

# Carlton®

## Liquidtight Flexible Tubing and Accessories

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- Carflex® Liquidtight Fittings . . . . .42–45
- Carflex® Liquidtight Flexible  
Non-Metallic Conduit . . . . .40
- Carflex® X-Flex™ Non-Metallic  
Mechanical Protection Tubing . . . . .41



## Product Overview

Liquidtight Flexible Non-metallic Conduit provides superior wire protection in harsh, damp environments. Carflex Conduit is non-conductive, non-corrosive and resistant to oil, acid, ozone and alkaline. Carflex Conduit is strong and lightweight and because it weighs 50% less than metallic systems, it's easy to handle, transport and install. Carflex is ideal for industrial, air conditioning, heating and outdoor lighting applications.



## Features

- Non-conductive and non-corrosive
- Lightweight for easy handling, transportation and installation
- Crush, abrasion and strain resistant
- Provides superior wire protection
- Smooth interior ideal for pulling cable
- No jagged edges
- Maintains internal I.D. even in tight radius bends
- Type LFNC-B
- Resistant to oil, acid, ozone and alkaline
- CSA Certified as per Section 12-1300 of the Canadian Electrical Code, Part 1.
- Sequentially marked footage
- Suitable for use at conduit temperatures of 80°C dry, 60°C wet and 60°C oil

*Note: Liquidtight flexible conduits, metallic and non-metallic, in contrast to rigid PVC conduit and electrical non-metallic tubing, does not have wire temperature limitations. Any temperature rated wire (for example, 90° wire) can be used as long as the temperature conditions marked on the conduit are not exceeded.*

## Applications

- Control and motor
- Air conditioning and heating
- Computer power distribution
- Machine tools
- Console wiring
- Transformer connections
- Outdoor lighting

## Coils

Cat. No.	Nom. Size (in.)	Avg. O.D. (in.)	Avg. I.D. (in.)	Length Coil (ft)	Std Coil Wt. (lb)
15004-100	3/8	0.700	0.4890	100	11.70
15005C-025	1/2	0.830	0.6270	25	3.25
15007-100	3/4	1.040	0.8250	100	18.00
15007C-025	3/4	1.040	0.8250	25	4.25
15008-100	1	1.302	1.046	100	28.00
15009-100	1-1/4	1.645	1.385	100	37.60
15010-50	1-1/2	1.882	1.580	50	22.55
15010-100	1-1/2	1.882	1.580	100	47.80
15011-050	2	2.357	2.025	50	34.10

Standard color Grey

## Reels

Cat. No.	Nom. Size (in.)	Avg. O.D. (in.)	Avg. I.D. (in.)	Length Reels (ft)	Std Reel Wt. (lb)
15004-001	3/8	0.700	0.4890	1000	145.0
15005-001	1/2	0.830	0.6270	1000	157.0
15007-001	3/4	1.040	0.8250	1000	212.0
15008-500	1	1.302	1.046	500	155.0
15009-200	1-1/4	1.645	1.385	200	100.0
15010-150	1-1/2	1.882	1.580	150	95.7
15011-100	2	2.357	2.025	100	94.6

Standard color Grey

## Product Overview

Extra Flexible Non-metallic Mechanical Protection Tubing is ideal for applications requiring extra strength and flexibility such as robotics and repetitive flexing arms. Carflex X-Flex is non-conductive, non-corrosive and resistant to oil, acid, ozone and alkaline. It's designed for use with standard Carflex fittings providing a complete non-metallic system. Carflex X-Flex is lightweight for easier handling, transportation and installation.



Where noted by ♦

## Features

- Extra strong and flexible to withstand repetitive motions
- Non-conductive and non-corrosive
- Resistant to oil, acid, ozone and alkaline
- Lightweight for easy handling, transportation and installation
- Crush, abrasion and strain resistant
- Provides superior wire protection
- Smooth interior ideal for pulling cable
- No jagged edges
- Rated for continuous use at 60°C ambient
- Type NMPT-B

## Applications

- Repetitive Flexing Arms
- Robotics
- Machine Tools
- Automatic/Moving Machinery
- Control and motor

