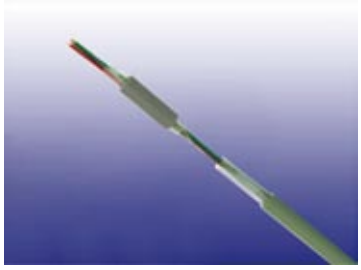
ADDISON

PE Insulated ISDN Basic Access Air Core Cables

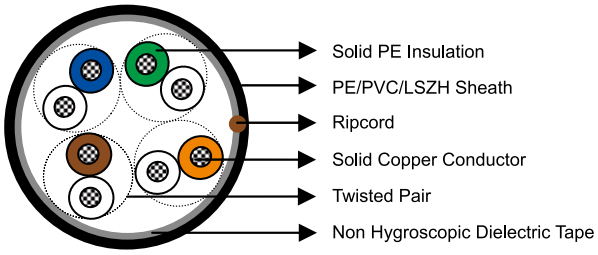
APPLICATION

The cables are used as basic access for ISDN services in central office wiring and cabling for ISDN basic access installation.



STANDARDS

• ER.f5.058



CONSTRUCTION

- **Conductors:** Solid annealed bare copper sized 0.5/0.6mm as per ASTM B-3/IEC 60228 class 1.
- **Insulation:** Solid polyethylene as per ASTM D 1248/IEC 60708.
- **Twisted Pairs:** Insulated conductors are twisted into pairs with varying lays to minimize crosstalk.
- **Cable Core Assembly:** The pairs are cabled together in layers of 12, 13 & 25 pair unit to form the cable core. Units are identified by colour coded binders.
- **Core Wrapping:** One or more non-hygroscopic polyester tapes are helically or longitudinally laid with an overlap.
- **Sheath:** PVC/LSZH.
- **Ripcord (optional):** Nylon ripcord may be placed parallel to the cores to facilitate sheath removal.

ELECTRICAL PROPERTIES

Nominal Conductor Diameter	mm	0.5	0.6
Conductor Gauge Size	AWG	24	-
Conductor Size	mm^2	0.196	0.283
Maximum Conductor Resistance @20°C	Ω/km	91	63
Minimum Insulation Resistance @500V DC	MΩ·km	16000	16000
Maximum Resistance Unbalance	%	2.5	2.5
Average Mutual Capacitance	nF/km	52	52
Maximum Capacitance Unbalance @1KHz pair-to-pair	pF/km	260	260
Maximum Capacitance Unbalance @1KHz pair-to-ground	pF/km	2625	2625
Maximum Average Attenuation @20KHz	dB/km	4.9	3.9
Maximum Average Attenuation @40KHz	dB/km	6.2	4.8
Maximum Average Attenuation @60KHz	dB/km	7.0	5.6

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Maximum Average Attenuation @80KHz	dB/km	7.7	6.0
Maximum Average Attenuation @100KHz	dB/km	7.9	6.3
Minimum ELFEXT pair-to-pair @20KHz	dB	56	56
Minimum ELFEXT pair-to-pair @40KHz	dB	52	52
Minimum ELFEXT pair-to-pair @60KHz	dB	50	50
Minimum ELFEXT pair-to-pair @80KHz	dB	49	49
Minimum ELFEXT pair-to-pair @100KHz	dB	48	48
Minimum NEXT pair-to-pair @20KHz	dB	61	61
Minimum NEXT pair-to-pair @40KHz	dB	57	57
Minimum NEXT pair-to-pair @60KHz	dB	55	55
Minimum NEXT pair-to-pair @80KHz	dB	54	54
Minimum NEXT pair-to-pair @100KHz	dB	51	51
Dielectric Strength Conductor to Conductor 3secs	V DC	3600	3600
Nominal Insulation Thickness	mm	0.2	0.25
Nominal Insulated Conductor Diameter	mm	0.9	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: 15 x Overall Diameter

COLOUR CODE

Standard colour code is per BT CW 110J given in Colour Code Chart.

DIMENSIONS AND WEIGHT

Cable Code	Number of Pairs	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
0.5mm Conductor, 0.9mm Insulated Wire				
TP58-2Y(St)Y2P05-ISDN-B	2	0.8	4.5	23.0
TP58-2Y(St)Y4P05-ISDN-B	4	0.8	5.0	33.5
0.6mm Conductor, 1.1mm Insulated Wire				
TP58-2Y(St)Y2P06-ISDN-B	2	1.0	5.5	30.0
TP58-2Y(St)Y4P06-ISDN-B	4	1.0	6.0	45.0