

SPECIFICATIONS

- * NEMA 3R CONSTRUCTION
- * FABRICATED FROM CORROSION-RESISTANT 0.125THK ALUMINUM
- * FACTORY WIRING 600 VOLT RATED COPPER
- * NATURAL ALUMINUM UNLESS OTHERWISE SPECIFIED
- * ALL EXTERIOR HINGES CONTINUOUS PIANO TYPE ALUMINUM
- * ALL COMPONENTS ARE UL LISTED

PAGE 1 OF 2

THIS INFORMATION IS PROPERTY TO PACIFIC UTILITY PRODUCTS, INC. AND IS NOT DISCLOSED OUTSIDE OF PACIFIC UTILITY PRODUCTS, INC. WITHOUT A CONFIDENTIALITY AGREEMENT

COMPONENT DIRECTORY

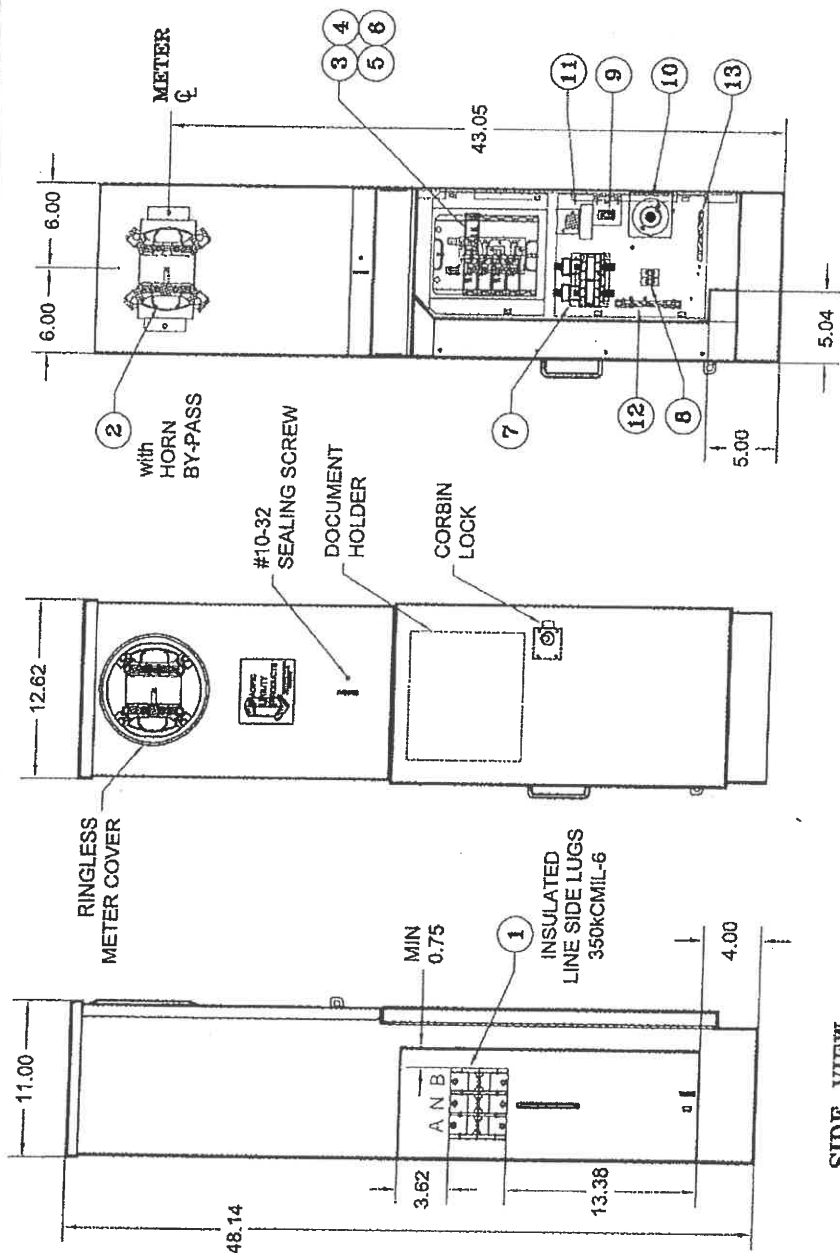
CAT. NO.	USP AR MFG	120240 VAC 1-Phase 3-Wire
1	LANDING LUGS 3500CMIL - 6 PER PHASE	
2	MAIN SHT 200A 5L W/ HORN BY-PASS	
3	WTR CBT 100A 2P 120/240VAC 10kAIC	
4	LOAD CENTER 125A 8CKT 1-Phase CU	
5	(1) CB 30A 2P 120/240VAC FKR B2200	
6	(2) CB 15A 1P 120/240VAC 10k BR115	
7	(2) MERCURY RELAY 30A 1MDT 120V COIL	
8	(1) THERM LKP 2P 85A #4- #18 AWG	
9	SWITCH TOGGLE SPST 20A 240VAC	
10	PE RECEPTACLE TWIST LK COOPER	
11	SURGE ARRESTER 2P 800VAC	
12	INSULATED NEUTRAL	
13	GROUND	

SERVICE PEDESTAL

S.S.O. No.		QTY.
DATE	22 JULY, 2011	
JOB NAME	"	
DISTRIBUTOR	POWER EQUIPMENT SALES	

USP NON-RESIDENTIAL
SERVICE PEDESTAL
0 - 200 AMPERES
0 - 600 VOLTS

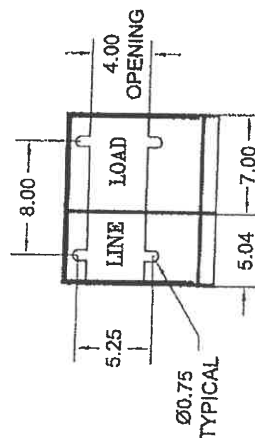
**PACIFIC
UTILITY
PRODUCTS**
2430 RAILROAD ST.
CORONA, CALIFORNIA 92880



FRONT VIEW
SHOWN LESS COVERS

FRONT VIEW

SIDE VIEW



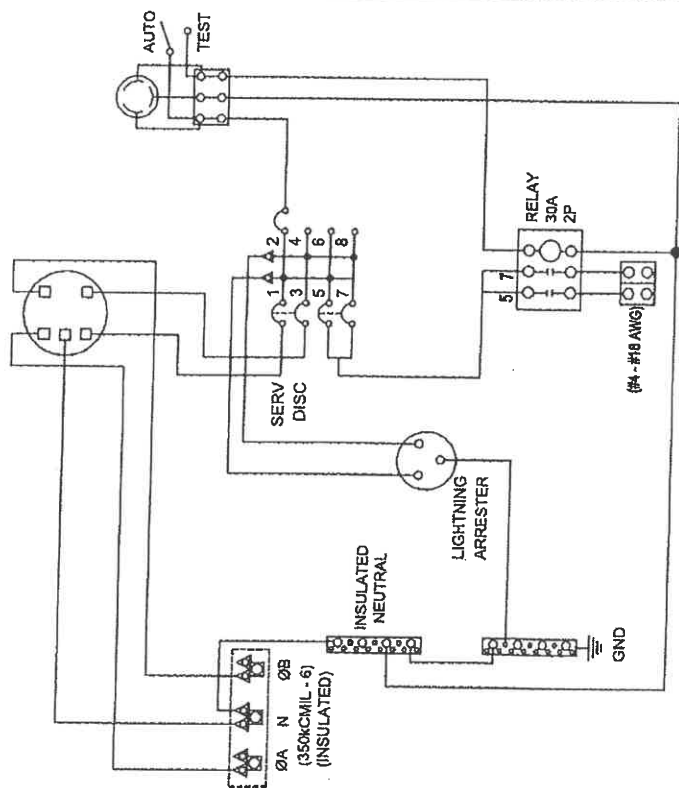
FAL127421

BONDED NEUTRAL REMOVE BONDING MEANS FOR TEST PURPOSES ONLY

*MAIN SERVICE DISCONNECT: 100 AMPs CUTLER-HAMMER TYPE BR
*CIRCUIT BREAKERS 80 AMPs OR LESS: CUTLER-HAMMER TYPE BR, BQ, GFCB.
*REPLACEMENT BREAKERS(S) MUST BE SAME TYPE AND RATING.
*AUTOMATIC TRIP IS INDICATED BY HANDLE POSITION MIDWAY BETWEEN
(ON) AND (OFF). TO RESTORE POWER MOVE HANDLE TO (OFF), THEN (ON).
*METER SOCKET: DURHAM 200 AMPs CONTINUOUS.

LOAD CENTER IS LIMITED TO A MAXIMUM OF 12 INSTALLED CIRCUITS THAT UTILIZE A NEUTRAL CONNECTION, EITHER SINGLE POLE, MULTI-POLE, OR A COMBINATION OF EACH.

SHIPPING TENDS TO LOOSEN ELECTRICAL CONNECTIONS - TIGHTEN ALL CONNECTIONS BEFORE ENERGIZING UNIT.



WIRING DIAGRAM

[illegible]

TORQUE INFORMATION

- | | | | |
|-------|---|-------|-------------------|
| □ | 350MCM - 6 | CU/AL | 275 IN.L.B. |
| △ | #14-1/0 | CU/AL | 50 IN.L.B. |
| ***** | NEUTRAL & EQUIPMENT GROUND-SINGLE CONDUCTOR | | |
| ○ | #14-1/0 | CU/A | #1-1/0 50 IN.L.B. |

#5-1/2 30 IN
#6-4 45 IN

#8 40 IN

CL/VAI	#6	#14-10	25 IN
			25 IN

DATE	NO.	IN.
05/14/08	#8	25 IN
05/14/08	#8	25 IN

#14-10 20 IN.

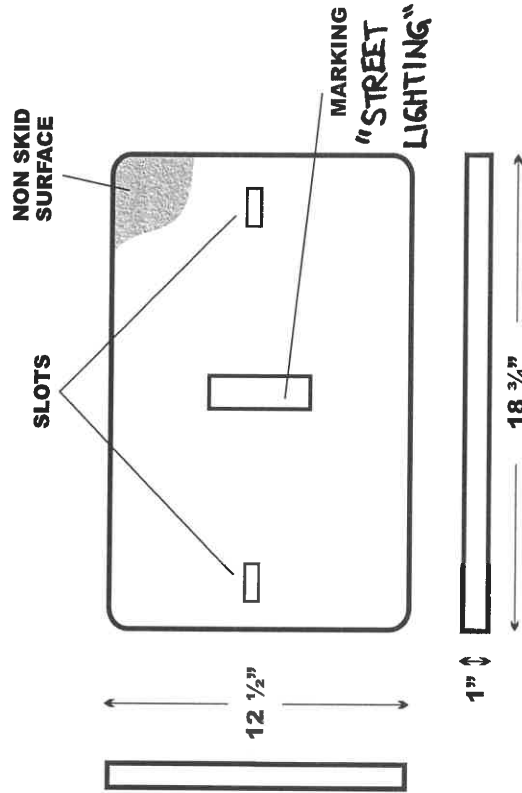
E CONDUCTOR
CLIPAL
45 INAF

CU/AL 20 IN. 43 IN.

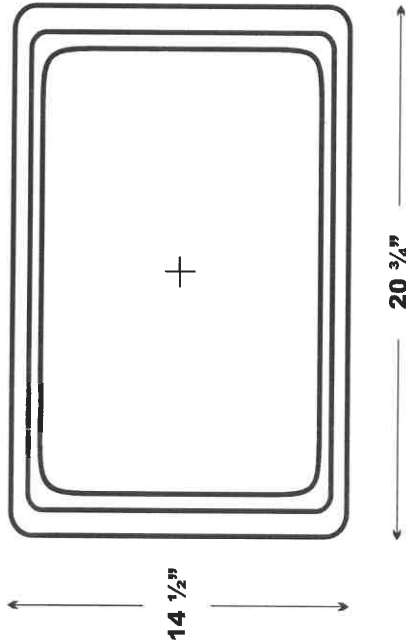
FROM EQUATION TO VALUES

111812 PC Tier 15 / 22,500#

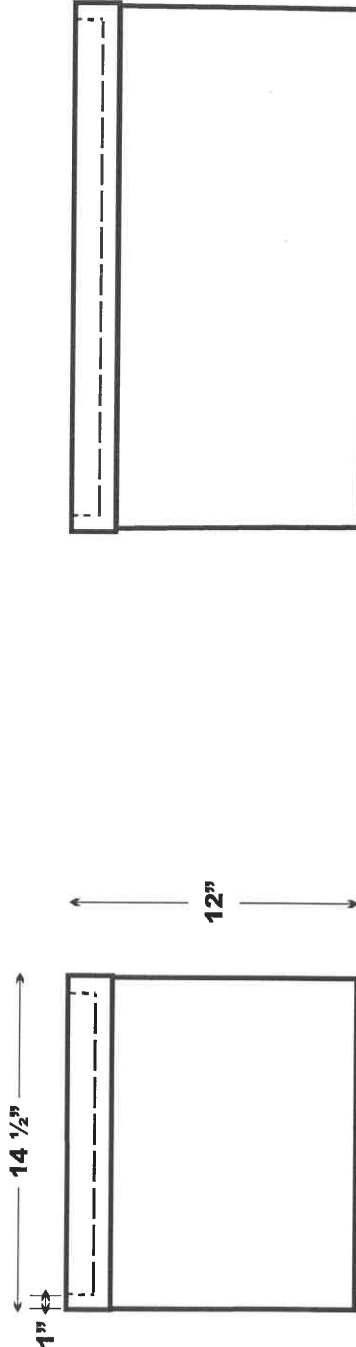
COVER VIEW



TOP VIEW



SIDE VIEW



END VIEW

Part No. 111812 PC "STREET LIGHTING"

BODY: POLYMER CONCRETE

COVER: POLYMER CONCRETE

Weight 58 lbs.

Tolerance +/- 1/8"

ANSI Tier 15

Date Jan 8 2010

File 111812 PC

22,500#

WWW.MARTINPC.COM

Martin Enterprises
"Your Underground Endurance Beyond"



ISO 9001:2008
Registered
Certificate # A3355US

7231 Boulder Ave. #282
Highland, CA 92346
Tel: 951.928.8713
Fax: 951.928.4623

This product design is the sole property of Martin Enterprises. This design is NOT to be altered unless written permission is received by Martin Enterprises only.

11" x 18" BOX ASSEMBLY

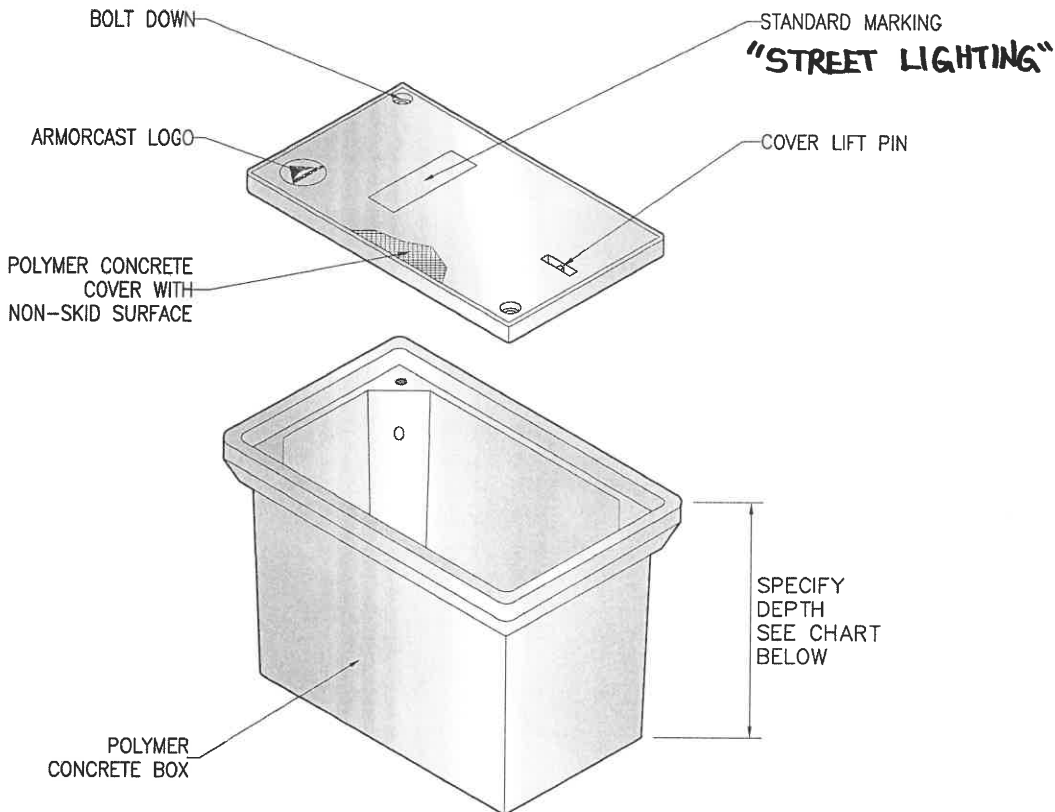
12" to 18" DEPTHS



POLYMER CONCRETE

ARMORCAST PRODUCTS COMPANY

A6001429



11"W x 18"L BOX ASSEMBLIES Specify Depth Below

DESCRIPTION	NOMINAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER	APPROX. WEIGHT	PALLET QTY.
Box & Cover Assembly	11" x 18" x 12"	10K	8	A6001429A	47 lbs.	18
	11" x 18" x 12"	20K	15 / 22	A6001429TA / A6001429HDA	47 lbs.	18
Box & Cover Assembly	11" x 18" x 18"	10K	8	A6001429AX18	71 lbs.	12
	11" x 18" x 18"	20K	15/ 22	A6001429TAX18 / A6001429HDAX18	71 lbs.	12

COMPONENTS

MORE COVER VARIATIONS ARE AVAILABLE IN OUR "COVER SECTION"

DESCRIPTION	NOMINAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER	APPROX. WEIGHT	PALLET QTY.
Replacement Covers	11" x 18"	10K	8	A6001428	15 lbs.	50
	11" x 18"	20K	15	A6001428T	15 lbs.	50
Replacement Boxes	11" x 18" x 12"	10K / 20K	22	A6001429	32 lbs.	18
	11" x 18" x 18"	10K / 20K	22	A6001429X18	56 lbs.	12

- Boxes are Open Bottom and Stackable, also available with Solid Bottoms.
- For sizes not shown please contact Armorcast Products for more information.

THIS PRODUCT IS LISTED TO APPLICABLE UL STANDARDS AND REQUIREMENTS BY UL.

www.armorcastprod.com

Tel: (818) 982-3600 Fax: (818) 982-7742



ARMORCAST PRODUCTS COMPANY

11" x 18" BOX ASSEMBLY

STANDARD DIMENSIONS

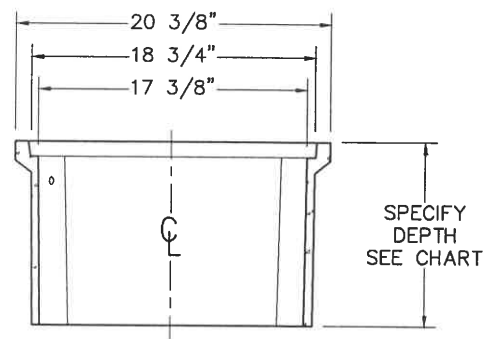
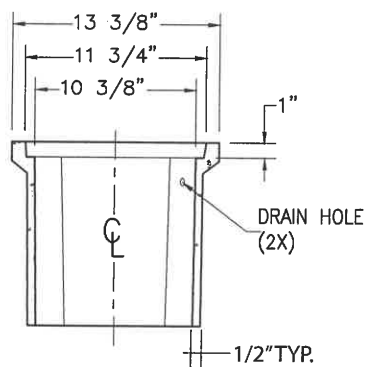
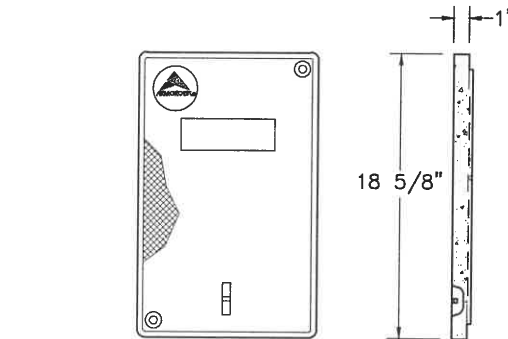
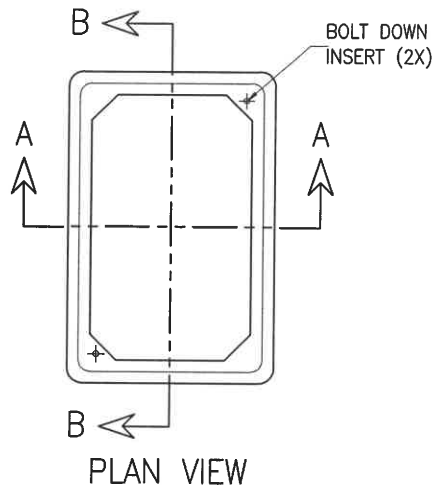
POLYMER CONCRETE

A6001429



LISTED

FILE #E364252



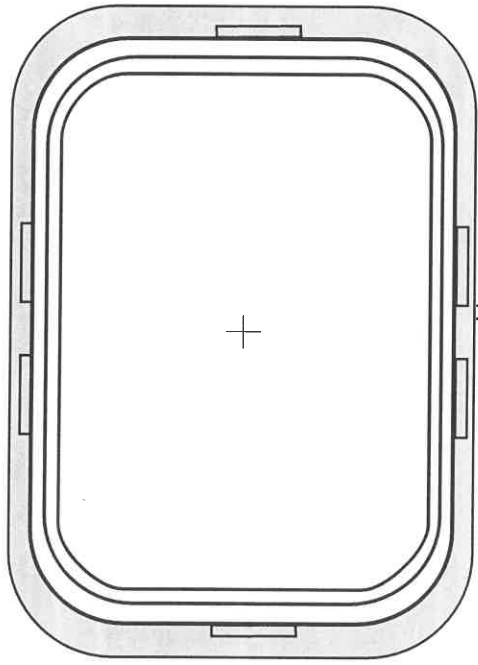
Armorcast Products Company reserves the right to update or discontinue product information at any time without notice.

www.armorcastprod.com

THIS PRODUCT IS LISTED TO APPLICABLE UL STANDARDS AND REQUIREMENTS BY UL.

