



## Southwire CL4SS Class 4 Non-Shielded Outdoor / General Purpose

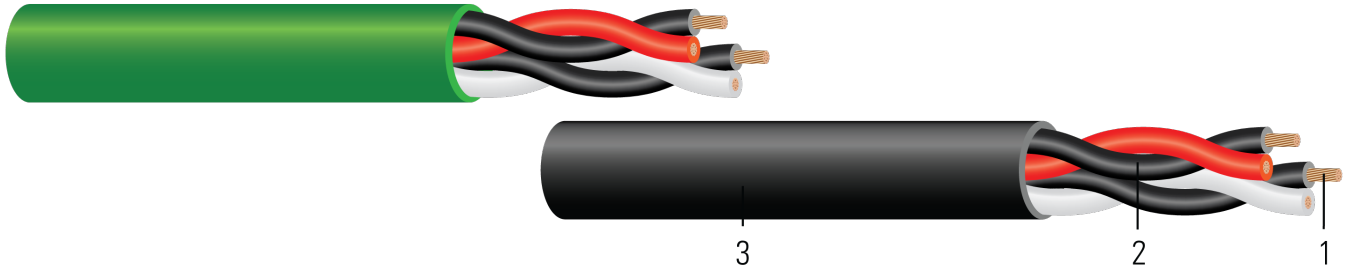


Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Class B or C stranded soft-drawn bare copper per ASTM B3 and B8
2. **Insulation:** Twisted pair(s) with premium grade, lead-free, flame-retardant, Polyvinyl Chloride (PVC). See Table 4 for pair(s) numbers and colors.
3. **Jacket:** Lead-free, flame-retardant, LS, Polyvinyl Chloride (PVC). See Table 5 for available jacket colors.

### APPLICATIONS AND FEATURES:

Intended for use in Fault Managed Power Systems (FMPS), remote powering, indoor Class 4 circuits per 2023 National Electrical Code (NEC) article 726. For use, primarily, in Agriculture, Intelligent Buildings, and Wireless Densification. The power source (transmitter) for Class 4 circuits shall be supplied from a power source that has a voltage output of 450 volts (peak or DC) or less. The CL4Z cables are considered for outdoor use only and are not to be attached to or used within a building structure. Type CL4Z cables comply with the applicable requirements for CL4. The CMG cables can be installed in buildings according to NEC article 722.135 and table 722.135(B).

Ratings:

Normal operating temperature: 90°C

Temperature Range: -40°C to 90°C

### SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 1400-2 Fault-Managed Power Systems - Part 2: Requirements for Cables
- UL 444 Communications Cables

### SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE{R} CL4SS P/N XX AWG X PAIR E537761 (UL) CL4Z- FMP (X.XA) 90C -40C OR CMG C(UL)US 90C -- FT4/IEEE 1202 MADE IN USA ROHS-2 COMPLIANT





**Table 1 – Weights and Measurements**

Cond. Size	Number of Pairs	Diameter Over Conductor	Insul. Thickness	Jacket Thickness	Approx. OD	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C
AWG/ Kcmil	pair	inch	mil	mil	inch	lb/1000ft	inch	Ω/1000ft
18	2	0.045	17	25	0.349	26	1.2	6.669
18	4	0.045	17	25	0.376	50	1.4	6.669
18	8	0.045	17	37	0.417	88	2.0	6.669
16	2	0.056	17	25	0.376	70	1.4	4.181
16	4	0.056	17	32	0.403	113	1.7	4.181
16	8	0.056	17	37	0.481	125	2.3	4.181
14	2	0.070	22	30	0.467	112	1.6	2.631
14	4	0.070	22	37	0.543	183	2.0	2.631
14	8	0.070	22	37	0.780	370	2.6	2.631

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

**Table 2 – Weights and Measurements (Metric)**

Cond. Size	Number of Pairs	Diameter Over Conductor	Insul. Thickness	Jacket Thickness	Approx. OD	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C
AWG/ Kcmil	pair	inch	mm	mm	mm	lb/km	mm	Ω/km
18	2	0.045	0.43	0.64	8.86	39	30.48	21.88
18	4	0.045	0.43	0.64	9.55	74	35.56	21.88
18	8	0.045	0.43	0.94	10.59	131	50.80	21.88
16	2	0.056	0.43	0.64	9.55	104	35.56	13.72
16	4	0.056	0.43	0.81	10.24	168	43.18	13.72
16	8	0.056	0.43	0.94	12.22	186	58.42	13.72
14	2	0.070	0.56	0.76	11.86	167	40.64	8.63
14	4	0.070	0.56	0.94	13.79	272	50.80	8.63
14	8	0.070	0.56	0.94	19.81	551	66.04	8.63

**Table 3 - Typical Electrical Capacitance for Each Pair**

Size	Capacitance
AWG	pF/ft
18	<30
16	<30
14	<30





**Table 4 - Stock Code by Jacket Color**

Conductor Size AWG	Number of Pairs num	Jacket Color		
		Green	Black	White
18	2	CL4Z182N0605	CL4Z182N0608	CL4Z182N0601
18	4	CL4Z184N0605	CL4Z184N0608	CL4Z184N0601
18	8	CL4Z188N0605	CL4Z188N0608	CL4Z188N0601
16	2	CL4Z162N0605	CL4Z162N0608	CL4Z162N0601
16	4	CL4Z164N0605	CL4Z164N0608	CL4Z164N0601
16	8	CL4Z168N0605	CL4Z168N0608	CL4Z168N0601
14	2	CL4Z142N0605	CL4Z142N0608	CL4Z142N0601
14	4	CL4Z144N0605	CL4Z144N0608	CL4Z144N0601
14	8	CL4Z148N0605	CL4Z148N0608	CL4Z148N0601

**Table 5 - Pair Color Chart - Numbers & Colors**

2 Pair	4 Pair	8 Pair
1 Black & Red	1 Black & Red	1 Black & Red
2 Black & White	2 Black & White	2 Black & White
	3 Black & Green	3 Black & Green
	4 Black & Blue	4 Black & Blue
		5 Black & Yellow
		6 Black & Brown
		7 Black & Orange
		8 Black & White

