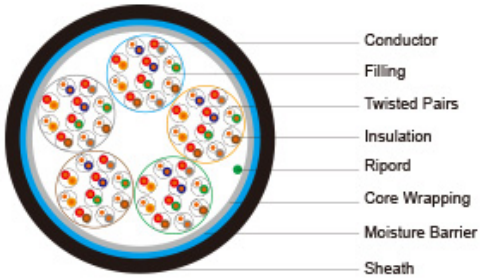
Solid PE Insulated & PE Sheathed Jelly Filled Cables to CW 1326& CW 1326/1179



Application	The cables are designed for use as subscriber distribution cables and as connection between central offices in local access networks. The cables are jelly filled and suitable for installation in ducts. The cables are also available for direct burial in the ground and aerial installation with integral suspension strand. An armoured option is offered for direct burial installations. A figure-8 self support option is offered for aerial installation.
Standards	CW 1326 (For unscreened cable) CW 1179 (For screened cable) CW 1252 (For self-supporting cable)
Conductors:	Solid annealed bare copper, 0.5mm as per class 1 of BS 6360/IEC 60228
Insulation:	Solid polyethylene as per BS EN 50290-2-23/BS 6234/IEC 60708
Twisted Pairs:	Insulated conductors are twisted into pairs with varying lay length to minimize crosstalk
Cabling Element:	Twisted Pairs
Cable Core Assembly:	Cables are composed of 10-pair units
Core Wrapping:	One or more non-hygroscopic polyester tapes are helically or longitudinally laid with an overlap. These tapes furnish thermal, mechanical as well as high dielectric protection between shielding and individual conductors
Moisture Barrier (optional):	A layer of aluminium tape (0.15mm) coated with PE-copolymer on one or both sides is applied longitudinally with overlap over the cable core to provide shielding coverage and ensure a barrier against water vapor
Filling:	The cable core interstices are filled with petroleum jelly to avoid longitudinal water penetration within the cable. The water resistant filling compound is applied to the air space between non-hygroscopic tape and shield, shield and sheath within the cable core
Sheath:	Black low density polyethylene as per BS 6234/IEC 60708, being able to withstand exposure to sunlight, temperature variations, ground chemicals and other environmental contaminants
Ripcord:	Ripcord may be provided for slitting the sheath longitudinally to facilitate its removal
Spare Pairs (optional):	Spare pairs may be incorporated for 200 and larger pair cables

Continuity Wire (optional):	Tinned copper drain wire may be longitudinally laid to ensure electrical continuity of the screen

Electrical Properties

Nominal Conductor Diameter	mm	0.5
Conductor Gauge Size	AWG	24
Conductor Size	mm2	0.196
Maximum Average Conductor Resistance @20°C	Ω/km	91
Minimum Insulation Resistance @500V DC	MΩ.km	1500
Maximum Average Mutual Capacitance @800Hz*	nF/km	56
Maximum Individual Mutual Capacitance @800Hz (for 99% cases)	nF/km	64
Maximum Individual Capacitance Unbalance @800Hz pair-to-pair	pF/500m	275
Maximum Conductor Loop Resistance @20°C	Ω/km	192
Impedance @1KHz	Ω	796
Impedance @100KHz	Ω	134
Impedance @512KHz	Ω	118
Impedance @1MHz	Ω	115
Maximum Average Attenuation @0.8KHz	dB/km	1.3
Maximum Average Attenuation @1KHz	dB/km	1.35
Maximum Average Attenuation @3KHz	dB/km	2.52
Maximum Average Attenuation @150KHz	dB/km	8.3
Maximum Average Attenuation @772KHz	dB/km	19.4
Maximum Average Attenuation @1000KHz	dB/km	21.4
Dielectric Strength Conductor to Conductor (3secs)	V DC	500
Nominal Insulation Thickness	mm	0.275
Nominal Insulated Conductor Diameter	mm	1.05

*For screened cables of 20 pairs or less, the maximum average mutual capacitance shall not apply and the maximum for 99% of cases shall be increased by 3nF

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 (unarmoured cables);15 x Overall Diameter (armoured cables)