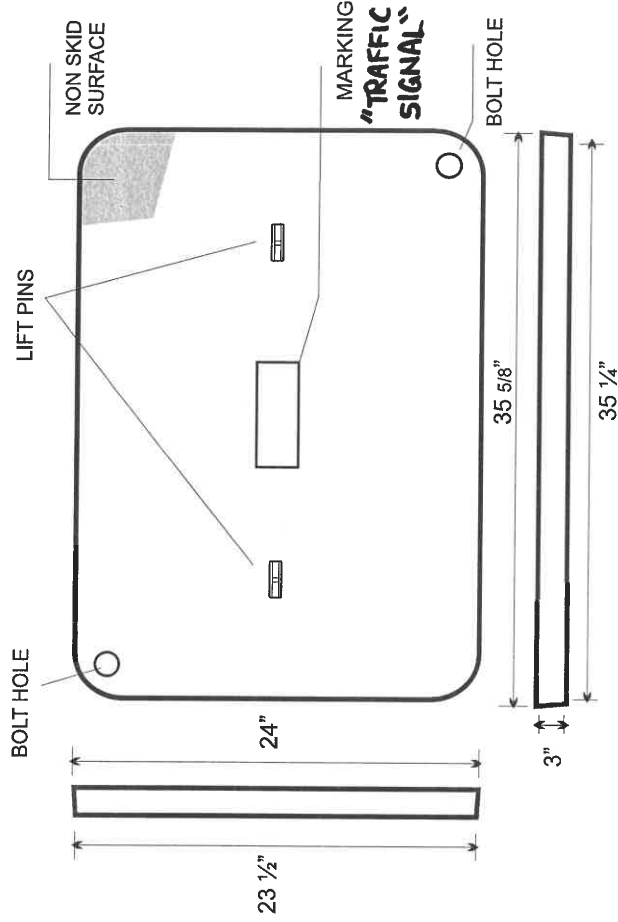
Tel: (818) 982-3600 Fax: (818) 982-7742

243624 FRP PC Ring & Cover

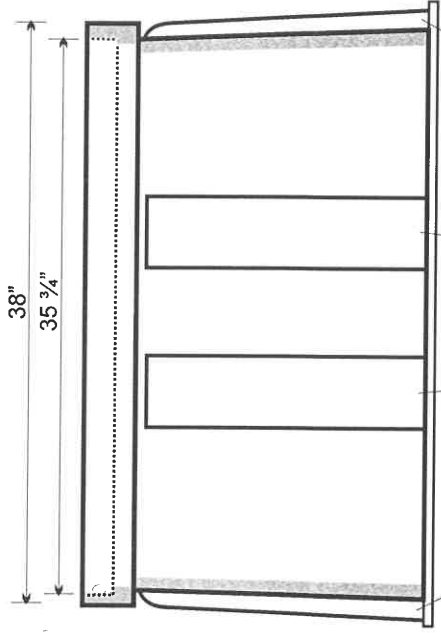


TOP VIEW

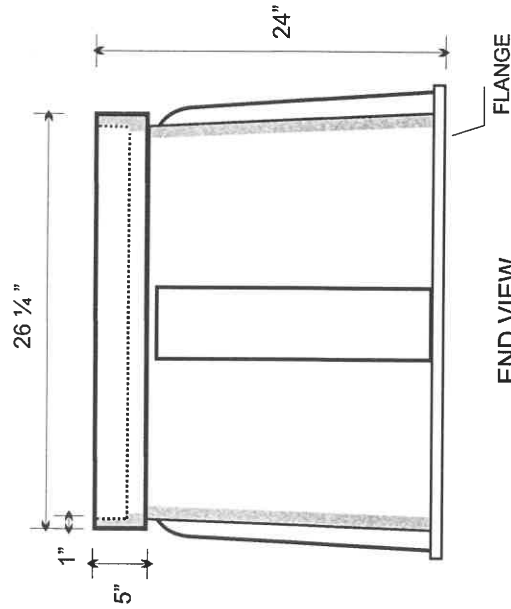
COVER VIEW



SIDE VIEW



VERTICAL REINFORCEMENTS



END VIEW

Part No. 243624 FRP			
BODY: FRP			
COVER: POLYMER CONCRETE			
Weight 220 lbs.	Tolerance +/- 1/8"	Weight Load 20k	
Date July 8 2009	File 243624FRP PC		



Martin Enterprises
 "Your Underground Enclosure Experts"
 WWW.MARTINFRP.COM

7231 Boulder Ave. #262
 Highland, CA 92346
 Tel: 909.967.7910
 Fax: 951.926.4623
 This product design is the sole property
 of Martin Enterprises. This design is NOT
 to be altered unless written permission is
 allowed by Martin Enterprises only.

24" x 36" FRP FLARED BOX ASSEMBLY

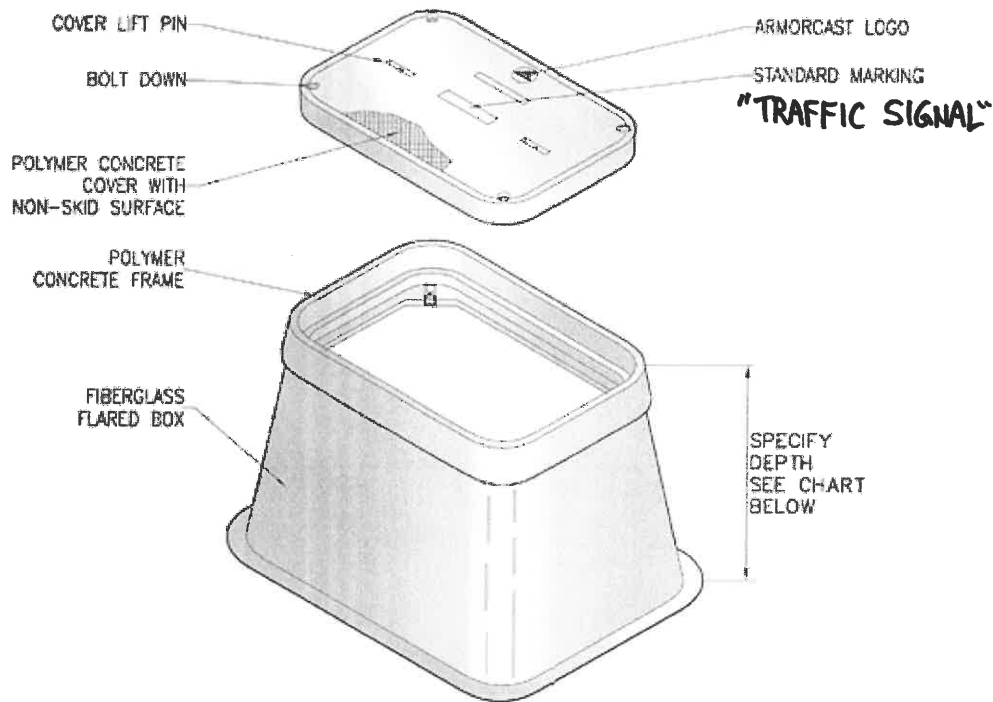
18" to 36" DEPTHS



FIBERGLASS

ARMORCAST PRODUCTS COMPANY

A6001974



24"W x 36"L FRP FLARED BOX ASSEMBLIES Specify Depth Below

DESCRIPTION	NOMINAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER	APPROX. WEIGHT	PALLET QTY.
Box & Cover Assembly	24" x 36" x 18"	10K	8	A6001974AX18	173 lbs.	5
	24" x 36" x 18"	20K	15	A6001974TAX18	242 lbs.	5
Box & Cover Assembly	24" x 36" x 24"	10K	8	A6001974AX24	174 lbs.	5
	24" x 36" x 24"	20K	15	A6001974TAX24	241 lbs.	5
Box & Cover Assembly	24" x 36" x 30"	10K	8	A6001974AX30	207 lbs.	5
	24" x 36" x 30"	20K	15	A6001974TAX30	276 lbs.	5
Box & Cover Assembly	24" x 36" x 36"	10K	8	A6001974AX36	210 lbs.	5
	24" x 36" x 36"	20K	15	A6001974TAX36	280 lbs.	5

COMPONENTS

DESCRIPTION	NOMINAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER	APPROX. WEIGHT	PALLET QTY.
Replacement Covers	24" x 36"	10K	8	A6001975	95 lbs.	20
	24" x 36"	20K	15	A6001975T	157 lbs.	20
Replacement Boxes	24" x 36" x 18"	10K / 20K	8 / 15	A6001974X18	78 lbs.	5
	24" x 36" x 24"	10K / 20K	8 / 15	A6001974X24	79 lbs.	5
	24" x 36" x 30"	10K / 20K	8 / 15	A6001974X30	112 lbs.	5
	24" x 36" x 36"	10K / 20K	8 / 15	A6001974X36	115 lbs.	5
Extensions 18" Boxes Only	24" x 36" x 8"	10K / 20K	8 / 15	A6001974EX8	50 lbs.	5
	24" x 36" x 16"	10K / 20K	8 / 15	A6001974EX16	62 lbs.	3

- Boxes are Open Bottom.
- For sizes not shown please contact Armorcast Products for more information

www.armorcastprod.com

Tel: (818) 982-3600 Fax: (818) 982-7742



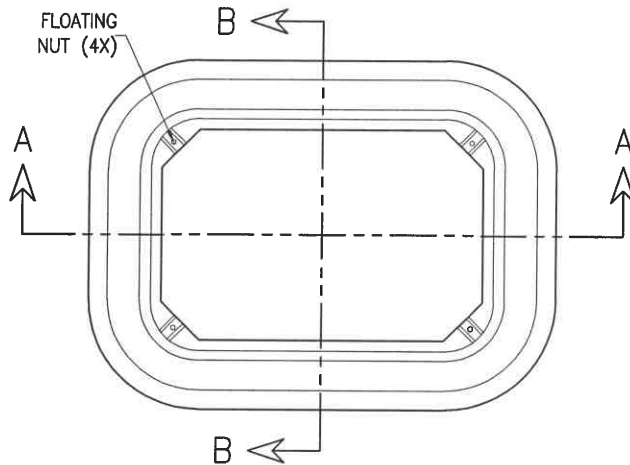
24" x 36" FRP FLARED BOX ASSEMBLY

STANDARD DIMENSIONS

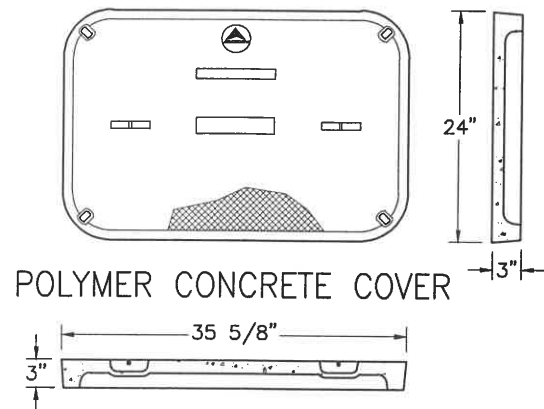
ARMORCAST PRODUCTS COMPANY

FIBERGLASS

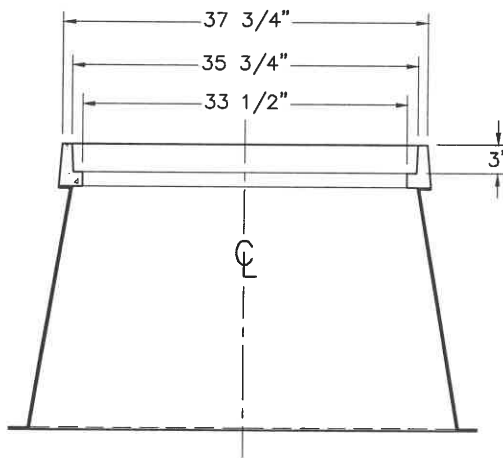
A6001974



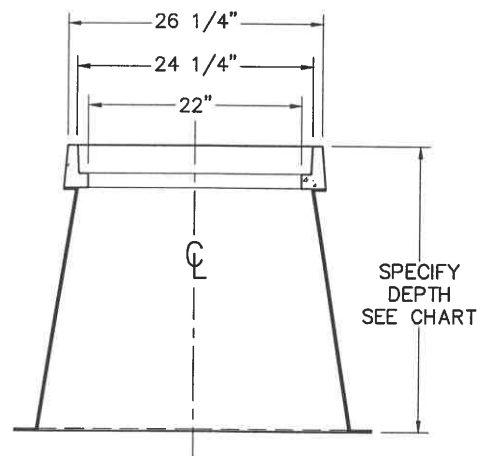
PLAN VIEW



POLYMER CONCRETE COVER



SECTION A-A



SECTION B-B

Armorcast Products Company reserves the right to update or discontinue product information at any time without notice.

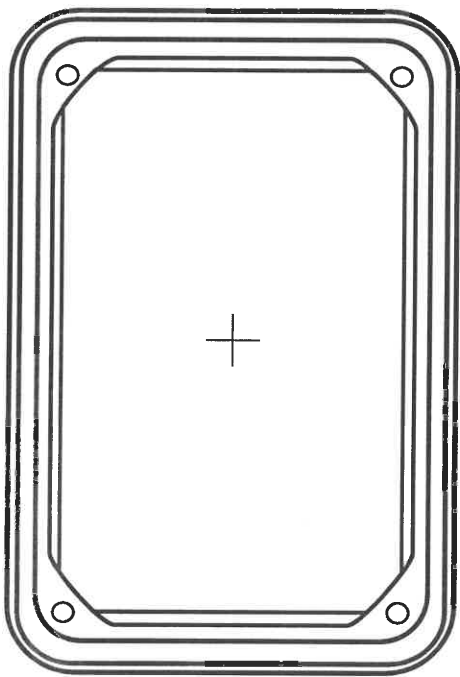
www.armorcastprod.com

Tel: (818) 982-3600 Fax: (818) 982-7742

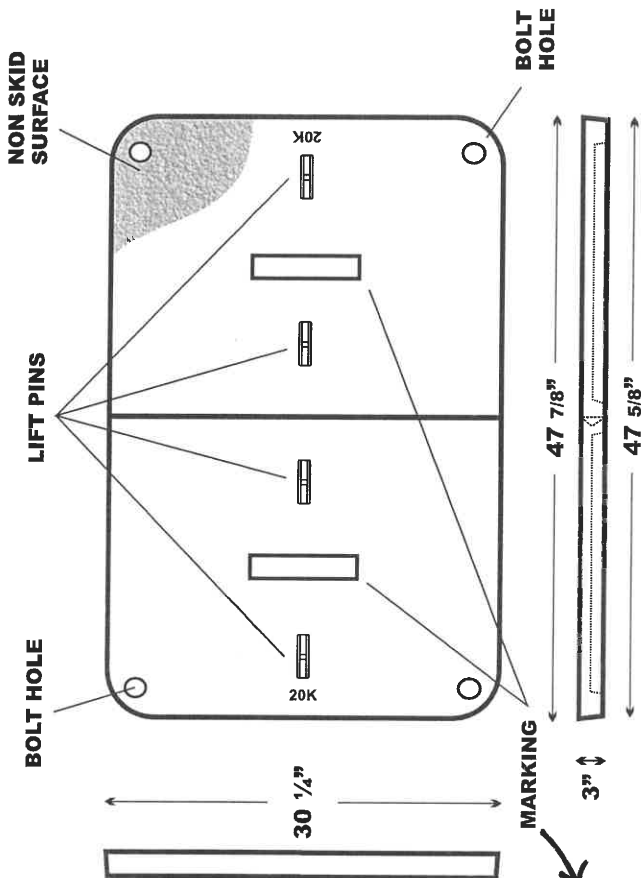
FIBERGLASS
BOXES

304824 PC / 2 Piece Cover Tier 15 / 22,500#

TOP VIEW



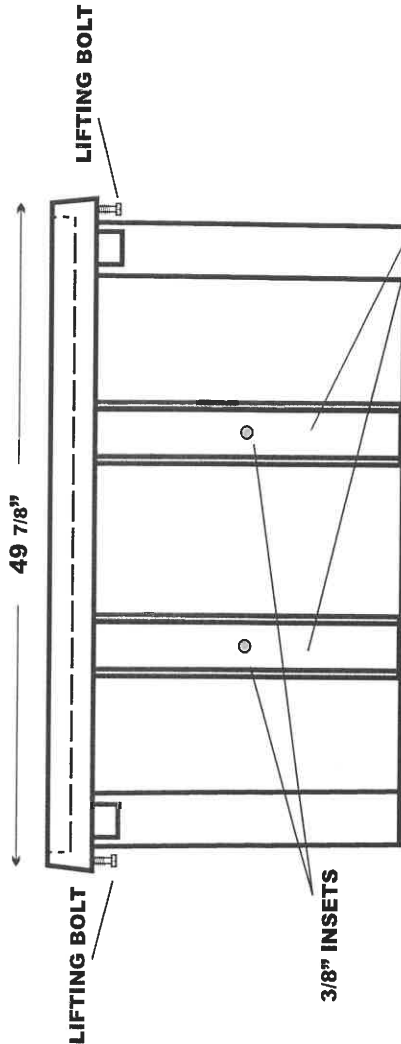
COVER VIEW



"TRAFFIC SIGNAL"
AND
"FIBER OPTICS"



END VIEW



SIDE VIEW

Part No. 304824 PC			
BODY:	POLYMER CONCRETE		
COVER:	POLYMER CONCRETE		
Weight 580 lbs.	Tolerance +/- 1/8"	ANSI Tier 15	
Date Oct 8 2011	File 304824 PC	22,500#	

MATERIAL: POLYMER CONCRETE
STANDARD COLOR: GRAY
OTHER COLORS AVAILABLE

WWW.MARTINPC.COM



Martin Enterprises
"Your Underground Excellence Expert"

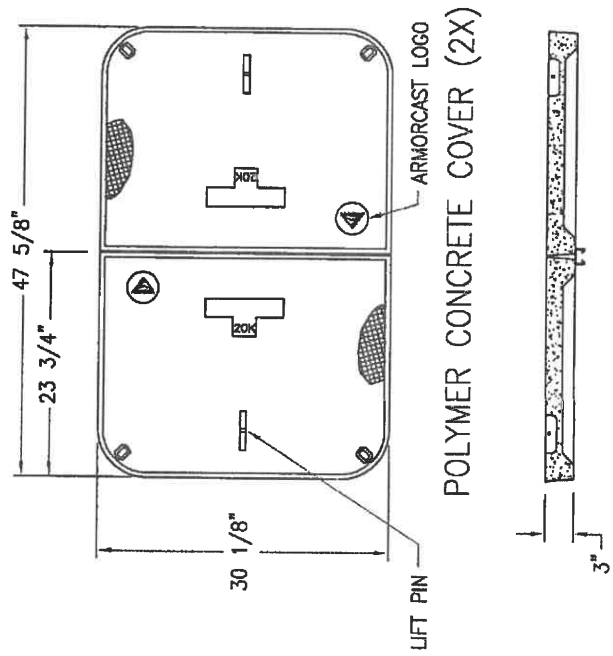
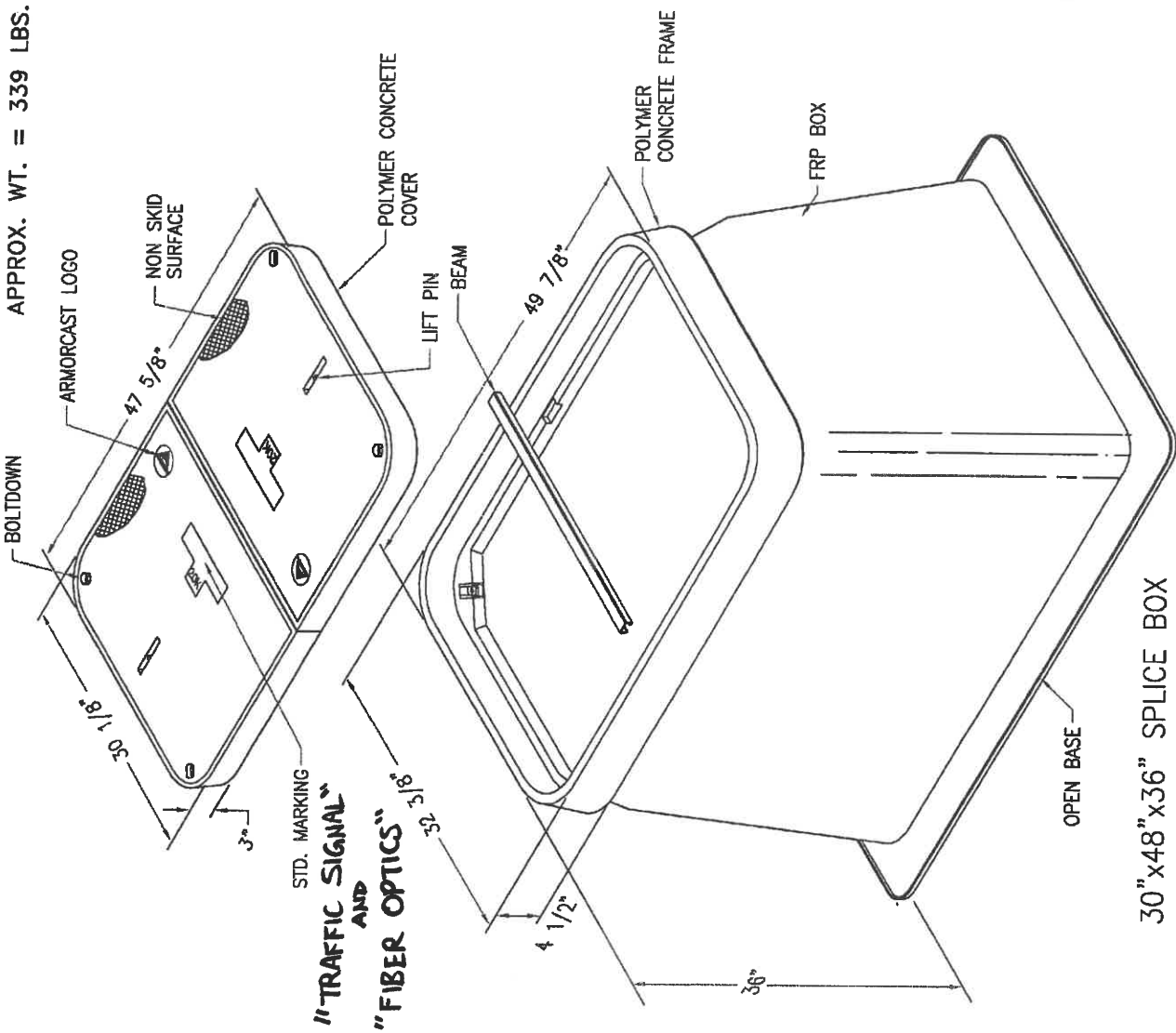


7231 Boulder Ave. #262
Highland, CA 92346
Tel 951.928.8713
Fax 951.928.4623

ISO 9001:2008
Registered Firm
Certificate # A3395US

The product design is the sole property of Martin Enterprises. This design is NOT to be altered unless written permission is obtained by Martin Enterprises only.

APPROX. WT. = 339 LBS.



