

Liquidtight flexible nonmetallic conduit fittings

Specifications – Type A conduit fittings

—
01 Series 6302
liquidtight flexible
nonmetallic
conduit fittings

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02 Series 6322
liquidtight flexible
nonmetallic
conduit fittings

Application

- To provide a liquidtight, dust-tight 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 ensures 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

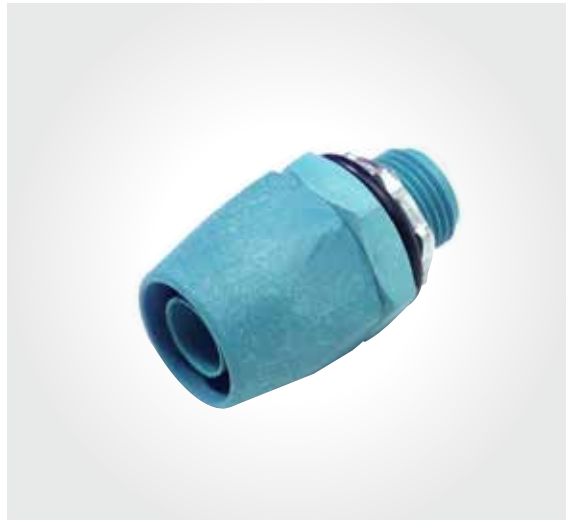
- Body: Thermoplastic
- Gland: Thermoplastic
- O-ring: Neoprene
- Locknut: Steel (case-hardened)

Standard finish

- Body, gland and O-ring: As molded
- Locknut: Electro zinc-plated

Range

- Conduit size: ½ in. through 1¼ in.
- Hub size: ½ in. through 1¼ in. NPT



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01

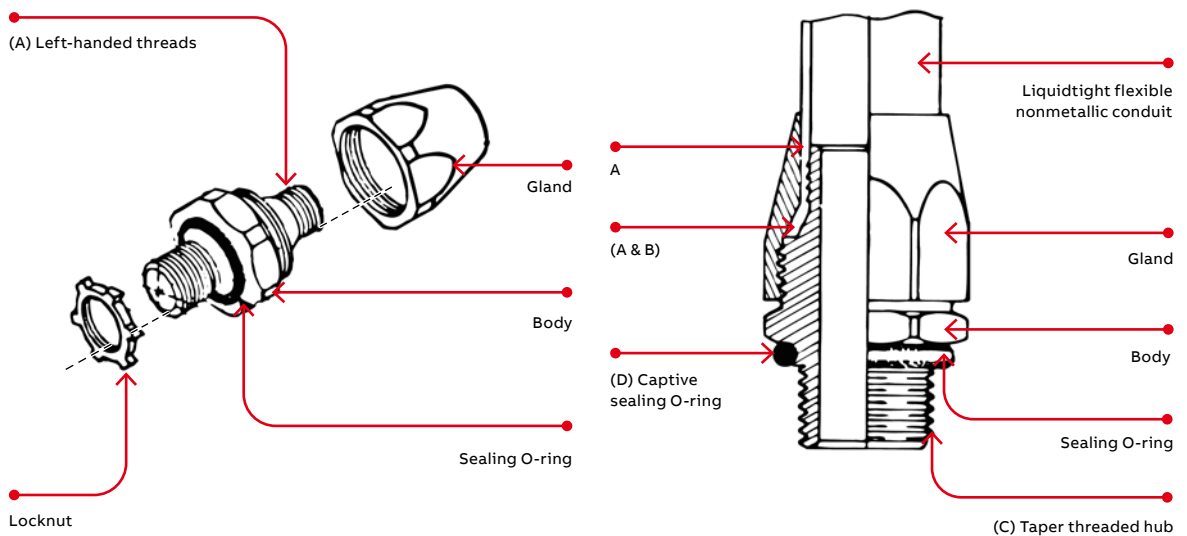


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02

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 ABB. 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.



Liquidtight flexible nonmetallic conduit fittings

Type A conduit fittings

- 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

Thermoplastic fittings for liquidtight flexible nonmetallic conduit Type A



	Cat. no.	Conduit size (in.)	Dimensions (in.)		
			A	B	C cross corners
Straight fittings					
	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 fittings					
	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.

