



CABLE COMPOSITION



STANDARD CABLE.

This cable is based on cores made from 7 strands of o 2mm annealed tinned copper wire & is sheathed in Type 1 PVC. These cables are available in white or

LOW SMOKE & FUME CABLE. The

standard security cable can also be specified with a special low emission PVC outer sheathing. Using this sheathing, the compound oxygen index level is greater than 32%. This means it will require more than 32% of the volume of air to be oxygen for it to catch fire. 'Normal' air contains around 19% oxygen. The acid emission level is less than 10%. A normal PVC sheathing compound would give a figure of 20%.

14 STRAND CABLE. This is similar to the standard cable except that each core is made up of 14 strands of o.2mm cable. This gives a Nominal conductor area of o.44mm". (This is often used in areas where o.5mm" wire is required).



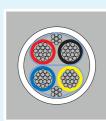
SCREENED CABLE.

This uses the same cores as standard cable. In addition, an aluminium foil is wrapped around the cores. Screened cable offers significant advantages in situations where RF interference or spurious signals may lead

to false alarms or erosion of data. An earth drain wire is present along the entire length of the cable providing shield continuity and a convenient earthing point at the control panel.

TWIN POWER & DATA. Two different conductor types are used. A power pair (red/blue) is provided in 16 strands x 0.2mm (0.5mm") for use where higher than normal current carrying capacity or lower voltage drop is required

The data cores consist of the standard 7 strands x 0.2mm tinned copper wire. The data cores are aluminium foil wrap screened (with an earth drain wire) to give added protection against induced transients that may be carried via the power cores or outside influences.



TWISTED PAIR

CABLE. Each core consists of 24 strands of o.2mm (o.75mm") copper wire. Each pair of cores is twisted and aluminium foil wrap screened. A bare 7 strands x o.2mm earth drain wire is included. Twisted pair cable is particularly useful for bus

systems or for installations requiring longer lengths of cabling such as access control and CCTV.



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CABLE CONSTRUCTION



CORES. Cores are prepared using Type 1 PVC insulation to cover the tinned copper wire. In order to ensure a constant diameter, a laser is used which is accurate to 0.0001mm. The PVC insulation is tested by passing the core through a high voltage (5kV) curtain which eliminates all possibility of inadequate insulation.

LAYING UP (BUNCHING). This process puts a "slow twist" on the cores which gives them their own natural circumference. This combined with the sheathing process, produces round flexible cable.

SHEATHING. The bunched core is chalk dusted & a rip cord inserted for easier stripping of insulation. The bunched cores are then sheathed with Type 1 PVC. The quality of this material is critical to the flexibility of the finished cable.

CABLE AT A GLANCE

	Standard cable, Screened cable, low smoke & fume	Twin power & data	Twisted pair
Core Type:	Annealed tin copper	Annealed tin copper	Copper
Strand Diameter	0.2mm	0.2mm	0.2mm
Strands per core	7	16 Power 7 Data	24
Nom. Conductor Area	0.22mm²	0.50mm ^{2 -} power 0.22mm ^{2 -} data	0.75mm²
Core Gauge	24 AWG	22 AWG	20 AWG
Insulation Thickness	0.3mm	0.4mm	0.3mm
Max. Operating Voltage	50v RMS	50v RMS	50v RMS
Current Rating: Per Core @ 70°C	1 AMP	3 AMP	4.5 AMP
Max. operating Temp	70°C	70°C	70°C
Nom Core Resistance @ 20°C	92 OHMS/KM	40 OHMS/KM	25 OHMS/KM
BS Standards	BS4737, section 3.30	BS4737, section 3.30	BS4737, section 3.30



DATA SHEETS ALSO AVAILABLE:

Internal sounders & speakers

Detection

External sounders

Emergency switches & accessories

Freewave - wirefree system

Hydrosure - fall detection for swimming pools & ponds

DOOR LOOPS

A range of door loops are available in 4 or 6 cores, in fixed or extendible lengths and come with junction boxes included. They are constructed from braided copper cores with crimped spade connectors for ease of connection.

ORDER CODE:

Single door loops & junction boxes 500mm armoured flexi-tube C/W end caps (no cable) DLT 103/WH 300mm 4 way cable DLA 704/WH 300mm 6 way cable DLA 706/WH

Extendible door loops including junction boxes DLA 708/WH 250mm extending to 1000mm 4 way cable 250mm extending to 1000mm 6 way cable DLA 709/WH

Standard cables in white (WH) other colours available to special order.



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