

## 87777 Multi-Conductor - CMP Rated (Plenum) Cable

For more Information  
please call

1-800-Belden1



### General Description:

22 AWG stranded (7x30) TC conductor, FEP insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall jacket per table below, 22 AWG stranded TC drain wire.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
3	22	7x30	TC - Tinned Copper	0.762

Total Number of Conductors: 6

#### Insulation

##### Insulation Material:

Insulation Material	Wall Thickness (mm)
FEP - Fluorinated Ethylene Propylene	0.254

Insulation Resistance: 200,000 megaohms/1000 ft. @500 Volts DC (Cond. to Cond.); 75,000 megaohms/1000 ft. @ 500 Volts DC (Cond. to Shield)

#### 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: 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)
PVDF - Fluorocopolymer	0.356

#### Overall Cable

Overall Nominal Diameter: 5.944 mm

#### Pair

##### Pair Color Code Chart:

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

### Mechanical Characteristics (Overall)

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Operating Temperature Range:	-20°C To +150°C
Bulk Cable Weight:	53.575 Kg/Km
Max. Recommended Pulling Tension:	364.752 N
Min. Bend Radius/Minor Axis:	63.500 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
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):	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:	NFPA 262
CSA Flame Test:	FT6

#### Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	8777

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)

50

#### Nom. Inductance:

Inductance (µH/m)

0.59058

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

101.711

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

Capacitance (pF/m)

219.827

#### Nominal Velocity of Propagation:

VP (%)

69

#### Nominal Delay:

Delay (ns/m)

4.82307

#### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

52.496

METRIC MEASUREMENT VERSION

## 87777 Multi-Conductor - CMP Rated (Plenum) Cable

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 37.075 Ohm/km

### Max. Operating Voltage - UL:

**Voltage**  
300 V RMS

### Max. Recommended Current:

**Current**  
3.5 Amps per conductor @ 25°C

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
87777 0021000	1,000 FT	39,000 LB	RED	C	3 SH PR #22 FEP SOLEF
87777 002500	500 FT	19,500 LB	RED	C	3 SH PR #22 FEP SOLEF

#### Notes:

C = CRATE REEL PUT-UP.

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