Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

8434 Multi-Conductor - Special Audio, Communication and Instrumentation Cable

Description:

25 AWG stranded (7x33) tinned copper conductors, polyethylene insulation, overall Beldfoil® shield (100% coverage), 25 AWG stranded TC drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
2	25	7x33	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)	Dia. (in.)
PE - Polyethylene	.013	.047

Inner Shield

Inner Shield Material:

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

Inner Shield Drain Wire AWG:

AWG
25

Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Outer Shield

Outer Shield Material:

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

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.020

Overall Cabling

Overall Nominal Diameter: 0.165 in.

Pair

Pair Color Code Chart:

Number	Color
1	Shielded: Red & Black
2	Unshielded: Green & White

Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
1.500	8.000

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +80°C

Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	13.600 lbs/1000 ft.
Max. Recommended Pulling Tension:	41 lbs.
Min. Bend Radius (Install)/Minor Axis:	1.700 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

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

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Inductance:

Inductance (µH/ft)
.2

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
25

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
40

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
45.5

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:	18.900 Ohm/1000 ft

Max. Operating Voltage - Non-UL:

Voltage
400 V RMS

Max. Recommended Current:

Current
1.3 Amps per conductor @ 25°C

Notes (Overall)

Notes: Red and Black pair 100% Beldfoil® shielded with drain wire. 3 copper, 4 copper-covered steel strands in each conductor.

Put Ups and Colors:

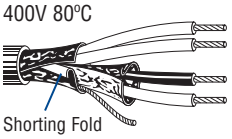
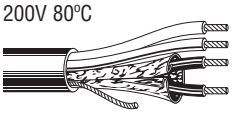
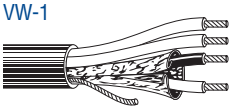
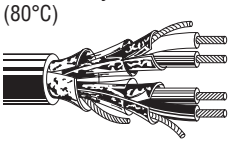
Item #	Putup	Ship Weight	Color	Notes	Item Desc
8434 060U1000	1,000 FT	14.000 LB	CHROME		4 #25 PE SH PVC
8434 060100	100 FT	2.000 LB	CHROME		4 #25 PE SH PVC
8434 0601000	1,000 FT	12.000 LB	CHROME	C	4 #25 PE SH PVC
8434 060500	500 FT	7.000 LB	CHROME		4 #25 PE SH PVC

Notes:

C = CRATE REEL PUT-UP.

Combination Shields

Special Audio, Communication and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	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
25 AWG Stranded (7x33) Tinned Copper Conductors • Overall Beldfoil® Shield (100% Coverage) • 25 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
400V 80ºC	**8434**		2	Shielded: Red & Black	100	30.5	2.1	1.0	.013	.33	.020	.51	.165	4.19	25	82	40	131
 Shorting Fold					500	152.4	7.0	3.2										
				Unshielded: Green & White	U-1000	U-304.8	14.0	6.4										
					1000	304.8	12.0	5.5										
Red/Black pair 100% Beldfoil shielded with drain wire. 3 copper, 4 copper-covered steel strands in each conductor.																		
22 AWG Stranded (7x30) Tinned Copper Conductors • One Pair Beldfoil Shielded (100% Coverage) • Stranded Tinned Copper Drain Wire																		
PVC Insulation • Chrome PVC Jacket (Pair and Single Cabled)																		
300V RMS 90ºC	**9685**	NEC: CM	1.5 (1 pair + 1 single)	Shielded: Black & White	U-1000	U-304.8	24.0	10.9	.013	.33	.032	.81	.199	5.05	60	197	99	325
				Unshielded: Brown														
Meets NEC Article 800 22 AWG drain wire																		
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
200V 80ºC	**8730**†		2	Shielded: Red & Black	U-1000	U-304.8	24.0	10.9	.008	.20	.030	.76	.205	5.21	34	112	67	220
					1000	304.8	26.0	11.8										
24 AWG drain wire				Unshielded: Green & White														
300V 80ºC VW-1	**8724**†	NEC: CM CEC: CM	2	Shielded: Red & Black	U-1000	U-304.8	21.0	9.5	.008	.20	.019	.48	.165	4.19	34	112	67	220
					1000	304.8	21.0	9.5										
24 AWG drain wire				Unshielded: Green & White														
22 AWG Stranded (7x30) TC Conductors • Cabled in Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG Stranded TC Drain Wires																		
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
UL AWM Style 2717 (80°C)	**8728**	NEC: CM CEC: CM	2	Black & Red	U-500	U-152.4	15.5	7.0	.010	.25	.028	.71	.215	5.46	35	115	62	203
					500	152.4	15.5	7.0										
				Green & White	U-1000	U-304.8	30.0	13.6										
					1000	304.8	31.0	14.0										
Meets NEC Article 800 Each pair Beldfoil shielded with individual drain wire plus polyester film over each shield.																		

TC = Tinned Copper

*Capacitance between conductors.

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

† Request Technical Bulletin T/8-21 before planning high and low level circuits in the same cable.