FILE # A6-1550TAX36

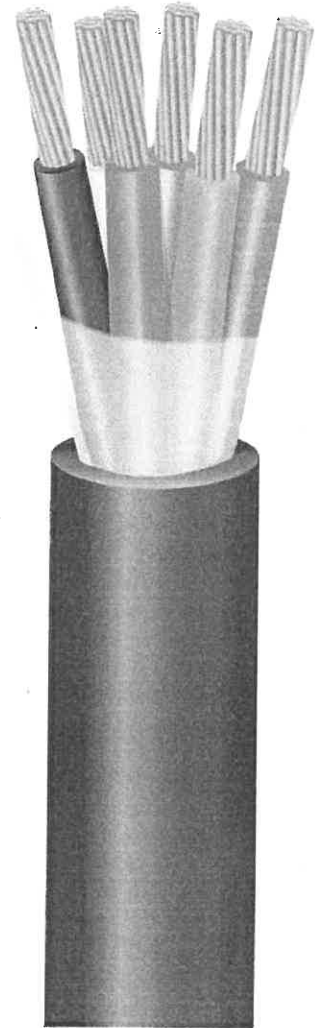
PART DESCRIPTION 30" X 48" X 36" SPLICE BOX ASSEMBLY		MAX. LOAD 20K	
13230 Saffrey Street, North Hollywood, CA 91605 (818) 882-5800		DRAWING NUMBER A6001550TAX36	
ARMORCAST PRODUCTS COMPANY		SCALE NONE	DATE 1/02
THE INFORMATION IN THIS DRAWING IS CONFIDENTIAL. THE DRAWING IS NOT TO BE REPRODUCED OR ITS CONTENTS DISCLOSED IN ANY WAY WITHOUT WRITTEN APPROVAL OF ARMORCAST PRODUCTS COMPANY. IF IT IS THE PROPERTY OF ARMORCAST PRODUCTS COMPANY, IT IS TO BE RETURNED TO ARMORCAST PRODUCTS COMPANY, 13230 SAFFREY STREET, NORTH HOLLYWOOD, CALIFORNIA 91605.		APPROVED BY WS	DATE 1/02

SIGNAL CABLE

IMSA Spec 20-1 • Stranded Conductor

Specifications		Color Code	Put-Ups
Conductor - Stranded Bare Copper	Jacket - PE	Per Specification, See Color Code Tables on Page 15.	Standard Reels 2,500' and 5,000' <i>Other lengths available. Please consult your factory representa- tive for availability.</i>
Insulation	Voltage Rating - 600 V		
16 AWG - .025" (.635mm) PE	Temp. Rating - 75°C		
14 AWG - .025" (.635mm) PE			
12 AWG - .030" (.762mm) PE			

PART NO.	NO. OF COND	OUTER JKT THICKNESS		NOMINAL O.D.		WEIGHT lbs. / 100'
		INCH	mm	INCH	mm	
16 AWG						
8362	2	.045	1.143	.322	8.18	58
8363	3	.045	1.143	.339	8.61	75
8364	4	.045	1.143	.369	9.37	94
8365	5	.045	1.143	.402	10.21	113
8367	7	.045	1.143	.435	11.05	146
8369	9	.060	1.524	.538	13.67	186
83610	10	.060	1.524	.580	14.73	220
83612	12	.060	1.524	.597	15.16	254
83616	16	.060	1.524	.660	16.76	325
83620	20	.060	1.524	.737	18.72	395
14 AWG						
8302	2	.045	1.143	.322	8.18	58
8303	3	.045	1.143	.339	8.61	75
8304	4	.045	1.143	.369	9.37	94
8305	5	.045	1.143	.402	10.21	113
8307	7	.045	1.143	.435	11.05	146
8309	9	.060	1.524	.538	13.67	186
8310	10	.060	1.524	.580	14.73	220
8312	12	.060	1.524	.597	15.16	254
8314	14	.060	1.524	.626	15.90	325
8315	15	.060	1.524	.660	16.76	311
8316	16	.060	1.524	.660	16.76	325
8319	19	.060	1.524	.694	17.63	375
8320	20	.060	1.524	.729	18.52	395
8321	21	.060	1.524	.729	18.52	413
8325	25	.060	1.524	.808	20.52	478
8326	26	.060	1.524	.808	20.52	501
12 AWG						
8702	2	.045	1.143	.376	9.55	58
8703	3	.045	1.143	.397	10.08	75
8704	4	.045	1.143	.434	11.02	94
8705	5	.045	1.143	.475	12.07	113
8707	7	.045	1.143	.514	13.06	146
8709	9	.060	1.524	.634	16.10	186
8710	10	.060	1.524	.688	17.48	220
8712	12	.060	1.524	.709	18.01	254
8716	16	.060	1.524	.787	19.99	325
8719	19	.060	1.524	.829	21.06	395
8720	20	.080	2.03	.913	23.19	631
8721	21	.080	2.03	.913	23.19	652
8725	25	.080	2.03	1.010	25.65	760



Cable Identification

Indent print on jacket
"ADVANCED DIGITAL CABLE,
INC. IMSA 20-1 YYYY* 600V"
**replace YYYY with year of manufacturer*

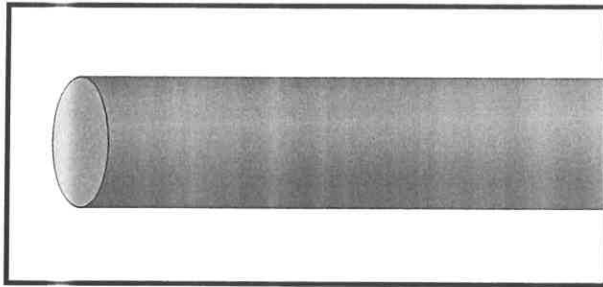
Inkjet print on reverse side of
jacket with footage markers.

The information contained on this specification is intended to be used as a guide in product selection and is believed to be reliable. ADC has made every effort to ensure the data shown above is accurate at the time of publication. This specification is subject to change anytime without notice.

Phone: (800) 343 2579 • Fax: (828) 389 3922 • www.adcable.com



SIGNAL GROUND

Made in the
USA

Bare Copper Solid Conductor

*Bare or Tinned, Soft (Annealed),
Medium Hard, Hard Drawn*

Application:

Suitable for use in electrical grounding systems and on insulators for overhead transmission and distribution applications.

Standards:

ASTM Standards:

- B-1 (hard drawn)
- B-2 (medium hard drawn)
- B-3 (soft or annealed)
- B-33 (tinned)

REA/RUS Approved

Federal Standard QQ-W-343

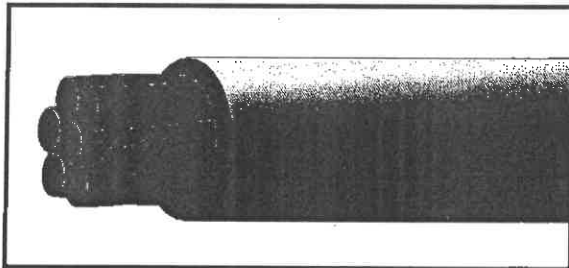
RoHS Compliant

Part Number		Size AWG	Nominal Diameter (Inch)	Approx. Net Weight (lb/1000')	Hard Drawn		Medium Hard Drawn		Soft (annealed)		Ampacity*
					Min. Breaking Strength (lbs.)	DC Resistance (OHMS/1000') @ 20°C	Min. Breaking Strength (lbs.)	DC Resistance (OHMS/1000') @ 20°C	DC Resistance (OHMS/1000') @ 20°C		
									Bare	Tinned	
SOLID BARE COPPER	BSOS18	18	0.0403	4.92	85	6.6400	67	6.6100	6.3900	6.6400	-
	BSOS16	16	0.0508	7.82	135	4.1800	106	4.1600	4.0200	4.1800	-
	BSOS14	14	0.0641	12.43	214	2.6300	167	2.6100	2.5200	2.6200	-
	BSOS12	12	0.0808	19.77	337	1.6500	262	1.6400	1.5900	1.6500	-
	BSOS10	10	0.1019	31.43	529	1.0390	410	1.0330	0.9988	1.0430	-
	BSOS8	8	0.1285	49.98	826	0.6532	644	0.6498	0.6281	0.6426	98
	BSOS6	6	0.1620	79.46	1,280	0.4110	1,010	0.4088	0.3952	0.4109	124
	BSOS4	4	0.2043	126.40	1,970	0.2584	1,584	0.2571	0.2485	0.2528	155
	BSOS2	2	0.2576	200.90	3,002	0.1625	2,450	0.1617	0.1563	0.1580	209
	BSOS1	1	0.2893	253.30	3,688	0.1289	3,024	0.1282	0.1239	-	-
	BSOS1/0	1/0	0.3249	319.50	4,518	0.1011	3,731	0.1016	0.0982	-	282
	BSOS2/0	2/0	0.3648	402.80	5,519	0.0802	4,600	0.0798	0.0779	-	329
	BSOS3/0	3/0	0.4096	507.80	6,720	0.0636	5,666	0.0633	0.0618	-	382
	BSOS4/0	4/0	0.4600	640.50	8,143	0.0504	6,980	0.0502	0.0490	-	444

* Per NEC Table 310-21. Based on conductor temperature of 80°C; ambient temperature of 40°C; 2 ft./sec. wind.

NOTE: The data shown is approximate and subject to standard industry tolerances.

#4 USE/RHH - STREETLIGHT DISTRIBUTION CABLE



XLP USE-2 RHH/RHW-2 600 Volt, Copper

Standards:

UL 44 and UL 854, ICEA S-95-658/NEMA WC-70, C (UL) US
Federal spec. A-A-59544
600 Volt UL/1000 Volt CSA
Available Gasoline and Oil Resistant II and L-824G
ROHS compliant
-40° C rated
Direct Burial/Sunlight resistant

Application:

Types USE-2, RHH/RHW-2 are suitable for use in general purpose wiring applications and may be installed in raceway, conduit, direct burial and aerial installations.

Description:

Single copper conductor, stranded, insulated with moisture and heat resistant, chemically cross-linked polyethylene insulation. Temperature rating 90° C in wet and dry applications. Colors available.

Single Conductors

Size AWG or MCM	Strand (no.)	Insulation Thickness (mils)	Approx. Diameter Overall (inch)	Approx. Net Weight per 1000 feet (lbs.)	Ampacity* 90°C Wet/Dry
14	7	45	.169	22	35†
12	7	45	.188	30	40†
10	7	45	.212	45	55†
8	7	60	.272	73	80
6	7	60	.310	107	105
→ 4	7	60	.358	161	140
3	7	60	.382	193	165
2	7	60	.419	244	190
1	19	80	.484	307	220
1/0	19	80	.523	379	260
2/0	19	80	.567	469	300
3/0	19	80	.617	582	350
4/0	19	80	.673	724	405
250	37	95	.773	873	455
300	37	95	.819	1027	505
350	37	95	.871	1200	570
400	37	95	.918	1349	615
500	37	95	1.011	1683	700
600	61	110	1.116	2014	780
750	61	110	1.226	2508	885

* Per NEC-Table 310-17.

The overcurrent protection for items marked with an obelisk (†) shall not exceed 15 amps for 14 AWG, 20 amps for 12 AWG, and 30 amps for 10 AWG per NEC 310-17 footnote.

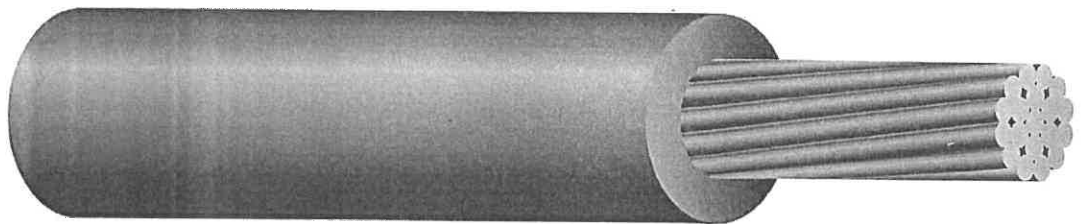
NOTE: The data shown is approximate and subject to standard industry tolerances.

2007

RHH or RHW or USE

#4 USE/RHH - STREETLIGHT
DISTRIBUTION CABLE

Underground Service Entrance Cable. 600 Volt.
Copper Conductors. Cross-Linked Polyethylene (XLP) Insulation.
High-Heat, Moisture, and Sunlight Resistant.
Sizes 6 Through 4/0 AWG Also Rated SIS.



APPLICATIONS

Southwire Type RHH or RHW-2 or USE-2 conductors are used with conduit as specified in the 2011 National Electrical Code. When used as Type USE-2, conductor is suitable for use as underground service entrance cable for direct burial at conductor temperatures not to exceed 90° C. When used as RHH, conductor temperatures shall not exceed 90°C in dry locations. When used as RHW-2 or USE-2, conductor temperatures shall not exceed 90°C in wet or dry locations. Voltage rating for RHH or RHW-2 or USE-2 conductors is 600 volts.

SPECIFICATIONS

Southwire Type RHH or RHW-2 or USE-2 comply with:

- ASTM - B3, B8 (7, 19, 37, 61 Strands), B787 (19 Wire Combination Unilay Strand)
- UL Standard 44 for RHH or RHW-2
- UL Standard 854 for USE-2
- Federal Specification A-A-59544
- National Electrical Code, NFPA 70 - 2011 Edition
- NEMA WC 70 Construction Requirements
- RoHS/REACH Compliant

CONSTRUCTION

Southwire Type RHH or RHW-2 or USE-2 copper conductors are annealed (soft) copper. Insulation is an abrasion, moisture, heat, and sunlight resistant black cross-linked polyethylene (XLP). An optional CT rated product is available upon request for sizes 1/0 and larger.



greenSpec[™]
RoHS Compliant

Copyright 2010, Southwire Company.
All Rights Reserved.

*Southwire is a registered trademark
of Southwire Company.

CU-RHH/RHW/USE

Conductor		Insulation Thickness	Nominal O.D. (mils)	Approx. Weight per 1000' (lbs)	Allowable Ampacities+			Standard Package
Size (AWG or kcmil)	Number of Strands				60°	75°	90°	
14	7	45	160	20	15	15	15	AC
12	7	45	177	29	20	20	20	AC
10	7	45	201	42	30	30	30	AC
8	7	60	256	68	40	50	55	AC
6	7	60	294	101	55	65	75	ABCD
4	7	60	341	154	70	85	95	ABCD
2	7	60	397	235	95	115	130	ABCD
1	19	80	484	309	110	130	145	B
1/0	19	80	520	379	125	150	170	ABC
2/0	19	80	557	472	145	175	195	ABC
3/0	19	80	614	583	165	200	225	ABC
4/0	19	80	673	729	195	230	260	BC
250	37	95	748	863	215	255	290	BC
300	37	95	804	1029	240	285	320	AB
350	37	95	854	1191	260	310	350	AB
400	37	95	899	1352	280	335	380	
500	37	95	983	1674	320	380	430	AB
600	61	110	1089	2012	350	420	475	A
700	61	110	1158	2332	385	460	520	
750	61	110	1191	2492	400	475	535	
800	61	110	1223	2642	410	490	555	
900	61	110	1283	2970	435	520	585	
1000	61	110	1340	3288	455	545	615	

+ Allowable ampacities shown are for general use as specified by the National Electrical Code, 2011 Edition, section 310.15 and 240.4(D)

Unless the equipment is marked for use at higher temperatures the conductor ampacities shall be limited to the following per NEC 110.14(C)

60° C- When terminated to equipment for circuits rated 100 amperes or less or marked for 14- 1 AWG conductors.

75° C- When terminated to equipment for circuits rated over 100 amperes or marked for 1/0 AWG or larger conductors.

90° C- Wet or dry locations for ampacity adjustment purposes using NEC section 310.15

Package Codes:

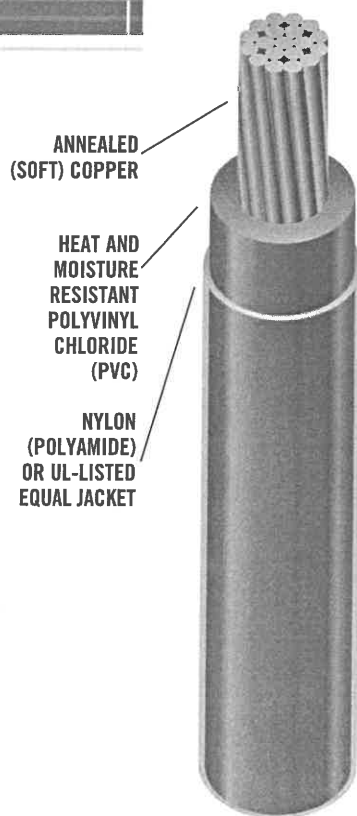
A- 2500 ft. Reel

B- 1000 ft. Reel

C- 500 ft. Reel

D- 5000 ft. Reel

THHN/THWN/TWN75/T90



ANNEALED
(SOFT) COPPER

HEAT AND
MOISTURE
RESISTANT
POLYVINYL
CHLORIDE
(PVC)

NYLON
(POLYAMIDE)
OR UL-LISTED
EQUAL JACKET

600 Volts

Copper Conductor

Thermoplastic
Insulation/Nylon Sheath
Heat, Moisture, Gasoline,
and Oil Resistant¹

Sizes 8 AWG and
Larger Rated THWN-2
All Stranded Sizes
Rated MTW and THWN

Sizes 14 Through 6 AWG
Rated AWM (105°C)
Sizes 14 Through 1 AWG
Rated VW-1

Size 1/0 AWG and
Larger Listed for CT
Use Black Size 2 AWG
and Larger Listed
Sunlight-Resistant

APPLICATIONS Suitable for use as follows:

- Southwire Type THHN or THWN-2* conductors are primarily used in conduit and cable trays for services, feeders, and branch circuits in commercial or industrial applications as specified in the National Electrical Code²
- When used as Type THHN, conductor is suitable for use in dry locations at temperatures not to exceed 90°C
- When used as Type THWN-2*, conductor is suitable for use in wet or dry locations at temperatures not to exceed 90°C or not to exceed 75°C when exposed to oil or coolant
- When used as Type MTW, conductor is suitable for use in wet locations or when exposed to oil or coolant at temperatures not to exceed 60°C or dry locations at temperatures not to exceed 90°C (with ampacity limited to that for 75°C conductor temperature per NFPA 79)
- Conductor temperatures not to exceed 105°C in dry locations when rated AWM and used as appliance wiring material. Voltage for all applications is 600 volts

STANDARDS & REFERENCES

Southwire Type THHN or THWN-2* or MTW (also AWM) meets or exceeds all applicable ASTM specifications, UL Standard 83, UL Standard 1063 (MTW), Federal Specification A-A-59544, and requirements of the National Electrical Code.

CONSTRUCTION

- Southwire Type THHN or THWN-2* or MTW copper conductors are annealed (soft) copper, insulated with a tough heat and moisture resistant polyvinyl chloride (PVC), over which a nylon (polyamide) or UL-listed equal jacket is applied
- Available in black, white, red, blue, green, yellow, brown, orange, and gray; some colors standard, some subject to economic order quantity
- Conductor sizes 2 AWG and larger listed and marked sunlight-resistant in black only

SPECIFICATIONS

• MTW or THHN or THWN-2

Conductors shall be UL-listed Type MTW or THHN or THWN-2* gasoline and oil resistant II, suitable for operations at 600 volts as specified in the National Electrical Code. Sizes 14 through 1 AWG shall be rated VW-1, larger sizes shall be listed for CT use. Sizes 2 AWG and larger listed and marked sunlight-resistant in black only. Conductors shall be annealed copper, insulated with high-heat and moisture resistant PVC, jacketed with abrasion, moisture, gasoline, and oil resistant nylon or listed equivalent, as manufactured by Southwire Company or approved equal.

• AWM

Conductors shall be UL-listed Type THHN or THWN-2* or MTW or AWM, suitable for operation at 600 volts at conductor temperatures not to exceed 105°C.

*rated -2 for 8 AWG and larger only

¹Oil and gasoline resistant II as defined by Underwriters Laboratories

* 2005 Edition



greenSpec[®]
RoHS Compliant



COPPER CONDUCTORS

WEIGHTS, MEASUREMENTS AND PACKAGING



CONDUCTOR		INSULATION THICKNESS (mils)	JACKET THICKNESS (mils)	NOMINAL O.D. (mils)		APPROX. NET WEIGHT PER 1000 FT. (lbs)		ALLOWABLE AMPACITIES†			STANDARD PACKAGE
SIZE (AWG or kcmil)	NUMBER OF STRANDS			SOL.	STR.	SOL.	STR.	60°C	75°C	90°C	
14	19	15	4	102	109	15	16	15	15	15	DNFP
12	19	15	4	119	128	23	24	20	20	20	DNFP
10	19	20	4	150	161	37	38	30	30	30	DQFP
8	19	30	5	--	213	--	62	40	50	55	FP
6	19	30	5	--	249	--	95	55	65	75	EP
4	19	40	6	--	318	--	152	70	85	95	C
3	19	40	6	--	346	--	188	85	100	110	BC
2	19	40	6	--	378	--	234	95	115	130	C
1	19	50	7	--	435	--	299	110	130	150	B
1/0	19	50	7	--	474	--	371	125	150	170	B
2/0	19	50	7	--	518	--	461	145	175	195	B
3/0	19	50	7	--	568	--	574	165	200	225	B
4/0	19	50	7	--	624	--	717	195	230	260	B
250	37	60	8	--	694	--	850	215	255	290	B
300	37	60	8	--	747	--	1011	240	285	320	B
350	37	60	8	--	797	--	1173	260	310	350	B
400	37	60	8	--	842	--	1333	280	335	380	B
500	37	60	8	--	926	--	1653	320	380	430	B
600	61	70	9	--	1024	--	1985	355	420	475	C
750	61	70	9	--	1126	--	2462	400	475	535	C
1000	61	70	9	--	1275	--	3254	455	545	615	C

Solid construction available in sizes 14 through 10 AWG as Types THHN or THWN or AWM only. Sizes 14 through 6 AWG also suitable for 105°C appliance wiring material (AWM). Sizes 14 and 12 AWG contain four 500 ft. spools per carton. Size 10 AWG contains two 500 ft. spools per carton.

†Allowable ampacities shown are for general use as specified by the National Electrical Code, 2005 Edition, section 310.15 unless the equipment is marked for use at higher temperatures the conductor ampacity shall be limited to the following:
 60°C - When terminated to equipment for circuits rated 100 amperes or less or marked for size 14 through 1 AWG conductors. MTW wet locations or when exposed to oil or coolant.
 75°C - When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than size 1 AWG. THWN-2 when exposed to oil or coolant. MTW dry locations.
 90°C - THHN dry locations. THWN-2 wet or dry locations. For ampacity derating purposes.

