

DEF Standard 61-12 Part 4 Cables

7/0.1 mm, Unscreened, PVC Sheath

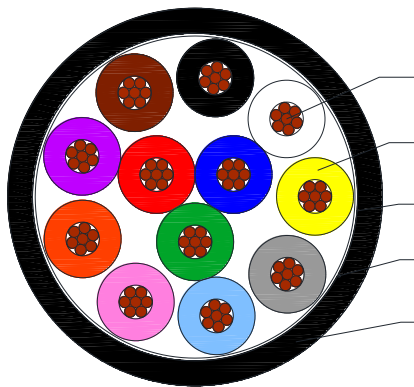


C2020 to C2034

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	C2020	C2021	C2022	C2023	C2024	C2025	C2026	C2027
Identification code	7-1-2A	7-1-3A	7-1-4A	7-1-6A	7-1-9A	7-1-12A	7-1-15A	7-1-18A
No. of Cores	2	3	4	6	9	12	15	18
Nom. Conductor Diameter (mm)	7×0.1							
Nom. Radial Thickness Insulation(mm)	0.20							
Nom. Insulation Diameter (mm)	0.70							
Nom. Radial Thickness Sheath(mm)	0.4	0.4	0.4	0.45	0.45	0.45	0.45	0.45
Nom. Overall Diameter(mm)	2.5	2.6	2.8	3.3	3.8	4.1	4.5	4.7
Operating Temperature (°C)	-0 to +70							
Min. Bend Radius (install)(mm)	25	26	28	33	38	41	45	47
Nominal Cable Weight (kg/km)	5.4	6.5	8.0	12.0	17.4	19.0	23.5	27.0

Part Number	C2028	C2029	C2030	C2031	C2032	C2033	C2034
Identification code	7-1-25A	7-1-36A	7-1-50A	7-1-60A	7-1-85A	7-1-108A	7-1-162A
No. of Cores	25	36	50	60	85	108	162
Nom. Conductor Diameter (mm)	7×0.1						
Nom. Radial Thickness Insulation(mm)	0.20						
Nom. Insulation Diameter (mm)	0.70						
Nom. Radial Thickness Sheath(mm)	0.55	0.55	0.55	0.65	0.65	0.65	0.75
Nom. Overall Diameter(mm)	5.8	6.4	7.3	8.0	9.1	10.2	12.2
Operating Temperature (°C)	-0 to +70						
Min. Bend Radius (install)(mm)	58	64	73	80	91	102	122
Nominal Cable Weight (kg/km)	38.2	50.8	67.3	81.8	110	-	-

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)
384	1000	140	1000	250

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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	