



## Description:

22 AWG stranded (19x34) silver-plated copper conductors, cabled and color-coded, extruded TFE Teflon® insulation, silver-plated copper braid shield (85% coverage), TFE teflon tape-wrapped jacket

## Physical Characteristics (Overall)

### Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
1	22	19x34	SPC - Silver Plated Copper

### Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (in.)
Teflon®	TFE - Tetrafluoroethylene	.010

Insulation Resistance: 100,000 Megaohms/1000 ft. @ 500 V DC.

### Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	SPC - Silver Plated Copper	85

### Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material	Nom. Wall Thickness (in.)
Teflon®	TFE - Tetrafluoroethylene	.010

### Overall Cabling

Overall Cabling Color Code Chart:

Color
White

Overall Nominal Diameter: 0.091 in.

## Mechanical Characteristics (Overall)

Operating Temperature Range: -65°C To +200°C

Bulk Cable Weight: 8.900 lbs/1000 ft.

Max. Recommended Pulling Tension: 22.300 lbs.

Min. Bend Radius (Install)/Minor Axis: 0.875 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): 01/01/2005

EU Directive 2002/96/EC (WEEE): Yes

## 83305E Multi-Conductor - MIL-W-16878/4 (Type E)

<b>EU Directive 2003/11/EC (BFR):</b>	Yes
<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>MII Order #39 (China RoHS):</b>	Yes
<b>Military Specification:</b>	MIL-W-16878/4 (Type E, except stranding, insulated conductors)

### Flame Test

<b>UL Flame Test:</b>	UL1685 UL Loading, VW-1
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### Plenum/Non-Plenum

<b>Plenum (Y/N):</b>	No
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## Electrical Characteristics (Overall)

### Nom. Inductance:

**Inductance (µH/ft)**

.12

### Nom. Capacitance Conductor to Shield:

**Capacitance (pF/ft)**

57.9

### Nom. Conductor DC Resistance:

**DCR @ 20°C (Ohm/1000 ft)**

14.3

### Nominal Outer Shield DC Resistance:

**DCR @ 20°C (Ohm/1000 ft)**

11.3

### Max. Operating Voltage - UL:

**Voltage**

600 V RMS

### Max. Recommended Current:

**Current**

5 Amps per conductor at 25°C

## Notes (Overall)

**Notes:** Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83305E 009100	100 FT	1.000 LB	WHITE	E	1 #22 TFE BRD TFE TAPE
83305E 0091000	1,000 FT	10.000 LB	WHITE	E	1 #22 TFE BRD TFE TAPE

### Notes:

E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

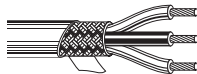
# High-Temperature

## Overall Braid Shield — Control and Instrumentation Cables MIL-W-16878/4 (Type E) — Individual Conductors

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

**26 AWG** Stranded (7x34) Silver-plated Copper Conductors • Cabled and Color-coded • Silver-plated Copper Braid Shield (85% Coverage)

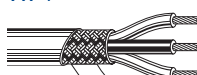
**Extruded TFE Teflon® Insulation • White TFE Teflon Tape-wrapped Jacket**

600V RMS -65°C to 200°C VW-1 	<b>83303E</b>	—	1	White	500 <sup>††</sup>	152.4	3.5	1.6	.010	.25	.010	.25	.076	1.93	—	—	44.6	146
					1000 <sup>▲</sup>	304.8	6.0	2.7										
	<b>83317E</b>	—	2	White, Black	100 <sup>†</sup>	30.5	1.4	0.6	.010	.25	.011	.28	.121	3.07	20.8	68	35.5	116
					500 <sup>††</sup>	152.4	6.5	3.0										
1000 <sup>▲</sup>					304.8	14.0	6.4											
<b>83332E</b>	—	3	White, Black, Red	100 <sup>†</sup>	30.5	1.7	0.8	.010	.25	.011	.28	.127	3.23	18.8	62	31.4	103	
				1000 <sup>▲</sup>	304.8	17.0	7.7											
<b>83347E</b>	—	4	White, Black, Red, Green	100 <sup>†</sup>	30.5	1.9	0.9	.010	.25	.011	.28	.137	3.48	18.5	61	30.5	100	
				500 <sup>††</sup>	152.4	10.0	4.5											
				1000 <sup>▲</sup>	304.8	19.0	8.6											

MIL-Spec MIL-W-16878/4 (Type E).