- Nylon-insulated throat
- 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

Metallic fittings for liquidtight flexible nonmetallic conduit Type A



	Cat. no.	Conduit size (in.)	Hub thread (NPT)	Dimensions (in.)	
				A	B
	3720-TB*	3/8	1/2-14	1 1/32	2
	3721-TB	1/2	1/2-14	1 3/8	2 1/8
	3722-TB	3/4	3/4-14	1 5/8	2 1/4
	3723	1	1-11 1/2	1 7/8	2 1/2
	3724-TB	1 1/4	1 1/4-11 1/2	2 3/8	2
	3725	1 1/2	1 1/2-11 1/2	2 3/4	3 3/8
	3726	2	2-11 1/2	3 17/32	3 3/8

* Not UL Listed

Liquidtight flexible nonmetallic conduit fittings

Specifications – Bullet® liquidtight fittings for liquidtight flexible nonmetallic conduit Type B and tubing

Plastic Bullet 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 O-ring
- Captive sealing O-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:

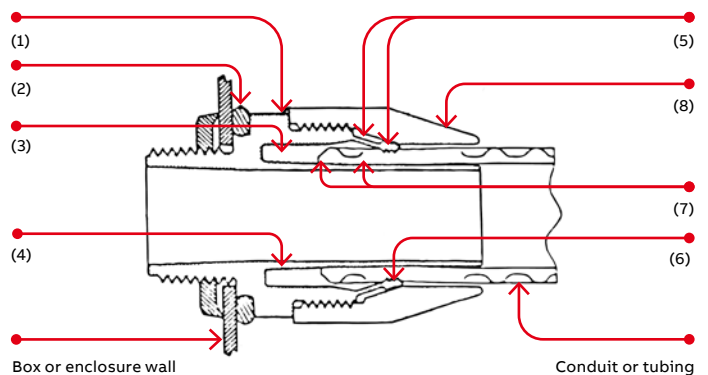
- Body gland: Weather-stabilized thermoplastic (black)
- O-ring: Nitrile (blue)
- Locknut: Steel/electro-zinc plated
- Material temperature rating: Thermoplastic -40 °C to 105 °C
- Material flammability rating: UL94V-2

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

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



Liquidtight flexible nonmetallic conduit fittings

Bullet liquidtight fittings for nonmetallic liquidtight conduit Type B and tubing.

Plastic Bullet fittings



Cat. no.	Fig.	Trade size (in.)	A±0.015	*B± 0.035 (0.90)		C±0.015 (0.40)	Min. throat dia. D in. (mm)	E Thread NPT	F* in. (mm) approx.
			(0.040) in. (mm)	in.	(mm)	across corner in. (mm)			
LT38P	1	3/8	0.570 (14.48)	1.595	(40.51)	1.354 (34.39)	0.417 (10.59)	1/2-14	-
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	3/8	0.570 (14.48)	1.380	(35.05)	1.354 (34.39)	0.417 (10.59)	1/2-14	1.880 (47.75)
LT50P	1	1/2	0.570 (14.48)	1.636	(41.55)	1.448 (36.78)	0.550 (13.97)	1/2-14	-
LT450P	2	1/2	0.570 (14.48)	2.092	(53.14)	1.448 (36.78)	0.550 (13.97)	1/2-14	1.590 (40.39)
LT950P	3	1/2	0.570 (14.48)	1.489	(37.82)	1.448 (36.78)	0.550 (13.97)	1/2-14	1.986 (50.44)
LT75P	1	3/4	0.582 (14.78)	1.757	(44.63)	1.740 (44.20)	0.740 (18.80)	3/4-14	-
LT475P	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)
LT975P	3	3/4	0.582 (14.78)	1.790	(45.47)	1.740 (44.20)	0.740 (18.80)	3/4-14	2.212 (56.00)
LT100P	1	1	0.726 (18.44)	1.923	(48.84)	2.068 (52.53)	0.940 (23.88)	1-11 1/2	-
LT4100P	2	1	0.726 (18.44)	2.684	(68.17)	2.068 (52.53)	0.940 (23.88)	1-11 1/2	2.034 (51.66)
LT9100P	3	1	0.726 (18.44)	2.104	(53.44)	2.068 (52.53)	0.940 (23.88)	1-11 1/2	2.508 (63.70)
LT125P	1	1 1/4	0.750 (19.05)	2.164	(54.97)	2.494 (63.35)	1.257 (31.93)	1 1/4-11 1/2	-
LT4125P	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)
LT9125P	3	1 1/4	0.750 (19.05)	2.564	(65.13)	2.494 (63.35)	1.257 (31.93)	1 1/4-11 1/2	2.856 (72.54)
LT150P	1	1 1/2	0.767 (19.48)	3.353	(85.77)	2.784 (70.71)	1.453 (36.91)	1 1/2-11 1/2	-
LT4150P	2	1 1/2	0.767 (19.48)	3.605	(91.57)	2.784 (70.71)	1.453 (36.91)	1 1/2-11 1/2	2.604 (66.14)
LT9150P	3	1 1/2	0.767 (19.48)	2.854	(72.49)	2.784 (70.71)	1.453 (36.91)	1 1/2-11 1/2	3.144 (79.86)
LT200P	1	2	0.794 (20.17)	2.605	(66.17)	3.362 (85.39)	1.883 (47.83)	2-8	-
LT4200P	2	2	0.794 (20.17)	4.210	(106.93)	3.362 (85.39)	1.883 (47.83)	2-8	3.050 (77.47)
LT9200P	3	2	0.794 (20.17)	3.432	(87.17)	3.362 (85.39)	1.883 (47.83)	2-8	3.675 (93.34)

