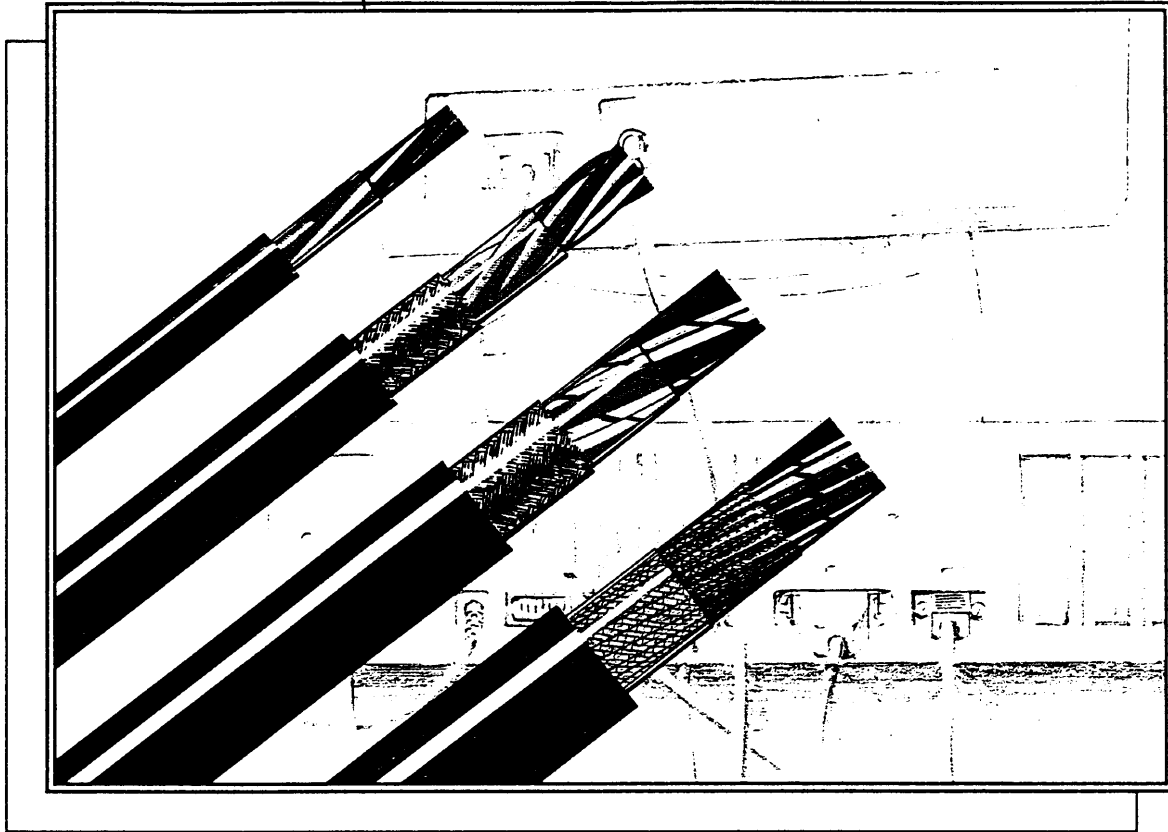


# Defence Standard 61-12 (Part 5)

715-9180 to 716054

## Small Multicore Cables



This Ministry of Defence Standard details requirements of small multicore cables having PVC and polyethylene insulated cores, with or without screening, and a PVC sheath. Cables to this standard are intended for use in similar applications to those detailed in DEF STAN 61-12 (Part 4).

As in DEF STAN 61-12 (Part 4), none of the cables listed in this standard are intended to be used as power cables or for the direct connection of equipment to mains power supplies.

Two types of cores are included:  
 Low tension (LT) cores, which are either 16/0.2mm or 37/0.315mm and having PVC insulation;  
 High tension (HT) cores, which are 16/0.2mm having a polyethylene insulation.

Low tension cores are suitable for operation at voltages up to 440V (rms) and frequencies up to 1600Hz.

High tension cores are suitable for operation at voltages up to 2,000V (rms) and frequencies up to 1600Hz.

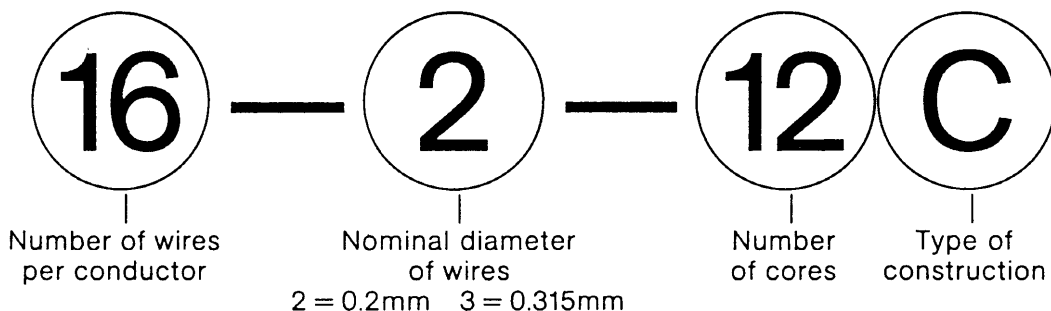
### Conductor Details

Conductor Composition (No. of Wires/ Nominal Wire Diameter - mm)	Nominal Conductor Area (mm <sup>2</sup> )	Maximum Conductor Resistance @ 20°C (Ohms/km)
16/0.2	0.5	40.1
37/0.315	2.89	6.79

The cables having PVC insulation and sheath can be offered with either general purpose or heat resisting grades of PVC. The standard types are suitable for a maximum (conductor) operating temperature of 70°C, whilst those manufactured with heat resisting PVC are suitable for a maximum (conductor) operating temperature of 85°C.

