



Circular conductor

PRYSMIAN FP600S
MT/XLPE/LSOH/SWA/LSOH

Multicore Fire Resistant Armoured Cable
refer to BS 7846-F120
0.6/1kV

Certificate

BASEC
BRITISH APPROVALS SERVICE FOR CABLES

Application

Prysmian 600S is the ultimate fire resistant, armoured cable for power of emergency, life safety and fighting systems used in buildings. Designed primarily for clipped direct, on tray, in basket, in free air, direct buried or embedded in concrete.

- Smoke barriers, control dampers, smoke curtains
- Smoke and heat exhaust ventilations
- Fire fighting and evacuation lifts
- Wet riser pumps, sprinkler pumps, water mist

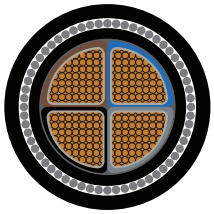
Construction

No.	Classification	Code	Construction detail
①	Conductor	CU	Annealed copper conductor BS EN 60228 (IEC 60228) Class 2
②	Fire barrier	MT	Mica tape
③	Insulation	XLPE	XLPE according to BS 7655-1.3 GP8
④	Inner covering	LSOH	LSOH according to BS7846:2015 Bedding color: Black
⑤	Armor	SWA	Galvanized steel wire for multi-core cables
⑥	Outer sheath	LSOH	LSOH according to BS7655-6.1 LTS 1 Sheath color: Black

Cable marking

The outer sheath is marked in embossing with ink printing sequential meter mark as follows:

PRYSMIAN(T) FP600S BASEC BS7846-F120 FIRE RESISTANT ELECTRIC CABLE 600/1000V H SIZE YYYY XXXXm





Shaped conductor

Core Identification

No. of cores	Detail
2 core	Brown-Blue
3 core	Brown-Black-Grey
4 core	Blue-Brown-Black-Grey
5 core	Green and Yellow-Blue-Brown-Black-Grey

Other colours available as customer requirement

Applicable Standards

Design guidelines	BS 7846
Halogen properties	BS EN (IEC) 60754-1, BS EN (IEC) 60754-2
Flame retardant properties	BS EN (IEC) 60332-1-2, BS EN (IEC) 60332-3-24
Fire resistance properties	BS 7846-F120, BS 6387 CWZ, BS 8491 120 mins
Smoke density	BS EN (IEC) 61034-2

