

**RIGID NONMETALLIC CONDUIT
PLUS 40[®] & 80[®]**

ELBOWS - SCHEDULE 40 & 80

FLEXIBLE PVC ELBOWS

COUPLINGS

ADAPTERS

**SPECIAL APPLICATION
FITTINGS & ACCESSORIES**

CONDUIT BODIES

JUNCTION BOXES

FS BOXES AND COVERS

SUPPORT STRAPS

CLAMPS

FEATURES:

- ***EASE OF INSTALLATION***
- ***SAFETY***
- ***IMPACT RESISTANT***
- ***CORROSION RESISTANT***

1. LHP reserves the right to round orders to the nearest package quantity.

2. Prices subject to change without notice.

3. Shaded items indicate non-stock factory make-to-order items only – material is non-returnable and non-cancellable.

Carlton® Rigid Nonmetallic Conduit, Fittings & Accessories

Carlton® manufactures the most complete line of nonmetallic conduit fittings in the electrical industry. Carlton Plus 40® and Plus 80® conduits are designed for use aboveground and underground as described in the National Electrical Code. Specify only Carlton conduits and fittings to ensure raceway system integrity.

Features

Ease of Installation Nonmetallic conduits are 1/4 to 1/5 the weight of metallic systems, can be installed in less than half the time, and are easily fabricated on the job.

Safety Nonmetallic conduits are non-conductive, assuring a safe system.

Impact Resistant Carlton Plus 40® and Plus 80® nonmetallic conduits are resistant to sunlight and are UL Listed for exposed or outdoor usage. The use of expansion fittings allows the system to expand and contract with temperature variations.

Corrosion Resistant Carlton conduits and fittings are nonmetallic and will not rust or corrode.

Carlton nonmetallic Plus 40® and Plus 80® conduits and elbows are manufactured to NEMA TC-2, Federal specification WC1094A and UL 651 specifications. Fittings are manufactured to NEMA TC-3, Federal specification WC1094A and UL514B. Both conduit and fittings carry respective UL or ETL Listings and UL or ETL labels.

Support of Carlton Rigid Nonmetallic Conduit in Aboveground Installations

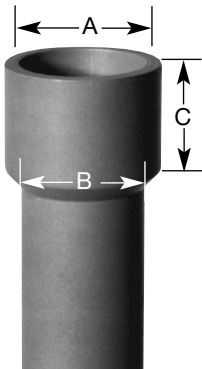
Table 347-8, 99 NEC shows the support requirements for Plus 40® and Plus 80® rigid PVC non-metallic conduit.

Plastic conduit should always be installed away from steam lines, etc. Support straps should allow for lineal movement caused by expansion and contraction.

Maximum ambient temperature is 122°F (50°C).

Table 347-8, NEC

Conduit Size (In.)	Maximum Spacing Between Supports (Ft.)
1/2 - 1	3
1-1/4 - 2	5
2-1/2 - 3	6



Acceptable Dimensions in Inches of UL Listed Integral Bell

Trade Size of Conduit in Inches	A At Entrance		B At Bottom		C Socket Depth	
	Max.	Min.	Max.	Min.	Max.	Min.
1/2	0.860	0.844	0.844	0.828	1.500	0.652
3/4	1.074	1.054	1.056	1.036	1.500	0.719
1	1.340	1.320	1.320	1.300	1.875	0.875
1-1/4	1.689	1.665	1.667	1.643	2.000	0.938
1-1/2	1.930	1.906	1.906	1.882	2.000	1.062
2	2.405	2.381	2.381	2.357	2.000	1.125
2-1/2	2.905	2.875	2.883	2.853	3.000	1.469
3	3.530	3.500	3.507	3.477	3.125	1.594



Carlson Plus 40® Rigid PVC Nonmetallic Conduit

Heavy Wall EPC

Listed for underground applications encased in concrete or direct burial. Also for use in exposed or concealed applications aboveground. • Sunlight resistant • Rated for use with 90°C conductors • Superior weathering characteristics

With Integral Bell*



Part #	Product Size	UPC Code	Crate Quantity	Carton Dimensions (L x W x H)	Piece Weight (Lbs)	Piece Cube (Cu. Ft.)
49005-005	1/2"	0 34481 18416 4	3000'	60" x 49" x 17.5"	0.875	29.77
49005-010	1/2"	0 34481 23468 5	6000'	129" x 49" x 17.5"	1.740	64.01
49007-005	3/4"	0 34481 18417 1	2200'	60" x 49" x 17.5"	1.175	29.77
49007-010	3/4"	0 34481 23472 2	4400'	129" x 49" x 17.5"	2.330	64.01
49008-010	1"	0 34481 23477 7	3600'	132" x 47" x 19.5"	3.440	70.01
49009-010	1-1/4"	0 34481 23481 4	3300'	130" x 47" x 20.5"	4.720	72.4
49010-010	1-1/2"	0 34481 23485 2	2250'	126" x 46.5" x 21.5"	5.670	72.89
49011-010	2"	0 34481 23489 0	1400'	127" x 46" x 21"	7.570	70.99
49012-010	2-1/2"	0 34481 23497 5	930'	133" x 46" x 22.5"	12.450	79.66
49013-010	3"	0 34481 23501 9	880'	135" x 49" x 24.5"	1.610	92.39
49014-010	3-1/2"	0 34481 23504 0	630'	127" x 48" x 25"	1.920	88.19
49015-010	4"	0 34481 23507 1	570'	139" x 48" x 27"	2.270	104.25
49016-010	5"	0 34481 23511 8	380'	144" x 49" x 28"	3.121	114.33
49017-010	6"	0 34481 23515 6	260'	136" x 50" x 27"	4.035	106.25

Rigid nonmetallic conduit is normally supplied in standard 10' lengths, with one belled end per length. For specific requirements, it may be produced in lengths shorter or longer than 10', with or without belled ends.

Carlson Plus 80® Rigid PVC Nonmetallic Conduit

Extra Heavy Wall EPC-80

Listed for use in aboveground and belowground applications that are subject to physical damage • Sunlight resistant • Rated for use with 90°C conductors • Superior weathering characteristics • For use in areas subject to physical damage

With Integral Bell*



Part #	Product Size	UPC Code	Crate Quantity	Carton Dimensions (L x W x H)	Piece Weight (Lbs)	Piece Cube (Cu. Ft.)
49405-010	1/2"	0 34481 23524 8	6000'	129" x 49" x 17"	2.180	59.24
49407-010	3/4"	0 34481 23526 2	4400'	129" x 49" x 17.5"	3.060	64.01
49408-010	1"	0 34481 23528 6	3600'	132" x 47" x 19.5"	4.450	70.01
49409-010	1-1/4"	0 34481 23531 6	3300'	138" x 47" x 20.5"	6.070	72.84
49410-010	1-1/2"	0 34481 23533 0	2250'	126" x 46.5" x 26.5"	7.460	89.85
49411-010	2"	0 34481 23537 8	1400'	127" x 46" x 21"	10.120	70.99
49412-010	2-1/2"	0 34481 23541 5	930'	133" x 46" x 22.5"	15.630	79.66
49413-010	3"	0 34481 23544 6	880'	135" x 44" x 24.5"	21.140	93.78
49415-010	4"	0 34481 23549 1	570'	139" x 48" x 27"	30.920	104.25
49416-010	5"	0 34481 23555 2	380'	128" x 50" x 28"	10.947	103.70
49417-010	6"	0 34481 23558 3	260'	128" x 50" x 28"	5.878	103.70

Rigid nonmetallic conduit is normally supplied in standard 10' lengths, with one belled end per length. For specific requirements, it may be produced in lengths shorter or longer than 10', with or without belled ends.

Use Schedule 40 Fittings with Plus 40® and Plus 80® Conduit.

Notes: 1. Special fittings and conduit sizes will be quoted on request.

2. DON'T FORGET TO ORDER CEMENT.

3. Carlson reserves the right to ship to the nearest unitized quantity.

Schedule 40 Elbows - Standard Radius

Available in plain and integral belled end for use with nonmetallic solvent weld fittings.

90° Elbow



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
UA9ADR-CTN	1/2"	0 34481 06041 3	45	20" x 6" x 6.5"	7.006	0.45
UA9AER-CTN	3/4"	0 34481 06042 0	25	20" x 6" x 6.5"	5.814	0.45
UA9AFR-CTN	1"	0 34481 06043 7	25	18" x 12" x 6"	10.250	0.75
UA9AGR-CTN	1-1/4"	0 34481 06044 4	6	18" x 12" x 6"	4.416	0.75
UA9AH-CAR	1-1/2"	0 34481 06045 1	5	18" x 12" x 6"	4.872	0.75
UA9AJ-CAR	2"	0 34481 06046 8	5	18" x 12" x 6"	6.814	0.75
UA9AK-CAR	2-1/2"	0 34481 06047 5	10	24" x 16" x 12.12"	26.958	2.69
UA9AL-CAR	3"	0 34481 06048 2	5	24" x 16" x 15.12"	20.274	3.36
UA9AN	4"	0 34481 06050 5	1	39" x 33" x 23"	175.000	17.13

45° Elbow



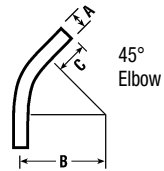
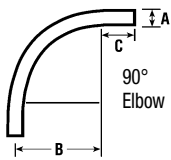
Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
UA7ADR-CAR	1/2"	0 34481 06061 1	25	12" X 4" X 6"	2.878	0.17
UA7AER-CAR	3/4"	0 34481 06062 8	15	12" X 4" X 6"	2.560	0.17
UA7AFR-CTN	1"	0 34481 06063 5	15	20" X 4" X 6"	4.180	0.27
UA7AGR-CTN	1-1/4"	0 34481 06064 2	6	12" X 6" X 6"	2.670	0.25
UA7AHR-CTN	1-1/2"	0 34481 06065 9	6	12" X 6" X 6"	3.390	0.25
UA7AJ-CAR	2"	0 34481 06066 6	4	12" X 8" X 6"	3.386	0.33
UA7AK-CAR	2-1/2"	0 34481 22610 9	5	16" X 12" X 12"	7.950	1.33
UA7AL-CAR	3"	0 34481 06068 0	5	16" X 12" X 12"	12.900	1.33
UA7AN	4"	0 34481 06060 4	1	29" X 23" X 23"	104.250	8.87

Flexible PVC Elbows



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
UAFAD	1/2"	0 34481 15859 2	8	12" x 3" x 6"	1.60	0.12
UFAAE	3/4"	0 34481 15860 8	6	12" x 3" x 6"	1.80	0.12
UAFAF	1"	0 34481 15861 5	6	20" x 4" x 6"	3.02	0.28

- UL listed for exposed and direct burial applications in accordance with Article 351 of 1999 NEC.
- 0° - 90° bending and offset applications
- O-ring seal for moisture tight connections
- Maintains round shape throughout bend.
- Sunlight resistant.
- Non-corrosive — All PVC and Neopreme material.
- Fully assembled and ready to use.