### Explanation of Identification Code Numbers

Example:



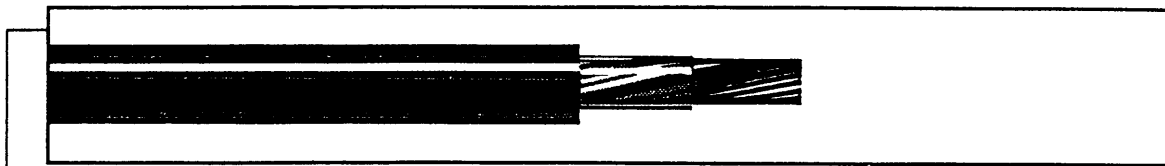
### Type A: (UNSCREENED)

**Construction:** Flexible, tinned annealed copper conductors, complying with the requirements of BS 6360.

PVC insulated (Type TI 1 to BS 6746).

Cores twisted together and collectively polyester taped.

PVC sheathed (Type 6 to BS 6746) BLACK.



Defence Standard 61-12 (Part 5)

Cable Identification Code No.	Number of Cores	Conductor Composition	Nominal Radial Thickness of Insulation (mm)	Core Diameter (mm)		Overall Diameter (mm)		NATO Stock No. 6145-99-
				Minimum	Maximum	Minimum	Maximum	
16-2-2A	2	16/0.2	0.45	1.75	1.90	5.1	5.9	111-6715
16-2-3A	3	16/0.2	0.45	1.75	1.90	5.4	6.2	111-6722
16-2-4A	4	16/0.2	0.45	1.75	1.90	5.9	6.7	111-6726
16-2-6A	6	16/0.2	0.45	1.75	1.90	6.9	7.7	111-6733
16-2-12A	12	16/0.2	0.45	1.75	1.90	9.1	9.9	111-6743
16-2-18A	18	16/0.2	0.45	1.75	1.90	10.5	11.5	111-6749
16-2-25A	25	16/0.2	0.45	1.75	1.90	12.6	13.6	111-6756

30

### Type C: (COLLECTIVELY SCREENED)

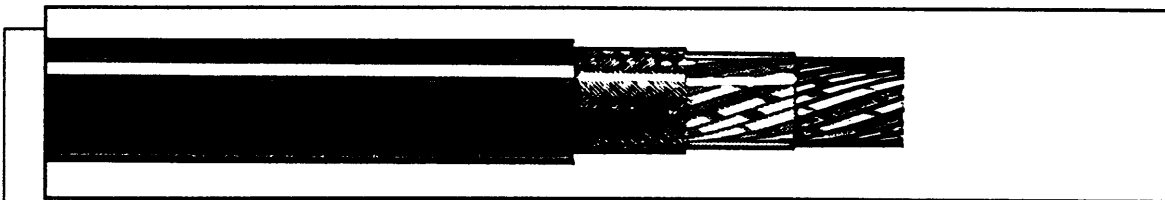
**Construction:** Flexible, tinned annealed copper conductors, complying with the requirements of BS 6360.

PVC insulated (Type TI 1 to BS 6746).

Cores twisted together and collectively polyester taped.

Collectively tinned copper wire braided screened (91% minimum coverage).

PVC sheathed (Type 6 to BS 6746) BLACK.



Cable Identification Code No.	Number of Cores	Conductor Composition	Nominal Radial Thickness of Insulation (mm)	Core Diameter (mm)		Overall Diameter (mm)		NATO Stock No. 6145-99-
				Minimum	Maximum	Minimum	Maximum	
16-2-1C	1	16/0.2	0.45	1.75	1.90	3.3	3.8	015-1682
16-2-2C	2	16/0.2	0.45	1.75	1.90	6.1	6.9	111-6717
16-2-3C	3	16/0.2	0.45	1.75	1.90	6.4	7.2	111-6724
16-2-4C	4	16/0.2	0.45	1.75	1.90	6.9	7.7	111-6728
16-2-6C	6	16/0.2	0.45	1.75	1.90	7.9	8.7	111-6735
16-2-10C	10 (5 pair)	16/0.2	0.45	1.75	1.90	10.8	11.8	111-6742
16-2-12C	12	16/0.2	0.45	1.75	1.90	10.0	11.0	111-6745
16-2-18C	18	16/0.2	0.45	1.75	1.90	11.5	12.5	111-6751
16-2-25C	25	16/0.2	0.45	1.75	1.90	13.6	14.6	111-6758
16-2-36C	36	16/0.2	0.45	1.75	1.90	15.5	16.7	111-6760
16-2-60C	60	16/0.2	0.45	1.75	1.90	19.1	20.3	111-6761