FR-P	FR-P
Nitric Acid 20%	FR-VE	FR-VE-120° (*)
Phosphoric Acid 10%	FR-P	FR-P
Phosphoric Acid 30%	FR-P	FR-P
Phosphoric Acid 85%	FR-P	FR-P
Sodium Bicarbonate 10%	FR-P	FR-P
Sodium Bisulfate	FR-P	FR-P
Sodium Carbonate	FR-P	FR-VE
Sodium Chloride	FR-P	FR-P
Sodium Hydroxide 1-50%	FR-VE	FR-VE-120° (*)
Sodium Hypochlorite 5%	FR-P	FR-VE-120° (*)
Sodium Nitrate	FR-P	FR-P
Sodium Silicate	FR-P	FR-VE-210° (*)
Sodium Sulfate	FR-P	FR-P
Sulfuric Acid 0-30%	FR-P	FR-P
Sulfuric Acid 30-50%	FR-VE	FR-VE
Sulfuric Acid 50-70%	FR-VE	FR-VE-180° (*)
Trisodium Phosphate 25%	FR-P	FR-VE-210° (*)
Trisodium Phosphate - All	FR-VE	FR-VE-210° (*)
Water, Distilled	FR-P	FR-P

Symbols:

FRP - Polyester fire-retardant

FRVE - Vinyl Ester fire-retardant

All data represents the best available information and is believed to be correct. The data should not be construed as a warranty of performance for that product as presented in these tables. User tests should be performed to determine suitability of service if there is any doubt or concern. Such variables as concentration, temperature, time of exposure and combined chemical effects of mixtures of chemicals make it impossible to specify the exact suitability of fiber-reinforced plastics in all environments. ABB will be happy to supply material samples for testing. These recommendations should only be used as a guide, and ABB does not take responsibility for design or suitability of materials for service intended. In no event will ABB be liable for any consequential or special damages for any defective material or workmanship including, without limitation, labor charges or other expenses or damage to property resulting from loss of materials or profits or increased expenses of operations.

Technical information

CSA and NEMA loading classes

The standard classes of cable trays, as related to their maximum design loads and to the associated design support spacing based on a simple beam span requirement, shall be designated in accordance with Table 1.

Selection process

Please note the load ratings in Table 1 are those most commonly used. Other load ratings are acceptable. (according to NEMA VE-1/CSA C22.2 No 126.1-02).

Costs vary between different load classes. Since labor and coupling costs are similar for a given length of tray, the heavier classes are less cost-effective on a load length basis. The designer should therefore specify the lightest class of tray compatible with the weight requirements of the cable tray.

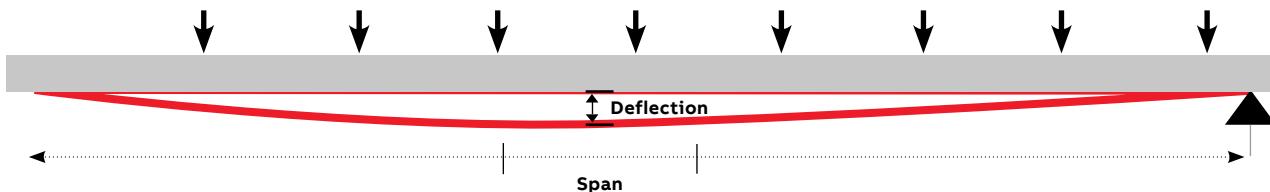
Table 1 – Span/load class designation – USA

Load kg/m (lb/ft.)	Span m (ft.)					
	1.5 (5)	2.4 (8)	3.0 (10)	3.7 (12)	6.0 (20)	
37 (25)	5AA	8AA	10AA	12AA	20AA	
74 (50)	5A	8A	10A	12A	20A	
112 (75)	–	8B	–	12B	20B	
149 (100)	–	8C	–	12C	20C	

NOTE: These ratings are also used in Mexico.

Table 1 – Span/load class designation – CANADA

Load kg/m (lb/ft.)	Span m (ft.)					
	1.5 (5)	2.0 (6.5)	2.5 (8.2)	3.0 (10)	4.0 (13)	5.0 (16.4)
37 (25)	–	–	–	A	–	–
45 (30)	–	–	A	–	–	–
62 (42)	–	A	–	–	–	–
67 (45)	–	–	–	–	–	D
82 (55)	–	–	–	–	–	D
97 (65)	–	–	–	C	–	–
99 (67)	A	–	–	–	–	–
112 (75)	–	–	–	–	–	E
113 (76)	–	–	–	–	D	–
119 (80)	–	–	C	–	–	–
137 (92)	–	–	–	–	–	E
164 (110)	–	C	–	–	–	–
179 (120)	–	–	–	D	–	–
189 (127)	–	–	–	–	E	–
259 (174)	C	–	–	–	–	–
299 (200)	–	–	–	E	–	–



Loading capacity

Cable loads

The cable load is the total weight, expressed in (lb/ft.), of all the cables that will be placed in the cable tray.

Snow loads

Depending on the area, snowfall could indicate an additional design load. If snowfall is a factor and the tray has a solid cover in outdoor installations, a minimum load of 5 lb (2.27kg). per square foot should be used.

Ice loads

If a cable tray system is subject to icing conditions, usually only the top surface or cover and the windward side will be coated with any significant amount. It is generally assumed that ice weighs 57 lb (25.85kg) per cubic foot.

Wind loads

All outdoor cable tray installations should factor in wind loads, especially the pressure exerted on side rails of ladder trays. There have also been instances of strong winds lifting covers off trays, which can be minimized with the use of wraparound cover clamps.

Concentrated loads

A concentrated static load is not included in Table 1 (following page). Some user applications may require that a given concentrated static load be imposed over and above the working load.

Such a concentrated static load represents a static weight applied on the centerline of the tray at midspan. When so specified, the concentrated static load may be converted to an equivalent uniform load (We) in kilograms/meter (pounds), using the following formula, and added to the static weight of cable in the tray:

$$We = \frac{2 \times (\text{concentrated static load, kg (lb)})}{\text{Span length, m (ft.)}}$$

This combined load may be used to select a suitable load/span designation. If the combined load exceeds the working load shown on the following page, the manufacturer should be consulted.

Effect of temperature

Strength properties of reinforced plastics are reduced when continuously exposed to elevated temperatures. Working loads shall be reduced based on table 2.

Table 2 – Effect of temperature

Temperature (°C)	Temperature (°F)	Approximate % of strength	
		Isophthalic polyester	Vinylester
23.8	75	100	100
37.7	100	90	100
51.6	125	78	100
65.5	150	68	90
79.4	175	60	90
93.3	200	52	75

NEMA Standard 8-10-1986.

If unusual temperature conditions exist, the manufacturer should be consulted.

Technical information

Thermal contraction and expansion

It is important that thermal contraction and expansion be considered when installing cable tray systems. The length of the straight cable tray runs and the temperature differential govern the number of expansion splice plates required (see Table 1 below).

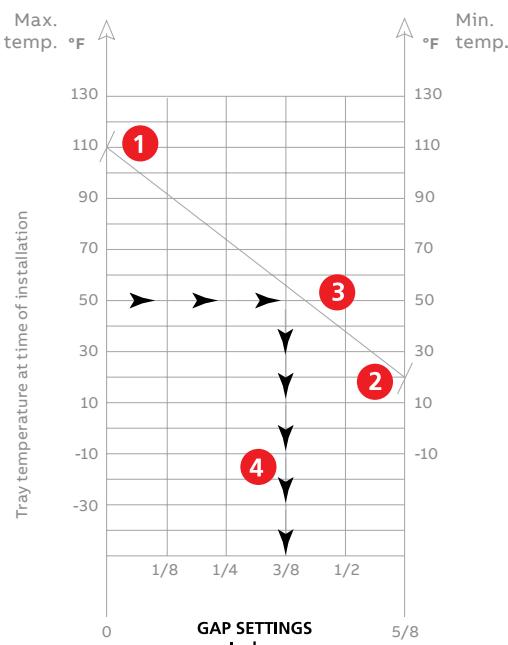
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01 Typical cable tray installation

The cable tray should be anchored at the support nearest to its midpoint between the expansion splice plates and secured by expansion guides at all other support locations (see diagram 01). The cable tray should be permitted longitudinal movement in both directions from that fixed point.

Accurate gap setting at the time of installation is necessary for the proper operation of the expansion splice plates. The following procedure should assist the installer in determining the correct gap (see Figure 1):

1. Plot the highest expected tray temperature on the maximum temperature line.
2. Plot the lowest expected tray temperature on the minimum temperature line.
3. Draw a line between the maximum and minimum points.
4. Plot the tray temperature at the time of installation to determine the gap setting.

Figure 1 - Proper gap settings

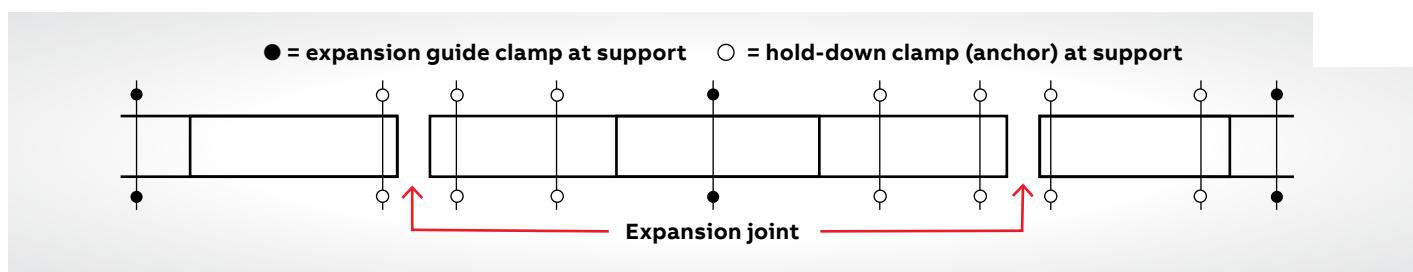


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Table 1 - Expansion or contraction for various temperature differences

Temperature differential		Max. distance between expansion connector* for 1" (25.4mm) expansion		Max. distance between expansion connector* for 5/8" (15.9mm) expansion	
°F	°C	(ft.)	(m)	(ft.)	(m)
14	25	667	203.3	417	127.1
28	50	333	101.5	208	63.3
42	75	222	67.6	139	42.3
56	100	167	50.9	104	31.7
70	125	133	40.5	83	25.2
83	150	111	33.8	69	21
97	175	95	28.9	59	17.9

NOTE: These ratings are also used in Mexico.



Technical information

Installation guidelines

Installation of T&B nonmetallic cable tray should be made in accordance with the standards set by the NEMA VE2 publication and CSA standards.

Always observe common safety practices when assembling tray and fittings. Installations generally require some field cutting. Dust created during fabrication presents no serious health hazard, but skin irritation may be experienced by some workers.

Operators of saws and drills should wear masks, long-sleeve shirts or coveralls.

Fabrication with nonmetallic cable tray is relatively easy and comparable to working with wood. Ordinary hand tools may be used in most cases.

Avoid excessive pressure when sawing or drilling. Too much force can rapidly dull tools and also produce excessive heat, which softens the bonding resin in the nonmetallic cable tray, resulting in a ragged edge rather than a clean-cut edge.

Field cutting is simple and can be accomplished with a circular power saw with an abrasive cut-off wheel (masonry type) or hack saw (24 to 32 teeth per inch).

Drill nonmetallic as you would drill hardwood. Standard twist drills are more than adequate. Any surface that has been drilled, cut, sanded or otherwise broken must be sealed with a compatible resin. Carbide-tipped saw blades and drill bits are recommended when cutting large quantities.

Support the nonmetallic cable tray material firmly during cutting operations to keep material from shifting, which may cause chipping at the cut edge.

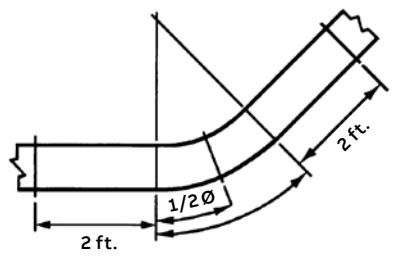
Each tray section length should be equal to or greater than the support span. When possible, the splice should be located at quarter span.

Fittings should be supported as per NEMA VE2.

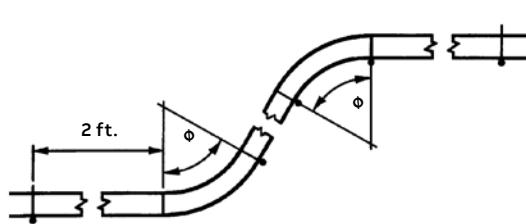
Technical information

Cable tray support locations

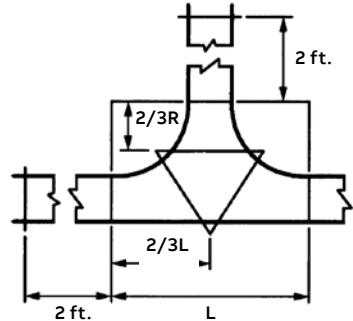
Horizontal elbow



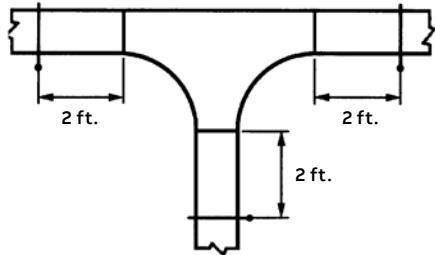
Vertical elbow



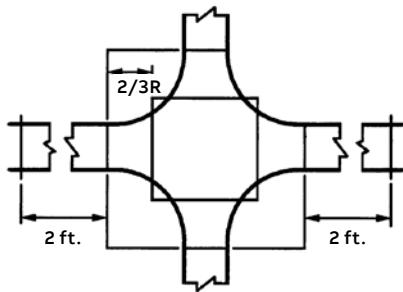
Horizontal tee



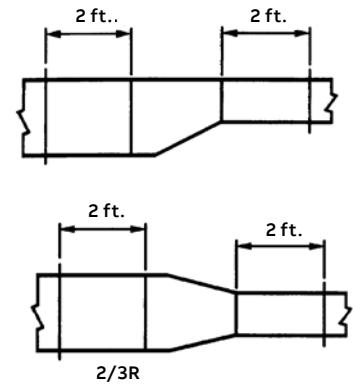
Horizontal wye



Horizontal cross



Horizontal reducer



*NOTE: $\phi = 30^\circ, 45^\circ, 60^\circ, 90^\circ$ (degree of fitting)

FRP Cable Tray specifications

External revision 1

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 *Dimension
 Conversion Table:
 2" = 50.8mm
 3" = 76.2mm
 4" = 101.6mm
 5" = 127mm
 7" = 177.8mm
 6" = 152.4mm
 8" = 203.2mm
 9" = 228.6mm
 9.25" = 235mm
 12" = 304.8mm
 18" = 355.6mm
 18.5" = 470mm
 24" = 457.2mm
 30" = 762mm
 36" = 914.4mm
 42" = 1,066.8mm

Section 1 - Acceptable manufacturers

- 1.01** Cable tray system will be made of straight sections, fittings and accessories as defined in the latest CSA/NEMA standards publication.
- 1.02** All manufacturing practices will be in accordance with CSA/NEMA.
- 1.03** Cable trays will be by ABB, or approved CSA/NEMA member.

Section 2 - Cable tray design

- 2.01** Straight section structural elements; side rails, rungs and splice plates shall be pultruded from glass fiber reinforced polyester or vinyl ester resin.
- 2.02** Pultruded shapes will be constructed with a surface veil to ensure a resin-rich and ultravioletresistant surface.
- 2.03** Pultruded shapes shall meet the ASTM E-84 Class 1 flame rating and self-extinguishing requirements of ASTM D-635.

Section 3 - Construction

- 3.01** Straight section lengths will be 120" (10 ft. (3.05m)) or 240" (20 ft. (6.10m)) standard.
- 3.02** Side rails will be inward "C" configuration and be predrilled to accept splice plates.
- 3.03** Overall heights shall be 8, 6, 4 or 3" (*mm) respectively.
- 3.04** Loading depths for cable tray systems shall be 7, 5, 3 or 2" (*mm) as per CSA/NEMA tolerances.