Colour Code

Standard colour code is per CW 1326 given in the following Colour Code Chart

Cabling Element No.	a-wire	b-wire	Cabling Element No.	a-wire	b-wire
1	WHITE	BLUE	6	RED	BLUE
2	WHITE	ORANGE	7	RED	ORANGE
3	WHITE	GREEN	8	RED	GREEN
4	WHITE	BROWN	9	RED	BROWN
5	WHITE	GREY	10	RED	GREY

Units binders

No. of Units	Binder Colour	No. of Units	Binder Colour
1	BLUE	6	WHITE
2	ORANGE	7	RED
3	GREEN	8	BLACK
4	BROWN	9	YELLOW
5	GREY	10	VIOLET

Dimensions And Weight

Solid PE Insulated and Unscreened/Screened PE Sheathed Jelly Filled Cable to CW 1326, CW 1326/1179

Cable Code	Number of Pairs	Minimum Sheath Thickness mm	Maximum Overall Diameter mm (Unscreened)	Nominal Weight kg/km (Unscreened)	Maximum Overall Diameter mm (Screened)	Nominal Weight kg/km (Screened)
0.5mm Conductor, 1.05mm Insulated Wire						
TP1326-2YF(L)2Y-2P05	2	1.1	8.5	55	10	65
TP1326-2YF(L)2Y-5P05	5	1.2	8.5	77	10	87

TP1326-2YF(L)2Y-10P05	10	1.2	12	126	13.5	137
TP1326-2YF(L)2Y-20P05	20	1.3	15	221	16.5	231
TP1326-2YF(L)2Y-30P05	30	1.4	18	332	19.5	347
TP1326-2YF(L)2Y-50P05	50	1.4	19.5	483	21	504
TP1326-2YF(L)2Y-100P05	100	1.5	25	933	26.5	956

*The above part number will be changed for unscreened cables by deleting the (L).

Solid PE Insulated, PE Inner Sheathed, Steel Wire Armoured and PE Outer Sheathed Jelly Filled Cable to CW 1326/1198 (Unscreened)

Cable Code	Number of Pairs	Minimum Bedding Thickness mm	Steel Wire Diameter mm	Minimum Sheath Thickness mm	Maximum Overall Diameter mm	Nominal Weight kg/km
0.5mm Conductor, 1.05mm Insulated Wire						
TP1326-2YF2Y(SWA)2Y-2P05	2	1.1	0.9	0.9	13.7	241
TP1326-2YF2Y(SWA)2Y-5P05	5	1.2	0.9	0.9	13.7	274
TP1326-2YF2Y(SWA)2Y-10P05	10	1.2	0.9	0.9	17.2	351
TP1326-2YF2Y(SWA)2Y-20P05	20	1.3	1.25	0.9	20.9	499
TP1326-2YF2Y(SWA)2Y-30P05	30	1.4	2	1	24.8	749
TP1326-2YF2Y(SWA)2Y-50P05	50	1.4	2	1	26.3	1123
TP1326-2YF2Y(SWA)2Y-100P05	100	1.5	2	1.1	32	1763

Solid PE Insulated, PE Inner Sheathed, Steel Wire Armoured and PE Outer Sheathed Jelly Filled Cable to CW 1326/1179/1198 (Screened)

Cable Code	Number of Pairs	Minimum Bedding Thickness mm	Steel Wire Diameter mm	Minimum Sheath Thickness mm	Maximum Overall Diameter mm	Nominal Weight kg/km
0.5mm Conductor, 1.05mm Insulated Wire						

TP1326-2YF(L)2Y(SWA)2Y-2P05	2	1.1	0.9	0.9	15.2	251
TP1326-2YF(L)2Y(SWA)2Y-5P05	5	1.2	0.9	0.9	15.2	286
TP1326-2YF(L)2Y(SWA)2Y-10P05	10	1.2	1.25	0.9	19.4	363
TP1326-2YF(L)2Y(SWA)2Y-20P05	20	1.3	2	1	23.3	501
TP1326-2YF(L)2Y(SWA)2Y-30P05	30	1.4	2	1	26.3	752
TP1326-2YF(L)2Y(SWA)2Y-50P05	50	1.4	2	1.1	28	1139
TP1326-2YF(L)2Y(SWA)2Y-100P05	100	1.5	2	1.2	30.5	1786