

Aluminum Rigid Conduit

Product Catalog



- Corrosion resistant aluminum
- Light weight and easy installation
- Low maintenance
- Conduit, elbow and coupling specifications

Aluminum Rigid Conduit

Aluminum Conduit, Elbows and Couplings

Allied Tube & Conduit®, the leading manufacturer of steel conduit and tubing, also offers a broad line of rigid aluminum conduit, couplings, and elbows.

Allied aluminum rigid conduit combines light weight and corrosion resistance to provide a full-line of easy to install, low maintenance conduit whenever specifications call for aluminum.

The complementary line of aluminum accessories ensures end to end system installation.



FEATURES

- **Light Weight**
approximately one-third the weight of steel
- **Corrosion Resistant**
aluminum resists most corrosive atmospheres in industrial environments
- **Easy to Install**
can be easily cut, bent and threaded without special tools
- **Low Maintenance**
doesn't leave discoloring streaks or stains



SPECIFICATION DATA

ALLOY:

Allied Rigid Aluminum Conduits and Fittings are all manufactured of 6063 alloy in temper designation T-1 to ensure maximum performance in electrical installations.

STANDARDS:

Allied Rigid Aluminum Conduit is listed by Underwriters' Laboratories to UL 6A, "Standard for Electrical Rigid Metal Conduit — Aluminum, Red Brass and Stainless Steel" and is manufactured to ANSI C80.5 (Replaces Federal specification WWC-540C).

THREAD PROTECTORS:

Color-Coded end caps keep threads clean and sharp and help provide trade size recognition. Even sizes are blue; 1/2 trade sizes are black; and 1/4 trade sizes are red.

RECOMMENDED INSTALLATION PRACTICES

CUTTING:

A hacksaw is recommended to cut trade sizes 1 1/4 and smaller. Larger trade sizes can be cut with power cut-off equipment.

BENDING:

Standard EMT benders, one size larger than the size of the conduit, should be used on conduit trade sizes 1 and smaller. For sizes over trade size 1, conventional equipment is recommended.

THREADING:

Sharp dies and conventional cutting oil should be used for aluminum conduit. A general purpose emulsifiable oil can provide excellent results.

FITTINGS:

Aluminum couplings and fittings are recommended; however galvanized couplings and fittings are satisfactory for most installations.

FISHING AND WIRE PULLING:

Small Conduit:

In trade sizes up to 1 1/2 and on shorter runs (up to 100 feet), polyethylene fish tapes can be used effectively. Also recommended are round, flexible, speedometer-type steel cables. Use of flat steel tapes should be avoided since they tend to jam in the bends, or if not used carefully, scrape and cut conduit walls.

Large Conduit:

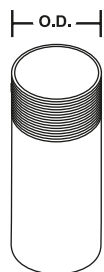
For pulling large conductors through larger conduit or longer runs, polypropylene rope is recommended. Steel pulling cables, especially when old or frayed, can damage steel or aluminum conduit.

IN SOIL OR CONCRETE:

Underwriters' Laboratories Electrical Construction Equipment Directory (UL Green Book) states that aluminum conduit used in concrete or in contact with soil requires supplementary corrosion protection. Examples of supplementary protection are paints approved for the purpose, bitumastic coatings or tape wraps approved for the purpose.

