# Industrial Fittings

## Liquidtight Flexible Nonmetallic Conduit Fittings

### Specifications — Type A Conduit Fittings



Series 6302 Liquidtight Flexible Nonmetallic Conduit Fittings



Series 6322 Liquidtight Flexible Nonmetallic Conduit Fittings

#### **Application**

• To provide a liquidtight, dustight connection between flexible, nonmetallic conduit and a box or an enclosure

#### **Features**

- Serrated design provides high mechanical pullout strength (A)
- Unique component parts (body/gland) design insures positive seal between conduit and fitting (B)
- Tapered thread hub and sealing 'O' ring provide a liquidtight/dust tight seal to a box or an enclosure (C)
- High strength, chemical resistant, non-burning, non-dripping thermoplastic construction
- Smooth insulated body throughout for maximum dielectric strength
- Captive 'O' ring and reduced number of parts save installation time (D)

#### **Standard Material**

Body	Thermoplastic
Gland	Thermoplastic
'0' Ring	Neoprene
Locknut	Steel (Case Hardened)

#### **Standard Finish**

Body, Gland & 'O' Ring As Molded Locknut Electro Zinc

#### Range

- Conduit SizeHub Size
- 1/2 in. thru 1-1/4 in.
- 1/2 in. thru 1-1/4 in. NPT

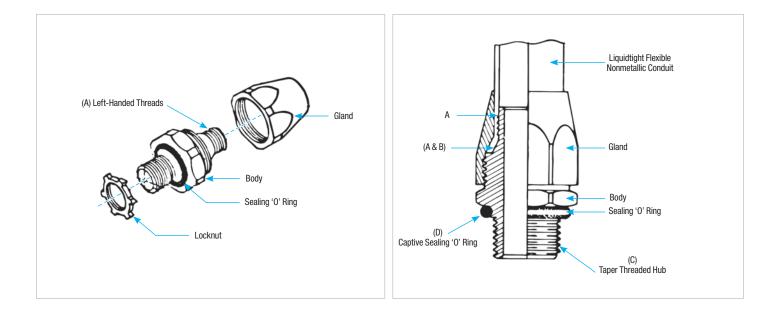
Thomas Betts A Member of the ABB Group B103



## Liquidtight Flexible Nonmetallic Conduit Fittings

**Suggested Specifications for Type A Conduit and Fittings** 

- Type A Liquidtight Flexible Nonmetallic Conduit shall be seamless type adequately reinforced with one or more layers of flexible braided reinforcing cords. Conduit jacket shall be of non-kinking oil resistant/ water resistant flame retardant material suitable for ambient environmental conditions.
- Where Type A Flexible Nonmetallic Conduit terminates into a threaded or threadless opening, the conduit shall be cut square, deburred, installed with sufficient slack to reduce effects of vibration and assembled with approved fittings such as Series 6302 or 3720 manufactured by Thomas & Betts. Fittings shall be of malleable iron/ steel/ thermoplastic construction with taper-threaded hub and:
- (1) Ferrous metallic fittings shall be electro-zinc plated inside outside and equipped with a nylon insulated throat
- (2) Thermoplastic fittings shall be of high impact chemical resistant, non-burning, non-dripping thermoplastic
- (3) Fittings shall be provided with a captive, moisture resistant/ oil resistant synthetic rubber gasket

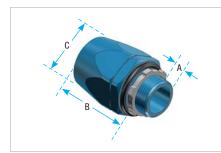






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## Liquidtight Flexible Nonmetallic Conduit Fittings

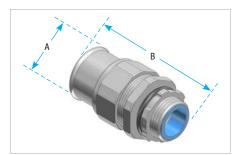


#### **Straight Fitting**



#### 90° Angle Fitting

Designed especially for the Type A, all-plastic raceways now in use for dynamic machine tool applications Fittings are constructed of a high-strength, chemically resistant thermoplastic tougher than the raceway itself Neoprene sealing ring is furnished with fitting providing a liquidtight seal for knockout applications



- · Nylon insulated throat
- T&B Sealing Ring to seal knockouts
- · Steel or malleable iron
- UL Listed
- NPT hub threads to seal in female threads
- High mechanical pull-out strength
- Provides positive seal against water, oil and dust

### Thermoplastic Fittings for Liquidtight Flexible Nonmetallic Conduit Type A



	Conduit	Dimensions (in.)				
Cat. No.	Size (in.)	А	В	C Cross Corners		
Straight Fitting						
6302	1/2	0.60	1.68	1.48		
6303	3/4	0.61	1.85	1.76		
6304	1	0.77	1.89	2.10		
6305	1-1/4	0.79	2.30	2.67		
90° Angle Fitting						
6322	1/2	0.60	1.56	1.48		
6323	3/4	0.61	1.74	1.76		
6324	1	0.77	1.78	2.10		
6325	1-1/4	0.79	2.13	2.67		