STANDARD PACKAGE CODES

B - 1000 ft. reel
 C - 500 ft. reel
 D - 2500 ft. spool
 E - 1000 ft. spool
 F - 500 ft. spool
 N - 2000 ft. carton
 Q - 350 ft. carton
 P - Drum

THHN/THWN/TWN75/T90

→ #14 AWG - "ORANGE" - FIBER TRACER CABLE

→ #10 AWG - "BLACK" - POLE & BRACKET CABLE

Circuit Sized THHN/THWN

Vynlon® PVC/Nylon



Solid wires:
90°C Dry or Wet

Stranded wires:
90°C Dry, 75°C Wet

600 volts

**Gasoline and oil
resistant**

APPLICATIONS

600-volt building wire for use in commercial and industrial applications as specified in the NEC®, including machine-tool and appliance wiring. Marked VW-I. Wires with solid conductors are rated THWN-2.

CONDUCTORS

Solid conductors: Uncoated copper per ASTM-B3.
Stranded conductors: Uncoated copper per ASTM-B3, ASTM-B787

INSULATION

Color-coded, heat-and moisture-resistant PVC (polyvinyl chloride)

JACKET

Nylon (polyamide), clear

INDUSTRY STANDARDS*

UL 83: File No. E15119
UL 1063 (MTW): File No. E85964
AWM: File No. E11829
Canada Standard C22.2 No. 75 and CSA Bulletin No. 1451
ASTM Standards: B3, B8, B787
WC70/ICEA S-95-658
Federal Specification A-A-59544
NFPA-70: National Electrical Code®

Cerro Wire LLC self certifies that these products, in stranded constructions, satisfy the product safety requirements identified by the European Low Voltage Directive 2006/95/EC.

SURFACE PRINT

Stranded: CERRO VINYLON-A 14 AWG (2.08mm²) (UL) THHN or THWN or MTW or AWM GR2 VW-I 600V - C(UL) TWN75 or T90 NYLON

Solid: CERRO VINYLON-A 14 AWG (2.08mm²) (UL) THHN or THWN-2 or AWM GR2 VW-I 600V - C(UL) TWN75 or T90 NYLON



MADE IN THE USA

©2012, Cerro Wire LLC
All Rights Reserved

*It is the sole responsibility of the end user to determine suitability of this product for its intended end use and application.

cerrowire

Electrical Distribution Division: 800.523.3869 | FAX 877.877.9563
www.cerrowire.com

A Marmon Group/
Berkshire Hathaway Company

Circuit Sized THHN/THWN

Vinylon® PVC/Nylon

Product Code	Conductors		Covering		Approx. O.D. Inches	Allowable Ampacities*			Approx. Net. Wt. Lbs./M Ft.
	AWG Size	No. of Strands	PVC Ins. Mils.	Nylon Jkt. Mils.		60°C **	75°C ***	90°C ****	
112-14xxx	14	Solid	15	4	0.104	15	15	15	15
112-16xxx	12	Solid	15	4	0.120	20	20	20	23
112-18xxx	10	Solid	20	4	0.151	30	30	30	37
112-34xxx	14	19	15	4	0.110	15	15	15	16
112-36xxx	12	19	15	4	0.130	20	20	20	24
112-38xxx	10	19	20	4	0.165	30	30	30	39

* Per Table 310.15 (B) (16) NEC®

** For termination to equipment for circuits rated 100 amperes or less or marked for size 14 through 1 AWG conductors. Also for MTW used in wet locations or exposed to oil or coolant.

*** For termination to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG and for THWN in wet locations.

Also for THWN-2 exposed to oil or coolant and MTW in dry locations.

**** For THHN used in dry locations and THWN-2 used in wet or dry locations. For ampacity derating purposes.

Colors available (Product Code 7th and 8th Digits)

AWG Size	Black 01	White 02	Red 03	Blue 04	Green 05	Orange 06	Yellow 07	Brown 08	Purple 09	Grey 10	Pink 11
14 Solid	X	X	X	X	X	X	X	X	X	X	X
12 Solid	X	X	X	X	X	X	X	X	X	X	X
10 Solid	X	X	X	X	X	X	X	X	X	X	X
14 Strand	X	X	X	X	X	X	X	X	X	X	X
12 Strand	X	X	X	X	X	X	X	X	X	X	X
10 Strand	X	X	X	X	X	X	X	X	X	X	X

→ #14 AWG - "ORANGE" - FIBER TRACER

Packages Available (Product Code 9th Digit)

→ #10 AWG - "BLACK" - Pole # BRACKET

Package Code	J	M
Size	500' (SPOOL)	2,500' (REEL)
14, 12 Solid & Strand	X	X
10 Solid & Strand	X	X

cerrowireElectrical Distribution Division: 800.523.3869 | FAX 877.877.9563
www.cerrowire.comA Marmon Group/
Berkshire Hathaway Company

THHN / MTW / THWN-2 COPPER CONDUCTOR

Engineering Specifications:

Standards:

Underwriters Laboratories Standard UL-83, UL-1063, UL-758
AWM Spec 1316, 1317, 1318, 1319, 1320, 1321
ASTM Stranding Class B3, B8, B787
Federal Specification A-A-59544
Canadian Standards Association C22.2 No. 75
NEMA WC70/ICEA S-95-658

Construction:

Conductors:

Solid, uncoated copper conductors per ASTM-B3
Stranded, uncoated copper conductors per ASTM-B3, ASTM-B787 and ASTM-B8

Insulation:

Color-coded Polyvinyl Chloride (PVC), heat- and moisture-resistant, flame-retardant compound per UL-1063 and UL-83

Applications:

Type THHN-THWN-2 building wire is intended for general purpose applications as defined by the National Electrical Code (NEC). Suitable for new construction or rewiring for 600-volt applications. When used as type THHN or THWN-2, the conductor is suitable for use in wet or dry locations at temperatures not to exceed 90°C or not to exceed 75°C in oil or coolants. When used as type MTW, conductor is suitable for use in dry locations at 90°C, or not to exceed 60°C in wet locations or where exposed to oils or coolants. When used as type AWM temperatures should not exceed 105°C in dry locations.

Features:

Slick, Nylon outer jacket for easy pulling. VW-1 rated 14 AWG - 1 AWG. 1/0 AWG and larger is rated for CT use. 6 AWG and larger is rated for sunlight resistance in all colors. All sizes are rated "Gasoline and oil resistant II."

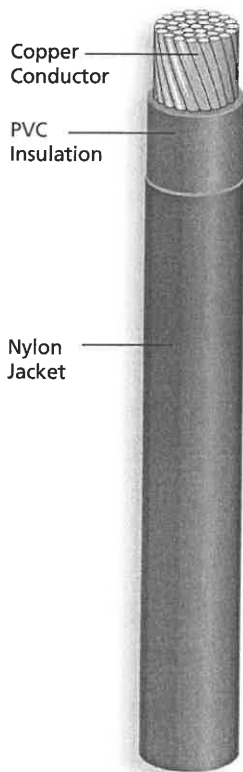
Jacket:

A tough, polyamide, Nylon outer covering per UL-1063 and UL-83.

→ #14 AWG - "ORANGE" - FIBER
→ #10 AWG - "BLACK" - POLE & BRACKET



Listed Solid E-123774
Stranded E-156879



Size (AWG or kcmil)	Number of Strands	Conductor Size (mm ²)	Insulation Thickness (inches)		Outside Diameter		Allowable Ampacities*			Approx. Net Weight (lbs./1000 ft.)	Standard Packaging
			PVC	Nylon	(inches)	(mm)	60°C	75°C	90°C		
14	Solid	2.08	.015	.004	.101	2.57	15	15	15	15	2000 carton (4x500), 2500' reels
12	Solid	3.31	.015	.004	.120	3.05	20	20	20	23	2000 carton (4x500), 2500' reels
10	Solid	5.26	.020	.004	.149	3.78	30	30	30	37	1000 carton (2x500), 2500' reels
14	19	2.08	.015	.004	.109	2.77	15	15	15	17	2000 carton (4x500), 2500' reels
12	19	3.31	.015	.004	.127	3.23	20	20	20	24	2000 carton (4x500), 2500' reels
10	19	5.26	.020	.004	.160	4.07	30	30	30	38	1000 carton (2x500), 2500' reels
8	19	8.37	.030	.005	.212	5.39	40	50	55	63	500' 1000' 2500' 5000' reels
6	19	13.3	.030	.005	.248	6.30	55	65	75	95	500' 1000' 2500' 5000' 25,000' reels
4	19	21.2	.040	.006	.317	8.06	70	85	95	153	500' 1000' 2500' 5000' 20,000' reels
3	19	26.7	.040	.006	.344	8.74	85	100	110	189	500' 1000' 2500' 5000' 15,000' reels
2	19	33.6	.040	.006	.375	9.53	95	115	130	234	500' 1000' 2500' 5000' 14,000' reels
1	19	42.4	.050	.007	.435	11.05	110	130	150	299	500' 1000' 2500' 5000' 22,000' reels
1/0	19	53.5	.050	.007	.474	12.04	125	150	170	372	500' 1000' 2500' 5000' 16,000' reels
2/0	19	67.4	.050	.007	.518	13.16	145	175	195	462	500' 1000' 2500' 5000' 14,000' reels
3/0	19	85.0	.050	.007	.568	14.43	165	200	225	572	500' 1000' 2500' 5000' 12,000' reels
4/0	19	107	.050	.007	.624	15.85	195	230	260	712	500' 1000' 2500' 5000' 9000' reels
250	37	127	.060	.008	.678	17.23	215	255	290	851	500' 1000' 2500' 4000' 8500' reels
300	37	152	.060	.008	.730	18.55	240	285	320	1010	500' 1000' 3500' 7500' reels
350	37	177	.060	.008	.777	19.74	260	310	350	1170	500' 1000' 3000' 6000' reels
400	37	203	.060	.008	.821	20.86	280	335	380	1330	500' 1000' 3000' 5000' reels
500	37	253	.060	.008	.902	22.91	320	380	430	1650	500' 1000' 2500' 4000' reels
600	61	304	.070	.009	1.051	26.70	355	420	475	1985	500' 1000' 2000' 3000' reels
750	61	380	.070	.009	1.156	29.37	400	475	535	2455	500' 1000' 1500' 2500' reels
1000	61	507	.070	.009	1.310	33.28	455	545	615	3252	500' 1000' 2000' reels

*Allowable ampacity shown above is per the National Electrical Code. The above data is approximate and subject to normal manufacturing tolerances.

PRINT LEGEND:

SOLID CONDUCTOR SIZES 14 AWG THROUGH 10 AWG: E123774 (size) AWG TYPE THHN OR THWN-2 GR II VW-1 600 VOLTS (UL) OR AWM OR C-(UL) TYPE T90 NYLON OR TWN 75 FT1. DATE/TIME/OPER/QC
STRANDED CONDUCTOR SIZES 14 AWG THROUGH 8 AWG: E156879 (size) AWG TYPE MTW OR THHN OR THWN-2 GR II VW-1 600 VOLTS (UL) OR AWM OR C-(UL) TYPE T90 NYLON OR TWN 75 FT1. DATE/TIME/OPER/QC
STRANDED CONDUCTORS SIZES 6 AWG THROUGH 1 AWG: E156879 (size) TYPE MTW OR THHN OR THWN-2 GR II SUN RES VW-1 600 VOLTS (UL) OR AWM OR C-(UL) TYPE T90 NYLON OR TWN 75 FT1. DATE/TIME/OPER/QC
CONDUCTOR SIZES 1/0 AWG THROUGH 1000 KCMIL: E156879 (size) TYPE MTW OR THHN OR THWN-2 GR II SUN-RES FOR CT USE (UL) OR C-(UL) TYPE T90 NYLON OR TWN 75 FT1. DATE/TIME/OPER/QC

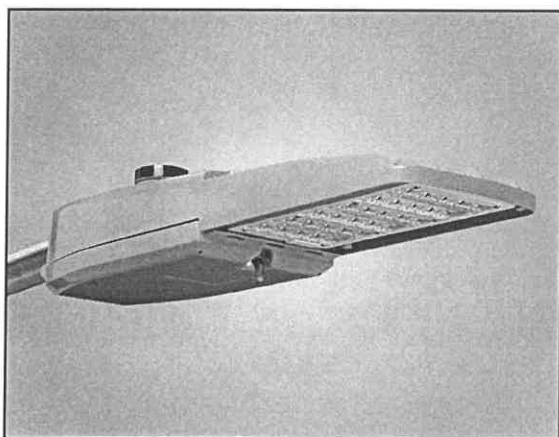


Consistent with LEED® goals
& Green Globes™ criteria
for light pollution reduction

Autobahn Series ATB0

Roadway Lighting

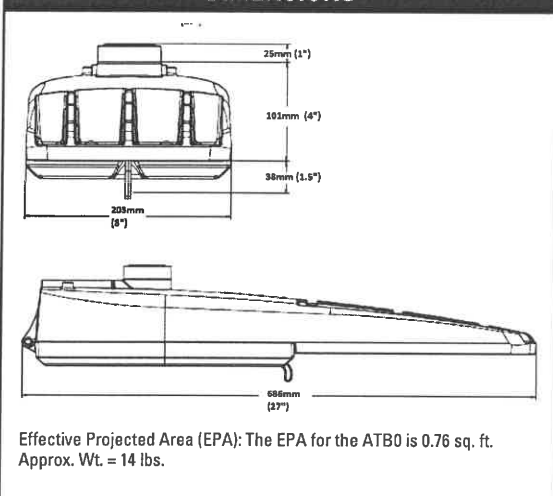
PRODUCT OVERVIEW



Applications:

Roadways
Off ramps
Residential streets
Parking lots

DIMENSIONS



STANDARDS

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Color temperatures of $\leq 3000\text{K}$ must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Features:

OPTICAL

Same Light: Performance is comparable to 70-250W HPS roadway luminaires.

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

Unique IP66 rated LED light engines provided 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing. Available in Type II, III, IV, and V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated $>100,000$ hours at 25°C , L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected of 40-60% over comparable HID luminaires.

Robust Surge Protection: Three different surge protection options provide a minimum of ANSI C136.2 10kV/5kA protection. 20kV/10kA protection is also available.

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easily leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 7 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).

Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. Provides a 3G vibration rating per ANSI C136.31

Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 7 pin receptacle optionally available.

Premium solid state locking style photocontrol - PCSS (10 year rated life) Extreme long life solid state locking style photocontrol - PCLL (20 year rated life).

Multi-level dimming available to provide scheduled dimming as specified by the customer.

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

Note: Specifications subject to change without notice. Actual performance may differ as a result of end-user environment and application.

Autobahn Series ATB0

Roadway Lighting

ORDERING INFORMATION

Example: ATB0 30LEDE10 MVOLT R2

ATB0	20BLEDE10	MVOLT	R2
Series	Performance Packages	Voltage	Optics
ATB0 Autobahn LED Roadway	10BLEDE70 10B Chips, 700mA Driver 10BLEDE10 10B Chips, 1050mA Driver 10BLEDE15 10B Chips, 1500mA Driver 20BLEDE53 20B Chips, 525mA Driver 20BLEDE70 20B Chips, 700mA Driver 20BLEDE10 20B Chips, 1050mA Driver 20BLEDE13 20B Chips, 1300mA Driver 20BLEDE15 20B Chips, 1500mA Driver 30BLEDE70 30B Chips, 700mA Driver 30BLEDE85 30B Chips, 850mA Driver 30BLEDE10 30B Chips, 1050mA Driver 30BLEDE13 30B Chips, 1300mA Driver 30BLEDE15 30B Chips, 1500mA Driver	MVOLT Multi-volt, 120-277V 347 347V 480 480V	R2 Roadway Type II R3 Roadway Type III R4 Roadway Type IV R5 Roadway Type V
NR			
Options			
<u>Color Temperature (CCT)</u> (Blank) 4000K CCT, 70 CRI Min. 3K 3000K CCT, 70 CRI Min. 5K 5000K CCT, 70 CRI Min.	UMS-XX 8" Horizontal Arm for Square Pole, Painted to match Fixture UMR-GALV 8" Horizontal Arm for Round Pole, Galvanized UMS-GALV 8" Horizontal Arm for Square Pole, Galvanized	<u>Accessories (field installed):</u> ATB0 LTS20 Light Trespass Shield for ATB0 LEM 20 ATB0 LTS30 Light Trespass Shield for ATB0 LEM 30	
<u>Paint</u> (Blank) Gray (Standard) BK Black BZ Bronze DOB Dark Bronze GI Graphite WH White	<u>Controls</u> (Blank) 3 Pin NEMA Photocontrol Receptacle (Standard) P7² 7 Pin Photocontrol Receptacle (Dimmable Driver Included) NR No Photocontrol Receptacle AO³ Field Adjustable Output DM 0V-10V Dimmable Driver (Controls by others) ML^{4,5} Multi-Level Dimming PCSS¹ Solid State Lighting Photocontrol (120-277V) PCLL Solid State Long Life Photocontrol SH Shorting Cap	Notes 1 Not available in 347 or 480V. 2 Not available with DM, ML or NR. 3 Not available with DM or ML options. Not available with 10BLED packages. 4 Not available with AO, DM or P7 options. 5 Dimming Schedule and light level information required from the customer in order to configure product. Contact Infrastructure Technical Support to proceed.	
<u>Surge Protection</u> (Blank) Standard 10kV/5kA SPD 20 20kV/10kA SPD MP¹ MOV Pack IL¹ SPD with Indicator Light	<u>Packaging</u> (Blank) Single Unit (Standard) JP Job Pack (42/Pallet)		
<u>Terminal Block</u> (Blank) Terminal Block (Standard) T2 Wired to L1 & L2 Positions			
<u>Misc.</u> BL External Bubble Level HS House-Side Shield NL Nema Label XL Not CSA Certified UMR-XX 8" Horizontal Arm for Round Pole, Painted to match Fixture			



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023

www.americanelectriclighting.com

© 2014-2019 Acuity Brands Lighting, Inc. All Rights Reserved. ATB0 02/21/19

Warranty Five-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/resources/terms-and-conditions

Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

Autobahn Series ATB0

Roadway Lighting

PERFORMANCE PACKAGE

Performance Package	Drive Current (mA)	Input Watts	Optic	3K (3000K CCT, 70 CRI Min.)					4K/5K (4000K/5000K CCT, 70 CRI Min.)					LLD @ 25°C		
				Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	25k Hours	75k Hours	100k Hours
10B	700	25	R2	2,670	107	1	0	1	2,994	120	1	0	1	0.98	0.97	0.96
	1050	37		4,006	108	1	0	2	4,293	116	1	0	2	0.97	0.95	0.92
	1500	54		5,364	99	1	0	2	5,688	105	1	0	2	0.93	0.90	0.88
	700	25	R3	2,702	108	1	0	1	3,009	120	1	0	1	0.98	0.97	0.96
	1050	37		4,069	110	1	0	1	4,313	117	1	0	1	0.97	0.95	0.92
	1500	54		5,409	100	1	0	1	5,742	106	1	0	1	0.93	0.90	0.88
	700	25	R4	2,686	107	1	0	1	2,992	120	1	0	1	0.98	0.97	0.96
	1050	37		3,934	106	1	0	1	4,232	114	1	0	1	0.97	0.95	0.92
	1500	54		5,383	100	1	0	2	5,653	105	1	0	2	0.93	0.90	0.88
	700	25	R5	2,806	112	2	0	1	3,065	123	2	0	1	0.98	0.97	0.96
	1050	37		4,125	111	3	0	1	4,422	120	3	0	1	0.97	0.95	0.92
	1500	54		5,551	103	3	0	1	5,844	108	3	0	1	0.93	0.90	0.88
20B	525	36	R2	4,328	120	1	0	2	4,638	129	1	0	2	0.98	0.97	0.96
	700	48		5,652	118	1	0	2	5,956	124	1	0	2	0.98	0.96	0.95
	1050	71		7,948	112	2	0	2	8,506	120	2	0	2	0.97	0.95	0.92
	1300	87		9,157	105	2	0	3	9,922	114	2	0	3	0.93	0.90	0.88
	1500	99		10,288	104	2	0	3	11,038	111	2	0	3	0.93	0.90	0.88
	525	36	R3	4,436	123	1	0	1	4,704	131	1	0	1	0.98	0.97	0.96
	700	48		5,705	119	1	0	1	6,114	127	1	0	2	0.98	0.96	0.95
	1050	71		8,080	114	2	0	2	8,606	121	2	0	2	0.97	0.95	0.92
	1300	87		9,442	109	2	0	2	10,065	116	2	0	2	0.93	0.90	0.88
	1500	99		10,503	106	2	0	2	11,181	113	2	0	2	0.93	0.90	0.88
	525	36	R4	4,459	124	1	0	2	4,676	130	1	0	2	0.98	0.97	0.96
	700	48		5,766	120	1	0	2	6,022	125	1	0	2	0.98	0.96	0.95
	1050	71		8,101	114	2	0	2	8,569	121	2	0	2	0.97	0.95	0.92
	1300	87		9,321	107	2	0	2	10,053	116	2	0	2	0.93	0.90	0.88
	1500	99		10,426	105	2	0	2	11,160	113	2	0	3	0.93	0.90	0.88
	525	36	R5	4,540	126	3	0	1	4,869	135	3	0	1	0.98	0.97	0.96
	700	48		5,832	122	3	0	1	6,287	131	3	0	1	0.98	0.96	0.95
	1050	71		8,241	116	3	0	2	8,880	125	3	0	2	0.97	0.95	0.92
	1300	87		9,597	110	3	0	2	10,397	120	4	0	2	0.93	0.90	0.88
	1500	99		10,647	108	4	0	2	11,593	117	4	0	2	0.93	0.90	0.88
30B	700	70	R2	8,406	120	2	0	2	9,174	131	2	0	3	0.98	0.97	0.96
	850	83		9,897	119	2	0	3	10,457	126	2	0	3	0.97	0.95	0.92
	1050	105		11,806	112	2	0	3	12,414	118	2	0	3	0.97	0.95	0.92
	1300	126		13,675	109	3	0	3	14,964	119	3	0	3	0.93	0.90	0.88
	1500	145		15,090	104	3	0	3	16,251	112	3	0	3	0.93	0.90	0.88
	700	70	R3	8,539	122	2	0	2	8,893	127	2	0	2	0.98	0.97	0.96
	850	83		10,056	121	2	0	2	10,825	130	2	0	2	0.97	0.95	0.92
	1050	105		11,936	114	2	0	2	12,748	121	2	0	2	0.97	0.95	0.92
	1300	126		13,893	110	3	0	3	14,850	118	3	0	3	0.93	0.90	0.88
	1500	145		15,381	106	3	0	3	16,193	112	3	0	3	0.93	0.90	0.88
	700	70	R4	8,335	119	2	0	2	8,971	128	2	0	2	0.98	0.97	0.96
	850	83		9,877	119	2	0	2	10,589	128	2	0	2	0.97	0.95	0.92
	1050	105		11,943	114	2	0	3	12,782	122	2	0	3	0.97	0.95	0.92
	1300	126		13,681	109	2	0	3	14,889	118	3	0	3	0.93	0.90	0.88
	1500	145		14,952	103	3	0	3	16,463	114	3	0	3	0.93	0.90	0.88
	700	70	R5	8,893	127	3	0	2	9,329	133	3	0	2	0.98	0.97	0.96
	850	83		10,469	126	4	0	2	11,209	135	4	0	2	0.97	0.95	0.92
	1050	105		12,382	118	4	0	2	13,296	127	4	0	2	0.97	0.95	0.92
	1300	126		14,453	115	4	0	2	15,254	121	4	0	2	0.93	0.90	0.88
	1500	145		15,853	109	4	0	2	16,871	116	4	0	2	0.93	0.90	0.88

Note: Individual fixture performance may vary.

