# **Detailed Specifications & Technical Data**

## **ENGLISH MEASUREMENT VERSION**



83556 Multi-Conductor - Audio, Control and Instrumentation Cable





# **Description:**

22 AWG stranded (7x30) 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	<b>Conductor Material</b>
6	22	7x30	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:



#### **Overall Cabling Color Code Chart:**

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

Overall Nominal Diameter: 0.183 in.

# **Mechanical Characteristics (Overall)**

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Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	45 lbs/1000 ft.
Max. Recommended Pulling Tension:	58 lbs.
Min. Bend Radius (Install)/Minor Axis:	1.750 in.

# **Detailed Specifications & Technical Data**





# 83556 Multi-Conductor - Audio, Control and Instrumentation Cable

Applicable Specifications and Agence	cy Compliance (Overall)
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# **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 04/01/2005 EU RoHS Compliance Date (mm/dd/yyyy): 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

# **Electrical Characteristics (Overall)**

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
23

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
40

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 15.5

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 4.4

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current
1.9 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
83556 002100	100 FT	5.200 LB	RED	С	6#22 FEP SH FEP
83556 0021000	1,000 FT	36.000 LB	RED	С	6#22 FEP SH FEP
83556 002500	500 FT	16.500 LB	RED	С	6#22 FEP SH FEP

# Notes:

C = CRATE REEL PUT-UP.

# **Plenum-Rated**

Overall Foil/Braid Shield Audio, Control and Instrumentation Cables

Description	Part	UL NEC/	No.	Color	Standard	Lengths	Stan Unit V			ation (ness		ket (ness	Nomir	nal OD	Nom	inal C	•	_
Description	No.	C(UL) CEC Type	of Cond.	Code	Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	pF/ Ft.	pF/ m	pF/ Ft.	pF/ m
4 AWG Stranded (7)	,				Cabled •	Overall E	Beldfoil	® (100°	% Cov	erage	) + TC	Braid	Shield	d (85%	Cov	erage	∋)	
Plenum • FEP Insu																		
OOV 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	.15	.014	.36	.135	3.43	20	66	36	118
Wisited Comments	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	.15	.014	.36	.144	3.66	20	66	36	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	.15	.014	.36	.165	4.19	20	66	36	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	.15	.014	.36	.188	4.78	20	66	36	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	.15	.014	.36	.207	5.26	20	66	36	118
table for Outdoor and Direct B	83515	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	.15	.014	.36	.227	5.77	20	66	36	118

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

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Plenum • FEP Ins	ulation	• Red F	EP J	acket														
300V RMS	83552	NEC: CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	500 <sup>†</sup> 1000 <sup>†</sup>	152.4 304.8	8.0 16.0	3.7 7.3	.006	.15	.014	.36	.141	3.58	23	75	40	131
Single Control	83553	NEC: CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	100 500 <sup>†</sup> 1000 <sup>†</sup>	30.5 152.4 304.8	3.5 11.5 20.0	1.6 5.2 9.1	.006	.15	.014	.36	.148	3.76	23	75	40	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	.15	.014	.36	.159	4.04	23	75	40	131
	83556	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500 <sup>†</sup> 1000 <sup>†</sup>	30.5 152.4 304.8	5.2 16.5 36.0	2.4 7.5 16.3	.006	.15	.014	.36	.183	4.65	23	75	40	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	.15	.014	.36	.209	5.31	23	75	40	131
	83562	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	500 <sup>†</sup> 1000 <sup>†</sup>	152.4 304.8	28.5 60.0	13.0 27.2	.006	.15	.015	.38	.234	5.94	23	75	40	131
Suitable for Outdoor and Direct	<b>83569</b> Burial applic	NEC: CMP CEC: CMP FT6 ations.	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	.15	.015	.38	.269	6.83	23	75	40	131

<sup>\*</sup>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.



