A brand of the Prysmian Group

CONSTRUCTION – PVC CABLES 0.6/1 KV

3C+E PVC CIRCULAR SWA

PVC INSULATED LAID UP PVC BEDDED GSW ARMOURED AND PVC SHEATHED CABLE TO AS/NZS 5000.1.

For mains, submains and subcircuits unenclosed, in conduit, buried direct or in underground ducts for buildings and industrial plants where mechanical damage may occur. Suitable for glanding.

Cable Characteristics


Semi-rigid

12D


2


Water Splashes


Good


+75 °C -15 °C


C3


Good

Cable Design

CONDUCTOR:

Plain annealed copper conductor to AS/NZS 1125
Maximum continuous operating temperature: 75 °C

Can also be operated at temperatures up to 90 °C when not exposed to mechanical deformation (see AS/NZS 3008.1)

INSULATION:

V-90 PVC
Colours: Red, White, Blue, Green/Yellow

ARMOUR:

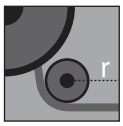
Steel wire armour

SHEATH:

5V-90 PVC
Colours: Orange

Installation Conditions

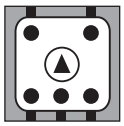

INDUSTRIAL EQUIPMENT



18D


IN FREE AIR


IN GROUND


MACHINES

0 °C


IN TRENCH


IN DUCT


EXTERNAL BUILDING

Physical & Electrical Characteristics

Product code	Conductor			Cable				Min. installed bending radius mm
	Nominal C.S.A. mm²	Number and diameter of wires No/mm	Nominal diameter mm	Nominal insulation thickness mm	Overall diameter		Approx. mass kg/100 m	
					Minimum mm	Maximum mm		
1.53CEOCA	1.5	7/0.50	1.5	0.8	15.4	16.4	55	200
2.53CEOCA	2.5	7/0.67	2.0	0.8	16.7	17.7	65	215
43CEOCA	4	7/0.85	2.6	1.0	18.4	19.5	78	235
63CEOCA	6	7/1.04	3.1	1.0	19.5	20.1	89	250
103CEOCA	10	7/1.35	4.1	1.0	22.1	23.5	113	280
163CEOCA	16	7/1.70	5.1	1.0	25.1	26.5	157	320
253CEOCA	25	19/1.35	6.8	1.2	28.2	29.6	202	350
353CEOCA	35	19/1.53	7.7	1.2	30.7	32.3	247	390
503CEOCA	50	19/1.78	8.9	1.4	34.8	36.6	315	440
703CEOCA	70	19/2.14	10.7	1.4	40.3	41.6	432	500
953CEOCA	95	19/2.45	12.5	1.6	44.9	46.4	544	560
1203CEOCA	120	37/2.03	14.2	1.6	48.9	50.3	645	600
1503CEOCA	150	37/2.25	15.8	1.8	55.0	56.6	830	680
1853CEOCA	185	37/2.52	17.6	2.0	60.5	62.2	1005	740
2403CEOCA	240	61/2.25	20.3	2.2	68.1	70.0	1275	840

Conductor nominal C.S.A. mm²	Current rating (a)			Electrical characteristics	
	Unenclosed spaced A	Buried direct A	Underground in duct A	Maximum D.C. resistance at 20°C Ω/km	Reactance per core Ω/km
1.5	16	24	19	13.6	0.111
2.5	23	34	26	7.41	0.102
4	31	44	34	4.61	0.102
6	40	55	43	3.08	0.0967
10	54	74	57	1.83	0.0906
16	72	96	74	1.15	0.0861
25	97	125	96	0.727	0.0853
35	120	150	115	0.524	0.0826
50	145	180	140	0.387	0.0797
70	185	220	175	0.268	0.077
95	230	265	210	0.193	0.0766
120	265	300	240	0.153	0.0743
150	305	335	270	0.124	0.0745
185	350	380	310	0.0991	0.0744
240	410	440	370	0.0754	0.0735

(a) Based on 75 °C conductor temperature, 40 °C ambient air temperature and where applicable, burial depth of 0.5 m, soil temperature of 25 °C and soil thermal resistivity of 1.2 °C.m/W. Refer to AS/NZS 3008.1 for other installation conditions.

Physical & Electrical Characteristics

Conductor nominal C.S.A. mm^2	Diameter under armour		Diameter over armour		Armour wire diameter mm
	Minimum mm	Maximum mm	Minimum mm	Maximum mm	
1.5	9.3	10.0	11.8	12.4	1.25
2.5	10.6	11.3	13.1	13.8	1.25
4	12.3	13.0	14.8	15.5	1.25
6	13.4	14.2	15.9	16.7	1.25
10	16.0	17.1	18.5	19.6	1.25
16	18.3	19.4	21.5	22.6	1.6
25	21.4	22.4	24.6	25.6	1.6
35	24.0	25.1	27.2	28.3	1.6
50	27.6	29.1	30.8	32.3	1.6
70	32.1	33.0	36.1	37.0	2.0
95	36.5	37.6	40.5	41.6	2.0
120	40.1	41.1	44.1	45.1	2.0
150	45.0	46.3	50.0	51.3	2.5
185	50.1	51.4	55.1	56.4	2.5
240	57.3	58.8	62.3	63.8	2.5

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Cable Usage Characteristics

AMBIENT TEMPERATURE

Maximum operating temperature
Minimum operating temperature

MECHANICAL IMPACT RESISTANCE

1	Light Impact
2	Moderate Impact
3	Heavy Impact
4	Very Heavy Impact

RESISTANCE TO SOLAR RADIATION AND WEATHER

Excellent	Permanent
Very Good	Frequent
Good	Occasional
Acceptable	Accidental
Poor	None

BEHAVIOUR IN FLAME AND FIRE

Reaction To Fire	Resistant To Fire
C 1 Fire retardant	Level 1 Ultimate fire survival
C 2 Flame retardant	Level 2 Two hours fire survival
C 3 No fire performance	Level 3 Restrained spread & self extinguishing

HALOGEN FREE

AS/NZS 4507

MINIMUM BENDING RADIUS

Minimum bending radius of installed cables

CHEMICAL RESISTANCE

Excellent	Permanent
Very Good	Frequent
Good	Occasional
Acceptable	Accidental
Poor	None

RESISTANCE TO WATER

Negligible	No humidity
Water Drops	Occasional condensation
Spray	Water run off
Splashes	Exposed to water splashes
Heavy Sea	Exposed to waves
Immersion	Temporarily covered by water
Submersion	Permanently covered by water

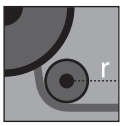
FLEXIBILITY

Rigid	Flexible
Semi-rigid	Very flexible

LOW SMOKE EMISSION

AS/NZS 4507

Laying Conditions



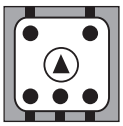
MINIMUM BENDING RADIUS DURING INSTALLATION

IN TRENCH

IN GROUND

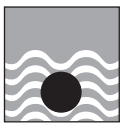
IN DUCT

DOMESTIC APPLIANCES



MACHINES

MOBILE EQUIPMENT



SUBMERGED

OVERHEAD AERIAL

MIN. INSTALLATION TEMPERATURE

IN FREE AIR

IN GROUND WITH PROTECTION

IN CONDUIT

OUTDOOR APPLIANCES

FESTOON

INTERNAL WIRING

INDUSTRIAL EQUIPMENT

EXTERNAL BUILDING

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Certified System
Quality
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