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 or BROWN),
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 or BROWN)

Outer Sheath
> PVC sheath complying with BS7655 requirements for Type 9

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)
## Cable Details

### Nominal cross sectional area

<table>
<thead>
<tr>
<th>Nominal cross sectional area</th>
<th>Minimum average thickness of insulation</th>
<th>Nominal thickness of oversheath</th>
<th>Approximate diameter overall</th>
<th>Minimum bending radius</th>
<th>Approximate cable weight</th>
<th>Maximum pulling eye force</th>
<th>Maximum DC resistance at 20°C</th>
<th>Maximum AC resistance at 90°C</th>
<th>Approximate Capacitance (cable to cable in Trefoil)</th>
<th>Approximate Inductance in Trefoil</th>
<th>Approximate Reactance @ 50Hz</th>
<th>Approximate Impedance @ 50Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm²</td>
<td>mm</td>
<td>mm</td>
<td>mm</td>
<td>mm</td>
<td>kg/ km</td>
<td>kg</td>
<td>Ohms/km</td>
<td>Ohms/km</td>
<td>uf/km</td>
<td>mH/km</td>
<td>Ohms/km</td>
<td>Ohms/km</td>
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</tbody>
</table>

### Single Core

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>mm²</td>
<td>1 Sec Short Circuit Rating of Conductor (90 to 250°C) KA</td>
<td>Single Phase Spaced*</td>
<td>Three Phase Spaced</td>
<td>Ambient temperature (Air) 25°C</td>
<td>Temperature °C</td>
</tr>
<tr>
<td>50</td>
<td>7.1</td>
<td>289</td>
<td>268</td>
<td>223</td>
<td>260</td>
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<tr>
<td>70</td>
<td>10.0</td>
<td>366</td>
<td>342</td>
<td>284</td>
<td>331</td>
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<tr>
<td>95</td>
<td>13.6</td>
<td>452</td>
<td>423</td>
<td>352</td>
<td>411</td>
</tr>
<tr>
<td>120</td>
<td>17.2</td>
<td>527</td>
<td>495</td>
<td>412</td>
<td>482</td>
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<tr>
<td>150</td>
<td>21.4</td>
<td>604</td>
<td>570</td>
<td>475</td>
<td>554</td>
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<tr>
<td>185</td>
<td>26.4</td>
<td>699</td>
<td>662</td>
<td>551</td>
<td>644</td>
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<tr>
<td>240</td>
<td>34.3</td>
<td>835</td>
<td>792</td>
<td>658</td>
<td>772</td>
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<tr>
<td>300</td>
<td>42.9</td>
<td>966</td>
<td>919</td>
<td>761</td>
<td>896</td>
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<tr>
<td>400</td>
<td>57.2</td>
<td>1129</td>
<td>1077</td>
<td>887</td>
<td>1050</td>
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<tr>
<td>500</td>
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<td>1315</td>
<td>1257</td>
<td>1027</td>
<td>1026</td>
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<tr>
<td>630</td>
<td>90.1</td>
<td>1533</td>
<td>1469</td>
<td>1186</td>
<td>1434</td>
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<tr>
<td>800</td>
<td>114</td>
<td>1765</td>
<td>1694</td>
<td>1347</td>
<td>1565</td>
</tr>
</tbody>
</table>

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). Alternatively rating are as BS6724 cables.

Ref: BS7889/01/07

Prysmian Cables & Systems Limited, Sales Office, Chickenhall Lane, Eastleigh, Hants, SO50 6YU, UK

Commercial Enquiries, Tel +44 (0) 845 678 345, Fax: +44 (0) 23 8029 5465

www.prysmian.co.uk
Product Certification Schedule

Schedule No: 017/004/320
Licensee: PRYSMIAN CABLES & SYSTEMS LTD, CHICKENHALL LANE, EASTLEIGH, HAMPSHIRE, SO50 6YU
Factory: PRYSMIAN CABLES & SYSTEMS LTD, CHICKENHALL LANE, EASTLEIGH, HAMPSHIRE, SO50 6YU
Specification: BS 7889:2012 Electric cables - Thermosetting insulated, unarmoured cables with a voltage of 600/1000 V, for fixed installations
Type of Cable: Table 2 - Single-core 600/1000V cables with circular stranded copper conductor
HAR Document: Not applicable
HAR Specification: Not applicable
Origin Thread: Not applicable
Origin Mark: PRYSMIAN (B) or (B) PRYSMIAN or BRITCABLE (B) or (B) BRITCABLE

PERMISSIBLE MARKS

BASEC

YELLOW
ACETATE
THREAD

Please refer to the BASEC Product Certification Requirements

Expiry Date: 11/08/2020

Signed for and on behalf of the British Approvals Service for Cables

Date 02/08/2017

This Certificate and Schedule(s) remains the property of BASEC, and shall be returned when required.
Product Certification Schedule

Schedule No: 017/006/081
Licensee: PRYSMIAN CABLES & SYSTEMS LTD, CHICKENHALL LANE, EASTLEIGH, HAMPSHIRE, SO50 6YU
Factory: PRYSMIAN CABLES & SYSTEMS LTD, WREXHAM INDUSTRIAL ESTATE, WREXHAM, LL13 9PH
Specification: BS 7889:2012 Electric cables - Thermosetting insulated, unarmoured cables with a voltage of 600/1000 V, for fixed installations
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HAR Document: Not applicable
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Origin Thread: Not applicable
Origin Mark: PRYSMIAN (W) or BRITCABLE (W)

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Peaceman Cable Engineering Ltd.
Flat B, 6/F., Sui Ying Ind. Bldg
No. 1 Yuk Yat Street, To Kwa Wan.
Kowloon.
Hong Kong.

Att: To All Concerned

**BS7889 Cable Diameter**
Due to the Wrexham facility switching to a more compact copper strand design which reduces the spacing between individual copper strands but still adhering to the required cross sectional area. This has led to improved manufacturing process control which has meant improved material usage, this in turn has led to a slight reduction in the overall cable diameters over the previously stated cable diameters for the BS7889 cable range.

If you require any further information please contact me.
Yours sincerely

[Signature]

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