



Product: [UE16044W](#)

Type EX Thermocouple, 4 Pr #16 Sol, XLPE Ins Pur, Red, IS/OS, Purple LSZH Jkt, 600V TC 90C Dry/Wet SUN RES

Product Description

Type EX Thermocouple, 4 Pair 16AWG (Solid) Chromel+Constantan, XLPE Insulation Pur, Red Color Code, Individual & Overall Beldfoil® Shield, Purple LSZH Outer Jacket, 600V TC 90C Dry/Wet SUN RES

Technical Specifications

Product Overview

Suitable Applications:	Industrial Control, Raceways Cable trays and ducts, Digital Control, Instruments (4-20ma, 0-10v, ...), low voltage digital control (24v, ...), encoders, control circuits, distributed control system (DCS), programmable logic controller (PLC), Solenoids, Valves, Actuators, Positioners
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	Nominal Diameter	No. of Pairs
Pair(s)	16	Solid	Chromel & Constantan	0.051 in	4

Conductor Count: 8

Insulation

Element	Material	Nominal Diameter	Nominal Wall Thickness
Pair(s)	XLP, XLPO, XLPE (Thermoset)	0.113 in	0.031 in

Color Chart

Number	Color
Pair 1	Purple and Red Numbered 1
Pair 2	Purple and Red Numbered 2
Pair 3	Purple and Red Numbered 3
Pair 4	Purple and Red Numbered 4

Inner Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire Diameter	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	TC - Tinned Copper	0.046 in	18

Outer Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire Diameter	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	TC - Tinned Copper	0.057 in	16

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.648 in	0.063 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
6.3 Ohm/1000ft
11.5 Ohm/1000ft

Current

Max. Recommended Current [A]

18 Amps per Conductor at 30°C

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	233 lbs/1000ft
Max. Pull Tension:	143 lbs
Min Bend Radius (Overall):	6.5 in

Standards

NEC/(UL) Compliance:	TC
ANSI Compliance:	MC 96.1-1982 Type EX

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
CA Prop 65:	Yes

Suitability

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

Flammability, LSOH, Toxicity Testing

CSA/C(UL) Flammability:	FT4
IEEE Flammability:	IEEE 1202
UL voltage rating:	600 V RMS (Type TC)

History

Update and Revision:	Revision Number: 0.52 Revision Date: 05-31-2024
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