**24 AWG** Stranded (19x36) Silver-plated Copper Conductors • Cabled and Color-coded • Silver-plated Copper Braid Shield (85% Coverage)

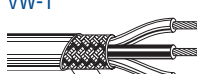
**Extruded TFE Teflon Insulation • White TFE Teflon Tape-wrapped Jacket**

600V RMS -65°C to 200°C VW-1 	<b>83304E</b>	—	1	White	500 <sup>††</sup>	152.4	4.5	2.0	.010	.25	.010	.25	.085	2.16	—	—	46	151
					1000 <sup>▲</sup>	304.8	8.0	3.6										
	<b>83318E</b>	—	2	White, Black	100 <sup>†</sup>	30.5	1.6	0.7	.010	.25	.011	.28	.131	3.33	26.5	87	42.4	139
					500 <sup>††</sup>	152.4	7.5	3.4										
1000 <sup>▲</sup>					304.8	16.0	7.3											
<b>83333E</b>	—	3	White, Black, Red	100 <sup>†</sup>	30.5	1.9	0.9	.010	.25	.011	.28	.137	3.48	21.9	72	36.8	121	
				500 <sup>††</sup>	304.8	10.0	4.5											
				1000 <sup>▲</sup>	304.8	19.0	8.6											
<b>83348E</b>	—	4	White, Black, Red, Green	100 <sup>†</sup>	30.5	2.3	1.0	.010	.25	.011	.28	.149	3.79	21.9	72	36.8	121	
				500 <sup>††</sup>	152.4	12.0	5.4											
				1000 <sup>▲</sup>	304.8	23.0	10.4											

Complies with MIL-W-16878/4 (Type E) except stranding.

**22 AWG** Stranded (19x34) Silver-plated Copper Conductors • Cabled and Color-coded • Silver-plated Copper Braid Shield (85% Coverage)

**Extruded TFE Teflon Insulation • White TFE Teflon Tape-wrapped Jacket**

600V RMS -65°C to 200°C VW-1 	<b>83305E</b>	—	1	White	100 <sup>†</sup>	30.5	1.1	0.5	.010	.25	.010	.25	.091	2.31	—	—	57.9	190
					500 <sup>††</sup>	152.4	5.0	2.3										
					1000 <sup>▲</sup>	304.8	9.0	4.1										
	<b>83319E</b>	—	2	White, Black	100 <sup>†</sup>	30.5	1.9	0.9	.010	.25	.011	.28	.143	3.63	29.9	98	49.2	161
500 <sup>††</sup>					152.4	10.0	4.5											
1000 <sup>▲</sup>					304.8	19.0	8.6											
<b>83334E</b>	—	3	White, Black, Red	100 <sup>†</sup>	30.5	2.7	1.2	.010	.25	.011	.28	.150	3.81	27.4	90	45.7	150	
				500 <sup>††</sup>	152.4	12.5	5.7											
				1000 <sup>▲</sup>	304.8	24.0	10.9											
<b>83349E</b>	—	4	White, Black, Red, Green	100 <sup>†</sup>	30.5	3.1	1.4	.010	.25	.011	.28	.163	4.14	27.4	90	45.7	150	
				500 <sup>††</sup>	152.4	14.5	6.6											
				1000 <sup>▲</sup>	304.8	28.0	12.7											

Complies with MIL-W-16878/4 (Type E) except stranding.

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

<sup>†</sup> 100 ft. put-up one piece, exact length.  
<sup>††</sup> 500 ft. put-up exact, but may contain up to 3 pieces. Minimum length of any one piece is 25 ft.  
<sup>▲</sup> Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.