

## 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. (mm) |
|---------|-----|-----------|--------------------|-----------|
| 3       | 22  | 7x30      | TC - Tinned Copper | 0.762     |

Total Number of Conductors: 6

**Insulation**

Insulation Material:

| Insulation Material | Wall Thickness (mm) |
|---------------------|---------------------|
| PP - Polypropylene  | 0.279               |

**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 (mm) |
|--------------------------|--------------------------|
| PVC - Polyvinyl Chloride | 0.864                    |

**Overall Cable**

Overall Nominal Diameter: 6.934 mm

**Pair**

Pair Color Code Chart:

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

Pair Lay Length & Direction:

| Lay Length (mm) | Twists (twist/m) | Direction |
|-----------------|------------------|-----------|
| 44.450          | 22.639           | 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:                | 58.040 Kg/Km             |
| Max. Recommended Pulling Tension: | 351.408 N                |
| Min. Bend Radius/Minor Axis:      | 69.850 mm                |

## 8777 Multi-Conductor - Shielded Twisted Pair Cable

## Applicable Specifications and Agency Compliance (Overall)

## Applicable Standards &amp; 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/m) |
|-------------------|
| 0.59058           |

## Nom. Capacitance Conductor to Conductor:

| Capacitance (pF/m) |
|--------------------|
| 98.43              |

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

| Capacitance (pF/m) |
|--------------------|
| 180.455            |

## Nominal Velocity of Propagation:

| VP (%) |
|--------|
| 66     |

## Nom. Conductor DC Resistance:

| DCR @ 20°C (Ohm/km) |
|---------------------|
| 49.215              |

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

## 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 | 305 MT | 18.597 KG   | CHROME |       | 3 SH PR #22 PP PVC   |
| 8777 060U500  | 152 MT | 9.525 KG    | CHROME |       | 3 SHLD PR #22 PP PVC |

## METRIC MEASUREMENT VERSION

## 8777 Multi-Conductor - Shielded Twisted Pair Cable

|               |          |            |        |     |                      |
|---------------|----------|------------|--------|-----|----------------------|
| 8777 060100   | 30 MT    | 2.132 KG   | CHROME |     | 3 SHLD PR #22 PP PVC |
| 8777 0601000  | 305 MT   | 19.505 KG  | CHROME | C   | 3 SHLD PR #22 PP PVC |
| 8777 06010000 | 3,048 MT | 208.653 KG | CHROME | C Y | 3 SHLD PR #22 PP PVC |
| 8777 0601640  | 500 MT   | 31.244 KG  | CHROME | C   | 3 SHLD PR #22 PP PVC |
| 8777 060250   | 76 MT    | 5.103 KG   | CHROME | C   | 3 SHLD PR #22 PP PVC |
| 8777 0603280  | 1,000 MT | 62.487 KG  | CHROME | C   | 3 SHLD PR #22 PP PVC |
| 8777 060500   | 152 MT   | 9.752 KG   | CHROME | C   | 3 SHLD PR #22 PP PVC |
| 8777 0605000  | 1,524 MT | 97.523 KG  | 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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