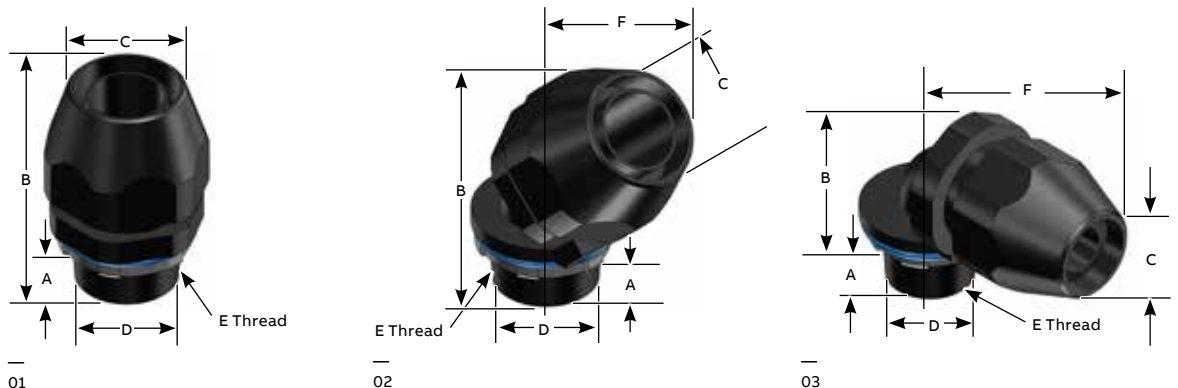
* After assembly

- 01 Figure 1
- 02 Figure 2
- 03 Figure 3

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 ABB, LT38P series.



BULLET® Quick connect™ liquidtight fitting

For liquidtight flexible nonmetallic conduit Type B and tubing



Bullet® Quick Connect™ fitting allows for a fast and effective installation, greatly speeding up the process!

Features & benefits

- Single-piece fitting (no locknut required)
- Quick and easy installation without access to the inside
- Corrosion resistant
- Connector assembles to conduit without disassembly
- Provides a double sealing action
- Swivel mechanism allows for a fast and easy conduit installation
- Elongated gland nut profile designed to provide additional strain relief for 90° pull and an easy hand grip
- Connector ferrule designed to accept variations in conduit inside diameter and is tolerant of field conduit cuts
- 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

Applications

- A series of nonmetallic connectors designed to provide a liquidtight seal when terminating liquidtight nonmetallic conduit (U.L. Type B) to a box
- Ideal for panel builders and volume installers

Conforms to

- C.S.A. 22.2 No. 18.3-12
- ANSI/UL514B
- Watertight requirements of Type 4 and Type 4x

Material / Materials / Finishes

- Body Gland: Weather stabilized thermoplastic
- Friction washer
- Material Flammability rating: UL94-V2

Temperature range

- -18°C to +105°C (-2°F to +221°F)

