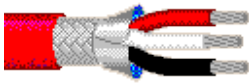


83803 Multi-Conductor - Power-Limited Fire Protective, Control & Instrum Cable



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

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (in.)
Teflon®	FEP - Fluorinated Ethylene Propylene	.016

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 (in.)
Teflon®	FEP - Fluorinated Ethylene Propylene	.015

Overall Cabling

Overall Cabling Lay Length & Direction:

Length (in.)
3.0

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red

Overall Nominal Diameter: 0.323 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +200°C

UL Temperature Rating: 200°C

Bulk Cable Weight: 106 lbs/1000 ft.

Min. Bend Radius (Install)/Minor Axis: 3.250 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: FPLP, CMP

NEC Articles: 760

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

CEC/C(UL) Specification:	CMP
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
C(UL) Flame Test:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
32

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
55

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
1.7

Max. Operating Voltage - UL:

Voltage
300 V RMS (UL AWM Style 1424)

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	10.600 LB	RED	C	3#12 FEP SH FEP
83803 0021000	1,000 FT	111.000 LB	RED	C	3#12 FEP SH FEP
83803 002500	500 FT	56.500 LB	RED	C	3#12 FEP SH FEP

Notes:

C = CRATE REEL PUT-UP.

Plenum-Rated Fire Alarm





Power-Limited Fire Protective, Control and Instrumentation Cables

Subject 1424 (NEC Article 760, Type FPLP)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m





14 AWG Stranded (7x22) TC Conductors • Conductors Cabled • Overall Beldfoil® (100% Coverage) + TC Braid Shield (85% Coverage)

Plenum • FEP Insulation • Red FEP Jacket

	83752 UL Style 2464 & 1424 (300V 200°C)	NEC: FPLP, CMP	2 See Chart 2 (Tech Info Section)	See Chart 2 (Tech Info Section)	100	30.5	7.1	3.2	.016	.41	.015	.38	.267	6.78	30	98	52	171				
		CEC: CMP FT6			500 [†]	152.4	31.5	14.3														
					1000 [†]	304.8	60.0	27.2														
	83753	NEC: FPLP, CMP	3 See Chart 2 (Tech Info Section)	See Chart 2 (Tech Info Section)	500 [†]	152.4	42.5	19.3	.016	.41	.015	.38	.284	7.21	30	98	52	171				
		CEC: CMP FT6			1000 [†]	304.8	82.0	37.2														
	83754	NEC: FPLP, CMP	4 See Chart 2 (Tech Info Section)	See Chart 2 (Tech Info Section)	100	30.5	9.8	4.5	.016	.41	.015	.38	.311	7.90	30	98	52	171				
		CEC: CMP FT6			500 [†]	152.4	52.5	23.8														
					1000 [†]	304.8	102.0	46.3														
	83756	NEC: FPLP, CMP	6 See Chart 2 (Tech Info Section)	See Chart 2 (Tech Info Section)	100	30.5	14.1	6.4	.016	.41	.017	.43	.376	9.55	30	98	52	171				
		CEC: CMP FT6			500 [†]	152.4	74.5	34.0														
					1000 [†]	304.8	150.0	68.1														

12 AWG Stranded (7x20) TC Conductors • Conductors Cabled • Overall Beldfoil (100% Coverage) + TC Braid Shield (85% Coverage)

Plenum • FEP Insulation • Red FEP Jacket

	83802 UL Style 2464 & 1424 (300V 200°C)	NEC: FPLP, CMP	2 See Chart 2 (Tech Info Section)	See Chart 2 (Tech Info Section)	100	30.5	7.5	3.4	.016	.41	.015	.38	.303	7.70	32	105	55	180				
		CEC: CMP FT6			500 [†]	152.4	41.0	18.6														
					1000 [†]	304.8	80.0	36.3														
	83803	NEC: FPLP, CMP	3 See Chart 2 (Tech Info Section)	See Chart 2 (Tech Info Section)	100	30.5	10.6	4.8	.016	.41	.015	.38	.323	8.20	32	105	55	180				
		CEC: CMP FT6			500 [†]	152.4	56.5	25.7														
					1000 [†]	304.8	111.0	50.4														
	83804	NEC: FPLP, CMP	4 See Chart 2 (Tech Info Section)	See Chart 2 (Tech Info Section)	100	30.5	13.8	6.3	.016	.41	.017	.43	.359	9.12	32	105	55	180				
		CEC: CMP FT6			500 [†]	152.4	73.0	33.1														
					1000 [†]	304.8	147.0	66.7														
	83806	NEC: FPLP, CMP	6 See Chart 2 (Tech Info Section)	See Chart 2 (Tech Info Section)	100	30.5	19.7	9.0	.016	.41	.017	.43	.430	10.92	32	105	55	180				
		CEC: CMP FT6			500 [†]	152.4	213.0	96.7														
					1000 [†]	304.8	213.0	96.7														

TC = Tinned Copper

All cables on this page pass the IEEE 383-2003 Flame Test and are listed by the California State Fire Marshall. Component Recognized UL2464, 300V 80°C.

*Capacitance between conductors.

**Capacitance between one conductor and other conductors connected to shield.

† Spools are one piece, but length may vary ±10% from length shown.