

## FP100® BS 8592

Fire Resistant Single Core Cable. 450/750 V



Prysmian FP100® BS 8592 is the original fire resistant low voltage single core cable for use in steel conduits

### KEY APPLICATIONS

FP100® BS 8592 is ideally suited to drawing into conduit installations that provide adequate mechanical protection and it forms the key part of a wiring system for evacuation and fire fighting applications.

Green/Yellow is also suitable as a separate earth.

### FEATURES AND BENEFITS

- Ideal for rewiring existing steel conduit and upgrade to a fire resistant system or where the added mechanical protection or flexibility of a steel conduit or suitable trunking system is required
- Tough robust insulation prevents damage during installation
- Low smoke and corrosive gas emissions Low Smoke, Zero Halogen (LSOH®)

### STANDARDS



**BS 8592**

**IEC 60331-3**

**BS EN 50200 - PH120**

**BS 8434-2**

**BS EN 60332-1-2**

**BS EN 61034-2**

**BS EN 60754-1**

**BS EN 60228**

Construction Standard

Fire Resistant Test

Fire Resistant Test - Flame & Shock - 120 Minutes

Fire Resistant Test - Flame, Shock & Water - 120 Minutes

Flame Propagation - Single Cable

Smoke emission

Corrosive and acid gas

Conductors

### CONSTRUCTION

Conductor material

Copper

Conductor surface

Bare

Core insulation material

Mica + polymer

---

## APPLICATIONS PROPERTIES

Nominal voltage U0 [V]	450
Nominal voltage U [V]	750
Flame retardant	In accordance with BS EN 60332-1-2
Halogen free	Yes
Low smoke	Yes
Max. conductor temperature [°C]	90
Min. Operation temperature [°C]	-25
Min. Installation temperature [°C]	0
Max. Installation temperature [°C]	80
Bending radius (rule)	6D

---

## COLOURS

A range of insulation colours are available, including green/yellow

---

## CURRENT RATINGS

Refer to table 4E1 of BS 7671 Requirements for Electrical Installations. IET Wiring Regulations

Note: Where a conductor operates at a temperature exceeding 70°C it shall be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature

---

## CONTACT INFORMATION

Prysmian Cables & Systems Limited, Chickenhall Lane, Eastleigh, Hampshire, SO50 6YU, United Kingdom  
uk.prysmiangroup.com

Copyright Prysmian Group - 2021

You may not copy, reprint or reproduce in any form the content, either wholly or in part, of this Datasheet, without the written permission of the copyright owner.

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group : any modification or alteration afterwards of product may give different result. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend the information within this Datasheet without prior notice. This Datasheet may include inaccuracies, omissions of content and of information and is not contractually valid unless specifically authorised by Prysmian Group.

## TECHNICAL DATA

Nominal cross section conductor [mm <sup>2</sup> ]	Conductor category	Nominal thickness insulation [mm]	Nominal outer diameter [mm]	Cable weight [kg/km]	Conductor resistance at 20° C [Ohm/km]
1.5	Class 2 = stranded	0.7	3.6	26	12.1
2.5	Class 2 = stranded	0.8	4.2	39	7.41
4	Class 2 = stranded	0.8	4.7	53	4.61
6	Class 2 = stranded	0.8	5.3	76	3.08
10	Class 2 = stranded	1	6.6	125	1.83
16	Class 2 = stranded	1	7.2	180	1.15
25	Class 2 = stranded	1.2	9	280	0.727
35	Class 2 = stranded	1.2	10.5	380	0.524
50	Class 2 = stranded	1.4	12.2	520	0.387
70	Class 2 = stranded	1.4	13.4	710	0.268

## Certificate of Product Approval

Licensee:

### **Prysmian Cables & Systems Ltd**

Chickenhall Lane, Eastleigh, SO50 6YU, Hampshire, United Kingdom

Factory:

Chickenhall Lane, Eastleigh, SO50 6YU, Hampshire, United Kingdom

Standard:

BS 8592:2016

Description:

Single core non-sheathed fire resistant cables with thermosetting insulation and having low emission of smoke and corrosive gases when affected by fire

Details:

These cables conform to BS 8592, and by reference, conform to the appropriate requirements of BS EN 60228, BS EN 60332-1-2, BS EN61034-2, BS EN 60754-1 and IEC 60331-

3. Additionally tested to BS 8434-2:2003+A2:2009 and BS EN 50200:2015 PH120 (tests conducted in steel conduit). These cables have a rated voltage of 450/750V

Materials:

Insulation EI 5, Sheath None

Brand Name:

FP100

Origin Mark:

PRYSMIAN (B) OR (B) PRYSMIAN

#### Permissible Approval Marks:

**BASEC**

BASEC name



BASEC roundel

Signed for and on behalf of  
BASEC Group Ltd

*Kieran O'Brien* Date: 06/07/2023

Date of original issue: 04/11/2020

Check BASEC website to verify validity.

