
 TECHNICAL DATA SHEET

Steel & Malleable Iron fittings - Series 5200/5300

For liquid-tight flexible metallic conduit

T&B Liquidtight Systems®



Liquid-tight fittings for the most demanding industrial installations

Certifications / Standards:



Features & Benefits:

- Meets UL 514B and CSA C22.2 No. 18.3 for liquid-tight fittings
- Trade sizes ½" to 4" meets CSA Heavy Duty requirements, when used with T&B HD Certified LFMC
- Full compliance to IEC 61386-1, -23 requirements
- Trade sizes from ¾" to 6" (12mm to 153mm)
- Insulated and non-insulated versions
- Straight, 45° and 90° fitting bodies with NPT threads
- 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 seal tight performance
- Heat curled insulators help protect wire sheathing from damage
- Revolver® grounding fittings with GR part number suffix

Applications:

- 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
- Typical applications include raceway for general purpose industrial and commercial construction, Machine OEMs, panel builders, indoor and outdoor installations
- 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
- Suitable to be used in Zone 2, Zone 20, Zone 21, Zone 22, Class I Division 2, Class II Division 1 & 2, and Class III Hazardous locations per CE Code.

Construction / Material / Finish:

- Trade sizes ¾" to 1¼" Steel with Zinc Chromate finish
- Trade sizes 1½" to 6" malleable iron with Zinc Chromate finish
- Zinc plated Steel ground cones
- Thermoplastic nylon seal rings
- Thermoplastic nylon heat curled insulators protect wire sheathing from damage
- 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: -25 to +105°C (-13 to +221°F)

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
- CSA C22.2 No. 18.3, Outlet and Conduit Boxes, Fittings and Accessories
 - File: LR-2884, LR-4484
- IEC/EN 61386-1, -23, Conduit Systems for Cable Management
 - EU DoC: EC-012-7185
- 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 52/53 liquid-tight fittings and T&B Liquidtight Systems LFMC
- Covers all trade sizes from ¾" 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, 6, 12, 13
 - Outdoor: Type 3, 3R, 4, 6
- CSA C22.2 No. 94.2: Type 3, 3R, 4, 12, 13
- NEMA 250: Type 3, 3R, 4, 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, Pull, Resistance, Oil spray, Polymer durability, Flammability Coating thickness, Current withstand
- CSA Heavy Duty requirements

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 5200/5300 Liquid-tight Fittings

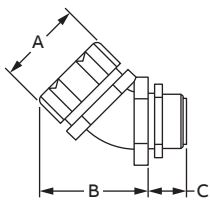
Seal Gaskets

Trade size			Thread Type			Insulated			Non-Insulated			Part no.
Inches	Metric	ISO BS EN	Standard	Size	Straight Part no.	45° Part no.	90° Part no.	Straight Part no.	45° Part no.	90° Part no.		
3/8"	12mm	16mm	NPT	1/2"	5331	5341	5351	5231	5241	5251	5262	
1/2"	16mm	20mm	NPT	1/2"	5332	5342	5352	5232	5242	5252	5262	
3/4"	21mm	25mm	NPT	3/4"	5333	5343	5353	5233	5243	5253	5263	
1"	27mm	32mm	NPT	1"	5334TB	5344	5354	5234	5244	5254	5264	
1 1/4"	35mm	40mm	NPT	1 1/4"	5335	5345	5355	5235	5245	5255	5265	
1 1/2"	41mm	50mm	NPT	1 1/2"	5336	5346	5356	5236	5246	5256	5266	
2"	53mm	63mm	NPT	2"	5337	5347	5357	5237	5247	5257	5267	
2 1/2"	63mm	70mm	NPT	2 1/2"	5338	5348	5358	5238	5248	5258	5268	
3"	78mm	80mm	NPT	3"	5339	5349	5359	5239	5249	5259	5269	
4"	103mm	100mm	NPT	4"	5340	5350	5360	5240	5250	5260	5270	
5"	129mm	120mm	NPT	5"	5385	—	—	5285	—	—	—	
6"	155mm	140mm	NPT	6"	5386	—	—	—	—	—	—	

