

Wide and extreme temperature solutions

T&B Liquidtight Systems®



The T&B Liquidtight Systems® brand encompasses complete flexible metallic cable protection solutions, designed for use in applications where wide and extreme temperatures can compromise power conductors, control wiring and communication cables.



Introduction

The T&B Liquidtight Systems portfolio provides one of the widest and most complete range of liquid-tight flexible metallic conduit solutions for wide and extreme temperature applications, from -60 to +150 °C.

Typical applications

For use in indoor or outdoor installations:

- Foundries and roller mills
- Forges and stamping
- Furnaces and curing systems
- Industrial ovens and kilns
- Pumping stations
- Power distribution equipment and substations
- Refrigeration and freezer systems
- Rooftop HVAC equipment
- Drilling platforms
- Pump skids
- Cell towers
- Wind turbines and solar collectors
- Machining centers



Solutions designed for extreme temperatures

Careful material selection and testing is key to providing a reliable cable protection system that meets the highest performance under extreme temperature conditions. Typically, wide and extreme temperature solutions in the market have only been focused on the conduits.

With T&B Liquidtight Systems, all component parts, including liquid-tight fittings and seal gaskets, are designed and tested at extreme temperatures to ensure reliable performance over the life of the installation.

Wide and extreme temperature system components

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

Wide and extreme temperature solutions

- 01 Series 5300-HT LT fittings
- 02 Type LTXE extreme temp LFMC
- 03 Series 526x-HT high temp seal gaskets



System components

- Liquid-tight flexible metallic conduit
 - Galvanized steel and stainless steel 316 cores
 - UV-resistant PVC and TPU jackets
 - Food and beverage
 - Trade sizes 3/8" to 4"
- Liquid-tight fittings
 - NPT and ISO metric threads
 - Trade sizes 3/8" to 4"
- Seal gaskets
- Conduit supports
- Mesh grips

T&B product lines

- Types LTTU, LTTE, LTXE, LT6XE

- Series 5300-HT high temperature

- Series 5260 and 5260-HT versions
- Series H1 and H9
- Series WMG

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, 6, 12, 13	UL listed when using listed conduits
CSA	CSA C22.2 No. 94.2	Type 3, 3R, 4, 4X, 6, 12, 13	CSA certified when using listed conduits
IEC IP	IEC/EN 60529	IP66, IP67, IP68, IP69	CE certified with all conduits
NEMA	NEMA 250	Type 3, 3R, 4, 4X, 6, 12, 13	Self-certified, tested to UL 50E 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. In the case of T&B Liquidtight Systems extreme temperature

solutions, product standard performance tests were used at wider temperature ranges than the product standards recognizes. Diligent material evaluation and testing ensure that the T&B rating claims meet the highest performance standards possible.

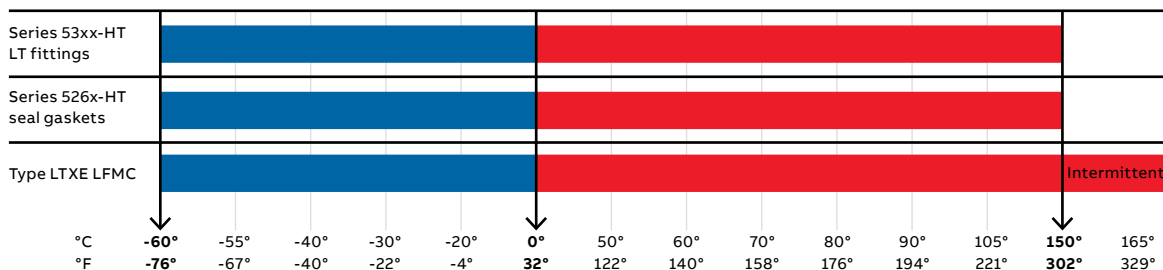
Type LTXE and LT6XE extreme temperature conduits

IEC/EN 61386-1, -23	CE certified	-45 to +150 °C (-49 to +302 °F)
T&B engineered and tested	General	-60 to +150 °C (-76 to +302 °F)



