



## Flexible VSD/EMC Cables, 0.6/1kV

### Application

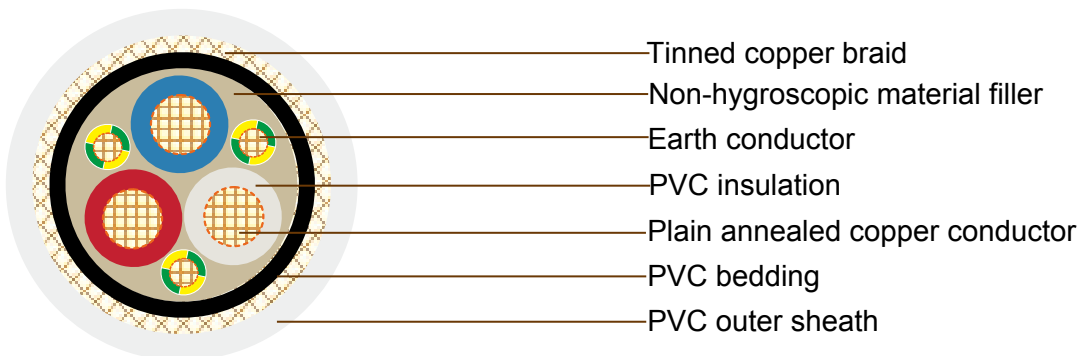
These cables are used for applications that require Electromagnetic Compatibility (EMC), to minimise any interference or disturbance, propagation and reception of electromagnetic energy with reference to unwanted effects, and suitable for Variable Speed Drive equipment or other application requiring screened cable.

### Standard

AS/NZS 5000.1, AS 1125, AS 3808

### Cable Construction

#### TYPE 1



**Conductor:** Plain annealed copper, class 5 strands

**Insulation:** Flame retardant polyvinyl chloride PVC V75

**Insulation colour:** 3 cores + E: Red, White, Blue + Green/Yellow

4 cores + E: Red, White, Blue, Black + Green/Yellow

**Filler:** Non-hygroscopic material

**Bedding:** Flame retardant polyvinyl chloride PVC V75

**Screen:** Tinned annealed copper braid

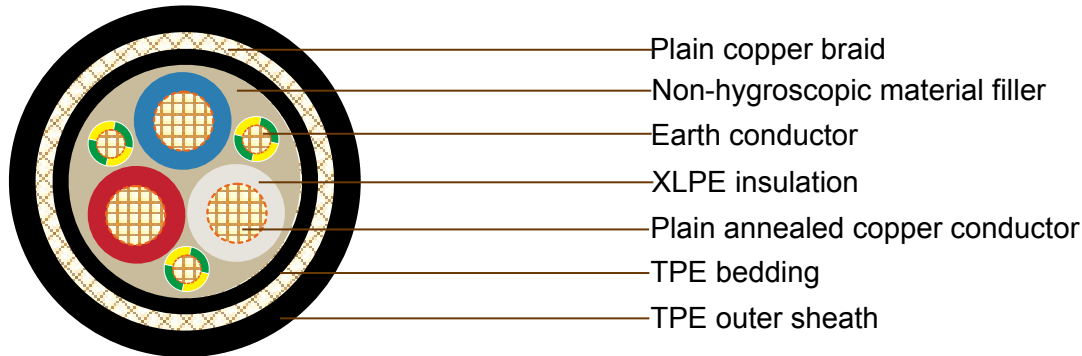
**Sheath:** Flame retardant polyvinyl chloride PVC V75

**Sheath colour:** Transparent



## Australian Standard

### TYPE 2



**Conductor:** Plain annealed copper, class 5 strands

**Insulation:** Cross -linked polyethylene (XLPE)

**Insulation colour:** 3 cores + E: Red, White, Blue + Green/Yellow

4 cores + E: Red, White, Blue, Black + Green/Yellow

**Filler:** Non-hygroscopic material

**Bedding:** Thermoplastic elastomer (TPE)

**Screen:** Plain annealed copper braid

**Sheath:** Thermoplastic elastomer (TPE)

**Sheath colour:** Black

## Technical Characteristics

### ELECTRICAL CHARACTERISTICS

Nom. conductor area mm <sup>2</sup>	Max. wires Dia. Fine-wire strand mm	DC resistance at 20°C Ohm/km	AC resistance at 75°C Ohm/km	AC resistance at 90°C Ohm/km	3-Phase at 75°C Voltage Drop mV/A.m	3-Phase at 90°C Voltage Drop mV/A.m	Reactance Type 1 cable Ohm/km	Reactance Type 2 cable Ohm/km
1.5	0.25	13.3	16.2	17.0	28.0	29.4	0.118	0.118
2.5	0.25	7.98	9.7	10.2	16.8	17.6	0.112	0.112
4	0.30	4.95	6.02	6.31	10.4	10.9	0.108	0.108
6	0.30	3.30	4.01	4.21	6.95	7.29	0.104	0.104
10	0.40	1.91	2.41	2.52	4.17	4.38	0.0982	0.102
16	0.40	1.21	1.47	1.54	2.55	2.68	0.0937	0.0970
25	0.40	0.780	0.889	0.932	1.55	1.62	0.0895	0.0921
35	0.40	0.554	0.652	0.684	1.14	1.19	-	0.0895
50	0.40	0.386	0.490	0.513	0.862	0.902	-	0.0893
70	0.50	0.272	0.325	0.340	0.581	0.608	-	0.0859