Standard Radius Elbow Dimensions 90° and 45°

Size	A	B Min. (Radius)	C Min.
1/2"	0.840	4"	1-1/2"
3/4"	1.050	4-1/2"	1-1/2"
1"	1.315	5-3/4"	1-7/8"
1-1/4"	1.660	7-1/4"	2"
1-1/2"	1.900	8-1/4"	2"
2"	2.375	9-1/2"	2"
2-1/2"	2.875	10-1/2"	3"
3"	3.500	13"	3-1/8"

Schedule 40 Elbows - Standard Radius

Available in plain and integral belled end for use with nonmetallic solvent weld fittings.



90° Elbow - Belled



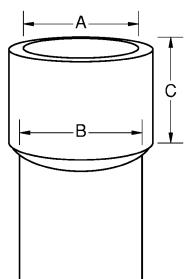
Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
UA9ADB-CTN	1/2"	0 34481 22698 7	40	20" X 6" X 6"	6.400	0.42
UA9AEB-CTN	3/4"	0 34481 22701 4	25	20" X 6" X 6"	6.150	0.42
UA9AFB-CTN	1"	0 34481 22704 5	25	18" X 12" X 6"	10.430	0.75
UA9AGB-CTN	1-1/4"	0 34481 19620 4	12	18" X 12" X 6"	8.440	0.75
UA9AHB-CTN	1-1/2"	0 34481 19621 1	7	18" X 12" X 6"	6.648	0.75
UA9AJB-CAR	2"	0 34481 19622 8	5	18" X 12" X 6"	6.800	0.75
UA9AKB-CAR	2-1/2"	0 34481 19623 5	10	24" x 16" x 12"	25.760	2.67
UA9ALB-CAR	3"	0 34481 19624 2	5	24" x 16" x 15"	20.950	3.33

45° Elbow - Belled



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
UA7ADB-CTN	1/2"	0 34481 03900 6	25	12" x 4" x 6"	2.650	0.20
UA7AEB-CTN	3/4"	0 34481 03901 3	20	12" x 6" x 6"	2.960	0.30
UA7AFB-CTN	1"	0 34481 03902 0	14	20" x 4" x 6"	3.920	0.30
UA7AGB-CAR	1-1/4"	0 34481 19629 7	5	12" x 6" x 6"	2.050	0.30
UA7AHB-CAR	1-1/2"	0 34481 19630 3	5	12" x 8" x 6"	2.780	0.38
UA7AJB-CAR	2"	0 34481 19632 7	4	12" x 8" x 6"	3.120	0.38
UA7AKB-CAR	2-1/2"	0 34481 22611 6	5	18" X 12" X 6"	8.840	0.75
UA7ALBR	3"	0 34481 19633 4	3	18" X 12" X 6"	25.122	2.69
UA7ANB-CAR	4"	0 34481 19635 8	6	24" x 16" x 12"	0.030	2.69

Integral Belled End Dimensions



Trade Size	A At Entrance		B At Bottom		C Socket Depth	
	Max.	Min.	Max.	Min.	Max.	Min.
1/2"	0.860	0.844	0.844	0.828	1.500	0.652
3/4"	1.074	1.054	1.056	1.036	1.500	0.719
1"	1.340	1.320	1.320	1.300	1.875	0.875
1-1/4"	1.689	1.665	1.667	1.643	2.000	0.938
1-1/2"	1.930	1.906	1.906	1.882	2.000	1.062
2"	2.405	2.381	2.381	2.357	2.000	1.125
2-1/2"	2.905	2.875	2.883	2.853	3.000	1.469
3"	3.530	3.500	3.507	3.477	3.125	1.594

Shaded area indicates non-stock factory make-to-order items only – material is non-returnable and non-cancellable.

Schedule 40 Elbows - Special Radius



90° Elbow - Standard



Part #	Product Size	Product Radius	POS UPC Code	Case Weight (Lbs)	Package Quantity
UA9CF	1"	18"	0 34481 06710 8	0.93	1
UA9DF	1"	24"	0 34481 06741 2	1.56	1
UA9EF	1"	30"	0 34481 06725 2	1.42	1
UA9FF	1"	36"	0 34481 06732 0	1.70	1
UA9HF	1"	48"	0 34481 06745 0	2.20	1
UA9CG	1-1/4"	18"	0 34481 22725 0	1.23	1
UA9DG	1-1/4"	24"	0 34481 06806 8	1.57	1
UA9EG	1-1/4"	30"	0 34481 06730 6	1.95	1
UA9FG	1-1/4"	36"	0 34481 06750 4	2.29	1
UA9CH	1-1/2"	18"	0 34481 06712 2	1.48	1
UA9DH	1-1/2"	24"	0 34481 06711 5	1.88	1
UA9EH	1-1/2"	30"	0 34481 06731 3	2.48	1
UA9FH	1-1/2"	36"	0 34481 06813 6	2.74	1
UA9HH	1-1/2"	48"	0 34481 06747 4	3.62	1
UA9CJ	2"	18"	0 34481 06740 5	2.07	1
UA9DJ	2"	24"	0 34481 96716 3	2.64	1
UA9EJ	2"	30"	0 34481 06717 7	3.26	1
UA9FJ-UPC	2"	36"	0 34481 06718 4	3.86	1
UA9HJ	2"	48"	0 34481 06719 1	5.25	1
UA9CK	2-1/2"	18"	0 34481 06714 6	3.48	1
UA9DK	2-1/2"	24"	0 34481 16721 1	4.50	1
UA9EK	2-1/2"	30"	0 34481 06722 1	5.38	1
UA9FK-UPC	2-1/2"	36"	0 34481 06723 8	6.63	1
UA9HK	2-1/2"	48"	0 34481 06724 5	8.16	1
UA9CL	3"	18"	0 34481 06715 3	4.69	1
UA9DL	3"	24"	0 34481 22738 0	6.13	1
UA9EL	3"	30"	0 34481 22742 7	7.24	1
UA9FL	3"	36"	0 34481 06728 3	9.23	1
UA9HL	3"	48"	0 34481 06729 0	10.64	1
UA9DM	3-1/2"	24"	0 34481 06720 7	7.25	1
UA9EM	3-1/2"	30"	0 34481 06735 1	8.70	1
UA9FM	3-1/2"	36"	0 34481 06733 7	10.15	1
UA9HM	3-1/2"	48"	0 34481 06734 4	13.37	1
UA9DN	4"	24"	0 34481 06736 8	8.59	1
UA9EN	4"	30"	0 34481 06737 5	10.31	1
UA9FN	4"	36"	0 34481 06738 2	12.22	1
UA9HN	4"	48"	0 34481 06739 9	15.85	1
UA9IN	4"	60"	0 34481 22766 3	19.47	1
UA9JN	4"	72"	0 34481 22778 6	22.91	1

Shaded area indicates non-stock factory make-to-order items only – material is non-returnable and non-cancellable.

Schedule 40 Elbows - Special Radius

90° Elbow - Belled



Part #	Product Size	Product Radius	POS UPC Code	Case Weight (Lbs)	Package Quantity
UA9CFB	1"	18"	0 34481 22723 6	0.93	1
UA9DFB	1"	24"	0 34481 22731 1	1.18	1
UA9EFB	1"	30"	0 34481 07947 7	1.43	1
UA9CGB	1-1/4"	18"	0 34481 19650 1	1.24	1
UA9DGB	1-1/4"	24"	0 34481 19655 6	1.58	1
UA9EGB	1-1/4"	30"	0 34481 05500 6	1.99	1
UA9FGB	1-1/4"	36"	0 34481 19670 9	2.29	1
UA9CHB	1-1/2"	18"	0 34481 19651 8	1.48	1
UA9DHB	1-1/2"	24"	0 34481 19656 3	1.89	1
UA9EHB	1-1/2"	30"	0 34481 05518 1	1.99	1
UA9FHB	1-1/2"	36"	0 34481 19671 6	2.83	1
UA9CJB	2"	18"	0 34481 19652 5	1.97	1
UA9DJB-UPC	2"	24"	0 34481 08226 2	2.63	1
UA9EJB	2"	30"	0 34481 19664 8	3.26	1
UA9FJB	2"	36"	0 34481 19672 3	3.76	1
UA9HJB	2"	48"	0 34481 19681 5	5.02	1
UA9CKB	2-1/2"	18"	0 34481 19653 2	3.48	1
UA9DKB-UPC	2-1/2"	24"	0 34481 08227 9	4.34	1
UA9EKB	2-1/2"	30"	0 34481 19665 5	4.77	1
UA9FKB	2-1/2"	36"	0 34481 19673 0	6.27	1
UA9HKB	2-1/2"	48"	0 34481 19682 2	8.17	1
UA9CLB	3"	18"	0 34481 19654 9	4.69	1
UA9DLB-UPC	3"	24"	0 34481 08228 6	6.06	1
UA9ELB	3"	30"	0 34481 19666 2	7.24	1
UA9FLB	3"	36"	0 34481 19674 7	8.51	1
UA9HLB	3"	48"	0 34481 19683 9	10.99	1
UA9DMB	3-1/2"	24"	0 34481 19660 0	7.25	1
UA9EMB	3-1/2"	30"	0 34481 05519 8	1.99	1
UA9FMB	3-1/2"	36"	0 34481 19675 4	10.16	1
UA9DNB	4"	24"	0 34481 19661 7	8.59	1
UA9ENB	4"	30"	0 34481 19668 6	10.31	1
UA9FNB	4"	36"	0 34481 19676 1	12.60	1
UA9HNB	4"	48"	0 34481 19685 3	15.62	1
UA9INB	4"	60"	0 34481 22767 0	18.74	1

Shaded area indicates non-stock factory make-to-order items only – material is non-returnable and non-cancellable.

