## **Detailed Specifications & Technical Data**



#### 88777 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. (in		
3 22 7x30 TC - Tinned Copper .030		
Total Number of Conductors:	<b>⊸</b> 6	
Insulation Insulation Material:		
Insulation Trade Name Insulation Material	Wall Thickness (in.)	
Teflon® FEP - Fluorinated Ethylene Pro	ylene 0.010	
Inner Shield Inner Shield Material:		
Inner Shield Trade Name Type Inner Shield Material	Coverage (%)	
Beldfoil® (Z-Fold®) Tape Aluminum Foil-Polyes	er Tape 100	
Inner Shield Drain Wire AWG:		
AWG		
22		
Inner Shield Drain Wire Stranding:	16x34	
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: Outer Jacket Trade Name Outer Jacket Material	Nom. Wall Thickness (in.)	
Outer Jacket Material:     Outer Jacket Trade Name   Outer Jacket Material     Teflon®   FEP - Fluorinated Ethylene		
Outer Jacket Material:     Outer Jacket Trade Name   Outer Jacket Material     Teflon®   FEP - Fluorinated Ethylene	ropylene 0.014	
Outer Jacket Material:     Outer Jacket Trade Name   Outer Jacket Material     Teflon®   FEP - Fluorinated Ethylene		
Outer Jacket Material:     Outer Jacket Trade Name   Outer Jacket Material     Teflon®   FEP - Fluorinated Ethylene	ropylene 0.014	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color	ropylene 0.014	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color 1 Black & Red	ropylene 0.014	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color	ropylene 0.014	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White	ropylene 0.014	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green	ropylene 0.014	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green	ropylene 0.014	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green Mechanical Characteristics (Overall)	0.014 0.234 in.	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green Mechanical Characteristics (Overall) Operating Temperature Range:	-70°C To +200°C	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight:	ropylene   0.014     0.234 in.     -70°C To +200°C     37 lbs/1000 ft.	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis:	ropylene 0.014   0.234 in.   -70°C To +200°C   37 lbs/1000 ft.   82 lbs.   2.500 in.	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis:	ropylene 0.014   0.234 in.   -70°C To +200°C   37 lbs/1000 ft.   82 lbs.   2.500 in.	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene Overall Cable Overall Nominal Diameter: Pair Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Comp	ropylene 0.014   0.234 in.   -70°C To +200°C   37 lbs/1000 ft.   82 lbs.   2.500 in.	
Outer Jacket Material: Outer Jacket Trade Name Outer Jacket Material Teflon® FEP - Fluorinated Ethylene I Overall Cable Overall Nominal Diameter: Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Comp Applicable Standards & Environmental Programs	ropylene   0.014     0.234 in.   0.234 in.     -70°C To +200°C	

# **Detailed Specifications & Technical Data**



#### ENGLISH MEASUREMENT VERSION

### 88777 Multi-Conductor - CMP Rated (Plenum) Cable

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/ft) 0.18	
Nom. Capacitance Conductor to Conductor:	
Capacitance (pF/ft)	
31	
Nom. Capacitance Cond. to Other Conductor & Shield:	
Capacitance (pF/ft) 67	
Nominal Velocity of Propagation:	
VP (%) 69	
Maximum Conductor DC Resistance:	
DCR @ 20°C (Ohm/100 m) 16	
Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:	11.300 Ohm/1000 ft
Max. Operating Voltage - UL:	
Voltage 300 V RMS	
Max. Recommended Current:	
Current	
1.96 Amps per conductor @ 25°C	

#### Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
88777 002100	100 FT	5.900 LB	RED	С	3 SH PR #22 FEP FEP
88777 0021000	1,000 FT	41.000 LB	RED	С	3 SH PR #22 FEP FEP
88777 002500	500 FT	20.000 LB	RED	С	3 SH PR #22 FEP FEP
88777 0025000	5,000 FT	195.000 LB	RED		3 SH PR #22 FEP FEP

Notes: C = CRATE REEL PUT-UP.

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Revision Number: 2 Revision Date: 08-16-2012

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