
 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

Certifications / Standards:



Features & Benefits:

- Meets UL 514B and CSA C22.2 No. 18.3 for liquid-tight fittings
- Full compliance to IEC 61386-1, -23 requirements
- Trade sizes from 3/8" to 4" (12mm to 100mm)
- Insulated throat helps protect 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 help provide superior bonding
- Double Bevel Sealing Ring eases assembly and helps ensure 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 I Division 2, Class II Division 1 & 2 Hazardous Locations per NEC® Section 500

Construction / Material / Finish:

- Trade sizes 3/8" 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 TDS000081 (Fittings: Nickel plated brass & PA66 Polyamide)
- See Publication TDS000117 (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 EGP1 (Electrical standard for GP machine tools)
- JIC EMP1 (Electrical Standard for Mass Production Engineering)
- Federal Specification A-A 50552 (Fittings for flexible conduit)
- Federal Specification H-28 (Threads)

Ingress Protection:

- Helps provide "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 3/8" 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, 6, 12, 13
 - Outdoor: Type 3, 3R, 4, 4X, 6
- CSA C22.2 No. 94.2: Type 3, 3R, 4, 4X, 12, 13
- NEMA 250: Type 3, 3R, 4, 4X, 6, 12, 13

IEC system ingress ratings:

- IP Ingress Protection per IEC 60529 requirements
- IEC Ingress Ratings: IP66, IP67, IP68, IP69

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 | | | | | | | | | | |
| Trade size | | | Thread Type | | Insulated with steel ground cone | | | Seal gaskets | | Locknuts |
| Inches | Metric | ISO BS EN | Std | Size | Straight Part no. | 45° Part no. | 90° Part no. | Part no. | Part no. | |
| 3/8" | 12mm | 16mm | NPT | 3/8" | 5331-NB | 5341-NB | 5351-NB | 5261 | — | LNB/O38 |
| | | | ISO | M16 | 9330-NB | 9340-NB | 9350-NB | — | — | LNB/M16 |
| | | | ISO | M20 | 9331-NB | 9341-NB | 9351-NB | — | — | LNB/M20 |
| 1/2" | 16mm | 20mm | NPT | 1/2" | 5332-NB | 5342-NB | 5352-NB | 5262 | — | LNB/O50 |
| | | | ISO | M20 | 9332-NB | 9342-NB | 9352-NB | — | — | LNB/M20 |
| 3/4" | 21mm | 25mm | NPT | 3/4" | 5333-NB | 5343-NB | 5353-NB | 5263 | — | LNB/O75 |
| | | | ISO | M25 | 9333-NB | 9343-NB | 9353-NB | — | — | LNB/M25 |
| 1" | 27mm | 32mm | NPT | 1" | 5334-NB | 5344-NB | 5354-NB | 5264 | — | LNB/O100 |
| | | | ISO | M32 | 9334-NB | 9344-NB | 9354-NB | — | — | LNB/M32 |
| 1 1/4" | 35mm | 40mm | NPT | 1 1/4" | 5335-NB | 5345-NB | 5355-NB | 5265 | — | LNB/O125 |
| | | | ISO | M40 | 9335-NB | 9345-NB | 9355-NB | — | — | LNB/M40 |
| 1 1/2" | 41mm | 50mm | NPT | 1 1/2" | 5336-NB | 5346-NB | 5356-NB | 5266 | — | LNB/O150 |
| | | | ISO | M50 | 9336-NB | 9346-NB | 9356-NB | — | — | LNB/M50 |
| 2" | 53mm | 63mm | NPT | 2" | 5337-NB | 5347-NB | 5357-NB | 5267 | — | LNB/O200 |
| | | | ISO | M63 | 9337-NB | 9347-NB | 9357-NB | — | — | LNB/M63 |
| 2 1/2" | 63mm | 70mm | NPT | 2 1/2" | 5338-NB | — | — | 5268 | — | Standard |
| | | | — | — | 5338-NBHT | — | — | 5268-HT | — | Standard |
| | | | NPT | 3" | 5339-NB | — | — | 5269 | — | Standard |
| 3" | 78mm | 80mm | — | — | 5339-NBHT | — | — | 5269-HT | — | Standard |
| | | | NPT | 4" | 5340-NB | — | — | 5270 | — | Standard |
| | | | — | — | 5340-NBHT | — | — | 5270-HT | — | Standard |

Note: ISO Metric thread fittings supplied with Seal O-Rings as standard.
Contact ABB for technical specifications on HT High Temperature versions

