Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION





83905 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.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
1	20	Solid	Chromel
1	20	Solid	Alumel

Total Number of Conductors: 2

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 K		

Flame Test

UL Flame Test: UL910 Steiner Tunnel

Plenum/Non-Plenum

Plenum (Y/N): Yes

Surface Printing (Overall)

Surface Printing: BELDEN 83905 E34972 2C20 (UL) CL3P 200C PLTC SUN RES THCPL K (2

FT., 7 DIGIT SEQUENTIAL NUMBER) FEET

Electrical Characteristics (Overall)

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/km)		
CHROMEL	1378.02		
ALUMEL	554.489		

Notes (Overall)

Notes: Chromel & Alumel = "Chromel and Alumel are Hoskins Manufacturing Company trademarks."

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83905 001100	100 FT	2.000 LB	BROWN		2#20 TYPE K THERMOCOUPLE
83905 0011000	1,000 FT	14.000 LB	BROWN	С	2#20 TYPE K THERMOCOUPLE
83905 001500	500 FT	7.000 LB	BROWN		2#20 TYPE K THERMOCOUPLE

Notes:

C = CRATE REEL PUT-UP.

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

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