ATB0	15°C	20°C	25°C	30°C	35°C	40°C
LLD Multiplier	1.02	1.01	1	0.98	0.97	0.95

To calculate the LLD for a temperature other than 25°C, multiply the LLD @ 25°C (shown in the performance package table) by the LLD multiplier for the selected temperature.



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023

www.americanelectriclighting.com

© 2014-2019 Acuity Brands Lighting, Inc. All Rights Reserved. ATB0 02/21/19

Warranty Five-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/resources/terms-and-conditions

Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

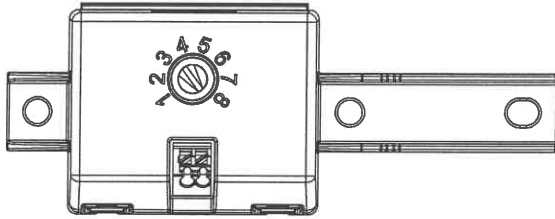
Please contact your sales representative for the latest product information.

Autobahn Series ATB0

Roadway & Security Lighting

FAO Module

FIELD ADJUSTABLE OUTPUT MODULE



Field Adjustable Module

The Field Adjustable Output (FAO) module is an onboard device that adjusts the light output and input wattage to meet site specific requirements, allowing a single fixture configuration to be flexibly applied in many different applications.

Configuration	FAO Position	Lumens	% Wattage
20BLEDE53	8	100%	100%
20BLEDE53	7	100%	100%
20BLEDE53	6	100%	100%
20BLEDE53	5	86%	86%
20BLEDE53	4	73%	74%
20BLEDE53	3	60%	62%
20BLEDE53	2	50%	54%
20BLEDE53	1	35%	47%
20BLEDE70	8	100%	100%
20BLEDE70	7	100%	100%
20BLEDE70	6	100%	100%
20BLEDE70	5	86%	86%
20BLEDE70	4	73%	73%
20BLEDE70	3	60%	61%
20BLEDE70	2	50%	52%
20BLEDE70	1	35%	44%
20BLEDE10	8	100%	100%
20BLEDE10	7	100%	100%
20BLEDE10	6	100%	100%
20BLEDE10	5	86%	85%
20BLEDE10	4	73%	71%
20BLEDE10	3	60%	58%
20BLEDE10	2	50%	49%
20BLEDE10	1	35%	35%
20BLEDE13	8	100%	100%
20BLEDE13	7	100%	100%
20BLEDE13	6	97%	97%
20BLEDE13	5	86%	85%
20BLEDE13	4	73%	72%
20BLEDE13	3	60%	59%
20BLEDE13	2	50%	49%
20BLEDE13	1	35%	35%
20BLEDE15	8	100%	100%
20BLEDE15	7	100%	100%
20BLEDE15	6	100%	100%
20BLEDE15	5	86%	85%
20BLEDE15	4	73%	71%
20BLEDE15	3	59%	58%
20BLEDE15	2	46%	45%
20BLEDE15	1	33%	33%

Configuration	FAO Position	Lumens	% Wattage
30BLEDE70	8	100%	100%
30BLEDE70	7	100%	100%
30BLEDE70	6	100%	100%
30BLEDE70	5	86%	85%
30BLEDE70	4	73%	72%
30BLEDE70	3	60%	59%
30BLEDE70	2	50%	49%
30BLEDE70	1	35%	35%
30BLEDE85	8	100%	100%
30BLEDE85	7	100%	100%
30BLEDE85	6	100%	100%
30BLEDE85	5	86%	86%
30BLEDE85	4	73%	72%
30BLEDE85	3	60%	59%
30BLEDE85	2	50%	49%
30BLEDE85	1	35%	35%
30BLEDE10	8	100%	100%
30BLEDE10	7	100%	100%
30BLEDE10	6	87%	86%
30BLEDE10	5	69%	68%
30BLEDE10	4	55%	54%
30BLEDE10	3	41%	40%
30BLEDE10	2	26%	26%
30BLEDE10	1	15%	16%
30BLEDE13	8	100%	100%
30BLEDE13	7	100%	100%
30BLEDE13	6	87%	86%
30BLEDE13	5	69%	67%
30BLEDE13	4	55%	53%
30BLEDE13	3	41%	40%
30BLEDE13	2	26%	26%
30BLEDE13	1	15%	16%
30BLEDE15	8	100%	100%
30BLEDE15	7	100%	100%
30BLEDE15	6	100%	100%
30BLEDE15	5	86%	85%
30BLEDE15	4	73%	70%
30BLEDE15	3	60%	57%
30BLEDE15	2	50%	47%
30BLEDE15	1	35%	33%



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

© 2014-2017 Acuity Brands Lighting, Inc. All Rights Reserved. ATB0_FAO_MODULE 07/20/17

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

Page 1 of 1

In-Line Fuse Holders for 1³/₃₂" x 1 1¹/₂" and Class CC Fuses

COOPER Circuit Protection

Single-Pole

1³/₃₂" x 1 1¹/₂" Fuses



HEB-

For any 1³/₃₂" x 1 1¹/₂" fuse. Fuse holder rated 30A, 600V (CSA Listed 15A max.). Typical fuse types: Edison MOL MEN, MEQ and MCL. (1/40 -30A)



HET-

A HEB- fuse holder with a permanently installed solid neutral. Easily identified by white plastic coupling nut.

Double-Pole

Class CC



HEY-

Double-pole fuse holder has water-resistant, polarized design, and accepts Class CC branch circuit fuses (Edison fuse types EDCC, HCTR or HCLR, 600V or less) Particularly applicable in street lighting circuits with optional breakaway receptacle.

1³/₃₂" x 1 1¹/₂" Midget Fuses



HEX-

For any 1³/₃₂" x 1 1¹/₂" fuse. Fuse holder rated 30A, 600V (CSA Listed 15A max.). Typical fuse types: Edison MOL MEN, MEQ and MCL. (1/40 -30A)

Single- and Double-Pole without Breakaway Option

Packaging & Ordering Information:

XXX	—		—	
HEB HET HEY HEX		Load Side Terminal A thru W		Line Terminal A thru W

Single-Pole with Breakaway Option

Packaging & Ordering Information:

XXX	—	J	—	W	—	RYC
HEB or HET		Load Terminal A thru K		Line Terminal		Break-W-Way Terminal RLC - A thru J or RYC

Double-Pole with Breakaway Option

Packaging & Ordering Information:

XXX	—		—	W	—	
HEX or HEY		Load Terminal A thru K		Line Terminal		Break-W-Way Terminal DRLC - A thru J or DRYC

Available Part Numbers

Non-Breakaway Units:

HEB-AA⁽¹⁾ (2) (3), HEB-AB⁽²⁾, HEB-AC⁽²⁾,
HEB-AD⁽²⁾, HEB-AE⁽²⁾, HEB-AJ, HEB-AK, HEB-AL, HEB-AR,
HEB-AY, HEB-BA⁽²⁾, HEB-BB⁽²⁾, HEB-BC⁽²⁾, HEB-BD⁽²⁾,
HEB-CC⁽²⁾, HEB-DD⁽²⁾, HEB-JJ, HEB-JK, HEB-JL, HEB-JY,
HEB-LL, HEB-NN, HEB-PP⁽²⁾, HEB-QQ⁽²⁾, HEB-RR⁽²⁾,
HEB-SS, HEB-TT⁽²⁾, HEB-ZA.

Agency Information:

⁽¹⁾UL Recognized, Guide IZLT2, File E14853

⁽²⁾CSA Certified, Class 6225-01, File 47235

⁽³⁾CE

Breakaway Units:

(Includes fuse holder, breakaway part and insulating boots):

HEB-AW-RLA, HEB-AW-RLC-A⁽¹⁾ (2) (3), HEB-AW-RLC-B,
HEB-AW-RLC-C, HEB-AW-RLC-J, HEB-AW-RYA,
HEB-AW-RYC, HEB-BW-RLC-A, HEB-BW-RLC-B,
HEB-BW-RYC, HEB-JW-RLC-J, **HEB-JW-RYC**,
HEB-KW-RLC-J, HEB-KW-RYC, HEB-LW-RLA,
HEB-LW-RLC-J, HEB-LW-RYA

Agency Information:

⁽¹⁾UL Recognized, Guide IZLT2, File E14853

⁽²⁾CSA Certified, Class 6225-01, File 47235

⁽³⁾CE

In-Line
Fuse Holders

Catalog and Specification Data

Note: The construction elements listed below illustrate the full construction of the available part numbers. NOT all construction elements are available in all combinations.

Conductor Terminals

Type Terminal	Conductor Data				Terminal Symbols	
	Size	No. Per Terminal	Solid	Stranded	Load Side	Line Side
Copper Crimp 	#12 to #8	1	•	•	A	A
	#12	2	•	•		
	#10	2	•	•		
	#6	1	•	•	B	B
	#4	1	•	•		
	#8	2	•	•		
	#4	1	—	•	C	C
	#6	2	•	•		
	#2	1	—	•	D	D
	#4	2	•	•	E	E

Copper Set-Screw

	#12 to #2	1	•	•	J	J
---	-----------	---	---	---	---	---

	#12 to #2	2	•	•	K	K
---	-----------	---	---	---	---	---

Solid Breakaway

	(Required with Breakaway Receptacle)				W	W
--	--------------------------------------	--	--	--	---	---

Available Part Numbers

HEX Series:

HEX-AA⁽¹⁾ (2), HEX-AB, HEX-AC, HEX-AD, HEX-AE, HEX-AY, HEX-BB, HEX-CC, HEX-JJ, HEX-JK, and HEX-KK.

Agency Information:

⁽¹⁾UL Recognized, Guide IZLT2, File E14853

⁽²⁾CSA Certified, Class 6225-01, File 47235

HEY Series:

HEY-AA, HEY-AB, HEY-AC, HEY-AD, HEY-AE, HEY-AL, HEY-BB, and HEY-JJ.

HET Series:

HET-AA, HET-AB, HET-BB, HET-JJ, and HET-JK

Optional

Type Terminal	Conductor Data				Breakaway Terminal	
	Size	No. Per Terminal	Solid	Stranded	Single-Pole	*Double-Pole
Copper Crimp 	#12 to #8	1	•	•	-RLC-A	-DRLC-A
	#6	1	•	•	-RLC-B	-DRLC-B
	#4	1	•	•	-RLC-C	-DRLC-C

Copper Set-Screw

	#12 to #2	1	•	•	-RLC-J	-DRLC-J
---	-----------	---	---	---	--------	---------

	#12 to #2	2	•	•	-RYC	-DRYC
---	-----------	---	---	---	------	-------

* Terminal illustrations show the end view of single-pole receptacles and one-pole only of the double-pole receptacles. Thus, for example, in the case of a double-pole, set-screw type receptacle with terminals that accept two conductors, a total of four conductors could be connected to the receptacle per the following drawing.



Catalog Data — Insulating Boots

Catalog Numbers	Type
2A0660	Single Conductor
2A0661	Two Conductor

Insulating boots are optional and not included with non-Breakaway holders and must be ordered separately. They are included as a standard item with the breakaway series.

When boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200% of the RMS load current.

Watertight Fuse Protection



HEB in-line fuse holders are water resistant and easy to install. Protect fuses in locations exposed to water, weather, corrosive fumes, salt-spray, etc. Holders are two-sectioned, molded plastic. The captive nut couples the loadside section to the lineside section; compression of the o-ring when the nut is tightened forms a vapor and water resistant unit.

Double-Pole Fuse Holders For Simultaneous Non- Load-Break Disconnect of Two Conductors



HEX and HEY units permit the fusing of two conductors. Loadside conductors can be disconnected from the lineside conductors by disengaging a captive stainless steel screw. Positive non-load-break disconnect (for non-energized circuits) provides maintenance safety. Helps prevent shock. Makes loads electrically dead.

Fuse holders are polarized. They can be used for line-to-line or line-to-neutral loads. Polarization prevents inadvertent reversal of loadside conductors (provides compliance with NEC® Section 240-22).

Both loadside terminals are always identical; both lineside terminals are always identical.

Serve As A Non-Load-Break Disconnect



The body of the fuse recesses within the loadside section so that it does not make electrical contact with the lineside section until the coupling nut engages the threads on the lineside section. The holder section thus provides a positive means of breaking or opening a non-energized electrical circuit for maintenance and repair.

Breakaway Receptacles For Impact Separation



Are available as an option with fuse holders. Ideally suited for breakaway lighting standards as required by state and federal highway commissions). Receptacle consists of a female terminal jacketed in an integral rubber insulating sleeve, and an external wire/cable terminal. The female terminal tightly mates with a lineside, solid, copper rod terminal (symbol "W") of the fuse holder. The insulating

sleeve also insulates the body of the lineside section of the fuse holder. Should the holder be subjected to an undue pull, it will separate from the lineside, Breakaway receptacle and become electrically dead. Separating the holder and receptacle on a non-energized circuit facilitates repair/maintenance.

Solid "W" Terminals Mate With Breakaway



Receptacles

A solid copper "rod" terminal must be used on the line-side of a fuse holder when holder is equipped with a breakaway receptacle. This solid rod terminal mates with the internal female terminal(s) of the breakaway receptacle. The letter "W" in the catalog number of the fuse holder designates this type terminal.



Crimp And Set-Screw Terminals

Crimp and setscrew type terminals are available for copper conductors.



2A0661



2A0660

Insulating Boots Save Installation Time

Boots come in two configurations - for single conductor and the "Y" type for two conductors. Fit all Edison in-line fuse holders. Designed to snugly fit over conductor insulation. Fits to wire by cutting off tapered tip. Diameter of conductor insulation cannot exceed 0.450". Inside of boots are treated with silicone to facilitate drawing of wire.

Boots come as a standard item with breakaway receptacles. They are optional and must be ordered separately for fuse holders without breakaway receptacles. **When boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200% of the RMS load current.**

"Tap-Off" Connections

Fuse holders with terminal accepting two conductors can be used as a tap-off connector. Saves cost and manhours.

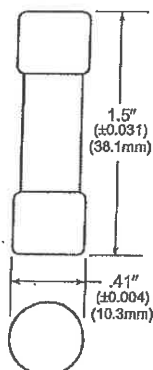
LIMITRON®

Fast-Acting Fuses

600 Volt, 1/10 - 30 Amps



Dimensional Data



Catalog Symbol: KTK
 Fast-Acting
 1/10 TO 30A
 600Vac (or less)
 Interrupting Rating: 100,000A RMS Sym. (UL)
 UL Listed, STD. 248-14, (Guide #JDYX, File #E19180)
 CSA Certified: C22.2 NO. 248.14
 (File #53787—Class #1422-01)
 HRC-MISC

Electrical Ratings (Catalog Symbol and Amperes)

600Vac - UL Listed and C.S.A.

KTK-1/10	KTK-1	KTK-6	KTK-25
KTK-1/8	KTK-1-1/4	KTK-7	KTK-30
KTK-2/10	KTK-1-1/2	KTK-7-1/2	—
KTK-1/4	KTK-2	KTK-8	—
KTK-3/10	KTK-2-1/2	KTK-9	—
KTK-4/10	KTK-3	KTK-10	—
KTK-1/2	KTK-3-1/2	KTK-12	—
KTK-6/10	KTK-4	KTK-15	—
KTK-3/4	KTK-5	KTK-20	—

Carton Quantity and Weight

Ampere Ratings	Carton Qty.	Weight*	
		Lbs.	Kg.
1-30	10	.180	.082

*Weight per carton.



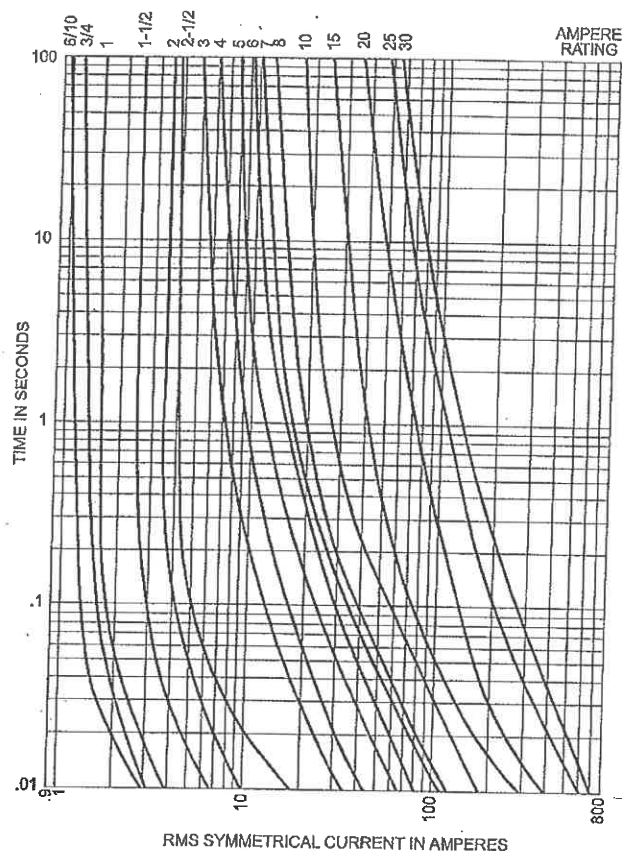
Recommended fuseblocks/fuseholders for 13/32" x 1-1/2" fuses

See Data Sheets listed below

- Open fuseblocks - 1104, 2104
- Finger-safe fuseholders - 1109, 1102, 1103, 1151
- Panel-mount fuseholders - 2114, 2113, 2108, 2112, 2109, 2140
- In-line fuseholders - 2127, 2126

- LIMITRON® fast-acting fuse.
- Melamine tube.
- Nickel-plated bronze endcaps.

Time-Current Characteristic Curves—Average Melt



CE logo denotes compliance with European Union Low Voltage Directive (50-1000Vac, 75-150Vdc). Refer to Data Sheet: 8002 or contact Bussmann Application Engineering at 636-527-1270 for more information.

The only controlled copy of this Data Sheet is the electronic read-only version located on the Bussmann Network Drive. All other copies of this Data Sheet are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

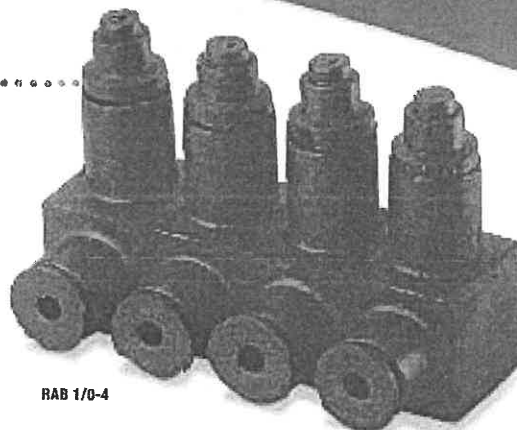


Lighting Mechanical Connectors

Flood-Seal™ Street and Highway — Lighting Mechanical Connectors

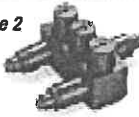
Two connector styles to match your application

- Ensures a fully insulated, watertight and submersible connection
- Mechanical connector accepts aluminum or copper conductors ranging from #14 to 1/0 AWG



RAB 1/0-4

Flood-Seal™ Street and Highway — Lighting Mechanical Connectors

Cat. No.	Conductor Range	Outlets	Style
RAB 1/0-2	#14-1/0	2	Style 1 
RAB 1/0-3		3	
RAB 1/0-4		4	
RAB 1/0-5		5	
RAB 1/0-6		6	
RAB 1/0-7		7	
RAB 1/0-8		8	
RAB 1/0-9		9	
RAB 1/0-10		10	
RAB 1/0-21		3	Style 2 
RAB 1/0-22		4	
RAB 1/0-31		5	
RAB 1/0-32		5	
RAB 1/0-33		5	
RAB 1/0-42		6	

For oxide-inhibitor option, add "-G" suffix to the catalogue number.

* STREETLIGHT CABLE SPLICES IN
PULL BOXES

Rigid Non-Metallic Schedule 40 Electrical Conduit



Schedule 40 Electrical Conduit

Allied Tube & Conduit® created the long bell for ease and efficiency. In compliance with the industry standards, Allied Tube & Conduit® PVC Electrical Conduit is manufactured from PVC compounds complying with the UL651 standards. Our PVC Electrical Conduits are subject to in-process quality control to assure compliance with appropriate manufacturing and performance standards.

- UL 651
- NEMA TC-2
- Sunlight resistant per UL 651
- Listed for 90° C conductors or cable
- Rigid nonmetallic raceway for wires and cables in accordance with the NEC
- Product manufactured with one integral solvent-weld bell standard per length



10' Part No.	20' Part No.	Trade Size	Average O.D. (in)	Minimum Average I.D. (in)	Minimum Wall (in)	Weight Per Foot (lbs)	10 Ft Crate Quantity (ft)
8102	8502	½	0.840	0.578	0.109	0.165	6000
8103	8503	¾	1.050	0.780	0.113	0.220	4400
→ 8104	8504	1	1.315	1.004	0.133	0.326	3600
8105	8505	1 ¼	1.660	1.335	0.140	0.441	3300
8106	8506	1 ½	1.900	1.564	0.145	0.528	2250
→ 8108	8508	2	2.375	2.021	0.154	0.730	1400
→ 8110	8510	2 ½	2.875	2.414	0.203	1.158	930
→ 8112	8512	3	3.500	3.008	0.216	1.609	880
→ 8114	8514	3 ½	4.000	3.486	0.226	1.935	630
8116	8516	4	4.500	3.961	0.237	2.292	570
8120	8520	5	5.563	4.975	0.258	3.105	380
8124	8524	6	6.625	5.986	0.280	4.030	260
880747	924297	8*	8.625	7.853	0.322	6.065	140

Meets or exceeds the requirements of NEMA TC 2 and UL 651 for Schedule 40 Conduit.

