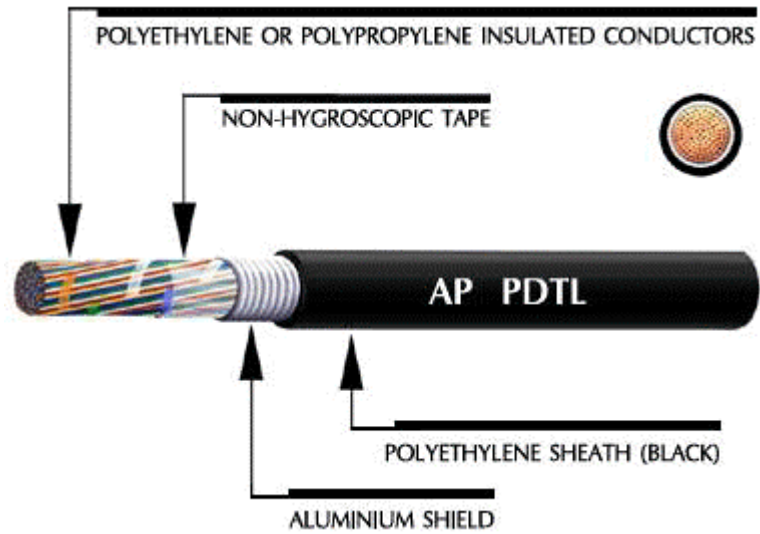


## Application :

For exchange area telephone distribution lines, principally for aerial installation by attachment to a support strand. It may be used, however, in underground ducts where there is no damage due to mechanical abuse.

## TELEPHONE AND COMMUNICATION CABLES. AP : ALPETH SHEATHED CABLE.



## Construction :

Conductor	: 0.4, 0.5, 0.65 or 0.9 mm annealed copper, solid.
Insulation	: Polyethylene or Polypropylene.
Pairs	: Two insulated conductors twisted.
Lay-up	: Unit construction for cables more than 25 pairs. Concentric for cables up to 25 pairs.
Core-covering	: Non-hygroscopic tape with a high dielectric strength.
Shield	: Plastic coated Aluminium tape, thickness 0.2 mm laid on with overlap. The aluminium tape is corrugated for every size of cables.
Sheath	: Polyethylene (Black).

## ELECTRICAL CHARACTERISTICS OF THE COMMUNICATION CABLES AT 25 °C ± 3 °C

(TYPES : AP )

Conductor Size AWG		26	24	22	19
Conductor diameter (nominal)	mm	0.4	0.5	0.65	0.9
Mutual capacitance at 1000 Hz					
Average Cm for; 25 pairs and larger	nF/km	52 ± 2	52 ± 2	52 ± 2	52 ± 2
Less than 25 pai	nF/km	52 ± 4	52 ± 4	52 ± 4	52 ± 4
Mutual Conductance of any pair at 1000 Hz					
Shell not exceed	μS/km	2	2	2	2
Capacitance unbalance pair to pair at 1000 Hz					
For up to 6 pairs cable, maximum individual	pF/km	181	181	181	181
For more then 6 pairs cable, maximum rms	pF/km	45	45	45	45
Insulation resistance, Minimum	MΩ-km	16,000	16,000	16,000	16,000
Conductor resistance at 20 °C , Maximum	Ω/km	144.4	90.2	57.1	28.5
High voltage test					
Conductor to conductor (3 seconds)	kV-dc	2.4	3.0	3.6	4.5
Conductor to shield (3 seconds)	kV-dc	10	10	10	10
Attenuation at 1000 Hz, Nominal	dB/km	1.80	1.43	1.11	0.77
Capacitance Unbalance pair to ground at 1000 Hz					
For up to 6 pairs cable, maximum individual	pF/km	2625	2625	2625	2625
For more than 6 pairs cable, maximum individual	pF/km	2625	2625	2625	2625
For more than 6 pairs cable, maximum average	pF/km	574	574	574	574

Minimum bending diameter shall not less than 18 times the cable overall diameter.