3.05 Loading classifications and test specimens shall be per CSA/NEMA.

3.06 Rung spacing shall be 6, 9.25, 12 or 18.5" (*mm)

Section 4 - Dimensions

- 4.01** All fittings shall be of mitered design type with a minimum 3" (76.2mm) tangent following the radius.
- 4.02** All fittings shall have a nominal 9.25" rung spacing.
- 4.03** Width (usable inside tray width) shall be 6, 9, 12, 18, 24, 30 or 36" (*mm).
- 4.04** Outside width shall not exceed inside width by more than a total of 2" (50.8mm).
- 4.05** Straight and expansion splice plates will be of stainless steel or fiberglass design with an eight-bolt pattern in 5" (127mm) fill systems and four-bolt pattern for 3, 4, 6 and 8" tray depths.
- 4.06** Dimension tolerances will be per CSA/NEMA.

4.07 Cable tray must have integral connection between side rails and rungs consisting of nonmetallic mechanical fasteners and adhesive bonding.

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

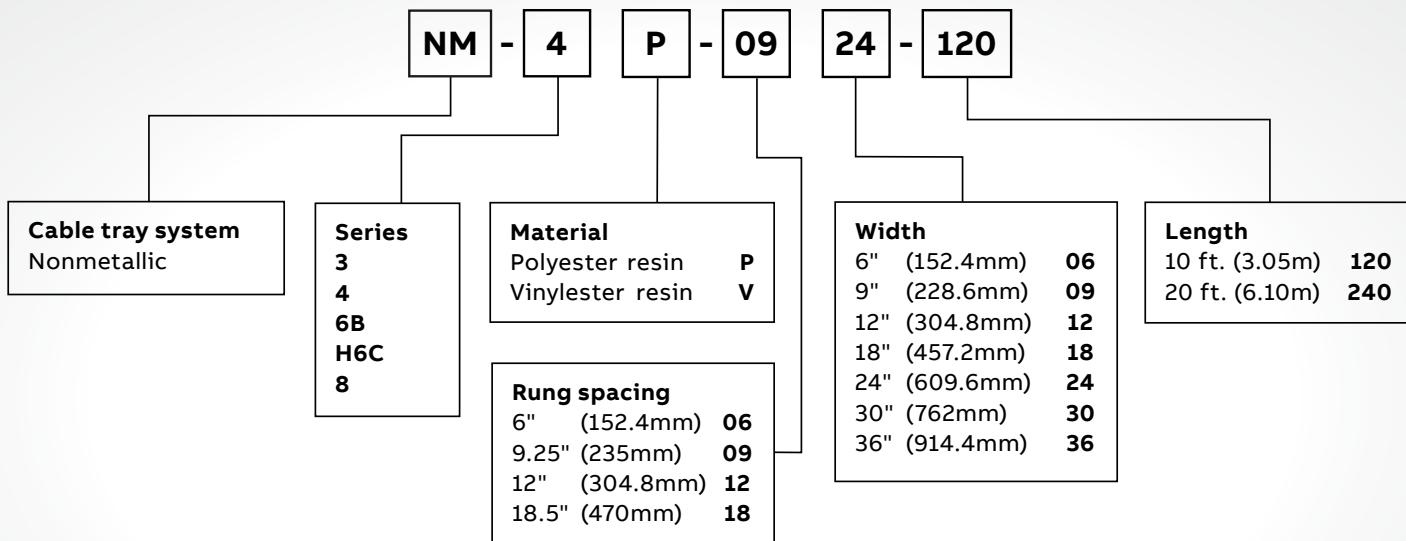
To order a straight section of cable tray, select the appropriate size and material from the charts below and place those symbols in the sequence shown to form the complete catalog number.

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

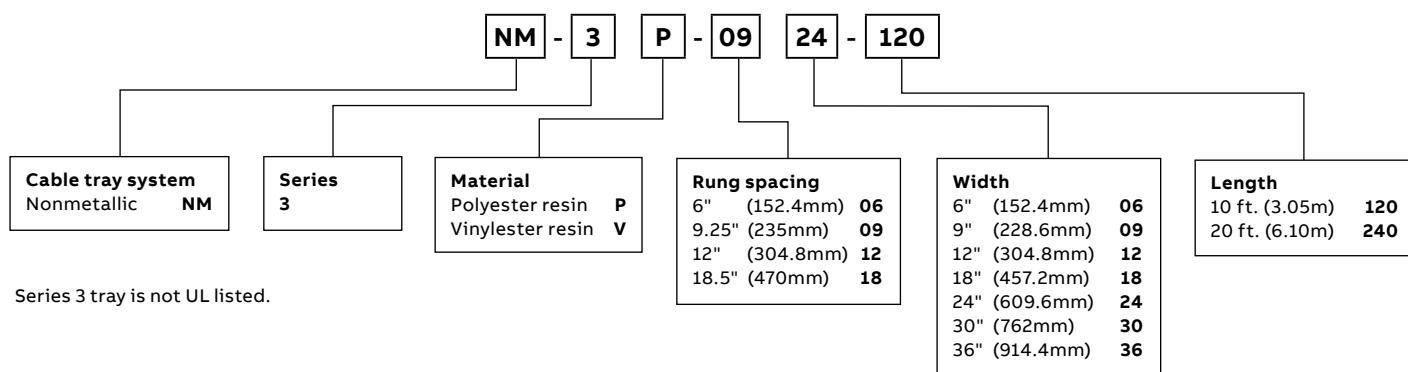
3" (76.2mm) Straight sections - Series 3



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)	3	Load (lb)/ft.)	1.5	257	145	93	64	47
		Load (kg)/m)	1.5	382.46	215.78	138.4	95.24	69.94
		Deflection (in.)	1.5	1.5	2.7	4.2	6.1	8.2
		Deflection (mm)	1.5	38.1	68.58	106.68	154.94	208.28
		K factor	1.5	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.

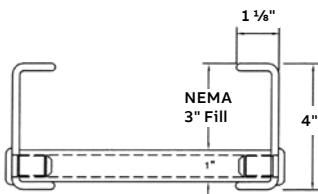
Deflection factor: To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

Loading

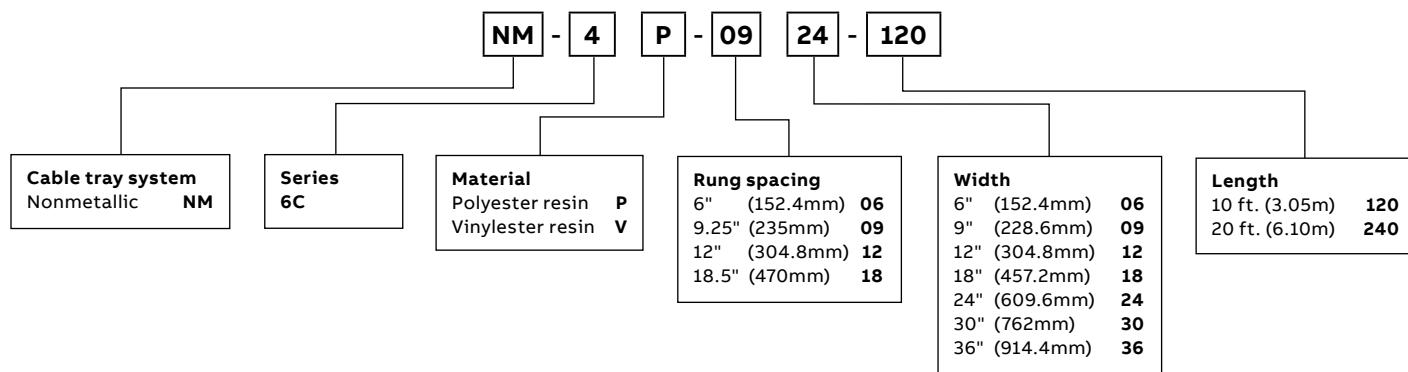
- CSA load class: E/6M
- NEMA 12C

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)	4	Load (lb)/ft.)	1.5	157	109	80	61	48
		Load (kg)/m)	1.5	71.21	49.44	36.29	27.67	21.77
		Deflection (in.)	1.5	2.6	3.7	5.0	6.5	8.2
		Deflection (mm)	1.5	66.04	93.98	127	165.1	208.28
		K factor	1.5	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%.

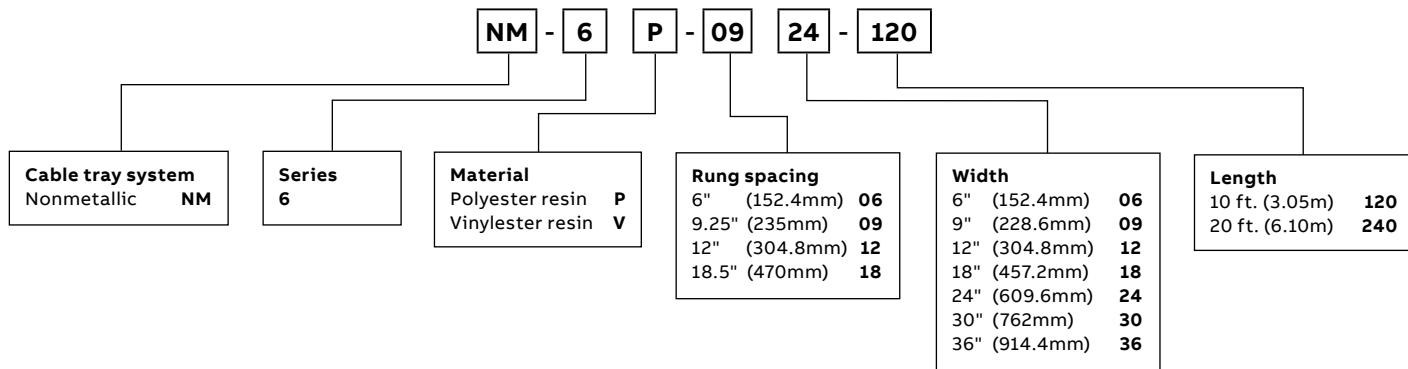
Loading

- 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)		
Side rail height: 6" (152.4mm) (5" (127mm) loading depth)	6B	Load (lb./ft.)	1.5	254	186	143	113	91
		Load (kg./m)	1.5	115.21	84.37	64.86	51.26	41.28
		Deflection (in.)	1.5	2.2	3.0	3.9	5.0	6.1
		Deflection (mm)	1.5	55.88	76.2	99.06	127	154.94
		K factor	1.5	0.009	0.016	0.027	0.044	0.067

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.

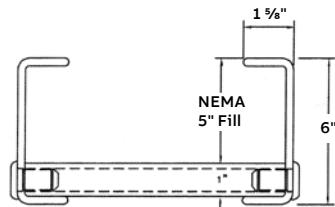
Deflection factor: To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

Loading

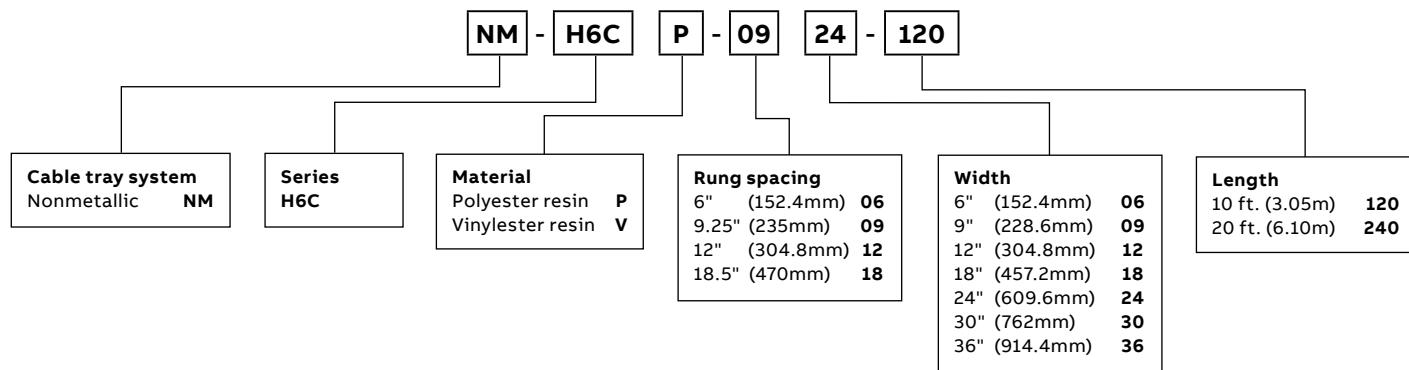
- CSA load class: E/6M
- NEMA 20C

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)	H6C	Load (lb)/ft.)	1.5	386	283	217	171	139
		Load (kg)/m)	1.5	175.09	128.37	98.43	77.56	63.05
		Deflection (in.)	1.5	3.1	4.2	5.5	6.9	8.6
		Deflection (mm)	1.5	78.74	106.68	139.7	175.26	218.44
		K factor	1.5	0.008	0.015	0.025	0.040	0.062
		Load (lb)/ft.)	2.0	289	212	163	129	104
		Load (kg)/m)	2.0	131.09	96.16	73.94	58.51	47.17
		Deflection (in.)	2.0	2.3	3.1	4.1	5.2	6.4
		Deflection (mm)	2.0	58.42	78.74	101.6	132.08	162.56
		K factor	2.0	0.008	0.015	0.025	0.040	0.062



Straight section number selection



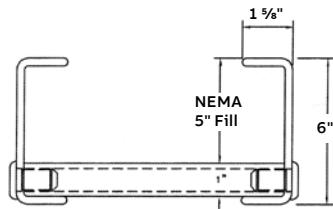
Nonmetallic - Cable tray straight lengths

8" (203.2mm) Straight sections - Series 8

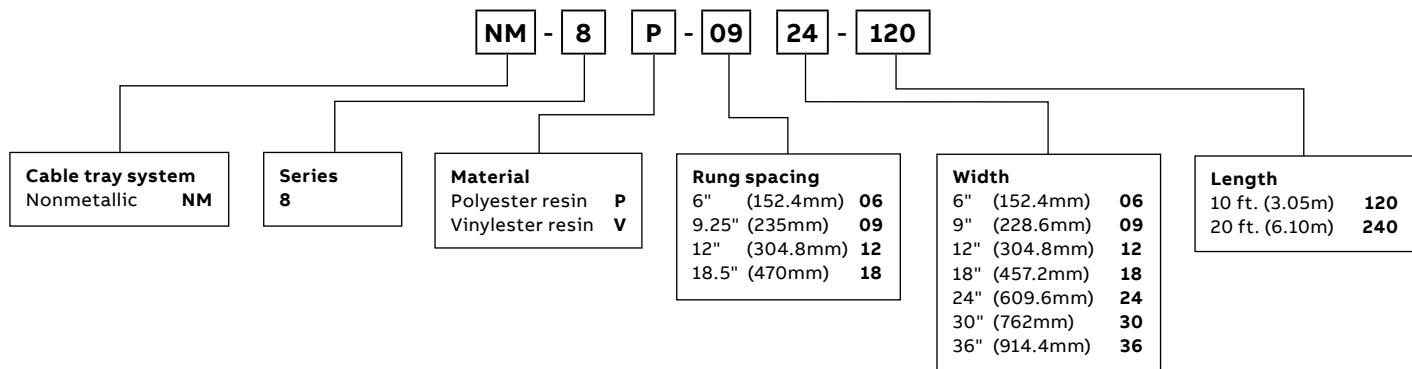


8" (203.2mm) Straight sections – Series 8: Loading - NEMA 20C

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)	8	Load (lb)/ft.)	1.5	358	358	353
		Load (kg)/m)	1.5	532.76	532.76	525.32
		Deflection (in.)	1.5	2.3	4.0	6.3
		Deflection (mm)	1.5	58.42	101.6	160.02
		K factor	1.5	0.006	0.011	0.018
					0.027	0.040

