



### Flexible Aluminium Cables 0.6/1kV SDI 90°C

- Application :** In indoor/outdoor, fixed wiring applications for mains and submains
- Conductor :** Flexible Aluminium
- Insulation :** X-90 to AS/NZS 3808
- Sheath :** HFS-90-TP to AS/NZS 3808  
 AS/NZS 1660.5.6 (Equivalent to IEC 60332-1)  
 AS/NZS 1660.5.1 (Equivalent to IEC 60332-3-24)
- Binder :** Non-hygroscopic tape wrapping
- Voltage Rating:** 0.6/1kV
- Operating Temperature:** -40°C to +110°C
- Min Bending Radius:** 8 x cable diameter after installed  
 12 x cable diameter during installation.



### Physical & Electrical Characteristic

Product Code	Conductor Size (mm <sup>2</sup> )	Dia of con. mm	Dia of finish cable(mm)	Gross weight of cable kg/km
AFX035	35	8.6	13.5	226
AFX050	50	10.4	15.4	286
AFX070	70	12.6	18.0	389
AFX095	95	14.0	19.6	485
AFX120	120	16.7	22.7	575
AFX150	150	18.1	24.5	730
AFX185	185	19.8	26.8	887
AFX240	240	22.9	30.3	1115
AFX300	300	25.6	33.4	1384
AFX400	400	28.7	35.1	1829
AFX500	500	32.6	41.8	2303
AFX630	630	36.8	46.8	2898



> Two Single Core X-HF-90 with maximum conductor temperature of 90°C.  
 Reference ambient temperature: 40°C in air, 25°C. in ground.

### Amperage Rating

Current Carrying Capacity A									
Conductor Size mm <sup>2</sup>	Unenclosed			Enclosed	Thermal insulation		Buried Direct	Underground wiring enclosure	
	Spaced	Spaced from Surface	Touching	Wiring enclosure in air	Partially Surrounded by thermal insulation	Completely surrounded by thermal insulation			
25	117	112	91	87	70	45	139	102	114
35	144	137	111	105	84	56	167	122	136
50	177	167	136	129	103	-	198	147	164
70	226	212	174	159	127	-	243	181	200
95	280	262	216	198	158	-	291	221	239
120	328	305	253	226	181	-	332	252	278
150	377	350	291	255	204	-	372	283	311
185	439	406	340	301	241	-	423	329	359
240	527	485	408	360	288	-	492	388	417
300	612	562	473	-	-	-	556	440	482
400	723	660	559	-	-	-	638	516	553
500	850	772	656	-	-	-	729	590	632
630	1003	904	772	-	-	-	833	695	740



> Three Single Core X-HF-90 with maximum conductor temperature of 90°C.  
 Reference ambient temperature: 40°C in air, 25°C. in ground.

Current Carrying Capacity A									
Conductor Size Mm2	Unenclosed			Enclosed	Thermal insulation		Buried Direct	Underground wiring enclosure	
	Spaced	Spaced from Surface	Touching	Wiring enclosure in air	Partially Surrounded by thermal insulation	Completely surrounded by thermal insulation			
25	113	97	91	75	60	45	117	87	103
35	140	119	111	93	75	56	140	106	122
50	171	146	136	111	89	-	166	126	147
70	219	186	174	142	114	-	203	158	180
95	271	232	216	171	137	-	243	190	214
120	318	271	253	203	162	-	277	221	248
150	366	313	291	229	183	-	310	249	277
185	427	365	339	261	209	-	352	283	321
240	513	438	407	312	250	-	409	333	371
300	596	508	472	368	294	-	463	385	430
400	705	599	557	424	339	-	530	442	491
500	829	703	652	509	407	-	604	520	559
630	978	824	765	583	466	-	688	593	654



# POWERMAC CABLES AUSTRALIA PTY LTD

## Technical Data Sheet

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 Coopers Plains, QLD, 4108

Conductor Size Mm <sup>2</sup>	Three-phase voltage drop (Vc) at 50Hz, mV/A.m.			
	Laid in trefoil		Laid flat touching or in a wiring enclosure	
	Conductor Temperature 90°C		Conductor Temperature 90°C	
	Max.	0.8 p.f.	Max.	0.8 p.f.
25	2.67	-	2.67	-
35	1.94	-	1.94	-
50	1.43	-	1.44	-
70	0.997	-	1.00	-
95	0.727	-	0.733	-
120	0.582	-	0.589	-
150	0.482	-	0.491	-
185	0.394	-	0.404	-
240	0.314	-	0.327	-
300	0.266	-	0.281	-
400	0.226	0.226	0.243	0.242
500	0.197	0.195	0.216	0.211
630	0.177	0.172	0.198	0.188

\*Single phase voltage drop can be obtained by multiplying the 3 phase value by 1.155