


Harness The Power

The Prysmian solution to battery storage.



A brand of the

Prysmian
Group



We have raised the standard of flexibility,
with our newest Flextreme cable.

Made up of an outer sheath material, UV stabilised rubber,
the Flextreme will allow you to harness the power of renewable energy.

Australian made? Yes, of course.

Energy Storage

With the increased penetration of renewables,
the grid is experiencing a shift from predictable
dispatchable generation to variable non-dispatchable
generation.

What happens when the sun goes down and the wind
stops? And what if renewable sources produce too much
energy? How to ensure reliability of supply and prevent
energy waste with a limited conventional generation
contribution? Energy storage could be the right answer,
as it is being considered by network operators as a
potential effective solution enabling the grid stability.
The Flextreme cable is Prysmian's energy storage solution.

An X-HF-110 insulation increases the Flextreme's capacity
to store energy. Storing unused energy when demand is
low, is effective at reducing waste. When demand is high,
the energy is distributed. This means that the Flextreme
cable efficiently transmits energy to therefore maximise
the storage capacity. The flexible nature of Flextreme has
the potential to revolutionise the renewable industry,
increasing the accessibility and stability of power.

Features of Flextreme

Extreme Flexibility

Made up of halogen free, flexible cross-linked polyethylene, the Flextreme is an extremely flexible cable solution with a Class 5 conductor by AS/NZS 1125 standards.

Superior Cable Management

- Product availability
- Shorter lead times
- Cables can be cut to length
- Reactive local support

Long-life Performance

- Australian designed and made
- Cables made from premium concepts
- Superior performance
- Superior temperature range - maximum operating temperature +110 °C

Safety – Performance that Ensures Peace of Mind

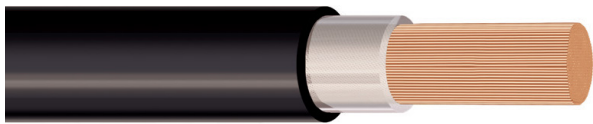
- High flexibility ensures easier handling – reducing the risk of workplace injury and fatigue



Quality – Superior Manufacturing and Support

- Independently certified by a NATA accredited facility
- Exceeds Australian standards
- Expert quality control
- Quality technical after-sales support and service.

Insulation X-HF-110



Approvals

Suitable for fixed applications only in accordance with AS/NZS 5000.1

Behaviour in Flame and Fire

Flame propagation - AS/NZS IEC 60332-1

Temperature Range

Maximum operating temperature: +110 °C

Minimum operating temperature: -40 °C

Minimum Bending Radius*

Installed cables : 4D

During installation : 6D

Resistance to

Chemical exposure : Occasional

Mechanical impact : Light

Water exposure : Occasional condensation

Solar radiation and weather exposure : Frequent

Cable Design

Conductor:

Super flexible annealed copper conductor

Insulation:

Flexible cross-linked polyethylene, halogen free, environmental friendly

Sheath:

Thermoplastic UV stabilised rubber, lead-free, extra flexible, abrasion resistant, flame retardant, recyclable

Installation Conditions

In free air

In conduit

In trench

In ground with protection






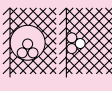
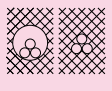





In duct

* Values given are for general guidance. Bending radius can be discussed for specific project

SINGLE CORE

Core Configuration	Phase Conductor Cross Sectional Area (mm ²)	Phase Conductor Diameter (Nominal) (mm)	Phase Conductor Insulation Thickness (Nominal) (mm)	Earth Conductor Cross Sectional Area (mm ²)	Earth Conductor Diameter (Nominal) (mm)	Earth Conductor Insulation Thickness (Nominal) (mm)	Overall Cable Diameter (Nominal) (mm)	Minimum Bending Radius During Installation (mm)	Minimum Bending Radius Installed (mm)	Weight of Cable (Nominal) (Kg/100m)
1	10	4.2	0.7	---	---	---	8.6	55	35	14
1	16	5.3	0.7	---	---	---	9.7	60	40	20
1	25	6.8	0.9	---	---	---	11.6	70	50	29
1	35	7.9	0.9	---	---	---	12.7	80	55	39
1	50	9.4	1.0	---	---	---	14.4	90	60	53
1	70	11.3	1.1	---	---	---	16.5	100	70	73
1	95	13.0	1.1	---	---	---	18.4	110	75	95
1	120	14.7	1.2	---	---	---	20.3	125	85	119
1	150	16.5	1.4	---	---	---	22.7	140	95	148
1	185	18.2	1.6	---	---	---	24.8	150	100	178
1	240	21.0	1.7	---	---	---	28.0	170	115	232
1	300	23.5	1.8	---	---	---	30.9	190	125	289
1	400	27.0	2.0	---	---	---	35.0	210	140	377
1	500	30.5	2.2	---	---	---	39.1	235	160	475
1	630	35.2	2.4	---	---	---	44.6	270	180	630









