

2491B Cable/6701B Cable - Flexible Single Core Cable LSZH - 0.75mm² to 300mm²



Description

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.

Standards

- Conforms to H07Z-K
- Conforms to H05Z-K
- BS EN/IEC 60332-3-24
- BS EN/IEC 60228
- IEC/EN 60754-1/2
- BS EN/IEC 60332-1-2
- IEC/EN 61034-1/2,

Key Features



Voltage Rating
0.75mm² -1.0mm²: 300/500 Volts (H05Z-K)
1.5mm² -240mm²: 450/750 Volts (H07Z-K)



Minimum Bending Radius
Up to 35mm² - 4 x overall diameter
Above 35mm² - 6 x overall diameter



Flame Retardancy
BS EN/IEC 60332-1
BS EN/IEC 60332-3-24



Temperature Limits
Fixed: -25°C to +90°C

Construction

- **Conductor:** Class 5 Flexible stranded copper
- **Sheath:** Low Smoke Zero Halogen (LSZH)

QA Lab

Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

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Core Colours

0.75mm - 2.5mm



4mm to 6mm



10mm - 300mm



2491B Cable/6701B Cable - Flexible Single Core Cable LSZH - 0.75mm² to 300mm² - Dimensions

Reference	Conductor Size (mm ²)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)
2491B/75	0.75	1	24/0.20	2.12	12
2491B1	1	1	32/0.20	2.48	14
2491B1	1	1	30/0.20	2.48	14
2491B1/5	1.5	1	30/0.25	2.98	20
2491B2/5	2.5	1	50/0.25	3.63	30
2491B4	4	1	56/0.25	4.23	45
2491B6	6	1	84/0.30	4.83	65
6701B10	10	1	80/0.40	6.1	110
6701B16	16	1	126/0.40	7.1	160
6701B25	25	1	196/0.40	8.7	250
6701B35	35	1	276/0.40	9.9	340
6701B50	50	1	396/0.40	11.6	480
6701B70	70	1	360/0.5	13.3	670
6701B95	95	1	475/0.50	15.2	890
6701B120	120	1	608/0.50	17	1140
6701B150	150	1	756/0.50	18.9	1410
6701B185	185	1	925/0.50	21	1710
6701B240	240	1	1221/0.50	23.9	2270
6701B300	300	1	1530/0.51	28.9	2443

TABLE 4E1A

CURRENT-CARRYING CAPACITY (amperes)

Ambient temperature: 30°C
 Conductor operating temperature:90°C

Conductor cross sectional area	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C (clipped direct)		Reference Method F (in free air or on a perforated cable tray etc. horizontal or vertical etc) Touching			Reference Method G (in free air) Spaced by one cable diameter		
	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 and 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		
	A	A	A	A	A	A	A	A	A	Horizontal	Vertical	
mm ²	A	A	A	A	A	A	A	A	A	A	A	A
1	14	13	17	15	19	17.5	-	-	-	-	-	-
1.5	19	17	23	20	25	23	-	-	-	-	-	-
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	310	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	
300	486	435	603	514	743	681	783	736	703	902	833	
400	-	-	683	584	868	793	940	868	823	1085	1008	
500	-	-	783	666	990	904	1083	998	946	1253	1169	
630	-	-	900	764	1130	1033	1254	1151	1088	1454	1362	
800	-	-	-	-	1288	1179	1358	1275	1214	1581	1485	
1000	-	-	-	-	1443	1323	1520	1436	1349	1775	1671	

Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5). Where it is intended to group a cable in this table with other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 12.1.5). For cables having flexible conductors see section 2.4 of this appendix for adjustment factors for current-carrying capacity and voltage drop.

