

**TECHNICAL DATA SHEET** 

## Liquid-tight fittings - Series 5200ALGR Aluminum

# For liquid-tight flexible metallic conduit

## **T&B Liquidtight Systems**°



Revolver® Aluminum Grounding 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 1" (12mm to 25.4mm)
- · Straight and 90° conduit bodies
- NPT Thread
- 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

### Applications:

- Typical applications include raceway for industrial and commercial applications such as suspended electical systems, corrosive environments and portable equipment, where light weight requirements must be met
- Aluminum LFMC are typically 35 to 40% lighter than steel core conduits
- 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
- $\bullet \ \ \text{Used to positively bond flexible liquid-tight flexible metallic conduit to boxes or enclosures}$
- · 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" Copper-Free Aluminum
- · Zinc plated steel ground cones
- Thermoplastic Nylon sealing rings
- Halogen Free thermoplastic 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, E3060
- 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-012-7188
- 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 5200ALGR liquid-tight fittings and T&B Liquidtight Systems LFMC
- Covers all trade sizes from 3/8" to 1" (12mm to 25.4mm)
- Ingress ratings require use of Series 5260 Seal Gaskets

## UL, CSA & NEMA system ingress ratings:

- 5200ALGR 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

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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 sel	Product selection										
Series 5200ALGR Aluminum LT Fittings Seal Gaskets											
Trade size			Т	hread Type							
					Straight	45°	90°				
Inches	Metric	ISO BS EN	Standard	Size	Part no.	Part no.	Part no.	Part no.			
3/8"	12mm	16mm	NPT	1/2"	5231ALGR	_	5251ALGR	5262			
1/2"	16mm	20mm	NPT	1/2"	5232ALGR	_	5252ALGR	5262			
3/4"	21mm	25mm	NPT	3/4"	5233ALGR	_	5253ALGR	5263			
1"	27mm	32mm	NPT	1"	5234ALGR	_	5254ALGR	5264			
11/4"	35mm	40mm	NPT	11/4"	_	_	_	_			
11/2"	41mm	50mm	NPT	11/2"	_	_	_	_			
2"	53mm	63mm	NPT	2"	_	_	_	_			
21/2"	63mm	70mm	NPT	21/2"	_	_	_	_			
3"	78mm	80mm	NPT	3"	_	_	_	_			
4"	103mm	100mm	NPT	4"	_	_	_	_			

Dimensions (approximate	)										
Drawing			Trade size		Inches		Millimeters			Weight	
	Inches	Metric	ISO BS EN	Α	В	С	Α	В	С	lbs.	kg
Series 5200ALGR Straight	LT Fittings										
	3/8"	12mm	16mm	15/32"	15/16"	9/16"	29.4	23.8	14.3	0.07	0.03
6.6	1/2"	16mm	20mm	13/8"	1"	9/16"	34.9	25.4	14.3	0.08	0.04
	3/4"	21mm	25mm	121/32"	11/16"	9/16"	42.1	27.0	14.3	0.12	0.06
	1"	27mm	32mm	17/8"	15/16"	3/4"	47.6	33.3	19.1	0.21	0.09
A F	11/4"	35mm	40mm	_	_	_	_	_	_	_	_
	11/2"	41mm	50mm	_	_	_	_	_	_	_	_
<u> </u>	2"	53mm	63mm	_	_	_	_	_	_	_	_
<b>→</b> B → <b>→</b> C →	21/2"	63mm	70mm	_	_	_	_	_	_	_	_
1. 0 -1.0-1	3"	78mm	80mm	_	_	_	_	_	_	_	_
	4"	103mm	100mm	_	_	_	_	_	_	_	_
Series 5200ALGR 90° LT Fi	ttings										
	3/8"	12mm	16mm	15/32"	13/8"	9/16"	29.4	34.9	14.3	0.09	0.04
A ->	1/2"	16mm	20mm	13/8"	19/16"	9/16"	34.9	39.7	14.3	0.13	0.06
	3/4"	21mm	25mm	121/32"	13/4"	9/16"	42.1	44.5	14.3	0.17	0.07
	1"	27mm	32mm	17/8"	23/16"	3/4"	47.6	55.6	19.1	0.26	0.12
	11/4"	35mm	40mm	_	_	_	_	_	_	_	_
	11/2"	41mm	50mm	_	_	_	_	_	_	_	_
	2"	53mm	63mm	_	_	_	_	_	_	_	_
	21/2"	63mm	70mm	_	_	_	_	_	_	_	_
	3"	78mm	80mm	_	_	_	_	_	_	_	_
← B →   ← C →	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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