

PRYSMIAN
FP 400



Certificate No 077b*
Certificate No 517b*

FIRE RESISTANT ARMoured POWER CABLE - BS 7846 F2 600/1000 V



Conductor

Plain annealed copper stranded conductor meets the requirements of BS EN 60228 Class 2

Key Applications

- > Fire resistant, low fire hazard armoured power and control cable
- > Use for fire performance circuits in public buildings

Insulation

Mineral ceramic (Mica) fire resistant tape and 90°C cross - linked insulation

British Standards

- > BS 6387 CWZ*
- > BS 7846 F2
- > London Underground S1085 Approved Product Register
- > BASEC approved
- > LPCB approved*
- > BS EN 61034-2*
- > BS EN 60754-1*

Bedding

Extruded LSOH

Armour

Single layer of galvanised steel wires

Core identification

HARMONISED CORE IDENTIFICATION:

- ○ brown-blue
- ○ ○ brown-black-grey
- ○ ○ blue-brown-black-grey
- ○ ○ ○ brown-black-grey-blue-green/yellow

NON HARMONISED CORE IDENTIFICATION:

- ○ red-black
 - ○ ○ red-yellow-blue
 - ○ ○ black-red-yellow-blue
 - ○ ○ ○ red-yellow-blue-black-green/yellow
- Non harmonised colours to special order.

Sheath

Extruded LSOH suitable for outdoor installation with exposure to normal daylight UV



Temperature Range
-25 to +90°C



Bending Radius
8D



Mechanical Impact
High



Fire Performance
BS EN 60332-1-2
BS EN 60332-3-24



Flexibility
Rigid



Halogen Free
BS EN 60754-1



Low Smoke Emissions
BS EN 61034-2



Fire Resistant
BS 6387 Category CWZ

Nominal cross sectional area mm ²	Approximate overall diameter mm	Approximate diameter under armour mm	Nominal diameter of armour wires mm	Approximate cable weight kg/km	Maximum conductor resistance at 20°C ohms/km	Short Circuit rating (1 sec) of conductor kA	Current rating Three phase AC Clipped direct Amps	Current rating Three phase AC Free Air Amps	Volt drop Three phase AC mV/A/m
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Three Core

1.5	13.9	9.4	0.9	370	12.1	0.20	23	25	27
2.5	15.5	10.8	0.9	455	7.41	0.35	31	33	16
4	16.4	11.6	0.9	530	4.61	0.57	42	44	10
6	17.9	13.4	0.9	650	3.08	0.86	53	56	6.8
10	22	16.1	1.25	1000	1.83	1.4	73	78	4.0
16	24	17	1.25	1250	1.15	2.2	94	99	2.5
25	28	22	1.6	1800	0.727	3.6	124	131	1.65
35	32	25	1.6	2300	0.524	5.0	154	162	1.15
50	32	25	1.6	2600	0.387	7.1	187	197	0.87
70	35	28	1.6	3300	0.268	10.0	238	251	0.60
95	38	30	2.0	4400	0.193	13.6	289	304	0.45
120	42	34	2.0	5200	0.153	17.2	335	353	0.37
150	47	37	2.5	6600	0.124	21.4	386	406	0.30
185	51	42	2.5	7900	0.0991	26.5	441	463	0.26
240	56	47	2.5	9900	0.0754	34.3	520	546	0.21
300	61	51	2.5	11900	0.0601	42.9	599	628	0.185
400	67	57	2.5	14700	0.0470	57.2	673	728	0.165

Four Core

1.5	14.9	10.3	0.9	415	12.1	0.20	23	25	27
2.5	16.9	12.1	0.9	530	7.41	0.35	31	33	16
4	17.7	13.1	0.9	610	4.61	0.57	42	44	10
6	21	14.7	1.25	880	3.08	0.86	53	56	6.8
10	24	17.7	1.25	1150	1.83	1.4	73	78	4.0
16	25	19.3	1.25	1450	1.15	2.2	94	99	2.5
25	30	24	1.6	2200	0.727	3.6	124	131	1.65
35	34	28	1.6	2800	0.524	5.0	154	162	1.15
50	36	29	1.6	3200	0.387	7.1	187	197	0.87
70	39	31	2.0	4200	0.268	10.0	238	251	0.60
95	43	34	2.0	5300	0.193	13.6	289	304	0.45
120	48	38	2.5	6800	0.153	17.2	335	353	0.37
150	52	42	2.5	8100	0.124	21.4	386	406	0.30
185	57	47	2.5	9900	0.0991	26.5	441	463	0.26
240	63	53	2.5	12400	0.0754	34.3	520	546	0.21
300	68	58	2.5	15000	0.0601	42.9	599	628	0.185
400	77	65	3.15	19400	0.0470	57.2	673	728	0.165