TABLE 4E1B

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature:90°C

Conductor cross sectional area (mm ²)	2 cables, DC (mV/ A/m)	2 cables, single-phase AC									3 or 4 cables, three-phase AC											
		Reference Methods A & B (enclosed in conduit or trunking)			Reference Methods C, F & G (clipped direct, on tray or in free air)						Reference Methods A & B (enclosed in conduit or trunking)			Reference Methods C, F & G (clipped direct, on tray or in free air)								
					Cables touching			Cables spaced*						Cables touching, Trefoil			Cables touching, Flat			Cables spaced* Flat		
		(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(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	46	46			46			46			40			40			40			40		
1.5	31	31			31			31			27			27			27			27		
2.5	19	19			19			19			16			16			16			16		
4	12	12			12			12			10			10			10			10		
6	7.9	7.9			7.9			7.9			6.8			6.8			6.8			6.8		
10	4.7	4.7			4.7			4.7			4.0			4.0			4.0			4.0		
16	2.9	2.9			2.9			2.9			2.5			2.5			2.5			2.5		
		R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z	R	X	Z
25	1.850	1.850	0.310	1.900	1.850	0.190	1.850	1.850	0.280	1.850	1.600	0.270	1.650	1.600	0.165	1.600	1.600	0.190	1.600	1.600	0.270	1.650
35	1.350	1.350	0.290	1.350	1.350	0.180	1.350	1.350	0.270	1.350	1.150	0.250	1.150	1.150	0.155	1.150	1.150	0.180	1.150	1.150	0.260	1.200
50	0.990	1.000	0.290	1.050	0.990	0.180	1.000	0.990	0.270	1.000	0.870	0.250	0.900	0.860	0.155	0.870	0.860	0.180	0.870	0.860	0.260	0.890
70	0.680	0.700	0.280	0.750	0.680	0.175	0.710	0.680	0.260	0.730	0.600	0.240	0.650	0.590	0.150	0.610	0.590	0.175	0.620	0.590	0.250	0.650
95	0.490	0.510	0.270	0.580	0.490	0.170	0.520	0.490	0.260	0.560	0.440	0.230	0.500	0.430	0.145	0.450	0.430	0.170	0.460	0.430	0.250	0.490
120	0.390	0.410	0.260	0.480	0.390	0.165	0.430	0.390	0.250	0.470	0.350	0.230	0.420	0.340	0.140	0.370	0.340	0.165	0.380	0.340	0.240	0.420
150	0.320	0.330	0.260	0.430	0.320	0.165	0.360	0.320	0.250	0.410	0.290	0.230	0.370	0.280	0.140	0.310	0.280	0.165	0.320	0.280	0.240	0.370
185	0.250	0.270	0.260	0.370	0.260	0.165	0.300	0.250	0.250	0.360	0.230	0.230	0.320	0.220	0.140	0.260	0.220	0.165	0.280	0.220	0.240	0.330
240	0.190	0.210	0.260	0.330	0.200	0.160	0.250	0.195	0.250	0.310	0.185	0.220	0.290	0.170	0.140	0.220	0.170	0.165	0.240	0.170	0.240	0.290
300	0.155	0.175	0.250	0.310	0.160	0.160	0.220	0.155	0.250	0.290	0.150	0.220	0.270	0.140	0.140	0.195	0.135	0.160	0.210	0.135	0.240	0.270
400	0.120	0.140	0.250	0.290	0.130	0.155	0.200	0.125	0.240	0.270	0.125	0.220	0.250	0.110	0.135	0.175	0.110	0.160	0.195	0.110	0.240	0.260
500	0.093	0.120	0.250	0.280	0.105	0.155	0.185	0.098	0.240	0.260	0.100	0.220	0.240	0.090	0.135	0.160	0.088	0.160	0.180	0.085	0.240	0.250
630	0.072	0.100	0.250	0.270	0.086	0.155	0.175	0.078	0.240	0.250	0.088	0.210	0.230	0.074	0.135	0.150	0.071	0.160	0.170	0.068	0.230	0.240
800	0.056	-	-	-	0.072	0.150	0.170	0.064	0.240	0.250	-	-	-	0.062	0.130	0.145	0.059	0.155	0.165	0.055	0.230	0.240
1000	0.045	-	-	-	0.063	0.150	0.165	0.054	0.240	0.240	-	-	-	0.055	0.130	0.140	0.050	0.155	0.165	0.047	0.230	0.240

NOTE: * Spacings larger than one cable diameter will result in a larger voltage drop.

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