

TECHNICAL DATA SHEET

Liquid-tight fittings, high temperature - Series 5300-HT For liquid-tight flexible metallic conduit

T&B Liquidtight Systems[®]



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 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 11/4" 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)
- CSA: 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)

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

Certifications / Standards:



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-012-7191
- 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:

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- 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
CSA C22.2, No. 94.2:	Type 3, 3R, 4, 12, 13

• 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 and CSA C22.2, No. 18.3 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

Series 5300-HT High Temperature LT Fittings								Seal Gaskets	
Trade size			Т	hread Type					
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	
11/4"	35mm	40mm	NPT	11/4"	5335-HT	5345-HT	5355-HT	5265-HT	
11/2"	41mm	50mm	NPT	11/2"	5336-HT	5346-HT	5356-HT	5266-HT	
2"	53mm	63mm	NPT	2"	5337-HT	5347-HT	5357-HT	5267-HT	
21⁄2"	63mm	70mm	NPT	21/2"	5338-HT		_	5268-HT	
3"	78mm	80mm	NPT	3"	5339-HT		_	5269-HT	
4"	103mm	100mm	NPT	4"	5340-HT	_	_	5270-HT	

Drawing			Trade size			Inches		Mil	limeters		Weight
-	Inches	Metric	ISO BS EN	Α	В	с	А	В	с	lbs.	kg
Series 5300-HT Straight L1	Fittings										
	3/8"	12mm	16mm	15/32"	15/16"	9/16"	29.4	23.8	14.3	0.13	0.06
	1/2"	16mm	20mm	13/8"	1"	9/16"	34.9	25.4	14.3	0.22	0.10
	3/4"	21mm	25mm	1²1/32"	11/16"	9/16"	42.1	27.0	14.3	0.25	0.11
I <u>P</u>	1"	27mm	32mm	11/8"	15/16"	3/4"	47.6	33.3	19.1	0.38	0.17
A	11/4"	35mm	40mm	23/32"	111/16"	13/16"	53.2	42.9	20.6	0.50	0.23
	11/2"	41mm	50mm	223/32"	11/8"	13/16"	69.1	47.6	20.6	0.93	0.42
	2"	53mm	63mm	31⁄4"	23/16"	7⁄8"	82.6	55.6	22.2	1.38	0.62
	21/2"	63mm	70mm	33⁄4"	31/8"	1"	95.3	79.4	25.4	3.25	1.47
◄ B → < C →	3"	78mm	80mm	41/2"	31⁄4"	1"	114.3	82.6	25.4	4.38	1.98
	4"	103mm	100mm	5²9/32"	3³⁄8"	11 ⁷ /32"	150.0	85.7	38.6	7.52	3.41
Series 5300-HT 45° LT Fitt	ings										
	3/8"	12mm	16mm	15/32"	1%16"	9/16"	29.4	39.7	14.3	0.18	0.08
$\mathbf{\lambda}$	1/2"	16mm	20mm	13/8"	11/8"	9/16"	34.9	43.0	14.3	0.33	0.15
A	3/4"	21mm	25mm	1²1/32"	21/8"	9/16"	42.1	54.0	14.3	0.38	0.17
\checkmark	1"	27mm	32mm	17⁄8"	21⁄4"	3/4"	47.6	57.2	19.1	0.54	0.24
	11/4"	35mm	40mm	23/32"	23/4"	13/16"	53.2	69.9	20.6	0.98	0.44
	11/2"	41mm	50mm	2 ² 3/ ₃₂ "	33⁄8"	13/16"	69.1	85.7	20.6	1.21	0.55
	2"	53mm	63mm	31⁄4"	31⁄8"	7⁄8"	82.6	98.4	22.2	2.19	0.99
	21/2"	63mm	70mm			_	_	_		_	_
⊲ B → ⊲ → _C	3"	78mm	80mm	_	_	-	_	_		_	_
	4"	103mm	100mm	_	_	-	_	_	_	_	_
Series 5300-HT 90° LT Fitt	ings										
	3/8"	12mm	16mm	15/32"	13/8"	9/16"	29.4	34.9	14.3	0.21	0.10
	1/2"	16mm	20mm	13/8"	1%16"	9/16"	34.9	39.7	14.3	0.29	0.13
	3/4"	21mm	25mm	1²1/32"	13/4"	9/16"	42.1	44.5	14.3	0.37	0.17
	1"	27mm	32mm	17⁄8"	23/16"	3/4"	47.6	55.6	19.1	0.66	0.30
	11/4"	35mm	40mm	23/32"	23⁄4"	13/16"	53.2	69.9	20.6	1.19	0.54
	11/2"	41mm	50mm	223/32"	215/16"	13/16"	69.1	74.6	20.6	1.55	0.70
	2"	53mm	63mm	31⁄4"	37/16"	7⁄8"	82.6	87.3	22.2	2.77	1.26
	21/2"	63mm	70mm			—			—		_

Note:

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

3"

4"

С

78mm

103mm

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80mm

100mm

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