



# Caledonian

## INDOOR TELEPHONE CABLES

[www.caledonian-cables.co.uk](http://www.caledonian-cables.co.uk) [www.addison-cables.com](http://www.addison-cables.com)

## PVC/LSZH Insulated & PVC/LSZH Sheathed Switchboard Cables to DIN VDE 0815

J-Y(St)Y...2X0.6 Lg

J-Y(St)Y...2X0.8 Lg

J-H(St)H...2X0.6 Lg

J-H(St)H...2X0.8 Lg

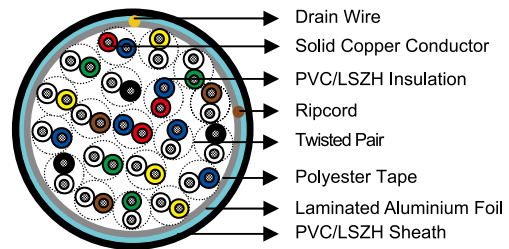
### APPLICATION

The installation cables are used for telephone and signal transmission and suitable for permanent installation on and under plaster in dry and damp rooms and for permanent installation on external walls. They are designed to handle low frequency analogue or digital signals for flexible installation.



### STANDARDS

- DIN VDE 0815



### CONSTRUCTION

- **Conductors:** Solid annealed bare copper sized 0.6/0.8mm as per VDE 0295/IEC 60228 Class 1.
- **Insulation:** PVC Y11 type to DIN VDE 0207-4. LSZH compound can be offered as option.
- **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 cable core in layers.
- **Core Wrapping:** One or more non-hygroscopic polyester tapes are helically or longitudinally laid with an overlap prior to sheathing.
- **Screen:** Laminated aluminium foil is provided for fully enclosing the core with an overlap.
- **Sheath:** PVC YM1 type to DIN VDE 0207-5. LSZH sheath can be offered as option.
- **Ripcord:** Nylon ripcord may be placed parallel to the cores to facilitate sheath removal.
- **Drain Wire:** Drain wire with a diameter of 0.4mm is provided in cables up to 10 pairs. Drain wire with a diameter of 0.6mm is provided in cables with more than 10 pairs.

### TYPE CODES

J-	Installation Cable
Y	Polyvinylchloride (PVC)
H	Low Smoke & Zero Halogen
(St)	Static Shield
Lg	Stranded in layers

## ELECTRICAL PROPERTIES

Nominal Conductor Diameter	mm	0.6	0.8	0.6	0.8
VDE CODE		J-Y(St)Y	J-Y(St)Y	J-H(St)H	J-H(St)H
Conductor Size	mm <sup>2</sup>	0.283	0.5	0.283	0.5
Maximum Conductor Resistance @20°C	Ω/km	63	34.6	63	34.6
Maximum Loop Resistance @20°C	Ω/km	130	73.2	130	73.2
Minimum Insulation Resistance @500V DC @20°C	MΩ·km	100	100	100	100
Maximum Average Attenuation @0.8KHz	dB/km	1.7	1.1	1.7	1.1
Maximum Mutual Capacitance @0.8KHz*	nF/km	100	100	120	120
Maximum Capacitance Unbalance K1	pF/100m	300	300	300	300
Maximum Working Voltage Peak Value	V	300	300	300	300
Insulation Material		PVC	PVC	LSZH	LSZH
Sheath Material		PVC	PVC	LSZH	LSZH
Nominal Insulation Thickness	mm	0.3	0.4	0.3	0.4
Nominal Insulated Conductor Diameter	mm	1.2	1.6	1.2	1.6

\* In Cables up to 4 pairs 120nF/km

## MECHANICAL 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

## COLOUR CODE

In 2 pair- cables:

Pair 1: a-wire red            b-wire black

Pair 2: a-wire white        b-wire yellow

In cables with 4 and more pairs:

a-wire of the 1st pair in each layer red, in all other pairs white

b-wire blue, yellow, green, brown, black in repeated sequence counting direction from the outside to the inside.

## DIMENSIONS AND WEIGHT

VDE CODE: J-Y(St)Y ...x2x0.6/0.8 Lg

Cable Code	Number of Pairs	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
0.6mm Conductor, 1.2mm Insulated Wire					
T815J-Y(St)Y-Lg-1P06	1	0.3	1.0	4.8	30
T815J-Y(St)Y-Lg-2P06	2	0.3	1.0	5.0	40
T815J-Y(St)Y-Lg-3P06	3	0.3	1.0	6.3	50
T815J-Y(St)Y-Lg-4P06	4	0.3	1.0	6.5	60
T815J-Y(St)Y-Lg-5P06	5	0.3	1.0	7.2	70
T815J-Y(St)Y-Lg-6P06	6	0.3	1.0	7.5	80
T815J-Y(St)Y-Lg-8P06	8	0.3	1.0	8.0	90
T815J-Y(St)Y-Lg-10P06	10	0.3	1.0	10.0	110
T815J-Y(St)Y-Lg-12P06	12	0.3	1.0	10.2	130
T815J-Y(St)Y-Lg-14P06	14	0.3	1.0	10.5	145
T815J-Y(St)Y-Lg-16P06	16	0.3	1.0	11.0	160
T815J-Y(St)Y-Lg-20P06	20	0.3	1.0	12.0	190



