

TABLE BEC 111 Technical Data for Instrumentation Cables 150/250V to BS6883, IEC60331 and IEC60332

Cable Characteristics	Unit of Measurement	1.00mm ² (7/0.44) HOFR to IEC60332	1.50mm ² (7/0.53) HOFR to IEC60332	1.00mm ² (7/0.53) Fire resistant to IEC60331	1.50mm ² (7/0.53) Fire resistant to IEC60331
DC Cond res @ 20°C	Maximum ohms / Km	18.56	12.44	18.56	12.44
AC Cond res @ 90°C	Maximum ohms / Km	23.67	15.87	23.67	15.87
Reactance @ 50 Hz	Nominal ohms / Km	0.128	0.121	0.136	0.129
Reactance @ 60 Hz	Nominal ohms / Km	0.154	0.145	0.164	0.154
Impedance (50Hz, 90°C)	Nominal ohms / Km	23.67	15.87	23.67	15.87
Impedance (60Hz, 90°C)	Nominal ohms / Km	23.67	15.87	23.67	15.87
Inductance	Nominal mH / Km	0.408	0.385	0.434	0.410
Cond loop resistance	Maximum ohms / Km	36.40	24.40	36.40	24.40
Loop self inductance	Maximum mH / Km	819	778	867	823
L/R Ratio	Maximum MicroH / ohm	27	38	29	40
Conductor S/C rating (1 Sec., 90 - 250°C)	kA	0.152	0.221	0.152	.221
Current Rating @ 45°C	Amps	12	15	12	15
Volt Drop V0 (dc)	mV/A/M	54	35	54	35
Volt Drop V50 1 Phase	mV/A/M	54	35	54	35
Volt Drop V50 3 Phase	mV/A/M	49	31	49	31
Volt Drop V60 1 Phase	mV/A/M	54	35	54	35
Volt Drop V60 3 Phase	mV/A/M	47	30	47	30

Number of Pairs / Triples	1.00mm ² (7/0.44) HOFR to IEC60332		1.5mm ² (7/0.53) HOFR to IEC60332		1.00mm ² (7/0.44) Fire resistant to IEC60331		1.50mm ² (7/0.53) Fire resistant to IEC60331	
	Nominal Armour Resistance ohms/KM	Nominal Capacitance MicroF / KM	Nominal Armour Resistance ohms/KM	Nominal Capacitance MicroF / KM	Nominal Armour Resistance ohms/M	Nominal Capacitance MicroF / KM	Nominal Armour Resistance ohms/M	Nominal Capacitance MicroF / KM
Collectively Screened								
1 Pair	24.30	0.115	26.44	0.128	32.88	0.102	32.50	0.114
2 Pairs	35.28	0.096	16.70	0.105	21.94	0.086	22.03	0.094
5 Pairs	19.92	0.096	12.46	0.105	24.45	0.086	26.40	0.094
10 Pairs	15.46	0.096	16.66	0.105	19.01	0.086	13.36	0.094
20 Pairs	4.85	0.096	5.07	0.105	6.58	0.086	6.66	0.094
Individually Screened								
1 Pair	24.30	0.115	26.44	0.128	32.88	0.102	32.50	0.114
2 Pairs	16.71	0.115	18.62	0.128	21.98	0.102	21.58	0.114
5 Pairs	12.48	0.115	12.99	0.128	25.62	0.102	16.36	0.114
10 Pairs	16.52	0.115	9.34	0.128	19.70	0.102	11.23	0.114
20 Pairs	5.41	0.115	5.89	0.128	6.71	0.102	6.61	0.114
Collectively Screened								
1 Triple	24.85	0.101	27.02	0.111	32.50	0.091	33.44	0.100
3 Triples	12.12	0.096	12.56	0.105	25.79	0.086	16.31	0.094
5 Triples	13.99	0.096	15.35	0.105	17.47	0.086	18.45	0.094
7 Triples	15.47	0.096	16.61	0.105	19.05	0.086	13.03	0.094
12 Triples	4.91	0.096	5.36	0.105	6.38	0.086	6.45	0.094
Individually Screened								
1 Triple	24.85	0.101	27.02	0.111	32.50	0.091	33.44	0.100
3 Triples	12.17	0.101	12.67	0.111	26.01	0.091	16.49	0.100
5 Triples	14.57	0.101	15.52	0.111	17.76	0.091	18.99	0.100
7 Triples	15.69	0.101	16.93	0.111	19.33	0.091	13.53	0.100
12 Triples	5.06	0.101	5.44	0.111	6.83	0.091	6.73	0.100

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