

PVC Insulated

Single core, 0.6/1kV V-90 insulated, to AS/NZS 5000.1 (unsheathed), copper conductors, 90°C. Manufactured to PVC Best Practice Guidelines.

Description

- Single core,
- 0.6/1kV V-90 insulated,
- to AS/NZS 5000.1 (unsheathed),
- Copper conductors, 90°C.

Note: Other temperature grades subject to minimum production runs



Standards

National AS/NZS 5000.1

Characteristics

Construction characteristics

Insulation	V-90
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Electrical characteristics

Rated Voltage U ₀ /U (Um)	0.6/1 kV
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Rated Voltage U₀/U (Um)
0.6/1 kV

PVC Insulated

Single Core PVC insulated

Cross section [mm ²]	Type of conductor	Nom. insulation thick. [mm]	Nom. overall diam. [mm]	Approx. weight [kg/100m]	Nexans ref.
25	Compact copper	1.2	8.4	26.0	BAAC17AA001
35	Compact copper	1.2	9.4	35.0	BAAC18AA001
50	Compact copper	1.4	10.9	48.0	BAAC19AA001
70	Compact copper	1.4	12.4	67.0	BAAC20AA001
95	Compact copper	1.6	15.2	96.0	BAAC22AA001
0.5	Solid copper	0.8	2.4	1.0	BAAP01AA001
1	Solid copper	0.8	2.8	1.6	BAAP02AA001
1	Stranded copper	0.8	2.8	1.5	BAAP03AA001
1.5	Stranded copper	0.8	3.1	2.0	BAAP05AA001
2.5	Stranded copper	0.8	3.6	3.2	BAAP07AA001
4	Stranded copper	1.0	4.5	5.1	BAAP09AA001
6	Stranded copper	1.0	5.1	7.1	BAAP11AA001
10	Stranded copper	1.0	6.0	11.1	BAAP13AA001
16	Stranded copper	1.0	6.9	17.0	BAAP15AA001
120	Stranded copper	1.6	17.3	118.0	BAAP23AA001
150	Stranded copper	1.8	18.8	144.0	BAAP24AA001
185	Stranded copper	2.0	21.1	180.0	BAAP25AA001
240	Compact copper	2.2	24.1	236.0	BAAP26AA001
300	Stranded copper	2.4	26.9	296.0	BAAP27AA001
400	Stranded copper	2.6	30.6	376.0	BAAP28AA001
500	Stranded copper	2.8	34.1	477.0	BAAP30AA001
630	Stranded copper	2.8	37.8	613.0	BAAP32AA001

Single Core PVC insulated Copper Earth Conductor

Cross section [mm ²]	Type of conductor	Nom. insulation thick. [mm]	Nom. overall diam. [mm]	Approx. weight [kg/100m]	Nexans ref.
1.5	Stranded copper	0.6	2.7	1.8	AATP05AA001
2.5	Stranded copper	0.7	3.4	3.0	AATP07AA001

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Current carrying capacity table single phase (in Amps)

Insulation type: Thermoplastic Maximum conductor temperature: 75°C Reference ambient temperature: 40°C IN AIR, 25°C IN GROUND

Conductor cross-section									
mm ²	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu
1	16	16	13	13	11	6	24	18	21
1.5	21	21	16	18	14	8	31	23	26
2.5	30	29	23	24	20	12	43	32	36
4	40	39	31	32	25	16	56	41	47
6	51	49	40	41	33	20	71	52	58
10	69	67	54	54	44	27	94	69	77
16	92	89	72	70	56	36	122	89	99
25	124	119	97	94	75	48	158	116	129
35	153	145	119	112	90	59	190	139	155
50	187	177	146	138	110	-	225	168	186
70	238	223	184	170	136	-	277	206	228
95	295	276	230	212	169	-	332	252	278
120	344	321	267	242	193	-	378	287	316
150	395	367	308	282	225	-	424	329	354
185	459	424	358	320	256	-	480	373	408
240	549	505	428	381	305	-	556	438	472
300	636	582	495	-	-	-	628	496	546
400	744	676	577	-	-	-	713	575	621
500	867	780	668	-	-	-	805	649	721
630	1014	897	770	-	-	-	904	750	816

 Unenclosed spaced

 Unenclosed spaced from surface

 Unenclosed touching

 Enclosed conduit in air

 Enclosed, partially surrounded by thermal insulation

 Enclosed, completely surrounded by thermal insulation

 Buried direct

 Underground ducts A

 Underground ducts B

PVC Insulated

Current carrying capacity table three phase (in Amps)

Insulation type: Thermoplastic Maximum conductor temperature: 75°C Reference ambient temperature: 40°C IN AIR, 25°C IN GROUND

Conductor cross-section									
mm ²	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu
1	16	14	13	12	10	6	21	16	19
1.5	20	17	16	15	12	8	27	20	24
2.5	29	25	23	21	17	12	37	27	33
4	38	33	31	28	23	16	49	36	43
6	49	42	40	35	28	20	61	45	53
10	67	58	54	47	37	27	81	59	70
16	89	77	72	62	50	36	104	78	90
25	120	103	97	81	64	48	134	100	117
35	148	127	119	100	80	59	160	122	140
50	181	156	146	119	95	-	190	144	168
70	230	197	184	152	122	-	233	180	205
95	287	246	230	183	147	-	279	217	250
120	335	287	267	217	173	-	317	252	283
150	385	330	308	244	195	-	356	283	317
185	447	383	357	284	227	-	402	325	365
240	535	457	426	331	265	-	465	377	422
300	620	529	492	388	311	-	524	434	488
400	726	615	573	442	353	-	593	492	553
500	846	710	661	523	418	-	668	571	641
630	990	817	760	588	471	-	748	639	723



Unenclosed spaced



Unenclosed spaced from surface



Unenclosed touching



Enclosed conduit in air



Enclosed, partially surrounded by thermal insulation



Enclosed, completely surrounded by thermal insulation



Buried direct



Underground ducts A



Underground ducts B