Technical Data

Rated voltage	0.6/1 kV
Test voltage	3.5kV/5min
Temperature range	-15℃-90℃

Bending Radius

Minimum bending radius	8D

Notes: D =overall diameter of cable

MT/XLPE/LSOH/SWA/LSOH multi-core cables BS 7846-F120 0.6/1kV

No. of cores	×	C.S.A	Shape of Conductor	Nominal thickness of insulation	Approx. diameter under armour	Armor wire nominal diameter	Nominal thickness of sheath	Approx. Overall diameter	Approx. Cable Weight	Max. DC resistance at 20°C	Short circuit current (1s)	Current rating single cable in30°C free air #	Voltage drop - single cable in free air #
n		mm2		mm	mm	mm	mm	mm	kg/km	Ω/km	Ka(1s)	A	mV/A/m
2	×	6	Circular	0.7	15.6	1.25	1.4	20.7	887	3.08	0.86	66	7.900
2	×	10	Circular	0.7	17.9	1.25	1.5	23.4	1070	1.83	1.43	90	4.700
2	×	16	Circular	0.7	19.3	1.25	1.5	24.3	1207	1.15	2.29	115	2.900
2	×	25	Circular	0.9	22.9	1.25	1.6	28.1	1544	0.727	3.58	152	1.900
2	×	35	Circular	0.9	25.5	1.6	1.7	31.6	2255	0.524	5.01	188	1.350
3	×	6	Circular	0.7	16.7	1.25	1.4	21.7	948	3.08	0.86	56	6.800
3	×	10	Circular	0.7	19.2	1.25	1.5	24.6	1203	1.83	1.43	78	4.000
3	×	16	Circular	0.7	20.7	1.25	1.6	25.8	1369	1.15	2.29	99	2.500
3	×	25	Circular	0.9	24.9	1.6	1.7	31.0	2188	0.727	3.58	131	1.650
3	×	35	Circular	0.9	27.3	1.6	1.8	33.3	2654	0.524	5.01	162	1.150
3	×	50	Shaped	1.0	27.5	1.6	1.8	34.8	3002	0.387	7.15	197	0.870
3	×	70	Shaped	1.1	30.8	1.6	1.9	38.3	3810	0.268	10.01	251	0.600
3	×	95	Shaped	1.1	31.8	2.0	2.1	40.5	4798	0.193	13.59	304	0.450
3	×	120	Shaped	1.2	34.9	2.0	2.2	44.7	5728	0.153	17.16	353	0.370
3	×	150	Shaped	1.4	39	2.5	2.3	49.8	7242	0.124	21.45	406	0.300
3	×	185	Shaped	1.6	42.9	2.5	2.4	54.2	8666	0.0991	26.46	463	0.260
3	×	240	Shaped	1.7	47.5	2.5	2.6	59.2	10726	0.0754	34.32	546	0.210
3	×	300	Shaped	1.8	52.3	2.5	2.7	64.2	12881	0.0601	42.9	628	0.185
3	×	400	Shaped	2.0	59.1	2.5	2.9	71.4	15897	0.047	57.2	728	0.165
4	×	6	Circular	0.7	18.4	1.25	1.5	23.7	1067	3.08	0.86	56	6.800
4	×	10	Circular	0.7	21.2	1.25	1.5	26.7	1328	1.83	1.43	78	4.000
4	×	16	Circular	0.7	22.9	1.25	1.6	28.0	1584	1.15	2.29	99	2.500
4	×	25	Circular	0.9	27.6	1.6	1.7	33.6	2575	0.727	3.58	131	1.650
4	×	35	Circular	0.9	30.3	1.6	1.8	36.3	3148	0.524	5.01	162	1.150
4	×	50	Shaped	1.0	30.8	1.6	1.9	38.3	3692	0.387	7.15	197	0.870

Note # single phase for 2 core, 3 phase for 3 core, 4 core or 5 core

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No. of cores	×	C.S.A	Shape of Conductor	Nominal thickness of insulation	Approx. diameter under armour	Armor wire nominal diameter	Nominal thickness of sheath	Approx. Overall diameter	Approx. Cable Weight	Max. DC resistance at 20°C	Short circuit current (1s)	Current rating single cable in30°C free air #	Voltage drop - single cable in free air #
n		mm2		mm	mm	mm	mm	mm	kg/km	Ω/km	Ka(1s)	A	mV/A/m
4	×	70	Shaped	1.1	35.1	2.0	2.1	43.8	5110	0.268	10.01	251	0.600
4	×	95	Shaped	1.1	36.2	2.0	2.2	45.1	6045	0.193	13.59	304	0.450
4	×	120	Shaped	1.2	40.3	2.5	2.3	51.2	7718	0.153	17.16	353	0.370
4	×	150	Shaped	1.4	44.5	2.5	2.4	55.8	9121	0.124	21.45	406	0.300
4	×	185	Shaped	1.6	49.1	2.5	2.6	60.6	10989	0.0991	26.46	463	0.260
4	×	240	Shaped	1.7	54.9	2.5	2.7	66.8	13741	0.0754	34.32	546	0.210
4	×	300	Shaped	1.8	60.1	2.5	2.9	72.4	16563	0.0601	42.9	628	0.185
4	×	400	Shaped	2.0	68.4	3.15	3.2	82.6	21604	0.047	57.2	728	0.165
5	×	6	Circular	0.7	20.4	1.25	1.5	25.7	1172	3.08	0.86	56	6.800
5	×	10	Circular	0.7	23.5	1.25	1.6	29.2	1513	1.83	1.43	78	4.000
5	×	16	Circular	0.7	25.8	1.6	1.7	31.8	2266	1.15	2.29	99	2.500
5	×	25	Circular	0.9	30.6	1.6	1.8	36.6	2989	0.727	3.58	131	1.650
5	×	35	Circular	0.9	33.6	1.6	1.9	39.8	3761	0.524	5.01	162	1.150
5	×	50	Circular	1.0	36.2	2.0	2.0	44.2	4918	0.387	7.15	197	0.870
5	×	70	Circular	1.1	41.2	2.0	2.2	49.7	6365	0.268	10.01	251	0.600

Note # single phase for 2 core, 3 phase for 3 core, 4 core or 5 core

BASEC
BRITISH APPROVALS SERVICE FOR CABLES

Certificate No:
256/001/002
Issue No: 1

Certificate of Product Approval

Licensee:
Prysmian Tianjin Cables Co., Ltd.

