

Digicode 30KHz Indoor Signalling Cables

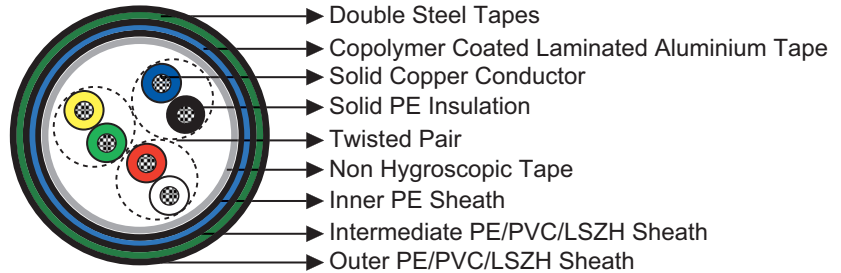
Applications

The cables are designed for transmission of track circuit digicode signals up to 30 kHz in electrified lines.



Standards

- EN 50266-2-4 & IEC 60332-3(Fire performance)
- EN 50268-2(Smoke density)
- EN 50267-2-1(Halogen content)
- EN 50267-2-2(Gases acidity)
- EN 50265-2-1, IEC 60332-1, NF C 32070 Cat C2 compliant (for PVC sheathed cables)



Construction

- Conductors: Solid Annealed copper, 1.4 mm nominal diameter (0.6 mm for the auxiliary pair).
- Insulation: Polyethylene.
- Cabling Element: Two insulated conductors are twisted together to form a pair.
- Stranding: Pairs are helically stranded to get the cable core.
- Core Wrapping: Plastic tape(s) with overlapping.
- Inner Sheath: Low density polyethylene.
- Moisture Barrier: Copolymer coated laminated aluminium tape.
- Intermediate Sheath: LSZH fire retardant compound. PE or PVC option can be offered upon request.
- Mechanical Protection: Two helically applied steel tapes.
- Outer Sheath: LSZH fire retardant compound. PE or PVC option can be offered upon request.

Electrical Characteristics at 20°C

Nominal Conductor Diameter	mm	1.4
Maximum DC Conductor Resistance	Ω/km	12.1
Maximum Resistance Unbalance	%	3
Minimum Insulation Resistance @500 V DC (1min)	MΩ.km	5000
Dielectric Strength (DC voltage 1 min)		
Conductor to Conductor	V	1000
Conductor to Screen	V	3000
Minimum Spark Test On Outer Sheath (AC voltage)	V	5000
Maximum Mutual Capacitance (Data pairs)	nF/km	45
Nominal Mutual Capacitance (Auxiliary pair)	nF/km	50
Maximum Capacitance Unbalance		



Pair to Pair	nF/500m	400
Pair to Ground	nF/500m	1500
Maximum Characteristic Pair Attenuation		
@2.1KHz	dB/km	0.64
@4.1KHz	dB/km	0.76
@9.5KHz	dB/km	1.05
@20.7KHz	dB/km	1.28
Minimum Near End Crosstalk Attenuation (NEXT)		
@4.1KHz	dB/km	54
@20.7KHz	dB/km	42
Minimum Far End Crosstalk Attenuation (FEXT)		
@4.1KHz	dB/km	59
@20.7KHz	dB/km	48
Minimum Unbalance Attenuation	dB	40
Maximum Rated Voltage, between pair conductors	V rms	220
Maximum Rated Current	A rms	1

➤ Mechanical and Thermal Properties

- Minimum Bending Radius: 8×OD (static); 16×OD (dynamic)
- Temperature Range: -40°C to +60°C (during operation); -20°C to +50°C (during installation)

➤ Dimensions and Weight

Cable Code	Number of Pairs	Nominal Sheath Thickness mm			Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Interm.	Outer		
RS/DIG-2Y2Y(L)HBH-1P1.4	1*	0.7	1.3	1.5	17.9	428
RS/DIG-2Y2Y(L)HBH-2P1.4	2*	0.7	1.3	1.5	19.2	497
RS/DIG-2Y2Y(L)HBH-3P1.4	3	0.7	1.3	1.5	20.2	562

*Plus one auxiliary pair with 0.6mm conductors.



Mineral Oil Resistant



Acid & Alkaline Resistant



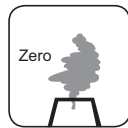
Laid In conduit



Flame Retardant
NF C32-070-2.1(C2)
IEC 60332-1/EN 50265-2-1



Fire Retardant
NF C32-070-2.2(C1)
IEC 60332-3/EN 50266



Zero Halogen
IEC 60754-1/NF C20-454
EN 50267-2-1



Low Smoke Emission
IEC 61034/NFC20-902
EN 50268/NF C32-073



Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453



Low Toxicity