



**Product:** [A02082](#)

TC VN/PVC, 2 C #8 Str BC, PVC-NYL Ins E2, Blk PVC Jkt, 600V TC 90C Dry/Wet SUN RES DIR BUR

## Product Description

UL Type TC (1277) PVC-Nylon/PVC, 2 Conductor 8AWG (Class B) Bare Copper, PVC-NYL Insulation E2 Color Code, Black PVC Outer Jacket, 600V TC 90C Dry/Wet SUN RES DIR BUR

## Technical Specifications

### Product Overview

Suitable Applications:	harsh environment digital and serial two-way communication, oil and gas extraction and refining sites, petrochemical, Profibus process automation or Foundation FieldBus process automation, extreme temperature environments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc.
------------------------	--

### Physical Characteristics (Overall)

#### Conductor

Element	AWG	Stranding	Material	Nominal Diameter	No. of Conductors
Conductor(s)	8	7x16.5	BC - Bare Copper	0.143 in	2

Conductor Count:	2
------------------	---

#### Insulation

Material	Nominal Diameter	Nominal Wall Thickness
PVC/Nylon - Polyvinyl Chloride + Nylon	0.218 in	0.038 in

#### Color Chart

Number	Color
1	Black
2	Red

#### Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.506 in	0.047 in

### Electrical Characteristics

#### Conductor DCR

<b>Nominal Conductor DCR</b>
0.64 Ohm/1000ft

#### Current

<b>Max. Recommended Current [A]</b>
55 Amps per Conductor at 30°C

#### Voltage

Description	UL Description	UL Voltage Rating	Voltage Rating [V]
Type TC	TC	600 V RMS (Type TC)	600 V RMS (Type TC)

### Temperature Range

UL Temp Rating:	90°C Dry, 90°C Wet
Operating Temperature Range:	-30°C To +90°C

Wet Temp Range:	-30°C To +90 °C
Dry Temp Range:	-30°C To +90 °C

## Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	195 lbs/1000ft
Max. Pull Tension:	266 lbs
Min Bend Radius (Overall):	5.0 in
Min. Bend Radius/Minor Axis:	2.02 in

## Standards

NEC/(UL) Compliance:	TC, THWN-2
----------------------	------------

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes

## Suitability

Suitability - Burial:	Yes
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

## Flammability, LSOH, Toxicity Testing

UL Flammability:	UL 1685 UL Loading
IEEE Flammability:	1202
UL voltage rating:	600 V RMS (Type TC)

## Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

## Related Part Numbers

### Variants

Item #	Put-Up Type
A02082 0102500	Reel

## History

Update and Revision:	Revision Number: 0.57 Revision Date: 02-03-2025
----------------------	---

© 2025 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.