Schedule 40 Elbows - Special Radius

45° Elbow



Part #	Product Size	Product Radius	POS UPC Code	Case Weight (Lbs)	Package Quantity
UA7CF	1"	18"	0 34481 06760 3	0.54	1
UA7DF	1"	24"	0 34481 06770 2	0.65	1
UA7EF	1"	30"	0 34481 05457 3	0.77	1
UA7FF	1"	36"	0 34481 06791 7	0.93	1
UA7HF	1"	48"	0 34481 05458 0	1.17	1
UA7CG	1-1/4"	18"	0 34481 06761 0	0.68	1
UA7DG	1-1/4"	24"	0 34481 06771 9	0.86	1
UA7EG	1-1/4"	30"	0 34481 05465 8	1.09	1
UA7FG	1-1/4"	36"	0 34481 06758 0	1.23	1
UA7CH	1-1/2"	18"	0 34481 06762 7	0.85	1
UA7DH	1-1/2"	24"	0 34481 06775 7	1.03	1
UA7EH	1-1/2"	30"	0 34481 05466 5	1.31	1
UA7FH	1-1/2"	36"	0 34481 06795 5	1.48	1
UA7HH	1-1/2"	48"	0 34481 05467 2	1.97	1
UA7CJ	2"	18"	0 34481 06763 4	1.19	1
UA7DJ	2"	24"	0 34481 06766 5	1.45	1
UA7EJ	2"	30"	0 34481 06767 2	1.76	1
UA7FJ	2"	36"	0 34481 06768 9	2.07	1
UA7HJ	2"	48"	0 34481 06769 6	2.63	1
UA7CK	2-1/2"	18"	0 34481 06765 8	2.09	1
UA7DK	2-1/2"	24"	0 34481 06781 8	2.49	1
UA7EK	2-1/2"	30"	0 34481 05468 9	3.11	1
UA7FK	2-1/2"	36"	0 34481 06773 3	3.49	1
UA7HK	2-1/2"	48"	0 34481 06774 0	4.56	1
UA7CL	3"	18"	0 34481 06764 1	2.81	1
UA7DL	3"	24"	0 34481 22626 0	3.48	1
UA7EL	3"	30"	0 34481 06777 1	4.02	1
UA7FL	3"	36"	0 34481 06778 8	4.69	1
UA7DM	3-1/2"	24"	0 34481 05469 6	4.25	1
UA7EM	3-1/2"	30"	0 34481 05470 2	4.87	1
UA7FM	3-1/2"	36"	0 34481 06780 1	5.64	1
UA7DN	4"	24"	0 34481 22627 7	4.96	1
UA7EN	4"	30"	0 34481 06787 0	5.92	1
UA7FN	4"	36"	0 34481 06788 7	6.87	1
UA7HN	4"	48"	0 34481 06789 4	8.59	1

Shaded area indicates non-stock factory make-to-order items only – material is non-returnable and non-cancellable.

Schedule 40 Elbows - Special Radius

45° Elbow - Belled



Part #	Product Size	Product Radius	POS UPC Code	Case Weight (Lbs)	Package Quantity
UA7FHB	1-1/2"	36"	0 34481 19711 9	1.490	1
UA7CJB	2"	18"	0 34481 19692 1	1.210	1
UA7DJB	2"	24"	0 34481 19697 6	1.320	1
UA7EJB	2"	30"	0 34481 19704 1	1.760	1
UA7FJB	2"	36"	0 34481 19712 6	2.210	1
UA7HJB	2"	48"	0 34481 22635 2	2.640	1
UA7DKB	2-1/2"	24"	0 34481 19698 3	2.490	1
UA7FKB	2-1/2"	36"	0 34481 19713 2	3.490	1
UA7CLB	3"	18"	0 34481 19694 5	2.810	1
UA7DLB	3"	24"	0 34481 19699 0	3.480	1
UA7ELB	3"	30"	0 34481 19706 5	4.020	1
UA7FLB	3"	36"	0 34481 19714 0	4.770	1
UA7HLB	3"	48"	0 34481 19723 2	6.110	1
UA7DNB	4"	24"	0 34481 19701 0	4.960	1
UA7ENB	4"	30"	0 34481 19708 9	5.120	1
UA7FNB	4"	36"	0 34481 19716 4	6.870	1
UA7HNB	4"	48"	0 34481 19725 6	8.590	1
UA7NNB	4"	120"	0 34481 33958 8	20.108	1
UA7SNB	4"	150"	0 34481 22676 5	23.180	1

Shaded area indicates non-stock factory make-to-order items only – material is non-returnable and non-cancellable.

Schedule 80 Elbows - Standard Radius



90° Elbow



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
UB9AD-CAR	1/2"	0 34481 06321 6	25	12" x 8" x 6"	4.55	0.38
UB9AE-CAR	3/4"	0 34481 06322 3	15	12" x 8" x 6"	4.32	0.38
UB9AF-CAR	1"	0 34481 06323 0	10	12" x 8" x 6"	4.96	0.38
UB9AG-CAR	1-1/4"	0 34481 06324 7	5	12" x 12" x 6"	4.20	0.54
UB9AH-CAR	1-1/2"	0 34481 06325 4	5	18" x 12" x 6"	5.72	0.75
UB9AJ-CAR	2"	0 34481 06326 1	5	18" x 12" x 6"	8.68	0.75
UB9AK-CAR	2-1/2"	0 34481 06327 8	10	24" x 16" x 12"	31.10	2.66
UB9AL-CAR	3"	0 34481 06328 5	5	24" x 16" x 15"	25.65	3.36
UB9AN	4"	0 34481 06330 8	5	24" x 16" x 15"	26.65	3.36

45° Elbow



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
UB7AD-UPC	1/2"	0 34481 06341 4	50	11.5" x 7.62" x 5.37"	0.12	0.27
UB7AE-UPC	3/4"	0 34481 06342 1	25	11.5" x 7.62" x 5.37"	4.55	0.27
UB7AF-UPC	1"	0 34481 06343 8	20	11.5" x 7.62" x 11.25"	6.74	0.57
UB7AG-CAR	1-1/4"	0 34481 06344 5	5	12" x 6" x 6"	2.45	0.25
UB7AH-CAR	1-1/2"	0 34481 06345 2	5	12" x 6" x 6"	3.55	0.25
UB7AJ-UPC	2"	0 34481 06346 9	20	16" x 12" x 11"	21.00	1.22
UB7AK	2-1/2"	0 34481 06347 6	20	24" x 16" x 12"	37.00	2.66
UB7AL	3"	0 34481 06348 3	30	24" x 16" x 15"	53.00	3.33
UB7AN	4"	0 34481 06350 6	25	24" x 16" x 15"	60.00	3.33

Schedule 80 Elbows - Special Radius

90° Elbow



Part #	Product Size	Product Radius	POS UPC Code	Case Weight (Lbs)	Package Quantity
UB9DH-UPC	1-1/2"	24"	0 34481 04683 7	2.420	1
UB9DJ-UPC	2"	24"	0 34481 19085 1	5.352	1
UB9FJ	2"	36"	0 34481 19095 9	5.602	1
UB9DK-UPC	2-1/2"	24"	0 34481 19110 0	5.352	1
UB9FK	2-1/2"	36"	0 34481 19120 9	7.663	1
UB9DL	3"	24"	0 34481 19135 5	7.227	1
UB9FL	3"	36"	0 34481 19145 2	11.610	1

Shaded area indicates non-stock factory make-to-order items only – material is non-returnable and non-cancellable.

Expansion Couplings

For Use with Plus 40® and Plus 80®



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E945D-CAR	1/2"	0 34481 06121 2	6	16" x 12" x 12.12"	0.400	1.34
E945E-CAR	3/4"	0 34481 06122 9	6	16" x 12" x 12.12"	0.580	1.34
E945F-CAR	1"	0 34481 06123 6	6	16" x 12" x 12.12"	0.770	1.34
E945G	1-1/4"	0 34481 06124 3	5	16" x 12" x 12.12"	1.040	1.34
E945H	1-1/2"	0 34481 06125 0	5	16" x 12" x 12.12"	1.280	1.34
E945J-CAR	2"	0 34481 06126 7	5	16" x 12" x 12.12"	1.740	1.34
E945K-CAR	2-1/2"	0 34481 06127 4	4	24" x 16" x 12"	3.269	2.66
E945L-CAR	3"	0 34481 06128 1	2	24" x 16" x 12"	4.637	2.66
E945N	4"	0 34481 06130 4	5	24" x 16" x 12"	6.728	2.66

E945 series expansion couplings are designed to compensate for length changes due to temperature variations in exposed conduit runs.

