

# Detailed Specifications & Technical Data



## METRIC MEASUREMENT VERSION

### 9873 Multi-Conductor - Audio, Control and Instrumentation Cable



For more Information  
please call

1-800-Belden1



#### General Description:

20 AWG stranded (7x28) TC conductors, polypropylene insulation, twisted pairs, individually shielded w/Beldfoil® (100% coverage), 22 AWG stranded TC drain wire, overall PVC jacket.

#### Physical Characteristics (Overall)

##### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
3	20	7x28	TC - Tinned Copper

Total Number of Conductors:

6

##### Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
PP - Polypropylene	0.381

##### Inner Shield

Inner Shield Material:

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

Inner Shield Drain Wire AWG:

AWG
22

Inner Shield Drain Wire Stranding:

19x34

Inner Shield Drain Wire Conductor Material:

TC - Tinned Copper

##### Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.889

#### Overall Cable

Overall Nominal Diameter:

8.661 mm

##### Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green

Pair Lay Length & Direction:

Lay Length (mm)	Twists (twist/m)	Direction
44.450	22.639	Left Hand

#### Mechanical Characteristics (Overall)

Operating Temperature Range:

-20°C To +80°C

UL Temperature Rating:

80°C (UL AWM Style 2919)

Bulk Cable Weight:

84.827 Kg/Km

Max. Recommended Pulling Tension:

471.509 N

Min. Bend Radius/Minor Axis:

88.900 mm

#### Applicable Specifications and Agency Compliance (Overall)

##### Applicable Standards & Environmental Programs

NEC/(UL) Specification:

CM

NEC Articles:

800

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CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2919 (30 V 80°C)
EU Directive 2011/65/EU (ROHS II):	Yes
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
CSA Flame Test:	FT1

#### Suitability

Suitability - Indoor:	Yes
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#### Plenum/Non-Plenum

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

##### Nom. Characteristic Impedance:

Impedance (Ohm)
50

##### Nom. Inductance:

Inductance (μH/m)
0.59058

##### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
98.43

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

Capacitance (pF/m)
180.455

##### Nominal Velocity of Propagation:

VP (%)
66

##### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
34.4505

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 45.934 Ohm/km

##### Max. Operating Voltage - UL:

Voltage	Description
300 V RMS	UL type CM
30 V RMS	UL AWM 2919

##### Max. Recommended Current:

Description	Current
10C Temperature Rise	2.7 Amps per conductor @ 25°C ambient

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9873 060100	30 MT	2,994 KG	CHROME		3 FS PR #20 PP PVC
9873 0601000	305 MT	27,669 KG	CHROME	C	3 FS PR #20 PP PVC
9873 060250	76 MT	7,371 KG	CHROME	C	3 FS PR #20 PP PVC
9873 060500	152 MT	14,515 KG	CHROME	C	3 FS PR #20 PP PVC
9873 0605000	1,524 MT	142,882 KG	CHROME		3 FS PR #20 PP PVC

##### Notes:

C = CRATE REEL PUT-UP.

### 9873 Multi-Conductor - Audio, Control and Instrumentation Cable

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