

METRIC MEASUREMENT VERSION



## 9777 Multi-Conductor - Audio, Control and Instrumentation Cable

For more Information  
please call

1-800-Belden1



### General Description:

18 AWG stranded (19x30) TC conductors, polypropylene insulation, twisted pairs, individually shielded w/Beldfoil® (100% coverage), 20 AWG stranded TC drain wire, PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
15	18	19x30	TC - Tinned Copper

Total Number of Conductors: 30

#### Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
PP - Polypropylene	0.483

#### 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
20

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 (mm)
PVC - Polyvinyl Chloride	1.321

#### Overall Cable

Overall Nominal Diameter: 20.803 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
7	Black & Orange
8	Red & White
9	Red & Green
10	Red & Blue
11	Red & Yellow
12	Red & Brown

13	Red & Orange
14	Green & White
15	Green & Blue

### Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	520.870 Kg/Km
Max. Recommended Pulling Tension:	3932.209 N
Min. Bend Radius/Minor Axis:	209.550 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

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. 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)

20.9984

## METRIC MEASUREMENT VERSION

### 9777 Multi-Conductor - Audio, Control and Instrumentation Cable

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 27.232 Ohm/km

#### Max. Operating Voltage - UL:

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

#### Max. Recommended Current:

Current
2.7 Amps per conductor @ 25°C

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9777 0601000	1,000 FT	415.000 LB	CHROME	C	15 FS PR #18 PP PVC
9777 060500	500 FT	191.000 LB	CHROME	C	15 FS PR #18 PP PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2    Revision Date: 09-07-2012

© 2019 Belden, Inc  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).