

FP600s

Fire Resistant Armoured Power Cable. BS 7846-F120. 600/1000 V



Prysmian FP600s is the ultimate fire resistant, armoured cable for power of emergency, life safety and fighting systems used in buildings

KEY APPLICATIONS

Designed primarily for clipped directly to a surface, on tray, in basket or in free air. These cables can also be laid direct in ground or in ducts in free draining soil, or embedded in concrete

Smoke barriers, control dampers, smoke curtains.

Smoke and heat exhaust ventilation systems.

Fire fighting and evacuation lift supplies.

Wet riser pumps.

Extinguishing systems - sprinkler pumps, water mist and powder.

FEATURES AND BENEFITS

- Fire resistant to BS 7846 F120
- Suitable for use in large and complex buildings to power fire fighting equipment
- BS 8519 Category 1, 2 and 3 for power
- Robust armour provides cable with added mechanical protection
- Reduced flame propagation
- London Underground S1085 Approved Products Register
- Low Smoke, Zero Halogen (LSOH®) sheath
- Manufactured under ISO 9001 Quality management systems
- Designed to meet the requirements of London Underground LUL - S1085 - Fire Safety Performance of Materials - Stations and Tunnel Infrastructure
- Multi core steel wire armour

ADDITIONAL TECHNICAL SUPPORT

- [FAQ's](https://uk.prysmiangroup.com/technical-area/faqs) - uk.prysmiangroup.com/technical-area/faqs
- [Technical email](mailto:tech.info@prysmiangroup.com) - tech.info@prysmiangroup.com
- [Live Chat](https://uk.prysmiangroup.com/technical-area) - uk.prysmiangroup.com/technical-area
- Technical hotline: 02380 295222

STANDARDS



BS 7846 - Category F120

BS 8491 - 120 Minutes

BS 6387 Category CWZ

BS EN 60332-1-2

BS EN 60332-3-24

BS EN 61034-2

BS EN 60754-1

Construction Standard

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

Fire Resistant Tests

Flame Propagation - Single Cable

Flame Propagation - Multiple (bunched) Cables - Category C

Smoke emission

Corrosive and acid gas

CONSTRUCTION

Conductor material	Copper
Conductor surface	Bare
Core insulation material	Mica + XLPE
Armouring/reinforcement	Wire
Armouring	Yes
Material inner sheath	Low smoke zero halogen
Material outer sheath	Low smoke zero halogen
Cable shape	Round

APPLICATIONS PROPERTIES

Nominal voltage U ₀ [V]	600
Nominal voltage U [V]	1,000
Flame retardant	In accordance with BS EN 60332-3-24
Halogen free	Yes
Low smoke	Yes
Max. conductor temperature [°C]	90
Min. Operation temperature [°C]	-25
UV resistant	Yes
Outdoor installation	Yes
Min. Installation temperature [°C]	0
Max. Installation temperature [°C]	80
Underground installation	Yes
Bending radius (rule)	8D

COLOURS

Insulation: Two Cores: Brown, Blue;
Three Cores: Brown, Black, Grey;
Four Cores: Blue, Brown, Black, Grey;
Five Cores: Blue, Brown, Black, Grey, Green/Yellow;
Sheath: Black

