

**CABLE, TELEPHONE, POLYETHYLENE INSULATED, MOISTURE BARRIER SHEATHED,
UNIT TWIN TYPE, INTEGRAL BEARER FOR AERIAL ERECTION
TELEPHONE CABLE P.E.U.T.I.B. TO TMB SPEC. AC 0001**

CONDUCTOR

Annealed Copper Wire

INSULATION

High density polyethylene conforming with the colour standard of BS 6746 C

TWINNING

Two insulated conductors are twisted together to form a pair

STRANDING UNIT

5 or 10 pairs

LAID-UP

Unit are laid-up into a compact and symmetrical cable core

CORE WRAPPING

The cable core is wrapped with a layer of mylar tape

MOISTURE BARRIER SHEATH

An aluminium tape with polymer coating is applied over the cable core and then sheathed with black polyethylene

BEARER WIRE

High tensile galvanized steel wire

ELECTRICAL CHARACTERISTICS

Size	Conductor resistance at 20°C		Mutual capacitance	Capacitance unbalance		Insulation resistance	Dielectric strength	
	Max. average	Max. for 90% of cases		Max. average	* Pair-to-pair		Pair-to-ground	Min.
			Max.		Max. ave			
mm	ohm/km	ohm/km	nF/km	pF/500m	pF/km	Mohm. km	V. dc	V. dc
0.40	143	150	52 ± 2	200	574	10,000	2000	4000
0.50	91	96	52 ± 2	200	574	10,000	2000	4000
0.63	58	60	52 ± 2	200	574	10,000	2000	4000
0.90	28	30	52 ± 2	200	574	10,000	2000	4000
1.27	14	15	52 ± 2	200	574	10,000	2000	4000

* The measured values shall be divided by $\frac{1}{2} \left(\frac{L}{500} + \sqrt{\frac{L}{500}} \right)$

where L is the length in meter of the cable under test
Length less than 100 meters are considered as 100 meters

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CONSTRUCTION DATA

Conductor		PE	Bearer Wire				Dimension		Approx. Weight	Packing Length
Size	No. of Pairs	Sheath Thickness	Size	Web		Bearer Sheath Thickness	M1	M2		
mm	pr	mm	mm	Thickness	Depth	mm	mm	mm	kg/km	m/drum
0.4	5	2.1	1 / 2.5	2.0	1.5	1.0	14.9	8.9	120	1000
0.4	10	2.1	1 / 2.5	2.0	1.5	1.0	15.7	9.7	145	1000
0.4	20	2.1	1 / 2.5	2.0	1.5	1.0	17.6	11.6	190	1000
0.4	30	2.1	1 / 2.5	2.0	1.5	1.0	19.0	13.0	230	1000
0.4	50	2.1	1 / 2.5	2.0	1.5	1.0	21.3	15.3	310	1000
0.4	100	2.1	7 / 1.2	2.0	1.5	1.3	27.0	19.3	520	1000
0.4	200	2.2	7 / 1.6	2.5	1.5	1.5	34.1	24.8	920	1000
0.4	400	2.3	7 / 2.0	3.0	1.5	1.5	43.6	33.1	1660	1000
0.5	5	2.1	1 / 2.5	2.0	1.5	1.0	15.5	9.5	140	1000
0.5	10	2.1	1 / 2.5	2.0	1.5	1.0	16.9	10.9	170	1000
0.5	20	2.1	1 / 2.5	2.0	1.5	1.0	19.3	13.3	240	1000
0.5	30	2.1	7 / 1.2	2.0	1.5	1.3	22.8	15.1	340	1000
0.5	50	2.1	7 / 1.2	2.0	1.5	1.3	25.7	18.0	450	1000
0.5	100	2.1	7 / 1.6	2.5	1.5	1.5	32.4	23.1	780	1000
0.5	200	2.3	7 / 2.0	3.0	1.5	1.5	40.7	30.2	1380	1000
0.5	400	2.5	7 / 2.0	3.0	1.5	1.5	51.3	40.8	2410	500
0.63	5	2.1	1 / 2.5	2.0	1.5	1.0	16.2	10.2	155	1000
0.63	10	2.1	1 / 2.5	2.0	1.5	1.0	18.3	12.3	210	1000
0.63	20	2.1	1 / 2.5	2.0	1.5	1.0	21.3	15.3	310	1000
0.63	30	2.1	7 / 1.2	2.0	1.5	1.3	25.3	17.6	430	1000
0.63	50	2.1	7 / 1.2	2.0	1.5	1.3	29.0	21.3	610	1000
0.63	100	2.2	7 / 1.6	2.5	1.5	1.5	37.1	27.8	1090	1000
0.63	200	2.4	7 / 2.0	3.0	1.5	1.5	47.1	36.6	1980	1000
0.9	5	2.1	1 / 2.5	2.0	1.5	1.0	18.4	12.4	210	1000
0.9	10	2.1	1 / 2.5	2.0	1.5	1.0	21.4	15.4	310	1000
0.9	20	2.1	7 / 1.2	2.0	1.5	1.3	27.4	19.7	530	1000
0.9	30	2.1	7 / 1.2	2.0	1.5	1.3	30.7	23.0	700	1000
0.9	50	2.3	7 / 1.6	2.5	1.5	1.5	38.0	28.7	1120	1000
0.9	100	2.5	7 / 2.0	3.0	1.5	1.5	48.5	38.0	2030	1000
1.27	5	2.1	1 / 2.5	2.0	1.5	1.0	21.8	15.8	320	1000
1.27	10	2.1	7 / 1.2	2.0	1.5	1.3	27.9	20.2	530	1000
1.27	20	2.2	7 / 1.6	2.5	1.5	1.5	36.1	26.8	950	1000
1.27	30	2.3	7 / 2.0	3.0	1.5	1.5	42.3	31.8	1370	1000

