Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION





83900 Multi-Conductor - High-Temperature Thermocouple Wire

For more Information please call

1-800-Belden1



General Description:

20 AWG solid conductors, FEP insulation, unshielded, FEP jacket.

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Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
1	20	Solid	Iron
1	20	Solid	Constantan

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
FEP - Fluorinated Ethylene Propylene	0.254

Outer Shield

Outer Shield Material:

Outer Shield	Material
Unshielded	

Outer Jacket

Outer Jacket Material:

Outer Jacket Material			
FEP - Fluorinated Ethylene Propylene			

Overall Cable

Overall Nominal Diameter: 1.930 x 3.251 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
Non-UL Temperature Rating:	200°C
Bulk Cable Weight:	19.347 Kg/Km
Min. Bend Radius/Minor Axis:	31.750 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	PLTC, CL3P
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes

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CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
ANSI Specification:	MC 96.1-1982 Type J
Flame Test	
UL Flame Test:	UL910 Steiner Tunnel
Plenum/Non-Plenum	
Plenum (Y/N):	Yes

Surface Printing (Overall)

Surface Printing: BELDEN 83900 E34972 2C20 (UL) CL3P 200C PLTC SUN RES THCPL J (2 FT., 7 DIGIT SEQUENTIAL NUMBER) FEET

Electrical Characteristics (Overall)

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/km)		
IRON	203.422		
CONSTANTAN	1010.55		

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83900 001100	100 FT	2.000 LB	BROWN		2#20 TYPE J THERMOCOUPLE
83900 0011000	1,000 FT	14.000 LB	BROWN	С	2#20 TYPE J THERMOCOUPLE
83900 001500	500 FT	7.000 LB	BROWN		2#20 TYPE J THERMOCOUPLE

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 06-29-2011

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