

8770 Multi-Conductor - Audio, Control and Instrumentation Cable



Description:

18 AWG stranded (16x30) tinned copper conductors, conductors cabled, polyethylene insulation, overall Beldfoil® shield (100% coverage), 20 AWG stranded tinned copper drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
3	18	16x30	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PE - Polyethylene	.018

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape w/Shorting Fold	100

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
20	Stranded	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.033

Overall Cabling

Overall Cabling Lay Length & Direction:

Length (in.)	Twists (ft.)
1.5	8

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	Red
3	Clear

Overall Nominal Diameter: 0.246 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +60°C
UL Temperature Rating:	60°C (UL AWM Style 2093)
Bulk Cable Weight:	36.200 lbs/1000 ft.
Max. Recommended Pulling Tension:	74 lbs.
Min. Bend Radius (Install)/Minor Axis:	2.500 in.

8770 Multi-Conductor - Audio, Control and Instrumentation Cable

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2093 (300 V 60°C)
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):	01/01/2004
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:	UL1685 UL Loading
----------------	-------------------

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	88770

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

69

Nom. Inductance:

Inductance (µH/ft)

.1844

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

24

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

48

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

6.6

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

8.5

Max. Operating Voltage - UL:

Voltage

300 V RMS (UL AWM Style 2093)

Max. Recommended Current:

Current

5.3 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8770 060U1000	1,000 FT	37.000 LB	CHROME		3 #18 LDPE FS PVC

8770 Multi-Conductor - Audio, Control and Instrumentation Cable

8770 060U500	500 FT	19.000 LB	CHROME		3 #18 LDPE FS PVC
8770 0601000	1,000 FT	39.000 LB	CHROME	C	3 #18 LDPE FS PVC
8770 06010000	10,000 FT	420.000 LB	CHROME	C Y	3 #18 LDPE FS PVC
8770 060500	500 FT	20.000 LB	CHROME	C	3 #18 LDPE FS PVC

Notes:

C = CRATE REEL PUT-UP.

Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

Overall Beldfoil® Shield


Audio, Control and Instrumentation Cables

Plenum-Rated and Non-Plenum

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

18 AWG Stranded (16x30) TC Conductors • Conductors Cabled • Overall Beldfoil Shield (100% Coverage) • 20 AWG Stranded TC Drain Wire


Polyethylene Insulation • Chrome PVC Jacket

 <p>Shorting Fold</p>	8770	UL AWM Style 2093 (300V 60°C)	NEC: 3	Black,	U-500	U-152.4	20.0	9.1	.018	.46	.033	.84	.246	6.25	24	79	48	157	
		CM	Red,	500	152.4	20.5	9.3												
		CEC:	Clear	U-1000	U-304.8	38.0	17.2												
		CM		1000	304.8	40.0	18.2												
					10000††	3048.0	430.0	195.5											

For Plenum version of 8770, see 8770.


18 AWG Stranded (19x30) TC Conductors • Conductors Cabled • Overall Beldfoil Shield (100% Coverage) • 20 AWG Stranded TC Drain Wire

Semi-rigid PVC Insulation • Chrome PVC Jacket


 <p>Z-Fold®</p>	9418	UL AWM Style 2464 (300V 80°C)	NEC: 4	Red,	100	30.5	5.6	2.6	.010	.25	.035	.89	.245	6.22	70	230	120	394	
		CMG	Green,	U-500	U-152.4	18.0	8.2												
		CEC:	Black,	500	152.4	24.5	11.1												
		CMG FT4	White	U-1000	U-304.8	35.0	16.0												
					1000	304.8	52.0	23.7											
					10000††	3048.0	510.0	231.3											

For Plenum versions of 9418, see 89418 or 82418.

Plenum • FEP Insulation • Red FEP Jacket


	88770	(-70°C to +200°C)	NEC: 3	Black,	500	152.4	16.0	7.3	.007	.18	.014	.36	.161	4.09	54	177	96	315
		CMP	White,	1000	304.8	32.0	14.6											
		CEC:	Red															
		CMP FT6																

Suitable for Outdoor and Direct Burial applications. Chemical Resistance: Gasoline and Oil.

	89418	(-70°C to +200°C)	NEC: 4	Black,	100	30.5	5.5	2.5	.007	.18	.014	.36	.177	4.50	30	98	57	187
		CMP	White,	500†	152.4	18.0	8.2											
		CEC:	Red,	1000†	304.8	36.0	16.4											
		CMP FT6	Green															

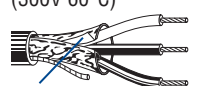
Suitable for Outdoor and Direct Burial applications. Chemical Resistance: Gasoline and Oil.

Plenum • FEP Insulation • Natural Flammarrest® Jacket

	82418	(-70°C to +200°C)	NEC: 4	Black,	U-1000▲	U-304.8	36.0	16.4	.007	.18	.014	.36	.176	4.47	30	98	63	207
		CMP	White,	1000†	304.8	38.0	17.2											
		CEC:	Red,															
		CMP FT6	Green															

16 AWG Stranded (19x29) TC Conductors • Conductors Cabled • Overall Beldfoil Shield (100% Coverage) • 18 AWG Stranded TC Drain Wire

Polyethylene Insulation • Chrome PVC Jacket

 <p>Z-Fold®</p>	8618	UL AWM Style 2107 (300V 60°C)	NEC: 3	Black,	U-500	U-152.4	31.0	14.1	.031	.79	.031	.79	.327	8.3	26	85	50	164
		CL3	Red,	500	152.4	32.5	14.8											
			Clear	1000	304.8	66.0	30.1											

TC = Tinned Copper

* Capacitance between conductors.

** Capacitance between one conductor and other conductors connected to shield.

† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

†† Final put-up may vary -10% to +20%. May contain 2 pieces. Min. length 1500 ft.

▲ Final put-up may vary 0 to -10%.