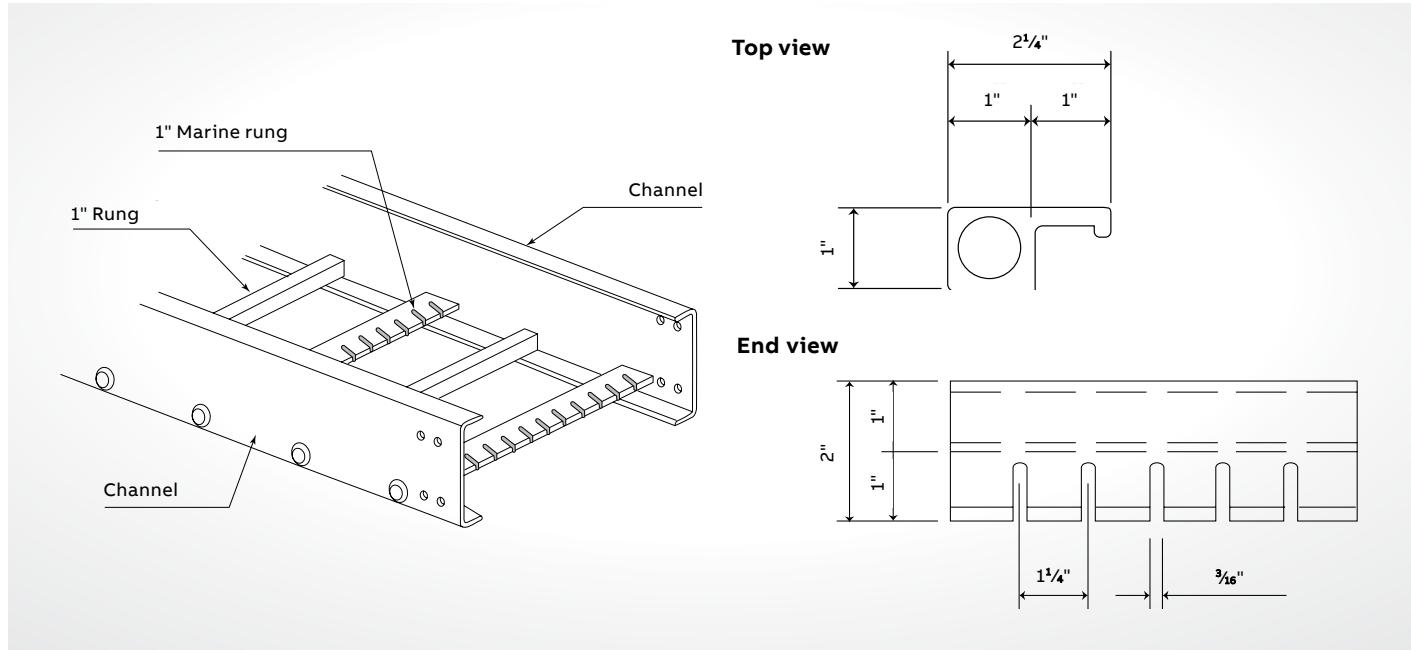


Straight section number selection

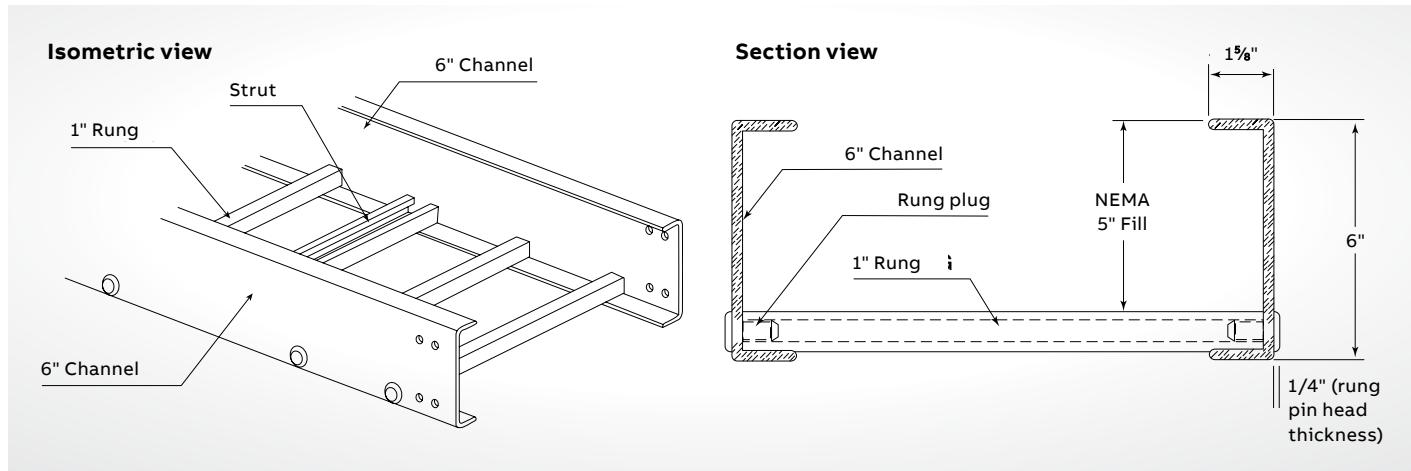


Nonmetallic - Cable tray straight lengths

Marine rung & strut rung cable tray



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01



—
02

—
01 Marine 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

—
02 Strut rung cable tray

Strut rung cable tray

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



Nonmetallic - Cable tray

Fittings

NOTE: Splice plates NOT included. See pages 353-355 for type of splice plates available.
Covers are available. Please consult your ABB representative.

Selection guide

1. Nonmetallic cable tray system.
2. For mitered fittings when available.
3. Select height of fitting required for application. This should match tray series and height selection.
4. 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.
5. Select the desired width in inches.
6. Angle of fitting required for application.
7. Type of fitting required for application. See choices below.
8. Radius required for application. This would be determined by allowable radius of cables being installed. Standard radius is 24" (609.6mm).

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.

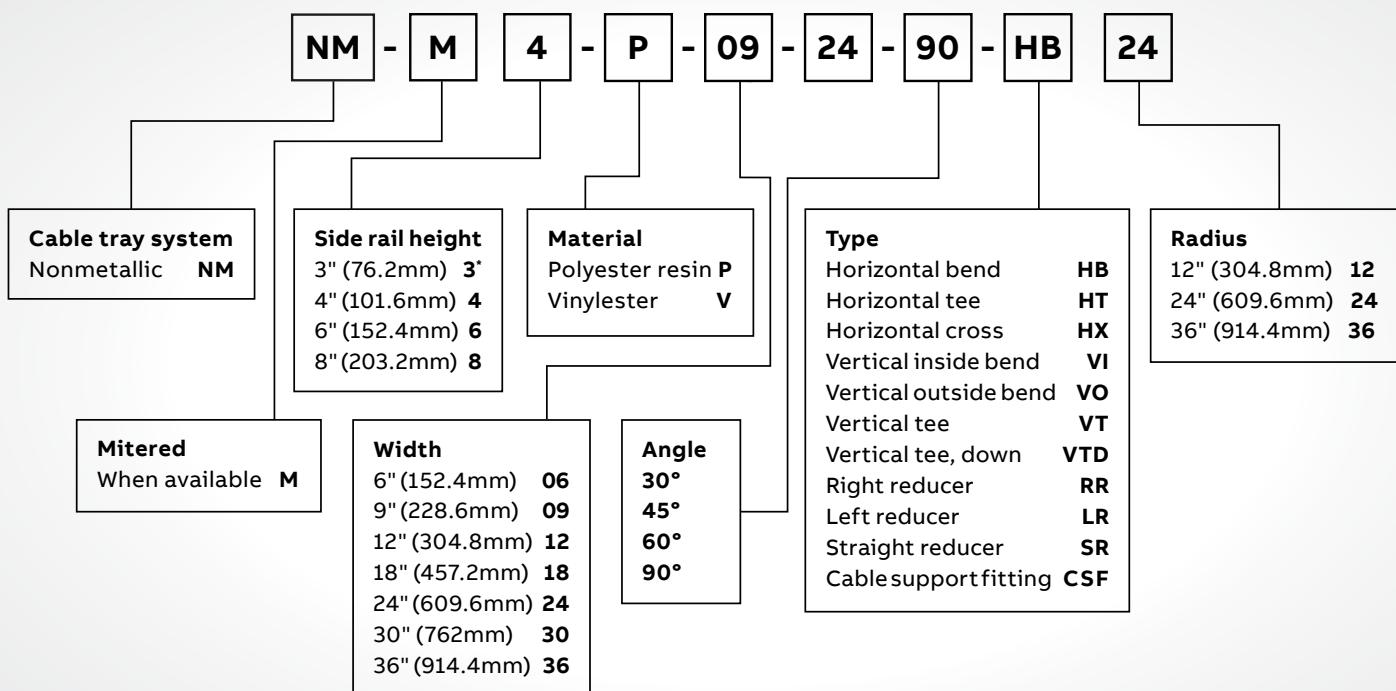
Example:

NM-4P0924-120

- 4" (101.6mm) side rail, polyester resin
- 9" (228.6mm) rung spacing
- 24" (609.6mm) wide, 120" (10 ft.) 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.



*Series 3 cable tray does not have UL listing.

Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - 90° Horizontal bend fittings

90° Horizontal bend

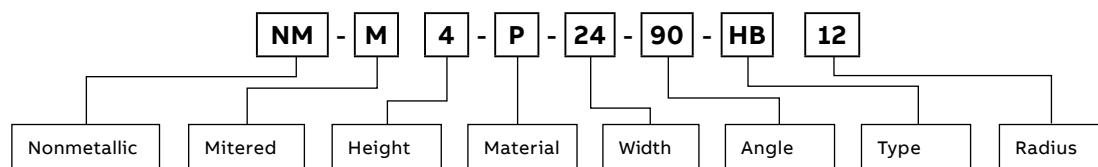
Bend radius (R)			Tray width (W)	Dimensions				
(in.)	(mm)	(in.)	(mm)	Cat. No.	A (in.)	A (mm)	L (in.)	L (mm)
12	304.8	6	152.4	NM-M(*)-(Matl)-06-90HB12	33 $\frac{5}{8}$	854	47 $\frac{1}{2}$	1,207
12	304.8	9	228.6	NM-M(*)-(Matl)-09-90HB12	36 $\frac{5}{8}$	930	51 $\frac{3}{4}$	1,314
12	304.8	12	304.8	NM-M(*)-(Matl)-12-90HB12	39 $\frac{5}{8}$	1,006	56	1,422
12	304.8	18	457.2	NM-M(*)-(Matl)-18-90HB12	45 $\frac{5}{8}$	1,159	64 $\frac{1}{2}$	1,638
12	304.8	24	609.6	NM-M(*)-(Matl)-24-90HB12	51 $\frac{5}{8}$	1,311	73	1,854
12	304.8	30	762	NM-M(*)-(Matl)-30-90HB12	57 $\frac{5}{8}$	1,464	81 $\frac{1}{2}$	2,070
12	304.8	36	914.4	NM-M(*)-(Matl)-36-90HB12	63 $\frac{5}{8}$	1,616	90	2,286
24	609.6	6	152.4	NM-M(*)-(Matl)-06-90HB24	45 $\frac{5}{8}$	1,159	64 $\frac{1}{2}$	1,638
24	609.6	9	228.6	NM-M(*)-(Matl)-09-90HB24	48 $\frac{5}{8}$	1,235	68 $\frac{3}{4}$	1,746
24	609.6	12	304.8	NM-M(*)-(Matl)-12-90HB24	51 $\frac{5}{8}$	1,311	73	1,854
24	609.6	18	457.2	NM-M(*)-(Matl)-18-90HB24	57 $\frac{5}{8}$	1,464	81 $\frac{1}{2}$	2,070
24	609.6	24	609.6	NM-M(*)-(Matl)-24-90HB24	63 $\frac{5}{8}$	1,616	90	2,286
24	609.6	30	762	NM-M(*)-(Matl)-30-90HB24	69 $\frac{5}{8}$	1,768	98 $\frac{1}{2}$	2,502
24	609.6	36	914.4	NM-M(*)-(Matl)-36-90HB24	75 $\frac{5}{8}$	1,921	107	2,718
36	914.4	6	152.4	NM-M(*)-(Matl)-06-90HB36	57 $\frac{5}{8}$	1,464	81 $\frac{1}{2}$	2,070
36	914.4	9	228.6	NM-M(*)-(Matl)-09-90HB36	60 $\frac{5}{8}$	1,540	85 $\frac{3}{4}$	2,178
36	914.4	12	304.8	NM-M(*)-(Matl)-12-90HB36	63 $\frac{5}{8}$	1,616	90	2,286
36	914.4	18	457.2	NM-M(*)-(Matl)-18-90HB36	69 $\frac{5}{8}$	1,768	98 $\frac{1}{2}$	2,502
36	914.4	24	609.6	NM-M(*)-(Matl)-24-90HB36	75 $\frac{5}{8}$	1,921	107	2,718
36	914.4	30	762	NM-M(*)-(Matl)-30-90HB36	81 $\frac{5}{8}$	2,073	115 $\frac{5}{8}$	2,931
36	914.4	36	914.4	NM-M(*)-(Matl)-36-90HB36	87 $\frac{5}{8}$	2,226	123 $\frac{5}{8}$	3,146

(*) Side Rail Height. One pair of fiberglass splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - 45° Horizontal bend fittings

45° Horizontal bend

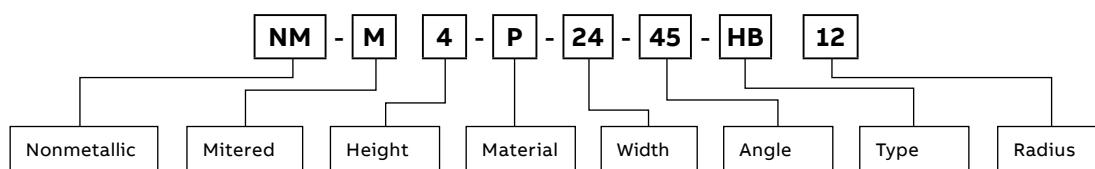
Bend radius (R)	Tray width (W)	Dimensions						
		(in.) (mm)	(in.) (mm)	Cat. No.	A (in.)	A (mm)	L (in.)	L (mm)
12	304.8	6	152.4	NM-M(*)-(Matl)-06-45HB12	20 ^{11/16}	525	38 ^{7/8}	987
12	304.8	9	228.6	NM-M(*)-(Matl)-09-45HB12	23 ^{11/16}	602	41	1,041
12	304.8	12	304.8	NM-M(*)-(Matl)-12-45HB12	26 ^{11/16}	678	43 ^{1/8}	1,095
12	304.8	18	457.2	NM-M(*)-(Matl)-18-45HB12	32 ^{11/16}	830	47 ^{7/8}	1,203
12	304.8	24	609.6	NM-M(*)-(Matl)-24-45HB12	38 ^{11/16}	983	51 ^{1/8}	1,311
12	304.8	30	762	NM-M(*)-(Matl)-30-45HB12	44 ^{11/16}	1,135	55 ^{7/8}	1,419
12	304.8	36	914.4	NM-M(*)-(Matl)-36-45HB12	50 ^{11/16}	1,287	60 ^{1/8}	1,527
24	609.6	6	152.4	NM-M(*)-(Matl)-06-45HB24	24 ^{1/4}	616	47 ^{7/8}	1,203
24	609.6	9	228.6	NM-M(*)-(Matl)-09-45HB24	27 ^{1/4}	692	49 ^{1/2}	1,257
24	609.6	12	304.8	NM-M(*)-(Matl)-12-45HB24	30 ^{1/4}	768	51 ^{1/8}	1,311
24	609.6	18	457.2	NM-M(*)-(Matl)-18-45HB24	36 ^{1/4}	921	55 ^{7/8}	1,419
24	609.6	24	609.6	NM-M(*)-(Matl)-24-45HB24	42 ^{1/4}	1,073	60 ^{1/8}	1,527
24	609.6	30	762	NM-M(*)-(Matl)-30-45HB24	48 ^{1/4}	1,226	64 ^{3/8}	1,635
24	609.6	36	914.4	NM-M(*)-(Matl)-36-45HB24	54 ^{1/4}	1,378	68 ^{5/8}	1,743
36	914.4	6	152.4	NM-M(*)-(Matl)-06-45HB36	27 ^{3/4}	705	55 ^{7/8}	1,419
36	914.4	9	228.6	NM-M(*)-(Matl)-09-45HB36	30 ^{3/4}	781	58	1,473
36	914.4	12	304.8	NM-M(*)-(Matl)-12-45HB36	33 ^{3/4}	857	60 ^{1/8}	1,527
36	914.4	18	457.2	NM-M(*)-(Matl)-18-45HB36	39 ^{3/4}	1,010	64 ^{3/8}	1,635
36	914.4	24	609.6	NM-M(*)-(Matl)-24-45HB36	45 ^{3/4}	1,162	68 ^{5/8}	1,743
36	914.4	30	762	NM-M(*)-(Matl)-30-45HB36	51 ^{3/4}	1,314	72 ^{3/16}	1,846
36	914.4	36	914.4	NM-M(*)-(Matl)-36-45HB36	57 ^{3/4}	1,467	77 ^{1/16}	1,957

(*) Side Rail Height. One pair of fiberglass splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9^{1/4}" nominal (235mm). For other types of splice plates, see pages 353-355.

Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - Horizontal tee fittings

Horizontal tee

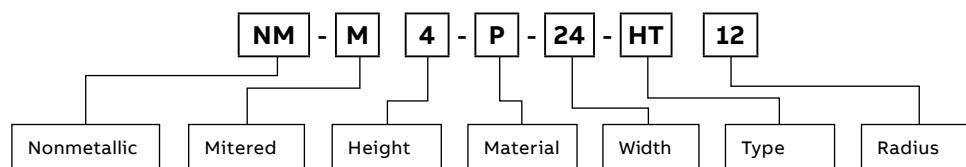
Bend radius (R)				Tray width (W)	Dimensions			
(in.)	(mm)	(in.)	(mm)	Cat. No.	A (in.)	A (mm)	L (in.)	L (mm)
12	304.8	6	152.4	NM-M(*)-(Matl)-06-HT12	30%	780	55½	1,410
12	304.8	9	228.6	NM-M(*)-(Matl)-09-HT12	33%	850	55½	1,410
12	304.8	12	304.8	NM-M(*)-(Matl)-12-HT12	36%	930	55½	1,410
12	304.8	18	457.2	NM-M(*)-(Matl)-18-HT12	42%	1,080	64¾	1,640
12	304.8	24	609.6	NM-M(*)-(Matl)-24-HT12	48%	1,240	74	1,880
12	304.8	30	762	NM-M(*)-(Matl)-30-HT12	54%	1,390	74	1,880
12	304.8	36	914.4	NM-M(*)-(Matl)-36-HT12	60%	1,540	83¼	2,110
24	609.6	6	152.4	NM-M(*)-(Matl)-06-HT24	42%	1,080	74	1,880
24	609.6	9	228.6	NM-M(*)-(Matl)-09-HT24	45%	1,160	83¼	2,110
24	609.6	12	304.8	NM-M(*)-(Matl)-12-HT24	48%	1,240	83¼	2,110
24	609.6	18	457.2	NM-M(*)-(Matl)-18-HT24	54%	1,390	92½	2,350
24	609.6	24	609.6	NM-M(*)-(Matl)-24-HT24	60%	1,540	92½	2,350
24	609.6	30	762	NM-M(*)-(Matl)-30-HT24	66%	1,690	101¼	2,580
24	609.6	36	914.4	NM-M(*)-(Matl)-36-HT24	72%	1,840	111	2,820
36	914.4	6	152.4	NM-M(*)-(Matl)-06-HT36	54%	1,390	101¼	2,580
36	914.4	9	228.6	NM-M(*)-(Matl)-09-HT36	57%	1,460	101¼	2,580
36	914.4	12	304.8	NM-M(*)-(Matl)-12-HT36	60%	1,540	111	2,820
36	914.4	18	457.2	NM-M(*)-(Matl)-18-HT36	66%	1,690	111	2,820
36	914.4	24	609.6	NM-M(*)-(Matl)-24-HT36	72%	1,840	120¼	3,050
36	914.4	30	762	NM-M(*)-(Matl)-30-HT36	78%	2,000	129½	3,290
36	914.4	36	914.4	NM-M(*)-(Matl)-36-HT36	84%	2,150	129½	3,290

(*) Side Rail Height. Two pairs of fiberglass splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9¾" nominal (235mm). For other types of splice plates, see pages 353-355.

Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - Horizontal cross fittings

Horizontal cross

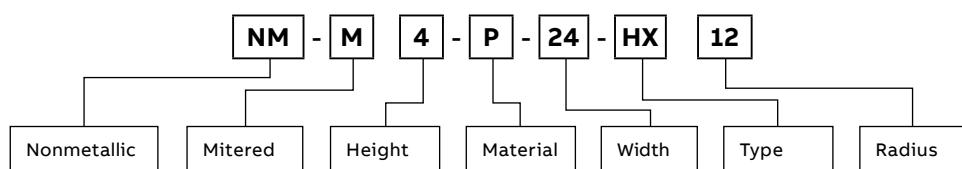
Bend radius (R)	Tray width (W)	Cat. No.	Dimensions			
(in.) (mm)	(in.) (mm)		A (in.)	A (mm)	L (in.)	L (mm)
12 304.8	6 152.4	NM-M(*)-(Matl)-06-HX12	54 $\frac{3}{4}$	1,390	55 $\frac{1}{2}$	1,410
12 304.8	9 228.6	NM-M(*)-(Matl)-09-HX12	57 $\frac{3}{4}$	1,470	55 $\frac{1}{2}$	1,410
12 304.8	12 304.8	NM-M(*)-(Matl)-12-HX12	60 $\frac{3}{4}$	1,540	55 $\frac{1}{2}$	1,410
12 304.8	18 457.2	NM-M(*)-(Matl)-18-HX12	66 $\frac{3}{4}$	1,700	64 $\frac{3}{4}$	1,640
12 304.8	24 609.6	NM-M(*)-(Matl)-24-HX12	72 $\frac{3}{4}$	1,850	74	1,880
12 304.8	30 762	NM-M(*)-(Matl)-30-HX12	78 $\frac{3}{4}$	2,000	74	1,880
12 304.8	36 914.4	NM-M(*)-(Matl)-36-HX12	84 $\frac{3}{4}$	2,150	83 $\frac{1}{4}$	2,110
24 609.6	6 152.4	NM-M(*)-(Matl)-06-HX24	78 $\frac{3}{4}$	2,000	74	1,880
24 609.6	9 228.6	NM-M(*)-(Matl)-09-HX24	81 $\frac{3}{4}$	2,080	83 $\frac{1}{4}$	2,110
24 609.6	12 304.8	NM-M(*)-(Matl)-12-HX24	84 $\frac{3}{4}$	2,150	83 $\frac{1}{4}$	2,110
24 609.6	18 457.2	NM-M(*)-(Matl)-18-HX24	90 $\frac{3}{4}$	2,310	92 $\frac{1}{2}$	2,350
24 609.6	24 609.6	NM-M(*)-(Matl)-24-HX24	96 $\frac{3}{4}$	2,460	92 $\frac{1}{2}$	2,350
24 609.6	30 762	NM-M(*)-(Matl)-30-HX24	102 $\frac{3}{4}$	2,610	101 $\frac{1}{4}$	2,580
24 609.6	36 914.4	NM-M(*)-(Matl)-36-HX24	108 $\frac{3}{4}$	2,760	111	2,820
36 914.4	6 152.4	NM-M(*)-(Matl)-06-HX36	102 $\frac{3}{4}$	2,610	101 $\frac{1}{4}$	2,580
36 914.4	9 228.6	NM-M(*)-(Matl)-09-HX36	105 $\frac{3}{4}$	2,690	101 $\frac{1}{4}$	2,580
36 914.4	12 304.8	NM-M(*)-(Matl)-12-HX36	108 $\frac{3}{4}$	2,760	111	2,820
36 914.4	18 457.2	NM-M(*)-(Matl)-18-HX36	114 $\frac{3}{4}$	2,910	111	2,820
36 914.4	24 609.6	NM-M(*)-(Matl)-24-HX36	120 $\frac{3}{4}$	3,070	120 $\frac{1}{4}$	3,050
36 914.4	30 762	NM-M(*)-(Matl)-30-HX36	126 $\frac{3}{4}$	3,220	129 $\frac{1}{2}$	3,290
36 914.4	36 914.4	NM-M(*)-(Matl)-36-HX36	132 $\frac{3}{4}$	3,370	129 $\frac{1}{2}$	3,290

(*) Side Rail Height. Three pairs of fiberglass splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - Horizontal reducer fittings

Horizontal reducer - 4" (101.6mm)

Tray widths

W1 (in.)	W2 (in.)	Left-hand reducer Cat. No.	Dim. A (in.)	Dim. L (mm)
9	228.6	NM-M(*)-(Matl)-09-LR06	27 3/4	705
12	304.8	NM-M(*)-(Matl)-12-LR06	37	940
12	304.8	NM-M(*)-(Matl)-12-LR09	27 3/4	705
18	457.2	NM-M(*)-(Matl)-18-LR06	37	940
18	457.2	NM-M(*)-(Matl)-18-LR09	37	940
18	457.2	NM-M(*)-(Matl)-18-LR12	27 3/4	705
24	609.6	NM-M(*)-(Matl)-24-LR06	46 1/4	1,175
24	609.6	NM-M(*)-(Matl)-24-LR09	37	940
24	609.6	NM-M(*)-(Matl)-24-LR12	37	940
24	609.6	NM-M(*)-(Matl)-24-LR18	27 3/4	705
30	762	NM-M(*)-(Matl)-30-LR06	46 1/4	1,175
30	762	NM-M(*)-(Matl)-30-LR09	46 1/4	1,175
30	762	NM-M(*)-(Matl)-30-LR12	37	940
30	762	NM-M(*)-(Matl)-30-LR18	37	940
30	762	NM-M(*)-(Matl)-30-LR24	27 3/4	705
36	914.4	NM-M(*)-(Matl)-36-LR06	55 1/2	1,410
36	914.4	NM-M(*)-(Matl)-36-LR09	46 1/4	1,175
36	914.4	NM-M(*)-(Matl)-36-LR12	46 1/4	1,175
36	914.4	NM-M(*)-(Matl)-36-LR18	37	940
36	914.4	NM-M(*)-(Matl)-36-LR24	37	940
36	914.4	NM-M(*)-(Matl)-36-LR30	27 3/4	705

Straight reducer Cat. No.	Dim. A (in.)	Dim. L (mm)
NM-M(*)-(Matl)-09-SR06	26 3/8	670
NM-M(*)-(Matl)-12-SR06	26 3/4	679
NM-M(*)-(Matl)-12-SR09	26 3/8	670
NM-M(*)-(Matl)-18-SR06	34 1/2	876
NM-M(*)-(Matl)-18-SR09	33	838
NM-M(*)-(Matl)-18-SR12	26 3/4	679
NM-M(*)-(Matl)-24-SR06	37 1/2	953
NM-M(*)-(Matl)-24-SR09	36	914
NM-M(*)-(Matl)-24-SR12	36	914
NM-M(*)-(Matl)-24-SR18	26 3/4	679
NM-M(*)-(Matl)-30-SR06	40 1/2	1,029
NM-M(*)-(Matl)-30-SR09	39	991
NM-M(*)-(Matl)-30-SR12	37 1/2	953
NM-M(*)-(Matl)-30-SR18	35 3/4	908
NM-M(*)-(Matl)-30-SR24	26 3/4	679
NM-M(*)-(Matl)-36-SR06	43 1/2	1,105
NM-M(*)-(Matl)-36-SR09	42	1,067
NM-M(*)-(Matl)-36-SR12	40 1/2	1,029
NM-M(*)-(Matl)-36-SR18	37 1/2	953
NM-M(*)-(Matl)-36-SR24	35 3/4	908
NM-M(*)-(Matl)-36-SR30	26 3/4	679

Right-hand reducer Cat. No.	Dim. A (in.)	Dim. L (mm)
NM-M(*)-(Matl)-09-RR06	27 3/4	705
NM-M(*)-(Matl)-12-RR06	37	940
NM-M(*)-(Matl)-12-RR09	27 3/4	705
NM-M(*)-(Matl)-18-RR06	37	940
NM-M(*)-(Matl)-18-RR09	37	940
NM-M(*)-(Matl)-18-RR12	27 3/4	705
NM-M(*)-(Matl)-24-RR06	46 1/4	1,175
NM-M(*)-(Matl)-24-RR09	37	940
NM-M(*)-(Matl)-24-RR12	37	940
NM-M(*)-(Matl)-24-RR18	27 3/4	705
NM-M(*)-(Matl)-24-RR24	27 3/4	705
NM-M(*)-(Matl)-36-RR06	55 1/2	1,410
NM-M(*)-(Matl)-36-RR09	46 1/4	1,175
NM-M(*)-(Matl)-36-RR12	46 1/4	1,175
NM-M(*)-(Matl)-36-RR18	37	940
NM-M(*)-(Matl)-36-RR24	37	940
NM-M(*)-(Matl)-36-RR30	27 3/4	705

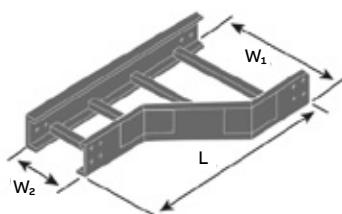
(*) Side Rail Height. One pair of fiberglass splice plates with SS6 hardware included. Dimensions for reference only; when critical, contact your ABB representative.

Consult your ABB representative for availability of molded fittings. Standard rung spacing for fittings is 9 1/4" nominal (235mm).

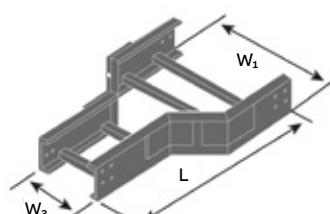
For other types of splice plates, see pages 353-355.

Dimensions (4" & 6")

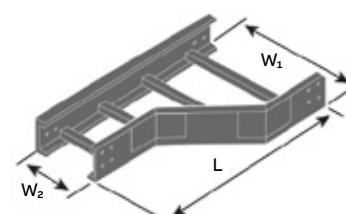
Left-hand reducer



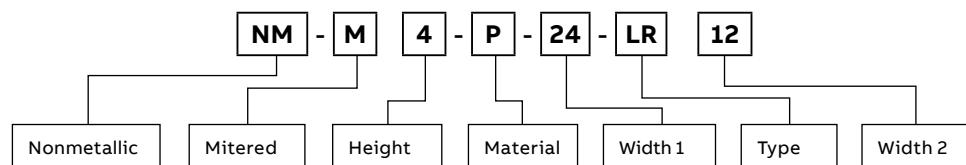
Straight reducer



Right hand reducer



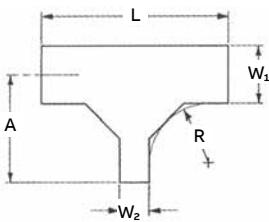
Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - Horizontal reducing tee fittings

Horizontal reducing tee - 12" (304.8mm) radius

	Tray width (W1)		Tray width (W2)		Cat. No.	12" (304.8mm) Radius			
	(in.) (mm)	(in.) (mm)	A (in.)	A (mm)		L (in.)	L (mm)		
	6 228.6	6 152.4	NM-M(*)-(Matl)-09-06-HT12	33%	2,813.05	55½	2,197.10		
	9 304.8	6 152.4	NM-M(*)-(Matl)-12-06-HT12	26%	1,174.75	55½	2,197.10		
	9 304.8	9 228.6	NM-M(*)-(Matl)-12-09-HT12	26%	1,174.75	55½	2,273.30		
	12 457.2	6 152.4	NM-M(*)-(Matl)-18-06-HT12	42%	3,117.85	55½	2,197.10		
	12 457.2	9 228.6	NM-M(*)-(Matl)-18-09-HT12	42%	1,250.95	55½	2,273.30		
	12 457.2	12 304.8	NM-M(*)-(Matl)-18-12-HT12	42%	1,250.95	55½	2,349.50		

(*) Side Rail Height. Two pairs of fiberglass splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9½" nominal (235mm). For other types of splice plates, see pages 353-355.

