

## 6941AB 3.3KV - BS6724 SINGLE CORE MAINS CABLE LSZH AWA



### APPLICATION

6941AB 3.3KV LSZH Mains cable, the single core aluminium wire armoured cable is most commonly used in power networks, due to the armour providing mechanical protection. Designed for use in AC circuits, the aluminium armour prevents magnetic build up. The cable can be used in public places where increased safety is required due to the Low Smoke Zero Halogen (LSZH) outer sheath.

### CABLE STANDARDS

BS6724  
BS EN 50267 (IEC 60754-1)  
BS EN 50268 (IEC 61034)  
IEC 60332-1, IEC 60332-3  
BS EN 50265, Category C  
BS EN 50266

### CONSTRUCTION

**Conductor:** Class 2 stranded copper conductor according to BS EN 60228 (previously BS 6360)  
**Insulation:** Cross Link Polyethylene (XLPE)  
**Bedding:** Low Smoke Zero Halogen (LSZH)  
**Armour:** Aluminium Wire Armour (AWA)  
**Sheath:** Low Smoke Zero Halogen (LSZH)

### CHARACTERISTICS

**Voltage Rating:** 1900/3300 Volts  
**Temperature Rating:** -25°C to +90°C  
**Minimum Bending Radius:** As per cable manufacturer datasheet

### CORE IDENTIFICATION

■ Brown Inner

Should not be installed at temperatures below 5°C or above 60°C

## 6941AB 3.3KV / BS6724 CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM <sup>2</sup> )	STRANDING (MM)	NO OF CORES	WEIGHT (KG/KM)	OVERALL DIAMETER (MM)	GLAND SIZE	NYLON CLEAT	TREFOIL CLEAT
6941AB120/3	120	37/2.03	1	1490	23..20	25	1.2	-
6941AB150/3	150	37/2.25	1	1870	26.30	32	1.2	-
6941AB185/3	185	37/2.52	1	2290	28.70	32	1.4	TASB04
6941AB240/3	240	61/2.25	1	2880	31.40	40	1.4	TASB05
6941AB300/3	300	61/2.52	1	3520	34.10	40	1.8	TASB07
6941AB400/3	400	61/2.85	1	4520	38.90	50S	1.8	TASB10
6941AB500/3	500	61/3.20	1	5680	42.80	50S	1.8	TASB12
6941AB630/3	630	127/2.52	1	7120	47.30	50	2.0	TASB15

## 6941AB 3.3KV / BS6724 CABLE - CURRENT CARRYING CAPACITY

CONDUCTOR CROSS - SECTIONAL AREA	REFERENCE METHOD C (CLIPPED DIRECT)		REFERENCE METHOD F (IN FREE AIR ON A PERFORATED CABLE TRAY HORIZONTAL / VERTICAL)								
	TOUCHING		TOUCHING			SPACED BY ONE DIAMETER					
	2 CABLES, SINGLE - PHASE AC OR DC FLAT	3 OR 4 CABLES, 3 PHASE AC FLAT	2 CABLES, SINGLE - PHASE AC OR DC FLAT	3 CABLES, 3 PHASE AC FLAT	3 CABLES, THREE - PHASE AC TREFOIL	2 CABLES DC		2 CABLES, SINGLE PHASE AC		3 OR 4 CABLES, THREE-PHASE AC FLAT	
						HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL
1	2	3	4	5	6	7	8	9	10	11	12
(MM <sup>2</sup> )	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
120	425	383	449	405	402	519	497	504	477	485	449
150	488	437	516	462	463	600	575	566	539	549	510
185	557	496	587	524	529	688	660	643	614	618	574
240	656	579	689	612	625	815	782	749	714	715	666
300	755	662	792	700	720	943	906	842	805	810	755
400	853	717	899	767	815	1137	1094	929	889	848	797
500	962	791	1016	851	918	1314	1266	1032	989	923	871
630	1082	861	1146	935	1027	1528	1474	1139	1092	992	940

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

## 6941AB 3.3KV / BS6724 CABLE - VOLTAGE DROP

CROSS SECTIONAL AREA MM <sup>2</sup>	2 CABLES DC	REFERENCE METHODS C AND F (CLIPPED DIRECT, ON TRAY OR IN FREE AIR)														
		2 CABLES SINGLE PASS AC						3 OR 4 CABLES THREE PHASE AC								
		TOUCHING			SPACED			TREFOIL/TOUCHING			FLAT / TOUCHING			FLAT		
		R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z
120	0.39	0.410	0.19	0.45	0.43	0.27	0.51	0.35	0.165	0.39	0.38	0.24	0.44	0.410	0.3	0.51
150	0.310	0.33	0.185	0.38	0.36	0.27	0.45	0.29	0.16	0.33	0.310	0.23	0.39	0.34	0.29	0.45
185	0.25	0.270	0.185	0.33	0.3	0.26	0.4	0.23	0.16	0.28	0.26	0.23	0.34	0.29	0.29	0.41
240	0.195	0.210	0.18	0.28	0.24	0.26	0.35	0.18	0.155	0.24	0.210	0.22	0.3	0.24	0.28	0.37
300	0.155	0.17	0.175	0.25	0.195	0.25	0.32	0.145	0.15	0.210	0.17	0.22	0.28	0.2	0.270	0.34
400	0.115	0.145	0.17	0.22	0.18	0.24	0.3	0.125	0.15	0.195	0.16	0.210	0.27	0.2	0.270	0.33
500	0.093	0.125	0.170	0.210	0.165	0.24	0.29	0.105	0.145	0.18	0.145	0.2	0.25	0.19	0.24	0.31
630	0.073	0.105	0.165	0.195	0.15	0.23	0.27	0.092	0.145	0.17	0.135	0.195	0.24	0.175	0.23	0.29

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CONDUCTOR OPERATING TEMPERATURE: 90°C

R = RESISTIVE COMPONENT  
X = REACTIVE COMPONENT  
Z = IMPEDANCE VALUE

SPACING'S LARGER THAN THOSE SPECIFIED WILL RESULT IN LARGER VOLT DROP.

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.