Corrosion Resistant Applications

Meets Coast Guard CG293

Use with our LNM-P Conduit on p. G23

### Liquidtight Flexible Nonmetallic Conduit Type A

_	_
3 P °	(UL)

Cat. No.	Conduit	Hub Thread	Dimensions (in.)		
Gal. NO.	Size (in.)	nup Inreau	Α	В	
3720-TB*	3/8	1/2 — 14 NPT	1-5/32	2	
3721-TB	1/2	1/2 — 14 NPT	1-3/8	2-1/8	
3722-TB	3/4	3/4 — 14 NPT	1-5/8	2-1/4	
3723	1	1 — 11-1/2 NPT	1-7/8	2-1/2	
3724-TB	1-1/4	1-1/4 — 11-1/2 NPT	2-3/8	2	
3725	1-1/2	1-1/2 — 11-1/2 NPT	2-3/4	3-3/8	
3726	2	2 — 11-1/2 NPT	3-17/32	3-5/8	

\* Not UL Listed

For Dura-Plate® Finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

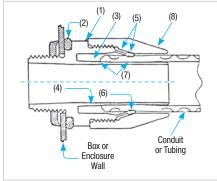






#### Application:

A Series of nonmetallic fittings designed to provide a liquidtight seal when terminating liquidtight nonmetallic conduit (UL Type B) or liquidtight nonmetallic tubing to a box or enclosure with knockout opening or a threaded hub.



Thomas&Betts

A Member of the ABB Group

## Liquidtight Flexible Nonmetallic Conduit Fittings

Specifications — Bullet<sup>®</sup> Liquidtight Fittings for Liquidtight Flexible Nonmetallic Conduit and Tubing

#### Plastic Bullet<sup>®</sup> Liquidtight Fittings Feature:

- Fitting assembles to conduit without disassembly and is designed to be installed with positive installation criteria (gland bottoms on body shoulder)
- Rugged low profile nonmetallic body and gland construction (1); the fitting is equipped with a steel locknut to firmly secure fitting to box or an enclosure and a sealing "0" ring
- Captive sealing "0" ring (2) with predetermined compression for a reliable seal at enclosure
- Fitting ferrule designed to accept variations in conduit inside diameter and is tolerant of field conduit cuts (3)
- Ferrule profile designed to reduce friction between conduit I.D. and ferrule (4) allowing conduit to seat properly for an effective seal
- Outer surface of clamping fingers provided with friction reducing ridges (5) for ease of installation; the inner surface is designed with conduit biting teeth to enhance clamping and sealing action (6)
- Performance of fittings tested to simulate adverse installation conditions
- Provides a double sealing action (7)
- Elongated gland nut profile (8) designed to provide additional strain relief for 90° pull and an easy hand grip
- Performance of fitting unaffected by exposure to detergents, cleaners, and sanitizers commonly encountered in food processing plants and typical industrial environment; also unaffected by cutting fluids, wiring pulling compounds and Marine environment
- Meets industry standards for cold impact and simulated hammer blow

#### **Standard Material/Finish:**

- Body Gland weather stabilized thermoplastic (black)
- "O" Ring nitrile (blue)
- Locknut Steel/electro-zinc plated
- Material temperature rating thermoplastic -40°C to 105°C
- Material Flammability Rating: UL94-V2

#### Conformity

- CSA C22.2 #227.2 & CSA C22.2 #227.3
- UL514B
- Watertight requirements of NEMA Type 4 and Type 4X
- Federal Standard H-28 (NPT threads)
- There is no CEC Rule to use Nonmetallic liquidtight conduit and fittings in Class I, Zone 2 or Class I, Division 2; Rule 18-202 (4) (b) Class II, Division 1; Rule 18-252 (4) Class II, Division 2; Rule 18-302 (4) Class III, Division 1





(SP)

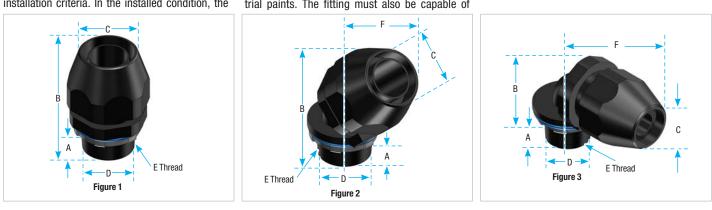
## Liquidtight Flexible Nonmetallic Conduit Fittings

### Plastic Bullet<sup>®</sup> Liquidtight Fittings for T&B NMC Nonmetallic Liquidtight Conduit Type B and T&B NMT Flexible Tubing

