
 TECHNICAL DATA SHEET

Liquid-tight fittings - Series 5200AL Aluminum

For liquid-tight flexible metallic conduit

T&B Liquidtight Systems®



Aluminum Liquid-tight fittings are ideal for use in corrosive environments and where light weight conduit systems are required.

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, CE Certified
- Trade sizes from 3/8" to 4" (12mm to 103mm)
- Straight 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®, zinc plated steel ground cones provides superior bonding
- Double Bevel Sealing Ring eases assembly and insures liquid-tight performance
- Revolver® grounding version with GR part number suffix

Applications:

- Typical applications include raceway for industrial and commercial applications such as suspended electrical systems, corrosive environments and portable equipment, where light weight requirements must be met
- Ideal for use with LTAE and LTLE aluminum LT Flexible Metallic Conduits
- 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 4" Copper-Free Aluminum
- Zinc plated steel ground cones
- Thermoplastic Nylon sealing rings
- Halogen Free seal rings
- Aluminum 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: Aluminum & 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-012-7187
- 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 5200AL 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:

- 5200AL 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/EN EC 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

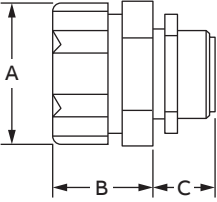
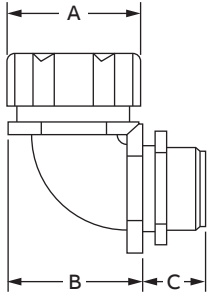
Meets all IEC/EN 61386-1, -23 standard requirements including:

- 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

Product selection

Series 5200AL Aluminum LT fittings			Series 200AL Aluminum LT fittings					Seal Gaskets
Trade size			Thread Type		Non-Insulated			Part no.
Inches	Metric	ISO BS EN	Standard	Size	Straight Part no.	45° Part no.	90° Part no.	
3/8"	12mm	16mm	NPT	1/2"	5231AL	—	5251AL	5262
1/2"	16mm	20mm	NPT	1/2"	5232AL	—	5252AL	5262
3/4"	21mm	25mm	NPT	3/4"	5233AL	—	5253AL	5263
1"	27mm	32mm	NPT	1"	5234AL	—	5254AL	5264
1 1/4"	35mm	40mm	NPT	1 1/4"	5235AL	—	5255AL	5265
1 1/2"	41mm	50mm	NPT	1 1/2"	5236AL	—	5256AL	5266
2"	53mm	63mm	NPT	2"	5237AL	—	5257AL	5267
2 1/2"	63mm	70mm	NPT	2 1/2"	5238AL	—	—	5268
3"	78mm	80mm	NPT	3"	5239AL	—	—	5269
4"	103mm	100mm	NPT	4"	5340AL	—	—	5270

Dimensions (approximate)

Drawing	Trade size			Inches			Millimeters			Weight	
	Inches	Metric	ISO BS EN	A	B	C	A	B	C	lbs.	kg
Series 5200AL Straight LT Fittings											
	3/8"	12mm	16mm	1 5/32"	1 5/16"	9/16"	29.4	23.8	14.3	0.07	0.03
	1/2"	16mm	20mm	1 3/8"	1"	9/16"	34.9	25.4	14.3	0.08	0.04
	3/4"	21mm	25mm	1 2 3/32"	1 1/16"	9/16"	42.1	27.0	14.3	0.12	0.06
	1"	27mm	32mm	1 7/8"	1 5/16"	3/4"	47.6	33.3	19.1	0.21	0.09
	1 1/4"	35mm	40mm	2 3/32"	1 11/16"	1 3/16"	53.2	42.9	20.6	0.34	0.15
	1 1/2"	41mm	50mm	2 2 3/32"	1 7/8"	1 3/16"	69.1	47.6	20.6	0.39	0.17
	2"	53mm	63mm	3 1/4"	2 3/16"	7/8"	82.6	55.6	22.2	0.60	0.27
	2 1/2"	63mm	70mm	3 3/4"	3 1/8"	1"	95.3	79.4	25.4	1.50	0.68
	4"	103mm	100mm	5 1/2"	3 3/8"	1 1/8"	139.7	85.7	28.6	3.00	1.36
Series 5200AL 90° LT Fittings											
	3/8"	12mm	16mm	1 5/32"	1 3/8"	9/16"	29.4	34.9	14.3	0.09	0.04
	1/2"	16mm	20mm	1 3/8"	1 9/16"	9/16"	34.9	39.7	14.3	0.13	0.06
	3/4"	21mm	25mm	1 2 3/32"	1 3/4"	9/16"	42.1	44.5	14.3	0.17	0.07
	1"	27mm	32mm	1 7/8"	2 3/16"	3/4"	47.6	55.6	19.1	0.26	0.12
	1 1/4"	35mm	40mm	2 3/32"	2 3/4"	1 3/16"	53.2	69.9	20.6	0.50	0.23
	1 1/2"	41mm	50mm	2 2 3/32"	2 1 5/16"	1 3/16"	69.1	74.6	20.6	0.57	0.26
	2"	53mm	63mm	3 1/4"	3 7/16"	7/8"	82.6	87.3	22.2	1.00	0.45
	2 1/2"	63mm	70mm	—	—	—	—	—	—	—	—
	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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