Horizontal reducing tee - 24" (609.6mm) & 36" (914.4mm) radius

Tray width (W1)	Tray width (W2)	Cat. No.	24" (609.6mm) Radius				36" (914.4mm) Radius			
			(in.) (mm)	(in.) (mm)	(**) Insert radius 24" or 36"	A (in.)	A (mm)	L (in.)	L (mm)	A (in.)
6 228.6	6 152.4	NM-M(*)-(Matl)-09-06-HT(**)	42%	2,813.05	74	2,197.10	54%	908.05	101½	1,739.90
9 304.8	6 152.4	NM-M(*)-(Matl)-12-06-HT(**)	48%	1,174.75	74	2,197.10	60%	946.15	101½	1,739.90
9 304.8	9 228.6	NM-M(*)-(Matl)-12-09-HT(**)	48%	1,174.75	83½	2,273.30	60%	946.15	101½	1,816.10
12 457.2	6 152.4	NM-M(*)-(Matl)-18-06-HT(**)	54%	3,117.85	74	2,197.10	66%	1,022.35	101½	1,739.90
12 457.2	9 228.6	NM-M(*)-(Matl)-18-09-HT(**)	54%	1,250.95	83½	2,273.30	66%	1,022.35	101½	1,816.10
12 457.2	12 304.8	NM-M(*)-(Matl)-18-12-HT(**)	54%	1,250.95	83½	2,349.50	66%	1,022.35	111	1,892.30

(*) Side Rail Height. (**) NOTE: Insert radius, 24" (609.6mm) or 36" (914.4mm). Two pairs of fiberglass splice plates with SS6 hardware included.

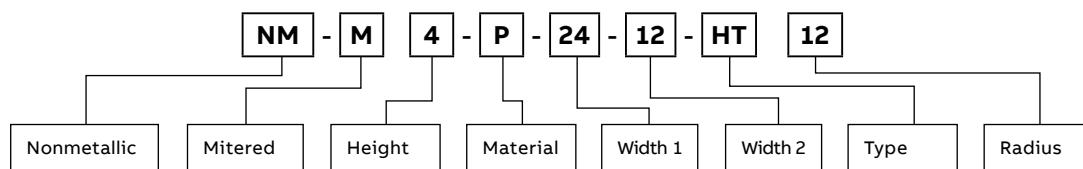
Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9½" nominal (235mm). For other types of splice plates, see pages 353-355.

Sample mitered fitting



Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - Horizontal expanding tee fittings

Horizontal expanding tee – 12" (304.8mm) & 24" (609.6mm) radius

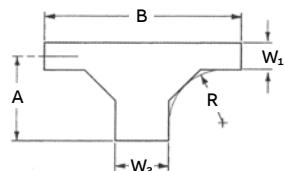
Tray width (W1) (in.) (mm)	Tray width (W2) (in.) (mm)	Cat. No. (**) Insert radius 12" or 24"	12" (304.8mm) Radius				24" (609.6mm) Radius			
			A (in.)	A (mm)	B (in.)	B (mm)	A (in.)	A (mm)	B (in.)	B (mm)
9 228.6	12 304.8	NM-M(*)-(Matl)-09-12-HT(**)	33 $\frac{5}{8}$	854	55 $\frac{1}{2}$	1,410	45 $\frac{5}{8}$	1,159	83 $\frac{1}{4}$	2,115
9 228.6	18 457.2	NM-M(*)-(Matl)-09-18-HT(**)	33 $\frac{5}{8}$	854	64 $\frac{3}{4}$	1,645	45 $\frac{5}{8}$	1,159	92 $\frac{1}{2}$	2,350
9 228.6	24 609.6	NM-M(*)-(Matl)-09-24-HT(**)	33 $\frac{5}{8}$	854	74	1,880	45 $\frac{5}{8}$	1,159	92 $\frac{1}{2}$	2,350
9 228.6	30 762	NM-M(*)-(Matl)-09-30-HT(**)	33 $\frac{5}{8}$	854	74	1,880	45 $\frac{5}{8}$	1,159	101 $\frac{3}{4}$	2,584
9 228.6	36 914.4	NM-M(*)-(Matl)-09-36-HT(**)	33 $\frac{5}{8}$	854	83 $\frac{1}{4}$	2,115	45 $\frac{5}{8}$	1,159	111	2,819
12 304.8	18 457.2	NM-M(*)-(Matl)-12-18-HT(**)	26 $\frac{5}{8}$	676	64 $\frac{3}{4}$	1,645	48 $\frac{5}{8}$	1,235	92 $\frac{1}{2}$	2,350
12 304.8	24 609.6	NM-M(*)-(Matl)-12-24-HT(**)	26 $\frac{5}{8}$	676	74	1,880	48 $\frac{5}{8}$	1,235	92 $\frac{1}{2}$	2,350
12 304.8	30 762	NM-M(*)-(Matl)-12-30-HT(**)	26 $\frac{5}{8}$	676	74	1,880	48 $\frac{5}{8}$	1,235	101 $\frac{3}{4}$	2,584
12 304.8	36 914.4	NM-M(*)-(Matl)-12-36-HT(**)	26 $\frac{5}{8}$	676	83 $\frac{1}{4}$	2,115	48 $\frac{5}{8}$	1,235	111	2,819
18 457.2	24 609.6	NM-M(*)-(Matl)-18-24-HT(**)	42 $\frac{5}{8}$	1,083	74	1,880	54 $\frac{5}{8}$	1,387	92 $\frac{1}{2}$	2,350
18 457.2	30 762	NM-M(*)-(Matl)-18-30-HT(**)	42 $\frac{5}{8}$	1,083	74	1,880	54 $\frac{5}{8}$	1,387	101 $\frac{3}{4}$	2,584
18 457.2	36 914.4	NM-M(*)-(Matl)-18-36-HT(**)	42 $\frac{5}{8}$	1,083	83 $\frac{1}{4}$	2,115	54 $\frac{5}{8}$	1,387	111	2,819
24 609.6	30 762	NM-M(*)-(Matl)-24-30-HT(**)	48 $\frac{5}{8}$	1,235	74	1,880	60 $\frac{5}{8}$	1,540	101 $\frac{3}{4}$	2,584
24 609.6	36 914.4	NM-M(*)-(Matl)-24-36-HT(**)	48 $\frac{5}{8}$	1,235	83 $\frac{1}{4}$	2,115	60 $\frac{5}{8}$	1,540	111	2,819
30 762	36 914.4	NM-M(*)-(Matl)-30-36-HT(**)	54 $\frac{5}{8}$	1,387	83 $\frac{1}{4}$	2,115	66 $\frac{5}{8}$	1,692	111	2,819

(*) Side Rail Height. * NOTE: Insert radius, 12" (304.8mm) or 24" (609.6mm). Two pairs of fiberglass splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9" (228.6mm). For other types of splice plates, see pages 353-355.

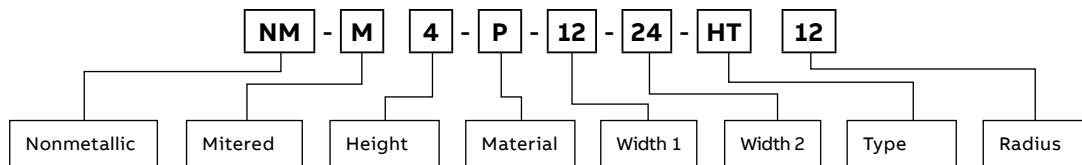
Dimensions



Sample mitered fitting



Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - Horizontal expanding tee fittings

Horizontal expanding tee - 36" (914.4mm) radius

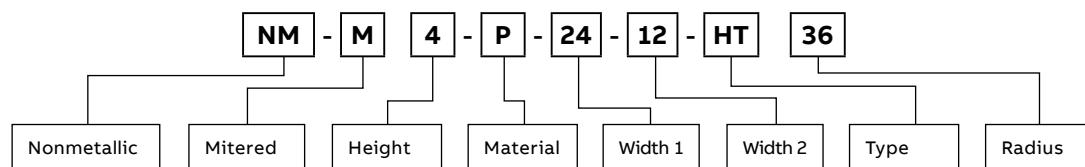
Tray width (W1) (in.) (mm)	Tray width (W2) (in.) (mm)	Cat. No.	36" (914.4mm) Radius			
			A (in.)	A (mm)	B (in.)	B (mm)
9 228.6	12 304.8	NM-M(*)-(Matl)-09-12-HT36	57 $\frac{1}{8}$	1,464	111	2,819
9 228.6	18 457.2	NM-M(*)-(Matl)-09-18-HT36	57 $\frac{1}{8}$	1,464	111	2,819
9 228.6	24 609.6	NM-M(*)-(Matl)-09-24-HT36	57 $\frac{1}{8}$	1,464	120 $\frac{1}{4}$	3,054
9 228.6	30 609.6	NM-M(*)-(Matl)-09-30-HT36	57 $\frac{1}{8}$	1,464	129 $\frac{1}{2}$	3,289
9 228.6	36 762	NM-M(*)-(Matl)-09-36-HT36	57 $\frac{1}{8}$	1,464	129 $\frac{1}{2}$	3,289
12 304.8	18 457.2	NM-M(*)-(Matl)-12-18-HT36	60 $\frac{1}{8}$	1,540	111	2,819
12 304.8	24 609.6	NM-M(*)-(Matl)-12-24-HT36	60 $\frac{1}{8}$	1,540	120 $\frac{1}{4}$	3,054
12 304.8	30 609.6	NM-M(*)-(Matl)-12-30-HT36	60 $\frac{1}{8}$	1,540	129 $\frac{1}{2}$	3,289
12 304.8	36 762	NM-M(*)-(Matl)-12-36-HT36	60 $\frac{1}{8}$	1,540	129 $\frac{1}{2}$	3,289
18 457.2	24 609.6	NM-M(*)-(Matl)-18-24-HT36	66 $\frac{1}{8}$	1,692	120 $\frac{1}{4}$	3,054
18 457.2	30 609.6	NM-M(*)-(Matl)-18-30-HT36	66 $\frac{1}{8}$	1,692	129 $\frac{1}{2}$	3,289
18 457.2	36 762	NM-M(*)-(Matl)-18-36-HT36	66 $\frac{1}{8}$	1,692	129 $\frac{1}{2}$	3,289
24 609.6	30 609.6	NM-M(*)-(Matl)-24-30-HT36	72 $\frac{1}{8}$	1,845	129 $\frac{1}{2}$	3,289
24 609.6	36 762	NM-M(*)-(Matl)-24-36-HT36	72 $\frac{1}{8}$	1,845	129 $\frac{1}{2}$	3,289
30 762	36 762	NM-M(*)-(Matl)-30-36-HT36	78 $\frac{1}{8}$	1,997	129 $\frac{1}{2}$	3,289

(*) Side Rail Height. Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9" (228.6mm). For other types of splice plates, see pages 353-355.

Fitting number selection



Sample mitered fitting



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - Horizontal expanding/reducing cross fittings

Horizontal expanding/reducing cross - 12" (304.8mm) & 24" (609.6mm) radius

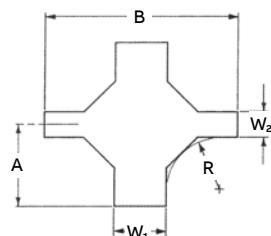
Tray width (W1)	Tray width (W2)	Cat. No. *Insert radius (12" or 24")	12" (304.8mm) Radius				24" (609.6mm) Radius				
			A (in.)	A (mm)	B (in.)	B (mm)	A (in.)	A (mm)	B (in.)	B (mm)	
6	152.4	9 228.6	NM-M(*)-(Matl)-06-09-HX*	54 $\frac{3}{4}$	1,391	55 $\frac{1}{2}$	1,410	78 $\frac{3}{4}$	2,000	84 $\frac{1}{4}$	2,140
6	152.4	12 304.8	NM-M(*)-(Matl)-06-12-HX*	54 $\frac{3}{4}$	1,391	55 $\frac{1}{2}$	1,410	78 $\frac{3}{4}$	4,972	83 $\frac{1}{4}$	2,115
6	152.4	18 457.2	NM-M(*)-(Matl)-06-18-HX*	54 $\frac{3}{4}$	1,391	64 $\frac{3}{4}$	1,645	78 $\frac{3}{4}$	2,000	92 $\frac{1}{2}$	2,350
6	152.4	24 609.6	NM-M(*)-(Matl)-06-24-HX*	54 $\frac{3}{4}$	1,391	74	1,880	78 $\frac{3}{4}$	2,000	92 $\frac{1}{2}$	2,350
6	152.4	30 762	NM-M(*)-(Matl)-06-30-HX*	54 $\frac{3}{4}$	1,391	74	1,880	78 $\frac{3}{4}$	2,000	101 $\frac{1}{4}$	2,584
6	152.4	36 914.4	NM-M(*)-(Matl)-06-36-HX*	54 $\frac{3}{4}$	1,391	83 $\frac{1}{4}$	2,115	78 $\frac{3}{4}$	2,000	111	2,819
9	228.6	12 304.8	NM-M(*)-(Matl)-09-12-HX*	57 $\frac{3}{4}$	1,467	55 $\frac{1}{2}$	1,410	81 $\frac{1}{4}$	2,076	83 $\frac{1}{4}$	2,115
9	228.6	18 457.2	NM-M(*)-(Matl)-09-18-HX*	57 $\frac{3}{4}$	1,467	64 $\frac{3}{4}$	1,645	81 $\frac{1}{4}$	2,076	92 $\frac{1}{2}$	2,350
9	228.6	24 609.6	NM-M(*)-(Matl)-09-24-HX*	57 $\frac{3}{4}$	1,467	74	1,880	81 $\frac{1}{4}$	2,076	92 $\frac{1}{2}$	2,350
9	228.6	30 762	NM-M(*)-(Matl)-09-30-HX*	57 $\frac{3}{4}$	1,467	74	1,880	81 $\frac{1}{4}$	2,076	101 $\frac{1}{4}$	2,584
9	228.6	36 914.4	NM-M(*)-(Matl)-09-36-HX*	57 $\frac{3}{4}$	1,467	83 $\frac{1}{4}$	2,115	81 $\frac{1}{4}$	2,076	111	2,819
12	304.8	18 457.2	NM-M(*)-(Matl)-12-18-HX*	60 $\frac{3}{4}$	1,543	64 $\frac{3}{4}$	1,645	84 $\frac{3}{4}$	2,153	92 $\frac{1}{2}$	2,350
12	304.8	24 609.6	NM-M(*)-(Matl)-12-24-HX*	60 $\frac{3}{4}$	1,543	74	1,880	84 $\frac{3}{4}$	2,153	92 $\frac{1}{2}$	2,350
12	304.8	30 762	NM-M(*)-(Matl)-12-30-HX*	60 $\frac{3}{4}$	1,543	74	1,880	84 $\frac{3}{4}$	2,153	101 $\frac{1}{4}$	2,584
12	304.8	36 914.4	NM-M(*)-(Matl)-12-36-HX*	60 $\frac{3}{4}$	1,543	83 $\frac{1}{4}$	2,115	84 $\frac{3}{4}$	2,153	111	2,819
18	457.2	24 609.6	NM-M(*)-(Matl)-18-24-HX*	66 $\frac{3}{4}$	1,695	74	1,880	90 $\frac{3}{4}$	2,305	92 $\frac{1}{2}$	2,350
18	457.2	30 762	NM-M(*)-(Matl)-18-30-HX*	66 $\frac{3}{4}$	1,695	74	1,880	90 $\frac{3}{4}$	2,305	101 $\frac{1}{4}$	2,584
18	457.2	36 914.4	NM-M(*)-(Matl)-18-36-HX*	66 $\frac{3}{4}$	1,695	83 $\frac{1}{4}$	2,115	90 $\frac{3}{4}$	2,305	111	2,819
24	609.6	30 609.6	NM-M(*)-(Matl)-24-30-HX*	72 $\frac{3}{4}$	1,848	74	1,880	96 $\frac{3}{4}$	2,457	101 $\frac{1}{4}$	2,584
24	609.6	36 914.4	NM-M(*)-(Matl)-24-36-HX*	72 $\frac{3}{4}$	1,848	83 $\frac{1}{4}$	2,115	96 $\frac{3}{4}$	2,457	111	2,819
30	762	36 914.4	NM-M(*)-(Matl)-30-36-HX*	78 $\frac{3}{4}$	2,000	83 $\frac{1}{4}$	2,115	102 $\frac{3}{4}$	2,610	111	2,819

(*) Side Rail Height. * NOTE: Insert radius, 12" (304.8mm) or 24" (609.6mm). Three pairs of fiberglass splice plates with SS6 hardware included.