Short Expansion Couplings

Expands to a Maximum of 2"



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E955D	1/2"	0 34481 06271 4	40	11.625" x 7.75" x 5.75"	3.36	0.30
E955E	3/4"	0 34481 06272 1	40	11.625" x 7.75" x 5.75"	4.25	0.30
E955F	1"	0 34481 06273 8	25	11.625" x 7.75" x 5.75"	3.69	0.30
E955G	1-1/4"	0 34481 06274 5	15	11.625" x 7.75" x 5.75"	3.35	0.30
E955H	1-1/2"	0 34481 06275 2	10	11.625" x 7.75" x 5.75"	2.77	0.30
E955J	2"	0 34481 06276 9	6	11.625" x 7.75" x 5.75"	2.35	0.30

Standard Couplings

Socket type for joining nonmetallic conduit



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E940D-CTN	1/2"	0 34481 00005 1	185	20" x 4" x 6"	5.000	0.30
E940DR-CTN	1/2"	0 34481 00005 1	75	12" x 3" x 6"	2.250	0.15
E940D10-UPC	1/2"	0 34481 00005 1	12 bags of 5	20" x 4" x 6"	3.340	0.27
E940E-CTN	3/4"	0 34481 00006 8	100	20" x 4" x 6"	4.000	0.30
E940ER-CTN	3/4"	0 34481 00006 8	45	12" x 3" x 6"	2.250	0.15
E940E5-UPC	3/4"	0 34481 00006 8	12 bags of 5	20" x 4" x 6"	3.010	0.27
E940FR-CTN	1"	0 34481 06103 8	24	12" X 3" X 6"	2.780	0.15
E940FR5	1"	0 34481 19595 5	25	12" X 4" X 6"	1.980	0.20
E940GR-CTN	1-1/4"	0 34481 06104 5	30	20" X 4" X 6"	3.690	0.30
E940HR-CTN	1-1/2"	0 34481 06105 2	12	12" X 4" X 6"	2.040	0.20
E940JR-CTN	2"	0 34481 06106 9	16	20" X 4" X 6"	3.010	0.30
E940K-CTN	2-1/2"	0 34481 06107 6	7	20" X 4" X 6"	1.880	0.30
E940LR	3"	0 34481 06108 3	3	12" X 4" X 6"	1.850	0.20
E940N-CAR	4"	0 34481 06110 6	5	12" X 12" X 6"	4.522	0.50

All socket fittings should be attached using Carlon solvent cement. Using Carlon fittings with Carlon nonmetallic conduit insures system integrity.

Female Adapters



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E942DR-CTN	1/2"	0 34481 00007 5	30	6" x 3" x 6"	1.600	0.08
E942ER-CTN	3/4"	0 34481 00008 2	20	6" x 3" x 6"	1.400	0.08
E942FR-CTN	1"	0 34481 06243 1	10	6" x 3" x 6"	1.110	0.08
E942GR	1-1/4"	0 34481 06244 8	6	6" x 3" x 6"	0.730	0.06
E942HR	1-1/2"	0 34481 06245 5	5	6" x 3" x 6"	0.720	0.06
E942JR	2"	0 34481 06246 2	4	6" x 3" x 6"	0.780	0.06
E942K-CAR	2-1/2"	0 34481 06247 9	4	12" x 4" x 6"	1.476	0.17
E942L-CAR	3"	0 34481 06248 6	3	12" x 4" x 6"	1.480	0.17
E942N-CAR	4"	0 34481 06250 9	7	12" x 12" x 6"	5.086	0.50

For adapting nonmetallic conduits to threaded fittings, metallic systems.

Female threads on one end, socket on other

Male Terminal Adapters



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E943D-CTN	1/2"	0 34481 00009 9	200	20" x 4" x 6"	4.400	0.30
E943DR-CTN	1/2"	0 34481 00009 9	100	12" x 3" x 6"	2.400	0.15
E943D10-UPC	1/2"	0 34481 15548 5	20 bags of 10	20" x 4" x 6"	4.426	0.30
E943E-CTN	3/4"	0 81203 00005 9	125	20" x 4" x 6"	4.130	0.30
E943ER-CTN	3/4"	0 81203 00005 9	50	12" x 3" x 6"	1.750	0.15
E943E5-UPC	3/4"	0 34481 12149 7	10 bags of 5	20" x 4" x 6"	3.524	0.30
E943FR-CTN	1"	0 34481 06203 5	30	12" x 3" x 6"	1.680	0.15
E943GR-CTN	1-1/4"	0 34481 06204 2	20	12" x 3" x 6"	1.760	0.15
E943HR-CTN	1-1/2"	0 34481 06205 9	16	12" x 3" x 6"	3.360	0.15
E943JRR	2"	0 34481 06206 6	28	20" x 4" x 6"	3.974	0.27
E943K-CTN	2-1/2"	0 34481 06207 3	6	12" x 4" x 6"	1.220	0.20
E943L-CAR	3"	0 34481 06218 0	5	12" x 4" x 6"	1.770	0.20
E943N-CAR	4"	0 34481 13101 4	5	12" x 6" x 6"	3.050	0.30

For adapting nonmetallic conduits to boxes, threaded fittings, metallic systems.

Male threads on one end, socket on other.

Box Adapters for Enclosures



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E996DR-CTN	1/2"	0 34481 06261 5	25	6" x 3" x 6"	0.600	0.630
E996ER-CTN	3/4"	0 34481 06262 2	25	6" x 3" x 6"	0.532	0.187
E996FR-CTN	1"	0 34481 06263 9	25	6" x 3" x 6"	0.780	0.187
E996GR-CTN	1-1/4"	0 34481 06264 6	15	6" x 3" x 6"	0.760	0.187
E996HR	1-1/2"	0 34481 06265 3	8	6" x 3" x 6"	0.530	0.060
E996JR	2"	0 34481 06266 0	4	12" x 3" x 6"	1.068	0.750
E996K-CAR	2-1/2"	0 34481 06267 7	10	12" x 6" x 6"	1.826	0.750
E996L-CAR	3"	0 34481 20827 3	5	12" x 4" x 6"	1.484	0.166

Adapts nonmetallic conduit to all electrical enclosures by inserting adapter through knockout and cementing into Carlon couplings.

Threaded Adapters



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E9842D	1/2"	0 34481 00286 4	25	6" x 3" x 6"	0.55	0.63
E9842E	3/4"	0 34481 00287 1	25	6" x 3" x 6"	0.88	0.63

Reducer Bushings

Schedule 40, Male x Female



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E950ED-CTN	3/4" x 1/2"	0 34481 06221 9	25	6" x 4" x 6"	0.63	0.08
E950FE-CTN	1" x 3/4"	0 34481 06223 3	25	6" x 4" x 6"	0.95	0.08
E950FD-CAR	1" x 1/2"	0 34481 06222 6	25	6" x 4" x 6"	0.40	0.08
E950GE-CAR	1-1/4" x 3/4"	0 34481 06224 0	10	6" x 4" x 6"	0.98	0.08
E950GF-CTN	1-1/4" x 1"	0 34481 06225 7	10	6" x 4" x 6"	0.66	0.08
E950HF-CAR	1-1/2" x 1"	0 34481 06226 4	10	6" x 4" x 6"	0.85	0.08
E950HGR	1-1/2" x 1"	0 34481 06227 1	7	6" x 4" x 6"	0.78	0.08
E950JG-CAR	2" x 1-1/4"	0 34481 06228 8	10	12" x 4" x 6"	2.04	0.17
E950JHR	2" x 1-1/2"	0 34481 06229 5	4	6" x 3" x 6"	0.63	0.06
E950KJ-CAR	2-1/2" x 2"	0 34481 06230 1	10	12" x 6" x 6"	2.67	0.25
E950LJ-CAR	3" x 2"	0 34481 06231 8	10	12" x 8" x 6"	5.32	0.33
E950LK	3" x 2-1/2"	0 34481 06232 5	25	11.5" x 7.6" x 11.3"	7.60	0.57
E950NL	4" x 3"	0 34481 06233 2	25	16" x 12" x 11.5"	22.80	1.28

Small End - 3.5" to 4.3" O.D. Large End - 4" to 5" O.D.

For connecting different sizes of conduit. Bell x Spigot.

Fabricated Reducers

Schedule 40, Male x Male



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E952KJ	2-1/2" x 2"	0 34481 06287 5	48	24" x 16" x 12"	25.70	2.67
E952LJ	3" x 2"	0 34481 06288 2	36	16" x 12" x 11"	21.00	1.28
E952LK	3" x 2-1/2"	0 34481 06289 9	36	24" x 16" x 12"	32.10	2.67

Fabricated Reducers (Male x Male)

End Bells

Schedule 40



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E997F-CAR	1"	0 34481 06143 4	15	6" x 4" x 6"	0.9	0.83
E997G-CAR	1-1/4"	0 34481 06144 1	10	12" x 4" x 6"	0.9	0.16
E997H-CAR	1-1/2"	0 34481 06145 8	10	12" x 4" x 6"	0.9	0.16
E997J-CAR	2"	0 34481 06146 5	10	12" x 4" x 6"	1.2	0.16
E997K-CAR	2-1/2"	0 34481 06147 2	10	12" x 6" x 6"	1.2	0.25
E997L-CAR	3"	0 34481 06148 9	10	12" x 8" x 6"	2.1	0.33

PVC pipe edge protection against pull rope cutting while pulling cable. Ridges on outside for concrete encasement.

Plugs

Plugs with Pull Tabs



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
P258JT-CTN	2"	0 34481 06186 1	60	11.5" x 7.6" x 11.3"	3.00	0.57
P258LT-CTN	3"	0 34481 06188 5	30	11.5" x 7.6" x 11.3"	3.30	0.57

Tapered cone design, 1/4" rope tie-off.

Lock Nuts

PVC Lock Nut



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
LT9LDR	1/2"	0 34481 12021 6	20 bags of 5	11.62" x 7.75" x 11.50"	4.67	0.60
LT9LER	3/4"	0 34481 12022 3	20 bags of 5	11.62" x 7.75" x 11.50"	4.67	0.60

Terminate threaded adapters into enclosures.

