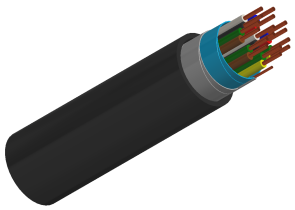
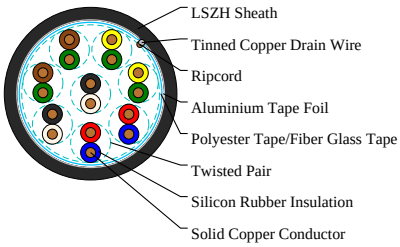
Caledonian
Telephone Cables
www.caledonian-cables.com marketing@caledonian-cables.com

INDOOR TELEPHONE CABLES

SR Insulated & LSZH Sheathed Fire Resistant Cables to DIN VDE 0815
TP815JE-H(St)H-Bd-FE180-E30-8P08





APPLICATIONS

The cables are similar in design and application to CW 1600, but with Silicon Rubber Insulation. They are used for the internal wiring of building when the circuit integrity during fire is paramount. The cables are intended for use in fire fighting plants with special ceramized silicon insulation, with and without aluminium foil and LSZH outer sheath.

STANDARDS

EN 50200:2000-02
EN 50266/EN 50267
EN 50268/BS 6387
IEC 60331/DIN VDE 0472-814

CABLE CONSTRUCTION

Conductors: Solid annealed bare or tinned copper as per class 1 of VDE 0295/IEC 60228.
Insulation: Silicon Rubber compound as per DIN VDE 0266.
Twisted Pairs: Insulated conductors are twisted into pairs with varying lay length to minimize crosstalk.
Cabling Element: Twisted Pairs.
Cable Core Assembly:The twisted pairs are stranded to the core in layers.
Core Wrapping: One or more non hygroscopic polyester tapes are helically or longitudinally laid with an overlap prior to sheathing.
Screen: A laminated Aluminium/Polyester tape is placed in contact with solid copper 0.6mm or 0.8mm drain wire.
Drain Wire: A solid tinned earth/continuity wire shall be laid longitudinally for screened cables.
Ripcord: Nylon ripcord may be placed parallel to the cores to facilitate sheath removal.
Sheath: LSZH compound HM2 as per VDE 0207-24.

COLOUR CODE

Quad colour in each bundle:
Pair 1: Blue-Red Pair 2: Green-Yellow Pair 3: Green-Brown Pair 4: White-Black
The individual bundles are identified by a numbered helix.

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: 7.5 x Overall Diameter (unarmoured cable);15 x Overall Diameter (armoured cables)

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: DIN VDE 0472-814, IEC 60331,EN 50200, VDE 0482-1
These standards specify the performance requirements for cables required to maintain insulation integrity under fire conditions.
7) Oxygen Index: DIN 4102-12
These standards specify the performance requirements for cables required to maintain circuit integrity under fire conditions.

DIMENSION AND PARAMETERS

Caledonian Cable Code	No. of Pairs	Conductor Size	Conductor Diameter	Nominal Insulation Thickness	Nominal Diameter over Insulation	Nominal Sheath Thickness	Nom. Overall Diameter	Approx. Weight
		mm²	mm	mm	mm	mm	mm	kg/km
TP815JE -H(St)H - Bd-FE180 -E30-8P08	8	0.5	0.8	0.4	1.6	1	12.8	218