

83506 Multi-Conductor - Audio, Control and Instrumentation Cable



Description:

24 AWG stranded (7x32) TC conductors, conductors cabled, plenum, FEP insulated, overall Beldfoil® (100% coverage) + TC braid shield (85% coverage), FEP jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
6	24	7x32	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.006

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 Material	Nom. Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.014

Overall Cabling

Overall Cabling Lay Length & Direction:

Length (in.)
1.75

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue

Overall Nominal Diameter: 0.165 in.

Mechanical Characteristics (Overall)

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

Bulk Cable Weight: 35.980 lbs/1000 ft.

Max. Recommended Pulling Tension: 37.200 lbs.

Min. Bend Radius (Install)/Minor Axis: 2 in.

83506 Multi-Conductor - Audio, Control and Instrumentation Cable

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
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)
20

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
36

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
24.0

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
5.8

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Current
1.4 Amps per conductor @ 25°C

Notes (Overall)

Notes: Plenum Cables, except for Flamarrest® jacket, are suitable for Outdoor and Direct Burial application.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83506 0021000	1,000 FT	26.000 LB	RED	C	6#24 FEP SH FEP
83506 002500	500 FT	13.000 LB	RED	C	6#24 FEP SH FEP

Notes:

C = CRATE REEL PUT-UP.

Plenum-Rated

Overall Foil/Braid Shield

Audio, Control and Instrumentation Cables

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

24 AWG Stranded (7x32) TC Conductors • Conductors Cabled • Overall Beldfoil® (100% Coverage) + TC Braid Shield (85% Coverage)

Plenum • FEP Insulation • Red FEP Jacket																			
	300V RMS	83503	NEC: CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	500 [†] 1000 [†]	152.4 304.8	9.5 16.0	4.3 7.3	.006 .006	.15 .15	.014 .014	.36 .36	.135 .144	3.43 3.66	20 20	66 66	36 36	118 118
		83504	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500 [†] 1000 [†]	30.5 152.4 304.8	3.5 10.0 20.0	1.6 4.6 9.1	.006 .006	.15 .15	.014 .014	.36 .36	.144 .165	3.66 4.19	20 20	66 66	36 36	118 118
		83506	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	500 [†] 1000 [†]	152.4 304.8	13.0 26.0	6.0 11.9	.006 .006	.15 .15	.014 .014	.36 .36	.165 .188	4.19 4.78	20 20	66 66	36 36	118 118
		83509	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500 [†] 1000 [†]	30.5 152.4 304.8	5.3 17.0 38.0	2.4 7.8 17.3	.006 .006	.15 .15	.014 .014	.36 .36	.188 .207	4.78 5.26	20 20	66 66	36 36	118 118
		83512	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	500 [†] 1000 [†]	152.4 304.8	21.0 45.0	9.6 20.4	.006 .006	.15 .15	.014 .014	.36 .36	.207 .227	5.26 5.77	20 20	66 66	36 36	118 118
		83515	NEC: CMP CEC: CMP FT6	15	See Chart 2 (Tech Info Section)	100 500 [†] 1000 [†]	30.5 152.4 304.8	7.2 25.0 53.0	3.3 11.4 24.1	.006 .006	.15 .15	.014 .014	.36 .36	.227 .269	5.77 6.83	20 20	66 66	36 36	118 118

Suitable for Outdoor and Direct Burial applications.

22 AWG Stranded (7x30) TC Conductors • Conductors Cabled • Overall Beldfoil (100% Coverage) + TC Braid Shield (85% Coverage)

Plenum • FEP Insulation • Red FEP Jacket																			
	300V RMS	83552	NEC: CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	500 [†] 1000 [†]	152.4 304.8	8.0 16.0	3.7 7.3	.006 .006	.15 .15	.014 .014	.36 .36	.141 .148	3.58 3.76	23 23	75 75	40 40	131 131
		83553	NEC: CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	100 500 [†] 1000 [†]	30.5 152.4 304.8	3.5 11.5 20.0	1.6 5.2 9.1	.006 .006	.15 .15	.014 .014	.36 .36	.148 .159	3.76 4.04	23 23	75 75	40 40	131 131
		83554	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500 [†] 1000 [†]	30.5 152.4 304.8	4.0 12.5 25.0	1.8 5.7 11.4	.006 .006	.15 .15	.014 .014	.36 .36	.159 .183	4.04 4.65	23 23	75 75	40 40	131 131
		83556	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500 [†] 1000 [†]	30.5 152.4 304.8	5.2 16.5 36.0	2.4 7.5 16.3	.006 .006	.15 .15	.014 .014	.36 .36	.183 .209	4.65 5.31	23 23	75 75	40 40	131 131
		83559	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500 [†] 1000 [†]	30.5 152.4 304.8	6.8 23.0 50.0	3.1 10.5 22.7	.006 .006	.15 .15	.014 .014	.36 .36	.209 .234	5.31 5.94	23 23	75 75	40 40	131 131
		83562	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	500 [†] 1000 [†]	152.4 304.8	28.5 60.0	13.0 27.2	.006 .006	.15 .15	.015 .015	.38 .38	.234 .269	5.94 6.83	23 23	75 75	40 40	131 131
	83569	NEC: CMP CEC: CMP FT6	19	See Chart 2 (Tech Info Section)	100 500 [†] 1000 [†]	30.5 152.4 304.8	9.6 44.0 85.0	4.4 20.0 38.6	.006 .006	.15 .15	.015 .015	.38 .38	.269 .304	6.83 7.94	23 23	75 75	40 40	131 131	

Suitable for Outdoor and Direct Burial applications.

* 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.

TC = Tinned Copper