
 TECHNICAL DATA SHEET

High temperature liquid-tight fittings - Series 5300-HT

For liquid-tight flexible metallic conduit

T&B Liquidtight Systems®



Steel and malleable iron liquid-tight fittings that meet the demand for indoor or outdoor extreme temperature installations.

Certifications / Standards:



Features & Benefits:

- Meets UL 514B for liquid-tight fittings
- Full compliance to IEC 61386-1, -23 requirements, CE Certified
- Trade sizes from 3/8" to 4" (12mm to 103mm)
- Insulated throat protect conductor jackets
- Straight, 45° and 90° conduit bodies
- NPT Threads
- 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 insures lliquid-tight performance
- Heat curled insulators protect wire sheathing from damage

Applications:

- Typical applications include raceway for industrial installations such as ovens, foundries, refrigeration, solar collectors, lumber kilns, pump skids, etc.
- Used where liquid tight flexible metallic raceway is installed in 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 3/8" to 1 1/4" Steel with Zinc Chromate finish
- Trade sizes 1-1/2" to 4" malleable iron with Zinc Chromate finish
- Zinc Plated Steel ground cones provide superior bonding
- Wide temperature polymers to meet application requirements
- Halogen Free seal rings, insulators and seal gaskets
- Tempered cast locknuts with teeth for vibration resistance

Environment ratings:

Working Temperature:

- UL: Gen: -20 to +105°C (-4 to +221°F)
- IEC/CE: Gen: -45 to +150°C (-49 to +302°F) Static
Gen: -25 to +105°C (-13 to +221°F) Dynamic
- General: Dry: -60 to +150°C (-76 to +302°F) Static

Chemical Resistance Guide:

- See Publication TDS000081 (Fittings: Steel, Iron & PA66 Polyamide)
- See Publication TDS000117 (Liquid Tight Flexible Metal Conduits)

Conforms to:

- UL 514B, Fittings for Cable and Conduit
 - File: E23018
- IEC/EN 61386-1, -23, Conduit Systems for Cable Management
 - EU DoC: EC-012-7191
- 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:

- Provides "Ingress Integrity" between enclosures, fittings, conduits & seals when using Series 52/53 liquid-tight fittings and T&B Liquidtight Systems LFMC
- Covers all trade sizes from 3/8" to 4" (12mm to 103mm)
- Ingress ratings require use of Series 5260 Seal Gaskets

UL, CSA & NEMA system ingress ratings:

- UL Listed type ratings tested to UL 50E requirements with UL Listed LFMC
- UL File No.: E23018
 - Indoor: Type 4, 12, 13
 - Outdoor: Type 3, 3R, 4
- NEMA 250: Type 3, 3R, 4, 12, 13

IEC system ingress ratings:

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

Standards requirements:

Designed to UL 514B test requirements including:

- Assembly, Pull, Resistance, Oil spray, Polymer durability, Flammability Coating thickness, Current withstand

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

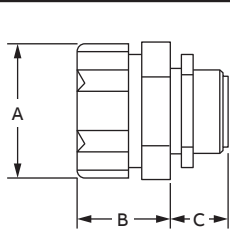
Series 5300-HT High Temperature LT Fittings

Trade size					Thread Type		Insulated			Seal Gaskets
Inches	Metric	ISO BS EN	Standard	Size	Straight Part no.	45° Part no.	90° Part no.	Part no.		
3/8"	12mm	16mm	NPT	1/2"	5331-HT	5341-HT	5351-HT	5262-HT		
1/2"	16mm	20mm	NPT	1/2"	5332-HT	5342-HT	5352-HT	5262-HT		
3/4"	21mm	25mm	NPT	3/4"	5333-HT	5343-HT	5353-HT	5263-HT		
1"	27mm	32mm	NPT	1"	5334-HT	5344-HT	5354-HT	5264-HT		
1 1/4"	35mm	40mm	NPT	1 1/4"	5335-HT	5345-HT	5355-HT	5265-HT		
1 1/2"	41mm	50mm	NPT	1 1/2"	5336-HT	5346-HT	5356-HT	5266-HT		
2"	53mm	63mm	NPT	2"	5337-HT	5347-HT	5357-HT	5267-HT		
2 1/2"	63mm	70mm	NPT	2 1/2"	5338-HT	—	—	5268-HT		
3"	78mm	80mm	NPT	3"	5339-HT	—	—	5269-HT		
4"	103mm	100mm	NPT	4"	5340-HT	—	—	5270-HT		