	Trade	A±0.015 (0.040)	*B± 0.035 (0.90)		C±0.015 (0.40) Across Corner	Min. Throat Dia. D	E Thread	F* (in.) (mm)									
	5	Size (in.)	in. (mm)	(in.)	(mm)	in. (mm)	in. (mm)	NPT	Approx.								
LT38P	1		0.570	1.595	(40.51)	1.054	0.417		_								
LT438P	2	3/8	0.570 (14.48)	2.012	(51.10)	1.354 (34.39)	0.417 (10.59)	1/2-14	1.534 (38.95)								
LT938P	3		(14.40)	1.380	(35.05)	(34.39)	(10.39)		1.880 (47.75)								
.T50P	1			1.636	(41.55)												
T450P	2	1/2	0.570	2.092	(53.14)	1.448	0.550	1/2-14	1.590 (40.39)								
.1450P .T950P	3	1/2	(14.48)	1.489	(37.82)	(36.78)	(13.97)	1/2-14	1.986 (50.44)								
.1930F	3			1.409	(37.02)				1.900 (30.44)								
.T75P	1			1.757	(44.63)				_								
T475P	2	3/4	0.582 (14.78)	2.452	(62.28)	1.740 (44.20)	0.740 (18.80)	3/4-14	1.821 (46.25)								
.T975P	3		(14.76)	1.790	(45.47)	(44.20)			2.212 (56.00)								
.T100P	1			1.923	(48.84)												
.T4100P	2	1	1	1	- 1	1	1	1	4	1	0.726	2.684	(48.04)	2.068	0.940	1-11-1/2	2.034 (51.66)
.14100P .T9100P	3		(18.44)	2.104	(53.44)	(52.53)	(23.88)	1-11-1/2	2.508 (63.70)								
.131001	5			2.104	(55.44)				2.300 (03.70)								
T125P	1		0.750	2.164	(54.97)	o 101	4.077		_								
T4125P	2	1-1/4	0.750 (19.05)	3.264	(82.91)	2.494 (63.35)	1.257 (31.93)	1-1/4-11-1/2	2.385 (60.58)								
T9125P	3		(19.05)	2.564	(65.13)	(03.33)	(31.93)		2.856 (72.54)								
TICOD		1		0.050	(50.77)				1								
T150P	1	1.1/0	0.767	3.353	(59.77)	2.784	1.453	1 1/0 11 1/0	0.004.(00.14)								
T4150P	2	1-1/2	(19.48)	3.605	(91.57)	(70.71)	(36.91)	1-1/2-11-1/2	2.604 (66.14)								
.T9150P	3			2.854	(72.49)				3.144 (79.86)								
.T200P	1			2.605	(66.17)				_								
T4200P	2	2	0.794	4.210	(106.93)	3.362	1.883 (47.83)	2-8	3.050 (77.47)								
LT9200P	3		(20.17)	3.432	(87.17)	(85.39)			3.675 (93.34)								

#### **Suggested Specification:**

Where liquidtight flexible nonmetallic conduit (UL and CSA Type B) or liquidtight flexible nonmetallic tubing is terminated to a box or enclosure, the nonmetallic fittings used shall be able to be installed without disassembly and provide a positive installation criteria. In the installed condition, the fitting must provide a seal meeting watertight requirements of NEMA Type 4 and Type 4X. The performance of fittings shall be unaffected by exposure to detergents, sanitizers, cutting fluids, wire pulling compounds and oil-based industrial paints. The fitting must also be capable of withstanding marine environment and cold impact simulating a hammer blow. Installed fittings shall be of the elongated gland type as manufactured by Thomas & Betts LT38P Series.







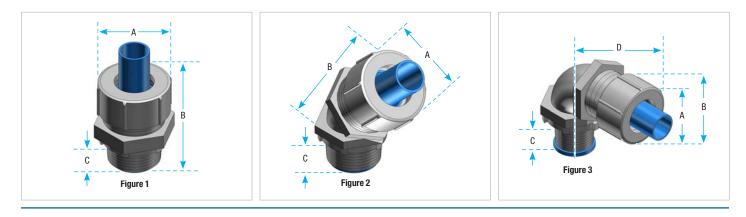
## Liquidtight Flexible Nonmetallic Conduit Fittings

### Metallic Bullet<sup>®</sup> Liquidtight Fittings for T&B NMC Nonmetallic Liquidtight Conduit Type B and T&B NMT Flexible Tubing

