

APPLICATION PROFILE

# General-purpose solutions

## *T&B Liquidtight Systems®*



T&B Liquidtight Systems® general-purpose cable protection solutions provide superior reliability in the most demanding environments and applications. T&B Liquidtight Systems products meet global standards requirements, including UL, CSA and CE. These products provide global solutions required by many machine OEMs and panel builders.

—  
01 Series 5200/5300 liquid-tight fittings  
—  
02 LTGU assembly

### Introduction

The T&B Liquidtight Systems portfolio provides a wide variety of solutions from which to choose for any general-purpose application.

### Typical applications

For use in indoor or outdoor installations:

- Industrial OEM machinery
- Panel builders
- Direct burial
- Air conditioning
- Power plants
- Steel mills
- Utilities
- Wastewater treatment
- Chemical processing
- Oil and gas refineries
- Renewable energy



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### System solutions

T&B Liquidtight Systems solutions provide coordinated design, material selection and testing assembly performance of the conduits, fittings and accessories, covering UL, CSA and IEC ingress ratings, as well as temperature ratings.

### Solutions designed for most general applications

Careful material selection and testing are key to providing a reliable cable protection system that can withstand a wide range of applications, such as corrosive environments, power plants, paper mills and much more.

### General-purpose system components

- Flexible metallic conduits
- Liquid-tight fittings
- Seal gaskets
- Locknuts
- Supports
- Wire mesh grips
- Hole plugs

## General-purpose solutions

- 01 Series 5200/5300 liquid-tight fittings
- 02 Series 5260 seal gaskets
- 03 Type LTGU LFMC



### System components

- Liquid-tight flexible metallic conduit
  - Galvanized steel and stainless steel cores
  - PVC extruded smooth jacket
  - Trade sizes 3/8" to 6"
  - CSA HD
- Liquid-tight fittings
  - NPT and ISO metric threads
  - Trade sizes 3/8" to 3"
  - CSA HD
- Seal gaskets
- Conduit supports
- Mesh grips

### T&B Liquidtight Systems® product lines

- Types LTGU, LTGE, LTGC, LT6GE
  
- Series 5200/5300 steel (NPT)
- Series 5200/5300 GR grounding (NPT)
- Series 5300-NB nickel-plated brass (NPT and ISO metric)
- Series 5260 seal gaskets
- Series HS-100 and HS100-SS conduit supports
- Series WMG-LT mesh grips

### System ingress ratings

Complete system solutions have been tested by ABB Installation Products and third-party certification organizations.

	Test standard	Ratings	Approvals and certifications
UL	UL 50E	Type 3, 3R, 4, 4X, 12, 13	UL listed when using listed conduits
CSA	CSA C22.2 No. 18.3	Type 3, 3R, 4, 4X, 12, 13	CSA certified when using listed conduits
NEMA	NEMA 250	Type 3, 3R, 4, 4X, 12, 13	Third-party verified, tested to UL 50E with all conduits
IEC IP	IEC/EN 60529	IP66, IP67, IP68, IP69	Third-party verified with all conduits

### System temperature ratings

System temperature ratings are achieved by ensuring that all components have been designed and tested to the appropriate product standard requirements or to the manufacturer's targeted

performance characteristic. Diligent material evaluation and testing ensures that T&B Liquidtight Systems rating claims meet the highest performance standards possible.

#### Type LTGU UL general-purpose conduit

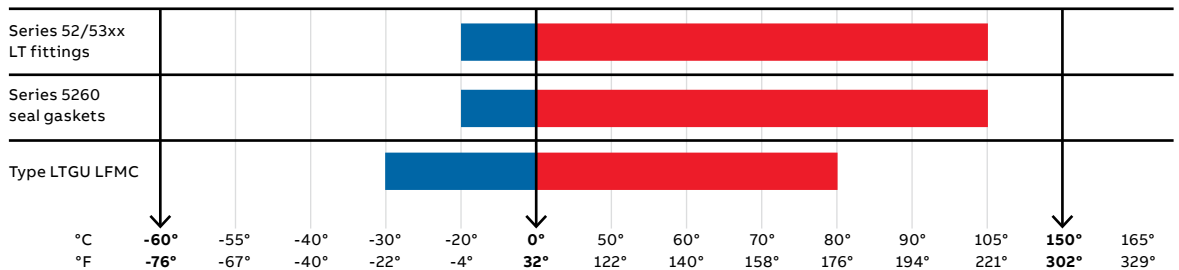
- IEC/EN 61386-1, -23      CE certified      -25 to +90 °C (-13 to +194 °F)
- T&B engineered and tested      General      -25 to +90 °C (-13 to +194 °F)



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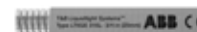