Pull Elbows

Access Pull Elbows



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E990DR-CAR	1/2"	0 34481 06621 7	25	12" x 4" x 6"	2.28	0.17
E990ER-CAR	3/4"	0 34481 06622 4	20	12" x 4" x 6"	2.40	0.17

Gasket included. Access pull point for cable in tight radius. Allows conduit changes in direction.

PVC Pull Elbow



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E990DER-CAR	1/2" to 3/4"	0 34481 18262 7	20	12" x 4" x 6"	2.96	0.17

Includes two reducer bushings. Access pull point for cable in tight radius. Allows conduit changes in direction.

Offsets

Meter Offset



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E995GR	1-1/4"	0 34481 06634 7	3	11.62" x 7.75" x 5.75"	3.30	0.29
E995J-CTN	2"	0 34481 06636 1	8	11.62" x 7.75" x 5.75"	3.04	0.29

Socket on one end with threads on offset. Brings services into meter box.

Offset



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E994DR-CTN	1/2"	0 34481 06631 6	25	12" x 4" x 6"	2.60	0.17
E994ER-CTN	3/4"	0 34481 06632 3	15	12" x 4" x 6"	2.16	0.17
E994F	1"	0 34481 06633 0	50	11.62" x 7.75" x 11.5"	11.56	0.60

Matches up PVC conduit stubs with surface mounted outlet boxes.

Caps

Service Entrance Caps



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E998E-CAR	3/4"	0 34481 06609 5	5	6" X 4" x 6"	0.68	0.08
E998F-CAR	1"	0 34481 06610 1	5	12" x 4" x 6"	1.23	0.17
E998G-CAR	1-1/4"	0 34481 06611 8	5	12" x 6" x 6"	2.13	0.25
E998H-CAR	1-1/2"	0 34481 06612 5	5	12" x 12" x 6"	5.50	0.50
E998J-CAR	2"	0 34481 06613 2	5	12" x 12" x 6"	5.50	0.50
E998K-UPC	2-1/2"	0 34481 06614 9	2	16" x 12" x 11.5"	8.90	1.28
E998L	3"	0 34481 06615 6	2	16" x 12" x 12.12"	8.49	1.35

Removable cover with plate knockouts.

End Caps



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E958D-CTN	1/2"	0 34481 06161 8	100	11.5" x 7.6" x 5.7"	2.97	0.28
E958E-CTN	3/4"	0 34481 06162 5	100	11.5" x 7.6" x 5.4"	4.40	0.27
E958F-CTN	1"	0 34481 06163 2	75	11.5" x 7.6" x 5.4"	4.75	0.27
E958G-CTN	1-1/4"	0 34481 06164 9	40	11.5" x 7.6" x 5.4"	4.40	0.27
E958H-CTN	1-1/2"	0 34481 06165 6	30	11.5" x 7.6" x 5.4"	3.70	0.27
E958J-CTN	2"	0 34481 20440 4	25	11.6" x 7.6" x 5.7"	5.08	0.29
E958L	3"	0 34481 20442 8	10	11.6" x 7.6" x 11.5"	5.82	0.58

Cap off unused PVC conduit temporarily or permanently with PVC solvent cement.

Conduit Bodies

Rigid nonmetallic. Hubs are not threaded. Textured lids. Foam-in-place gasket.

Type C



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E987D-CTN	1/2"	0 34481 06501 2	8	12" x 4" x 6"	2.00	0.17
E987E-CTN	3/4"	0 34481 06502 9	4	12" x 8" x 6"	4.25	0.33
E987F-CAR	1"	0 34481 06503 6	10	12" x 8" x 6"	4.00	0.33
E987G-CAR	1-1/4"	0 34481 06504 3	5	12" x 8" x 6"	4.55	0.33
E987H-CAR	1-1/2"	0 34481 06505 0	4	12" x 6" x 6"	3.36	0.25
E987J-CAR	2"	0 34481 06506 7	3	12" x 12" x 6"	4.74	0.50

Type LR



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E985D-CTN	1/2"	0 34481 06581 4	8	12" x 4" x 6"	1.95	0.17
E985E-CTN	3/4"	0 34481 06582 1	4	12" x 8" x 6"	4.33	0.33
E985F-CAR	1"	0 34481 06583 8	10	12" x 8" x 6"	4.30	0.33
E985G-CAR	1-1/4"	0 34481 06544 9	5	12" x 8" x 6"	4.46	0.33
E985H-CAR	1-1/2"	0 34481 06582 2	5	12" x 8" x 6"	4.71	0.33
E985J-CAR	2"	0 34481 06541 8	3	12" x 12" x 6"	4.83	0.50

Type T



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E983D-CTN	1/2"	0 34481 06601 9	8	12" x 4" x 6"	2.30	0.17
E983E-CTN	3/4"	0 34481 06602 6	8	12" x 8" x 6"	4.60	0.33
E983FR-CAR	1"	0 34481 06603 3	10	12" x 8" x 6"	3.28	0.33
E983GR-CAR	1-1/4"	0 34481 06604 0	4	12" x 8" x 6"	5.08	0.33
E983H-CAR	1-1/2"	0 34481 06605 7	4	12" x 8" x 6"	3.44	0.33
E983J-CAR	2"	0 34481 06606 4	3	12" x 12" x 6"	8.55	0.50

Type LL



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E984D-CTN	1/2"	0 34481 06561 6	8	12" x 4" x 6"	1.95	0.17
E984E-CTN	3/4"	0 34481 06562 3	4	12" x 6" x 6"	3.41	0.25
E984F-CAR	1"	0 34481 06563 0	10	12" x 8" x 6"	4.30	0.33
E984G-CAR	1-1/4"	0 34481 06564 7	5	12" x 8" x 6"	4.30	0.33
E984H-CAR	1-1/2"	0 34481 06565 4	5	12" x 8" x 6"	4.30	0.33
E984J-CAR	2"	0 34481 06566 1	3	12" x 12" x 6"	4.82	0.50

Conduit Bodies

Type X with Cover



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E970CD-CTN	1/2"	0 34481 06674 3	5	12" x 6" x 6"	3.34	0.25
E970CE-CTN	3/4"	0 34481 06675 0	5	12" x 6" x 6"	3.20	0.25

Four knock-out type socket openings, 90° spacing. Available with 1/2" or 3/4" socket outlets. Includes cover and gasket. Supplied with separate mounting feet for easy mounting.



Round Junction Box with Reducer

Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E970CDE-CTN	1/2" to 3/4"	0 34481 18261 0	5	12" x 6" x 6"	3.25	0.25

Type LB (Hubs are Not Threaded)



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E986D-CTN	1/2"	0 34481 20749 8	20	12" x 4" x 6"	2.12	0.17
E986E-CTN	3/4"	0 34481 06542 5	12	12" x 8" x 6"	4.40	0.33
E986F-CTN	1"	0 34481 06543 2	12	12" x 8" x 6"	4.30	0.33
E986GR	1-1/4"	0 34481 20757 3	6	12" x 8" x 6"	4.55	0.33
E986HR	1-1/2"	0 34481 06545 6	6	12" x 8" x 6"	4.40	0.33
E986J-CTN	2"	0 34481 06546 3	4	12" x 12" x 6"	4.89	0.50
E986K-CAR	2-1/2"	0 34481 06548 7	1	18" x 12" x 6"	3.63	0.75
E986L	3"	0 34481 06549 4	4	16" x 12" x 12"	3.74	1.33

*WP Box W/Lug-Grey

Type E (Hubs are Not Threaded)



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E988D-CAR	1/2"	0 34481 06521 0	5	6" x 4" x 6"	1.80	0.08
E988E	3/4"	0 34481 06522 7	20	11.62" x 7.75" x 11.5"	8.03	0.59
E988F-CAR	1"	0 34481 06523 4	10	12" x 8" x 6"	4.00	0.33
E988G-CAR	1-1/4"	0 34481 06524 1	5	12" x 8" x 6"	4.70	0.33
E988H-CAR	1-1/2"	0 34481 06525 8	5	12" x 8" x 6"	4.70	0.33
E988J-CAR	2"	0 34481 06526 5	3	12" x 12" x 6"	4.80	0.50

Molded Nonmetallic Junction Boxes

Manufactured from PVC or PPO thermoplastic molding compound and featuring foam-in-place gasket lids. Attached with stainless steel screws, these rugged enclosures offer all the corrosion resistance and physical properties you need for direct burial applications.



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E989NNJ-CAR	4" x 4" x 2"	0 34481 06681 1	5	12" x 6" x 6"	2.83	0.25
E987NR	4" x 4" x 4"	0 34481 06683 5	3	12" x 12" x 6"	4.30	0.50
E989NNR-CAR	4" x 4" x 6"	0 34481 06684 2	4	12" x 12" x 6"	5.00	0.50
E989PPJ-CAR	5" x 5" x 2"	0 34481 06685 9	4	12" x 6" x 6"	2.80	0.25
E987RR	6" x 6" x 4"	0 34481 06686 6	3	12" x 12" x 6"	2.76	0.50
E989RRR-UPC	6" x 6" x 6"	0 34481 06688 0	8	12" x 12" x 6"	2.50	0.50
E989N-CAR	8" x 8" x 4"	0 34481 06690 3	1	12" x 12" x 6"	2.12	0.50
E989R-UPC	12" x 12" x 6"	0 34481 06699 6	2	13.8" x 13.8" x 14.6"	9.50	1.60

Single Gang FS Boxes

Type FSE



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E980DFN-CTN	1/2"	0 34481 04892 3	12	12" x 8" x 6"	3.96	0.33
E980EFN-CTN	3/4"	0 34481 04893 0	12	12" x 8" x 6"	4.87	0.33
E980FFN-CTN	1"	0 34481 04894 7	8	12" x 8" x 6"	4.11	0.33

All sizes take standard covers and accessories or devices. Integral mounting feet provide easy mounting.

For dead-end terminations.

