Draka

A Brand of Prysmian Group

BS 6724 1kV

OHLS® Copper Conductor Armoured Cable. BS 6724. 600/1000 V

Draka Saffire (OHLS®) BS 6724 is a Zero Halogen,Low Smoke (OHLS®) industrial wiring cable for interconnection of systems, control circuitry and power circuits

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

The design of Draka BS 6724 is particularly robust and is well suited to areas at risk of mechanical damage.

FEATURES AND BENEFITS

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

STANDARDS

BS 6724	Construction Standard
BS EN 60332-1-2	Flame Propagation - Single Cable
BS EN 60332-3-24	Flame Propagation - Multiple (bunched) Cables - Category C
BS EN 61034-2	Smoke emission
BS EN 60754-1	Corrosive and acid gas

CONSTRUCTION

Conductor material	Copper
Conductor surface	Bare
Core insulation material	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 U0 [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: Single Core: Brown or Blue;

Two Cores: Brown, Blue;

Three Cores: Brown, Black, Grey;

Four Cores: Blue, Brown, Black, Grey;

Five Cores: Blue, Brown, Black, Grey, Green/Yellow;

7 to 37 Cores: White (with printed numbers);

Sheath: Black

CURRENT RATINGS

Refer to table 4E3 and 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]
1	150	Round	1.6	19.6	28	1,900	0.124
1	185	Round	1.6	22	30	2,300	0.0991
1	240	Round	1.6	24	32	2,900	0.0754
1	300	Round	1.6	27	35	3,500	0.0601
1	400	Round	2	31	40	4,500	0.047
1	500	Round	2	35	44	5,700	0.0366
1	630	Round	2	38	48	7,000	0.0283
1	800	Round	2.5	44	55	9,100	0.0221
1	1,000	Round	2.5	49	60	11,500	0.0176
2	1.5	Round	0.9	6.9	10.8	250	12.1
2	2.5	Round	0.9	8.2	12.2	315	7.41
2	4	Round	0.9	9.2	13.3	375	4.61
2	6	Round	0.9	10.4	14.4	450	3.08
2	10	Round	0.9	11.9	16.2	590	1.83
2	16	Round	1.25	14	19	890	1.15
2	25	Sector-shaped	1.25	15.8	22	1,150	0.727
2	35	Sector-shaped	1.6	17.2	24	1,450	0.524
2	50	Sector-shaped	1.6	21	28	1,900	0.387
2	70	Sector-shaped	1.6	23	30	2,400	0.268
2	95	Sector-shaped	2	25	32	3,100	0.193
2	120	Sector-shaped	2	28	36	3,700	0.153
2	150	Sector-shaped	2	30	39	4,500	0.124
2	185	Sector-shaped	2.5	34	43	5,700	0.0991
2	240	Sector-shaped	2.5	39	48	7,100	0.0754
2	300	Sector-shaped	2.5	43	53	8,500	0.0601
2	400	Sector-shaped	2.5	47	58	10,400	0.047
3	1.5	Round	0.9	7.4	11.2	270	12.1
3	2.5	Round	0.9	8.7	12.7	345	7.41
3	4	Round	0.9	9.9	13.9	425	4.61
3	6	Round	0.9	11.1	15.1	520	3.08
3	10	Round	1.25	12.8	17.7	800	1.83
3	16	Round	1.25	15	21	1,100	1.15
3	25	Round	1.6	19.2	26	1,700	0.727
3	35	Round	1.6	22	28	2,100	0.524
3	50	Sector-shaped	1.6	24	30	2,500	0.387

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]
3	70	Sector-shaped	1.6	26	33	3,100	0.268
3	95	Sector-shaped	2	29	37	4,200	0.193
3	120	Sector-shaped	2	32	40	5,100	0.153
3	150	Sector-shaped	2.5	36	45	6,400	0.124
3	185	Sector-shaped	2.5	40	49	7,700	0.0991
3	240	Sector-shaped	2.5	45	55	9,700	0.0754
3	300	Sector-shaped	2.5	49	59	11,700	0.0601
3	400	Sector-shaped	2.5	55	65	14,400	0.047
4	1.5	Round	0.9	8.1	11.9	305	12.1
4	2.5	Round	0.9	9.6	13.6	395	7.41
4	4	Round	0.9	10.9	14.9	495	4.61
4	6	Round	1.25	12.3	17.2	720	3.08
4	10	Round	1.25	14.1	19	940	1.83
4	16	Round	1.25	16.7	22	1,300	1.15
4	25	Round	1.6	22	28	2,100	0.727
4	35	Round	1.6	24	31	2,600	0.524
4	50	Sector-shaped	1.6	27	34	3,100	0.387
4	70	Sector-shaped	2	29	37	4,000	0.268
4	95	Sector-shaped	2	33	41	5,100	0.193
4	120	Sector-shaped	2.5	37	46	6,600	0.153
4	150	Sector-shaped	2.5	41	50	7,900	0.124
4	185	Sector-shaped	2.5	45	55	9,600	0.0991
4	240	Sector-shaped	2.5	51	61	12,100	0.0754
4	300	Sector-shaped	2.5	56	66	14,700	0.0601
4	400	Sector-shaped	3.15	63	75	19,100	0.047
5	1.5	Round	0.9	10.1	14.8	415	12.1
5	2.5	Round	0.9	11.5	16.1	500	7.41
5	4	Round	0.9	13	17.8	630	4.61
5	6	Round	1.25	14.8	21	900	3.08
5	10	Round	1.25	17.6	24	1,250	1.83
5	16	Round	1.6	19.9	27	1,750	1.15
5	25	Round	1.6	25	32	2,500	0.727
5	35	Round	1.6	27	34	3,000	0.524
7	1.5	Round	0.9	11	15.9	495	12.1
7	2.5	Round	0.9	12.9	17.6	620	7.41

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]
7	4	Round	1.25	13.7	18.9	830	4.61
12	1.5	Round	1.25	14.1	21	790	12.1
12	2.5	Round	1.25	16.5	23	990	7.41
12	4	Round	1.6	18.7	25	1,350	4.61
19	1.5	Round	1.25	16.3	22	960	12.1
19	2.5	Round	1.6	19.4	26	1,450	7.41
19	4	Round	1.6	22	29	1,800	4.61
27	1.5	Round	1.6	19.7	27	1,450	12.1
27	2.5	Round	1.6	24	30	1,850	7.41
27	4	Round	1.6	27	34	2,400	4.61
37	1.5	Round	1.6	22	29	1,650	12.1
37	2.5	Round	1.6	27	33	2,300	7.41