

2491B/6701B LSZH FLEXIBLE SINGLE CORES



APPLICATION

Single core 2491B flexible cable is primarily used for wiring appliances and for use in metering and switchgear. Due to the low smoke zero halogen outer sheath they can be used in areas of high pedestrian footfall such as hospitals, supermarkets, airports and offices where toxic fumes and emissions would be a health hazard. The flexible single core cable features flexible plain annealed copper conductor and an LSZH outer sheath.

CABLE STANDARDS

Flame propagation to BS EN 50266-1:2001 (formerly BS4066:PT1)

BS EN 50525-3-41

CONSTRUCTION

Conductor: Flexible Plain Annealed Copper Conductor

Sheath: Low Smoke and Zero Halogen (LSZH)

CHARACTERISTICS

Voltage Rating:

0.75mm² - 1.0mm² 300/500 Volts

1.5mm² - 240mm² 450/750 Volts

Temperature Limits: -15°C to +90°C

Minimum Bending Radius: As per cable manufacturer datasheet

CORE IDENTIFICATION

1.5mm² – 6mm²:

■ Black	■ Blue	■ Brown
■ Grey	■ Orange	■ White
■ Yellow	■ Red	■ Green/Yellow

10mm² - 240mm²:

■ Black	■ Blue	
■ Brown	■ Grey	■ Green/Yellow

Should not be installed at temperatures below 0°C

2491B/6701B LSZH FLEXIBLE SINGLE CORES - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	STRANDING (MM)	NO. OF CORES	WEIGHT (KG/KM)	OVERALL DIAMETER (MM)
2491B/75	0.75	24/0.20	1	12	2.12
2491B1	1	32/0.20	1	14	2.48
2491B1/5	1.5	30/0.25	1	20	2.98
2491B2/5	2.5	50/0.25	1	30	3.63
2491B4	4	56/0.25	1	45	4.23
2491B6	6	84/0.30	1	65	4.83
6701B10	10	80/0.40	1	110	6.10
6701B16	16	126/0.40	1	160	7.10
6701B25	25	196/0.40	1	250	8.70
6701B35	35	276/0.40	1	340	9.90
6701B50	50	396/0.40	1	480	11.60
6701B70	70	360/0.50	1	670	13.30
6701B95	95	475/0.50	1	890	15.20
6701B120	120	608/0.50	1	1140	17.00
6701B150	150	756/0.50	1	1410	18.90
6701B185	185	925/0.50	1	1710	21.00
6701B240	240	1221/0.50	1	2270	23.90

2491B/6701B LSZH FLEXIBLE SINGLE CORES – ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA (MM²)	REFERENCE METHOD A (ENCLOSED IN CONDUIT IN THERMALLY INSULATING WALL ETC) AMPS		REFERENCE METHOD B (ENCLOSED IN CONDUIT ON A WALL OR IN TRUNKING ETC)		REFERENCE METHOD C (CLIPPED DIRECT) AMPS		REFERENCE METHOD F (IN FREE AIR OR ON A PERFORATED CABLE TRAY ETC HORIZONTAL OR VERTICAL ETC) TOUCHING AMPS			REFERENCE METHOD G (IN FREE AIR) TSPACED BY ONCE CABLE DIAMETER AMPS	
	2 CABLES SINGLE-PHASE AC OR DC	3 OR 4 CABLES THREE-PHASE AC	2 CABLES SINGLE-PHASE AC OR DC	3 OR 4 CABLES THREE-PHASE AC	2 CABLES SINGLE-PHASE AC OR DC FLAT OR TOUCHING	3 OR 4 CABLES THREE-PHASE AC FLAT AND TOUCHING OR TREFOIL	2 CABLES SINGLE-PHASE AC OR DC FLAT	3 CABLES THREE-PHASE AC FLAT	3 CABLES THREE-PHASE AC TREFOIL	2 CABLES SINGLE-PHASE AC OR DC OR 3 CABLES THREE-PHASE AC FLAT	
										HORIZONTAL	VERTICAL
1	14	13	17	15	19	17.5	-	-	-	-	-
1.5	19	17	23	20	25	23	-	-	-	-	-
2.5	26	23	31	28	34	31	-	-	-	-	-
4	35	31	42	37	46	41	-	-	-	-	-
6	45	40	54	48	59	54	-	-	-	-	-
10	61	54	75	66	81	74	-	-	-	-	-
16	81	73	100	88	109	99	-	-	-	-	-
25	106	95	133	117	143	130	161	141	135	182	161
35	131	117	164	144	176	161	200	176	169	226	201
50	158	141	198	175	228	209	242	216	207	275	246
70	200	179	253	222	293	268	301	279	268	353	318
95	241	216	306	269	355	326	377	342	328	430	389
120	278	249	354	312	413	379	437	400	383	500	454
150	318	285	393	342	476	436	504	464	444	577	527
185	362	324	449	384	545	500	575	533	510	661	605
240	424	380	528	450	644	590	679	634	607	781	719

