Belden



Product: 21650

600V Type TC/CIC, (2) 8 AWG (7x16) BC+Grd, FR-XLPE/FR-PVC

Product Description

Two 8 AWG stranded (7x16) bare copper conductors plus ground wire, flame retardant cross-linked polyethylene insulation, flame retardant PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	CEC Power and Control Applications

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	2	8 AWG	7x16	BC - Bare Copper
Ground	1	8 AWG	7x20	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLP, XLPO, XLPE (Thermoset)	0.047 in (1.2 mm)	0.236 in (5.99 mm)	Black, White
Ground	XLP, XLPO, XLPE (Thermoset)		0.236 in (5.99 mm)	Yellow/Green

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.073 in (1.9 mm)	0.618 in (15.7 mm)	Yes

Overall Cable Diameter (Nominal):	0.618 in (15.7 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Max. Current
Conductor(s)	1.6 Ohm/1000ft (5.2 Ohm/km)	55 Amps per Conductor at 30ºC
Ground Wire		64 Amps per Conductor at 30ºC

Voltage

UL Voltage Rating	Voltage Rating
600 V	600 V (CSA TC)

Mechanical Characteristics

Temperature

UL Temperature	Operating
90°C Dry, 90°C Wet	Wet/Dry: -40°C to 90°C

Bend Radius

Stationary Min.	Installation Min.
2.472 in (62.79 mm)	3.09 in (78.5 mm)

Max. Pull Tension:	590 lbs (270 kg)
Bulk Cable Weight:	246 lbs/1000ft (366 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor/OutdoorDirect Burial, Indoor, Outdoor, Sunlight Resistance, UV Resistance
Flammability / Reaction to Fire:	UL 1685 UL Loading, FT4
NEC / UL Compliance:	Article 336, TC
AWM Compliance:	C22.2#230 Type TC, C22.2#239 Type CIC
CEC / C(UL) Compliance:	TC, CIC
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.48 Revision Date: 10-07-2026

© 2026 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.