* UL 651 does not include 8"



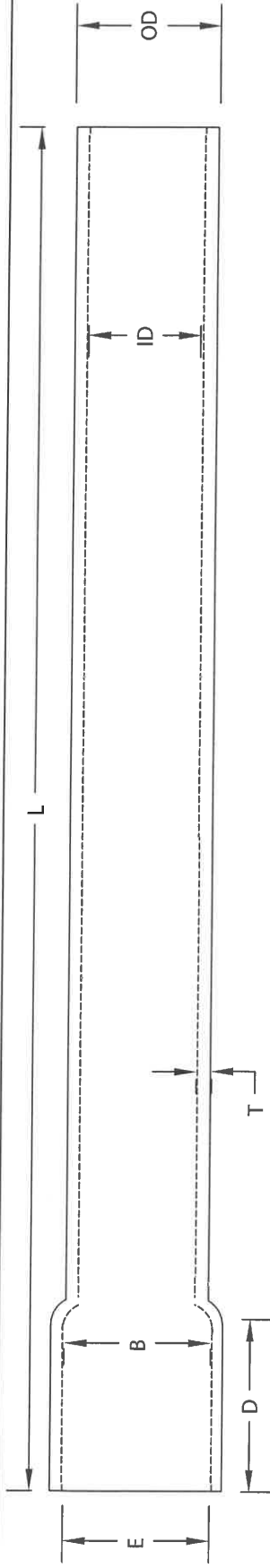
Intertek

Item availability may vary by region.

NOTE: Special orders are non-cancelable, non-returnable and non-refundable

16100 S. Lathrop Ave., Harvey, IL 60426
Phone / 708.339.1610 • Toll-Free / 800.882.5543

www.alliedeg.com



Part Number	Size	T Min.	OD	ID Min.	E	B	D Min.	L Min.
A52AE12	1/2"	0.109"	0.840"	0.578"	0.852"	0.836"	1.500"	120"
A52AG12	3/4"	0.113"	1.050"	0.780"	1.064"	1.046"	1.750"	120"
A52BA12	1"	0.133"	1.315"	1.004"	1.330"	1.310"	2.000"	120"
A52BC12	1 1/4"	0.140"	1.660"	1.335"	1.677"	1.655"	2.250"	120"
A52BE12	1 1/2"	0.145"	1.900"	1.564"	1.918"	1.894"	2.500"	120"
A52CA12	2"	0.154"	2.375"	2.021"	2.393"	2.369"	3.000"	120"
A52CE12	2 1/2"	0.203"	2.875"	2.414"	2.890"	2.868"	3.250"	120"
A52DA12	3"	0.216"	3.500"	3.008"	3.515"	3.492"	3.750"	120"
A52DE12	3 1/2"	0.226"	4.000"	3.486"	4.015"	3.992"	4.000"	120"
A52EA12	4"	0.237"	4.500"	3.961"	4.515"	4.491"	4.500"	120"
A52FA12	5"	0.258"	5.563"	4.975"	5.593"	5.553"	5.500"	120"
A52GA12	6"	0.280"	6.625"	5.986"	6.658"	6.614"	6.125"	120"
A52JA12 *	8"	0.322"	8.625"	7.853"	8.670"	8.610"	6.375"	120"

Dimensions are Nominal
* Not ETL Listed

ETL Listed
Conforms to UL-651
NEMA TC2 Compliant
See NEC Article 352 for use
Sunlight Resistant
Max 90° C Wire



Schedule 40 Rigid PVC Conduit

Complies with Federal Specification WC-1094

Drawn By: D.S. Frank

Date: 7-13-2010



HeritagePlastics

Rigid Non Metallic Schedule 40 Electrical Conduit

April 18, 2012

Heritage Plastics created the long bell for ease and efficiency. In compliance with the industry standards, Heritage Plastics PVC Electrical Conduit is manufactured from virgin PVC compounds complying with the UL651 standards as described in the standards specifications for rigid PVC compounds ASTM D 1784-81. Our PVC Electrical Conduits are subject to in-process quality control to assure compliance with appropriate manufacturing and performance standards.

- UL 651
- RUS Listed
- NEMA TC-2
- NEMA TC-3 (Accessories)
- UL Standard 514 B (Accessories)
- General Service Administration (GSA) WC 1094A
- National Electric Code - Article 352
- Sunlight and Weather resistant
- Reduced emissions of smoke & HCL
- Listed for 90° C conductors or cable and direct sunlight
- Rigid nonmetallic raceway for wires and cables in accordance with the NEC
- Superior weathering characteristics

Schedule 40 Electrical Conduit

10' Part #	20' Part #	Nominal Size	Weight 100'	Pack Qty 10'	O.D.	I.D.	Wall
510510	510520	½"	16.4	6,000'	.840	.622	.109
510710	510720	¾"	21.8	4,400'	1.050	.824	.113
→ 511010	511020	1"	32.1	3,600'	1.315	1.049	.133
511310	511320	1 ¼"	43.4	3,300'	1.660	1.380	.140
511510	511520	1 ½"	51.8	2,250'	1.900	1.610	.145
→ 512010	512020	2"	69.5	1,400'	2.375	2.067	.154
512510	512520	2 ½"	109.6	930'	2.875	2.469	.203
→ 513010	513020	3"	143.5	880'	3.500	3.068	.216
513510	513520	3 ½"	169.1	630'	4.000	3.548	.226
→ 514010	514020	4"	204.3	570'	4.500	4.026	.237
515010	515020	5"	277.6	380'	5.563	5.047	.258
516010	516020	6"	360.0	260'	6.625	6.065	.280



861 N. Lisbon Street
Carrollton, OH 44615
330.627.8002

5128 West Hanna Ave.
Tampa, FL 33634
330.627.8002

1202 N. Bowie Drive
Weatherford, TX 76086
817.594.8791

189 N. Heritage Park Dr.
Milford, UT 84751
817.594.8791

Prime Conduit, Inc.

Schedule 40 PVC Rigid Nonmetallic Conduit



- ETL Listed to UL651 in compliance with the NEC
- 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
- Made in USA



Part Number		Trade Size	Std. Crate Qty.		Wt. Per 100'	Dimensions		
10'	20'		10'	20'		O.D.	I.D.	Wall
49005-010	-	1/2"	6000'	-	17	0.840	0.622	0.109
49007-010	49007-020	3/4"	4400'	8800'	23	1.050	0.824	0.113
→ 49008-010	49008-020	1"	3600'	7200'	34	1.315	1.049	0.133
49009-010	49009-020	1 1/4"	3300'	6600'	46	1.660	1.380	0.140
49010-010	49010-020	1 1/2"	2250'	4500'	55	1.900	1.610	0.145
→ 49011-010	49011-020	2"	1400'	2800'	73	2.375	2.067	0.154
→ 49012-010	49012-020	2 1/2"	930'	1860'	124	2.875	2.469	0.203
→ 49013-010	49013-020	3"	880'	1760'	163	3.500	3.068	0.216
→ 49014-010	49014-020	3 1/2"	630'	1260'	196	4.000	3.548	0.226
→ 49015-010	49015-020	4"	570'	1140'	232	4.500	4.026	0.237
49016-010	49016-020	5"	380'	760'	315	5.563	5.047	0.258
49017-010	49017-020	6"	260'	520'	409	6.625	6.065	0.280

*With Integral Bell



Notes:

1. 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
2. Special conduit sizes will be quoted on request.
3. **DON'T FORGET TO ORDER CEMENT.**
4. Use RNC Fittings with Schedule 40 and Schedule 80 Conduit
5. Prime Conduit reserves the right to ship to the nearest unitized quantity.

SCEPTER RIGID PVC CONDUIT & FITTINGS

1/2" - 6" (12mm - 200mm)



Professional electricians ask for Scepter conduit by name for the quality and superior performance that ensures a long trouble free life. Scepter conduit is light weight and offers excellent chemical resistance, high tensile and impact strength, and the FT-4 rating permits use in noncombustible construction.

Suitable for exposed, concrete encased and direct burial applications, Scepter conduit requires no extra protection and is third party certified by CSA and NSF (sizes 1/2" - 6").

SHORT FORM SPECIFICATIONS

All wiring shall be installed in Rigid PVC conduit and secured to PVC boxes and cabinets by means of proper fittings. All boxes, access fittings and covers shall be furnished with threaded brass inserts, brass screws and PVC gaskets.

Rigid PVC fittings and junction boxes shall be used for all outlets, pull boxes and junction points. All PVC junction boxes shall be NEMA 1, 2, 3, 4, 4X, 6P, 12 and 13 rated and UL Listed for wet locations.

Exposed conduit shall be securely held in place by suitable hangers or straps with the maximum spacing of points for supports not exceeding those specified in the CEC or NEC. Except when embedded in concrete, rigid conduit pipe shall not be clamped tightly. It shall be supported in such a manner as to permit adequate linear movement, allowing for expansion and contraction of conduit due to temperature change. Where a temperature change exceeding 25°F (14°C) is anticipated, rigid PVC expansion joints shall be installed in accordance with the manufacturer's recommendations.

Proper care shall be taken when field bending, to maintain the internal diameter and wall thickness of the conduit.

The contractor shall furnish and install Scepter Rigid PVC conduit pipe and fittings made by IPEX. Where the engineer's specifications indicate Scepter products or equivalent, the equivalent shall be CSA certified and accepted by the Canadian Electrical Code. Due to broad manufacturing tolerances, all pipe and fitting products shall be of the same manufacturer.

APPLICATIONS

- Utilities
- Cable
- Communications
- Residential
- Airports
- Subways
- Bridges & tunnels
- Water treatment plants
- Sewage treatment plants
- Pulp & paper industries
- Street & highway lighting
- Food processing plants
- Agricultural, dairy, hogs, cattle, chicken, etc.
- Parking garages
- Car washes
- Fish plants
- Mines
- Marinas
- Steel mills

STANDARDS



Scepter Rigid PVC Conduit conforms to: CSA C22.2 No. 211.2, CSA C22.2 No. 211.0

NSF Certified to UL651

Sunlight Resistant

Rated for use with 90°C conductors

NEMA TC2

Corps. of Engineers Spec. CE 303:01

Military Spec, Federal Spec. WC 1094A

Scepter Rigid PVC boxes and fittings conform to: CSA C22.2 No. 85

UL Listed UL514B - UL514C

DID YOU KNOW?

Compared to metal, PVC products reduce labour on a typical installation by up to two-thirds. The reason? PVC is easy to work with. It can also be cut and joined without the usual pipe vices, cutters, threading equipment, and reamers associated with metal conduit.

WEIGHT COMPARISON OF SCHEDULE 40 CONDUIT

Nominal Size Inches	Sch 40 PVC lbs/100ft	Sch 80 PVC lbs/100ft	Aluminum Rigid Steel lbs/100ft
1/2	15	21	28
3/4	21	28	37
1	31	41	53
1-1/4	42	57	70
1-1/2	53	70	86
2	71	96	116
2-1/2	112	146	183
3	166	195	239
3-1/2	200	286	288
4	236	397	340
5	321	546	465
6	417	613	1771

PHYSICAL PROPERTIES OF PVC TYPE II

Properties	Unit	Value	ASTM Test Method
Electrical			
Dielectric Strength	volts/mil	1215	D149
Dielectric Constant	60 cps at 30°C	3.55	D150
	1000 cps at 30°C	3.22	D150
Power Factor	60 cps at 30°C	4.04	D150
	1000 cps at 30°C	4.71	D150
Physical			
Specific Gravity		13.5	D792
Hardness	Durometer D	78	D676
Izod Impact Strength @ 73°F (23°C)	ft.lb/in. notch	15.0	D256
Tensile Strength @ 73°F (23°C)	psi	6000	D638
Compressive Strength	psi	8600	D695
Flexural Strength	psi	11500	D790
Thermal			
Coefficient of Thermal Conductivity	BTU/sec/in ² /°F/in.	0.11	C177
Coefficient of Linear Expansion	per °F x 10 ⁻⁵	5.5	D696
Heat Distortion Temperature at 264 psi	°F	158	D648
Others			
Flammability		self-extinguishing	D635
Water Absorption in 30 days	%	0.6	
Color		charcoal grey	
Light Transmission		opaque	D791

All technical data is believed to be accurate and is presented solely for information and guidance.

PRODUCT SELECTION CHART & DIMENSIONS

Nominal Size Inches	10' Product Code	20' Product Code	O.D. Inches	I.D. Inches	Min. Wall Inches	Weight lbs./100	Standard 10' ft./crate
------------------------	---------------------	---------------------	----------------	----------------	---------------------	--------------------	---------------------------

Schedule 40 Heavy Wall in 10' or 20' Lengths

1/2	032405	032406	0.840	0.622	0.109	15	6,000
3/4	032407	032408	1.050	0.824	0.113	21	4,400
1	032410	032411	1.315	1.049	0.133	31	3,600
1-1/4	032412	032414	1.660	1.380	0.140	42	3,300
1-1/2	032415	032416	1.900	1.610	0.145	53	2,250
2	032420	032421	2.375	2.067	0.154	71	1,400
2-1/2	032425	032426	2.875	2.469	0.203	112	930
3	032430	032431	3.500	3.068	0.216	166	880
3-1/2	032435	032436	4.000	3.548	0.226	200	630
4	032440	032441	4.500	4.026	0.237	236	570
5	032450	032451	5.563	5.047	0.258	321	380
6	032460	032461	6.625	6.065	0.280	417	260

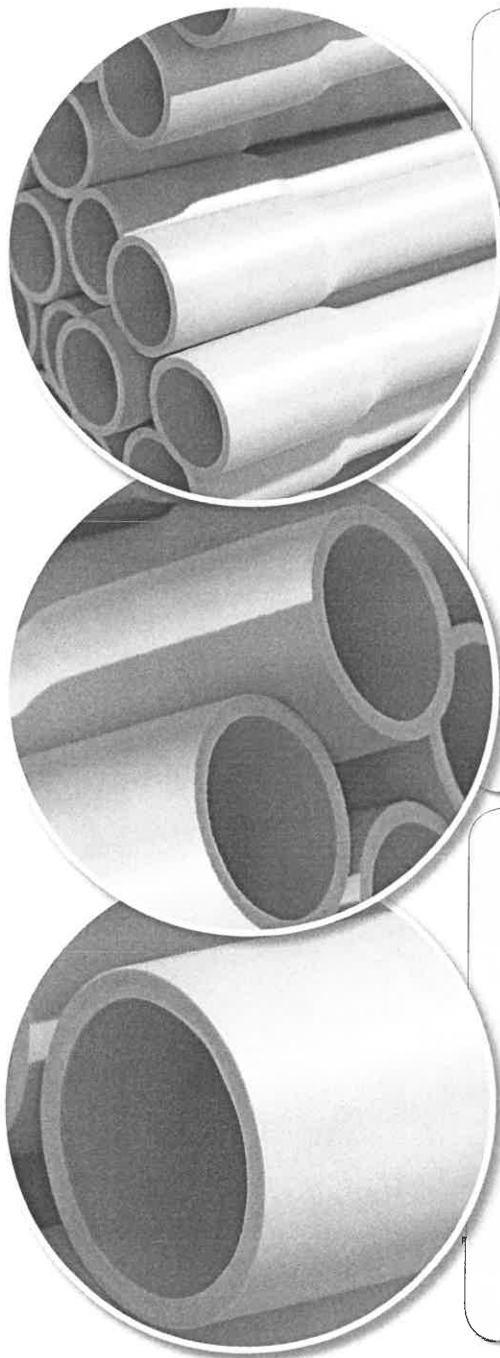
Schedule 80 Extra Heavy Wall in 10' or 20' Lengths

1/2	032505	032506	0.840	0.546	0.147	21	6,000
3/4	032507	032508	1.050	0.724	0.154	28	4,400
1	032510	032511	1.315	0.957	0.179	41	3,600
1-1/4	032512	032514	1.660	1.278	0.191	57	3,300
1-1/2	032515	032516	1.900	1.500	0.200	70	2,250
2	032520	032521	2.375	1.939	0.218	96	1,400
2-1/2	032525	032526	2.875	2.323	0.276	146	930
3	032530	032531	3.500	2.900	0.300	195	880
4	032540	032541	4.500	3.826	0.337	286	570
5	032550	032551	5.563	4.813	0.375	397	380
6	032560	032561	6.625	5.761	0.432	546	260



ELECTRICAL CONDUIT AND DUCT

MEETS ANSI/UL 651 AND NEMA TC-2, ASTM F512 AND NEMA TC-6 & 8.



APPLICATIONS

JM Eagle Electrical Conduit and Power Duct products are suitable for power, telephone and other electrical systems.

DESCRIPTION

JM Eagle offers a complete line of Electrical Conduit and Power Duct pipe that includes Schedule 40 and 80 Conduit (NEMA TC-2, ANSI/UL651), Encased and Direct Burial Conduit (ASTM F512, NEMA TC-6 & 8; and/or ANSI/UL 651A), and Type C Telephone Duct.

The products may be used for above-ground and underground installations, concrete encasements, and direct burials, as well as telephone applications.

They are available in ½- to 6-inch diameters, in 10- and/or 20-foot lengths, with one bell end, and come in gray.

The solvent-weld joints are designed to provide a rigid (or restrained) joint connection, and the schedule-rated products are specifically engineered for use in partial support systems above ground.

A complete line of Schedule 40 and 80, utility duct and junction box fittings complements the conduit products.

BENEFITS

JM Eagle Electrical Conduit and Power Duct products are light-weight, cost-effective and long-lasting.

- They can be field-cut with a power saw or ordinary handsaw without the use of expensive or complicated machinery.
- Easy to load, transport and handle, installers prefer them because they go into the ground quickly, saving installation costs.
- They maintain performance against external galvanic soil conditions without lining wrapping, coating or cathodic protection, and offer superior dielectric strength.
- They are rated for use with 90-degree C conductors, and come with UV protection.

Revised 5/1/2012. This information may have been updated. Please download the latest version at www.jmeagle.com/onesheets.



Building essentials
for a better tomorrow™

ELECTRICAL CONDUIT AND DUCT

SUBMITTAL AND DATA SHEET

SCHEDULE 40 CONDUIT

Rated for 90°C Conductors

SIZE	AVERAGE O.D.	NOM. I.D.	MIN. T.	APPROX. WT/100 FT
1/2	0.840	0.622	0.109	18
3/4	1.050	0.824	0.113	24
1	1.315	1.049	0.133	33
1 1/4	1.660	1.380	0.140	45
1 1/2	1.900	1.610	0.145	56
2	2.375	2.067	0.154	76
2 1/2	2.875	2.469	0.203	126
3	3.500	3.068	0.216	163
3 1/2	4.000	3.548	0.226	197
4	4.500	4.026	0.237	234
5	5.563	5.047	0.258	319
6	6.625	6.065	0.280	411

Schedule 40 is furnished in standard 10' lengths with one bell end.
20' lengths are available upon request.

SCHEDULE 80 CONDUIT

Rated for 90°C Conductors

SIZE	AVERAGE O.D.	NOM. I.D.	MIN. T.	APPROX. WT/100 FT
1/2	0.840	0.546	0.147	22
3/4	1.050	0.742	0.154	30
1	1.315	0.957	0.179	42
1 1/4	1.660	1.278	0.191	60
1 1/2	1.900	1.500	0.200	72
2	2.375	1.939	0.218	98
2 1/2	2.875	2.323	0.276	160
3	3.500	2.900	0.300	213
3 1/2	4.000	3.364	0.318	256
4	4.500	3.826	0.337	310
5	5.563	4.813	0.375	430
6	6.625	5.761	0.432	590

Schedule 80 is furnished in standard 10' lengths with one bell end.
20' lengths are available upon request.

CAO 8546 TYPE C ::

Rated for 90 °C Cable

SIZE	AVERAGE O.D.	NOM. I.D.	* MIN. T.	APPROX. WT/100 FT
4	4.350	4.044	0.149	147

* Based on 500,000 psi Modulus

* 400,000 psi Modulus available upon request.

:: GTS - 8342 and HDPE Tele Duct available upon request

:: JM Eagle™ Type C PVC duct is designed for direct burial installations of telephone cables and complies with CAO 8546.

TYPE DB60 ::

Rated for 90°C Cable

SIZE	AVERAGE O.D.	NOM. I.D.	* MIN. T.	APPROX. WT/100 FT
2	2.375	2.255	0.060	36
3	3.500	3.316	0.092	79
4	4.500	4.258	0.121	129
5	5.563	5.259	0.152	197
6	6.625	6.261	0.182	279

* Based on 500,000 psi Modulus

TYPE DB100 ::

Rated for 90°C Cable

SIZE	AVERAGE O.D.	NOM. I.D.	* MIN. T.	APPROX. WT/100 FT
3	3.500	3.276	0.112	91
3 1/2	4.000	3.744	0.128	120
4	4.500	4.212	0.145	152
5	5.563	5.207	0.179	231
6	6.625	6.201	0.213	328

* Based on 500,000 psi Modulus

TYPE DB120 ::

Rated for 90°C Cable

SIZE	AVERAGE O.D.	NOM. I.D.	* MIN. T.	APPROX. WT/100 FT
1	1.315	1.195	0.060	20
1 1/2	1.900	1.780	0.060	29
2	2.375	2.221	0.077	44
3	3.500	3.264	0.118	97
4	4.500	4.192	0.154	160
5	5.563	5.181	0.191	245
6	6.625	6.171	0.227	347

* Based on 500,000 psi Modulus

:: Conduit furnished with one (1) bell end per 20' length.

:: JM Eagle™ Type DB duct is designed for direct burial installations and complies with NEMA TC-6 & 8 and ASTM F512.

TYPE EB20* ::

Rated for 90°C Cable

SIZE	AVERAGE O.D.	NOM. I.D.	* MIN. T.	APPROX. WT/100 FT
2	2.375	2.255	0.060	36
3	3.500	3.378	0.061	56
4	4.500	4.336	0.082	91
5	5.563	5.357	0.103	141
6	6.625	6.375	0.125	198

* Type EB20 also complies with ANSI/UL 651 A

TYPE EB35* :: †

Rated for 90°C Cable

SIZE	AVERAGE O.D.	NOM. I.D.	* MIN. T.	APPROX. WT/100 FT
3	3.500	3.348	0.076	68
4	4.500	4.300	0.100	109
5	5.563	5.311	0.126	168
6	6.625	6.321	0.152	235

* Based on 500,000 psi Modulus

:: Conduit furnished with one bell end per 20-foot length.

:: JM Eagle™ Type EB duct is designed for concrete encasement installations and complies with NEMA TC-6 & TC-8 and ASTM F512.

Revised 5/1/2012. This information may have been updated. Please download the latest version at www.jmeagle.com/onesheets.

