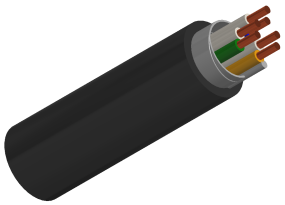
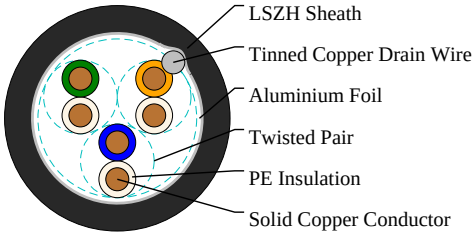
Caledonian
Telephone Cables
www.caledonian-cables.com marketing@caledonian-cables.com

INDOOR TELEPHONE CABLES

PE Insulated & LSZH Sheathed Cables to CW 1600
TP1600-2Y(St)H-3P05





APPLICATIONS

The cables are similar in design and application to CW 1308, but with Low Smoke Halogen Free cores and sheath. CW 1600 has the added advantage of an Aluminium/Polyester foil screen and drain wire. A fire barrier tape is included on cable with more than 6 pairs. The cables are used for the internal wiring of building when the need to protect people and equipment from smoke and fumes is paramount. The cables are designed to handle low frequency signals for short range applications and intended to be terminated in insulation displacement connectors (IDC).

STANDARDS

CW 1600

CABLE CONSTRUCTION

Conductors: Solid annealed bare or tinned copper sized 0.5mm (24AWG respectively) as per class 1 of BS 6360/ IEC 60228.
Insulation: Solid polyethylene as per BS 6234/IEC 60708.
Twisted Pairs: Insulated conductors are twisted into pairs with varying lay length to minimize crosstalk.
Cabling Element: Twisted Pairs/Triples/Quads.
Cable Core Assembly: layer for general use, including two cables for installation in customer's premises where a good appearance is required.
Screen: A 24µ aluminium polyester foil shield can be provided for fully enclosing the core with an overlap.
Drain Wire: A solid tinned 0.5mm earth/continuity wire shall be laid longitudinally.
Ripcord: Nylon ripcord may be placed parallel to the cores to facilitate sheath removal.
Sheath: LSZH compound. Grey, White, Cream or Black colours are available for options.

PHYSICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state): -30°C – +70°C
Temperature range during installation (mobile state): -20°C – +50°C
Minimum bending radius: 10 x Overall Diameter

FIRE HAZARD PERFORMANCE

1) Minimum Smoke Emission:IEC 61034, EN 50268 (New: EN 61034), VDE 0482-268 (New: VDE 0482-1034)
These standards specify a method to measure the generation of smoke from cables during fire. The result is expressed as percentage of light transmitted. Usually, the smoke density shall not be less than 60%.
2) Halogen Free: IEC 60754-1, EN 50267-2-1
These standards specify a method for determination of the amount of halogen acid gas evolved during combustion of compound. The hydrochloric acid yield should be less than 0.5%.
3) Non corrosive gases: IEC 60754-2, EN 50267-2-2, VDE 0482-267
These standards specify a method for determination of acidity of gas evolved during combustion of cables by measuring PH and conductivity. The specimen is deemed to pass this test if the pH value is less than 4.3 when related to 1 litre of water and conductivity is less than 10 µs/min.
4) Reduced Fire Propagation: IEC 60332-3C, EN 50266-2-4, VDE 0482-266-2-4
These standards specify a method for flame propagation test for bunched cables.
5) Flame Retardancy: IEC 60332-1, VDE 0482-265-2-1
These standards specify a method for flame propagation test for single core cables.
6) Temperature Index: BS EN ISO 4589-3, BS 2782 Part 1
These standards specify a method for measuring the temperature Index of materials. The temperature index shall be equal or greater than 280ºC.
7) Oxygen Index: BS EN ISO 4589-2, BS 2863
These standards specify a test for measuring the minimum oxygen concentration to support candle like combustion of plastics. The oxygen index shall not be less than 30%.

DIMENSION AND PARAMETERS

Caledonian Cable Code	No. of Pairs	Pair Elements	Conductor Size	Conductor Diameter	Insulation Thickness (min.)	Nominal Diameter over Insulation (max.)	Sheath Thickness (min.)	Overall Diameter (max.)	Approx. Weight
			mm²	mm	mm	mm	mm	mm	kg/km
TP1600 -2Y(St)H -3P05	3	Prs1-3	0.196	0.5	0.15	0.95	0.6	5	35