Type FSC

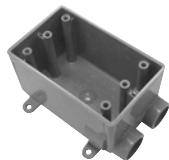


Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E981DFN-CTN	1/2"	0 34481 04897 8	12	12" x 8" x 6"	3.96	0.33
E981EFN-CTN	3/4"	0 34481 04899 2	12	12" x 8" x 6"	4.87	0.33
E981FFN-CTN	1"	0 34481 04901 2	8	12" x 8" x 6"	4.11	0.33

All sizes take standard covers and accessories or devices.

For through terminations.

Type FSS



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E982DFN-CTN	1/2"	0 34481 04903 6	12	11.62" x 7.75" x 11.5"	4.45	0.60
E982EFN-CTN	3/4"	0 34481 04907 4	12	11.62" x 7.75" x 11.5"	4.35	0.60
E982FFN-CTN	1"	0 34481 04911 1	8	12" x 8" x 6"	3.47	0.33

All sizes take standard covers and accessories or devices.

For multiple dead-end circuit terminations or where additional support is required in stub-up applications.

Single Gang FS Boxes

Type FSCC



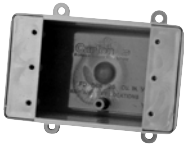
Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E979DFNR	1/2"	0 34481 04913 5	8	20" x 6" x 6"	5.19	0.416
E979EFN-CTN	3/4"	0 34481 04916 6	12	20" x 6" x 6"	5.79	0.416
E979FFN-CTN	1"	0 34481 04924 1	8	20" x 6" x 6"	5.96	0.416

All sizes take standard covers and accessories or devices.

For multiple through circuit terminations or where additional support is required in stub-up applications.

Single Gang Deep Device Boxes

Type FD

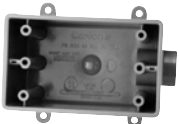


Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E9801	N/A	0 34481 15388 7	10	11.6" x 7.75" x 11.5"	4.29	0.598

All sizes take standard covers and accessories or devices. Integral mounting feet provide easy mounting.

For terminations where hub requirements vary according to application – hubs easily made with flared wood bit or hole saw.

Type FDE



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E9801DN	1/2"	0 34481 04886 2	10	11.6" x 7.75" x 11.5"	4.86	0.598
E9801EN	3/4"	0 34481 04885 5	10	11.6" x 7.75" x 11.5"	4.91	0.598
E9801FN	1"	0 34481 04887 9	10	11.6" x 7.75" x 11.5"	4.91	0.598

All sizes take standard covers and accessories or devices. Integral mounting feet provide easy mounting.

For dead-end terminations where large devices or additional wiring capacity is required.

Type FDC



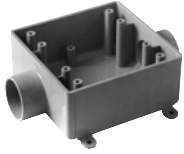
Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E9811DN	1/2"	0 34481 04889 3	10	11.6" x 7.75" x 11.5"	4.47	0.598
E9811EN	3/4"	0 34481 04890 9	10	11.6" x 7.75" x 11.5"	4.92	0.598
E9811FN	1"	0 34481 04891 6	10	11.6" x 7.75" x 11.5"	5.05	0.598

All sizes take standard covers and accessories or devices. Integral mounting feet provide easy mounting.

For through terminations where large devices or additional wiring capacity is required.

Two Gang FS Boxes

Type 2FSC

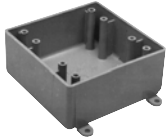


Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E9812DR	1/2"	0 34481 05096 4	4	20" x 6" x 6.5"	4.57	0.45
E9812E-CTN	3/4"	0 34481 05097 1	9	20" x 6" x 6.5"	4.57	0.45
E9812F-CTN	1"	0 34481 05098 8	9	20" x 6" x 6.5"	4.82	0.45

All sizes take standard covers and accessories or devices. Integral mounting feet provide easy mounting.

For through terminations where two devices or additional wiring capacity is required.

Type FS



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E9802	N/A	0 34481 15387 0	10	11.62" x 7.75" x 11.5"	4.85	0.59

All sizes take standard covers and accessories or devices. Integral mounting feet provide easy mounting.

For terminations where hub requirements vary according to application - hubs easily made with flared wood bit or hole saw.

Type 2FSE



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E9802DR	1/2"	0 34481 08401 3	5	20" x 6" x 6"	4.91	0.42
E9802E-CTN	3/4"	0 34481 08405 1	10	20" x 6" x 6"	4.91	0.42
E9802F-CTN	1"	0 34481 08410 5	10	20" x 6" x 6"	5.88	0.42

All sizes take standard covers and accessories or devices. Integral mounting feet provide easy mounting.

For dead-end terminations where two devices or additional wiring capacity is required.

Snap Strap® Conduit Support Straps

Carlon's Snap Strap® offers a unique support strap designed especially for the installation of PVC conduit. Also usable for installations of rigid steel. This high strength, nonmetallic clamp allows conduit to expand and contract freely, eliminating the bowing commonly seen from the expansion and contraction of conduit caused by varying temperature changes. Finished installations have a neat, attractive appearance on exposed applications.

Single Mount



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E978DCR	1/2"	0 34481 06931 7	18	6" x 3" x 6"	0.45	0.08
E978ECR	3/4"	0 34481 06932 4	15	6" x 3" x 6"	0.44	0.08
E978FCR	1"	0 34481 06933 1	10	6" x 3" x 6"	0.36	0.08

Indoor use only.

To be used in accordance with conduit spacing requirements per 99 NEC, Article 347-8. This part is not supplied with screws.

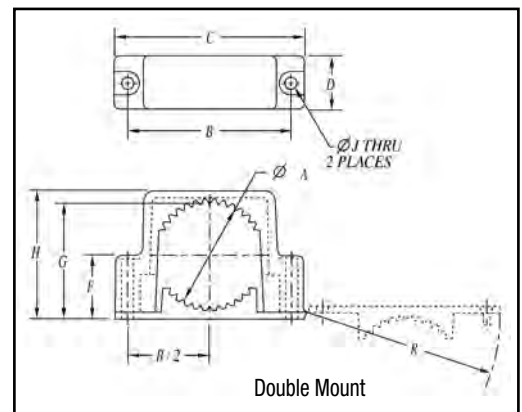
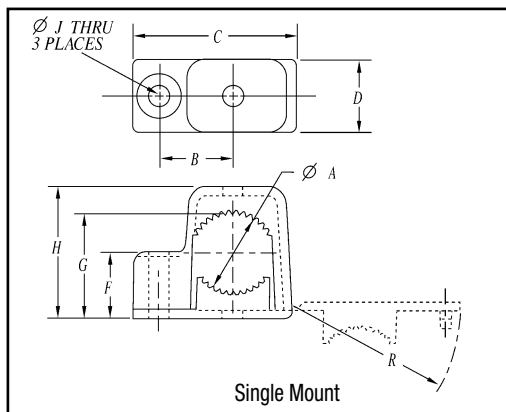
Double Mount



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E978GCR	1-1/4"	0 34481 06935 5	10	12" x 3" x 6"	0.84	0.12
E978HCR	1-1/2"	0 34481 13066 6	5	12" x 3" x 6"	0.47	0.12
E978JC-CAR	2"	0 34481 06937 9	10	12" x 4" x 6"	1.19	0.17

Indoor use only.

To be used in accordance with conduit spacing requirements per 99 NEC, Article 347-8. This part is not supplied with screws.



Nonmetallic Clamps

Nonmetallic Clamps offer the same chemical resistance as Carlton Nonmetallic Conduits for a complete, corrosion resistant system.

Conduit Clamps



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Case Weight (Lbs)	Case Cube (Cu. Ft.)
E977DC-CTN	1/2"	0 34481 18660 1	20 bags of 5	12" x 3" x 6"	1.20	0.13
E977DC25-UPC	1/2"	0 34481 15551 5	25 bags of 25	20' x 6" x 6"	6.87	0.45
E977EC-CTN	3/4"	0 34481 02494 1	20 bags of 5	12" X 3" X 6"	1.40	0.13
E977EC20-UPC	3/4"	0 34481 15552 2	25 bags of 20	20" x 6" x 6"	6.50	0.45
E977FC-CTN	1"	0 34481 02495 8	12 bags of 5	12" x 3" x 6"	1.90	0.13
E977GC-CTN	1-1/4"	0 34481 02496 5	12 bags of 5	12" x 3" x 6"	1.50	0.13
E977HC-CTN	1-1/2"	0 34481 02497 2	6 bags of 5	12" x 3" x 6"	0.70	0.15
E977JCR-CTN	2"	0 34481 02498 9	4 bags of 5	12" x 4" x 6"	1.08	0.17
E977KC-CAR	2-1/2"	0 34481 16020 5	25 pcs.	12" x 6" x 6"	1.42	0.25
E977LC-CAR	3"	0 34481 16022 9	20 pcs.	12" x 6" x 6"	1.38	0.25
E977NC-CAR	4"	0 34481 16024 3	15 pcs.	12" x 6" x 6"	1.21	0.25

To be used in accordance with conduit spacing requirements per 99 NEC, Article 347-8.

*Note: Each clamp requires 2 screws, 2 nuts and 2 washers.