I.D. : Inside Diameter
O.D. : Outside Diameter
T. : Wall Thickness

HDPE CONDUIT



→ 2" SDR 11 - "ORANGE" - INTERCONNECT

→ 4" SDR 11 - "BLACK" - TRAFFIC SIGNAL

Materials

The material requirements for PE conduit shall be classified in accordance with ASTM Standard D 3350 "Standard Specification for Polyethylene Plastic Pipe and Fittings Materials". ASTM D 3350 defines important physical properties of HDPE materials into ranges, or cell classes, so that each property can be defined within a range that is appropriate for the application. For HDPE conduit according to ASTM F 2160, the polyethylene material is defined as noted below:

Property	Range or Minimum Requirement	Units	Cell Class	Test Method
Density	0.941-0.955	g/cc	3	ASTM D 792 or 1505
Melt Index ^a	<0.25-0.40	g/10 minutes	3or4	ASTM D 1238
Flexural Modulus	110,000-160,000	Psi	4or5	ASTM D 790
Tensile Strength	3000-4000	Psi	4or5	ASTM D 638
Environmental Stress Crack Resistance ^b	F20>192	Hours (condition C)	3or4	ASTM D 1693
HDB	Not Defined		0,1,2,3,or 4	ASTM D2837

^a A melt index of up to 0.55 g/10 minutes is allowable provided that all other material requirements are met.

^b A ESCR, condition B, 10% Igepal of F10 >96 hours is allowable provided that all other material requirements are met.

4707 E. Kearney, Springfield, MO 65803 • 417.708.9887 • www.unitedpolysystems.com

HDPE CONDUIT

SDR 13.5 - ASTM D3035 / ATSM F2160 / NEMA TC7 EPECB

SDR 11 - ASTM D3035 / ASTM F2160

Nom. Size	Avg. OD	Min. Wall	Avg. ID	Wt. (lb/ft)	Pull Tensile Safe lbs.
PE3408/3608 PSI 128 PE4710 PSI 160					
3/4"	1.050	0.078	0.885	0.100	262
1"	1.315	0.097	1.109	0.160	408
1-1/4"	1.660	0.123	1.414	0.250	653
1-1/2"	1.900	0.141	1.618	0.330	857
2"	2.375	0.176	2.002	0.530	1,337
2-1/2"	2.875	0.213	2.449	0.764	1,959
3"	3.500	0.259	2.951	1.150	2,901
4"	4.500	0.333	3.794	1.900	4,795
5"	5.563	0.412	4.690	2.910	7,334
6"	6.625	0.491	5.584	4.130	10,408

Nom. Size	Avg. OD	Min. Wall	Avg. ID	Wt. (lb/ft)	Pull Tensile Safe lbs.
PE3408/3608 PSI 160 PE4710 PSI 200					
3/4"	1.050	0.095	0.849	0.120	328
1"	1.315	0.120	1.061	0.200	496
1-1/4"	1.660	0.151	1.358	0.310	787
1-1/2"	1.900	0.173	1.554	0.400	1,032
2"	2.375	0.216	1.917	0.640	1,612
2-1/2"	2.875	0.262	2.351	0.930	2,366
3"	3.500	0.318	2.826	1.390	3,497
4"	4.500	0.409	3.633	2.290	5,782
5"	5.563	0.506	4.490	3.510	8,843
6"	6.625	0.602	5.349	4.970	12,530

INTERCONNECT

SIGNALS

SDR 17 - ASTM D3035

Nom. Size	Avg. OD	Min. Wall	Avg. ID	Wt. (lb/ft)	Pull Tensile Safe lbs.
PE3408/3608 PSI 100 PE4710 PSI 125					
1-1/4"	1.660	0.107	1.465	0.206	574
1-1/2"	1.900	0.112	1.676	0.270	692
2"	2.375	0.140	2.078	0.430	1,081
3"	3.500	0.206	3.063	0.932	2,345
4"	4.500	0.265	3.938	1.514	3,878
5"	5.563	0.327	4.870	2.352	5,917
6"	6.625	0.390	5.798	3.340	8,403

SDR 15.5 - ASTM D3035

Nom. Size	Avg. OD	Min. Wall	Avg. ID	Wt. (lb/ft)	Pull Tensile Safe lbs.
PE3408/3608 PSI 110 PE4710 PSI 139					
1-1/4"	1.660	0.107	1.446	0.224	574
1-1/2"	1.900	0.123	1.654	0.295	755
2"	2.375	0.153	2.069	0.458	1,175
3"	3.500	0.226	3.048	0.997	2,557
4"	4.500	0.290	3.920	1.645	4,219
5"	5.563	0.359	4.844	2.517	6,456
6"	6.625	0.427	5.771	3.566	9,146



HDPE CONDUIT

Blue Diamond Conduit Sizes and Dimensions

Based on Controlled Outside Diameter

ASTM F 2160
SDR Pipe Data

SDR 9

SDR 11

SDR 13.5

Nominal Duct Size	Nominal OD	Nominal ID	Min Wall	Weight lbs/ft	Nominal ID	Min Wall	Weight lbs/ft	Nominal ID	Min Wall	Weight lbs/ft
1/2"	0.840	0.633	0.093	0.099	0.667	0.076	0.085	0.696	0.062	0.072
3/4"	1.050	0.797	0.117	0.152	0.839	0.095	0.130	0.874	0.078	0.110
1"	1.315	1.003	0.146	0.235	1.051	0.120	0.200	1.100	0.097	0.169
1 1/4"	1.660	1.270	0.184	0.372	1.338	0.151	0.314	1.394	0.123	0.264
1 1/2"	1.900	1.452	0.211	0.488	1.534	0.173	0.409	1.599	0.141	0.343
2"	2.375	1.816	0.264	0.762	1.917	0.216	0.639	2.002	0.176	0.531
2 1/2"	2.875	2.198	0.319	1.117	2.321	0.261	0.936	2.424	0.213	0.778
3"	3.500	2.676	0.389	1.655	2.825	0.318	1.387	2.950	0.259	1.153
4"	4.500	3.440	0.500	2.737	3.633	0.409	2.293	3.794	0.333	1.906
5"	5.562	4.252	0.618	4.182	4.490	0.506	3.505	4.689	0.412	2.912
6"	6.625	5.064	0.824	5.931	5.348	0.602	4.971	5.585	0.491	4.130

ASTM F 2160
SDR Pipe Data

SDR 15.5

SDR 17

Nominal Duct Size	Nominal OD	Nominal ID	Min Wall	Weight lbs/ft	Nominal ID	Min Wall	Weight lbs/ft
1/2"	0.840	-	-	-	-	-	-
3/4"	1.050	0.895	0.068	0.098	0.906	0.062	0.092
1"	1.315	1.147	0.084	0.151	1.140	0.077	0.139
1 1/4"	1.660	1.426	0.107	0.235	1.445	0.098	0.218
1 1/2"	1.900	1.635	0.123	0.305	1.656	0.112	0.282
2"	2.375	2.049	0.153	0.469	2.076	0.140	0.434*
2 1/2"	2.875	2.482	0.185	0.685	2.516	0.169	0.629*
3"	3.500	3.021	0.226	1.015	3.064	0.206	0.932*
4"	4.500	3.885	0.290	1.678	3.939	0.265	1.540*
5"	5.562	4.801	0.359	2.563*	4.868	0.327	2.352*
6"	6.625	5.719	0.427	3.637*	5.799	0.390	3.337*

SIGNAL CONDUIT:

4" SDR 11 - "GRAY"

INTERCONNECT CONDUIT:

2" SDR 11 - "ORANGE"

ASTM F 2160
SDR Pipe Data

SCH 40

SCH 80

Nominal Duct Size	Nominal OD	Nominal ID	Min Wall	Weight lbs/ft	Nominal ID	Min Wall	Weight lbs/ft
1/2"	0.840	-	-	-	-	-	-
3/4"	1.050	0.804	0.113	0.148	0.722	0.154	0.189
1"	1.315	1.029	0.133	0.218	0.936	0.179	0.278
1 1/4"	1.660	1.360	0.140	0.295	1.255	0.191	0.384
1 1/2"	1.900	1.590	0.145	0.352	1.476	0.200	0.465
2"	2.375	2.047	0.154	0.472	1.913	0.218	0.644
2 1/2"	2.875	2.445	0.203	0.744	2.290	0.276	0.983
3"	3.500	3.042	0.216	0.974	2.864	0.300	1.316
4"	4.500	3.896	0.282	1.387*	3.786	0.337	1.924
5"	5.562	5.009	0.258	1.904*	4.768	0.375	2.671
6"	6.625	6.031	0.280	2.444*	5.709	0.432	3.674*

Please note that some sizes and dimensions may require additional equipment or extended lead times.

*Note: Some dimensions only available in stick form.

Pipe Size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
Nom OD (in)	0.840	1.050	1.315	1.660	1.900	2.375	2.875	3.500	4.500	5.563	6.625	8.625	10.750	12.750
OD Tolerance +/-	0.004	0.005	0.007	0.008	0.010	0.012	0.014	0.018	0.023	0.028	0.033	0.043	0.054	0.064
Bend Radius (in) – Supported	8	10	13	17	19	24	29	39	50	61	73	155	194	230
Bend Radius (in) – Unsupported	16	20	26	34	38	48	58	78	100	122	146	233	290	344

Wall Type

SDR-9

Min. Wall (in)	0.093	0.117	0.146	0.184	0.211	0.264	0.319	0.389	0.500	0.618	0.736	0.958	1.194	1.417
Wall Tolerance +	0.020	0.020	0.020	0.022	0.025	0.032	0.038	0.047	0.060	0.074	0.088	0.115	0.143	0.170
Avg ID (in)	0.633	0.797	1.003	1.269	1.452	1.816	2.198	2.676	3.440	4.253	5.064	6.593	8.218	9.747
Weight (#/ft)	0.095	0.149	0.233	0.37	0.487	0.762	1.116	1.654	2.734	4.178	5.926	10.043	15.602	21.948
Safe Working Load	525	821	1,288	2,052	2,688	4,200	6,155	9,122	15,080	23,045	32,684	55,397	86,057	121,056

SDR-11

Min. Wall (in)	0.076	0.095	0.119	0.151	0.173	0.216	0.261	0.318	0.409	0.506	0.602	0.784	0.977	1.159
Wall Tolerance +	0.020	0.020	0.020	0.020	0.021	0.026	0.031	0.038	0.049	0.061	0.072	0.094	0.117	0.139
Avg ID (in)	0.668	0.840	1.057	1.338	1.533	1.917	2.322	2.826	3.633	4.491	5.348	6.963	8.678	10.293
Weight (#/ft)	0.079	0.124	0.195	0.312	0.409	0.638	0.934	1.385	2.291	3.501	4.966	8.417	13.075	18.393
Safe Working Load	440	687	1,078	1,717	2,249	3,515	5,151	7,633	12,618	19,284	27,349	46,355	72,010	101,297

SDR-13.5

Min. Wall (in)	0.062	0.078	0.097	0.123	0.141	0.176	0.213	0.259	0.333	0.412	0.491	0.639	0.796	0.944
Wall Tolerance +	0.020	0.020	0.020	0.020	0.020	0.021	0.026	0.031	0.040	0.049	0.059	0.077	0.096	0.113
Avg ID (in)	0.696	0.874	1.101	1.394	1.598	2.002	2.423	2.951	3.794	4.689	5.585	7.271	9.062	10.748
Weight (#/ft)	0.066	0.104	0.162	0.259	0.340	0.530	0.777	1.151	1.902	2.909	4.126	6.994	10.864	15.283
Safe Working Load	365	570	894	1,425	1,867	2,917	4,274	6,335	10,472	16,004	22,697	38,470	59,762	84,067

SDR-15.5

Min. Wall (in)	0.085	0.107	0.123	0.153	0.185	0.226	0.290	0.359	0.427	0.501	0.571	0.641	0.711	0.781
Wall Tolerance +	0.020	0.020	0.020	0.020	0.022	0.027	0.035	0.043	0.051	0.059	0.067	0.075	0.083	0.091
Avg ID (in)	1.125	1.426	1.634	2.049	2.483	3.021	3.885	4.802	5.719	6.636	7.553	8.470	9.387	10.304
Weight (#/ft)	0.143	0.228	0.300	0.466	0.683	1.015	1.675	2.562	3.633	4.704	5.775	6.846	7.917	8.988
Safe Working Load	792	1,234	1,607	2,466	3,592	5,342	8,814	13,483	19,123	27,349	38,470	55,397	86,057	121,056

SDR-17

Min. Wall (in)	0.062	0.077	0.098	0.112	0.140	0.169	0.206	0.265	0.327	0.390	0.453	0.516	0.579	0.642
Wall Tolerance +	0.020	0.020	0.020	0.020	0.020	0.020	0.025	0.032	0.039	0.047	0.054	0.061	0.068	0.075
Avg ID (in)	0.906	1.141	1.440	1.656	2.075	2.517	3.063	3.939	4.869	5.799	6.729	7.659	8.589	9.519
Weight (#/ft)	0.084	0.131	0.210	0.275	0.429	0.628	0.931	1.538	2.351	3.334	4.317	5.300	6.283	7.266
Safe Working Load	460	722	1,150	1,507	2,355	3,450	5,114	8,453	12,918	18,321	26,349	38,470	55,397	86,057

HDPE CONDUIT

ENDOT INDUSTRIES

DUCT AND INNERDUCT TECHNICAL SPECIFICATIONS

ENDUCT/BORE DUCT SMOOTHWALL DUCT AND INNERDUCT

Ideal for directional boring projects, ENDUCT Bore Duct is smoothwall duct produced from premium polyethylene resin (HDPE) for high tensile strength and maximum crush resistance.

SPECIFICATIONS:

ENDUCT P/N	SDR	SIZE	Nominal I.D.	O.D.	MINIMUM WALL THICKNESS
ASTM F2160* (ASTM D3035) - O.D. Controlled Bore Duct - SDR					
→ I DE 237	9	2" (50.8mm)	1.847" (46.9mm)	2.375" (60.3mm)	0.264" (6.7mm)
I DE 237	11	2" (50.8mm)	1.943" (49.4mm)	2.375" (60.3mm)	0.216" (5.5mm)
I DE 237	13.5	2" (50.8mm)	2.023" (51.4mm)	2.375" (60.3mm)	0.176" (4.5mm)
I DE 350	11	3" (76.2mm)	2.864" (72.7mm)	3.500" (88.9mm)	0.318" (8.1mm)
I DE 350	13.5	3" (76.2mm)	2.982" (75.7mm)	3.500" (88.9mm)	0.259" (6.6mm)
→ I DE 450	11	4" (101.6mm)	3.682" (93.5mm)	4.500" (114.3mm)	0.409" (10.4mm)
I DE 450	13.5	4" (101.6mm)	3.834" (97.4mm)	4.500" (114.3mm)	0.333" (8.46mm)
ASTM F2160* (ASTM D2447) - O.D. Controlled Bore Duct (Schedule 40 and 80)					
I DE 237	Sch. 80	2" (50.8mm)	1.939" (49.3mm)	2.375" (60.3mm)	0.218" (5.5mm)
I DE 237	Sch. 40	2" (50.8mm)	2.067" (52.5mm)	2.375" (60.3mm)	0.154" (3.9mm)
I DE 350	Sch. 80	3" (76.2mm)	2.900" (73.7mm)	3.500" (88.9mm)	0.300" (7.6mm)
I DE 350	Sch. 40	3" (76.2mm)	3.068" (77.9mm)	3.500" (88.9mm)	0.216" (5.5mm)
I DE 450	Sch. 80	4" (101.6mm)	3.826" (97.2mm)	4.500" (114.3mm)	0.337" (8.6mm)
I DE 450	Sch. 40	4" (101.6mm)	4.026" (102.3mm)	4.500" (114.3mm)	0.237" (6.0mm)
ASTM D2239 - I.D. Controlled Bore Duct - SDR					
I DE 307	11.5	3" (76.2mm)	3.068" (77.9mm)	3.602" (77.8mm)	0.267" (6.8mm)
I DE 403	11.5	4" (101.6mm)	4.026" (102.3mm)	4.726" (120.0mm)	0.350" (8.9mm)

*ASTM F2160 REPLACES ASTM D3035 AND D2447 FOR INNERDUCT PRODUCTS

BORE DUCT PART NUMBER SYSTEM - One Selection from Each Column (in order from left to right)

Creates a complete Product Part Number

EXAMPLE - 4", on a 114" Reel, Empty, Black, SDR 11 = IDE 450 35 01 01 14

PRODUCT	SIZE	REEL	PULL LINE	COLOR	SDR (ASTM)
I DE = smoothwall	206 = ASTM D2239 - 2"	39 = 72" steel	01 = empty	01 = blk	02 = 11.5 (2239)
	237 = ASTM F2160 - 2"	32 = 84" steel	11 = 1250# kevlar/polyester	02 = org	03 = 9 (2239)
	307 = ASTM D2239 - 3"	33 = 96"x 44" steel	12 = 1800# kevlar/polyester	03 = grn	04 = 7 (2239)
	350 = ASTM F2160 - 3"	34 = 96"x 55" steel	13 = 1000# polyester	04 = red	05 = 15 (2239)
	403 = ASTM D2239 - 4"	35 = 114" X 44" steel	14 = 1250# polyester	06 = blue	12 = 15.5 (2160)
	450 = ASTM F2160 - 4"		15 = 1800# polyester		13 = 13.5 (2160)
					14 = 11 (2160)
					16 = 9 (2160)
					18 = Schd. 40 (2160)
					19 = Schd. 80 (2160)

2" SDR 11 - "ORANGE" = SIGNAL INTERCONNECT
4" SDR 11 - "GRAY" = SIGNALS

For product Quantity per Reel refer to Endot Reel Capacity Charts.

Endot Industries, Inc. produces a complete line of smoothwall and ribbed duct from 1/2" through 4", in various ASTM specifications and SDR's. Please give us a call with your specific requirements and we will promptly provide a quotation.



CORPORATE HEADQUARTERS

60 Green Pond Road
Rockaway, NJ 07866
800-443-6368 • FAX 973-625-4087

ENDOT INDUSTRIES, INC.

www.endot.com • e-mail: info@endot.com

PLANT LOCATIONS

South Point, OH
Greeneville, TN
Pryor Creek, OK

1/05 1.5M

WL135 - SMOOTHWALL CONDUIT SIZES

→ 2" SDR 11 - ORANGE - INTERCONNECT

→ 4" SDR 11 - GRAY - TRAFFIC SIGNAL



SDR Product Dimensions									
PIPE SIZE ^A	AVG OD, in	SDR ^B		9	11	13.5	15.5*	17*	
3/4"	1.050	Min wall, in	Avg ID ^C , in	0.117	0.095				
		Weight, lb/ft		0.803	0.848				
1"	1.315	Min wall, in	Avg ID ^C , in	0.146	0.124	0.097			
		Weight, lb/ft		1.005	1.062	1.208			
1 1/4"	1.660	Min wall, in	Avg ID ^C , in	0.232	0.195	0.161			
		Weight, lb/ft		0.184	0.151	0.123			
1 1/2"	1.900	Min wall, in	Avg ID ^C , in	0.264	0.211	0.173			
		Weight, lb/ft		0.211	0.173	0.141			
2"	2.375	Min wall, in	Avg ID ^C , in	0.319	0.261	0.213			
		Weight, lb/ft		0.261	0.213	0.185			
2 1/2"	2.875	Min wall, in	Avg ID ^C , in	0.389	0.318	0.259			
		Weight, lb/ft		0.318	0.259	0.226			
3"	3.500	Min wall, in	Avg ID ^C , in	0.466	0.376	0.303			
		Weight, lb/ft		0.376	0.303	0.265			
4"	4.500	Min wall, in	Avg ID ^C , in	0.500	0.409	0.333			
		Weight, lb/ft		0.409	0.333	0.290			
5"	5.563	Min wall, in	Avg ID ^C , in	0.618	0.506	0.412			
		Weight, lb/ft		0.506	0.412	0.359			
6"	6.625	Min wall, in	Avg ID ^C , in	0.736	0.602	0.491			
		Weight, lb/ft		0.602	0.491	0.427			
8"	8.625	Min wall, in	Avg ID ^C , in	0.958	0.784	0.639			
		Weight, lb/ft		0.784	0.639	0.556			
10"	10.750	Min wall, in	Avg ID ^C , in	1.194	0.977	0.796			
		Weight, lb/ft		0.977	0.796	0.694			
12"	12.750	Min wall, in	Avg ID ^C , in	1.417	1.159	0.944			
		Weight, lb/ft		1.159	0.944	0.823			
		Min wall, in	Avg ID ^C , in	15.515	12.983	10.774			
		Weight, lb/ft		12.983	10.774	9.490			
		Min wall, in	Avg ID ^C , in	21.837	18.267	15.155			
		Weight, lb/ft		18.267	15.155	13.348			

Schedule Product Dimensions									
Pipe size ^A	Avg OD, in	Schedule ^B		40	80				
3/4"	1.05	Min wall, in	Avg ID ^C , in	0.113					
		Weight, lb/ft		0.81					
1"	1.315	Min wall, in	Avg ID ^C , in	0.133	0.179				
		Weight, lb/ft		1.033	0.936				
1 1/4"	1.66	Min wall, in	Avg ID ^C , in	0.14	0.191				
		Weight, lb/ft		1.363	1.255				
1 1/2"	1.9	Min wall, in	Avg ID ^C , in	0.145	0.200				
		Weight, lb/ft		1.593	1.476				
2"	2.375	Min wall, in	Avg ID ^C , in	0.154	0.218				
		Weight, lb/ft		2.049	1.913				
3"	3.5	Min wall, in	Avg ID ^C , in	0.216	0.300				
		Weight, lb/ft		3.042	2.864				
4"	4.5	Min wall, in	Avg ID ^C , in	0.237	0.337				
		Weight, lb/ft		3.998	3.786				
6"	6.625	Min wall, in	Avg ID ^C , in	1.374	1.908				
		Weight, lb/ft		1.374	1.908				
		Min wall, in	Avg ID ^C , in	0.432	0.5709				
		Weight, lb/ft		5.709	3.638				

* Products greater than 6" in diameter, Schedule 40 products greater than 3" in diameter, and all SDR 15.5 and SDR 17 products are available in stick lengths only. WL offers these products in stick lengths to ensure product quality and limit pipe ovality.

