

# **BS 6724 1kV**

LSOH Copper Conductor Armoured Cable. BS 6724. 600/1000 V



Prysmian BS 6724 is a Low Smoke, Zero Halogen (LSOH®) 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 Prysmian BS 6724 is particularly robust and is well suited to areas at risk of mechanical damage.

#### **FEATURES AND BENEFITS**

- Low Smoke, Zero Halogen (LSOH®)
- Manufactured under ISO 9001 Quality management systems
- Single core aluminium wire armour
- Multi core steel wire armour

#### ADDITIONAL TECHNICAL SUPPORT

- FAQ's- uk.prysmian.com/technical-area/faqs
- Technical email tech.info@prysmian.com
- Live Chat uk.prysmian.com/technical-area
- Technical hotline: 02380 295222

## **STANDARDS**



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



#### **CONSTRUCTION**

Conductor materialCopperConductor surfaceBareCore insulation materialXLPEArmouring/reinforcementWireArmouringYes

Material inner sheathLow smoke zero halogenMaterial outer sheathLow 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 Yes Low smoke 90 Max. conductor temperature [°C] -25 Min. Operation temperature [°C] **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



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]
1	150	Round	1.6	19.6	28	1,900	0.124	6,978
1	185	Round	1.6	22	30	2,300	0.0991	8,206
1	240	Round	1.6	24	32	2,900	0.0754	9,934
1	300	Round	1.6	27	35	3,500	0.0601	11,667
1	400	Round	2	31	40	4,500	0.047	15,219
1	500	Round	2	35	44	5,700	0.0366	17,984
1	630	Round	2	38	48	7,000	0.0283	21,968
1	800	Round	2.5	44	55	9,100	0.0221	29,450
1	1,000	Round	2.5	49	60	11,500	0.0176	36,094
2	1.5	Round	0.9	6.9	10.8	250	12.1	618
2	2.5	Round	0.9	8.2	12.2	315	7.41	737
2	4	Round	0.9	9.2	13.3	375	4.61	874
2	6	Round	0.9	10.4	14.4	450	3.08	1,055
2	10	Round	0.9	11.9	16.2	590	1.83	1,397
2	16	Round	1.25	14	19	890	1.15	2,042
2	25	Sector- shaped	1.25	15.8	22	1,150	0.727	2,661
2	35	Sector- shaped	1.6	17.2	24	1,450	0.524	3,432
2	50	Sector- shaped	1.6	21	28	1,900	0.387	4,453
2	70	Sector- shaped	1.6	23	30	2,400	0.268	5,534
2	95	Sector- shaped	2	25	32	3,100	0.193	7,718
2	120	Sector- shaped	2	28	36	3,700	0.153	9,391
2	150	Sector- shaped	2	30	39	4,500	0.124	11,024
2	185	Sector- shaped	2.5	34	43	5,700	0.0991	13,962
2	240	Sector- shaped	2.5	39	48	7,100	0.0754	17,284
2	300	Sector- shaped	2.5	43	53	8,500	0.0601	20,915



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	400	Sector- shaped	2.5	47	58	10,400	0.047	25,771
3	1.5	Round	0.9	7.4	11.2	270	12.1	677
3	2.5	Round	0.9	8.7	12.7	345	7.41	858
3	4	Round	0.9	9.9	13.9	425	4.61	1,005
3	6	Round	0.9	11.1	15.1	520	3.08	1,238
3	10	Round	1.25	12.8	17.7	800	1.83	3,198
3	16	Round	1.25	15	21	1,100	1.15	2,506
3	25	Round	1.6	19.2	26	1,700	0.727	4,096
3	35	Round	1.6	22	28	2,100	0.524	5,082
3	50	Sector- shaped	1.6	24	30	2,500	0.387	5,889
3	70	Sector- shaped	1.6	26	33	3,100	0.268	7,505
3	95	Sector- shaped	2	29	37	4,200	0.193	10,493
3	120	Sector- shaped	2	32	40	5,100	0.153	12,613
3	150	Sector- shaped	2.5	36	45	6,400	0.124	15,794
3	185	Sector- shaped	2.5	40	49	7,700	0.0991	18,948
3	240	Sector- shaped	2.5	45	55	9,700	0.0754	23,875
3	300	Sector- shaped	2.5	49	59	11,700	0.0601	28,790
3	400	Sector- shaped	2.5	55	65	14,400	0.047	35,832
4	1.5	Round	0.9	8.1	11.9	305	12.1	766
4	2.5	Round	0.9	9.6	13.6	395	7.41	952
4	4	Round	0.9	10.9	14.9	495	4.61	1,179
4	6	Round	1.25	12.3	17.2	720	3.08	1,693
4	10	Round	1.25	14.1	19	940	1.83	2,291
4	16	Round	1.25	16.7	22	1,300	1.15	3,006
4	25	Round	1.6	22	28	2,100	0.727	4,979

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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	35	Round	1.6	24	31	2,600	0.524	6,163
4	50	Sector- shaped	1.6	27	34	3,100	0.387	7,332
4	70	Sector- shaped	2	29	37	4,000	0.268	9,991
4	95	Sector- shaped	2	33	41	5,100	0.193	12,786
4	120	Sector- shaped	2.5	37	46	6,600	0.153	16,400
4	150	Sector- shaped	2.5	41	50	7,900	0.124	19,511
4	185	Sector- shaped	2.5	45	55	9,600	0.0991	23,731
4	240	Sector- shaped	2.5	51	61	12,100	0.0754	29,894
4	300	Sector- shaped	2.5	56	66	14,700	0.0601	36,706
4	400	Sector- shaped	3.15	63	75	19,100	0.047	47,463
5	1.5	Round	0.9	10.1	14.8	415	12.1	1,182
5	2.5	Round	0.9	11.5	16.1	500	7.41	1,362
5	4	Round	0.9	13	17.8	630	4.61	1,659
5	6	Round	1.25	14.8	21	900	3.08	2,315
5	10	Round	1.25	17.6	24	1,250	1.83	3,287
5	16	Round	1.6	19.9	27	1,750	1.15	4,439
5	25	Round	1.6	25	32	2,500	0.727	5,882
5	35	Round	1.6	27	34	3,000	0.524	7,140
7	1.5	Round	0.9	11	15.9	495	12.1	1,466
7	2.5	Round	0.9	12.9	17.6	620	7.41	1,738
7	4	Round	1.25	13.7	18.9	830	4.61	2,218
12	1.5	Round	1.25	14.1	21	790	12.1	2,459
12	2.5	Round	1.25	16.5	23	990	7.41	2,887
19	1.5	Round	1.25	16.3	22	960	12.1	3,213
19	2.5	Round	1.6	19.4	26	1,450	7.41	4,203



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]
19	4	Round	1.6	22	29	1,800	4.61	5,128
27	1.5	Round	1.6	19.7	27	1,450	12.1	4,615
27	2.5	Round	1.6	24	30	1,850	7.41	5,556
37	1.5	Round	1.6	22	29	1,650	12.1	6,375
37	2.5	Round	1.6	27	33	2,300	7.41	9,261

<sup>\*</sup>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: <a href="https://uk.prysmiangroup.com/embodied-carbon">https://uk.prysmiangroup.com/embodied-carbon</a>