Nominal cross sectional area mm ²	Approximate overall diameter mm	Approximate diameter under armour mm	Nominal diameter of armour wires mm	Approximate cable weight kg/km	Maximum conductor resistance at 20°C ohms/km	Short Circuit rating (1 sec) of conductor kA	Current rating Three phase AC Clipped direct Amps	Current rating Three phase AC Free Air Amps	Volt drop Three phase AC mV/A/m
Five Core									
1.5	15.6	11.3	0.9	455	12.10	0.2	23	25	27.0
2.5	17.3	13.0	0.9	550	7.41	0.4	31	33	16.0
4	18.8	14.3	0.9	660	4.61	0.6	42	44	10.0
6	23	16.4	1.25	990	3.08	0.9	53	56	6.8
10	25	19.2	1.25	1300	1.83	1.4	73	78	4.0
16	29	22	1.6	1900	1.15	2.2	94	99	2.5
25	34	27	1.6	2600	0.727	3.6	124	131	1.65
35	37	30	1.6	3200	0.524	5.0	154	162	1.15

No LPCB approval for 5 Core, BASEC approval for 1.5-10mm² inclusive

Nominal cross sectional area mm ²	Approximate overall diameter mm	Approximate diameter under armour mm	Nominal diameter of armour wires mm	Approximate cable weight kg/km	Maximum conductor resistance at 20°C ohms/km	Current rating DC or Single phase AC Clipped direct Amps	Current rating DC or Single phase AC Free Air Amps	Volt drop DC mV/A/m	Volt drop Single phase AC mV/A/m
Two Core									
1.5	13.5	9.1	0.9	345	12.1	27	29	31	31
2.5	14.8	10.3	0.9	415	7.41	36	39	19	19
4	15.8	11.4	0.9	480	4.61	49	52	12	12
6	16.6	12.1	0.9	550	3.08	62	66	7.9	7.9
10	19.9	15.1	0.9	750	1.83	85	90	4.7	4.7
16	22	16.4	1.25	1050	1.15	110	115	2.9	2.9
25	26	19.7	1.25	1400	0.727	146	152	1.85	1.9
35	29	23	1.6	1900	0.524	180	188	1.35	1.35
50	30	23	1.6	2100	0.387	219	228	0.98	1.00
70	33	26	1.6	2600	0.268	279	291	0.67	0.69
95	34	26	2.0	3200	0.193	338	354	0.49	0.52
120	37	29	2.0	3900	0.153	392	410	0.39	0.42
150	40	32	2.0	4600	0.124	451	472	0.31	0.35
185	45	35	2.5	5900	0.0991	515	539	0.25	0.29
240	50	40	2.5	7200	0.0754	607	636	0.195	0.24
300	54	44	2.5	8600	0.0601	698	732	0.155	0.21
400	59	49	2.5	10500	0.0470	787	847	0.120	0.19

Circular conductor 1.5 - 35mm² .

Shaped conductor 50mm² and above.

Current ratings in accordance with BS 7671/IET Wiring Regulations.

The tabulated ratings are based upon a 30°C ambient temperature and 90°C operating temperature.

Installation

Minimum recommended installation temperature 0°C.

Suitable for indoor and outdoor installations. Should be installed in accordance with BS 7671/IET Wiring Regulations or any other appropriate national regulations. Suitable for direct burial, trough, tray, ladder or other installations requiring a robust armoured cable.

PRYSMIAN



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For further information please
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Should you have any concerns about
unsafe, non-approved or counterfeit
cable, please contact the ACI

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