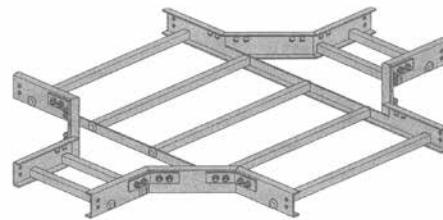
Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

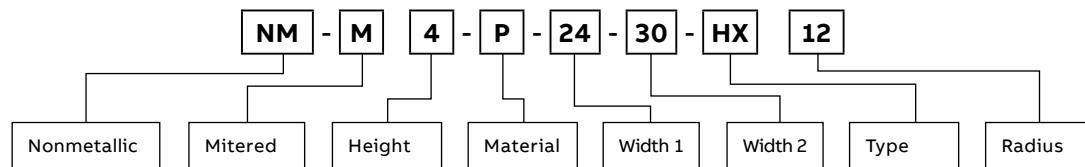
Dimensions



Sample mitered fitting



Fitting number selection



Nonmetallic - Cable tray fittings

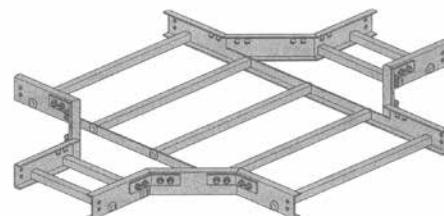
3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - Horizontal expanding/reducing cross fittings

Horizontal expanding/reducing cross - 36" (914.4mm) radius

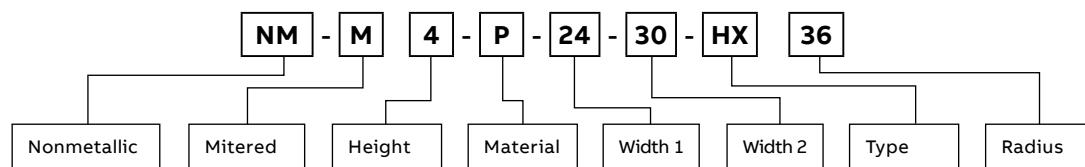
Tray width (W1) (in.) (mm)	Tray width (W2) (in.) (mm)	Cat. No.	36" (914.4mm) Radius			
			A (in.)	A (mm)	B (in.)	B (mm)
6 152.4	9 228.6	NM-M(*)-(Matl)-06-09-HX36	102 ³ / ₄	2,610	101 ³ / ₄	2,584
6 152.4	12 304.8	NM-M(*)-(Matl)-06-12-HX36	102 ³ / ₄	2,610	111	2,819
6 152.4	18 457.2	NM-M(*)-(Matl)-06-18-HX36	102 ³ / ₄	2,610	111	2,819
6 152.4	24 609.6	NM-M(*)-(Matl)-06-24-HX36	102 ³ / ₄	2,610	120 ¹ / ₄	3,054
6 152.4	30 609.6	NM-M(*)-(Matl)-06-30-HX36	102 ³ / ₄	2,610	129 ¹ / ₂	3,289
6 152.4	36 762	NM-M(*)-(Matl)-06-36-HX36	102 ³ / ₄	2,610	129 ¹ / ₂	3,289
9 228.6	12 304.8	NM-M(*)-(Matl)-09-12-HX36	105 ³ / ₄	2,686	111	2,819
9 228.6	18 457.2	NM-M(*)-(Matl)-09-18-HX36	105 ³ / ₄	2,686	111	2,819
9 228.6	24 609.6	NM-M(*)-(Matl)-09-24-HX36	105 ³ / ₄	2,686	120 ¹ / ₄	3,054
9 228.6	30 609.6	NM-M(*)-(Matl)-09-30-HX36	105 ³ / ₄	2,686	129 ¹ / ₂	3,289
9 228.6	36 762	NM-M(*)-(Matl)-09-36-HX36	105 ³ / ₄	2,686	129 ¹ / ₂	3,289
12 304.8	18 457.2	NM-M(*)-(Matl)-12-18-HX36	108 ³ / ₄	2,762	111	2,819
12 304.8	24 609.6	NM-M(*)-(Matl)-12-24-HX36	108 ³ / ₄	2,762	120 ¹ / ₄	3,054
12 304.8	30 609.6	NM-M(*)-(Matl)-12-30-HX36	108 ³ / ₄	2,762	129 ¹ / ₂	3,289
12 304.8	36 762	NM-M(*)-(Matl)-12-36-HX36	108 ³ / ₄	2,762	129 ¹ / ₂	3,289
18 457.2	24 609.6	NM-M(*)-(Matl)-18-24-HX36	115 ³ / ₄	2,940	120 ¹ / ₄	3,054
18 457.2	30 609.6	NM-M(*)-(Matl)-18-30-HX36	115 ³ / ₄	2,940	129 ¹ / ₂	3,289
18 457.2	36 762	NM-M(*)-(Matl)-18-36-HX36	115 ³ / ₄	2,940	129 ¹ / ₂	3,289
24 609.6	30 609.6	NM-M(*)-(Matl)-24-30-HX36	120 ³ / ₄	3,067	129 ¹ / ₂	3,289
24 609.6	36 762	NM-M(*)-(Matl)-24-36-HX36	120 ³ / ₄	3,067	129 ¹ / ₂	3,289
30 762	36 762	NM-M(*)-(Matl)-30-36-HX36	126 ³ / ₄	3,219	129 ¹ / ₂	3,289

(*) Side Rail Height. Three pairs of fiberglass splice plates with SS6 hardware included. Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings. Standard rung spacing for fittings is 9¹/₄" nominal (235mm). For other types of splice plates, see pages 353-355.

Sample mitered fitting



Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - 90° Vertical inside/outside bend fittings

90° Vertical inside bend fittings

Bend radius (R)	Tray width (W)	Cat. No.	Vertical bend 90°			
			A (in.)	A (mm)	L (in.)	L (mm)
12	304.8	4 101.6	NM-M(*)-(Matl)-04-90(**)12	20 $\frac{1}{8}$	530	29 $\frac{1}{2}$ 749
12	304.8	6 152.4	NM-M(*)-(Matl)-06-90(**)12	20 $\frac{1}{8}$	530	29 $\frac{1}{2}$ 749
12	304.8	8 203.2	NM-M(*)-(Matl)-08-90(**)12	20 $\frac{1}{8}$	530	29 $\frac{1}{2}$ 749
24	609.6	4 101.6	NM-M(*)-(Matl)-04-90(**)24	32 $\frac{1}{8}$	835	46 $\frac{1}{2}$ 1,181
24	609.6	6 152.4	NM-M(*)-(Matl)-06-90(**)24	32 $\frac{1}{8}$	835	46 $\frac{1}{2}$ 1,181
24	609.6	8 203.2	NM-M(*)-(Matl)-08-90(**)24	32 $\frac{1}{8}$	835	46 $\frac{1}{2}$ 1,181
36	914.4	4 101.6	NM-M(*)-(Matl)-04-90(**)36	44 $\frac{1}{8}$	1,133	63 $\frac{1}{16}$ 1,608
36	914.4	6 152.4	NM-M(*)-(Matl)-06-90(**)36	44 $\frac{1}{8}$	1,133	63 $\frac{1}{16}$ 1,608
36	914.4	8 203.2	NM-M(*)-(Matl)-08-90(**)36	44 $\frac{1}{8}$	1,133	63 $\frac{1}{16}$ 1,608

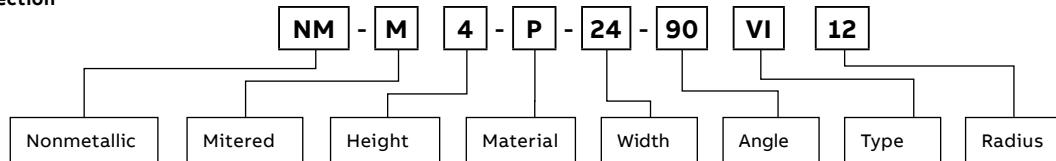
(*) Side Rail Height. (**) Add "VI" for vertical inside to complete Cat. No. One pair of fiberglass splice plates with SS6 hardware included. Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings. Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

90° Vertical outside bend fittings

Bend radius (R)	Tray width (W)	Cat. No.	Vertical bend 90°			
			A (in.)	A (mm)	L (in.)	L (mm)
12	304.8	4 101.6	NM-M(*)-(Matl)-04-90(**)12	19 $\frac{1}{8}$	505	28 $\frac{1}{8}$ 714
12	304.8	6 152.4	NM-M(*)-(Matl)-06-90(**)12	21 $\frac{1}{8}$	555	30 $\frac{15}{16}$ 786
12	304.8	8 203.2	NM-M(*)-(Matl)-08-90(**)12	23 $\frac{1}{8}$	606	33 $\frac{3}{4}$ 857
24	609.6	4 101.6	NM-M(*)-(Matl)-04-90(**)24	31 $\frac{1}{8}$	810	45 $\frac{1}{16}$ 1,145
24	609.6	6 152.4	NM-M(*)-(Matl)-06-90(**)24	33 $\frac{1}{8}$	860	47 $\frac{1}{16}$ 1,218
24	609.6	8 203.2	NM-M(*)-(Matl)-08-90(**)24	35 $\frac{1}{8}$	911	50 $\frac{3}{4}$ 1,289
36	914.4	4 101.6	NM-M(*)-(Matl)-04-90(**)36	43 $\frac{1}{8}$	1,114	62 $\frac{1}{16}$ 1,576
36	914.4	6 152.4	NM-M(*)-(Matl)-06-90(**)36	45 $\frac{1}{8}$	1,165	64 $\frac{7}{8}$ 1,648
36	914.4	8 203.2	NM-M(*)-(Matl)-08-90(**)36	47 $\frac{1}{8}$	1,216	67 $\frac{3}{4}$ 1,721

(*) Side Rail Height. (**) Add "VO" for vertical outside to complete Cat. No. One pair of fiberglass splice plates with SS6 hardware included. Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings. Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - 45°/30° Vertical inside bend fittings

45° Vertical inside bend

Bend radius (R)	Tray width (W)	Cat. No.	Vertical bend 45°				
			A (in.)	A (mm)	L (in.)	L (mm)	
12	304.8	3 76.2	NM-M(*)-(Matl)-03-45(**)12	8	203	18	457
12	304.8	4 101.6	NM-M(*)-(Matl)-04-45(**)12	11 $\frac{1}{16}$	281	19 $\frac{7}{8}$	505
12	304.8	6 152.4	NM-M(*)-(Matl)-06-45(**)12	12 $\frac{1}{2}$	318	19 $\frac{7}{8}$	505
12	304.8	8 203.2	NM-M(*)-(Matl)-08-45(**)12	13 $\frac{3}{8}$	352	19 $\frac{7}{8}$	505
24	609.6	3 76.2	NM-M(*)-(Matl)-03-45(**)24	9	229	24	610
24	609.6	4 101.6	NM-M(*)-(Matl)-04-45(**)24	14 $\frac{1}{16}$	370	28 $\frac{3}{8}$	721
24	609.6	6 152.4	NM-M(*)-(Matl)-06-45(**)24	16	406	28 $\frac{3}{8}$	721
24	609.6	8 203.2	NM-M(*)-(Matl)-08-45(**)24	17 $\frac{1}{16}$	443	28 $\frac{3}{8}$	721
36	914.4	3 76.2	NM-M(*)-(Matl)-03-45(**)36	11	279	30	762
36	914.4	4 101.6	NM-M(*)-(Matl)-04-45(**)36	18 $\frac{1}{8}$	470	36 $\frac{7}{8}$	937
36	914.4	6 152.4	NM-M(*)-(Matl)-06-45(**)36	19 $\frac{1}{2}$	495	36 $\frac{7}{8}$	937
36	914.4	8 203.2	NM-M(*)-(Matl)-08-45(**)36	20 $\frac{1}{16}$	532	36 $\frac{7}{8}$	937

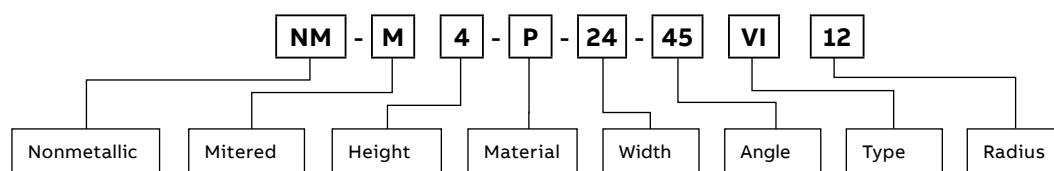
(*) Side Rail Height. (**) Add "VI" for vertical inside to complete Cat. No. One pair of fiberglass splice plates with SS6 hardware included. Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings. Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

30° Vertical inside bend

Bend radius (R)	Tray width (W)	Cat. No.	Vertical bend 30°				
			A (in.)	A (mm)	L (in.)	L (mm)	
12	304.8	3 76.2	NM-M(*)-(Matl)-03-30(**)12	8	203	18	457
12	304.8	4 101.6	NM-M(*)-(Matl)-04-30(**)12	9	229	18	457
12	304.8	6 152.4	NM-M(*)-(Matl)-06-30(**)12	10	254	18	457
12	304.8	8 203.2	NM-M(*)-(Matl)-08-30(**)12	12	305	18	457
24	609.6	3 76.2	NM-M(*)-(Matl)-03-30(**)24	9	229	24	610
24	609.6	4 101.6	NM-M(*)-(Matl)-04-30(**)24	10	254	24	610
24	609.6	6 152.4	NM-M(*)-(Matl)-06-30(**)24	12	305	24	610
24	609.6	8 203.2	NM-M(*)-(Matl)-08-30(**)24	14	356	24	610
36	914.4	3 76.2	NM-M(*)-(Matl)-03-30(**)36	11	279	30	762
36	914.4	4 101.6	NM-M(*)-(Matl)-04-30(**)36	12	305	30	762
36	914.4	6 152.4	NM-M(*)-(Matl)-06-30(**)36	14	356	30	762
36	914.4	8 203.2	NM-M(*)-(Matl)-08-30(**)36	15	381	30	762

(*) Side Rail Height. (**) Add "VI" for vertical inside to complete Cat. No. One pair of fiberglass splice plates with SS6 hardware included. Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings. Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - 35°/45° Vertical outside bend fittings

45° Vertical outside bend

Bend radius (R)	Tray width (W)	Cat. No.	Vertical bend 45°				
			A (in.)	A (mm)	L (in.)	L (mm)	
12	304.8	3 76.2	NM-M(*)-(Matl)-03-45(**)12	7	178	17	432
12	304.8	4 101.6	NM-M(*)-(Matl)-04-45(**)12	10 $\frac{1}{4}$	273	19 $\frac{1}{16}$	487
12	304.8	6 152.4	NM-M(*)-(Matl)-06-45(**)12	12 $\frac{1}{4}$	324	19 $\frac{1}{16}$	522
12	304.8	8 203.2	NM-M(*)-(Matl)-08-45(**)12	14 $\frac{1}{4}$	375	22	559
24	609.6	3 76.2	NM-M(*)-(Matl)-03-45(**)24	9	229	23	584
24	609.6	4 101.6	NM-M(*)-(Matl)-04-45(**)24	14 $\frac{5}{16}$	364	27 $\frac{11}{16}$	703
24	609.6	6 152.4	NM-M(*)-(Matl)-06-45(**)24	16 $\frac{5}{16}$	414	29 $\frac{1}{16}$	738
24	609.6	8 203.2	NM-M(*)-(Matl)-08-45(**)24	18 $\frac{5}{16}$	465	30 $\frac{1}{2}$	775
36	914.4	3 76.2	NM-M(*)-(Matl)-03-45(**)36	11	279	29	737
36	914.4	4 101.6	NM-M(*)-(Matl)-04-45(**)36	17 $\frac{13}{16}$	452	36 $\frac{1}{8}$	918
36	914.4	6 152.4	NM-M(*)-(Matl)-06-45(**)36	19 $\frac{13}{16}$	503	37 $\frac{7}{16}$	954
36	914.4	8 203.2	NM-M(*)-(Matl)-08-45(**)36	21 $\frac{13}{16}$	554	39	991

