Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9685 Multi-Conductor - Special Audio, Communication and Instrumentation Cable





Description:

22 AWG stranded (7x30) tinned copper conductors, PVC insulation, one pair Beldfoil® shielded (100% coverage), stranded tinned copper drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material
1	1	22	7x30	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PVC - Polyvinyl Chloride	.013

Inner Shield

Inner Shield Material:

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

Inner Shield Drain Wire AWG:



Inner Shield Drain Wire Stranding: Stranded
Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.032

Overall Cabling

Overall Nominal Diameter: 0.199 in.

Pair

Pair Color Code Chart:

Number	Color
1	Shielded: Black & White
2	Unshielded: Brown

Pair Lay Length & Direction:

L	ay Length	(in.)	Twists/ft.	(twist/ft)
1.	750		6.800	

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +60°C
UL Temperature Rating:	90°C
Bulk Cable Weight:	23.500 lbs/1000 ft.
Max. Recommended Pulling Tension:	27.300 lbs.

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Min. Bend Radius (Install)/Minor Axis: 2 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

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NEC/(UL) Specification:	CM
NEC Articles:	800
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
mme Test	

Flame Test

UL Flame Test: UL1685 UL Loading

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Inductance:

Inductance (µH/ft)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current 2.3 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9685 060U1000	1,000 FT	24.000 LB	CHROME		1#22 SHPR, 1#22 PVC PVC

Combination Shields

Special Audio, Communication and Instrumentation Cables

	Dowl	UL NEC/	No.		Standard Lengths				Insulation Thickness		Jacket Thickness		Nominal OD		Nom	ance		
Description	Part No.	C(UL) CEC Type	of Pairs	Color Code	Ft.	m	Lbs.	kg	inch				Inch		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 80°C 8434 .165 4.19 Shielded: 100 30.5 1.0 .013 .33 .020 .51 25 82 131 Red & Black 500 152.4 7.0 3.2 Unshielded: U-1000 U-304.8 14.0 6.4 Green & 1000 304.8 12.0 5.5 White Shorting Fold

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 90°C NEC: U-1000 U-304.8 24.0 10.9 .013 .33 .032 .81 .199 5.05 60 325 15 Shielded: 197 99 CM (1 pair + Black & 1 single) White Unshielded: WWW S Brown Meets NEC Article 800

22 AWG urain wire																		
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
200V 80°C	8730 [†]		2	Shielded: Red & Black	U-1000 1000	U-304.8 304.8	24.0 26.0	10.9 11.8	.008	.20	.030	.76	.205	5.21	34	112	67	220
24 AWG drain wire				Unshielded: Green & White														
300V 80°C VW-1	8724 [†]	NEC: CM CEC:	2	Shielded: Red & Black	U-1000 1000	U-304.8 304.8	21.0 21.0	9.5 9.5	.008	.20	.019	.48	.165	4.19	34	112	67	220
		СМ		Unshielded: Green & White														
24 AWG drain wire																		

22 AWG Stranded (7x30) TC Conductors • Cabled in Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG Stranded TC Drain Wires

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Polypropylene Insulat	Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																	
UL AWM Style 2717	8728	NEC:	2	Black &	U-500	U-152.4	15.5	7.0	.010	.25	.028	.71	.215	5.46	35	115	62	203
(80°C)		CM		Red	500	152.4	15.5	7.0										
		CEC:		Green &		U-304.8		13.6										
		CM		White	1000	304.8	31.0	14.0										

Meets NEC Article 800

22 AWG drain wire

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.