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

2491B/6701B LSZH FLEXIBLE SINGLE CORES –VOLTAGE DROP

CROSS SECTIONAL AREA MM ²	2 CABLES DC MV/A/M	2 CABLES SINGLE-PHASE AC MV/A/M									3 OR 4 CABLES THREE-PHASE AC MV/A/M											
		REFERENCE METHODS A AND B (ENCLOSED IN CONDUIT OR TRUNKING)			REFERENCE METHODS C, F AND G (CLIPPED DIRECT, ON TRAY OR IN FREE AIR)						REFERENCE METHODS A AND B (ENCLOSED IN CONDUIT OR TRUNKING)			REFERENCE METHODS C, F AND G (CLIPPED DIRECT, ON TRAY OR IN FREE AIR)								
					CABLES TOUCHING			CABLES SPACED*						CABLES TOUCHING, TREFOIL			CABLES TOUCHING, FLAT			CABLES SPACED*, FLAT		
1	2	3			4			5			6			7			8			9		
(MM ²)	(mV/A/m)	(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)			(mV/A/m)		
1.5	28.00	29.00			29.00			29.00			25.00			25.00			25.00			25.00		
2.5	18.00	18.00			18.00			18.00			15.00			15.00			15.00			15.00		
4	11.00	11.00			11.00			11.00			9.50			9.50			9.50			9.50		
6	7.3	7.30			7.30			7.3			6.40			6.40			6.40			6.40		
10	4.40	4.40			4.40			4.40			3.80			3.80			3.80			3.80		
16	2.80	2.80			2.80			2.80			2.40			2.40			2.40			2.40		
		R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z
25	1.750	1.800	0.330	1.800	1.750	0.200	1.750	1.750	0.290	1.800	1.500	0.290	1.550	1.500	0.180	1.500	0.150	0.250	1.550	1.500	0.320	1.550
35	1.250	1.300	0.310	1.300	1.250	0.200	1.250	1.250	0.280	1.300	1.100	0.270	1.100	1.100	0.170	1.100	1.100	0.24	1.100	1.100	0.320	1.150
50	0.930	0.950	0.300	1.000	0.930	0.190	0.950	0.930	0.280	0.970	0.81	0.260	0.850	0.800	0.170	0.820	0.800	0.24	0.840	0.800	0.320	0.860
70	0.630	0.650	0.290	0.720	0.630	0.185	0.660	0.630	0.270	0.690	0.560	0.250	0.61	0.550	0.160	0.57	0.550	0.24	0.600	0.550	0.31	0.630
95	0.460	0.490	0.280	0.560	0.47	0.180	0.500	0.47	0.270	0.540	0.420	0.24	0.480	0.41	0.160	0.430	0.41	0.230	0.47	0.400	0.31	0.51
120	278	249	354	312	413	379	437	400	383	500	454	120	278	249	354	312	413	379	437	400	383	500
150	0.32	0.33	0.26	0.43	0.32	0.165	0.36	0.32	0.25	0.41	0.29	0.23	0.37	0.28	0.14	0.31	0.28	0.165	0.32	0.28	0.24	0.37
185	0.25	0.27	0.26	0.37	0.26	0.165	0.30	0.25	0.25	0.36	0.23	0.23	0.32	0.22	0.14	0.26	0.22	0.165	0.28	0.22	0.24	0.33
240	0.19	0.21	0.26	0.33	0.20	0.16	0.25	0.195	0.25	0.31	0.185	0.22	0.29	0.17	0.14	0.22	0.17	0.165	0.24	0.17	0.24	0.29

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

CONDUCTOR OPERATING TEMPERATURE: 90°C

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

* SPACINGS LARGER THAN THOSE SPECIFIED IN METHOD 12 WILL RESULT IN LARGER VOLT DROP.

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