SPECIFICATIONS FOR ALUMINUM RIGID CONDUIT, ELBOWS & COUPLINGS

Conduit Weights and Dimensions

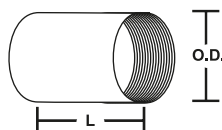


Trade Size Designator		Approx. Wt. Per 100 Ft. (30.5M)		Nominal Outside Diameter		Nominal Wall		Quantity In Master Bundle	
U.S.	Metric	lb.	kg	in.	mm	in.	mm	ft.	m
1/2	16	28.1	12.7	0.840	21.3	0.104	2.64	2500	762.5
3/4	21	37.4	17.0	1.050	26.7	0.107	2.72	2500	762.5
1	27	54.5	24.7	1.315	33.4	0.126	3.20	2000	610.0
1-1/4	35	71.6	32.5	1.660	42.2	0.133	3.38	1000	304.8
1-1/2	41	88.7	40.2	1.900	48.3	0.138	3.51	1000	304.8
2	53	118.5	53.8	2.375	60.3	0.146	3.71	450	137.2
2-1/2	63	187.5	85.0	2.875	73.0	0.193	4.90	300	91.5
3	78	246.3	111.7	3.500	88.9	0.205	5.21	200	61.0
3-1/2	91	295.6	134.1	4.000	101.6	0.215	5.46	200	61.0
4	103	350.2	155.8	4.500	114.3	0.225	5.72	200	61.0
5	129	478.9	217.2	5.563	141.3	0.245	6.22	80	23.4
6	155	630.4	285.9	6.625	168.3	0.266	6.76	60	18.3

NOTE:

- Dimensions and weights are nominal unless otherwise noted.
- Each length of conduit with coupling attached will be nominally 10 feet.

Couplings Weights and Dimensions

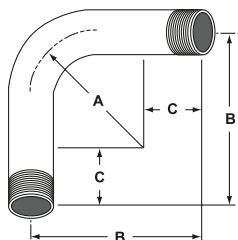


Trade Size Designator		Approx. Wt. Per 100 Ft. (30.5M)		Nominal Outside Diameter		Length		Standard Package
U.S.	Metric	lb.	kg	in.	mm	in.	mm	Pieces
1/2	16	6.1	2.8	1.08	27.4	1.56	39.6	100
3/4	21	9.1	4.1	1.33	33.8	1.62	41.1	50
1	27	12.5	5.7	1.56	39.6	2.00	50.8	30
1-1/4	35	18.9	8.6	1.95	49.5	2.06	52.3	25
1-1/2	41	23.3	10.6	2.22	56.4	2.06	52.3	25
2	53	34.6	15.7	2.75	69.8	2.12	53.8	15
2-1/2	63	68.3	31.0	3.28	83.3	3.12	79.2	20
3	78	91.4	41.5	3.94	100.8	3.25	82.6	15
3-1/2	91	108.0	49.0	4.44	112.8	3.37	85.6	12
4	103	142.0	64.4	5.00	127.0	3.50	88.9	12
5	129	241.9	109.7	6.30	160.0	3.75	95.3	8
6	155	321.0	145.6	7.39	187.7	4.00	101.6	6

NOTE:

- Dimensions, lengths, and weights are nominal

Elbows (90° Radius) Weights and Dimensions



Trade Size Designator		Approx. Wt. Per 100 Ft. (30.5M)		Nominal Dimensions					
				A		B		C	
U.S.	Metric	lb.	kg.	in.	mm	in.	mm	in.	mm
1/2	16	29	13.2	4.0	101.6	6.50	165.1	2.50	63.5
3/4	21	43	14.5	4.5	114.3	7.25	184.2	2.75	69.9
1	27	71	32.2	5.75	146.1	8.375	212.7	2.875	73.0
1-1/4	35	110	49.9	7.25	184.2	10.25	260.6	3.00	76.2
1-1/2	41	153	69.4	8.25	209.6	11.875	301.6	3.625	92.1
2	53	249	112.9	9.50	241.3	14.0	355.6	4.50	114.3
2-1/2	63	437	198.2	10.50	266.7	15.75	400.1	5.25	133.4
3	78	767	347.9	13.00	330.2	18.75	476.3	5.75	146.1
3-1/2	91	1036	469.9	15.00	381.0	21.75	552.5	6.75	171.5
4	103	1228	557.0	16.00	406.4	23.00	584.2	7.00	177.8
5	129	2490	1129.5	24.00	609.6	36.00	914.4	11.00	279.4
6	155	3850	1746.3	30.00	762.0	42.50	1079.5	12.50	317.5

NOTE: Special radius elbows are available upon request



Allied Tube & Conduit - Electrical Family of Innovative Products

• RIGID & IMC CONDUIT		• KWIK-FIT® EMT	
• ALUMINUM CONDUIT		• KWIK-COUPLE®	
• TRUE COLOR™ EMT		• KWIK-FIT® COMPRESSION EMT	
• E-Z PULL® EMT		• PVC CONDUIT & FITTINGS	

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Allied Tube & Conduit
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Electrical & Support Division

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