Nylon Conduit Clamp for Masonry Applications



Part #	Product Size	UPC Code	Carton Quantity	Carton Dimensions (L x W x H)	Carton Weight (Lbs)	Case Cube (Cu. Ft.)
E977NDC-CTN	1/2"	0 34481 18564 2	12 bags of 5	12" x 3" x 6"	1.198	0.125
E977NEC-CTN	3/4"	0 34481 18565 9	12 bags of 5	12" x 3" x 6"	1.392	0.125

Typical Properties of Conduit Raw Material Compound

Thermal

	ASTM Test	Typical Values
Co-efficient of Thermal Expansion-inch/inch/°F (properties @ 73.4°F)	D696	3.38 x 10 ⁻⁵
Heat Distortion °F at 264 psi	D648	160°F
Thermal Conductivity BTU (hr.) (ft.) (°F/in.)	N/A	1.3

Electrical

	ASTM Test	Typical Values
Dielectrical Strength volts/mil	D149	1100
Dielectric Constant 60 CPS @ 30°C	D150	4.00
Power Factor 60 CPS @ 30°C	D150	1.93

Mechanical

	ASTM Test	Typical Values
Specific Gravity	D792	1.43 - 1.6
Tensile Strength (psi) @ 73.4°F	D638	5,000-6,500
Izod Impact ft lbs./in. of notch	D256	0.65 - 1.5
Flexural Strength (psi)	D790	12,500
Compressive Strength (psi)	D695	9,000
Hardness (Durometer D)	D2240	85

Impedance (Volts lost per ampere per 100 feet)

	3B 90% P.F.	80% P.F.	1B 90% P.F.	80% P.F.
Steel Conduit	.0118	.0123	.0136	.0142
Plus 40®	.0105	.0106	.0121	.0122

Using 250 KCMil Cu. conductor. comparable values for other conductor sizes.

Wire Fill

Maximum number of conductors in Schedule 40 PVC conduit
Table 3A and Table 3B (Based on Table 1, Chapter 9 of the NEC)

Type Letters	Conductor Size AWG, MCM	Conduit Trade Size (inches)															
		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/4	5	6	8		
THWN	14	13	24	39	69	94	154										
	12	10	18	29	51	79	114	164									
	10	6	11	18	32	44	73	194	160								
	8	3	5	9	19	22	36	51	71	106	136						
THHN	6	1	4	6	11	15	26	37	57	76	98	125	154				
	4	1	2	4	7	9	16	22	35	47	60	75	94	137	236		
FEP (14 thru 2)	3	1	1	3	6	8	13	19	29	39	51	64	90	116	201		
	2	1	1	3	5	7	11	16	25	33	43	54	67	97	169		
FEPB (14 thru 8)	1	1	1	3	5	9	12	18	25	32	49	59	72	125			
	1/0	1	1	3	4	7	10	15	21	27	33	42	61	105			
PFA (14 thru 4/0)	2/0	1	1	2	3	6	8	13	17	22	28	35	51	88			
	3/0	1	1	1	3	5	7	11	14	18	23	29	42	73			
PFAH (14 thru 4/0)	4/0	1	1	1	2	4	6	9	12	15	19	24	35	61			
	250			1	1	1	3	4	7	10	12	16	20	28	49		
Z (14 thru 4/0)	300			1	1	1	3	4	6	8	11	13	17	24	42		
	350			1	1	1	2	3	5	7	9	12	15	21	37		
	400			1	1	1	1	3	5	6	8	10	13	19	33		
	500			1	1	1	2	4	5	7	9	11	16	27			
XHHW (4 thru 500MCM)	600			1	1	1	1	3	4	5	7	9	13	22			
	700			1	1	1	1	3	4	5	6	8	11	19			
	750			1	1	1	1	2	3	4	6	7	11	19			
	6	1	3	5	9	13	21	30	47	63	81	102	128	185	320		
XHHW	600			1	1	1	1	3	4	5	7	9	13	22			
	700			1	1	1	1	3	4	5	6	7	11	19			
	750			1	1	1	1	2	3	4	6	7	10	18			

Maximum number of conductors in Schedule 80 PVC conduit
(Based on Table 1, Chapter 9 of the NEC)

Conductor Size AWG, MCM		Conduit Trade Size (inches)									
		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5
# 14	THW	4	8	13	24	34	57	82	128		
	THHN	10	19	33	58	81	135	194	0		
12	THW	3	6	11	20	28	47	67	105	183	
	THHN	8	14	24	43	60	100	144	0		
10	THW	3	5	9	16	22	37	54	85	148	
	THHN	5	9	15	27	38	64	92	143		
8	THW	1	2	4	8	11	19	28	44	77	121
	THHN	1	4	7	13	18	31	45	70	123	195
6	THW	1	1	3	6	8	14	20	32	56	88
	THHN	1	3	5	9	13	22	32	50	88	140
4	THW	0	1	2	4	6	10	15	24	42	66
	THHN	1	1	3	6	8	13	20	31	54	86
3	THW	0	1	1	4	5	9	13	20	36	57
	THHN	1	1	2	5	7	11	17	26	46	73
2	THW	0	1	1	3	4	8	11	17	31	49
	THHN	1	1	1	4	5	9	14	22	38	61
1	THW	0	1	1	1	3	5	8	13	22	35
	THHN	0	1	1	3	4	7	10	16	28	45
0	THW	0	0	1	1	2	4	7	11	19	30
	THHN	0	1	1	2	3	6	8	13	24	38
00	THW	0	0	1	1	1	4	6	9	16	26
	THHN	0	1	1	1	3	5	7	11	20	32
000	THW	0	0	1	1	1	3	5	8	14	22
	THHN	0	0	1	1	2	4	6	9	16	26
0000	THW	0	0	1	1	1	3	4	6	11	18
	THHN	0	0	1	1	1	3	5	8	14	22
250	THW	0	0	0	1	1	1	3	5	9	14
	THHN	0	0	0	1	1	2	4	6	11	18
300	THW	0	0	0	1	1	1	3	4	8	13
	THHN	0	0	0	1	1	1	3	5	9	15
350	THW	0	0	0	1	1	1	2	4	7	11
	THHN	0	0	0	1	1	1	3	4	8	13
400	THW	0	0	0	0	1	1	1	3	6	10
	THHN	0	0	0	1	1	1	2	4	7	12
500	THW	0	0	0	0	1	1	1	3	5	8
	THHN	0	0	0	0	1	1	1	3	6	10
600	THW	0	0	0	0	0	1	1	1	4	7
	THHN	0	0	0	0	1	1	1	3	5	8
700	THW	0	0	0	0	0	1	1	1	3	6

Weight Comparison

Carlon Plus 40® rigid nonmetallic conduit compared to other rigid conduit in pounds per 100 feet (approx.)

Nom. Size	Carlon Plus 40® Rigid Nonmetallic Conduit	Carlon Plus 80® Rigid Nonmetallic Conduit	Aluminum	Electrical Metallic Tubing (EMT)	Intermediate Metal Conduit (IMC)	Rigid Steel (GALV)
1/2	18	22	27	30	57	79
3/4	23	29	36	46	78	105
1	35	43	53	66	112	153
1 1/4	48	60	70	96	114	201
1 1/2	57	72	86	112	176	246
2	76	100	116	142	230	334
2 1/2	125	153	183	230	393	527
3	164	212	239	270	483	690
3 1/2	198		288	350	561	831
4	234	310	340	400	625	982
5	317	431	465	Not Made	Not Made	1344
6	412	592	612	Not Made	Not Made	1770

Expansion and Contraction

Temperature Considerations for Rigid Nonmetallic Conduit Compensation for Linear Expansion

Like all construction materials, PVC will expand or contract with variations in temperatures. The coefficient of linear expansion in PVC conduit is 3.38×10^{-5} in./in./°F as compared to 1.2×10^{-5} for aluminum and 0.6×10^{-5} for steel. An expansion coupling is needed whenever the change in length due to temperature variation will exceed 1/2 in.

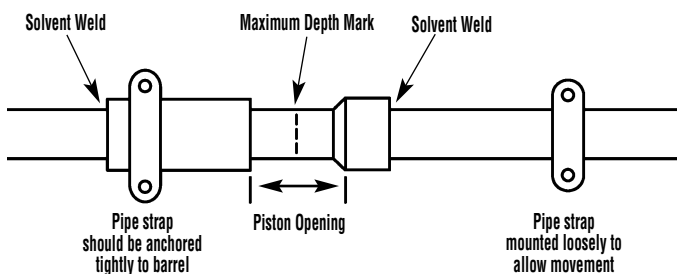
Add 30°F to the estimated temperature range when conduit is installed in direct sunlight to allow for radiant heating.

An expansion coupling consists of two sections of conduit, one telescoping inside another. When installing expansion couplings, alignment of piston and barrel is important. Be sure to mount expansion joint level for best performance.

For a vertical run, the expansion coupling must be installed close to the top of the run with the barrel jointing down, in order that rain water does not run into the opening. The lower end of the conduit run must be secured at the bottom so that any length change due to temperature variation will result in an upward movement.

Expansion Characteristics of PVC Rigid Nonmetallic Conduit Coefficient of Thermal Expansion = 3.38×10^{-5} in./in./°F

Temperature Change in Degrees F	Length Change in inches per 100 Ft. of PVC Conduit	Temperature Change in Degrees F	Length Change in inches per 100 Ft. of PVC Conduit	Temperature Change in Degrees F	Length Change in inches per 100 Ft. of PVC Conduit	Temperature Change in Degrees F	Length Change in inches per 100 Ft. of PVC Conduit
5	0.2	55	2.2	105	4.2	155	6.3
10	0.4	60	2.4	110	4.5	160	6.5
15	0.6	65	2.6	115	4.7	165	6.7
20	0.8	70	2.8	120	4.9	170	6.9
25	1.0	75	3.0	125	5.1	175	7.1
30	1.2	80	3.2	130	5.3	180	7.3
35	1.4	85	3.4	135	5.5	185	7.5
40	1.6	90	3.6	140	5.7	190	7.7
45	1.8	95	3.8	145	5.9	195	7.9
50	2.0	100	4.1	150	6.1	200	8.1



Determine the Piston Opening

The expansion joint must be installed to allow both expansion and contraction of the conduit run. The correct piston opening for any installation condition should use the following formula:

$$O = \left[\frac{T \text{ max} - T \text{ installed}}{DT} \right] E$$

Where:

- O = Piston opening (in.)
- T max = Maximum anticipated temperature of conduit (°F)
- T inst. = Temperature of conduit at time of installation (°F)
- DT = Total change in temperature of conduit (°F)
- E = Expansion allowance built into each expansion coupling (in.)

