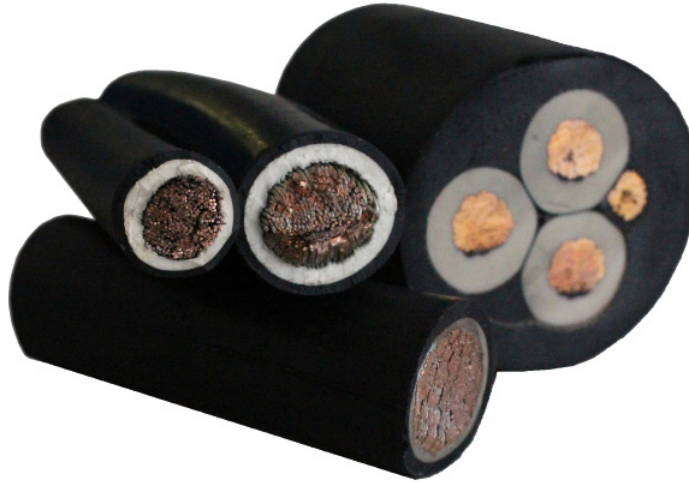


3.3kV Single Core Cables

AVAILABLE FROM
NEPEAN ELECTRONICS



NEPEAN Power is a proven leader in the supply and manufacture of quality engineered solutions, products and technologies. Established in 1994, through the commitment of our dedicated team we have become a supplier of choice.

The NEPEAN Power 3.3kV flex cables consist of extra finely stranded tinned copper conductors laid up to provide an extremely flexible design. The Protolon R-EP-110 elastomer insulation is rated at 3.3kV with an oil resistant, flame retardant PCP sheath and can be submerged up to 100 metres.

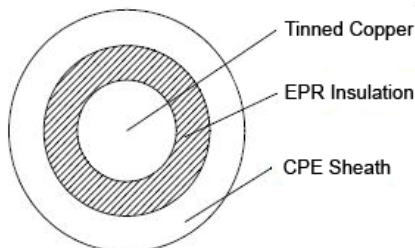
This cable is produced in accordance with AS1125 and AS3116.

Applications

- Internal switchboard cabling
- Sub-mains
- Electrical traction vehicles
- Battery bank connections
- Machine and equipment cabling
- Steelworks, cranes and hoists
- Stacker and reclaimer cabling
- DC wiring

Features

- Submersible to 100 metres
- Flexible design
- Oil resistant and flame retardant sheath



Specifications

Min. Ambient Temperature	-40°C
Max. Conductor Temperature	90°C
Short Term Temperature Rating	110°C
Max. Short-Circuit Temperature	250°C
Min. Flexed Ambient Temperature	-25°C
Rated Voltage	0.6/1kV - 3.3kV AC
Max. 3 Phase AC Operating Voltage	2.1/3.6kV (U _o /U)
Max. DC Operating Voltage	2.7/5.4kV (U _o /U)
AC Test Voltage	6kV
Minimum Fixed Bending Radius	4 x overall diameter
Minimum Flexed Bending Radius	6 x overall diameter
Max. Allowable Tensile Strength	15N/mm ²
Conductor Material	Tinned Copper
Separator Material	Polyester Tape
Core Insulation	Material EPR Rubber
	Surface Smooth
	Colour White
Jacket	Material CPE
	Surface Smooth
	Colour Black

3.3kV Single Core Cables

Short-Circuit Currents

Permissible thermal short-circuit currents for 1 second duration (conductor temperature at start of short-circuit 110°C).

mm ²	4	6	10	16	25	35	50	70	95	120	150	185	240
kA	0.49	0.73	1.22	1.95	3.05	4.27	6.10	8.54	11.6	14.6	18.3	22.6	29.3

Note: Permissible short-circuit currents for other durations are available.

Thermal as well as the dynamic short-circuit strength must be taken into account. The cables must in particular be firmly fixed to protect them from the effects of peak short-circuit currents.

Current Carrying Capacity

Current ratings are based on continuous operation at an ambient temperature of 40°C. At other temperatures these values must be converted using the following table.

°C	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Factor	1.26	1.20	1.15	1.12	1.05	1.00	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34

Note: Current ratings are based on AS/NZS 3008.1.1:1998 Table 8 Current-Carrying Capacities of Three Single-Core 0.6/1kV Sheathed and Unsheathed Non-Armoured Cables R-E-110.

Core insulation is white.

Ordering Information

Part Number	No. of Cores x Conductor	Nominal Stranding (Tinned Copper)	Diameter of Bare Conductor Stand	Cable Overall Diameter	Cable Weight (kg)	Current Carrying Capacity When Installed			
						Unenclosed Spaced	Unenclosed Spaced from Surface	Unenclosed Touching	Enclosed
NSGAFOU1.5	1 x 1.5	30 x 0.25	1.5	6.0	65	31	27	25	22
NSGAFOU2.5	1 x 2.5	50 x 0.25	1.9	6.2	80	43	38	36	32
NSGAFOU4	1 x 4	56 x 0.30	2.5	6.7	95	57	50	47	41
NSGAFOU6	1 x 6	84 x 0.30	3.2	7.6±0.4	120	73	63	59	51
NSGAFOU10	1 x 10	80 x 0.40	4.1	9.2±0.5	180	99	86	81	71
NSGAFOU16	1 x 16	128 x 0.40	6.5	10.1	250	130	115	105	93
NSGAFOU25	1 x 25	196 x 0.40	6.8	12.3	350	175	155	145	125
NSGAFOU35	1 x 35	276 x 0.40	8.1	13.0	455	220	190	175	150
NSGAFOU50	1 x 50	396 x 0.40	9.6	15.0	610	265	230	215	180
NSGAFOU70	1 x 70	540 x 0.40	11.2	16.8	805	340	290	270	235
NSGAFOU95	1 x 95	715 x 0.40	13.2	19.6±1.0	1055	420	365	340	285
NSGAFOU120	1 x 120	920 x 0.40	14.9	21.4±1.1	1350	490	420	395	335
NSGAFOU150	1 x 150	1138 x 0.40	16.6	23.6	1655	570	485	455	380
NSGAFOU185	1 x 185	1390 x 0.40	18.0	25.5±1.3	1975	660	560	530	450
NSGAFOU240	1 x 240	1838 x 0.40	21.2	27.6	2550	790	670	630	550
NSGAFOU300	1 x 300	2275 x 0.40	23.6	31.4	3230	910	780	730	630
NSGAFOU400	1 x 400	3035 x 0.40	27.2	34.4	4222	1070	910	850	720



NEPEAN
Power

www.nepeanpower.com

For more information please contact:

P: +61 2 4088 2790

E: power@nepean.com