Dimensions (approximate)

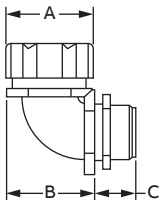
Drawing	Trade size			Inches			Millimeters			Weight	
	Inches	Metric	ISO BS EN	A	B	C	A	B	C	lbs.	kg
	3/8"	12mm	16mm	1 3/8"	1 1/16"	9/16"	29.4	23.8	14.3	0.13	0.06
	1/2"	16mm	20mm	1 3/8"	1"	9/16"	34.9	25.4	14.3	0.22	0.10
	3/4"	21mm	25mm	1 7/8"	1 1/8"	9/16"	42.1	27.0	14.3	0.25	0.11
	1"	27mm	32mm	1 7/8"	1 1/8"	3/4"	47.6	33.3	19.1	0.38	0.17
	1 1/4"	35mm	40mm	2 3/8"	1 11/16"	1 3/16"	53.2	42.9	20.6	0.50	0.23
	1 1/2"	41mm	50mm	2 3/8"	1 7/8"	1 3/16"	69.1	47.6	20.6	0.93	0.42
	2"	53mm	63mm	3 1/4"	2 1/16"	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	
5"	129mm	120mm	8 3/4"	5 1/8"	1 3/8"	222.3	130.2	47.6	25.00	11.34	
6"	155mm	140mm	8 3/4"	6 1/2"	2"	222.3	165.1	50.8	27.00	12.25	

Series 5200/5300 45° LT Fittings



3/8"	12mm	16mm	1 3/8"	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 7/8"	2 1/8"	9/16"	42.1	54.0	14.3	0.38	0.17
1"	27mm	32mm	1 7/8"	2 1/8"	3/4"	47.6	57.2	19.1	0.54	0.24
1 1/4"	35mm	40mm	2 3/8"	2 3/8"	1 3/16"	53.2	69.9	20.6	0.98	0.44
1 1/2"	41mm	50mm	2 3/8"	3 3/8"	1 3/16"	69.1	85.7	20.6	1.21	0.55
2"	53mm	63mm	3 3/4"	3 3/8"	7/8"	82.6	98.4	22.2	2.19	0.99
2 1/2"	63mm	70mm	3 3/4"	4 1/4"	1"	95.3	108.0	25.4	5.95	2.70
3"	78mm	80mm	4 1/2"	4 1/4"	1"	114.3	108.0	25.4	7.75	3.52
4"	103mm	100mm	5 1/2"	4 1/2"	1 1/8"	139.7	114.3	28.6	11.00	4.99

Series 5200/5300 90° LT Fittings



3/8"	12mm	16mm	1 3/8"	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 7/8"	1 3/4"	9/16"	42.1	44.5	14.3	0.37	0.17
1"	27mm	32mm	1 7/8"	2 1/16"	3/4"	47.6	55.6	19.1	0.66	0.30
1 1/4"	35mm	40mm	2 3/8"	2 3/4"	1 3/16"	53.2	69.9	20.6	1.19	0.54
1 1/2"	41mm	50mm	2 3/8"	2 15/16"	1 3/16"	69.1	74.6	20.6	1.55	0.70
2"	53mm	63mm	3 3/4"	3 7/16"	7/8"	82.6	87.3	22.2	2.77	1.26
2 1/2"	63mm	70mm	3 3/4"	8 7/8"	1"	95.3	225.4	25.4	8.60	3.90
3"	78mm	80mm	4 1/2"	10 1/4"	1"	114.3	260.4	25.4	12.86	5.83
4"	103mm	100mm	5 1/2"	12 5/8"	1 1/8"	139.7	320.7	28.6	20.94	9.50

Note:

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

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