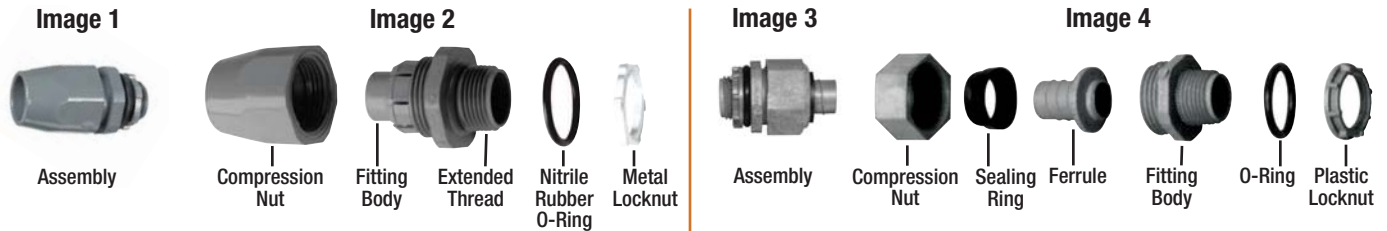
## Specifications

### Coils (Available in Black only)

Cat. No.	Nom. Size (in.)	Avg. O.D. (in.)	Avg. I.D. (in.)	Length Coils (ft)	Std Coil Wt. (lb)
15104-100	3/8	0.700	0.489	100	9.09
♦ 15105-100	1/2	0.830	0.627	100	10.01
♦ 15107-100	3/4	1.040	0.825	100	13.91
♦ 15108-100	1	1.302	1.046	100	18.25
15109-100	1-1/4	1.645	1.385	100	27.65
15110-100	1-1/2	1.882	1.580	100	38.00
15111-050	2	2.357	2.025	50	24.22

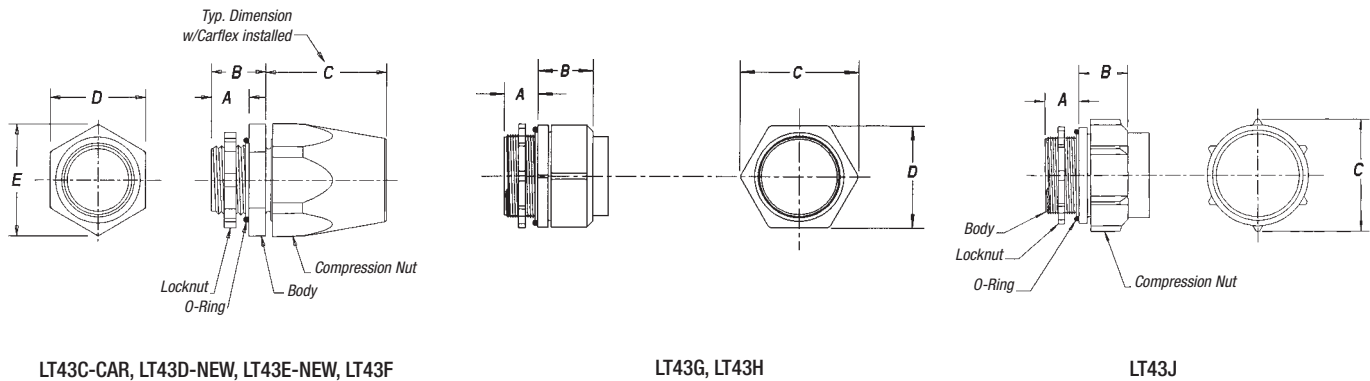
## Straight Fittings

- For Use with Carflex® conduit and Carflex® X-Flex™ conduit



## Features

- Non-conductive and non-corrosive
- Easy to install
- Resistant to oil, acid, ozone and alkaline
- Approved for indoor and outdoor locations
- Listed for "Wet locations"
- Nitrile rubber "O" ring for a liquidtight termination
- Temperatures up to 107°C



