

DEF Standard 61-12 Part 4 Cables 7/0.2mm, Unscreened, PVC Sheath

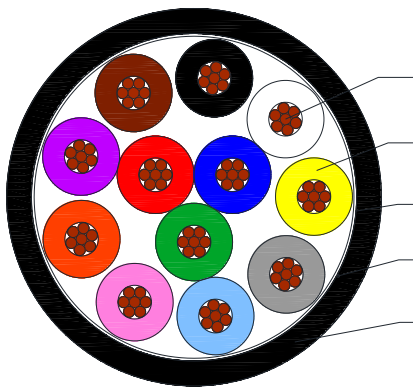


C2035 to C2049

Applications

Sub-miniature electric cables for local interconnection between and within instruments and electronic equipment for Ministry of Defence (MOD) use.

Cross Section Drawing



- Conductor
- Insulation
- PET Tape
- Year Thread
- Sheath

Design

| Unit | Properties |
|------------------------|--|
| Conductor | Flexible Tinned Copper Wire |
| Insulation | Polyvinyl Chloride (PVC) Colour code see table in page 3 |
| Filler (If applicable) | PVC |
| Wrapping tape | Polyester Tape |
| Manufacture year ID | Coloured thread |
| Sheath | Flame-Retardant Polyvinyl Chloride (PVC) Standard colour: Black |
| Standard Put Up Length | 305 meters |

*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

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Physical Characteristics

| Part Number | C2035 | C2036 | C2037 | C2038 | C2039 | C2040 | C2041 | C2042 |
|--------------------------------------|-----------|--------|--------|--------|--------|---------|---------|---------|
| Identification code | 7-2-2A | 7-2-3A | 7-2-4A | 7-2-6A | 7-2-8A | 7-2-12A | 7-2-18A | 7-2-20A |
| No. of Cores | 2 | 3 | 4 | 6 | 8 | 12 | 18 | 20 |
| Nom. Conductor Diameter (mm) | 7×0.2 | | | | | | | |
| Nom. Radial Thickness Insulation(mm) | 0.30 | | | | | | | |
| Nom. Insulation Diameter (mm) | 1.20 | | | | | | | |
| Nom. Radial Thickness Sheath(mm) | 0.45 | 0.45 | 0.45 | 0.45 | 0.55 | 0.55 | 0.65 | 0.65 |
| Nom. Overall Diameter(mm) | 3.6 | 3.8 | 4.1 | 4.8 | 5.8 | 6.4 | 7.7 | 7.9 |
| Operating Temperature (°C) | -0 to +70 | | | | | | | |
| Min. Bend Radius (install)(mm) | 36 | 38 | 41 | 48 | 58 | 64 | 77 | 79 |
| Nominal Cable Weight (kg/km) | 13 | 16 | 20 | 30 | 39 | 53 | 80 | 89 |

| Part Number | C2043 | C2044 | C2045 | C2046 | C2047 | C2048 | C2049 |
|--------------------------------------|-----------|---------|---------|---------|---------|----------|----------|
| Identification code | 7-2-25A | 7-2-36A | 7-2-50A | 7-2-60A | 7-2-85A | 7-2-108A | 7-2-162A |
| No. of Cores | 25 | 36 | 50 | 60 | 85 | 108 | 162 |
| Nom. Conductor Diameter (mm) | 7×0.2 | | | | | | |
| Nom. Radial Thickness Insulation(mm) | 0.30 | | | | | | |
| Nom. Insulation Diameter (mm) | 1.20 | | | | | | |
| Nom. Radial Thickness Sheath(mm) | 0.65 | 0.65 | 0.75 | 0.75 | 0.9 | 0.9 | 1.0 |
| Nom. Overall Diameter(mm) | 9.0 | 10.1 | 12.0 | 12.8 | 15.1 | 16.9 | 20.2 |
| Operating Temperature (°C) | -0 to +70 | | | | | | |
| Min. Bend Radius (install)(mm) | 90 | 101 | 120 | 128 | 151 | 169 | 202 |
| Nominal Cable Weight (kg/km) | 100 | 140 | 200 | 230 | 330 | 410 | 600 |

Electrical Characteristics at 20°C

| Max. Conductor Resistance (Ω/km) | Voltage test in water for 5 minutes (V rms) | Min. Insulation resistance in water at 500V for 1minute (MΩ*km) | Voltage test core to core for 1 minutes (V rms) | Operation voltage at frequencies up to 1.6 KHz (Volts RMS) |
|----------------------------------|---|---|---|--|
| 92 | 1350 | 100 | 1000 | 440 |

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Colour Code

| Core | Colour | Core | Colour | Core | Colour | Core | Colour |
|------|--------|------|--------------|------|----------------|------|-----------------|
| 1 | RED | 10 | PINK | 19 | YELLOW / blue | 28 | ORANGE / green |
| 2 | BLUE | 11 | TURQUOISE | 20 | WHITE / blue | 29 | GREY / green |
| 3 | GREEN | 12 | GREY | 21 | BLUE / black | 30 | YELLOW / brown |
| 4 | YELLOW | 13 | RED / blue | 22 | ORANGE / blue | 31 | WHITE / brown |
| 5 | WHITE | 14 | GREEN / red | 23 | GREEN / blue | 32 | BROWN / black |
| 6 | BLACK | 15 | YELLOW / red | 24 | GREY / blue | 33 | GREY / brown |
| 7 | BROWN | 16 | WHITE / red | 25 | YELLOW / green | 34 | YELLOW / violet |
| 8 | VIOLET | 17 | RED / black | 26 | WHITE / green | 35 | VIOLET / black |
| 9 | ORANGE | 18 | RED / brown | 27 | GREEN / black | 36 | WHITE / violet |

Note 1: Base colours are indicated by capital letters

Note 2: For cables containing 50 or more cores each layer shall consist of a RED core and a BLUE core laid-up adjacent to each other the remainder of the cores in the layer being WHITE. 50 and 108 core cables shall have a centre consisting of a RED, a BLUE and a WHITE core.

Reference Standards

| | |
|---------------------------|-----------------|
| Def Standard 61-12 part 4 | (BS) EN 50290-2 |
| IEC 60228 | UL2556 FV-1 |
| RoHS directives | |