### CURRENT RATING

Nom. conductor area	2 core and Earth				3 core and earth,		4 core and earth	
	Protected from sun		Exposed to sun		Protected from sun		Exposed to sun	
	V75	XLPE	V75	XLPE	V75	XLPE	V75	XLPE
mm <sup>2</sup>	A	A	A	A	A	A	A	A
6	44	54	34	43	38	46	29	37
10	60	74	46	58	52	63	39	50
16	81	99	60	77	70	85	51	66
25	110	135	80	105	95	115	68	88
35	135	165	95	125	115	140	81	105
50	160	195	110	145	140	165	96	125
70	205	250	140	185	175	215	120	155

### Cable Parameter

#### TYPE 1

No. of Core	Nom. conductor area mm <sup>2</sup>	Core diameter mm	Earth conductor area mm <sup>2</sup>	Earth core diameter mm	Over bedding diameter mm	Cable diameter mm	Approx. mass kg/km
2C+E	1.5	3.2	1.5	3.2	9.8	14.48	220
2C+E	2.5	3.7	2.5	3.7	11.0	15.85	272
3C+E	1.0	2.9	1.0	2.7	9.1	13.62	205
3C+E	1.5	3.2	1.5	3.0	9.8	14.48	238
3C+E	2.5	3.7	2.5	3.5	11.0	15.85	299
3C+E	4	4.7	4	4.7	13.3	18.58	417
3C+3E	6	5.3	1.5	3.0	13.4	16.86	478
3C+3E	10	6.2	1.5	3.0	15.5	19.07	636
3C+3E	16	7.4	2.5	3.5	18.4	22.10	908
3C+3E	25	9.1	4	4.7	22.3	29.12	1357
3C+3E	35	10.3	6	5.3	25.3	32.71	1794
3C+3E	50	12.3	10	6.2	29.5	37.67	2480
3C+3E	70	14.0	10	6.2	33.5	42.75	3323
4C+E	1.5	3.2	1.5	3.0	9.2	13.79	239
4C+E	2.5	3.7	2.5	3.5	10.5	15.21	309
4C+E	4	4.7	2.5	3.5	12.4	17.49	415
4C+E	6	5.3	2.5	3.5	13.6	18.92	516



## Australian Standard

No. of Core	Nom. conductor area mm <sup>2</sup>	Core diameter mm	Earth conductor area mm <sup>2</sup>	Earth core diameter mm	Over bedding diameter mm	Cable diameter mm	Approx. mass kg/km
4C+E	10	6.2	4	4.7	16.1	21.87	753
4C+E	16	7.4	6	5.3	18.7	24.89	1054
4C+E	25	9.1	6	5.3	22.2	29.03	1499
4C+E	35	10.3	10	6.2	25.2	32.51	1987
4C+E	50	12.3	16	7.4	29.6	37.80	2766
4C+E	70	14.0	25	9.1	34.0	43.37	3877

### TYPE 2

No. of Core	Nom. conductor area mm <sup>2</sup>	Core diameter mm	Earth conductor area mm <sup>2</sup>	Earth core diameter mm	Over bedding diameter mm	Cable diameter mm	Approx. mass kg/km
3C+E	1.5	3.2	1.5	3.0	8.8	12.26	201
3C+E	2.5	3.7	2.5	3.5	10.1	13.56	260
3C+3E	4	4.7	1.5	3.0	10.4	13.89	311
3C+3E	6	5.3	1.5	3.0	11.7	15.34	393
3C+3E	10	6.2	1.5	3.0	13.9	17.64	563
3C+3E	16	7.4	2.5	3.5	16.4	20.34	808
3C+3E	25	9.1	4	4.1	20.3	24.53	1206
3C+3E	35	10.3	6	4.7	23.1	27.49	1608
3C+3E	50	12.3	10	5.6	27.0	31.70	2248
3C+3E	70	14.0	10	5.6	31.4	36.84	3118
4C+E	1.5	3.2	1.5	3.0	9.4	12.65	222
4C+E	2.5	3.7	2.5	3.5	10.5	13.89	288
4C+E	4	4.7	2.5	3.5	11.6	15.05	362
4C+E	6	5.3	2.5	3.5	12.8	16.30	455
4C+E	10	6.2	4	4.7	15.2	18.88	676
4C+E	16	7.4	6	5.3	18.0	21.95	980
4C+E	25	9.1	6	5.3	21.6	25.78	1405
4C+E	35	10.3	10	6.2	24.9	29.25	1900
4C+E	50	12.3	16	7.4	28.8	33.46	2618
4C+E	70	14.0	25	9.1	33.6	38.97	3740