# **Detailed Specifications & Technical Data**

## METRIC MEASUREMENT VERSION





9768 Multi-Conductor - CM Rated Cable

For more Information please call

1-800-Belden1



# **General Description:**

22 AWG stranded (7x30) tinned copper conductor, polypropylene insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall PVC jacket and 22 AWG stranded tinned copper drain wire.

# **Physical Characteristics (Overall)**

## Conductor

#### AWG:

# Pairs	AWG	Stranding	<b>Conductor Material</b>	Dia. (mm)
12	22	7x30	TC - Tinned Copper	0.762

Total Number of Conductors: 24

## Insulation

## **Insulation Material:**

Insulation Material	Wall Thickness (mm)
PP - Polypropylene	0.279

#### **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:



Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

### **Outer Shield**

## **Outer Shield Material:**

Outer Shield Material
Unshielded

# **Outer Jacket**

#### **Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.914

# **Overall Cable**

Overall Nominal Diameter: 11.786 mm

#### Pair

# Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown

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7	Black & Orange		
8	Red & White		
9	Red & Green		
10	Red & Blue		
11	Red & Yellow		
12	Red & Brown		

Mechanical Characteristics (Overall)				
Operating Temperature Range:	-20°C To +80°C			
UL Temperature Rating:	80°C (UL AWM Style 2919)			
Bulk Cable Weight:	184.537 Kg/Km			
Max. Recommended Pulling Tension:	1423.424 N			
Min. Bend Radius/Minor Axis:	120.650 mm			
Applicable Specifications and Agency	Compliance (Overall)			
Applicable Standards & Environmental Pr	ograms			
NEC/(UL) Specification:	CM			
CEC/C(UL) Specification:	CM			

NEC/(UL) Specification:	CM
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

# Plenum/Non-Plenum

Plenum (Y/N): No

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 50

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) 49.215

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Ind. Pair Nominal Shield DC Resistance @ 20 34.779 Ohm/km Deg. C:

Max. Operating Voltage - UL:

Voltage	Description		
30 V RMS	UL AWM Style 2919		
300 V RMS	СМ		

#### Max. Recommended Current:

Current
1.4 Amps per conductor @ 25°C

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9768 060100	100 FT	13.900 LB	CHROME	С	12 FS PR #22 HDPE PVC
9768 0601000	1,000 FT	132.000 LB	CHROME	С	12 FS PR #22 HDPE PVC
9768 060250	250 FT	34.500 LB	CHROME		12 FS PR #22 HDPE PVC
9768 060500	500 FT	69.500 LB	CHROME	С	12 FS PR #22 HDPE PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 10-19-2016

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