(*) Side Rail Height. (**) Add "VO" for vertical outside to complete Cat. No. One pair of fiberglass splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

30° Vertical outside bend

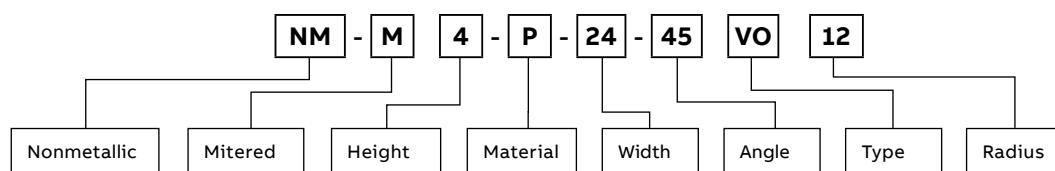
Bend radius (R)	Tray width (W)	Cat. No.	Vertical bend 30°				
			A (in.)	A (mm)	L (in.)	L (mm)	
12	304.8	3 76.2	NM-M(*)-(Matl)-03-30(**)12	7	178	17	432
12	304.8	4 101.6	NM-M(*)-(Matl)-04-30(**)12	8	203	17	432
12	304.8	6 152.4	NM-M(*)-(Matl)-06-30(**)12	10	254	18	457
12	304.8	8 203.2	NM-M(*)-(Matl)-08-30(**)12	10	254	18	457
24	609.6	3 76.2	NM-M(*)-(Matl)-03-30(**)24	9	229	23	584
24	609.6	4 101.6	NM-M(*)-(Matl)-04-30(**)24	10	254	23	584
24	609.6	6 152.4	NM-M(*)-(Matl)-06-30(**)24	12	305	24	610
24	609.6	8 203.2	NM-M(*)-(Matl)-08-30(**)24	12	305	24	610
36	914.4	3 76.2	NM-M(*)-(Matl)-03-30(**)36	11	279	29	737
36	914.4	4 101.6	NM-M(*)-(Matl)-04-30(**)36	12	305	29	737
36	914.4	6 152.4	NM-M(*)-(Matl)-06-30(**)36	14	356	30	762
36	914.4	8 203.2	NM-M(*)-(Matl)-08-30(**)36	14	356	30	762

(*) Side Rail Height. (**) Add "VO" for vertical outside to complete Cat. No. One pair of fiberglass splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

Fitting number selection



Nonmetallic - Cable tray fittings

3" (76.2mm), 4" (101.6mm), 6" (152.4mm) & 8" (203.2mm) - Vertical tee fittings

Vertical tee

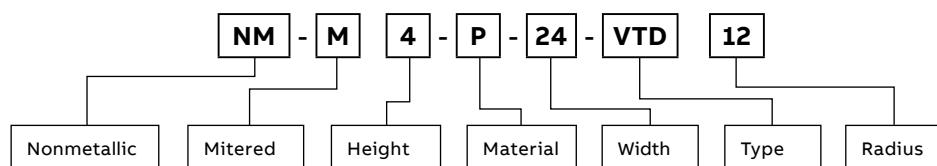
	Bend radius (R)	Tray width (W)	Cat. No.	Vertical tee		
	(in.) (mm)	(in.) (mm)		A (in.) (mm)	B (in.) (mm)	
VTD vertical tee down	24 609.6	6 152.4	NM-M(*)-(Matl)-06-(**)24	33 $\frac{1}{8}$	860	61 $\frac{3}{4}$ 1,568
	24 609.6	9 228.6	NM-M(*)-(Matl)-09-(**)24	33 $\frac{1}{8}$	860	61 $\frac{3}{4}$ 1,568
	24 609.6	12 304.8	NM-M(*)-(Matl)-12-(**)24	33 $\frac{1}{8}$	860	61 $\frac{3}{4}$ 1,568
	24 609.6	18 457.2	NM-M(*)-(Matl)-18-(**)24	33 $\frac{1}{8}$	860	61 $\frac{3}{4}$ 1,568
	24 609.6	24 609.6	NM-M(*)-(Matl)-24-(**)24	33 $\frac{1}{8}$	860	61 $\frac{3}{4}$ 1,568
	24 609.6	30 762.0	NM-M(*)-(Matl)-30-(**)24	33 $\frac{1}{8}$	860	61 $\frac{3}{4}$ 1,568
	24 609.6	36 914.4	NM-M(*)-(Matl)-36-(**)24	33 $\frac{1}{8}$	860	61 $\frac{3}{4}$ 1,568
VTU vertical tee up	36 914.4	6 152.4	NM-M(*)-(Matl)-06-(**)36	45 $\frac{1}{8}$	1,165	79 $\frac{1}{2}$ 2,178
	36 914.4	9 228.6	NM-M(*)-(Matl)-09-(**)36	45 $\frac{1}{8}$	1,165	79 $\frac{1}{2}$ 2,178
	36 914.4	12 304.8	NM-M(*)-(Matl)-12-(**)36	45 $\frac{1}{8}$	1,165	79 $\frac{1}{2}$ 2,178
	36 914.4	18 457.2	NM-M(*)-(Matl)-18-(**)36	45 $\frac{1}{8}$	1,165	79 $\frac{1}{2}$ 2,178
	36 914.4	24 609.6	NM-M(*)-(Matl)-24-(**)36	45 $\frac{1}{8}$	1,165	79 $\frac{1}{2}$ 2,178
	36 914.4	30 762.0	NM-M(*)-(Matl)-30-(**)36	45 $\frac{1}{8}$	1,165	79 $\frac{1}{2}$ 2,178
	36 914.4	36 914.4	NM-M(*)-(Matl)-36-(**)36	45 $\frac{1}{8}$	1,165	79 $\frac{1}{2}$ 2,178

(*) Side Rail Height. (**) Add: "VTD" for vertical tee down or "VTU" for vertical tee up to complete Cat. No. Two pairs of fiberglass splice plates with SS6 hardware included.

Dimensions for reference only; when critical, contact your ABB representative. Consult your ABB representative for availability of molded fittings.

Standard rung spacing for fittings is 9 $\frac{1}{4}$ " nominal (235mm). For other types of splice plates, see pages 353-355.

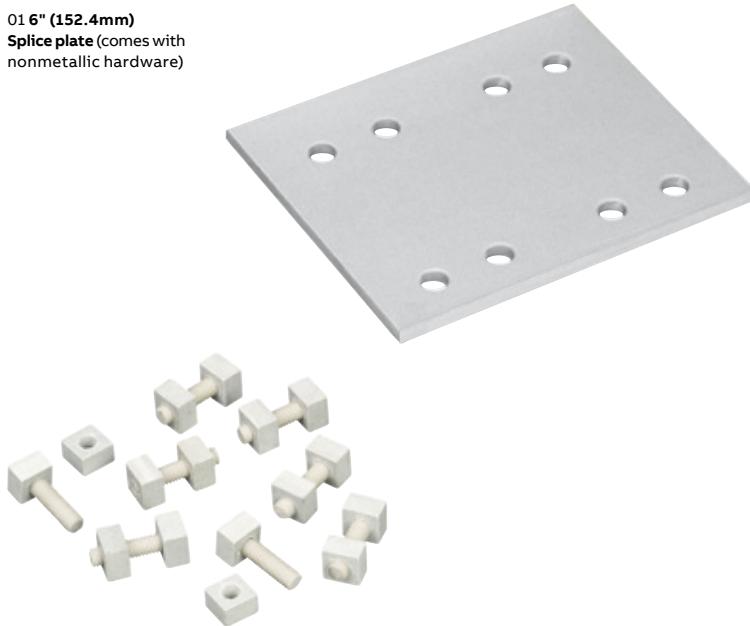
Fitting number selection



Nonmetallic - Cable tray

Splice plates

01 6" (152.4mm)
Splice plate (comes with
nonmetallic hardware)



01

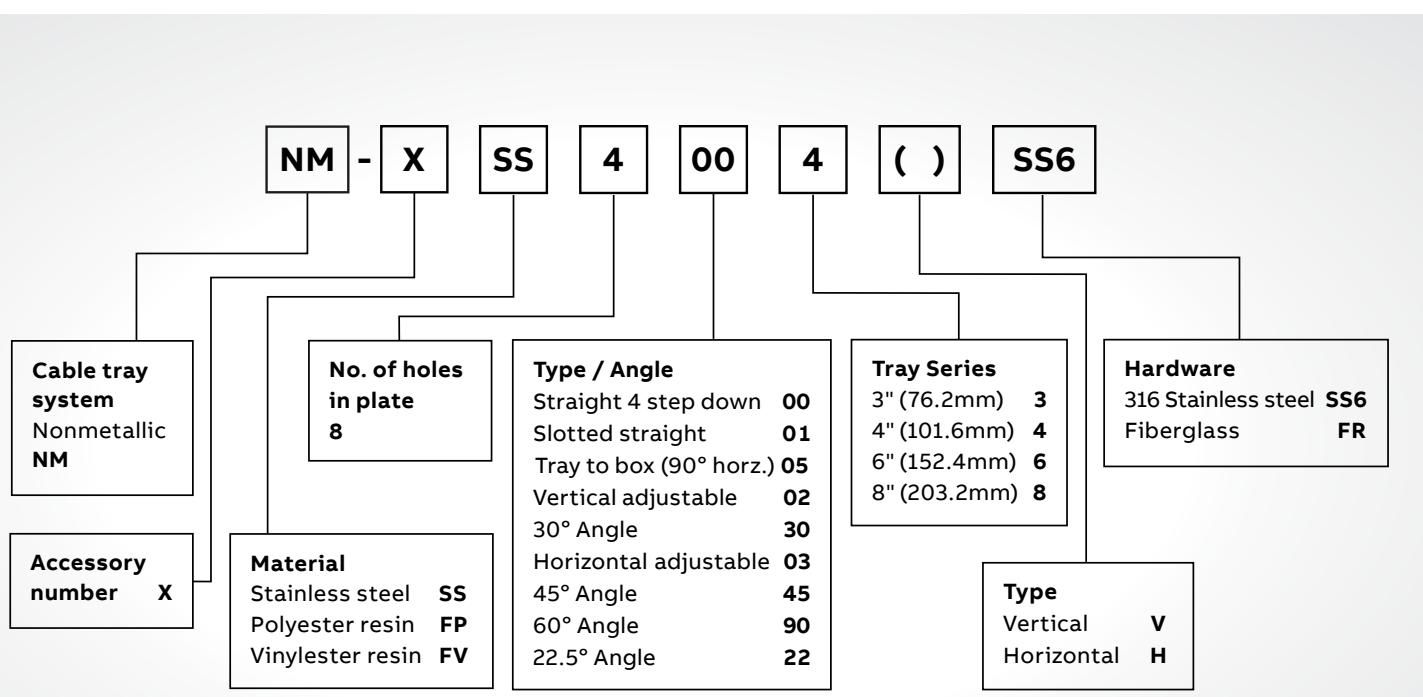
Splice plate number selection

Example:

NM-XSS4004SS6

- 316 stainless steel
- 4 holes supplied with 316 stainless steel hardware
- for a 4" (101.6mm) deep straight section.

NOTE: Splice plates shown on pages 353-355 represent splices for 6" (152.4mm) side rail height. Number of holes may vary with other side rail heights.



Nonmetallic - Cable tray

Splice plates

Standard splice plates

Cat. No.	Material	Height (in.)	Height (mm)
NM-XSS-8008*	Stainless steel	8	203.2
NM-XSS-4006*	Polyester resin	6	152.4
NM-XSS-4004*	Vinylester resin	4	101.6
NM-XSS-4003*		3	76.2

* Hardware suffix needed to complete catalog number. All splice plate hardware is $\frac{3}{8}$ ". Quantity required supplied with each tray section. Order only pairs of splice plates needed for field modifications. SS6 hardware supplied as standard - use SS6 suffix. Other hardware available; specify by hardware suffix.

Expansion splice plates

Cat. No.	Material	Height (in.)	Height (mm)
NM-XSS-8018*	Stainless steel	8	203.2
NM-XSS-8016*	Polyester resin	6	152.4
NM-XSS-4014*	Vinylester resin	4	101.6
NM-XSS-4013*		3	76.2

Allow for up to 1" (25.4mm) expansion or contraction of tray system. For correct gap setting procedure, see page 324.

* Hardware suffix needed to complete catalog number.

Horizontal adjustable splice plates

Cat. No.	Material	Height (in.)	Height (mm)
NM-XSS-8038*	Stainless steel	8	203.2
NM-XSS-4036*	Polyester resin	6	152.4
NM-XSS-4034*	Vinylester resin	4	101.6
NM-XSS-4033*		3	76.2

Provide for changes in the horizontal direction that do not conform to standard fittings. Furnished in pairs.

* Hardware suffix needed to complete catalog number.

Vertical adjustable splice plates

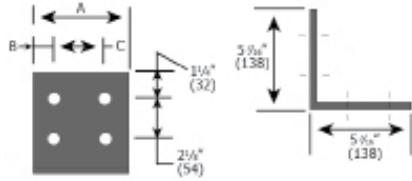
Cat. No.	Material	Height (in.)	Height (mm)
NM-XSS-8028*	Stainless steel	8	203.2
NM-XSS-4026*	Polyester resin	6	152.4
NM-XSS-4024*	Vinylester resin	4	101.6
NM-XSS-4023*		3	76.2

Provide for changes in elevation that do not conform to standard vertical fittings. Furnished in pairs.

* Hardware suffix needed to complete catalog number.

Nonmetallic - Cable tray

Splice plates



- Used to attach the end of a tray run to a distribution box or control center
- Furnished in pairs

Tray-to-box splice plates

Cat. No. Stainless steel	Cat. No. Polyester resin	Cat. No. Vinylester resin	Height (in.)	Height (mm)
NM-XSS8058*	NM-XFP8058*	NM-XFV8058*	8	203.2
NM-XSS4056*	NM-XFP4056*	NM-XFV4056*	6	152.4
NM-XSS4054*	NM-XFP4054*	NM-XFV4054*	4	101.6
NM-XSS4053*	NM-XFP4053*	NM-XFV4053*	3	76.2

Hardware other than SS6 is considered special. * Hardware supplied: 1 bolt and 1 springless strut nut $\frac{3}{8}$ diameter.

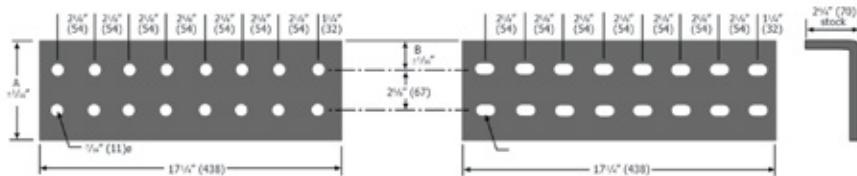


- Easy-to-install design
- Compatible with all series of T&B Cable Tray
- Available in aluminum, pre-galvanized steel, hot-dipped galvanized steel and stainless steel 316
- Versatile use for strut and beam installations
- Functional in all cable tray positions including vertical installations

Combo hold down guide clamp

Cat. No.	Material	Hardware size (in.)	Std. pkg. qty.
SSWCHGC	Stainless steel type 316L	$\frac{3}{8}$	1
SSWCHGC-HDW*	Stainless steel type 316L	$\frac{3}{8}$	1

* Hardware supplied: 1 bolt and 1 springless strut nut $\frac{3}{8}$ diameter.

