

## 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. May be installed directly buried or encased in concrete as permitted by The National Electrical Code® Article 353. For above ground applications, HDPE conduit must be encased in a minimum of 2 inches of concrete.

### 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/SHT/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       | 2X4 (BK/RD/BE/WE) 3E AL THHN 8 (GN) CU THHN 1-1/4" SCH40 BLACK HDPE CIC | BK, RD, BE, WE | 1.25              | 1.660                     | 0.140                    | 1.360                    | 18                       | 1420                   | BK              | 731                           |
| 634448       | 500X4 (BN/OE/YW/GY) 3E AL THHN 3" SCH40 BLACK HDPE CIC                  | 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 marked with this symbol is a standard stock item

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

### 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

