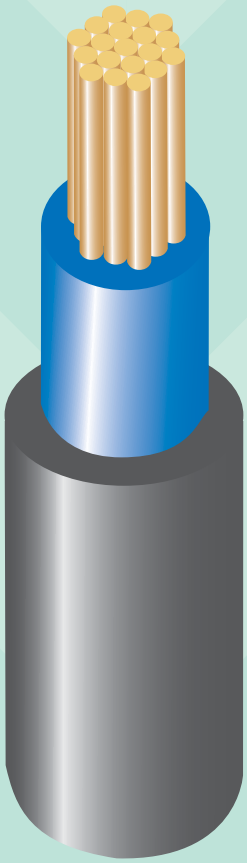
Standard Power Cables
Low Voltage (600/1000 V)

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

Flexibilty
Rigid

Ref: BS7889PVC/07/09

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PRYSMIAN CABLES & SYSTEMS

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Cable Details

Nominal cross sectional area	Minimum average thickness of insulation	Nominal thickness of oversheath	Approximate diameter overall	Minimum bending radus	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
mm²	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

	Short Circuit Rating	Current Ratings (ERA 69-30 pt V)					Approximate Volt Drops			Standard current ratings from ERA 69-30 pt V	Variation in Temperature	
Nominal cross sectional area	1 Sec Short Circuit Rating of Conductor (90 to 250C)	In Air Horizontal Spaced Single Phase	In Air Vertical Spaced Single Phase	In Air Trefoil format on Three Phase	In Air Vertical Spaced Three Phase	In Air Horizontal Spaced Three Phase	Single Phase Spaced*	Three Phase Trefoil	Three Phase Spaced*	Ambient temperature (Air) 25°C	Temperature °C	In air rating
mm²	KA	Amps	Amps	Amps	Amps	Amps	mV/A/m	mV/A/m	mV/A/m			
Single Core												
50	7.1	289	268	223	260	289	1.00	0.87	0.89		15	-
70	10.0	366	342	284	331	366	0.73	0.61	0.65		20	-
95	13.6	452	423	352	411	452	0.56	0.45	0.49		25	1.0
120	17.2	527	495	412	482	527	0.47	0.37	0.42		30	0.96
150	21.4	604	570	475	554	604	0.41	0.31	0.37		35	0.92
185	26.4	699	662	551	644	699	0.36	0.26	0.33		40	0.88
240	34.3	835	792	658	772	834	0.31	0.22	0.29		45	0.83
300	42.9	966	919	761	896	965	0.29	0.195	0.27		50	0.78
400	57.2	1129	1077	887	1050	1127	0.27	0.175	0.26		55	0.73
500	71.5	1315	1257	1027	1226	1312	0.26	0.16	0.25			
630	90.1	1533	1469	1186	1434	1529	0.25	0.15	0.24			
800	114	1765	1694	1347	1655	1761	0.25	0.145	0.24			
1000	143	1993	1916	1503	1878	1993	0.24	0.14	0.24			

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.
If current rating and buildings is required reference should be made to BS7671 (IEE Wiring Regs).

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