

**TECHNICAL DATA SHEET** 

# Quick-Connect™ steel fittings - Series 5200/5300-PT

For liquid-tight flexible metallic conduit

# T&B Liquidtight Systems®



Quick-Connect™ steel liquid-tight fittings install up to three times faster than traditional products.

## **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 27mm)
- · Insulated heat curled and non-insulated versions
- 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 seal tight performance

### 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  $\mbox{\ensuremath{\text{V}}}$
- 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" Steel 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
- Stamped Steel 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 & 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-012-7190
- 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 5200/5300-PT liquid-tight fittings and T&B Liquidtight Systems LFMC
- Covers all trade sizes from 3/8" to 1" (12mm to 27mm)
- 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

Product selection											
Series 5200/5300-PT Liquid-tight Fittings Seal Ga										Seal Gaskets	
Trade size			Thread Type				Insulated	Nor		-Insulated	
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.	Part no.
3/8"	12mm	16mm	NPT	1/2"	5331-PT	5341-PT	5351-PT	5231-PT	5241-PT	5251-PT	5262
			ISO	M16	_	_		_	_	_	_
			PG	13.5	_	_	_	_	_	_	_
1/2"	16mm	20mm	NPT	1/2"	5332-PT	5342-PT	5352-PT	5232-PT	5242-PT	5252-PT	5262
			ISO	M20	_	_	_	_	_	_	_
			PG	16	_	_	_	_	_	_	_
3/4"	21mm	25mm	NPT	3/4"	5333-PT	5343-PT	5353-PT	5233-PT	5243-PT	5253-PT	5263
			ISO	M25	_	_	_	_	_	_	_
			PG	21	_	_	_	_	_	_	_
1"	27mm	32mm	NPT	1"	5334-PT	5344-PT	5354-PT	5234-PT	5244-PT	5254-PT	5264
			ISO	M32	_	_		_	_	_	_
			PG	29	_	_		_	_	_	_

Drawing			Trade size	Inches				Mill		Weight	
J	Inches	Metric	ISO BS EN	Α	В	С	Α	В	С	lbs.	kg
	ight LT Fitti	ngs									
	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
! ∏ <del>                                    </del>	1"	27mm	32mm	17/8"	15/16"	3/4"	47.6	33.3	19.1	0.38	0.17
A	11/4"	35mm	40mm	_	_	_	_	_	_	_	_
	11/2"	41mm	50mm	_	_		_	_	_	_	_
<u> </u>	2"	53mm	63mm	_	_	_	_	_	_	_	_
	21/2"	63mm	70mm	_	_	_	_	_	_	_	_
← B →   ← C →	3"	78mm	80mm	_	_	_	_	_	_	_	_
	4"	103mm	100mm	_	_	_	_	_	_	_	_
Series 5200/5300-PT 45°	LT Fittings										
λ	3/8"	12mm	16mm	15/32"	1"	9/16"	29.4	25.4	14.3	0.18	0.08
	1/2"	16mm	20mm	13/8"	15/16"	9/16"	34.9	33.3	14.3	0.33	0.15
A'	3/4"	21mm	25mm	121/32"	19/16"	9/16"	42.1	39.7	14.3	0.38	0.17
	1"	27mm	32mm	17/8"	1½"	3/4"	47.6	38.1	19.1	0.54	0.24
	11/4"	35mm	40mm	_	_	_	_	_	_	_	_
	11/2"	41mm	50mm	_	_	_	_	_	_	_	_
	2"	53mm	63mm	_	_	_	_	_	_	_	_
	21/2"	63mm	70mm	_	_	_	_	_	_	_	_
	3"	78mm	80mm	_	_	_	_	_	_	_	_
<del></del>	4"	103mm	100mm	_	_	_	_	_	_	_	_
Series 5200/5300-PT 90° L	T Fittings			'							
<b>←</b> A <b>→</b>	3/8"	12mm	16mm	15/32"	13/16"	9/16"	29.4	30.2	14.3	0.21	0.10
	1/2"	16mm	20mm	13/8"	17/16"	9/16"	34.9	36.5	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"	115/16"	3/4"	47.6	49.2	19.1	0.66	0.30
	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.

ABB Inc. Electrification products Memphis, Tennessee USA

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