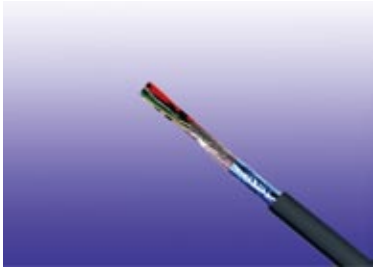
PE Insulated & PVC/LSZH Sheathed Installation Cables to DIN VDE 0816/0815

J-2Y(St)Y…2X0.6 StIII Bd J-2Y(St)H…2X0.6 StIII Bd

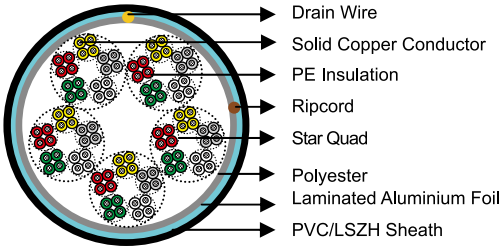
APPLICATION

The installation cables are used for telephone, signaling and data transmission for permanent surface or concealed installation in dry and damp rooms and for outdoor applications.



STANDARDS

• DIN VDE 0816/0815



CONSTRUCTION

• **Conductors:** Solid annealed bare copper sized 0.6mm as per VDE 0295/IEC 60228 class 1.
• **Insulation:** Solid polyethylene 2YI2 type as per VDE 0207-2.
• **Cabling Element:** Star Quads.
• **Cable Core Assembly:** Group of four wires is stranded into a star quad, the quads are assembled into units and the units form the core.
• **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 fully enclosing the core with an overlap.
• **Sheath:** PVC YM1 type to DIN VDE 0207 part 5. LSZH sheath can be offered as option.
• **Ripcord:** Nylon ripcord may be placed parallel to the cores to facilitate sheath removal.
• **Drain Wire:** Tinned drain wire may be applied longitudinally to provide continuity of the screen.

TYPE CODES

J-	Installation Cable
2Y	Polyethylene (PE)
H	Low Smoke & Zero Halogen
(St)	Static Shield of aluminium tape
StIII	Star quad in local cables.
Bd	Unit-type stranding.

ELECTRICAL PROPERTIES

Nominal Conductor Diameter	mm	0.6	0.6
VDE CODE		J-2Y(St)Y	J-2Y(St)H
Conductor Size	mm^2	0.283	0.283
Maximum Conductor Resistance @20°C	Ω/km	63	63
Maximum Loop Resistance @20°C	Ω/km	130	130
Minimum Insulation Resistance @500V DC	MΩ·km	5000	5000
Mutual Capacitance @0.8KHz (100% of all values) max	nF/km	52	52
(95% of all values) max		50	50
Capacitance Unbalance @0.8KHz	pF/300m		
K1 100% of values max	pF/300m	800	800
98% of values max	pF/300m	400	400
K9-12 100% of values max	pF/300m	300	300
98% of values max	pF/300m	100	100
Maximum Loop Resistance @20°C	Ω/km	130	130
Impedance (4 -16 Mhz)	Ω	100+/-15%	100+/-15%
Maximum Average Attenuation @1MHz	dB/km	35	35
Maximum Average Attenuation @4MHz	dB/km	55	55
Maximum Average Attenuation @10MHz	dB/km	73	73
Maximum Average Attenuation @16MHz	dB/km	86	86
Maximum Average Attenuation @20MHz	dB/km	95	95
Maximum Working Voltage Peak Value	V	225	225
Insulation Material		PE	PE
Sheath Material		PVC	LSZH
Nominal Insulation Thickness	mm	0.25	0.25
Nominal Insulated Conductor Diameter	mm	1.1	1.1

MECHANICAL AND THERMAL PROPERTIES

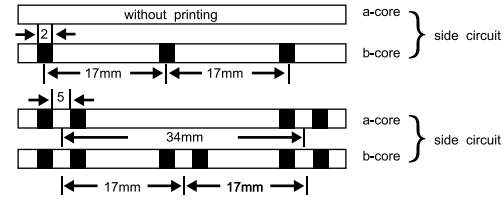
Temperature range during operation (fixed state): -30°C – +70°C
Temperature range during installation (mobile state): -20°C – +50°C
Minimum bending radius: 10 x Overall Diameter

COLOUR CODE

Quads

The single core is identified by black ring markings:

Side Circuit 1	a-wire	without marking
	b-wire	1 mark distance 17mm
Side Circuit 2	a-wire	2 marks distance 34mm
	b-wire	2 marks distance 17mm



Subunits

Basic colours of the wire insulation of the 5 star quads of a basic unit:

Quad 1 Red
Quad 2 Green
Quad 3 Grey
Quad 4 Yellow

Quad 5 White

The tracer units are coded with a red helix, all other units by a white binder.

DIMENSIONS AND WEIGHT

VDE CODE: J-2Y(St)Y…x2x 0.6 StIII Bd

Cable Code	Number of Pairs	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
0.6mm Conductor, 1.1mm Insulated Wire					
TP815J-2Y(St)Y-StIII-Bd-2P06	2	0.25	1.0	5.7	46
TP815J-2Y(St)Y-StIII-Bd-4P06	4	0.25	1.0	6.9	66
TP815J-2Y(St)Y-StIII-Bd-6P06	6	0.25	1.0	7.8	85
TP815J-2Y(St)Y-StIII-Bd-10P06	10	0.25	1.0	9.3	122
TP815J-2Y(St)Y-StIII-Bd-20P06	20	0.25	1.0	12.1	204
TP815J-2Y(St)Y-StIII-Bd-30P06	30	0.25	1.2	14.6	298
TP815J-2Y(St)Y-StIII-Bd-40P06	40	0.25	1.2	16.3	375
TP815J-2Y(St)Y-StIII-Bd-50P06	50	0.25	1.4	17.9	451
TP815J-2Y(St)Y-StIII-Bd-60P06	60	0.25	1.4	18.5	520
TP815J-2Y(St)Y-StIII-Bd-80P06	80	0.25	1.4	19.7	660
TP815J-2Y(St)Y-StIII-Bd-100P06	100	0.25	1.6	20.9	802

VDE CODE: J-2Y(St)H…x2x 0.6 StIII Bd

Cable Code	Number of Pairs	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
0.6mm Conductor, 1.1mm Insulated Wire					
TP815J-2Y(St)H-StIII-Bd-2P06	2	0.25	1.0	5.7	46
TP815J-2Y(St)H-StIII-Bd-4P06	4	0.25	1.0	6.9	66
TP815J-2Y(St)H-StIII-Bd-6P06	6	0.25	1.0	7.8	85
TP815J-2Y(St)H-StIII-Bd-10P06	10	0.25	1.0	9.3	122
TP815J-2Y(St)H-StIII-Bd-20P06	20	0.25	1.0	12.1	204
TP815J-2Y(St)H-StIII-Bd-30P06	30	0.25	1.2	14.6	298
TP815J-2Y(St)H-StIII-Bd-40P06	40	0.25	1.2	16.3	375
TP815J-2Y(St)H-StIII-Bd-50P06	50	0.25	1.4	17.9	451
TP815J-2Y(St)H-StIII-Bd-60P06	60	0.25	1.4	18.5	520
TP815J-2Y(St)H-StIII-Bd-80P06	80	0.25	1.4	19.7	660
TP815J-2Y(St)H-StIII-Bd-100P06	100	0.25	1.6	20.9	802