01

LT6XE system temperature rating



02

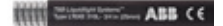
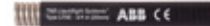
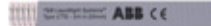


03

Wide and extreme temperature solutions

Product line overview

Liquid-tight flexible metallic conduit



	LTTU	LTTE	LTXE	LT6XE
Product line	Wide temp. — UL	Wide temp. — CE	Extreme temp. — CE	SST6 Extreme temp. — CE
Approvals and certifications				
UL 360	Yes	No	No	No
CSA C22.2, No. 56	Yes	No	No	No
CE certification, IEC/EN 61386	Yes	Yes	Yes	Yes
RoHS	Yes	Yes	Yes	Yes
Halogen free	Yes	Yes	Yes	Yes
Trade sizes				
UL (Inches)	3/8 to 4	3/8 to 6	3/8 to 6	3/8 to 4
CSA (mm)	12 to 103	12 to 155	13 to 155	12 to 103
BS EN (mm)	16 to 100	16 to 150	16 to 150	16 to 100
Materials				
Core	Galvanized steel	Galvanized steel	Galvanized steel	Stainless steel 316
Extruded jacket (UL ID/OD)	PVC	PVC	TPU	TPU
UL bond wire (3/8 to 1 1/4")	Yes	Yes	No	No
Documentation				
Technical data sheet	TDS000004	TDS000005	TDS000006	TDS000088
Quick select table	LTTU QST 0717	LTTE QST 0717	LTXE QST 0717	LT6XE QST 0118
CE certificate	EC-012-16-100	EC-012-16-156	EC-012-16-157	EC-012-17-178

Liquid-tight fittings and accessories



	Series 5200/5300	Series 5300-HT	Series 5300SST6HT	Series 526x-HT
Product line	Steel	Steel high temp.	SST 316 high temp.	High temp. seal gasket
Approvals and certifications				
UL 5148	Yes	Yes	Yes	Yes
CSA C22.2, No. 18.3	Yes	Yes	Yes	Yes
CE Certification, IEC/EN 61386	Yes	Yes	Yes	—
RoHS	Yes	Yes	Yes	Yes
Halogen free	Yes	Yes	Yes	Yes
Materials				
Metal components	Galvanized steel/MI	Galvanized steel/MI	Stainless steel 316	Stainless steel 316
Seals, insulators and gaskets	Nylon	Nylon	Nylon	TPV
Documentation				
Technical data sheet	TDS000122	TDS000123	TDS000124	TDS000232
CE Certificate	EC-012-7185	EC-012-7185	EC-012-7192	—

System ratings

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

General (with -HT fittings)	-55 to +105 °C (-67 to +221 °F)	-55 to +105 °C (-67 to +221 °F)	-60 to +150 °C (-76 to +302 °F)	-60 to +150 °C (-76 to +302 °F)
CE (with -HT fittings)	-45 to +105 °C (-49 to +221 °F)	-45 to +105 °C (-49 to +221 °F)	-45 to +150 °C (-49 to +302 °F)	-45 to +150 °C (-49 to +302 °F)
UL	-20 to +105 °C (-67 to +221 °F)	—	—	—
CSA	-20 to +75 °C (-58 to +167 °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, 6, 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, 6, 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.

Wide and extreme temperature solutions

Sample kits

T&B Liquidtight Systems solutions meet global application requirements for “wide and extreme temperature” installations, **-60 to +150 °C**.



Sample kit available

Part no.: LTSTEMP-KIT

Materials included:

- 5332-HT — ½" straight, high temperature steel LT fitting
- 5352-HT — ½" 90°, high temperature steel LT fitting
- 5262-HT — ½" high temperature seal gasket
- LTTUS02G-C — ½" wide temperature, UL LFMC
- LTXES02B-C — ½" extreme temperature, steel CE LFMC
- LT6XES02B-C — ½" extreme temperature, CE SST6 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 sales representative to order sample kit from ELIP Sales Portal

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

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