Dimensions (approximate)

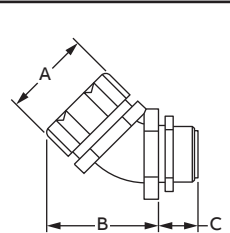
Drawing	Trade size			Inches			Millimeters			Weight	
	Inches	Metric	ISO BS EN	A	B	C	A	B	C	lbs.	kg

Series 5300-HT Straight LT Fittings



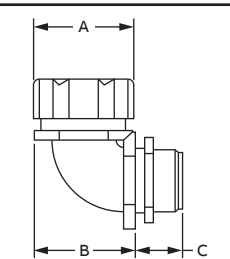
3/8"	12mm	16mm	1 5/32"	1 5/16"	9/16"	29.4	23.8	14.3	0.13	0.06
1/2"	16mm	20mm	1 3/8"	1"	9/16"	34.9	25.4	14.3	0.22	0.10
3/4"	21mm	25mm	1 2 1/32"	1 1/16"	9/16"	42.1	27.0	14.3	0.25	0.11
1"	27mm	32mm	1 7/8"	1 5/16"	3/4"	47.6	33.3	19.1	0.38	0.17
1 1/4"	35mm	40mm	2 3/32"	1 1 1/16"	13/16"	53.2	42.9	20.6	0.50	0.23
1 1/2"	41mm	50mm	2 2 3/32"	1 7/8"	13/16"	69.1	47.6	20.6	0.93	0.42
2"	53mm	63mm	3 1/4"	2 3/16"	7/8"	82.6	55.6	22.2	1.38	0.62
2 1/2"	63mm	70mm	3 3/4"	3 3/8"	1"	95.3	79.4	25.4	3.25	1.47
3"	78mm	80mm	4 1/2"	3 3/4"	1"	114.3	82.6	25.4	4.38	1.98
4"	103mm	100mm	5 1/2"	3 3/8"	1 1/8"	139.7	85.7	28.6	7.52	3.41

Series 5300-HT 45° LT Fittings



3/8"	12mm	16mm	1 5/32"	1 9/16"	9/16"	29.4	39.7	14.3	0.18	0.08
1/2"	16mm	20mm	1 3/8"	1 7/8"	9/16"	34.9	73.0	14.3	0.33	0.15
3/4"	21mm	25mm	1 2 1/32"	2 1/8"	9/16"	42.1	54.0	14.3	0.38	0.17
1"	27mm	32mm	1 7/8"	2 1/4"	3/4"	47.6	57.2	19.1	0.54	0.24
1 1/4"	35mm	40mm	2 3/32"	2 3/4"	13/16"	53.2	69.9	20.6	0.98	0.44
1 1/2"	41mm	50mm	2 2 3/32"	3 3/8"	13/16"	69.1	85.7	20.6	1.21	0.55
2"	53mm	63mm	3 1/4"	3 7/8"	7/8"	82.6	98.4	22.2	2.19	0.99
2 1/2"	63mm	70mm	—	—	—	—	—	—	—	—
3"	78mm	80mm	—	—	—	—	—	—	—	—
4"	103mm	100mm	—	—	—	—	—	—	—	—

Series 5300-HT 90° LT Fittings



3/8"	12mm	16mm	1 5/32"	1 3/8"	9/16"	29.4	34.9	14.3	0.21	0.10
1/2"	16mm	20mm	1 3/8"	1 9/16"	9/16"	34.9	39.7	14.3	0.29	0.13
3/4"	21mm	25mm	1 2 1/32"	1 3/4"	9/16"	42.1	44.5	14.3	0.37	0.17
1"	27mm	32mm	1 7/8"	2 3/16"	3/4"	47.6	55.6	19.1	0.66	0.30
1 1/4"	35mm	40mm	2 3/32"	2 3/4"	13/16"	53.2	69.9	20.6	1.19	0.54
1 1/2"	41mm	50mm	2 2 3/32"	2 1 5/16"	13/16"	69.1	74.6	20.6	1.55	0.70
2"	53mm	63mm	3 1/4"	3 7/16"	7/8"	82.6	87.3	22.2	2.77	1.26
2 1/2"	63mm	70mm	—	—	—	—	—	—	—	—
3"	78mm	80mm	—	—	—	—	—	—	—	—
4"	103mm	100mm	—	—	—	—	—	—	—	—

Note:

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

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