



Product: [A40142](#)

TC VN/PVC, 40 C #14 Str BC, PVC-NYL Ins E2, Blk PVC Jkt, 600V TC-ER
90C Dry/Wet SUN RES DIR BUR

Product Description

UL Type TC (1277) PVC-Nylon/PVC, 40 Conductor 14AWG (7x22) Bare Copper, PVC-NYL Insulation E2 Color Code, Black PVC Outer Jacket, 600V TC-ER 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.
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	14	7x22	BC - Bare Copper	40

Conductor Count:	40
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Insulation

Material	Nominal Diameter
PVC/Nylon - Polyvinyl Chloride + Nylon	0.112 in

Color Chart

Number	Color
1	Black
2	Red
3	Blue
4	Orange
5	Yellow
6	Brown
7	Red/Black
8	Blue/Black
9	Orange/Black
10	Yellow/Black
11	Brown/Black
12	Black/Red
13	Blue/Red
14	Orange/Red
15	Yellow/Red
16	Brown/Red
17	Black/Blue
18	Red/Blue
19	Orange/Blue
20	Yellow/Blue
21	Brown/Blue
22	Black/Orange
23	Red/Orange

24	Blue/Orange
25	Yellow/Orange
26	Brown/Yellow
27	Black/Yellow
28	Red/Yellow
29	Blue/Yellow
30	Orange/Yellow
31	Brown/Yellow
32	Black/Brown
33	Red/Brown
34	Blue/Brown
35	Orange/Brown
36	Yellow/Brown
37	Black
38	Red
39	Blue
40	Orange

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.985 in	0.083 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
4.2 Ohm/1000ft

Current

Max. Recommended Current [A]
3.2 Amps per Conductor at 30°C

Voltage

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

Temperature Range

UL Temp Rating:	90°C Dry, 75°C Wet
Operating Temperature Range:	-25°C To +90°C

Mechanical Characteristics

UV Resistance:	Yes
Min Bend Radius (Overall):	7.9 in
Min. Bend Radius/Minor Axis:	3.94 in

Standards

NEC/(UL) Compliance:	TC-ER
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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:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

Suitability

Suitability - Burial:	Yes
Suitability - Indoor:	Yes

Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 Vertical Tray Flame Test
IEEE Flammability:	1202
UL voltage rating:	600 V RMS (Type TC)

History

Update and Revision:	Revision Number: 0.51 Revision Date: 01-10-2024
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