16,Jin Rong Road, Xiqing District, 300385, Tianjin, P.R. China

Factory:
16,Jin Rong Road, Xiqing District, 300385, Tianjin, P.R. China

Standard:
BS 7846:2015

Description:
Armoured fire resistant power cables

Details:
Resistance to fire - Category F120.
These cables conform to BS 7846 and by reference, conform to the appropriate requirements of BS EN 60228, BS EN 60332-1-2, BS EN 60332-3-24, BS EN 61034-2, BS EN 60754-1, BS 8491 for F120 category and BS 6387 C,W,Z for F2 category specifications. These cables are rated 600/1000V.

Materials:
Insulation GP 8, Sheath LTS 1

Brand Name:
FP600S
FTP120

Origin Mark:
PRYSMIAN (T) FP600S
DRAKA (T) FTP120

Permissible Approval Marks:

BASEC name | BASEC roundel

Signed for and on behalf of
BASEC Group Ltd

Date: 25/07/2024

Date of original issue: 25/07/2024

Check BASEC website to verify validity.

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)

UKAS PRODUCT CERTIFICATION 0004

Expiry date:
02/06/2027

BASEC
BRITISH APPROVALS SERVICE FOR CABLES

Certificate No:
256/001/002
Issue No: 1

Type(s) and Range(s) of Approval

Table / Clause	Code Designation	Conductor Class	Range of Cores	Min Nominal Size -sqmm	Max Nominal Size - sqmm
4	N/A	Class 2	2	6	35
5	N/A	Class 2	3	6	400
6	N/A	Class 2	4	6	400
7	N/A	Class 2	5	6	70

Signed for and on behalf of
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Date: 25/07/2024

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BASEC Group Ltd, Presley House, Presley Way, Milton Keynes, MK8 0ES, UK
Registered in England No.13950143, Tel: +44 (0)1908 267300
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消 防 處
牌 照 及 審 批 總 區
消 防 工 程 合 規 課
通 風 系 統 組
香港灣仔告士打道 5 號
稅務大樓 35 樓

FIRE SERVICES DEPARTMENT
LICENSING & CERTIFICATION COMMAND
Fire Protection Engineering Compliance Division
Ventilating Systems Group
35/F, Revenue Tower,
5 Gloucester Road, Wan Chai,
Hong Kong

本處檔號 Our Ref.: FSD LC VSG 317/21
來函檔號 Your Ref.: PHK-FSD-2409-L02
圖文傳真 Fax: (852) 2382 2495
電 話 Tel. No.: (852) 2718 7567
電 郵 E-mail: fsvs@hkfsd.gov.hk

4 October 2024

Prysmian Hong Kong Holding Limited
Unit 06, 22/F CDW Building
388 Castle Peak Road
Tsuen Wan, N.T.
Hong Kong

(Attn.: Mr. TANG Wai-hung)

Dear Sir,

"Prysmian/Draka" Prysmian FP600S/ Draka FTP120 Fire Resisting Cables

I refer to your application form under above reference signed on 20.9.2024 together with copy of certificates and product catalogue, with respect to the captioned product for our acceptance assessment.

According to FSD Circular Letter no. 1/2024, any fire service installation/ equipment (except portable equipment, i.e. fire extinguisher, fire blanket, etc.) which is certified and properly listed by one of our recognized Product Certification Bodies (PCBs) is deemed to be accepted by this Department subject to (i) no change of the listing condition; and (ii) such equipment and the installation being in conformity with all relevant local requirements.

The application for the captioned product acceptance by this Department is not required subject to their valid BASEC listing in compliance with BS 7846: 2015 Category F120 as listed in the BASEC product certification scheme and their correct cable markings.

Yours faithfully,

(Stanley CHOW)
for Director of Fire Services

cc:
CTO(FPEC) c/w copy of incoming application form and BASEC certificate only for record – Fax 2382 2495

SC/
FileCode: Prysmian prysmian FP600S_Draka FTP120 FR cable_20241004(Listed).doc