Page 1 of 2

BASEC Group Ltd, Presley House, Presley Way, Milton Keynes, MK8 0ES, UK  
Registered in England No. 13950143, Tel: +44 (0)1908 267300  
Email: mail@basec.org.uk Web: www.basec.org.uk

BSF079 Issue 5 (20-03-2023)



Expiry date:  
**11/08/2026**



Type(s) and Range(s) of Approval

Table / Clause	Code Designation	Conductor Class	Range of Cores	Min Nominal Size -sqmm	Max Nominal Size - sqmm
2	N/A	Class 2	1	1.5	70

Signed for and on behalf of  
BASEC Group Ltd

*Kieran O'Brien* Date: 06/07/2023

Date of original issue: 04/11/2020

Check BASEC website to verify validity.

Page 2 of 2

BASEC Group Ltd, Presley House, Presley Way, Milton Keynes, MK8 0ES, UK  
Registered in England No.13950143, Tel: +44 (0)1908 267300  
Email: mail@basec.org.uk Web: www.basec.org.uk

BSF079 Issue 5 (20-03-2023)



Expiry date:  
**11/08/2026**

## Certificate of Product Approval

Certificate Number: 077p

Issue: 04

### PRYSMIAN CABLE & SYSTEMS LIMITED

Chickenhall Lane  
Bishopstoke  
Eastleigh  
Hants  
SO50 6YU  
United Kingdom

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

#### Product(s)

Cable Types as listed below:  
FP100 LSOH  
See Certificate Appendix for details

#### Standard(s) (see Appendix for details)

BS 6387:2013 (Category CWZ)  
EN 50267-2-1:1999  
EN 61034-2:2005  
IEC 60331-21:1999

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.



Signed for LPCB

David Hoare  
Certification Scheme Manager

16 September 2014  
Date of Issue

13 May 2013  
Date of First issue



This certificate and appendix remain the property of BRE Global Ltd and is issued subject to terms and conditions (for details visit [www.redbooklive.com/terms](http://www.redbooklive.com/terms)).

To check the validity of this certificate and appendix please visit [www.redbooklive.com/check](http://www.redbooklive.com/check), scan the QR tag or contact us.

LPCB is part of BRE Global Ltd, Garston, Watford, WD25 9XX  
T: +44 (0)333 321 8811 F: +44 (0)1923 664603 E: [enquiries@breglobal.com](mailto:enquiries@breglobal.com)



## Appendix to Certificate No: 077p PRYSMIAN CABLE & SYSTEMS LIMITED

Issue: 04

Product name					LPCB Ref. No.
FP100 LSOH					077p/01
Nominal csa of conductor (mm <sup>2</sup> )	Core Construction	BS 6387	EN 50267-2-1	EN 61034-2	IEC 60331-21
1.5	One <sup>(1)</sup>	C,W,Z <sup>(2,3)</sup>	<0.5% HCI	>60%	Complies <sup>(4)</sup>
2.5	One <sup>(1)</sup>	C,W,Z <sup>(2,3)</sup>	<0.5% HCI	>60%	Complies <sup>(4)</sup>
4.0	One <sup>(1)</sup>	C,W,Z <sup>(2,3)</sup>	<0.5% HCI	>60%	Complies <sup>(4)</sup>
6.0	One <sup>(1)</sup>	C,W,Z <sup>(2,3)</sup>	<0.5% HCI	>60%	Complies <sup>(4)</sup>
10	One <sup>(1)</sup>	C,W,Z <sup>(2,3)</sup>	<0.5% HCI	>60%	Complies <sup>(4)</sup>

### Uo/U 600/1000 V

#### Notes:

1. Stranded conductor only.
2. Where a single cable is fitted in a conduit, only phase to earth voltage was applied.
3. To satisfy the requirements of BS 6387:2013, for Categories C,W,Z testing was conducted using a 20mm stainless steel conduit as the other metallic element.
4. The FP100 LSOH cables met the requirements of IEC 60331-21:1999 when tested at a temperature of 950°C for a duration of 90mins + 15mins cool down, at a voltage rating of 600V.

**Cross-Listed products and alternative branding are detailed on page 3.**

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.



Signed for LPCB

David Hoare  
Certification Scheme Manager

16 September 2014  
Date of Issue

13 May 2013  
Date of First issue



This certificate and appendix remain the property of BRE Global Ltd and is issued subject to terms and conditions (for details visit [www.redbooklive.com/terms](http://www.redbooklive.com/terms)).

To check the validity of this certificate and appendix please visit [www.redbooklive.com/check](http://www.redbooklive.com/check), scan the QR tag or contact us.

LPCB is part of BRE Global Ltd, Garston, Watford, WD25 9XX  
T: +44 (0)333 321 8811 F: +44 (0)1923 664603 E: [enquiries@breglobal.com](mailto:enquiries@breglobal.com)




## Appendix to Certificate No: 077p PRYSMIAN CABLE & SYSTEMS LIMITED

Issue: 04

LPCB Ref No.	Model No.	Alternative Model No.	Labelled	Distributors Cert/Ref No.
077p/01	FP100 LSOH 1.5mm <sup>2</sup> - 10mm <sup>2</sup>	FT SIFER 950i OHLS 1.5mm <sup>2</sup> - 10mm <sup>2</sup>	Draka UK Ltd	1134g/01

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.



