

Liquidtight Connectors and Hubs for Liquidtight Flexible Metal Conduit

General Information and special features.

Applications

- Seal out oil, water, dirt, dust and fumes wherever liquidtight flexible metal conduit is used.
- Typical applications include food processors, beverage plants, chemical plants, dairies, machine shops, plastic fabricators, petroleum machinery, and gantry cranes.

ST and STB Series

For connections to threaded hubs. Insulated throat on STB protects conductors. Connectors are available with grounding lugs. Straight sizes 3/8" thru 5"; 45° and 90°, 3/8" thru 4". Straight and 90° styles in sizes 3/8" thru 2" also available with certain metric thread sizes. See page I-49.

STN Space-Saving Connectors for Enclosures

Appleton STN Series makes liquidtight connections to sheet metal enclosures. Space-saving, self-locking gasketed wedge forms a perfect seal and allows more wiring room. Straight sizes 3/8" thru 4"; 90° sizes 3/8" thru 1".

STG Neoprene Sealing Gasket Assembly

Steel backed, neoprene gasket assembly assures a liquidtight connection to a rough metal surface such as knock-outs in steel junction boxes. Sizes 1/2" thru 4" feature bonded gasket/retainer assembly. 1/4 and 3/8 available in thermoplastic material.

Female Steel ST Connectors

For liquidtight connections to threaded rigid metal conduit. Sizes 3/8" thru 1".

Features

- **Extra-long ferrule resists pull-outs.** All Appleton liquidtight fittings feature a one-piece, deep-grip ferrule design that simplifies installation and prevents conduit slewing. Its extra length and sharply defined threads provide greater surface contact with the conduit for excellent grounding continuity, greater pull-out strength (4X UL requirements)...and added protection against excessive external conduit flexing and vibration. It virtually eliminates the need for an external strain relief in many applications.



Straight ST/STB

90° ST/STB

45° ST/STB



Female ST



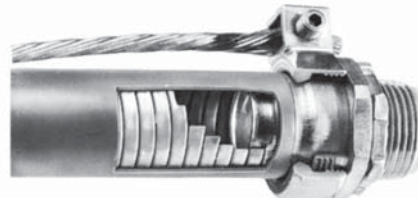
STG Neoprene Sealing Gasket Assembly



90° STN



Straight STN



Cutaway view—ST with External Grounding Lugs



STB with Strain Relief

- **External grounding lugs available on all Appleton liquidtight connectors.** Where National Electrical Code permits an external equipment bonding jumper, [NEC sections 250-96(b), 501-16(b) and 502-16(b)], Appleton ST and STB connectors are offered with an integral bonded steel zinc electroplated lug. Cut-away view shows extended ferrule design for maximum grounding effectiveness. Grounding lugs also available in STN, STL and Female ST Series. Consult factory.

- **Wire mesh strain relief available on all STB, STN, and female ST connectors.** Woven stainless steel mesh sleeve alleviates flexing stress at liquidtight connection.

Liquidtight “ST- F” Female Connectors and “STG” Sealing Gaskets for Liquidtight Flexible Metal Conduit Connectors

Applications

● Female ST Connectors

For use with liquidtight flexible metal conduit when making connection to threaded rigid conduit and IMC.

● STG Sealing Gaskets

Gaskets provide a positive seal between shoulder of male hub connector and sheet metal enclosure.

Features

- All ST Connectors have a unique long ferrule with more pronounced threads that provide over four times UL pull-out requirements. The ferrule also provides maximum surface contact for better sealing and a continuous, permanent, positive metal-to-metal ground.

- Liquidtight/raintight/oiltight.
- Suitable for wet locations.
- Full, machined tapered threads (NPT).
- Female ST Connectors have compact design with small turning radius.
- STG Sealing Gaskets in sizes 1/4” and 3/8” are one piece elastomeric gaskets. Sizes 1/2” thru 6” have unique bonded gasket/retaining-ring assembly for easy installation.

Standard Materials

- ST Connectors: 3/8” to 1”—steel with steel ferrule; 1-1/4” to 4”—malleable iron with aluminum ferrule.
- STG Sealing Gaskets: 1/4” and 3/8”—elastomeric material; 1/2” to 6”—steel retaining ring with bonded neoprene gasket.

Standard Finishes

- Steel—zinc electroplate.
- Malleable iron— Zinc electroplate, dichromate and epoxy powder coat.

Size Range:

- ST Female Connectors: 3/8” thru 4” conduit size.
- STG Sealing Gaskets: 1/4” thru 6” trade (hub) size.



Female ST-F Connector
Steel 3/8” - 1” Malleable Iron 1-1/4” - 4”



STG Sealing Gasket

Compliances

- UL Standard 514B.
- CSA Standard C22.2 No. 18.
- Suitable for hazardous locations Class I, Div. 2 Class II, Div. 1 and 2 Class III, Div. 1 and 2 NEC 501-4(b), 502-4(a)(2), 503-3(a)

- STG Sealing Gaskets are UL listed raintight when used with raintight enclosures and Appleton Liquidtight and Cord Grip fittings.

Catalog Number	Size (In.)	Catalog Number	Size (In.)
“ST” Connectors with Female Threaded Hubs*		Sealing Gasket - Not for use with STN	
ST-38F	3/8 Flex., 1/2 Hub	STG-25	1/4
ST-50F	1/2	STG-38	3/8
ST-75F	3/4	STG-50	1/2
ST-100F	1	STG-75	3/4
ST-125F	1-1/4	STG-100	1
ST-150F	1-1/2	STG-125	1-1/4
ST-200F	2	STG-150	1-1/2
ST-250F	2-1/2	STG-200	2
ST-300F	3	STG-250	2-1/2
ST-400F	4	STG-300	3
		STG-350	3-1/2
		STG-400	4
		STG-500	5
		STG-600	6

* Grounding lugs can be provided, consult factory. For replacement grounding ferrule, see Catalog Sect. ST. For dimensions, see page I-48.