	Trade Size (in.)	A±0.030 (0.80)	B±0.060* (1.50)		C±0.045 (1.15)		D	Thread NPT	
	0120 (111.)	in. (mm)	in.	(mm)	in.	(mm)	in. (mm)		
LT38M	1		1.150	1.500	(38.1)	0.562	(14.3)	_	
T438M	2	3/8	1.156 (29.4)	1.962	(49.8)	0.562	(14.3)		1/2-14
T938M	3		(23.4)	1.312	(33.3)	0.625	(15.9)	1.375 (34.9)	
T50M	1		4.075	1.562	(39.7)	0.562	(14.3)		
T450M	2	1/2	1.375 (34.9)	1.875	(47.6)	0.562	(14.3)		1/2-14
T950M	3		(34.9)	1.437	(36.5)	0.625	(15.9)	1.562 (39.7)	
.T75M	1	3/4		1.625	(41.2)	0.625	(15.9)	_	
T475M	2		1.656	2.125	(54.0)	0.562	(14.3)		3/4-14
.T975M	3		(42.1)	1.750	(44.4)	0.625	(15.9)	1.750 (44.4)	
.T100M	1		4.075	2.062	(52.4)	0.750	(19.0)	_	
.T4100M	2	1	1.875 (47.6)	2.250	(57.1)	0.812	(20.6)		1-11-1/2
.T9100M	3		(47.0)	1.937	(49.2)	0.812	(20.6)	2.187 (55.5)	
T125M	1			2.500	(63.5)	0.812	(20.6)		
T4125M	2	1-1/4	2.375	2.750	(69.8)	0.812	(20.6)		1-1/4-11-1/2
T9125M	3		(60.3)	2.500	(63.5)	0.812	(20.6)	2.750 (69.8)	
T150M	1			2.687	(68.2)	0.812	(20.6)		
.T4150M	2	1-1/2	2.750	2.750	(69.8)	0.812	(20.6)		1-1/2-11-1/2
.T9150M	3		(69.8)	2.812	(71.4)	0.812	(20.6)	2.937 (74.6)	
T200M	1			3.062	(77.8)	0.812	(20.6)		
T4200M	2	2	3.468	3.875	(98.4)	0.875	(20.0)		2-11-1/2
.T9200M	3		(88.1)	3.500	(88.9)	0.875	(22.2)	3.437 (87.3)	2 11 1/2

#### **Suggested Specification:**

Where liquidtight flexible nonmetallic conduit (UL and CSA Type B) or liquidtight flexible nonmetallic tubing is terminated to a box or enclosure, the metallic fittings used shall be able to be installed without disassembly and provide positive installation criteria. In the installed condition, the fitting must provide a seal, meeting watertight requirements of NEMA Type 4 and Type 4X with conduit and NEMA Type 4 enclosures with tubing. Installed fittings shall be as manufactured by Thomas & Betts LT38M Series. Material: Body/Gland — Steel/MI Insert — Nylon







# Industrial Fittings

## Liquidtight Flexible Nonmetallic Conduit Fittings



When you have a conduit application in a liquidtight environment, it's time to load up the T&B Bullet<sup>®</sup>. Thomas & Betts introduces the ISO Metric Bullet<sup>®</sup> liquidtight fittings for use with the 3/8 in., 1/2 in., and 3/4 in. NMT and NMC nonmetallic liquidtight conduit Series.

The T&B Bullet<sup>®</sup> liquidtight fitting and NMT nonmetallic conduit are suited for OEM applications as in the machine tool industry where environments include continuous motion, vibration, and exposure to moisture, oil, dirt and dust.

The T&B Bullet<sup>®</sup> liquidtight fitting and NMT nonmetallic conduit are also suitable for construction applications where ISO metric threading and liquidtight systems are installed.

The Xtra flex<sup>®</sup> system offers a lightweight, liquidtight flexible conduit solution for industrial applications. The Xtra flex<sup>®</sup> system allows fast, easy installation and high performance in demanding industrial applications.



### ISO Metric Bullet<sup>®</sup> Liquidtight Fitting



B109

Cat. No.	Angle of Fitting	Conduit Size (in.)	Knockout Size (in.)	Unit Package	Standard Package
LT38M-IS020	Straight	3/8	1/2	25	100
LT50M-IS020	Straight	1/2	1/2	25	100
LT75M-IS025	Straight	3/4	3/4	25	50
LT438M-IS020	45°	3/8	1/2	25	50
LT450M-IS020	45°	1/2	1/2	25	50
LT475M-IS025	45°	3/4	3/4	10	50
LT938M-IS020	90°	3/8	1/2	25	50
LT950M-IS020	90°	1/2	1/2	25	50
LT975M-IS025	90°	3/4	3/4	10	50



### ISO Metric Bullet<sup>®</sup> Liquidtight Fitting Nonmetallic

Cat. No.	Angle of Fitting	Conduit Size (in.)	Knockout Size (in.)	Unit Package	Standard Package
LT38P-IS020	Straight	3/8	1/2	25	100
LT50P-IS020	Straight	1/2	1/2	25	100
LT75P-IS025	Straight	3/4	3/4	25	50
LT938P-IS020	90°	3/8	1/2	25	50
LT950P-IS020	90°	1/2	1/2	25	50
LT975P-IS025	90°	3/4	3/4	10	50