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Cable Code	Number of Pairs	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
T815J-Y(St)Y-Lg-24P06	24	0.3	1.0	13.0	220
T815J-Y(St)Y-Lg-30P06	30	0.3	1.2	14.0	280
T815J-Y(St)Y-Lg-40P06	40	0.3	1.2	15.0	350
T815J-Y(St)Y-Lg-50P06	50	0.3	1.2	17.0	430
T815J-Y(St)Y-Lg-60P06	60	0.3	1.2	19.0	500
T815J-Y(St)Y-Lg-80P06	80	0.3	1.4	21.0	640
T815J-Y(St)Y-Lg-100P06	100	0.3	1.4	24.0	850
0.8mm Conductor, 1.6mm Insulated Wire					
T815J-Y(St)Y-Lg-1P08	1	0.4	1.0	6.0	40
T815J-Y(St)Y-Lg-2P08	2	0.4	1.0	7.0	60
T815J-Y(St)Y-Lg-3P08	3	0.4	1.0	8.5	80
T815J-Y(St)Y-Lg-4P08	4	0.4	1.0	9.0	100
T815J-Y(St)Y-Lg-5P08	5	0.4	1.0	9.5	120
T815J-Y(St)Y-Lg-6P08	6	0.4	1.0	11.0	140
T815J-Y(St)Y-Lg-8P08	8	0.4	1.0	11.5	170
T815J-Y(St)Y-Lg-10P08	10	0.4	1.2	13.2	220
T815J-Y(St)Y-Lg-12P08	12	0.4	1.2	14.2	250
T815J-Y(St)Y-Lg-14P08	14	0.4	1.2	15.0	280
T815J-Y(St)Y-Lg-16P08	16	0.4	1.2	16.0	320
T815J-Y(St)Y-Lg-20P08	20	0.4	1.2	17.0	380
T815J-Y(St)Y-Lg-24P08	24	0.4	1.4	19.0	460
T815J-Y(St)Y-Lg-30P08	30	0.4	1.4	20.8	560
T815J-Y(St)Y-Lg-40P08	40	0.4	1.4	23.0	710
T815J-Y(St)Y-Lg-50P08	50	0.4	1.6	26.0	900
T815J-Y(St)Y-Lg-60P08	60	0.4	1.6	28.0	1050
T815J-Y(St)Y-Lg-80P08	80	0.4	1.8	31.5	1400
T815J-Y(St)Y-Lg-100P08	100	0.4	2.0	33.0	1750

VDE CODE: J-H(St)H ...x2x0.6/0.8 Lg

Cable Code	Number of Pairs	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
0.6mm Conductor, 1.2mm Insulated Wire					
T815J-H(St)H-Lg-2P06	2	0.3	1.0	8.0	65
T815J-H(St)H-Lg-4P06	4	0.3	1.0	10.0	100
T815J-H(St)H-Lg-6P06	6	0.3	1.0	11.0	117
T815J-H(St)H-Lg-10P06	10	0.3	1.0	12.0	155
T815J-H(St)H-Lg-20P06	20	0.3	1.0	15.0	270
T815J-H(St)H-Lg-30P06	30	0.3	1.2	17.0	322
T815J-H(St)H-Lg-40P06	40	0.3	1.2	18.0	408
T815J-H(St)H-Lg-50P06	50	0.3	1.2	20.0	491
T815J-H(St)H-Lg-60P06	60	0.3	1.2	21.0	573
T815J-H(St)H-Lg-80P06	80	0.3	1.4	24.0	756
T815J-H(St)H-Lg-100P06	100	0.3	1.4	27.0	917
0.8mm Conductor, 1.6mm Insulated Wire					
T815J-H(St)H-Lg-1P08	2	0.4	1.0	9.0	77
T815J-H(St)H-Lg-4P08	4	0.4	1.0	11.0	135
T815J-H(St)H-Lg-6P08	6	0.4	1.0	12.0	165
T815J-H(St)H-Lg-10P08	10	0.4	1.2	15.0	250
T815J-H(St)H-Lg-20P08	20	0.4	1.2	19.0	420
T815J-H(St)H-Lg-30P08	30	0.4	1.4	22.0	620
T815J-H(St)H-Lg-40P08	40	0.4	1.4	26.0	850
T815J-H(St)H-Lg-50P08	50	0.4	1.6	28.0	1000
T815J-H(St)H-Lg-60P08	60	0.4	1.6	30.0	1150
T815J-H(St)H-Lg-80P08	80	0.4	1.8	34.0	1550
T815J-H(St)H-Lg-100P08	100	0.4	2.0	38.0	1850