Power & Control/Signal Type ACIC CSA

Power & Control/signal, Copper Conductors, 12 & 10 AWG - Power, 16 AWG - Jacketed Control/signal, 600 Volts / -25°c Min, 90°C Max, T90 PVC / Nylon Construction

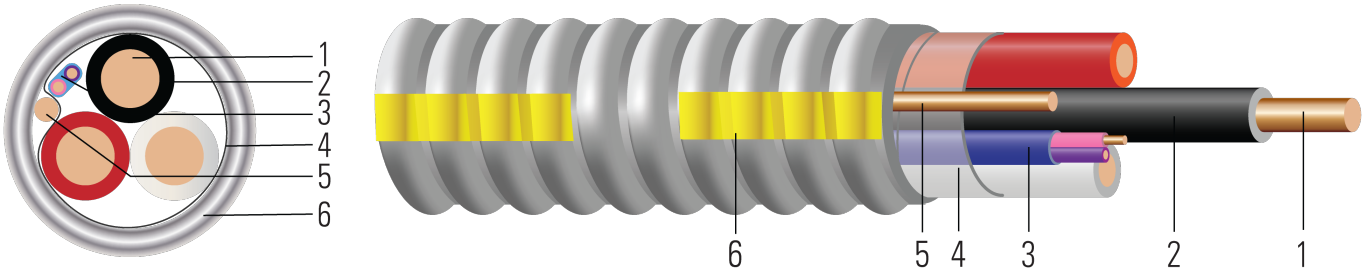

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid copper per ASTM B3
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type T90 Nylon
3. **Signal:** 16 AWG Copper Insulated Singles Pink, Purple. Overall light blue jacket over the signal cables
4. **Binder:** Polypropylene tape
5. **Bond Wire:** Solid copper
6. **Armor:** Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

Southwire's new ACIC-PCS DUO™ Cable is ideal for use with LED or fluorescent dimming controls in multi-residential and SMART buildings. ACIC-PCS DUO™ Cable combines power conductors along with Control/Signal applications all under one armor, saving you time and money. ACIC-PCS DUO™ cables are also designed for exposed and concealed wiring such as ventilated cable trays and other dry locations, where the maximum conductor temperature will not exceed 90°C. Minimum recommended installation temperature: -10°C (with suitable handling procedures).

- Reduces installation costs when compared to pulling separate power and control/signal/data cables
- All cables under one armor decreases the likelihood of damage - eliminating costly callbacks for troubleshooting and repair
- Yellow Stripe Identification - for easy identification when installed with other cables
- CSA 90°C Max. Insulation Temperature rating
- CSA -25°C Cold Temperature Rating
- CSA -10°C Minimum recommended cold Installation Temperature
- Class - C572101 - Control Cables
- CSA Certification File: LL90458 - Certified as ACIC for Control and Instrumentation

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- CSA C22.2 No. 239 Control and instrumentation cables

SAMPLE PRINT LEGEND:

SOUTHWIRE {CSA} LL90458 X/C AWG XX CU PVC/N AND AWG XX CU X/C PVC/N CONTROL -25°C FT1, FT4 SUN RES 90°C DRY 75°C WET 600V ACIC --- SOUTHWIRE ACIC-PCS DUO{TM} ---

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Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Strand	Insul. Thickness	Insulation Color	Ground	Approx. OD	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C†
	AWG/ Kcmil		No.	mil		No. x AWG	inch	lb/ 1000ft	inch	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
649880◊	14	2	SOLID	35	BK,WE	1x14.0	0.603	147	2.4	2.631	3.265	0.058	25
643483◊	12	3	SOLID	35	BK,RD,WE	1x14.0	0.614	193	2.5	1.662	2.063	0.054	30
643481◊	12	2	SOLID	35	BK,WE	1x14.0	0.622	166	2.5	1.662	2.063	0.054	30
643479◊	10	2	SOLID	35	BK,WE	1x12.0	0.602	198	2.4	1.04	1.291	0.05	40

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Ampacities based upon 2021 Canadian Electrical Code, Part I (CEC) Table 2 and do not take into account the overcurrent protection limitations in CEC Rule 14-104(2) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding). Also, see CEC Rules 4-004 and 4-006 for additional requirements."
* Inductive impedance is based on non-ferrous conduit with one diameter spacing.
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.

Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Cond. Number	Strand	Insul. Thickness	Insulation Color	Ground	Approx. OD	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C
	AWG/ Kcmil		No.	mm		No. x AWG	mm	kg/km	mm	Ω/km	Ω/km	Ω/km	Amp
649880◊	14	2	SOLID	0.89	BK,WE	1x14.0	15.32	219	60.96	8.63	10.71	0.1903	25
643483◊	12	3	SOLID	0.89	BK,RD,WE	1x14.0	15.60	287	63.50	5.45	6.77	0.1772	30
643481◊	12	2	SOLID	0.89	BK,WE	1x14.0	15.80	247	63.50	5.45	6.77	0.1772	30
643479◊	10	2	SOLID	0.89	BK,WE	1x12.0	15.29	295	60.96	3.41	4.24	0.1640	40

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Ampacities based upon 2021 Canadian Electrical Code, Part I (CEC) Table 2 and do not take into account the overcurrent protection limitations in CEC Rule 14-104(2) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding). Also, see CEC Rules 4-004 and 4-006 for additional requirements."
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