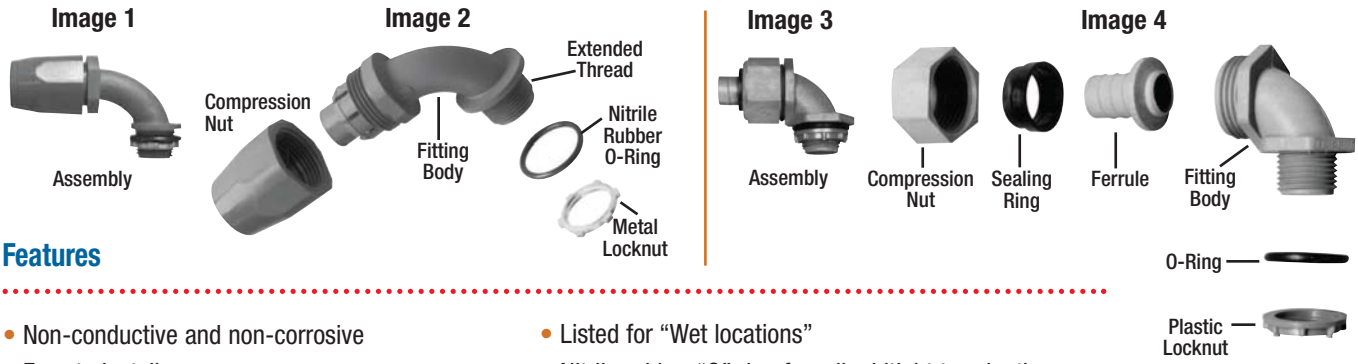
## Specifications



Cat. No.	Size (in.)	Std Ctn Qty	Std Ctn Wt. (lb)	Dimensions (in.)					Refer to Image
				A	B	C	D	E	
LT43C	3/8	50	3.6	0.55	0.75	1.60	1.30	1.40	1-2
LT43D-NEW	1/2	50	4.2	0.56	0.91	1.62	1.30	1.40	1-2
LT43E-NEW	3/4	50	6.6	0.56	0.91	1.88	1.61	1.71	1-2
LT43F-NEW	1	25	5.5	0.70	1.00	2.20	1.90	2.04	1-2
LT43G	1-1/4	5	1.5	0.71	1.16	2.50	2.17	-	3-4
LT43H	1-1/2	5	2.0	0.75	1.36	2.78	2.43	-	3-4
LT43J	2	5	2.5	1.00	1.45	3.33	-	-	3-4

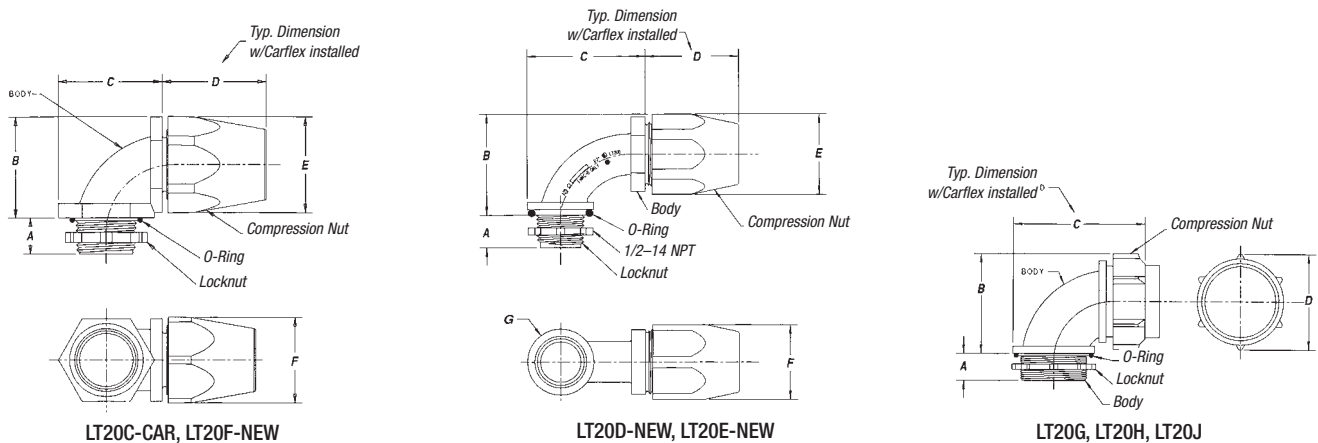
## 90° Fittings

- For Use with Carflex® conduit and Carflex® X-Flex™ conduit



### Features

- Non-conductive and non-corrosive
- Easy to install
- Resistant to oil, acid, ozone and alkaline
- Approved for indoor and outdoor locations
- Listed for "Wet locations"
- Nitrile rubber "O" ring for a liquidtight termination
- Temperatures up to 107°C



### Specifications



Cat. No.	Size (in.)	Std Ctn Qty	Std Ctn Wt. (lb)	Dimensions (in.)							Refer to Image
				A	B	C	D	E	F	G	
LT20C	3/8	50	3.6	0.56	1.44	1.44	1.56	1.39	1.26	-	1-2
LT20D-NEW	1/2	50	4.2	0.56	1.76	2.05	1.62	1.40	1.30	1.15	1-2
LT20E-NEW	3/4	50	6.6	0.56	2.04	2.35	1.88	1.71	1.61	1.50	1-2
LT20F-NEW	1	25	5.5	0.70	2.01	2.01	2.26	2.04	1.90	-	1-2
LT20G	1-1/4	5	1.5	0.75	2.50	3.55	2.48	-	-	-	3-4
LT20H	1-1/2	5	2.0	0.75	2.80	3.98	2.77	-	-	-	3-4
LT20J	2	5	2.5	0.94	3.48	4.56	3.33	-	-	-	3-4