Signed for LPCB

David Hoare  
Certification Scheme Manager

16 September 2014  
Date of Issue

13 May 2013  
Date of First issue



This certificate and appendix remain the property of BRE Global Ltd and is issued subject to terms and conditions (for details visit [www.redbooklive.com/terms](http://www.redbooklive.com/terms)).

To check the validity of this certificate and appendix please visit [www.redbooklive.com/check](http://www.redbooklive.com/check), scan the QR tag or contact us.

LPCB is part of BRE Global Ltd, Garston, Watford, WD25 9XX  
T: +44 (0)333 321 8811 F: +44 (0)1923 664603 E: [enquiries@breglobal.com](mailto:enquiries@breglobal.com)






**TO WHOM IT MAY CONCERN**

For FP100 077p issue we received the response letter by FSD, we could use on-line certificate to convince FSD officer.

<http://www.redbooklive.com/search/displaycompany.jsp?sectiontype=1&companyid=352&productgroupid=3074&sectionid=24&searchgrouptypeid=13&searchgroupid=0&id=677>

消防處  
牌照及審批總區  
通風系統課

香港九龍尖沙咀東康莊道 1 號  
消防總部大廈 5 樓



FIRE SERVICES DEPARTMENT  
LICENSING & CERTIFICATION COMMAND  
Ventilation Division

5/F, Fire Services Headquarters Building,  
No. 1 Hong Chong Road,  
Tsim Sha Tsui East, Kowloon,  
Hong Kong

本處檔號 Our Ref.: FP(LC) 317/21  
來函檔號 Your Ref.:  
圖文傳真 Fax: 2367 3206  
電話 Tel. No.: 2733 1557

18 April 2018



Prysmian Hong Kong Holding Limited,  
Unit 1511-12, 15/F.,  
Lu Plaza,  
2 Wing Yip Street,  
Kwun Tong,  
Kowloon,  
Hong Kong.

(Attn.: Mr. Stephen LAM)

Dear Sir,

**“Prysmian” FP100 LSOH Fire Resistant Cables**

I refer to your letter dated 20.12.2017 enclosing catalogues and test certificates and the supplementary information submitted on 3.4.2018 with respect to the captioned products for the assessment of this Department.

According to FSD Circular Letter No. 1/2007, this Department is not going to assess and comment on the captioned products subject to their valid LPCB listing in compliance with BS 6387:2013 as listed in the LPCB Redbook and their correct cable markings.

Yours faithfully,

(LEUNG KAM-man)  
for Director of Fire Services

KML/chl  
FileCode: prysmain fp100 bs 6387 20180418.doc

Reference No. : PHK- 23-001-004

Date : Mar 13<sup>th</sup> 2023

**To Whom it may concern**

**Subject: BS8592 of Single Core fire resistant cable**

Dear Sir,

We herewith confirm that our Prysmian FP100 and Draka Sifer 950i single Cables supplied to the above project, are manufactured by our UK factory.

We also confirm that Prysmian FP100 and Sifer 950i are complied with BS 8592:2016 which is an exclusive standard for single core fire resistant conduit wires, associated to BS 5266:2016 for the CoP of HKFSD. Such BS 8592 qualification is accredited by BASEC, in addition to previous LPCB for BS 6387 CWZ which the certificates are online for public access.

		<b>BASEC certificate</b> (issued from 2020)	<b>LPCB certificate</b> (issued from 2014)
<b>Brand</b>	<b>Designation</b>	<b>BS 8592</b>	<b>BS 6387 CWZ</b>
Prysmian	FP100	017/004/343	077c, 077p
Draka	Sifer 950i	189/001/080	1134c, 1134g

Below is new printing legend of FP100 and Draka Sifer 950i for the BASEC range:

**PRYSMIAN (B) FP100 ELECTRIC CABLE 450/750V BS8592 \*a\* \*yy\* BASEC**

**DRAKA (B) FT SIFER 950i ELECTRIC CABLE 450/750V BS8592 \*a\* \*yy\* BASEC**

**Where**

**\*a\* is the cross section, e.g. 1.5**

**\*yy\* is the year of manufacture, e.g. 2022**

I hope the above clarifies our conformity and the undersigned remains at your disposal for further understanding.

Yours sincerely,  
Prysmian Hong Kong Holding Limited



Eric Tang  
Business product Manager  
Prysmian Hong Kong Holding Limited  
Unit 06.22<sup>nd</sup> Floor, CDW Building, ,  
388 Castle Peak Road, Tsuen Wan  
HONG KONG

T +852 2827 8308  
F +852 2827 7212  
www.prysmiangroup.com