COLOUR SCHEME FOR 5-PAIR AND 10-PAIR UNITS

Pair Number	Colour of Conductor Insulation	
	A - Wire	B - Wire
1.	White	Blue
2.	White	Orange
3.	White	Green
4.	White	Brown
5.	White	Grey
6.	Red	Blue
7.	Red	Orange
8.	Red	Green
9.	Red	Brown
10.	Red	Grey

Note : 1st 5 pair is from No. 1 to No. 5
2nd 5 pair is from No. 6 to No. 10

COLOUR OF BINDER TAPES - 10-PAIR UNITS

Unit No.	Colour of Binder	Unit No.	Colour of Binder
1. (1A, 1B)	Blue	11.	Blue
2. (2A, 2B)	Orange	12.	Orange
3.	Green	13.	Green
4.	Brown	14.	Brown
5.	Grey	15.	Grey
6.	Blue - White	16.	Blue - White
7.	Orange - White	17.	Orange - White
8.	Green - White	18.	Green - White
9.	Brown - White	19.	Brown - White
10.	Grey - White	20.	Grey - White

Note : Unit No. 11-20 apply to 200 pairs cable

TELEPHONE CABLE P.E.U.T.I.B. TO TMB SPEC. AC 0001
CROSS-SECTION OF PEUTIB CABLE

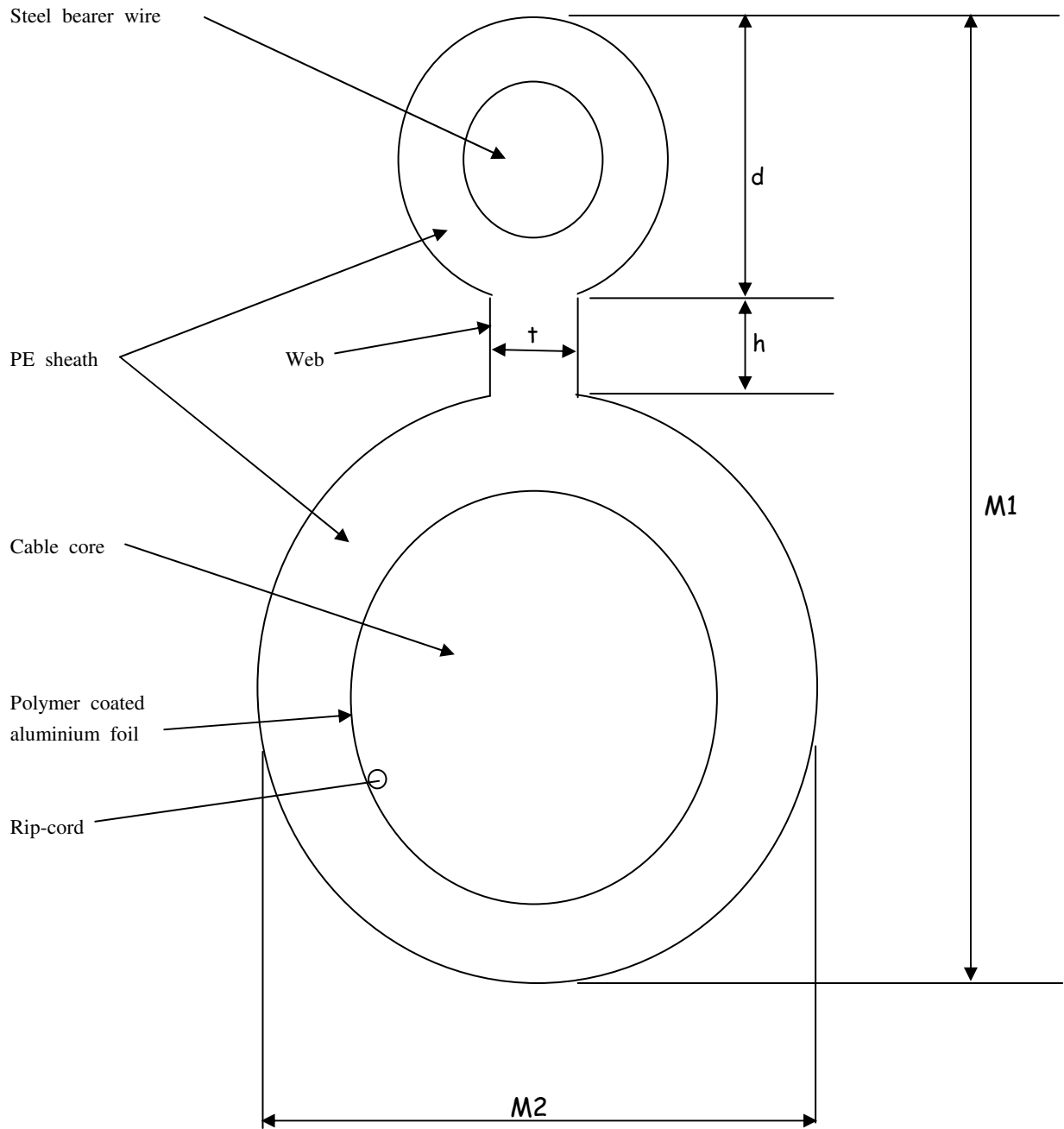
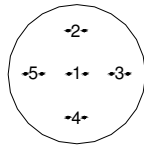