Color

- Black
- Gray
- Light gray

Chemical resistance

- See publication TDS000081

Technical data



Part no.*	Trade size (in)	A ±0.015 (0.40)		B ±0.035 (0.90)		C ±0.015 (0.40) Across corners		D across flats		E min. throat dia.		Hole size max.		Hole size min.	
		(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
LT38P-QC series straight fittings															
LT38P-QC-X**	3/8	0.393	10.00	2.61	66.51	1.075	27.30	0.978	24.84	0.409	10.40	0.695	17.65	0.742	18.85
LT50P-QC-X	1/2	0.393	10.00	2.57	65.44	1.244	31.60	1.135	28.84	0.541	13.75	0.860	21.84	0.902	23.01
LT75P-QC-X	3/4	0.393	10.00	2.81	71.55	1.437	36.50	1.327	33.70	0.700	17.80	0.700	17.80	1.141	28.98
LT100P-QC-X	1	0.393	10.00	3.03	77.16	1.772	45.00	1.642	41.70	1.642	41.70	0.954	24.25	1.406	35.71

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

* Replace the "X" of the part number by one of the following:

B = black (RAL 9005), G = gray (RAL 7001), LG = light gray (RAL 7035)

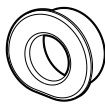
** UL component recognized

These connectors are Certified as components and intended to be used in electrical equipment, where the suitability is determined in the end use application

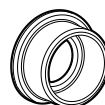
Removal tool

Product selection

Part no.	Standard size (NPT)
NPG-038-RT	3/8
NPG-050-RT	1/2
NPG-075-RT	3/4
NPG-100-RT	1



Front

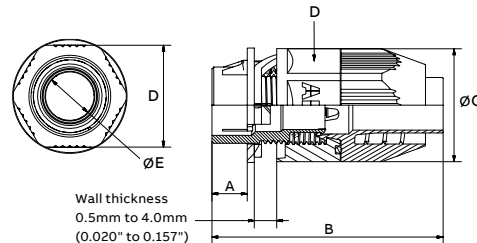


Back

Removal tool

- Push from inside the enclosure using this tool to easily remove the Bullet® quick connect™ liquidtight fitting
- Sold separately (Light grey plastic - RAL 7035)

Dimensions



Liquidtight flexible nonmetallic conduit fittings

Bullet liquidtight fittings for nonmetallic liquidtight conduit Type B and tubing.

Metallic Bullet fittings



Cat. no.	Fig.	Trade size (in.)	A±0.030	B±0.060*		C±0.045		D	Thread NPT
			(0.80)	in.	(mm)	in.	(mm)		
LT38M	1	3/8	1.156 (29.4)	1.500	(38.1)	0.562	(14.3)	-	1/2-14
LT438M	2	3/8	1.156 (29.4)	1.962	(49.8)	0.562	(14.3)	-	1/2-14
LT938M	3	3/8	1.156 (29.4)	1.312	(33.3)	0.625	(15.9)	1.375 (34.9)	1/2-14
LT50M	1	1/2	1.375 (34.9)	1.562	(39.7)	0.562	(14.3)	-	1/2-14
LT450M	2	1/2	1.375 (34.9)	1.875	(47.6)	0.562	(14.3)	-	1/2-14
LT950M	3	1/2	1.375 (34.9)	1.437	(36.5)	0.625	(15.9)	1.562 (39.7)	1/2-14
LT75M	1	3/4	1.656 (42.1)	1.625	(41.2)	0.625	(15.9)	-	3/4-14
LT475M	2	3/4	1.656 (42.1)	2.125	(54.0)	0.562	(14.3)	-	3/4-14
LT975M	3	3/4	1.656 (42.1)	1.750	(44.4)	0.625	(15.9)	1.750 (44.4)	3/4-14
LT100M	1	1	1.875 (47.6)	2.062	(52.4)	0.750	(19.0)	-	1-11 1/2
LT4100M	2	1	1.875 (47.6)	2.250	(57.1)	0.812	(20.6)	-	1-11 1/2
LT9100M	3	1	1.875 (47.6)	1.937	(49.2)	0.812	(20.6)	2.187 (55.5)	1-11 1/2
LT125M	1	1 1/4	2.375 (60.3)	2.500	(63.5)	0.812	(20.6)	-	1 1/4-11 1/2
LT4125M	2	1 1/4	2.375 (60.3)	2.750	(69.8)	0.812	(20.6)	-	1 1/4-11 1/2
LT9125M	3	1 1/4	2.375 (60.3)	2.500	(63.5)	0.812	(20.6)	2.750 (69.8)	1 1/4-11 1/2
LT150M	1	1 1/2	2.750 (69.8)	2.687	(68.2)	0.812	(20.6)	-	1 1/2-11 1/2
LT4150M	2	1 1/2	2.750 (69.8)	2.750	(69.8)	0.812	(20.6)	-	1 1/2-11 1/2
LT9150M	3	1 1/2	2.750 (69.8)	2.812	(71.4)	0.812	(20.6)	2.937 (74.6)	1 1/2-11 1/2
LT200M	1	2	3.468 (88.1)	3.062	(77.8)	0.812	(20.6)	-	2-11 1/2
LT4200M	2	2	3.468 (88.1)	3.875	(98.4)	0.875	(22.2)	-	2-11 1/2
LT9200M	3	2	3.468 (88.1)	3.500	(88.9)	0.875	(22.2)	3.437 (87.3)	2-11 1/2

