

## 83554 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	Conductor Material
4	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:

Length (in.)
2.0

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red
4	Green

Overall Nominal Diameter: 0.159 in.

### Mechanical Characteristics (Overall)

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

Bulk Cable Weight: 25.700 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius (Install)/Minor Axis: 1.700 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

## 83554 Multi-Conductor - Audio, Control and Instrumentation 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)
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)
4.9

### Max. Operating Voltage - UL:

Voltage
300 V RMS

### Max. Recommended Current:

Current
2.2 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
83554 002100	100 FT	4.000 LB	RED		4#22 FEP SH FEP
83554 0021000	1,000 FT	25.000 LB	RED	C	4#22 FEP SH FEP
83554 002500	500 FT	12.500 LB	RED	C	4#22 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	<b>83503</b>	NEC: CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	500 <sup>†</sup> 1000 <sup>†</sup>	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
		<b>83504</b>	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500 <sup>†</sup> 1000 <sup>†</sup>	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
		<b>83506</b>	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	500 <sup>†</sup> 1000 <sup>†</sup>	152.4 304.8	13.0 26.0	6.0 11.9	.006 .006	.15 .15	.014 .014	.36 .36	.165 .207	4.19 5.26	20 20	66 66	36 36	118 118
		<b>83509</b>	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500 <sup>†</sup> 1000 <sup>†</sup>	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
		<b>83512</b>	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	500 <sup>†</sup> 1000 <sup>†</sup>	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
		<b>83515</b>	NEC: CMP CEC: CMP FT6	15	See Chart 2 (Tech Info Section)	100 500 <sup>†</sup> 1000 <sup>†</sup>	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	<b>83552</b>	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 .006	.15 .15	.014 .014	.36 .36	.141 .159	3.58 4.04	23 23	75 75	40 40	131 131
		<b>83553</b>	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 .006	.15 .15	.014 .014	.36 .36	.148 .183	3.76 4.65	23 23	75 75	40 40	131 131
		<b>83554</b>	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500 <sup>†</sup> 1000 <sup>†</sup>	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
		<b>83556</b>	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 .006	.15 .15	.014 .014	.36 .36	.183 .209	4.65 5.31	23 23	75 75	40 40	131 131
		<b>83559</b>	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500 <sup>†</sup> 1000 <sup>†</sup>	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
		<b>83562</b>	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 .006	.15 .15	.015 .015	.38 .38	.234 .269	5.94 6.83	23 23	75 75	40 40	131 131
	<b>83569</b>	NEC: CMP CEC: CMP FT6	19	See Chart 2 (Tech Info Section)	100 500 <sup>†</sup> 1000 <sup>†</sup>	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.  
<sup>†</sup> Spools are one piece, but length may vary ±10% from length shown.

TC = Tinned Copper