Flexible Conduit

Liquatite®

Nonmetallic Core

Type LNM-P – Type A

This nonmetallic liquidtight conduit is ideally suited for continuous flexing situations. It is often specified in “Power Track” or cable carrier installations and on industrial robots. It does not contain a metal core which could fatigue from repeated flexing or vibration.

Construction

LNM-P is of the Layered, Type-A construction which incorporates a smooth seamless inner core of flexible PVC that is bonded to a covering of flexible PVC. Between these layers is a woven nylon mesh for added reinforcement. The PVC material is a high quality flame-retardant compound which resists oils, mild acids and exposure to sunlight.

Applications

General Use:
In accordance with CEC Rule 12-1002 (1) the flexible metal conduit is permitted in or on buildings of either combustible or non-combustible constructions.

Restriction and Exception:

CEC Rule 12-1004 (a): “12 (3/8) trade size flexible metal conduit shall be permitted to be used for runs of not more than 1.5 m (5 ft.) for the connection of equipment.” and CEC Rule 12-1004 (b): “12 (3/8) trade size liquidtight flexible conduit may be used as permitted by this code.”

Securesments with straps:
CEC Rule 12-1010 (3): “When flexible metal conduit is installed, it shall be secured at intervals not exceeding 1.5 m (5 ft.) and within 300 mm (12 in.) on each side of every outlet box or fitting except where flexible metal conduit is fished and except for lengths of not over 900 mm (3 ft.) at terminals where flexibility is necessary.”

Conductor fill:
CEC Rule 12-1014 defines the maximum number of conductor, the CEC Tables 6 provides the maximum number of conductors of one size in trade sizes of conduit, CEC Table 8 provides the maximum allowable per cent conduit fill, and CEC Table 9 provides the cross-sectional areas of conduit.

Specific Use and applications:

Elevators, Hoistways, in accordance with CEC Rules 38-021 (1) (a) (1) and 38-0221 (1) (a) (iv) Elevators, Cars, in accordance with CEC Rules 38-021 (1) (b) (v) Elevators, Within Machine Rooms, Control Rooms and Machinery Spaces and Control Spaces, in accordance with CEC Rule 38-021 (1) (c) (1) Elevators, Counterweights, in accordance with CEC Rule 38-021 (1) (d) Escalators, in accordance with CEC Rule 38-021 (2) Lifts for persons with physical disabilities, in accordance with CEC Rule 38-021 (3) Theater installation, in accordance with CEC Rule 44-102 (1)

Working temperatures
-20°C to 60°C

Listing / Certification

Certified. Conforms to CSA 22.2 No. 227.2 type A
Listed. Conforms to UL Standard ANSI/UL 1660 type A

Standard Colour
Safety Orange. Also available in Black and Grey. Part numbers listed designate Orange jacket.

Fittings
Fittings for Layered Conduit are for that conduit only and are so identified by the marking “FNMC-A”.

Recommendation:
“Suitable for use with 3700 Series, Type A, Metal Fittings from Thomas & Betts”. Refer to pages B101 to B103.

See Chart on p. G28 for dimensions and tolerances
* See p. G27 for label and packaging detail

Type LNM-P

<table>
<thead>
<tr>
<th>Trade Size (in.)</th>
<th>Cat. No.</th>
<th>Reel Content (m)</th>
<th>Cat. No.</th>
<th>Reel Content (m)</th>
<th>Cat. No.</th>
<th>Reel Content (m)</th>
<th>Inside Dia. Min. (in. mm)</th>
<th>Inside Dia. Max. (in. mm)</th>
<th>Outer Dia. Min. (in. mm)</th>
<th>Outer Dia. Max. (in. mm)</th>
<th>Inside Bend Radius (in.)</th>
<th>Wt. kg/30m</th>
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<tbody>
<tr>
<td>3/8</td>
<td>LNMP038-75</td>
<td>75</td>
<td>LNMP038-150</td>
<td>150</td>
<td>LNMP038-300</td>
<td>300</td>
<td>0.485(12.32)</td>
<td>0.505(12.83)</td>
<td>0.755(19.18)</td>
<td>0.775(19.69)</td>
<td>2.5 (63.5)</td>
<td>7</td>
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<tr>
<td>1/2</td>
<td>LNMP050-60</td>
<td>60</td>
<td>LNMP050-150</td>
<td>150</td>
<td>LNMP050-300</td>
<td>300</td>
<td>0.620(15.74)</td>
<td>0.640(16.26)</td>
<td>0.910(23.11)</td>
<td>0.930(23.62)</td>
<td>3.0 (76.2)</td>
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<tr>
<td>3/4</td>
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<td>LNMP075-150</td>
<td>150</td>
<td>-</td>
<td>-</td>
<td>0.815(20.70)</td>
<td>0.835(21.21)</td>
<td>1.150(29.21)</td>
<td>1.170(29.72)</td>
<td>4.0 (101.6)</td>
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<td>1</td>
<td>LNMP100-30</td>
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<td>LNMP100-120</td>
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<td>-</td>
<td>-</td>
<td>1.003(25.46)</td>
<td>1.025(26.00)</td>
<td>1.415(35.94)</td>
<td>1.435(36.52)</td>
<td>6.0 (152.4)</td>
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<tr>
<td>1-1/4</td>
<td>LNMP125-30</td>
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<td>LNMP125-60</td>
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<td>-</td>
<td>-</td>
<td>1.370(34.80)</td>
<td>1.395(35.43)</td>
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<tr>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.585(40.32)</td>
<td>1.620(41.15)</td>
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<td>-</td>
<td>2.075(52.71)</td>
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<td>2.555(64.90)</td>
<td>2.590(65.78)</td>
<td>9.0 (228.6)</td>
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</tr>
</tbody>
</table>
Nonmetallic Core

Type NMC – Type B

Recommended industrial applications:
- Machine tools
- Motor hookups
- Food processing equipment
- Extensions from wireways
- Sensor and microswitch wiring found in control consoles

Construction Type B
NMC is of the helically wound integral Type B construction. It contains a spiral of rigid PVC reinforcement imbedded within the flexible PVC wall.

Type NMC Specifications
Type NMC is intended for installation in accordance with CEC Rule 12-1300 to 12-1306 for Liquidtight Flexible Conduit.
- For containment of 600 volt and lower potential circuits.

Working Temperature
-20°C to 80°C/Dry 60°C/Wet 70°C/Oil

Listing / Certification
Certified. Conforms to CSA 22.2 No. 227.2 type B. The 3/8” through 1-1/4” trade sizes are listed and marked for direct burial and in poured concrete.

Listed. Conforms to Underwriters Laboratories Standard ANSI/UL 1660 type B

Standard Colour
Black

Type NMT – Tubing

Recommended industrial applications:
- Protection of fiber optic cable
- Installation of instrumentation and control cable
- Indoor/outdoor lighting
- Packaging equipment
- Marine and shipboard wiring
- Flexing—component wiring protection on robots, graphic arts equipment, etc.

Type NMT
Type NMT is an Extra Flexible Liquidtight Nonmetallic Tubing. This lightweight tubing cuts easily and installs quickly. It is ideal for wiring protection in tight quarters and for tight bends. The thin flexible PVC skin allows greater movement for many OEM applications. Used for wiring harnesses, laboratory, equipment, fiber optics, etc.

Construction
Co-extruded from both flexible and rigid PVC. The rigid spiral PVC reinforcement is imbedded within the wall of the tubing.

Working Temperature
-20°C to 70°C

Standard Colour
Black

UL Recognized