Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION





83803 Multi-Conductor - Power-Limited Fire Protective, Control & Instrum Cable

For more Information please call

1-800-Belden1



General Description:

12 AWG stranded (7x20) TC conductors, conductors cabled, plenum, FEP insulation, Beldfoil® (100% coverage) + TC braid shield (85% coverage), FEP jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
3	12	7x20	TC - Tinned Copper

Total Number of Conductors: 3

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Teflon®	FEP - Fluorinated Ethylene Propylene	0.4064

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	85

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material	Nom. Wall Thickness (mm)	
Teflon®	FEP - Fluorinated Ethylene Propylene	0.381	

Overall Cable

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red

Overall Nominal Diameter: 8.204 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
UL Temperature Rating:	200°C
Bulk Cable Weight:	157.749 Kg/Km
Min. Bend Radius/Minor Axis:	82.550 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP, FPLP
NEC Articles:	760
CEC/C(UL) Specification:	CMP

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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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Flame Test	
UL Flame Test:	NFPA 262
CSA Flame Test:	FT6
Plenum/Non-Plenum	
Plenum (Y/N):	Yes

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 104.992

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 180.455

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 5.5777

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current 20 Amps per conductor @ 25°C

Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83803 002100	100 FT	12.300 LB	RED	С	3#12 FEP SH FEP
83803 0021000	1,000 FT	111.000 LB	RED	С	3#12 FEP SH FEP
83803 002500	500 FT	56.500 LB	RED	С	3#12 FEP SH FEP

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 09-07-2012

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