CURRENT RATINGS FLEXIBLE CABLE 110°C - SINGLE CORE

Nominal Conductor Area (mm ²)	Unenclosed				Enclosed	Thermal Insulation		Buried Direct	Underground Wiring Enclosure		Three Phase Voltage Drop (@ 50Hz & 110°C) mV/A.m	
	Spaced	Spaced from Surface	Touching	Exposed to Sun	Metallic Wiring Enclosure in Air	Partially Surrounded by Thermal Insulation	Completely Surrounded by Thermal Insulation					
												
10	99	85	80	67	70	57	40	77	76	88	4.48	4.48
16	130	112	105	88	91	74	53	130	97	115	2.84	2.85
25	173	149	139	116	121	100	72	168	125	148	1.84	1.84
35	214	184	172	143	148	121	88	201	151	176	1.31	1.31
50	270	233	217	179	190	146	-	237	188	212	0.921	0.926
70	340	292	273	224	234	187	-	291	229	259	0.658	0.665
95	410	353	329	269	277	228	-	348	268	315	0.509	0.518
120	487	418	390	317	331	269	-	396	316	357	0.408	0.419
150	562	482	450	365	378	306	-	445	357	400	0.340	0.353
185	644	553	516	417	438	359	-	503	404	461	0.293	0.307
240	775	665	620	499	538	439	-	583	481	533	0.242	0.259
300	895	766	714	572	612	501	-	657	542	617	0.213	0.232
400	1079	918	855	682	757	575	-	746	648	700	0.187	0.208
500	1260	1064	990	786	864	692	-	843	729	815	0.172	0.194
630	1493	1240	1154	913	993	787	-	947	828	920	0.159	0.182

TWO CORE WITH EARTH

Core Configuration	Phase Conductor Cross Sectional Area (mm ²)	Phase Conductor Diameter (Nominal) (mm)	Phase Conductor Insulation Thickness (Nominal) (mm)	Earth Conductor Cross Sectional Area (mm ²)	Earth Conductor Diameter (Nominal) (mm)	Earth Conductor Insulation Thickness (Nominal) (mm)	Overall Cable Diameter (Nominal) (mm)	Minimum Bending Radius During Installation (mm)	Minimum Bending Radius Installed (mm)	Weight of Cable (Nominal) (Kg/100m)
2C+E	6	3.5	0.7	2.5	2.0	0.6	13.8	85	55	30
2C+E	10	4.3	0.7	4	2.7	0.7	15.8	95	65	38
2C+E	16	5.3	0.7	6	3.5	0.7	17.8	110	75	52
2C+E	25	6.7	0.9	6	3.5	0.7	21.3	130	85	73
2C+E	35	7.9	0.9	10	4.3	0.7	23.8	145	95	98
2C+E	50	9.4	1.0	16	5.3	0.7	27.2	165	110	134
2C+E	70	11.3	1.1	25	6.7	0.9	31.4	190	130	185





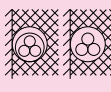
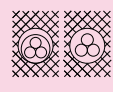


CURRENT RATINGS FLEXIBLE CABLE 110°C - TWO CORE WITH EARTH

Nominal Conductor Area (mm ²)	Unenclosed			Enclosed	Thermal Insulation		Buried Direct	Underground Wiring Enclosure	Single Phase Voltage Drop (@50Hz & 110°C) mV/A.m
	Spaced	Touching	Exposed to Sun	Metallic Wiring Enclosure in Air	Partially Surrounded by Thermal Insulation	Completely Surrounded by Thermal Insulation			
									
