

FTP120

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



Draka Firetuf® FTP120 is the ultimate fire resistant, armoured cable for power and control 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.

Extinguishing systems - sprinkler pumps, water mist and powder.

Wet riser pumps.

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
- Zero Halogen, Low Smoke (OHLS®) sheath
- Multi core steel wire armour
- Designed to meet the requirements of London Underground LUL - S1085 - Fire Safety Performance of Materials - Stations and Tunnel Infrastructure
- Manufactured under ISO 9001 Quality management systems

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]
2	4	Round	1.25	14.9	21	800	4.61
2	6	Round	1.25	14.7	21	850	3.08
2	10	Round	1.25	17.3	23	1,100	1.83
2	16	Round	1.25	18.5	25	1,250	1.15
2	25	Round	1.25	21	27	1,550	0.727
2	35	Round	1.6	24	31	2,100	0.524
2	50	Sector-shaped	1.6	23	30	2,100	0.387
2	70	Sector-shaped	1.6	26	33	2,600	0.268
2	95	Sector-shaped	2	27	36	3,400	0.193
2	120	Sector-shaped	2	31	39	4,100	0.153
2	150	Sector-shaped	2	33	42	4,800	0.124
2	185	Sector-shaped	2.5	37	47	6,100	0.0991
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	15.7	22	910	4.61
3	6	Round	1.25	15	21	860	3.08
3	10	Round	1.25	18.7	25	1,200	1.83
3	16	Round	1.25	19.7	26	1,400	1.15
3	25	Round	1.6	23	30	2,000	0.727
3	35	Round	1.6	26	33	2,500	0.524
3	50	Sector-shaped	1.6	26	33	2,700	0.387
3	70	Sector-shaped	1.6	29	36	3,400	0.268
3	95	Sector-shaped	2	32	41	4,600	0.193
3	120	Sector-shaped	2	35	44	5,500	0.153
3	150	Sector-shaped	2.5	39	49	6,900	0.124
3	185	Sector-shaped	2.5	43	53	8,200	0.0991
3	240	Sector-shaped	2.5	47	58	10,300	0.0754
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	15.3	21	860	4.61
4	6	Round	1.25	16.4	23	1,000	3.08
4	10	Round	1.25	21	26	1,400	1.83
4	16	Round	1.25	22	28	1,650	1.15
4	25	Round	1.6	26	33	2,400	0.727

TECHNICAL DATA

Number of cores	Nominal cross section conductor [mm ²]	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]
4	35	Round	1.6	29	36	3,000	0.524
4	50	Sector-shaped	1.6	30	37	3,300	0.387
4	70	Sector-shaped	2	32	41	4,500	0.268
4	95	Sector-shaped	2	36	45	5,700	0.193
4	120	Sector-shaped	2.5	40	50	7,300	0.153
4	150	Sector-shaped	2.5	44	54	8,600	0.124
4	185	Sector-shaped	2.5	49	59	10,500	0.0991
4	240	Sector-shaped	2.5	54	65	12,900	0.0754
4	300	Sector-shaped	2.5	59	70	15,600	0.0601
4	400	Sector-shaped	3.15	66	79	20,200	0.047
5	4	Round	1.25	17.4	24	1,050	4.61
5	6	Round	1.25	18	24	1,150	3.08
5	10	Round	1.25	23	29	1,650	1.83
5	16	Round	1.6	25	32	2,100	1.15
5	25	Round	1.6	28	35	2,800	0.727
5	35	Round	1.6	32	39	3,300	0.524