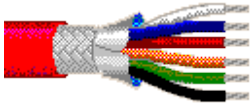


83656 Multi-Conductor - Audio, Control and Instrumentation Cable



Description:

18 AWG stranded (19x30) TC conductors, conductors cabled, plenum, FEP insulation, overall Beldfoil® (100% coverage) + TC braid shield (85% coverage)FEP jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
6	18	19x30	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.007

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 Color Code Chart:

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

Overall Nominal Diameter: 0.228 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	68.600 lbs/1000 ft.
Max. Recommended Pulling Tension:	144 lbs.
Min. Bend Radius (Install)/Minor Axis:	2.500 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU CE Mark:	Yes

83656 Multi-Conductor - Audio, Control and Instrumentation Cable

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. Inductance:

Inductance (µH/ft)

0.144

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

33

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

60

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

5.8

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

3.1

Max. Operating Voltage - UL:

Voltage

300 V RMS

Max. Recommended Current:

Current

3.8 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83656 002100	100 FT	8.000 LB	RED		6#18 FEP SH FEP
83656 0021000	1,000 FT	62.000 LB	RED	C	6#18 FEP SH FEP
83656 002500	500 FT	29.000 LB	RED	C	6#18 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

20 AWG Stranded (7x28) TC Conductors • Conductors Cabled • Overall Beldfoil® (100% Coverage) + TC Braid Shield (85% Coverage)

Plenum • FEP Insulation • Red FEP Jacket																
	300V RMS	83602	NEC: CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	11.0 22.0	5.0 10.0	.006 .15	.014 .36	.157 3.99	26	85	51	167
		83604	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	5.1 16.0 32.0	2.3 7.3 14.6	.006 .15	.014 .36	.178 4.52	26	85	51	167
		83606	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	6.2 21.5 47.0	2.8 9.8 21.3	.006 .15	.014 .36	.207 5.26	26	85	51	167
		83609	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	8.2 30.0 63.0	3.7 13.7 28.6	.006 .15	.014 .36	.238 6.05	26	85	51	167
		83612	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	7.8 35.0 67.0	3.5 15.9 30.4	.006 .15	.014 .36	.265 6.73	26	85	51	167

Suitable for Outdoor and Direct Burial applications.

18 AWG Stranded (19x30) TC Conductors • Conductors Cabled • Overall Beldfoil (100% Coverage) + TC Braid Shield (85% Coverage)

Plenum • FEP Insulation • Red FEP Jacket																
	300V RMS	83652	NEC: CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	4.6 13.5 27.0	2.1 6.1 12.3	.007 .18	.014 .36	.175 4.45	33	108	60	197
		83653	NEC: CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	5.4 17.5 39.0	2.5 8.0 17.7	.007 .18	.014 .36	.184 4.67	33	108	60	197
		83654	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	6.2 21.5 46.0	2.8 9.8 20.9	.007 .18	.014 .36	.199 5.05	33	108	60	197
		83656	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	8.1 29.5 62.0	3.7 13.5 28.2	.007 .18	.014 .36	.234 5.94	33	108	60	197
		83659	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	9.8 45.0 88.0	4.4 20.4 40.0	.007 .18	.015 .38	.293 7.44	33	108	60	197
	83662	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	11.9 55.5 109.0	5.4 25.2 49.5	.007 .18	.015 .38	.308 7.82	33	108	60	197	

Suitable for Outdoor and Direct Burial applications.

TC = Tinned Copper

*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.