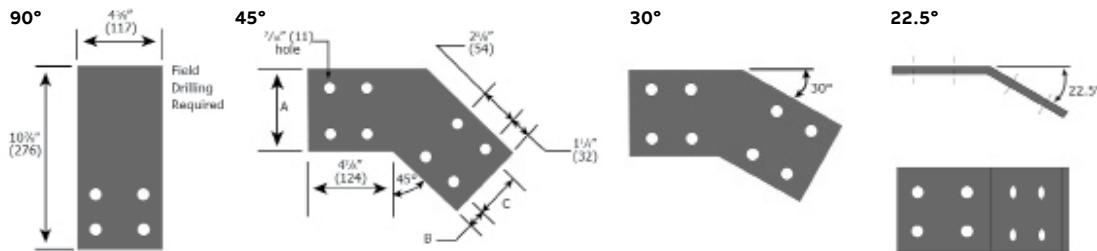


Heavy duty splice plate

Cat. No.	Description	Height (in.)	Height (mm)	Width (in.)	Width (mm)
NM-XFP16-00-8H-SS6	16 hole standard splice plate	8	204	17 1/4	438.2
NM-XFP16-01-8H-SS6	16 hole expansion splice plate	8	204	17 1/4	438.2

Nonmetallic - Cable tray

Splice plates



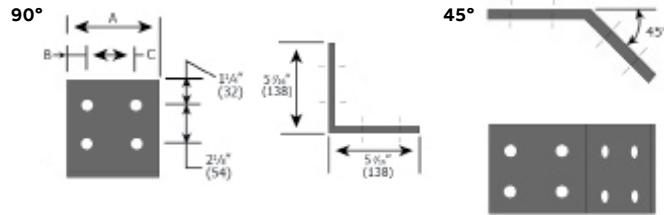
Vertical splice plate

Cat. No. Stainless steel	Cat. No. Polyester resin	Cat. No. Vinylester resin	Height (in.)	Height (mm)
90°				
NM-XSS-8908V*	NM-XFP-8908V*	NM-XFV-8908V*	8	203.2
NM-XSS-8906V*	NM-XFP-8906V*	NM-XFV-8906V*	6	152.4
NM-XSS-4904V*	NM-XFP-4904V*	NM-XFV-4904V*	4	101.6
NM-XSS-4903V*	NM-XFP-4903V*	NM-XFV-4903V*	3	76.2
45°				
NM-XSS-8458V*	NM-XFP-8458V*	NM-XFV-8458V*	8	203.2
NM-XSS-8456V*	NM-XFP-8456V*	NM-XFV-8456V*	6	152.4
NM-XSS-4454V*	NM-XFP-4454V*	NM-XFV-4454V*	4	101.6
NM-XSS-4453V*	NM-XFP-4453V*	NM-XFV-4453V*	3	76.2

* Hardware suffix needed to complete catalog number.

Cat. No. Stainless steel	Cat. No. Polyester resin	Cat. No. Vinylester resin	Height (in.)	Height (mm)
30°				
NM-XSS-8308V*	NM-XFP-8308V*	NM-XFV-8308V*	8	203.2
NM-XSS-8306V*	NM-XFP-8306V*	NM-XFV-8306V*	6	152.4
NM-XSS-4304V*	NM-XFP-4304V*	NM-XFV-4304V*	4	101.6
NM-XSS-4303V*	NM-XFP-4303V*	NM-XFV-4303V*	3	76.2
22.5°				
NM-XSS-8228V*	NM-XFP-8228V*	NM-XFV-8228V*	6	152.4
NM-XSS-8226V*	NM-XFP-8226V*	NM-XFV-8226V*	6	152.4
NM-XSS-4224V*	NM-XFP-4224V*	NM-XFV-4224V*	4	101.6
NM-XSS-4223V*	NM-XFP-4223V*	NM-XFV-4223V*	3	76.2

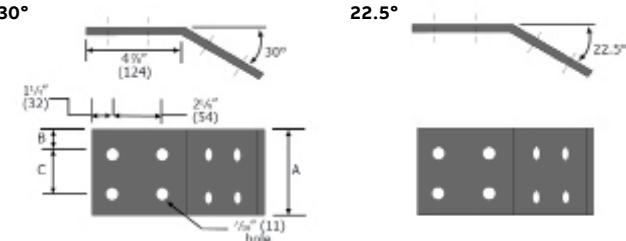
* Hardware suffix needed to complete catalog number.



Horizontal splice plates

Cat. No. Stainless steel	Cat. No. Polyester resin	Cat. No. Vinylester resin	Height (in.)	Height (mm)
90°				
NM-XSS-8908H*	NM-XFP-8908H*	NM-XFV-8908H*	8	203.2
NM-XSS-8906H*	NM-XFP-8906H*	NM-XFV-8906H*	6	152.4
NM-XSS-4904H*	NM-XFP-4904H*	NM-XFV-4904H*	4	101.6
NM-XSS-4903H*	NM-XFP-4903H*	NM-XFV-4903H*	3	76.2
45°				
NM-XSS-8458H*	NM-XFP-8458H*	NM-XFV-8458H*	8	203.2
NM-XSS-8456H*	NM-XFP-8456H*	NM-XFV-8456H*	6	152.4
NM-XSS-4454H*	NM-XFP-4454H*	NM-XFV-4454H*	4	101.6
NM-XSS-4453H*	NM-XFP-4453H*	NM-XFV-4453H*	3	76.2

* Hardware suffix needed to complete catalog number.

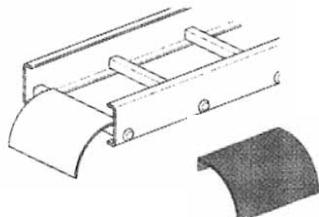


Cat. No. Stainless steel	Cat. No. Polyester resin	Cat. No. Vinylester resin	Height (in.)	Height (mm)
30°				
NM-XSS-8308H*	NM-XFP-8308H*	NM-XFV-8308H*	8	203.2
NM-XSS-8306H*	NM-XFP-8306H*	NM-XFV-8306H*	6	152.4
NM-XSS-4304H*	NM-XFP-4304H*	NM-XFV-4304H*	4	101.6
NM-XSS-4303H*	NM-XFP-4303H*	NM-XFV-4303H*	3	76.2
22.5°				
NM-XSS-8228H*	NM-XFP-8228H*	NM-XFV-8228H*	6	152.4
NM-XSS-8226H*	NM-XFP-8226H*	NM-XFV-8226H*	6	152.4
NM-XSS-4224H*	NM-XFP-4224H*	NM-XFV-4224H*	4	101.6
NM-XSS-4223H*	NM-XFP-4223H*	NM-XFV-4223H*	3	76.2

* Hardware suffix needed to complete catalog number.

Nonmetallic - Cable tray systems

Drop outs and barrier strips



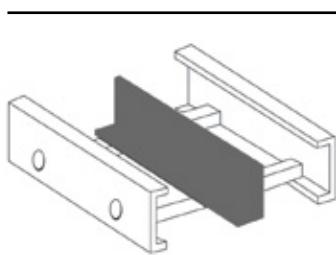
Ladder drop out

Specially designed ladder drop outs provide a rounded surface with adequate radius to protect cable as it exits from the tray, preventing damage to insulation.

Cat. No.	Material
NM-XWC-P-W*-9034	Pultruded fiberglass

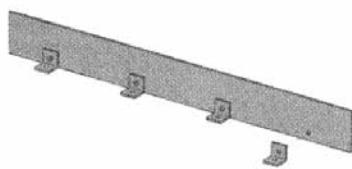
W = Tray width.

Barriers



Cat. No.	Material	Side rail height (in.)	Side rail height (mm)
NM-BS08P-120	Polyester resin	8	203.2
NM-BS06P-120	Polyester resin	6	152.4
NM-BS04P-120	Polyester resin	4	101.6
NM-BS03P-120	Polyester resin	3	76.2
NM-BS08V-120	Vinylester resin	8	203.2
NM-BS06V-120	Vinylester resin	6	152.4
NM-BS04V-120	Vinylester resin	4	101.6
NM-BS03V-120	Vinylester resin	3	76.2

Barriers are provided in 10 ft. lengths and supplied for field installation using 3/16" SS rivets (ref. part # TPDR) or use of an adjustable clamp ref. part # XXX (for 3, 4, 6 and 8" deep ladder tray).



Kit contents

- 1 pc. 72" (1,828.8mm) straight barrier
- 4 pc. XF-9002 barrier strip clip
- 8 pc. SS6 pop rivets
- 4 pc. #10 x 3/4" stainless steel self-tapping screw
- Assembly required - directions included

Flexible horizontal barrier kit

Cat. No.	Material	Side rail height (in.)	Side rail height (mm)	Loading depth (in.)	Loading depth (mm)
NM-BS08P-90HBFL	Polyester resin	8	203.2	6 ^{11/16}	169.86
NM-BS06P-90HBFL	Polyester resin	6	152.4	4 ^{11/16}	119.06
NM-BS04P-90HBFL	Polyester resin	4	101.6	2 ^{11/16}	68.26
NM-BS03P-90HBFL	Polyester resin	3	76.2	1 ^{3/4}	44.45
NM-BS08V-90HBFL	Vinylester resin	8	203.2	6 ^{11/16}	169.86
NM-BS06V-90HBFL	Vinylester resin	6	152.4	4 ^{11/16}	169.86
NM-BS04V-90HBFL	Vinylester resin	4	101.6	2 ^{11/16}	68.26
NM-BS03V-90HBFL	Vinylester resin	3	76.2	1 ^{3/4}	44.45

One kit allows up to 38 (965.2mm) radius position of the barrier.

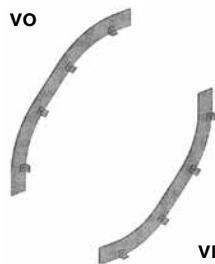
For larger than 38 (965.2mm) radius barrier position, two kits are required.

Nonmetallic - Cable tray systems

Barrier strips and blind end plates

Barrier mounting angle clips with fasteners

Cat. No.	Material
NM-PK-BAC	Pultruded fiberglass (polyester & vinylester)



- Barriers for vertical fitting
- Please add angle (X) and radius (\dagger) to catalog number
- Furnished with #10 x $\frac{3}{4}$ " self-tapping stainless steel screws

Vertical barrier

Cat. No.	Material	Height (in.)	Height (mm)
NM-BS08P(X)VI/VO	Polyester resin	8	203.2
NM-BS06P(X)VI/VO	Polyester resin	6	152.4
NM-BS04P(X)VI/VO	Polyester resin	4	101.6
NM-BS03P(X)VI/VO	Polyester resin	3	76.2
NM-BS08V(X)VI/VO	Vinylester resin	8	203.2
NM-BS06V(X)VI/VO	Vinylester resin	6	152.4
NM-BS04V(X)VI/VO	Vinylester resin	4	101.6
NM-BS03V(X)VI/VO	Vinylester resin	3	76.2

VI = inside vertical, VO = outside vertical.

Blind end plates

Cat. No.	Material	Height (in.)	Height (mm)
NM-XBE*1088W**	Polyester/ Vinylester	8	203.2
NM-XBE*1086W**	Polyester/ Vinylester	6	152.4
NM-XBE*1084W**	Polyester/ Vinylester	4	101.6
NM-XBE*1083W**	Polyester/ Vinylester	3	76.2

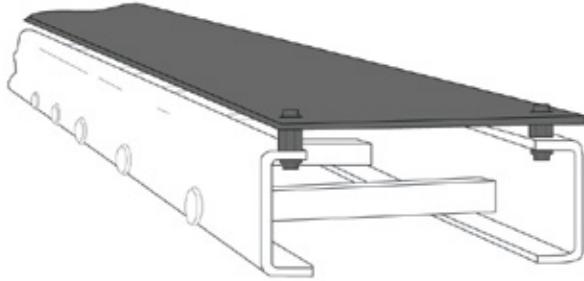
Forms a closure for any tray that dead ends. Furnished as one plate.

* Material suf \ddot{x} , P=Polyester, V= Vinylester. ** Hardware suffix needed to complete catalog number.

W = Tray width

Nonmetallic - Cable tray covers

Covers



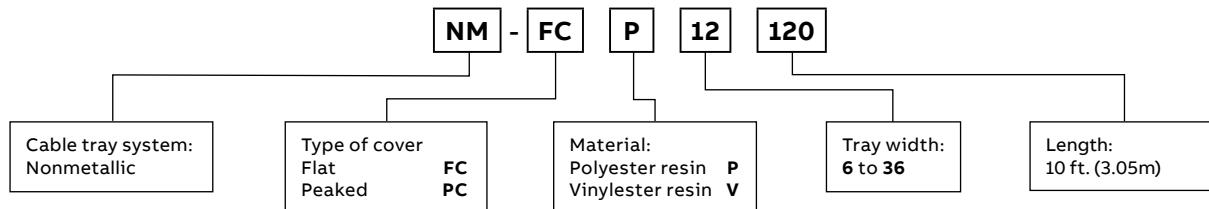
Covers for straight sections

- Material thickness: $\frac{1}{8}$ " (3.18mm)
- Standard cover length: 120" (10 ft.)
- $\frac{1}{4}$ " (6.35mm) diameter stainless fasteners with flat washers included

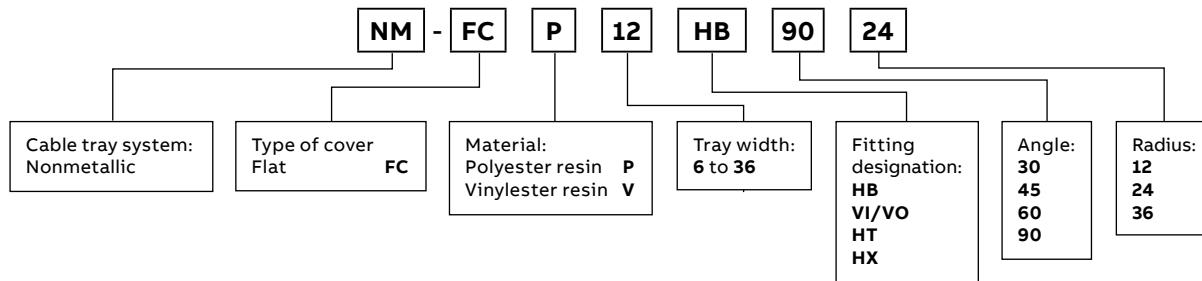
Covers for fittings

- Material thickness: $\frac{1}{8}$ " (3.18mm)
- $\frac{1}{4}$ " (6.35mm) diameter stainless fasteners with flat washers included

Covers for straight sections - Selection guide



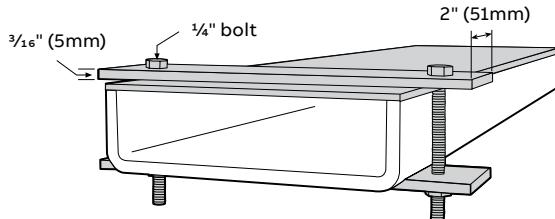
Covers for fittings - Selection guide



NOTE: Peaked fitting covers not available.
Other fitting covers are available. Please consult your ABB representative.

Nonmetallic - Cable tray

Accessories



Heavy-duty cover clamp

- Recommended for outdoor service
- Heavy-duty cover clamp available for flat covers only
- Available in stainless steel only

Cat. No.	Material	Side rail height (in.)	Side rail height (mm)
NM-XWC-P-W*-9084	Stainless steel	8	203.2
NM-XWC-P-W*-9064	Stainless steel	6	152.4
NM-XWC-P-W*-9044	Stainless steel	4	101.6
NM-XWC-P-W*-9034	Stainless steel	3	76.2

* W = Tray width

Pop rivets

Cat. No.	Material
TPDR	Stainless steel
	Thermoplastic

Raised cover clamps available.
Please consult your ABB representative.



Kit contents

- Resin
- Catalyst
- Stir stick and applicator

Brush-on resin seal kit

Cat. No.	Description
NM-RSK-QT	946 ml

To reseal fiberglass after field modifications.
Vinylester resin.

Spray sealant

Cat. No.	Description
NM-CLEAR-1215	12 fl. oz. can

Spray acrylic to reseal fiberglass after field modifications. Should be used for top coating polyester applications only.
Not recommended to seal vinylester.