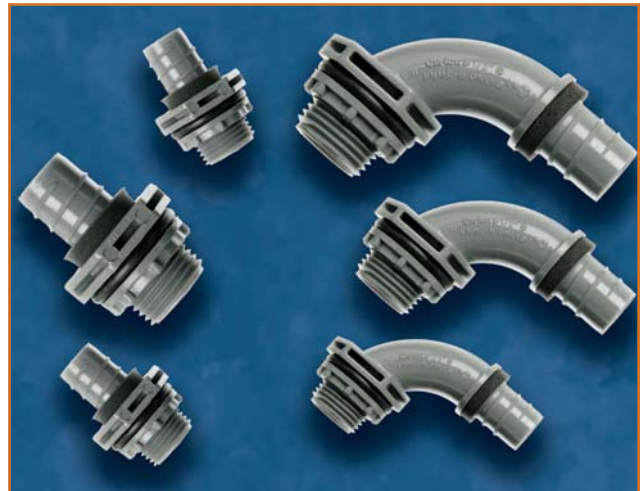
### Product Overview

#### Unique Design

The simple, one-piece body design of the Carflex One-Piece Liquidtight Non-metallic Fitting requires no disassembly of components for installation. The system is so strong that there is no need for a compression nut.

#### PVC Construction

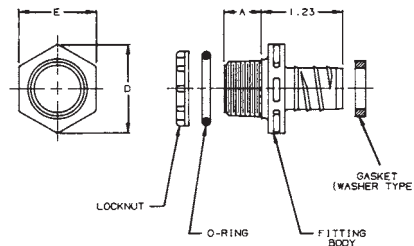
PVC construction of the fitting and locknut provides unparalleled protection from water, oil and dust. Totally non-metallic, the system is non-conductive and will not corrode or rust. Temperatures up to 60°C



#### Features

- Approved for indoor and outdoor locations
- Listed for "Wet Locations"

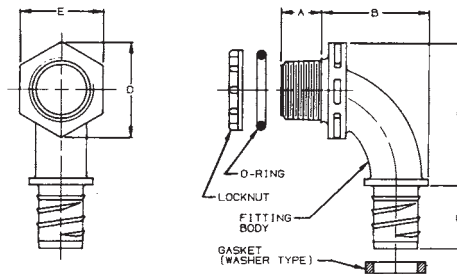
### Straight Fittings



SP®  
LR92248

Cat. No.	Trade Size (in.)	Std Ctn Qty	Std Ctn Wt. (lb)	Thread Size	Dimensions (in.)		
					A	D	E
LN43DA	1/2	100	2.8	14 NPT	0.56	1.34	1.19
LN43EA	3/4	50	2.2	14 NPT	0.56	1.63	1.44
LN43FA	1	25	3	11-1/2 NPT	0.69	1.99	1.75

### 90° Fittings



SP®  
LR92248

Cat. No.	Trade Size (in.)	Std Ctn Qty	Std Ctn Wt. (lb)	Thread Size	Dimensions (in.)				
					A	B	C	D	E
LN20DA	1/2	100	4.3	14 NPT	0.56	1.50	1.99	1.34	1.19
LN20EA	3/4	50	3.1	14 NPT	0.56	1.73	2.25	1.63	1.44
LN20FA	1	25	3.2	11-1/2 NPT	0.69	1.86	2.58	1.99	1.75

## Fittings Installation Instructions

### LT43C-CAR, LT43F thru J, LT20C-CAR, LT20F thru J

1. Cut the end of the Carflex conduit or Carflex® X-Flex™ tubing square.
2. Install compression nut and sealing gland ring over the end of the conduit or tubing.
3. Insert the ferrule end of the fitting into the conduit using a clockwise twisting action.
4. Screw fitting body into compression nut.
5. When installation is completed, use a wrench, tighten compression nut one-quarter (1/4) turn past hand-tight. Do not over tighten fitting.

*To prevent damage to conductors, conduit and fittings, do not twist Carflex during installation.*

### LT43D-New, LT43E-New, LT20D-New, LT20E-New

1. Cut the end of the Carflex conduit or Carflex® X-Flex™ tubing square.
2. Install compression nut over the end of the conduit or tubing.
3. Insert the ferrule end of the fitting into the conduit using a clockwise twisting action. (Be sure conduit is fully inserted to the bottom of the fitting shoulder).
4. Screw compression nut onto fitting body.
5. Use a wrench, and tighten compression nut one (1) full turn past hand-tight. Do not over tighten fitting.

*To prevent damage to conductors, conduit and fittings, do not twist Carflex during installation.*

## Liquidtight Conduit Technical Information

1. There shall be no more than the equivalent of four (4) quarter (90°) bends (360° total) between pull points, conduit bodies, and boxes.
2. The radius of the curve of the center of the conduit or tubing shall not be less than that shown in the table below:

Size of Conduit or Tubing		Radius to Center of Conduit or Tubing	
Inches	mm	Inches	mm
3/8	14	4	101.6
1/2	16	4	101.6
3/4	21	4-1/2	114.3
1	27	5-3/4	146.0
1-1/4	35	7-1/4	184.1
1-1/2	41	8-1/4	209.5
2	53	9-1/2	241.3