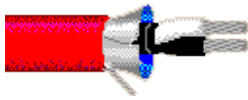


## 83394 Multi-Conductor - Control and Instrumentation Cable, 2 Conductors Cabled



### Description:

22 AWG stranded (7x30) TC conductors, conductors cabled, 22 AWG (7x30) stranded TC drain wire, FEP insulation, special Beldfoil® shield (100% coverage), silicone rubber jacket, noise reducing tape.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Conductors	AWG	Stranding	Conductor Material
2	22	7x30	TC - Tinned Copper

#### Insulation

##### Insulation Material:

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.015

#### Outer Shield

##### Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
1		Tape	Noise Reducing Conductive Nylon	

##### Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
22	7x30	TC - Tinned Copper

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
Silicone Rubber	.030

#### Overall Cabling

##### Overall Cabling Lay Length & Direction:

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

##### Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White

Overall Nominal Diameter: 0.199 in.

### Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +150°C

Bulk Cable Weight: 22.500 lbs/1000 ft.

Max. Recommended Pulling Tension: 27 lbs.

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

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

## 83394 Multi-Conductor - Control and Instrumentation Cable, 2 Conductors Cabled

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

### Flame Test

UL Flame Test:	UL1685 UL Loading, VW-1 (Singles)
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### Plenum/Non-Plenum

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

### Nom. Inductance:

Inductance (µH/ft)
.2

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
22

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

Capacitance (pF/ft)
40

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
17.5

### Max. Operating Voltage - UL:

Voltage	Description
2000 V DC	through jacket
350 V RMS	between conductors

### Max. Recommended Current:

Current
2.8 Amps per conductor @ 25°C

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83394 002U500	500 FT	14.500 LB	RED		2 #22 FEP SILICONE
83394 002500	500 FT	13.000 LB	RED	C	2 #22 FEP FS SIL

### Notes:

C = CRATE REEL PUT-UP.

# High-Temperature


## Overall Beldfoil® Shield

### 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


**22 AWG** Stranded (7x30) TC Conductors • Conductors Cabled • Special Beldfoil Shield (100% Coverage) • 22 AWG (7x30) Stranded TC Drain Wire

**FEP Insulation • Red Silicone Rubber Jacket • Noise Reducing Tape**

Jacket working voltage 2000V DC, shield to ground VW-1 	<b>83394</b>	AWM 4516	2	Black, White	100	30.5	3.6	1.6	.015	.38	.030	.76	.199	5.05	22	72	40	131
					U-500 <sup>†</sup> 500 <sup>†</sup>	U-152.4 152.4	14.5 13.0	6.6 5.9										

70°C (min.) to 150°C (max.) operating temperature.


Jacket working voltage 2000V DC, shield to ground VW-1 	<b>83395</b>	AWM 4516	3	Black, Red, White	100	30.5	3.9	1.8	.015	.38	.031	.79	.208	5.28	22	72	40	131
					U-500 <sup>†</sup>	U-152.4	14.0	6.4										

Jacket working voltage 2000V DC, shield to ground VW-1 	<b>83396</b>	AWM 4516	4	Black, White, Red, Green	100	30.5	3.9	1.8	.015	.38	.030	.76	.217	5.51	22	72	40	131
					U-500 <sup>†</sup>	U-152.4	16.0	7.3										

70°C (min.) to 150°C (max.) operating temperature.

**20 AWG** Stranded (7x28) TC Conductors • Twisted Pair • Special Beldfoil Shield (100% Coverage) • 20 AWG (7x28) Stranded TC Drain Wire

**FEP Insulation • Yellow Silicone Rubber Jacket • Noise Reducing Tape**

Jacket working voltage 2000V DC, shield to ground VW-1 	<b>83393</b>	AWM 4516	2	Black, Red	100 <sup>††</sup>	30.5	4.2	1.9	.020	.51	.030	.76	.242	6.15	22	72	40	131				
					U-500 <sup>†</sup>	U-152.4	18.5	8.4														
					500 <sup>†</sup>	152.4	17.0	7.8														

70°C (min.) to 150°C (max.) operating temperature.

**20 AWG** Stranded (7x28) TC Conductors • Conductors Cabled • Overall Beldfoil Shield (100% Coverage) • Drain Wire


**Tefzel® Insulation • Clear Tefzel Jacket**

300V RMS 150°C VW-1 	<b>85230</b>	—	2	Black, Red	500 <sup>†</sup>	152.4	12.5	5.7	.015	.38	.020	.51	.182	4.62	31	102	59	194
					1000 <sup>†</sup>	304.8	29.0	13.2										

300V RMS 150°C VW-1 	<b>85240</b>	—	3	Black, Red, Green	100	30.5	4.6	2.1	.015	.38	.020	.51	.193	4.90	27	87	48	157
					1000 <sup>†</sup>	304.8	30.0	13.6										

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

**Tefzel Insulation • Clear Tefzel Jacket**

300V RMS 150°C VW-1 	<b>85231</b>	—	2	Black, Red	100	30.5	5.6	2.5	.020	.51	.020	.51	.210	5.33	44	144	79	259				
					500 <sup>†</sup>	152.4	17.0	7.8														
					1000 <sup>†</sup>	304.8	38.0	17.3														

300V RMS 150°C VW-1 	<b>85241</b>	—	3	Black, Red, Green	500 <sup>†</sup>	152.4	22.5	10.3	.020	.51	.020	.51	.223	5.66	34	112	61	201
					1000 <sup>†</sup>	304.8	49.0	22.3										

TC = Tinned Copper

\*Capacitance between conductors. \*\*Capacitance between one conductor and other conductors connected to shield.  
<sup>†</sup>Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.  
<sup>††</sup>100 ft. put-up one piece, exact length.

Tefzel and Kapton are DuPont trademarks.