## General-purpose solutions

### Product line overview



#### Liquid-tight flexible metallic conduit



Product line	LTGU General purpose — UL	LTGE General purpose — CE	Type LTGC General purpose — CSA	Type LT6GE General purpose SST, CE
<b>Approvals and certifications</b>				
UL 360	Yes	No	No	No
CSA C22.2, No. 56	Yes	No	Yes	No
CE certification/EC/EN61386	Yes	Yes	Yes	Yes
RoHS	Yes	Yes	Yes	Yes
Halogen-free	No	No	No	No
<b>Trade sizes</b>				
UL (inches)	¾ to 4	¾ to 6	¾ to 4	¾ to 4
CSA (mm)	12 to 103	12 to 155	12 to 103	12 to 103
BS EN (mm)	16 to 100	16 to 150	16 to 100	16 to 100
<b>Materials</b>				
Core	Galvanized steel	Galvanized steel	Galvanized steel	Stainless steel 316L
Extruded jacket (UL ID/OD)	PVC	PVC	PVC	PVC
UL bond wire (¾ to 1¼")	Yes	No	No	No
<b>Documentation</b>				
Technical data sheet	TDS000001	TDS000002	TDS000003	TDS000087
Quick select table	LTGU QST 0420	LTGE QST 0217	LTGC QST 0217	LT6GE QST 1017
CE certificate	EC-012-16-102	EC-012-15-025	EC-012-15-025	EC-012-16-177



#### Liquid-tight fittings and accessories

Product line	Series 5200/5300 Steel	Series 5200/5300GR Steel, grounding	Series 5300-NB Nickel-plated brass	Series 5260 Seal gaskets
<b>Approvals and certifications</b>				
UL 5148	Yes	Yes	Yes	Yes
CSA C22.2, No.18.3	Yes	Yes	Yes	Yes
CE certification/EC/EN 61386	Yes	Yes	Yes	No
RoHS	Yes	Yes	Yes	Yes
Halogen-free	Yes	Yes	Yes	Yes
<b>Materials</b>				
Metal components	Galvanized steel/MI	Galvanized steel/MI	Nickel-plated brass	Stainless steel 316
Seals, insulators and gaskets	Nylon	Nylon	Nylon	Thermoplastic rubber
<b>Documentation</b>				
Technical data sheet	TDS000122	TDS000120	TDS000127	TDS000232
CE certificate	EC-012-7185	EC-012-7186	EC-012-7189	—

#### System ratings

##### Temperature — dry (see technical data sheets for complete ratings)

General	—	—	—	—
CE	-25 to +105 °C (-13 to +221 °F)	-25 to +105 °C (-13 to +221 °F)	-25 to +105 °C (-13 to +221 °F)	—
UL	-20 to +105 °C (-4 to +221 °F)	-20 to +105 °C (-4 to +221 °F)	-20 to +105 °C (-4 to +221 °F)	-20 to +105 °C (-4 to +221 °F)
CSA	-25 to +105 °C (-13 to +221 °F)	-20 to +105 °C (-4 to +221 °F)	-20 to +105 °C (-4 to +221 °F)	-20 to +105 °C (-4 to +221 °F)

##### Ingress

UL/CSA (tested per UL 50E)	Type 3, 3R, 4, 6, 12,13	Type 3, 3R, 4, 6, 12,13	Type 3, 3R, 4, 4X, 6, 12, 13	Type 3, 3R, 4, 4X, 12, 13
NEMA	Type 3, 3R, 4, 6, 12, 13	Type 3, 3R, 4, 6, 12, 13	Type 3, 3R, 4, 4X, 6, 12,13	Type 3, 3R, 4, 4X, 12, 13
IEC/EN 60529	IP66, IP67, IP68, IP69	IP66, IP67, IP68, IP69	IP66, IP67, IP68, IP69	IP66, IP67, IP68, IP69

Note: Product must be installed in accordance with applicable national and local electrical codes.

## General-purpose solutions

### Sample kits

T&B Liquidtight Systems® solutions meet global application requirements for general-purpose installations, -20 to +105 °C.



### Sample kit



Part no. LTSGP-KIT

ABB Installation Products Inc.  
Electrification Business  
860 Ridge Lake Blvd.  
Memphis, TN 38120

[electrification.us.abb.com](http://electrification.us.abb.com)

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### Sample kit available

Part no. LTSGP-KIT

### Materials included:

- 5332 — ½" straight, steel liquid-tight fitting
- 5352 — ½" 90°, steel liquid-tight fitting
- 5262 — ½" seal gasket
- LTGUS02G-C — ½" steel UL LFMC
- LTGES02B-C — ½" steel CE LFMC
- LT6GES02B-C — ½" stainless steel 316L CE LFMC
- Technical data sheets

Sample kits are in stock and available for immediate delivery.

### How to order:

1. Contact your local ABB sales representative to order
2. Supply your contact information and mailing address
3. ABB sale representative to order sample kit from EP Sales Portal

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