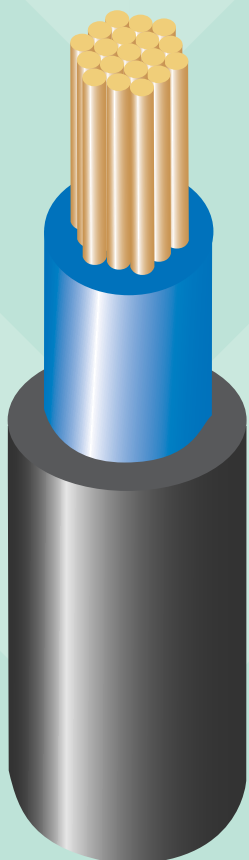


Standard Power Cables

Low Voltage (600/1000 V)

XLPE Insulated, PVC Sheathed, Single Core Unarmoured Cables to BS7889



Description

> Single core CSA mm². P.Cu. XLPE ins (BLUE, BROWN, BLACK or GREY), PVC sheath overall. 600/1000V to BS7889.

Conductors

> Plain annealed copper stranded circular conductor complying with BS EN 60228 Class 2

Insulation

> XLPE insulation complying with BS7655 requirements for type GP8

Core Identification

> Core coloured (BLUE, BROWN, BLACK or GREY)

Outer Sheath

> PVC sheath

Sheath Colour

> Normally BLACK but other colours available upon request

Flame Propagation

> All these cables meet the requirements of BS EN 60332-1-2

Installation

> All cables should be installed in accordance with the appropriate regulations, including IEE, or any other national legislation

Temperature Limits

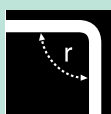
> All cables are suitable for operation in the range -15°C to +90°C, but should not be installed at temperatures below 0°C

Health and Safety

> Please refer to the Prysmian Cables and Systems Ltd leaflet 'Statement to Cable User's on the Health & Safety at Work Act 1974 and the Control of Substances Hazardous to Health Regulation (COSHH)



Temperature Range
-15 to +90°C



Bending Radius
Circular conductor $r = 6D$



Mechanical Impact
Medium



Fire Performance
BS EN 60332-1-2



Flexibility
Rigid

XLPE Insulated, PVC Sheathed, Single Core Unarmoured Cables to BS7889

Cable Details

Nominal cross sectional area	Minimum average thickness of insulation	Nominal thickness of oversheath	Approximate diameter overall	Minimum bending radius	Approximate cable weight	Maximum pulling eye force	Maximum DC resistance at 20°C	Maximum AC resistance at 90°C	Approximate Capacitance (cable to cable in Trefoil)	Approximate Inductance in Trefoil	Approximate Reactance @ 50Hz	Approximate Impedance @ 50Hz
mm ²	mm	mm	mm	mm	kg/km	kg	Ohms/km	Ohms/km	uF/km	mH/km	Ohms/km	Ohms/km

Single Core

50	1.0	1.4	13.1	60	535	250	0.387	0.494	0.462	0.311	0.098	0.504
70	1.1	1.4	15.1	70	745	350	0.268	0.342	0.501	0.304	0.096	0.356
95	1.1	1.5	16.7	70	1000	475	0.193	0.247	0.559	0.298	0.094	0.265
120	1.2	1.5	18.3	80	1245	600	0.153	0.196	0.588	0.294	0.093	0.217
150	1.4	1.6	20.2	90	1525	750	0.124	0.159	0.577	0.293	0.093	0.185
185	1.6	1.6	22.4	90	1900	925	0.0991	0.128	0.579	0.292	0.092	0.158
240	1.7	1.7	25.3	160	2450	1200	0.0754	0.097	0.621	0.286	0.090	0.132
300	1.8	1.8	28.1	170	3050	1500	0.0601	0.080	0.662	0.280	0.088	0.119
400	2.0	1.9	31.2	190	3875	2000	0.0470	0.064	0.673	0.280	0.088	0.109
500	2.2	2.0	34.6	210	4925	2000	0.0366	0.051	0.687	0.279	0.088	0.102
630	2.4	2.2	38.9	240	6250	2000	0.0283	0.042	0.711	0.278	0.088	0.098
800	2.6	2.3	43.6	270	8250	2000	0.0221	0.033	0.746	0.274	0.087	0.094
1000	2.8	2.4	50.8	310	10400	2000	0.0176	0.027	0.819	0.260	0.082	0.087

Nominal cross sectional area	Short Circuit Rating 1 Sec Short Circuit Rating of Conductor (90 to 250C) KA	Clipped direct		Free Air or Perforated Tray			Voltdrop Clipped direct, on tray in free air		
		Single Phase AC or DC Flat & Touching Amps	Three Phase Flat & Touching or Trefoil Amps	Single Phase AC or DC Flat & Touching Amps	Three Phase AC Flat & Touching Amps	Three Phase AC Trefoil Amps	Single Phase AC Touching Amps	Three Phase AC Touching Trefoil Amps	Three Phase AC Touching Flat Amps
mm ²	KA	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps

Single Core

50	7.1	228	209	242	216	207	1.00	0.87	0.87
70	10.0	293	268	310	279	268	0.71	0.61	0.62
95	13.6	355	326	377	342	328	0.52	0.45	0.46
120	17.2	413	379	437	400	383	0.43	0.37	0.38
150	21.4	476	436	504	464	444	0.36	0.31	0.32
185	26.4	545	500	575	533	510	0.30	0.26	0.28
240	34.3	644	590	679	634	607	0.25	0.22	0.24
300	42.9	743	681	783	736	703	0.22	0.20	0.21
400	57.2	868	793	940	868	823	0.20	0.175	0.195
500	71.5	990	904	1083	998	946	0.19	0.160	0.180
630	90.1	1130	1033	1254	1151	1088	0.175	0.150	0.170
800	114	1288	1179	1358	1275	1214	0.170	0.145	0.165
1000	143	1443	1323	1520	1436	1349	0.165	0.140	0.165

Ambient Temperature °C

Rating Factor

25	30	35	40	45	50	55	60
1.02	1.00	0.96	0.91	0.87	0.82	0.76	0.71

Ambient Temperature °C

Rating Factor

65	70	75	80
0.65	0.58	0.5	0.41

Note: The oversheath diameters are only approximate, if tolerance dimensions are required please specify at time of enquiry or order placement.
* If the Cable Spacing is Larger than 1 cable diameter then the volt drop will be larger than those specified.