

## 83602 Multi-Conductor - Audio, Control and Instrumentation Cable, 2 Cond Cabled



### Description:

20 AWG stranded (7x28) 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
2	20	7x28	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 Color Code Chart:

Number	Color
1	Black
2	White

Overall Nominal Diameter: 0.157 in.

### Mechanical Characteristics (Overall)

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

Bulk Cable Weight: 23 lbs/1000 ft.

Max. Recommended Pulling Tension: 50 lbs.

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

### 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

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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

## Electrical Characteristics (Overall)

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

44.3

### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

79.7

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

8.6

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

7.2

### 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
83602 0021000	1,000 FT	22.000 LB	RED	C	2#20 FEP SH FEP
83602 002500	500 FT	11.000 LB	RED	C	2#20 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	<b>83602</b>	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
		<b>83604</b>	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
		<b>83606</b>	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
		<b>83609</b>	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
		<b>83612</b>	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	<b>83652</b>	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
		<b>83653</b>	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
		<b>83654</b>	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
		<b>83656</b>	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
		<b>83659</b>	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
	<b>83662</b>	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.