Example

380 ft. of conduit is to be installed on the outside of a building exposed to the sun in a single straight run. It is expected that the conduit will vary in temperature from 0°F in the winter to 140°F in the summer (this includes the 30°F for radiant heating from the sun.) The installation is to be made at a conduit temperature of 90°F. From the table, a 140°F temperature change will cause a 5.7 in. length change in 100 ft. of conduit. The total change for this example is $5.7 \times 3.8 = 21.67'$ which should be rounded to 22'. The number of expansion couplings will be 22' # coupling range (6" for E945, 2" for E955.) If the E945 coupling is used, the number will be $22' \div 6 = 3.67$ which should be rounded to 4. The coupling should be placed at 95 ft. intervals (380 # 4). the proper piston setting at the time of installation is calculated as explained above.

$$O = \left[\frac{140 - 90}{140} \right] 6.0 = 2.1 \text{ in.}$$

Insert the piston into the barrel to the maximum depth. Place a mark on the piston at the end of the barrel. To properly set the piston, pull the piston out of the barrel to correspond to the 2.1 in. calculated above. See drawing at lower left.

Summary

1. Anticipate expansion and contraction of PVC conduit in aboveground, exposed installation.
2. Use an expansion coupling when length change due to temperature variation will exceed 1/4".
3. PVC conduit expands 4.1" for each 100 feet of run and a 100°F temperature change.
4. Align expansion coupling with the conduit run to prevent binding.
5. Follow the instructions to set the piston opening.
6. Rigidly fix the outer barrel of the expansion coupling so it cannot move. Mount the conduit connected to the piston loosely enough to allow the conduit to move as the temperature changes.

Corrosion Resistance of Carlon Plus 40® and Plus 80® Conduit and Fittings

Carlon Plus 40® and Plus 80® are generally acceptable for use in environments containing the chemicals below. These environmental resistance ratings are based upon tests where the specimens were placed in complete submergence in the reagent listed. Plus 40® and Plus 80® can be used in many process areas where chemicals not on this list are

manufactured or used because worker safety requirements dictate that any air presence or splashing be at a very low level.

If there are any questions for specific suitability in a given environment, prototype samples should be tested under actual conditions.

Acetic Acid 0-20%	Butyl Alcohol	Fluorine Gas – Dry	Mercury	Sodium Benzoate
Acetic Acid 20-30%	Butyl Phenol	Fluoroboric Acid	Methyl Sulfate	Sodium Bicarbonate
Acetic Acid 30-60%	Butylene	Fluorosilicic Acid	Methylene Chloride	Sodium Bisulfate
Acetic Acid 80%	Butyric Acid	Formaldehyde	Mineral Oils	Sodium Bisulfite
Acetic Acid – Glacial	Calcium Bisulfite	Formic Acid	Naphthalene	Sodium Bromide
Acetic Acid Vapors	Calcium Carbonate	Fructose	Nickel Chloride	Sodium Chlorate
Acetylene	Calcium Chlorate	Gallic Acid	Nickel Nitrate	Sodium Chloride
Adipic Acid	Calcium Chloride	Gas – Coke Oven	Nitric Acid, Anhydrous	Sodium Cyanide
Alum	Calcium Hydroxide	Gas – Natural (Dry)	Nitric Acid 20%	Sodium Dichromate
Aluminum Chloride	Calcium Hypochlorite	Gas – Natural (Wet)	Nitric Acid 40%	Sodium Ferricyanide
Aluminum Fluoride	Calcium Nitrate	Gasoline – Sour	Nitric Acid 60%	Sodium Ferrocyanide
Aluminum Hydroxide	Calcium Sulfate	Gasoline – Refined	Nitrobenzene	Sodium Fluoride
Aluminum Oxchloride	Carbonic Acid	Glucose	Nitrous Oxide	Sodium Hydroxide
Aluminum Nitrate	Carbon Dioxide Gas – Wet	Glycerine (Glycerol)	Oils and Fats	Sodium Hypochlorite
Aluminum Sulfate	Carbon Dioxide – Aqueous Solution	Glycol	Oils – Petroleum – (See Type)	Sodium Nitrate
Ammonia-Dry Gas	Carbon Monoxide	Glycolic Acid	Oleic Acid	Sodium Nitrite
Ammonium Bifluoride	Caustic Potash	Green Liquor (Paper Industry)	Oxalic Acid	Sodium Sulfate
Ammonium Carbonate	Caustic Soda	Heptane	Palmitic Acid 10%	Sodium Sulfide
Ammonium Chloride	Chloracetic Acid	Hexanol, Tertiary	Perchloric Acid 10%	Sodium Sulfite
Ammonium Hydroxide 28%	Chloral Hydrate	Hydrobromic Acid 20%	Phenylhydrazine Hydrochloride	Sodium Thiosulfate (Hypo)
Ammonium Metaphosphate	Chlorine Gas (Dry)	Hydrochloric Acid 0% - 25%	Phosgene, Gas	Stannic Chloride
Ammonium Nitrate	Chlorine Gas (Moist)	Hydrochloric Acid 25% - 40%	Phosphoric Acid – 0-25%	Stannous Chloride
Ammonium Persulfate	Chlorine Water	Hydrocyanic Acid or	Phosphoric Acid – 25-50%	Stearic Acid
Ammonium Phosphate – Neutral	Chlorosulfonic Acid	Hydrogen Cyanide	Phosphoric Acid – 50-85%	Sulfur
Ammonium Sulfate	Chrome Alum	Hydrofluoric Acid 10%	Photographic Chemicals	Sulfur Dioxide – Gas Dry
Ammonium Sulfide	Chromic Acid 10%	Hydrofluorosilicic Acid	Plating Solutions	Sulfur Trioxide
Ammonium Thiocyanate	Chromic Acid 30%	Hydrogen Phosphide	Potassium Bicarbonate	Sulfuric Acid – 0-10%
Amyl Alcohol	Chromic Acid 40%	Hydrogen Sulfide – Dry	Potassium Bichromate	Sulfuric Acid – 10-75%
Anthraquinone	Chromic Acid 50%	Hydrogen Sulfide –	Potassium Borate	Sulfuric Acid – 75-90%
Anthraquinonesulfonic Acid	Citric Acid	Aqueous Solution	Potassium Bromide	Sulfurous Acid
Antimony Trichloride	Copper Chloride	Hydroquinone	Potassium Carbonate	Tannic Acid
Aqua Regia	Copper Cyanide	Hydroxylamine Sulfate	Potassium Chloride	Tanning Liquors
Arsenic Acid 80%	Copper Fluoride	Iodine	Potassium Chromate	Tartaric Acid
Arylsulfonic Acid	Copper Nitrate	Kerosene	Potassium Cyanide	Titanium Tetrachloride
Barium Carbonate	Copper Sulfate	Lactic Acid 28%	Potassium Dichromate	Triethanolamine
Barium Chloride	Cottonseed Oil	Lauric Acid	Potassium Ferricyanide	Trimethyl Propane
Barium Hydroxide	Cresylic Acid 50%	Lauryl Chloride	Potassium Ferrocyanide	Trisodium Phosphate
Barium Sulfate	Crude Oil – Sour	Lauryl Sulfate	Potassium Fluoride	Turpentine
Barium Sulfide	Crude Oil – Sweet	Lead Acetate	Potassium Hydroxide	Urea
Beet – Sugar Liquor	Demineralized Water	Lime Sulfur	Potassium Nitrate	Vinegar
Benzene Sulfonic Acid 10%	Dextrin	Linoleic Acid	Potassium Perborate	Whiskey
Benzoic Acid	Dextrose	Lubricating Oils	Potassium Perchlorite	White Liquor (Paper Industry)
Bismuth Carbonate	Diglycolic Acid	Magnesium Carbonate	Potassium Permanganate 10%	Wines
Black Liquor (Paper Industry)	Disodium Phosphate	Magnesium Chloride	Potassium Persulfate	Zinc Chloride
Bleach – 12.5% Active CL ₂	Ethyl Alcohol	Magnesium Hydroxide	Potassium Sulfate	Zinc Chromate
Borax	Ethylene Glycol	Magnesium Nitrate	Propane	Zinc Cyanide
Boric Acid	Fatty Acids	Magnesium Sulfate	Propyl Alcohol	Zinc Nitrate
Brine	Ferric Chloride	Maleic Acid	Silicic Acid	Zinc Sulfate
Breeder Pellets – Dane. Fish	Ferric Nitrate	Malic Acid	Silver Cyanide	
Bromic Acid	Ferric Sulfate	Mercuric Chloride	Silver Nitrate	
Bromine – Water	Ferrous Chloride	Mercuric Cyanide	Silver Plating Solutions	
Butane	Ferrous Sulfate	Mercurous Nitrate	Sodium Acetate	
Butadiene	Fluorine Gas – Wet		Sodium Arsenite	

Suggested Format for Specifying Carlon Nonmetallic Conduit, Conduit Fittings and Junction Boxes

- A.** The Carlon rigid nonmetallic conduit system shall be installed as indicated on the drawings and as specified herein.
- B.** All wiring shall be installed in Carlon rigid nonmetallic conduit. All conduit shall be secured by means of proper fittings. All fittings shall be Carlon.
- C.** Carlon outlet boxes, fittings and junction boxes shall be used for all outlets, pull boxes and junction points. (Lighting fixtures shall not be supported or hung from PVC junction boxes but be supported in position by other means.)
- D.** Exposed conduits shall be mounted securely by suitable hangers or straps with the maximum spacing of points of supports not greater than indicated by Article 347-8 Supporting of Conduit NEC.
- E.** Except where embedded in concrete or direct buried, Carlon conduit shall be supported to permit adequate lineal movement to allow for expansion and contraction of conduit due to temperature change.
- F.** For aboveground installations where temperature change in excess of 14°C (25°F) is anticipated, expansion joints shall be installed. See Table 347-9(A) NEC for expansion characteristics.
- G.** Proper care shall be taken when field bending is employed to maintain the internal diameter and wall thickness of the conduit.