WL134 - SMOOTHWALL CONDUIT PRODUCT OVERVIEW

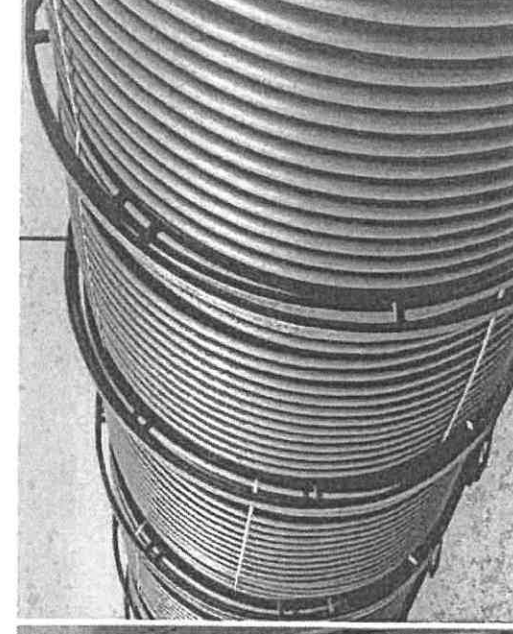
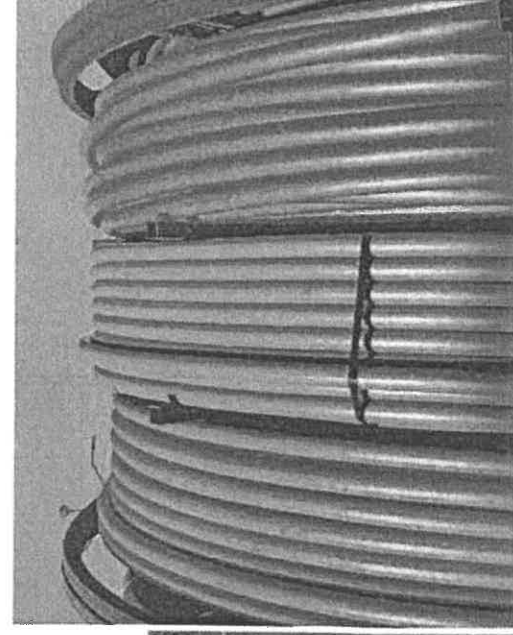
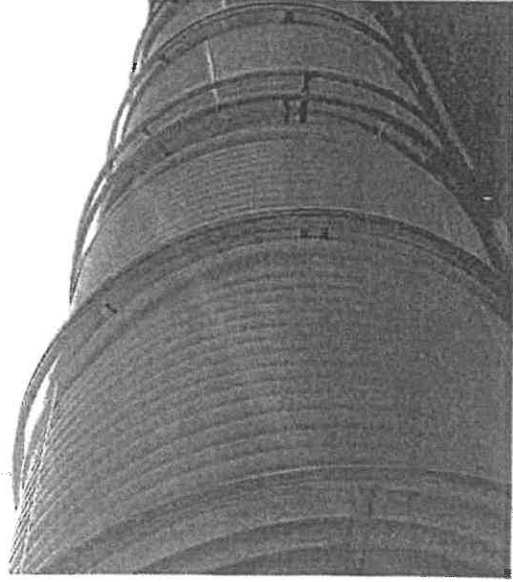


Product Features

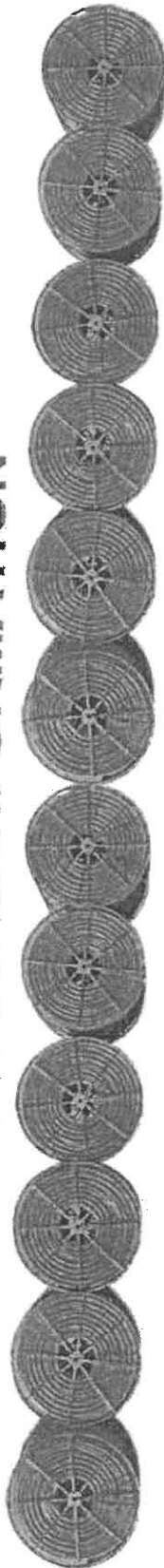
- Manufactured with highest quality HDPE materials
 - Classified to ASTM D3350
 - Meet or exceed cell class PE334480C or E
 - No recycled or filler materials
- Ideal protective pathway for Power & Communication installations
 - Flexible, Durable, and Impact resistant
 - Non-corrosive and resistant to chemicals
 - Protects against rock and root impingement
 - Ductile at low temperatures
- Long continuous lengths on reels for ease of installation

Product Options

- Diameters ranging from 3/4" to 12"
- Variety of wall dimensions (SDR, SDR, SCH40 & SCH80)
- Custom colors, stripes, lengths, and print-lines
- Pre-installed pull tape available
- Segmented reels available
- Manufactured in accordance with industry standards
 - ASTM F2160
 - NEMA TC-7
 - UL 651A Listed



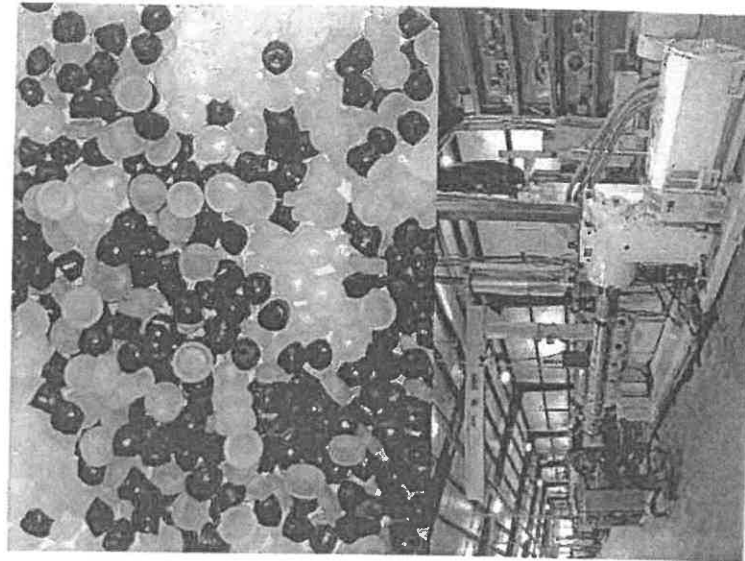
WL134 - RAW MATERIAL INFORMATION



Typical Physical Properties for WL Plastics HDPE Conduit Pipe Compound

- WL Plastics conduit pipe is manufactured from high density polyethylene compounds that meet or exceed ASTM D 3350 requirements and Cell Classification PE435540A.

Physical Property	Test Method	Typical Value
Cell classification	ASTM D3350	PE435540A
Melt Index (190/2.16)	ASTM D1238	0.3 g/10 min
High Load Melt Index(190/21.6)	ASTM D1238	6-26 g/10 min
Density natural resin (73°F/23°C)	ASTM 792/D1505	0.941-0.949 g/cm ³
Tensile strength at yield (2 in/min; 73°F/23°C)	ASTM D638	3500 – 4000 psi
Tensile elongation (2 in/min; 73°F/23°C)	ASTM D638	>600%
Flexural modulus (73°F/23°C)	ASTM D790	>130,000 psi
SCR, Condition B (100% Igepal)	ASTM D1693	> 1000 h
Thermal stability	ASTM D3350	>428°F (> 220°C)
Low Temperature Brittleness	ASTM D746	<-103°F (<-75°C)
Thermal expansion coefficient	ASTM D696	9 x 10 ⁻⁵ in/in/°F
Tensile Impact	ASTM D1822	277 ft-lb/in





HDPE COUPLING

REGIONS

LOG IN 1.800.847.7661



[BRANDS](#) | [PRODUCTS](#) | [MARKETS](#) | [COMPANY](#) | [LEARNING CENTER](#)

Pull Tape

Couplers

Armor-Guard

Push-Lock

Shur-Lock™ II

Split-Lock™ II

Lubricants

Tools & Accessories

Sealants

SHOPPING CART

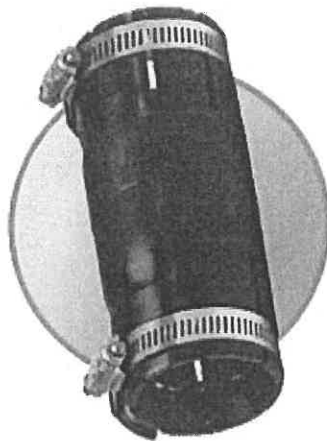
[View your shopping cart.](#)

→ 2" Shur-Lock II Coupler

SKU: 20000123

Features and Benefits

- One person installation
- Re-enterable, no special tools required
- Air and water tight
- No I.D. reduction
- Excellent pull out strength on hdpe, PVC, FRP and steel
- No-Stop version available for confined areas or repairs (* - NS available)
- Not recommended for plow chute



ETL Listed to UL-514B standards* available coupler for under-ground electrical applications available. * ETL Listed for underground applications, HDPE conduit, and wet locations.

GENERAL INFORMATION

The Shur-Lock™ II Coupling System is a patented* design for high-integrity joining of HDPE and PVC conduits. The body of the Shur-Lock™ II is manufactured from durable high-density polyethylene. The external band clamps and locking rings are made from corrosion-resistant stainless steel. The o-ring joints have been air pressure tested to hold over 130 psi and the water sealing capability withstands head pressures of greater than 20 feet. The Shur-Lock™ II is ETL Listed to UL-514B standards making it ideally suited for C&I electrical applications utilizing HDPE ducts or conduits. Beveling tools are also available for preparing the ends of the duct to facilitate the proper installation of the coupler.



HDPE COUPLING

REGIONS

LOG IN 1.800.847.7661



[BRANDS](#) | [PRODUCTS](#) | [MARKETS](#) | [COMPANY](#) | [LEARNING CENTER](#)

→ 4" Shur-Lock II Coupler

Couplers SKU: 20000245

Armor-Guard

Push-Lock

Shur-Lock™ II

Split-Lock™ II

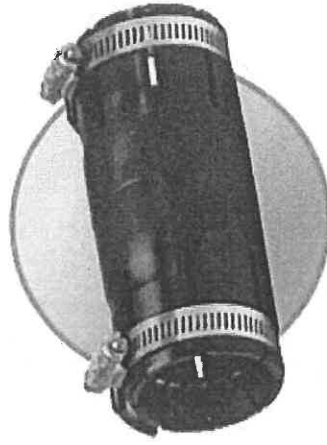
Lubricants

Tools & Accessories

Sealants

Features and Benefits

- One person installation
- Re-enterable, no special tools required
- Air and water tight
- No I.D. reduction
- Excellent pull out strength on hdpe, PVC, FRP and steel
- No-Stop version available for confined areas or repairs (* - NS available)
- Not recommended for plow chute



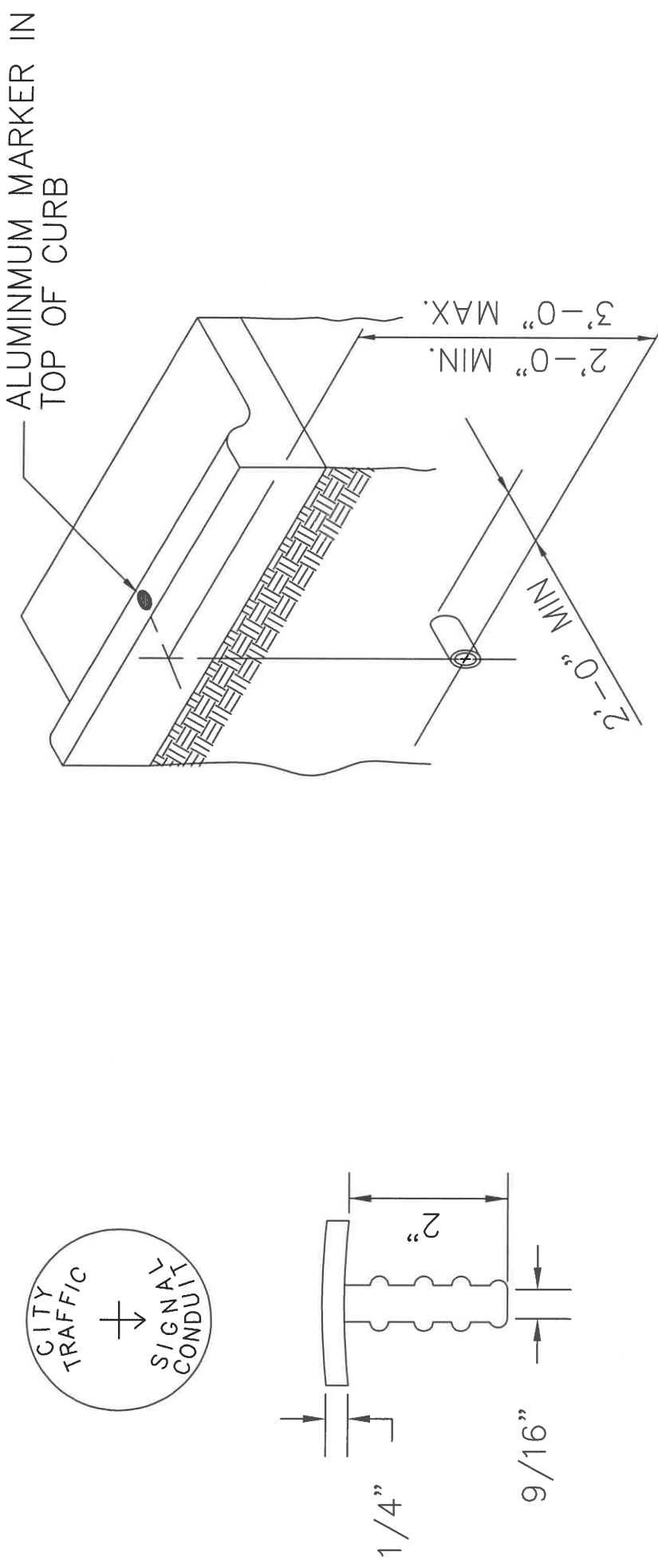
ETL Listed to UL-514B standards* available coupler for under-ground electrical applications available. * *ETL Listed for underground applications, HDPE conduit, and wet locations.*

GENERAL INFORMATION

The Shur-Lock™ II Coupling System is a patented* design for high-integrity joining of HDPE and PVC conduits. The body of the Shur-Lock™ II is manufactured from durable high-density polyethylene. The external band clamps and locking rings are made from corrosion-resistant stainless steel. The o-ring joints have been air pressure tested to hold over 130 psi and the water sealing capability withstands head pressures of greater than 20 feet. The Shur-Lock™ II is ETL Listed to UL-514B standards making it ideally suited for C&I electrical applications utilizing HDPE ducts or conduits. Beveling tools are also available for preparing the ends of the duct to facilitate the proper installation of the coupler.

SHOPPING CART

[View your shopping cart.](#)



CONDUIT SHALL BE PLACED 2'-0" TO 3'-0" BELOW THE TOP OF CURB ELEVATION AND SHALL EXTEND 2'-0" MINIMUM BEYOND THE BACK OF CURB. CONDUIT SHALL BE INSTALLED TO DRAIN, AND ALL ENDS SHALL BE THREADED AND CAPPED. AN ALUMINUM MARKER SHALL BE PLACED IN THE TOP OF THE CURB DIRECTLY OVER THE CONDUIT. ALUMINUM MARKERS WILL BE FURNISHED BY THE CONTRACTOR.

CONDUIT MARKING DETAIL

NON-DETECTABLE MARKING TAPE

4.0 Mil Virgin Pigmented Polyethylene Film • Rated for Direct Burial for Marking Underground Utility Lines
APWA Color-Coded for Representation and Visibility of Buried Utility Line

DESCRIPTION

PRO-LINE® Non-Detectable Marking Tape is used primarily for marking and underground utility structures. **PRO-LINE®** Non-Detectable Marking Tape serves three simple functions: Locate, Identify, and Protect. Non-Detectable Tape is usually the last category of a utility structures design and installation...maintenance and immediate location and identification. **PRO-LINE®** Non-Detectable Marking Tape is APWA Color-Coded to identify the type of utility that is buried below. Non-Detectable Marking Tape is also printed to identify what type of utility is buried below.



"Helping to Protect Underground Investments and the General Public Since 1992!"

STANDARDS & REFERENCES

PRO-LINE® Detectable Marking Tape meets or exceeds all applicable ASTM specifications.

- ASTM D2103-05 (Standard Specification for Polyethylene Film and Sheeting)
- ASTM D882-02 (Standard Test Method for Tensile Properties of Thin Plastic Sheeting)
- ASTM D882-75B (Standard Test Method for Tensile Properties of Thin Plastic Sheeting for Elongation)
- ASTM D2578 (Standard Test Method for Wetting Tension of Polyethylene and Polypropylene Films)

CONSTRUCTION

- **PRO-LINE®** Non-Detectable Marking Tape consists of a minimum 4.0 mil overall thickness, manufactured with virgin polyethylene with color pigments added at point of film extrusion to identify underground utility structures based on the APWA Color-Code .
- **PRO-LINE®** Non-Detectable Marking Tape is printed with big, bold, black lettering to identify what type of utility line is buried below.

TEST DATA	METHOD	VALUE
Thickness	ASTM D2103-05	4.0 mil
Tensile Strength	ASTM D882-02	2,750 psi
Elongation	ASTM D882-75B	500%
Film Pigmentation	APWA Color-Coded	APWA Color-Coded
Message Repeat	Mfg. Specs.	Varies by Legend
Printed Inks	Mfg. Specs.	Flexo 9605
Printability	ASTM D2578	45 Dynes
**THIS SPEC COVERS WIDTHS OF: 2", 3", 4", 6", 12" and 24" Non-Detectable Marking Tape		

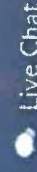
CAUTION FIBER OPTIC LINE BURIED BELOW - BLACK LETTERS ON ORANGE



SEARCH



800-243-6624



Live Chat

\$499.00 until
Free Shipping

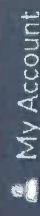


Shop Our Products

Quick Order

Contact Us

Resource Center



My Account

Home > Tapes > Underground Utility Marking Tape > Underground Warning Tape - Caution Buried Fiber Optic Cable Below

Underground Warning Tape - Caution Buried Fiber Optic Cable Below

Alert excavators of buried utility lines with Underground
Warning Tape

Style No. Select options below

Starting at \$72.00 Roll of 1000 Feet

Dimensions

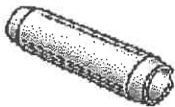
Choose an Option...



[View All Available Options](#)



ERICO - GROUND RODS

				
Pointed Ground Rod	Sectional Ground Rod	Compression Coupler for Pointed Rods	Threaded Coupler for Sectional Rods	Drive Stud for Sectional Rods

Pointed Copperbonded Ground Rods

Part No.	Plating Thickness (mil)	Diameter (in)	Length (ft)	Standard Package	Weight per 100
613852	5	3/8	5	5	160
613862	5	3/8	6	5	198
613880	10	3/8	8	5	270
611255	5	1/2	5	5	296
611265	5	1/2	6	5	310
611285	5	1/2	8	5	482
611380*	10	1/2	8	5	553
611205	5	1/2	10	5	557
611300*	10	1/2	10	5	738
615850	10	5/8	5	5	420
615860	10	5/8	6	5	509
615880*	10	5/8	8	5	680
615883*	13-REA	5/8	8	5	680
615800*	10	5/8	10	5	844
615803*	13-REA	5/8	10	5	844
615812*	10	5/8	12	5	1000
615815*	10	5/8	15	5	1275
613460	10	3/4	6	5	750
613480*	10	3/4	8	5	1000
613483*	13	3/4	8	5	1000
613400*	10	3/4	10	5	1240
613412*	10	3/4	12	5	1480
613415*	10	3/4	15	5	1850
614400*	10	1	10	5	2204

* UL Listed

Sectional Copperbonded Ground Rods

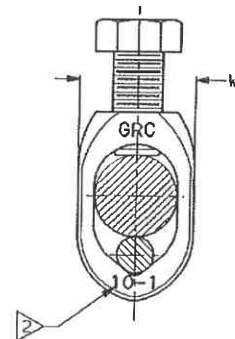
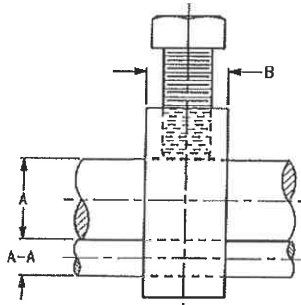
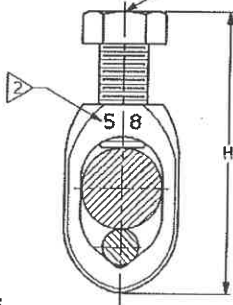
Plating Thickness	Diameter	Length	Standard	Weight
-------------------	----------	--------	----------	--------

3/4" GROUND ROD CLAMP

ACCOMMODATES - CU CONDUCTORS											
ROD 'A'			CABLE 'A-A'		CABLE 'A-A'		CAT. NO.	B	H	W	RECOMMENDED TORQUE
NOMINAL O.D.	ACTUAL O.D.		AWG		METRIC WIRE SIZE						
	(IN)	(MM)									
1/2	.500	[13]	10 SOL (.102) - 2 STR (.292)		6mm² STR [3.21] - 35mm² STR [7.62]	5	GRC12	.63 [16]	2.00 [51]	.89 [23]	240 27.0
5/8	.625	[16]	10 SOL (.102) - 1 STR (.332)		6mm² STR [3.21] - 35mm² STR [7.62]	5	GRC58	.63 [16]	2.18 [55]	.95 [24]	
3/4	.750	[19]	8 SOL (.128) - 1/0 STR (.373)		10mm² SOL [3.58] - 35mm² STR [7.62]		GRC34	.65 [17]	2.47 [63]	1.09 [28]	



3/8-16 SILICON BRONZE
HEX HD BOLT



NOTES:

- MATERIAL: BODY CAST FROM HIGH STRENGTH COPPER ALLOY.
- TYPICAL LETTERING
- UL 467 LISTED, FILE NO. E9999.
- SUITABLE FOR DIRECT BURIAL IN EARTH OR CONCRETE.
- REA ACCEPTED
- DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS ROUNDED OFF TO THE NEAREST MILLIMETER, UNLESS OTHERWISE NOTED, AND ARE FOR REFERENCE ONLY.

GROUNDING ROD CONNECTOR			
CAT NO: GRC-- (TABLE)	SCALE	N/A	
DRAWN: TJH	6/17/75	CHECKED: TJH	6/17/75
CSGR APPL: ESK	6/18/75	WFO APPL: N/A	
H.A. APPL: N/A		WFO APPL: N/A	
END FILE: SA76868-SHT01		PH REF: N/A	
U.S. ELECTRICAL DIVISION		PROJECT: DO 36695	
HANKNESTER, NH 03108		DRAWING NO. SA76868	
		SHEET 1 of 1	

REV.	DATE	DESCRIPTION	BY	C.K'D.
7	6/21/94	CHANGED PRINT NAME TO GRC (TABLE) ON REV 5 PER GEN 1050. ADDED METRIC DIM'S PER GEN 1050.	RDP	DF/KH
6	7/14/83	REMOVED TO C&D, ADDED DIM'S 1 & 2. 2. DIM'S 4 & 5. 2.00, 2.18, & 2.47. 1/0 DIM'S WERE .85, .95, & 1.09. (99.52065)	JLM	MSP

REV. 11/1991