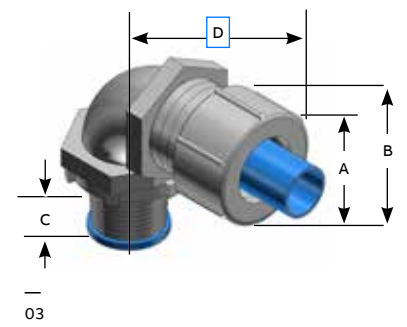
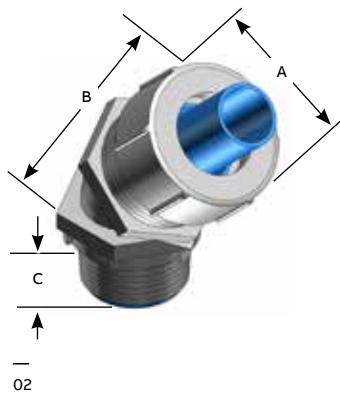
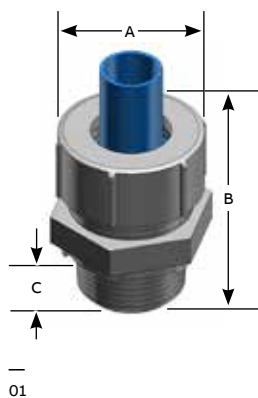
01 Figure 1
02 Figure 2
03 Figure 3

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 ABB, LT38M series.

Material:
Body/gland: Steel/malleable iron
Insert: Nylon



Liquidtight flexible nonmetallic conduit fittings

ISO metric Bullet fittings



When you have a conduit application in a liquidtight environment, it's time to load up the Bullet. ABB introduces the ISO metric Bullet liquidtight fittings for use with the 3/8 in., 1/2 in. and 3/4 in. NMT and NMC nonmetallic liquidtight conduit series.

The Bullet 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 Bullet liquidtight fitting and NMT nonmetallic conduit are also suitable for construction applications where ISO metric threading and liquidtight systems are installed.

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

ISO metric Bullet liquidtight fittings – Metallic



Cat. no.	Angle of fitting	Conduit size (in.)	Knockout size (in.)	Unit package	Standard package
LT38M-ISO20	Straight	3/8	1/2	25	100
LT50M-ISO20	Straight	1/2	1/2	25	100
LT75M-ISO25	Straight	3/4	3/4	25	50
LT438M-ISO20	45°	3/8	1/2	25	50
LT450M-ISO20	45°	1/2	1/2	25	50
LT475M-ISO25	45°	3/4	3/4	10	50
LT938M-ISO20	90°	3/8	1/2	25	50
LT950M-ISO20	90°	1/2	1/2	25	50
LT975M-ISO25	90°	3/4	3/4	10	50



ISO metric Bullet liquidtight fittings – Nonmetallic

Cat. no.	Angle of fitting	Conduit size (in.)	Knockout size (in.)	Unit package	Standard package
LT38P-ISO20	Straight	3/8	1/2	25	100
LT50P-ISO20	Straight	1/2	1/2	25	100
LT75P-ISO25	Straight	3/4	3/4	25	50
LT938P-ISO20	90°	3/8	1/2	25	50
LT950P-ISO20	90°	1/2	1/2	25	50
LT975P-ISO25	90°	3/4	3/4	10	50