6	67	63	57	54	45	33	64	62	8.94
10	94	88	80	75	60	45	85	84	5.18
16	124	116	105	100	81	59	145	109	3.28
25	163	154	138	129	107	79	188	139	2.13
35	202	190	170	163	133	97	226	171	1.51
50	254	238	213	202	160	-	268	209	1.06
70	318	299	266	257	205	-	330	259	0.755

THREE CORE AND FOUR CORE WITH EARTH

Core Configuration	Phase Conductor Cross Sectional Area (mm ²)	Phase Conductor Diameter (Nominal) (mm)	Phase Conductor Insulation Thickness (Nominal) (mm)	Earth Conductor Cross Sectional Area (mm ²)	Earth Conductor Diameter (Nominal) (mm)	Earth Conductor Insulation Thickness (Nominal) (mm)	Overall Cable Diameter (Nominal) (mm)	Minimum Bending Radius During Installation (mm)	Minimum Bending Radius Installed (mm)	Weight of Cable (Nominal) (Kg/100m)
3C+E	6	3.5	0.7	2.5	2.0	0.6	15.1	90	60	38
3C+E	10	4.3	0.7	4	2.7	0.7	17.4	105	70	49
3C+E	16	5.3	0.7	6	3.5	0.7	19.7	120	80	68
3C+E	25	6.7	0.9	6	3.5	0.7	23.1	140	95	97
3C+E	35	7.9	0.9	10	4.3	0.7	25.8	155	105	131
3C+E	50	9.4	1.0	16	5.3	0.7	29.6	180	120	182
3C+E	70	11.3	1.1	25	6.7	0.9	34.7	210	140	253
3C+E	95	13.0	1.1	25	6.7	0.9	38.2	230	155	322
3C+E	120	15.3	1.2	35	7.9	0.9	43.7	265	175	410
3C+E	150	16.5	1.4	50	9.4	1.0	48.1	290	195	516
3C+E	185	18.2	1.6	70	11.3	1.1	53.5	325	215	636
3C+E	240	21.0	1.7	95	13.0	1.1	60.4	365	245	828
4C+E	6	3.5	0.7	2.5	2.0	0.6	16.5	100	70	47
4C+E	10	4.3	0.7	4	2.7	0.7	19.1	115	80	61
4C+E	16	5.3	0.7	6	3.5	0.7	21.7	130	90	86
4C+E	25	6.7	0.9	6	3.5	0.7	25.6	155	105	124
4C+E	35	7.9	0.9	10	4.3	0.7	28.7	175	115	168
4C+E	50	9.4	1.0	16	5.3	0.7	33.2	200	135	232
4C+E	70	11.3	1.1	25	6.7	0.9	39.1	235	160	327
4C+E	95	13.0	1.1	25	6.7	0.9	43.1	260	175	418
4C+E	120	15.3	1.2	35	7.9	0.9	49.3	300	200	532
4C+E	150	16.5	1.4	50	9.4	1.0	54.1	325	220	665
4C+E	185	18.2	1.6	70	11.3	1.1	60.2	365	245	818
4C+E	240	21.0	1.7	95	13.0	1.1	68.0	410	275	1068

CURRENT RATINGS FLEXIBLE CABLE 110°C - THREE CORE AND FOUR CORE WITH EARTH

Nominal Conductor Area (mm ²)	Unenclosed			Enclosed	Thermal Insulation		Buried Direct	Underground Wiring Enclosure	Three Phase Voltage Drop (@ 50Hz & 110°C) mV/A.m
	Spaced	Touching	Exposed to Sun	Metallic Wiring Enclosure in Air	Partially Surrounded by Thermal Insulation	Completely Surrounded by Thermal Insulation			
									
6	57	54	49	46	38	28	53	51	7.74
10	80	75	68	65	51	38	71	71	4.48
16	106	99	89	84	68	50	122	91	2.84
25	140	131	118	112	93	67	158	118	1.84
35	173	162	145	137	112	83	190	143	1.31
50	218	204	182	175	139	-	226	178	0.917
70	273	255	227	217	173	-	277	217	0.654
95	327	306	271	263	216	-	333	259	0.504
120	387	360	318	306	249	-	379	298	0.403
150	444	413	364	356	288	-	426	341	0.334
185	505	470	412	402	329	-	481	381	0.286
240	602	559	488	489	398	-	558	453	0.234

Note: Refer to Cable Selection in General Information for more information and data based on AS/NZS 3008.1.1.

Linking the future

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