PRYSMIAN

A brand of the Prysmian Group

FP100®

THE FIRE RESISTANT SOLUTION FOR STEEL CONDUIT

Certificate No 077c

CABLE DESCRIPTION

Conductor

Plain annealed copper stranded (class 2) conductor to meet the requirements of BS EN 60228 class 2

Insulation

Mineral ceramic (Mica/Glass) fire resistant tape. 90°C cross-linked insulation.

Key Applications

> Essential safety circuits where the cable is protected by metal conduit.
> May be used for emergency lighting, fire alarm systems or other essential services.

Performance Standards

> 450/750 V and 600/1000 V
> BS 6387:1994 Cat C (950±40°C for 180 mins)
> BS 6387:1994 Cat W (650±40°C for 30 mins)
> BS 6387:1994 Cat Z (950±40°C for 15 mins)
> BS EN 60754-1
> BS EN 61034-2
> IEC 60331-21
> Use in screwed steel conduit to achieve fire rating
> LPCB Approved
> Low smoke, zero halogen, flame retardant

Core identification

Other core colours available on request

o brown o black o grey o blue
o red o yellow o orange o green/yellow

Tempreture Range -25 to +90°C

Bending Radius up to 8mm diameter r=4D above 9mm diameter r=6D

Mechanical impact Requires protection

Fire performance BS EN 60332-1-2

Flexibility Rigid

Halogen Free BS EN 60754-1

Low Smoke Emissions BS EN 61034-2

Fire Resistant IEC 60331-21 BS 6387 Category CWZ EN50200 PH120

Ref:FP100/01/17

Nominal cross sectional area mm²	Approximate overall diameter mm	Approximate cable weight kg/km	Maximum conductor resistance at 20°C Ω/km	Short circuit rating (1 sec) Amps	Current rating DC or single phase AC Amps	Current rating Three phase AC Amps	Volt drop DC mV/A/m	Volt drop Single phase AC mV/A/m	Volt drop Three phase AC mV/A/m
Single Core									
1.5*	3.5	25	12.1	215	23	20	31	31	27
2.5*	4.2	37	7.41	360	31	28	19	19	16
4*	4.7	51	4.61	570	42	37	12	12	10
6*	5.3	79	3.08	860	54	48	7.9	7.9	6.8
10*	6.9	125	1.83	1425	75	66	4.7	4.7	4
16	7.6	180	1.15	2275	100	88	2.9	2.9	2.5
25	9.2	275	0.727	3375	133	117	1.85	1.9	1.65
35	10.1	365	0.524	5000	164	144	1.35	1.35	1.15
50	12.0	495	0.387	7150	198	175	0.99	1.05	0.9
70	14.0	700	0.268	10000	253	222	0.68	0.75	0.65
95	16.0	960	0.193	13575	306	269	0.49	0.58	0.5
120	17.5	1190	0.153	17150	354	312	0.39	0.48	0.42
150	20.0	1470	0.124	21450	393	342	0.32	0.43	0.37
185	22.0	1830	0.0991	26450	449	384	0.25	0.37	0.32
240	24.0	2400	0.0754	34325	528	450	0.19	0.33	0.29
300	28.0	3050	0.0601	42925	603	514	0.155	0.31	0.27
400	33.0	4000	0.0470	57225	683	584	0.120	0.29	0.25
500	37.0	5100	0.0366	71525	783	666	0.093	0.28	0.24
630	38.0	6150	0.0283	90125	900	764	0.072	0.27	0.23

Notes to table

> * Sizes 1.5 - 10mm² are rated at 450/750V.
> Installation methods for current rating "Enclosed in conduit on a wall or in trunking" in accordance with BS7671/IEE Wiring Regulations. Table 4E1A
> Minimum recommended installation temperature -5°C.
> The tabulated ratings are based upon a 30°C ambient temperature at 90°C operating temperature.
> For other ambient temperatures or where several circuits are grouped together, appropriate rating factors should be applied.

Temperature ratings factor- Table 4B1

Ambient Temperature°C	25	30	35	40	45	50	55	60
Rating factor	1.02	1.00	0.96	0.91	0.87	0.82	0.76	0.71

Rating Factors for Groupings- Table 4C1

Number of circuits	2	3	4	5	6	7	8	9
Rating factor	0.80	0.70	0.65	0.60	0.57	0.54	0.52	0.50