TECHNICAL DATA SHEET

Liquid-tight fittings - Series 5300/9300-NB
For liquid-tight flexible metallic conduit

T&B Liquidtight Systems®

Nickel plated brass liquid-tight system solutions for the most demanding corrosive environments

Features & Benefits:
• Meets UL 514B and CSA C22.2, No. 18.3 for liquid-tight fittings
• Full compliance to IEC 61386-1, -23 requirements, CE Certified
• Trade sizes from ¼” to 2” (12mm to 63mm)
• Insulated throat protects wire jacket from damage
• Straight, 45° and 90° conduit bodies
• NPT and ISO Metric Thread Types
• Coordinated performance with T&B Liquidtight Systems Flexible Metallic Conduits
• Ingress protection ratings aligned with industrial enclosures
• Safe-Edge® ground cones provide superior bonding
• Double Bevel Sealing Ring eases assembly and ensures liquid-tight performance

Applications:
• Typical applications where severe corrosion protection is required including water/wastewater, food & beverage, salt environments, chemical processing, etc.
• Used where liquid tight flexible metallic raceway is installed in corrosive outdoor or indoor locations, and exposed to continuous or intermittent moisture
• Used to positively bond flexible liquid-tight flexible metallic conduit to boxes or enclosures
• Liquid-tight applications against water, oils, cutting fluids, mild acids
• For use in electrical circuits up to 1,000 V
• Suitable for use in Class 1 Division 2, Class 2 Division 1 & 2 Hazardous Locations per NEC® Section 500

Construction / Material / Finish:
• Trade sizes ¼” to 2” nickel plated brass
• Zinc Plated steel ground cones
• Thermoplastic nylon seal rings and insulators
• Halogen Free seal rings, insulators and seal gaskets
• Machined nickel plated brass locknuts supplied separately

Environment ratings:
Working Temperature:
• UL: Gen: -20 to +105°C (-4 to +221°F)
• CSA: Gen: -20 to +105°C (-4 to +221°F)
• IEC/CE: Gen: -25 to +105°C (-13 to +221°F)

Chemical Resistance Guide:
• See Publication TDS000061 (Fittings: Nickel plated brass & PA66 Polyamide)
• See Publication TDS000017 (Liquid Tight Flexible Metal Conduits)

Conforms to:
• UL 514B, Fittings for Cable and Conduit
  – File: E23018
• CSA C22.2, No. 18.3, Outlet and Conduit Boxes, Fittings and Accessories
  – File: LR-4484
• IEC/EN 61386-1, -23, Conduit Systems for Cable Management
  – EU Doc: EC-012-7189
• RoHS (Restriction of Hazardous Substance directive)
• NEMA FB-1 (Fittings and Conduit Bodies)
• JIC EGPI (Electrical standard for GP machine tools)
• JIC EMPI (Electrical Standard for Mass Production Engineering)
• Federal Specification A-A 50552 (Fittings for flexible conduit)
• Federal Specification H-28 (Threads)

Ingress Protection:
• Provides “Ingress Integrity” between enclosures, fittings, conduits & seals when using Series 5300-NB liquid-tight fittings and T&B Liquidtight Systems LFMC
• Covers all trade sizes from ¼” to 2” (12mm to 63mm)
• Ingress ratings require use of Series 5260 Seal Gaskets
• ISO Metric Thread fittings supplied with Seal O-Rings as standard

UL, CSA & NEMA system ingress ratings:
• UL Listed type ratings tested to UL 50/50E requirements with UL Listed LFMC
• UL File No.: E23018
  – Indoor: Type 4, 4X, 12, 13
  – Outdoor: Type 3, 3R, 4, 4X
• CSA C22.2, No. 94.2:
  – Type 3, 3R, 4, 4X, 12, 13
• NEMA 250:
  – Type 3, 3R, 4, 4X, 12, 13

IEC system ingress ratings:
• IP Ingress Protection per IEC 60529 requirements
• IEC Ingress Ratings: IP66, IP67

Standards requirements:
Designed to UL 514B and CSA C22.2, No. 18.3 test requirements including:
• Assembly, resistance, pull, material aging, current withstand, etc.
Meets all IEC/EN 61386-1, -23 standard requirements including:
• Impact resistance - Code 3 Medium, 6 Joules
• Tensile strength - Code 3 Medium, 500 N/2 min.
• Lower and upper temperatures
• IP protection against solid and liquids
Product selection

Series 5300-NB & 9300-NB Liquid-tight Fittings

<table>
<thead>
<tr>
<th>Trade size</th>
<th>Thread Type</th>
<th>Insulated with steel ground cone</th>
<th>Seal Gaskets</th>
<th>Locknuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inches</td>
<td>Metric</td>
<td>Std Size</td>
<td>Straight Part no.</td>
<td>45° Part no.</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>12mm 16mm</td>
<td>NPT</td>
<td>5331-NB</td>
<td>5341-NB</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>16mm 20mm</td>
<td>NPT</td>
<td>5332-NB</td>
<td>5342-NB</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>21mm 25mm</td>
<td>NPT</td>
<td>5333-NB</td>
<td>5343-NB</td>
</tr>
<tr>
<td>1&quot;</td>
<td>27mm 32mm</td>
<td>NPT</td>
<td>5334-NB</td>
<td>5344-NB</td>
</tr>
<tr>
<td>1 1/4&quot;</td>
<td>35mm 40mm</td>
<td>NPT</td>
<td>5335-NB</td>
<td>5345-NB</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>41mm 50mm</td>
<td>NPT</td>
<td>5336-NB</td>
<td>5346-NB</td>
</tr>
<tr>
<td>2&quot;</td>
<td>53mm 63mm</td>
<td>NPT</td>
<td>5337-NB</td>
<td>5347-NB</td>
</tr>
</tbody>
</table>

Note: ISO Metric thread fittings supplied with Seal O-Rings as standard.

Dimensions (approximate)

<table>
<thead>
<tr>
<th>Drawing</th>
<th>Trade size</th>
<th>Inches</th>
<th>Metric</th>
<th>ISO BS EN</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>lbs.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 5300-NB &amp; 9300-NB Straight LT Fittings - NPT &amp; Metric Threads</td>
<td>3/8&quot;</td>
<td>12mm 16mm</td>
<td>11/32&quot;</td>
<td>1/2&quot;</td>
<td>11/32&quot;</td>
<td>11/32&quot;</td>
<td>29.4</td>
<td>25.4</td>
<td>12.7</td>
</tr>
<tr>
<td>Series 5300-NB &amp; 9300-NB 45° LT Fittings - NPT &amp; Metric Threads</td>
<td>3/8&quot;</td>
<td>12mm 16mm</td>
<td>11/32&quot;</td>
<td>1/2&quot;</td>
<td>11/32&quot;</td>
<td>11/32&quot;</td>
<td>29.4</td>
<td>39.7</td>
<td>12.7</td>
</tr>
<tr>
<td>Series 5300-NB &amp; 9300-NB 90° LT Fittings - NPT &amp; Metric Threads</td>
<td>3/8&quot;</td>
<td>12mm 16mm</td>
<td>11/32&quot;</td>
<td>1/2&quot;</td>
<td>11/32&quot;</td>
<td>11/32&quot;</td>
<td>29.4</td>
<td>39.7</td>
<td>12.7</td>
</tr>
</tbody>
</table>

Note: Product must be installed in accordance with applicable national and local electrical codes.

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