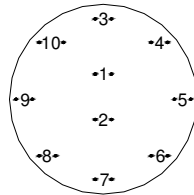
Figure 2

TELEPHONE CABLE P.E.U.T.I.B. TO TMB SPEC. AC 0001

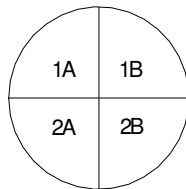
CABLE MAKE-UP



5 Pairs
(or 5-Pair Sub Units)

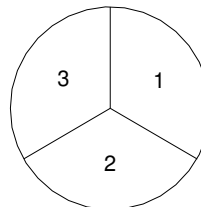


10 Pairs
(or 10-Pair Sub Units)



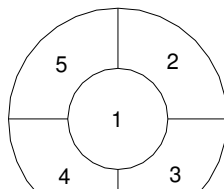
20 Pairs
(or 20-Pair Sub Units)

4 x 5 Pair
Sub Units



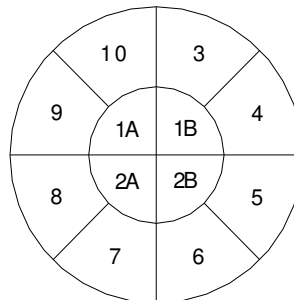
30 Pairs

3 x 10 Pair
Sub Units



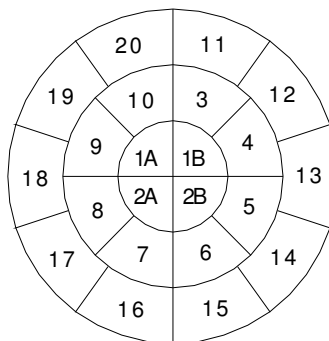
50 Pairs

5 x 10 Pair
Sub Units



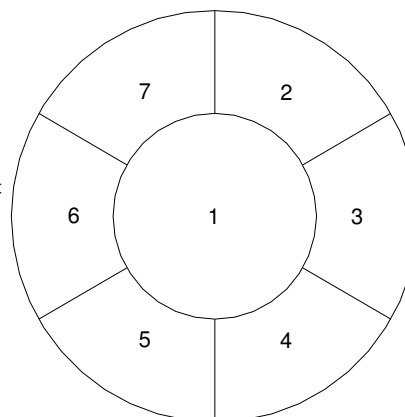
100 Pairs

Core 1 x 20 Pair Unit
Layer 8 x 10 Pair Sub Units



200 Pairs

Core 1 x 100 Pair Unit
Layer 10 x 10 Pair
Sub Units



400 Pairs

Core 1 x 100 Pair Unit
Layer 6 x 50 Pair
Sub Units