Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

8777 Multi-Conductor - Shielded Twisted Pair Cable

For more Information
please call

1-800-Belden1

General Description:

22 AWG stranded (7x30) tinned copper conductors, polypropylene insulation, twisted pairs individually Beldfoil® Shielded (100% coverage), 22 AWG stranded tinned copper drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
3	22	7x30	TC - Tinned Copper	.030

Total Number of Conductors: 6

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PP - Polypropylene	0.011

Inner Shield

Inner Shield Material:

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum-Polyester	100.000

Inner Shield Drain Wire AWG:

AWG
22

Inner Shield Drain Wire Stranding: 7x30

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 (in.)
PVC - Polyvinyl Chloride	0.034

Overall Cable

Overall Nominal Diameter: 0.273 in.

Pair

Pair Color Code Chart:

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

Pair Lay Length & Direction:

Lay Length (in.)	Twists (twist/ft)	Direction
1.750	6.900	Left Hand

Mechanical Characteristics (Overall)

Storage Temperature Range:	-40°C To +80°C
Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	39 lbs/1000 ft.
Max. Recommended Pulling Tension:	79 lbs.
Min. Bend Radius/Minor Axis:	2.750 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
NEC Articles:	800
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

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	88777, 87777, 82777

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
50

Nom. Inductance:

Inductance (µH/ft)
0.18

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
30

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
55

Nominal Velocity of Propagation:

VP (%)
66

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
15.0

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 10.600 Ohm/1000 ft

Max. Operating Voltage - UL:

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

Max. Recommended Current:

Description	Current
10C temperature rise	2 Amps per conductor @ 25°C ambient

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8777 060U1000	1,000 FT	41.000 LB	CHROME		3 SH PR #22 PP PVC
8777 060U500	500 FT	21.000 LB	CHROME		3 SHLD PR #22 PP PVC
8777 060100	100 FT	4.700 LB	CHROME		3 SHLD PR #22 PP PVC
8777 0601000	1,000 FT	43.000 LB	CHROME	C	3 SHLD PR #22 PP PVC
8777 06010000	10,000 FT	460.000 LB	CHROME	C Y	3 SHLD PR #22 PP PVC
8777 0601640	1,640 FT	68.880 LB	CHROME	C	3 SHLD PR #22 PP PVC
8777 060250	250 FT	11.250 LB	CHROME	C	3 SHLD PR #22 PP PVC
8777 0603280	3,280 FT	137.760 LB	CHROME	C	3 SHLD PR #22 PP PVC
8777 060500	500 FT	21.500 LB	CHROME	C	3 SHLD PR #22 PP PVC
8777 0605000	5,000 FT	215.000 LB	CHROME	C	3 SHLD PR #22 PP PVC

Notes:
C = CRATE REEL PUT-UP.
Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

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