# Cable-in-Conduit (CIC) AL 600V THHN SCH 40



Image not to scale. See Table 1 for dimensions.

#### **CONSTRUCTION:**

- Conductors: Aluminum AlumaFlex® SIMpull THHN/THWN-2® per SPEC 10012
- Ground: Copper SIMpull THHN/THWN-2® per SPEC 10000
- Conduit: High-Density Polyethylene (HDPE)

#### **APPLICATIONS AND FEATURES:**

Southwire's SIMpull® CIC has been utilized by end users in various applications, including the US Department of Transportation (DOT), the US Department of Energy (DOE), commercial constructions, EV infrastructure expansions, Utility grid-hardening efforts, airports, mass transit, renewables, petrochemical, agriculture, and data centers. Manufactured by continuously extruding HDPE loosely around the cable assembly with no adhesion between the conduit and the cable, thus leaving the cables free in the conduit. Lubrication is applied to the cable, allowing for cables to be pulled out and replaced if necessary.

#### SPECIFICATIONS:

- ASTM D3350 Standard Specification for Polyethylene Plastics Pipe and Fittings Materials
- ASTM D3485 Standard Specification for Coilable High Density Polyethylene (HDPE) Cable in Conduit (CIC)
- ASTM F2160 Standard Specification for Solid Wall High Density Polyethylene (HDPE) Conduit Based on Controlled Outside Diameter (OD)
- UL 1990 Standard for Nonmetallic Underground Conduit with Conductors
- CSA CSA marking is available upon request
- Buy American: Compliant with Buy American Requirements, found in 49 U.S.C. § 5323(j); specify "Made in the USA Only!" when ordering to ensure your project receives American made products.
- NEMA TC-7 Smooth-Wall Coilable Electrical Polyethylene Conduit

#### SAMPLE PRINT LEGEND:

{SQFTG} FEET (LOGO) SOUTHWIRE CABLE IN CONDUIT (UL) HDPE X" SCH40 NEMA TC 7 / ASTM F2160 (NESC) {MMM/DD/ YYYY} {MACH/SHFT/OP}







### **Table 1 – Physical and Electrical Data**

Stock Number	Description	Cable Color	Duct Nominal Size	Duct Nominal Outside Dia.	Duct Min. Wall Thickness	Duct Nominal Inside Dia.	Duct Min. Bending Radius	Duct Max. Pull Tension	Duct Color	Approx. Cable and Duct Weight
			inch	inch	inch	inch	inch	lb		lb/1000ft
634447	4 x #2 AL THHN 1x #8 CU THHN GRD	BK, RD, BE, WE	1.25	1.660	0.140	1.360	18	1420	Black	731
634448	4 x 500KCMIL AL THHN	BN, OE, YW, GY	3.00	3.500	0.216	3.042	39	4740	BK/3-RD Stripes	331

All dimensions are nominal and subject to normal manufacturing tolerances

## **Cable Specification**

Stock Number	Cable Specification			
634447 / 634448	SPEC 10012			

### **Cell Classification for HDPE Conduit**

Property	Test Method	Value		
Density	D4883	0.953 g/cc		
Melt Index	D1238	0.25 g/10 min		
Flexural Modulus	D790	168,000 psi		
Tensile Strength	D638	3900 yield @ 2 in/min		
SP-NCLS ESCR	F2136	>1000 hrs		
Hydrostatic Design Basis	D2837	N/A		

• (PE436580C-BK), (PE436580E-Colors)

CIC Labor Saving Calculator









<sup>♦</sup> Cable marked with this symbol is a standard stock item