CURRENT RATINGS

Refer to table 4E4 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

TECHNICAL DATA

Number of cores	Nominal cross section conductor [mm²]	Shape of conductor	Nominal diameter of armouring wire [mm]	Nominal diameter under armour [mm]	Nominal outer diameter [mm]	Cable weight [kg/km]	Conductor resistance at 20° C [Ohm/km]	Embodied Carbon [CO2e kg/km]
2	4	Round	1.25	15.1	24	1,000	4.61	2,389
2	6	Round	1.25	15.3	23	980	3.08	2,619
2	10	Round	1.25	17.3	23	1,100	1.83	3,146
2	16	Round	1.25	18.5	25	1,250	1.15	3,980
2	25	Round	1.25	21	27	1,550	0.727	5,501
2	35	Round	1.6	24	31	2,100	0.524	7,585
2	50	Sector-shaped	1.6	23	30	2,100	0.387	9,035
2	70	Sector-shaped	1.6	26	33	2,600	0.268	12,150
2	95	Sector-shaped	2	27	36	3,400	0.193	
2	120	Sector-shaped	2	31	39	4,100	0.153	20,926
2	150	Sector-shaped	2	33	42	4,800	0.124	
2	185	Sector-shaped	2.5	37	47	6,100	0.0911	31,824
2	240	Sector-shaped	2.5	41	51	7,500	0.0754	
2	300	Sector-shaped	2.5	45	56	9,000	0.0601	
2	400	Sector-shaped	2.5	50	61	10,900	0.047	
3	4	Round	1.25	15.2	22	950	4.61	2,598
3	6	Round	1.25	15.3	22	920	3.08	2,881
3	10	Round	1.25	18.7	25	1,200	1.83	3,945
3	16	Round	1.25	19.7	26	1,400	1.15	5,116
3	25	Round	1.6	23	30	2,000	0.727	7,676
3	35	Round	1.6	26	33	2,500	0.524	10,037
3	50	Sector-shaped	1.6	26	33	2,700	0.387	
3	70	Sector-shaped	1.6	29	36	3,400	0.268	17,183
3	95	Sector-shaped	2	32	41	4,600	0.193	
3	120	Sector-shaped	2	35	44	5,500	0.153	29,749
3	185	Sector-shaped	2.5	43	53	8,200	0.0991	45,269
3	240	Sector-shaped	2.5	47	58	10,300	0.0754	58,463
3	300	Sector-shaped	2.5	52	63	12,300	0.0601	
3	400	Sector-shaped	2.5	58	69	15,100	0.047	
4	4	Round	1.25	16.2	23	960	4.61	2,832
4	6	Round	1.25	15.6	24	1,050	3.08	3,479
4	10	Round	1.25	21	26	1,400	1.83	4,807
4	16	Round	1.25	22	28	1,650	1.15	6,460
4	25	Round	1.6	26	33	2,400	0.727	9,697
4	35	Round	1.6	29	36	3,000	0.524	12,818

TECHNICAL DATA

Number of cores	Nominal cross section conductor [mm²]	Shape of conductor	Nominal diameter of armouring wire [mm]	Nominal diameter under armour [mm]	Nominal outer diameter [mm]	Cable weight [kg/km]	Conductor resistance at 20° C [Ohm/km]	Embodied Carbon [CO2e kg/km]
4	50	Sector-shaped	1.6	30	37	3,300	0.387	16,304
4	70	Sector-shaped	2	32	41	4,500	0.268	23,906
4	95	Sector-shaped	2	36	45	5,700	0.193	31,386
4	120	Sector-shaped	2.5	40	50	7,300	0.153	39,756
4	150	Sector-shaped	2.5	44	54	8,600	0.124	48,110
4	185	Sector-shaped	2.5	49	59	10,500	0.0991	59,443
4	240	Sector-shaped	2.5	54	65	12,900	0.0754	75,874
4	300	Sector-shaped	2.5	59	70	15,600	0.0601	93,853
4	400	Sector-shaped	3.15	66	79	20,200	0.047	120,920
5	4	Round	1.25	16.8	24	1,050	4.61	3,202
5	6	Round	1.25	18	24	1,150	3.08	3,822
5	10	Round	1.25	23	29	1,650	1.83	5,834
5	16	Round	1.6	25	32	2,100	1.15	8,172
5	25	Round	1.6	28	35	2,800	0.727	11,659
5	35	Round	1.6	32	39	3,300	0.524	15,295

*The embodied carbon figure is taken from a single product in the range, for more information on how we calculate our embodied carbon figure visit here: <https://uk.prysmiangroup.com/embodied-carbon>