Dimensions (approximate)

| Drawing | Trade size | | | Inches | | | Millimeters | | | Weight | |
|---|------------|--------|-----------|---------|---------|--------|-------------|------|------|--------|------|
| | Inches | Metric | ISO BS EN | A | B | C | A | B | C | lbs. | kg |
| Series 5300-NB & 9300-NB Straight LT Fittings - NPT & Metric Threads | | | | | | | | | | | |
| | 3/8" | 12mm | 16mm | 1 1/8" | 1" | 1/2" | 28.5 | 25.4 | 12.7 | 0.11 | 0.05 |
| | 1/2" | 16mm | 20mm | 1 9/32" | 1" | 9/16" | 32.6 | 25.4 | 14.3 | 0.19 | 0.08 |
| | 3/4" | 21mm | 25mm | 1 9/32" | 1 1/16" | 9/16" | 40.5 | 27.0 | 14.3 | 0.27 | 0.12 |
| | 1" | 27mm | 32mm | 1 3/16" | 1 1/16" | 3/4" | 46.5 | 33.3 | 19.1 | 0.41 | 0.19 |
| | 1 1/4" | 35mm | 40mm | 2 1/16" | 1 1/16" | 13/16" | 56.2 | 42.9 | 20.6 | 0.73 | 0.33 |
| | 1 1/2" | 41mm | 50mm | 2 1/2" | 1 1/8" | 13/16" | 63.7 | 47.6 | 20.6 | 0.85 | 0.39 |
| | 2" | 53mm | 63mm | 3" | 2 1/16" | 7/8" | 76.6 | 55.6 | 22.2 | 1.11 | 0.51 |
| | 2 1/2" | 63mm | 70mm | 4 1/8" | 2 3/8" | 1 1/2" | 105.0 | 66.5 | 36.0 | 5.7 | 2.0 |
| | 3" | 78mm | 80mm | 5 1/2" | 2 5/8" | 1 1/2" | 128.0 | 67.2 | 38.0 | 7.43 | 2.8 |
| 4" | 103mm | 100mm | 6 1/2" | 3 3/8" | 1 1/2" | 162.0 | 78.8 | 37.0 | 12.9 | 4.8 | |
| Series 5300-NB & 9300-NB 45° LT Fittings - NPT & Metric Threads | | | | | | | | | | | |
| | 3/8" | 12mm | 16mm | 1 1/8" | 1 1/16" | 1/2" | 28.5 | 39.7 | 12.7 | 0.20 | 0.09 |
| | 1/2" | 16mm | 20mm | 1 9/32" | 1 1/8" | 9/16" | 32.6 | 43.0 | 14.3 | 0.25 | 0.11 |
| | 3/4" | 21mm | 25mm | 1 9/32" | 1 1/8" | 9/16" | 40.5 | 54.0 | 14.3 | 0.35 | 0.16 |
| | 1" | 27mm | 32mm | 1 3/16" | 1 1/8" | 3/4" | 46.5 | 57.2 | 19.1 | 0.64 | 0.29 |
| | 1 1/4" | 35mm | 40mm | 2 1/16" | 1 1/8" | 13/16" | 56.2 | 69.9 | 20.6 | 0.86 | 0.39 |
| | 1 1/2" | 41mm | 50mm | 2 1/2" | 1 1/4" | 13/16" | 63.7 | 85.7 | 20.6 | 1.19 | 0.54 |
| | 2" | 53mm | 63mm | 3" | 1 3/8" | 7/8" | 76.6 | 98.4 | 22.2 | 2.68 | 1.22 |
| | 2 1/2" | 63mm | 70mm | — | — | — | — | — | — | — | — |
| | 3" | 78mm | 80mm | — | — | — | — | — | — | — | — |
| 4" | 103mm | 100mm | — | — | — | — | — | — | — | — | |
| Series 5300-NB & 9300-NB 90° LT Fittings - NPT & Metric Threads | | | | | | | | | | | |
| | 3/8" | 12mm | 16mm | 1 1/8" | 1 3/8" | 1/2" | 28.5 | 34.9 | 12.7 | 0.21 | 0.10 |
| | 1/2" | 16mm | 20mm | 1 9/32" | 1 1/4" | 9/16" | 32.6 | 39.7 | 14.3 | 0.37 | 0.17 |
| | 3/4" | 21mm | 25mm | 1 9/32" | 1 1/4" | 9/16" | 40.5 | 44.5 | 14.3 | 0.52 | 0.24 |
| | 1" | 27mm | 32mm | 1 3/16" | 1 1/4" | 3/4" | 46.5 | 55.6 | 19.1 | 0.79 | 0.36 |
| | 1 1/4" | 35mm | 40mm | 2 1/16" | 1 1/4" | 13/16" | 56.2 | 69.9 | 20.6 | 1.26 | 0.57 |
| | 1 1/2" | 41mm | 50mm | 2 1/2" | 1 1/2" | 13/16" | 63.7 | 74.6 | 20.6 | 1.75 | 0.79 |
| | 2" | 53mm | 63mm | 3" | 1 3/8" | 7/8" | 76.6 | 87.3 | 22.2 | 3.30 | 1.50 |
| | 2 1/2" | 63mm | 70mm | — | — | — | — | — | — | — | — |
| | 3" | 78mm | 80mm | — | — | — | — | — | — | — | — |
| 4" | 103mm | 100mm | — | — | — | — | — | — | — | — | |

Note: Product must be installed in accordance with applicable national and local electrical codes.
• Dimensions for reference only.

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