## TELEPHONE AND COMMUNICATION CABLES. AP : ALPETH SHEATHED CABLE.

### TYPE AP

Conductor (mm)	Number of pairs	PHELPS DODGE TYPE LETTER	Nominal insulation thickness (mm)	Nominal sheath thickness (mm)	Approximate Overall diameter (mm)	Approximate cable weight (kg/km)	Standard length (m)
0.4	3	26 AP 003	0.15	1.5	8.0	55	1,000/R
	5	26 AP 005	0.15	1.5	8.5	60	1,000/R
	6	26 AP 006	0.15	1.5	9.0	65	1,000/R
	10	26 AP 010	0.15	1.5	9.5	80	1,000/R
	12	26 AP 012	0.15	1.5	10.0	90	1,000/R
	15	26 AP 015	0.15	1.5	10.5	100	1,000/R
	20	26 AP 020	0.15	1.5	11.0	120	1,000/R
	25	26 AP 025	0.15	1.5	12.0	140	1,000/R
	30	26 AP 030	0.15	1.5	12.5	155	1,000/R
	40	26 AP 040	0.15	1.5	13.5	190	1,000/R
	50	26 AP 050	0.15	1.5	14.5	220	1,000/R
	75	26 AP 075	0.15	1.5	16.5	300	1,000/R
	100	26 AP 100	0.15	1.5	18.0	380	1,000/R
	150	26 AP 150	0.15	1.5	21.0	540	500/R
	200	26 AP 200	0.15	1.5	24.0	690	500/R
	300	26 AP 300	0.15	1.5	27.5	1,000	500/R
	400	26 AP 400	0.15	1.8	31.5	1,300	500/R
	600	26 AP 600	0.15	2.0	37.5	1,900	500/R
	900	26 AP 900	0.15	2.3	45.5	2,800	250/R
0.5	3	24 AP 003	0.20	1.5	8.5	60	1,000/R
	5	24 AP 005	0.20	1.5	9.5	70	1,000/R
	6	24 AP 006	0.20	1.5	10.0	75	1,000/R
	10	24 AP 010	0.20	1.5	11.0	100	1,000/R
	12	24 AP 012	0.20	1.5	11.5	120	1,000/R
	15	24 AP 015	0.20	1.5	12.0	130	1,000/R
	20	24 AP 020	0.20	1.5	13.0	160	1,000/R
	25	24 AP 025	0.20	1.5	14.0	190	1,000/R
	30	24 AP 030	0.20	1.5	14.5	220	1,000/R
	40	24 AP 040	0.20	1.5	16.0	270	1,000/R
	50	24 AP 050	0.20	1.5	17.0	320	1,000/R
	75	24 AP 075	0.20	1.5	19.5	440	1,000/R
	100	24 AP 100	0.20	1.5	22.5	570	1,000/R
	150	24 AP 150	0.20	1.5	26.0	810	500/R
	200	24 AP 200	0.20	1.8	29.5	1,070	500/R
	300	24 AP 300	0.20	1.8	35.0	1,530	500/R
	400	24 AP 400	0.20	2.0	39.5	2,010	500/R
	600	24 AP 600	0.20	2.3	48.0	2,980	350/R
	900	24 AP 900	0.20	2.5	57.0	4,415	250/R

R = Packing in reel

Revision : 1 Dated June 1,2000

Telecommunications Cable

**Phelps Dodge Thailand Limited**

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## TELEPHONE AND COMMUNICATION CABLES. AP : ALPETH SHEATHED CABLE.

### TYPE AP

Conductor (mm)	Number of pairs	PHELPS DODGE TYPE LETTER	Nominal insulation thickness (mm)	Nominal sheath thickness (mm)	Approximate Overall diameter (mm)	Approximate cable weight (kg/km)	Standard length (m)
0.65	3	22 AP 003	0.25	1.5	9.5	70	1,000/R
	5	22 AP 005	0.25	1.5	10.5	90	1,000/R
	6	22 AP 006	0.25	1.5	11.0	100	1,000/R
	10	22 AP 010	0.25	1.5	12.5	130	1,000/R
	12	22 AP 012	0.25	1.5	13.0	160	1,000/R
	15	22 AP 015	0.25	1.5	13.5	180	1,000/R
	20	22 AP 020	0.25	1.5	15.0	230	1,000/R
	25	22 AP 025	0.25	1.5	16.0	260	1,000/R
	30	22 AP 030	0.25	1.5	17.0	310	1,000/R
	40	22 AP 040	0.25	1.5	19.0	390	1,000/R
	50	22 AP 050	0.25	1.5	20.5	460	1,000/R
	75	22 AP 075	0.25	1.5	24.0	660	1,000/R
	100	22 AP 100	0.25	1.5	27.0	850	500/R
	150	22 AP 150	0.25	1.8	32.0	1,240	500/R
	200	22 AP 200	0.25	2.0	36.5	1,630	500/R
	300	22 AP 300	0.25	2.0	43.5	2,380	350/R
	400	22 AP 400	0.25	2.3	50.0	3,120	250/R
600	22 AP 600	0.25	2.5	59.5	4,610	250/R	
0.9	3	19 AP 003	0.30	1.5	11.0	100	1,000/R
	5	19 AP 005	0.30	1.5	12.5	140	1,000/R
	6	19 AP 006	0.30	1.5	13.0	160	1,000/R
	10	19 AP 010	0.30	1.5	15.0	220	1,000/R
	12	19 AP 012	0.30	1.5	16.0	260	1,000/R
	15	19 AP 015	0.30	1.5	17.5	310	1,000/R
	20	19 AP 020	0.30	1.5	19.0	390	1,000/R
	25	19 AP 025	0.30	1.5	20.5	460	1,000/R
	30	19 AP 030	0.30	1.5	22.5	570	1,000/R
	40	19 AP 040	0.30	1.5	25.5	720	1,000/R
	50	19 AP 050	0.30	1.5	27.5	850	500/R
	75	19 AP 075	0.30	1.8	33.0	1,240	500/R
	100	19 AP 100	0.30	2.0	37.0	1,620	500/R
	150	19 AP 150	0.30	2.0	44.5	2,380	500/R
	200	19 AP 200	0.30	2.3	51.0	3,130	500/R
	300	19 AP 300	0.30	2.5	60.5	4,700	250/R
	400	19 AP 400	0.30	2.8	69.5	6,210	250/R

R = Packing in reel

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