



Product: [6454](#)

IA, 1C #22, Str, Foam HDPE, 300 V, PLTC 60C, CM 60C, SUN RES, CSA CM, CSA FT1

Product Description

IA, 1 Conductor 22 AWG (7/.0096) TC - Tinned Copper, Foam HDPE Insulation, Overall Tinned Copper Shield, Black PVC Outer Jacket, PLTC 60C, CM 60C, SUN RES, CSA CM, CSA FT1 cm, FT1 UL FT1; CSA FT1

Technical Specifications

Product Overview

Suitable Applications:	Data, communication, audio, and low-level signal transmission; industrial networking, serial communication, control panels, automation equipment, and instrumentation systems.
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Comm	1	22 AWG	7x31	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Comm	HDPE - High-Density Polyethylene	0.033 in (0.84 mm)	0.095 in (2.4 mm)	Blue/White

Inner Shield

Element	Shield Type	Material	Coverage	Drainwire Type
Comm	Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC

Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	65%

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.042 in (1.1 mm)	0.300 in (7.62 mm)

Overall Cable Diameter (Nominal):	0.300 in (7.62 mm)
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Electrical Characteristics

Electricals

Element	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Max. Current
Comm	11 pF/ft (36 pF/m)	209 pF/ft (686 pF/m)	120 Ohm	2.7 A

Nom Outer Shield DCR:	52 Ohm/1000ft (170 Ohm/km)
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Voltage

UL Voltage Rating
300 V (CM, PLTC)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-20°C To +60°C

Bend Radius

Stationary Min.
3.0 in (76 mm)

Max. Pull Tension:	143 lbs (64.9 kg)
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Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL1685 FT1 Loading, FT1
NEC / UL Compliance:	Article 725, Article 800, CM, PLTC
CEC / C(UL) Compliance:	.
European Directive Compliance:	EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	ALPHA WIRE P/N 6454 E34972-48 3C22 SHIELDED (UL) CM OR PLTC SUN RES OR C(UL) CM --- FT1 CE ROHS
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History

Update and Revision:	Revision Number: 0.114 Revision Date: 08-29-2026
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Part Numbers

Variants

Item #	Color	Putup Type	Length
6454 BK005	Black	Reel	100 ft
6454 BK002	Black	Reel	500 ft
6454 BK001	Black	Reel	1,000 ft

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