

Electronic Control Cables Fire Resistant Cables LIHCH-TP (FE180 / PH120)



Application

- Feeder cable for frequency controlled motors with electromagnetic interference.
- At instrumentation and control engineering.
- At industrial electronics.
- Computer and office devices.
- Indoor communication systems.
- Indoor sound systems.
- Security and fire alarm systems.
- In places where human life, valuable materials and equipments need to be protected.

Cable Construction

- 1 - Conductor : Stranded electrolytic copper conductor (Class 5) (IEC 60228, EN 60228, DIN VDE 0295)
- 2 - Insulation : Cross-linked polymer compound in ceramic form (DIN 47100)
- 3 - Stranding : Insulations are stranded into pairs and all pairs are stranded together.
- 4 - Wrapping : Polyester tape, glass yarn tape
- 5 - Screen : Tinned copper braiding
- 6 - Outer Jacket : UV resistant halogen-free outer jacket. RAL 2008 (Orange)

Technical Characteristics

Conductor Diameter	Conductor Resistance Ω/km (20 °C)	Insulation Resistance $\text{M}\Omega/\text{km}$ (500 V DC)	Mutual Capacitance nF/km (800 Hz)	Current Carrying Capacity A	Operating Voltage V DC	Test Voltage V (DC, 1 minute)
0.50 mm ²	39	20	120	9	300	2000
0.75 mm ²	26	20	120	12	300	2000
1.00 mm ²	19.5	20	130	15	300	2000
1.5 mm ²	13.3	20	140	18	300	2000
2.5 mm ²	7.98	20	150	26	300	2000

Mechanical Characteristics

Bending Radius	Temperature Range Operating
15xD mm	-40°C~+70°C

Standards

Smoke Density Test	Corrosive Gas Test	Halogen-free Test	Flame Retardancy Test	Flame Propagation Test
IEC 61034-2, VDE 0482-1034-2, BS EN 61034-2	IEC 60754-2, VDE 0482-267-2-3, BS EN 50267-2-3	IEC 60754-1, VDE 0482-267-2-1, EN 50267-2-1, BS EN 50267-2-1	IEC 60332-1-2, VDE 0482-332-1-2, BS EN 60332-1-2	IEC 60332-3-24, VDE 0482-332-3-24, BS EN 60332-3-24

Circuit Integrity Test (FE180)	Circuit Integrity with Shock Test (PH120)
IEC 60331-23	EN 50200, VDE 0482-200, BS EN 50200

Notes

Reference Standard: DIN VDE 0812

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Part Number	Pair Count	Conductor Diameter (mm ²)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Approx. Weight (kg/km)	Packing Lengths (m)
3.518.2.4.3.0050.0.0002	2	0.5	7	28.3	68	100/500/1000
3.518.2.4.3.0050.0.0003	3	0.5	8.1	38.1	83	100/500/1000
3.518.2.4.3.0050.0.0004	4	0.5	9.9	51.4	113	100/500/1000
3.518.2.4.3.0050.0.0005	5	0.5	10.8	61.2	131	100/500/1000
3.518.2.4.3.0050.0.0006	6	0.5	11.8	69.7	152	100/500/1000
3.518.2.4.3.0050.0.0007	7	0.5	11.9	78.6	168	100/500/1000
3.518.2.4.3.0050.0.0008	8	0.5	12.8	89.4	186	100/500/1000
3.518.2.4.3.0050.0.0009	9	0.5	15	100.9	217	100/500/1000
3.518.2.4.3.0050.0.0010	10	0.5	15.1	109.7	234	100/500/1000
3.518.2.4.3.0050.0.0012	12	0.5	15.6	129.4	266	100/500/1000
3.518.2.4.3.0050.0.0014	14	0.5	16.4	147.8	299	100/500/1000
3.518.2.4.3.0050.0.0016	16	0.5	17.5	174.7	345	100/500/1000
Part Number	Pair Count	Conductor Diameter (mm ²)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Approx. Weight (kg/km)	Packing Lengths (m)
3.518.2.4.3.0075.0.0002	2	0.75	7.6	37.3	81	100/500/1000
3.518.2.4.3.0075.0.0003	3	0.75	8.8	52.3	102	100/500/1000
3.518.2.4.3.0075.0.0004	4	0.75	10.8	71.2	139	100/500/1000
3.518.2.4.3.0075.0.0005	5	0.75	11.7	83	161	100/500/1000
3.518.2.4.3.0075.0.0006	6	0.75	12.9	97.4	189	100/500/1000
3.518.2.4.3.0075.0.0007	7	0.75	12.9	111.6	211	100/500/1000
3.518.2.4.3.0075.0.0008	8	0.75	14	126.7	234	100/500/1000
3.518.2.4.3.0075.0.0009	9	0.75	16.4	143.5	272	100/500/1000
3.518.2.4.3.0075.0.0010	10	0.75	16.5	156.8	295	100/500/1000
3.518.2.4.3.0075.0.0012	12	0.75	17.2	189.7	342	100/500/1000
3.518.2.4.3.0075.0.0014	14	0.75	18.1	217	389	100/500/1000
3.518.2.4.3.0075.0.0016	16	0.75	19.1	244.6	434	100/500/1000
Part Number	Pair Count	Conductor Diameter (mm ²)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Approx. Weight (kg/km)	Packing Lengths (m)
3.518.2.4.3.0100.0.0002	2	1	8.2	44.8	94	100/500/1000
3.518.2.4.3.0100.0.0003	3	1	9.5	66.3	122	100/500/1000
3.518.2.4.3.0100.0.0004	4	1	11.6	83	159	100/500/1000
3.518.2.4.3.0100.0.0005	5	1	12.7	100.7	188	100/500/1000
3.518.2.4.3.0100.0.0006	6	1	13.9	120.1	223	100/500/1000
3.518.2.4.3.0100.0.0007	7	1	14	138	250	100/500/1000
3.518.2.4.3.0100.0.0008	8	1	15.2	155.6	277	100/500/1000
3.518.2.4.3.0100.0.0009	9	1	17.9	180.6	326	100/500/1000
3.518.2.4.3.0100.0.0010	10	1	18	199.8	356	100/500/1000
3.518.2.4.3.0100.0.0012	12	1	18.7	239.8	412	100/500/1000
3.518.2.4.3.0100.0.0014	14	1	19.7	274.4	470	100/500/1000
3.518.2.4.3.0100.0.0016	16	1	20.9	309.2	524	100/500/1000

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Part Number	Pair Count	Conductor Diameter (mm ²)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Approx. Weight (kg/km)	Packing Lengths (m)
3.518.2.4.3.0150.0.0002	2	1.5	8.9	64.2	118	100/500/1000
3.518.2.4.3.0150.0.0003	3	1.5	11.3	96	160	100/500/1000
3.518.2.4.3.0150.0.0004	4	1.5	12.6	121	203	100/500/1000
3.518.2.4.3.0150.0.0005	5	1.5	13.9	149.6	244	100/500/1000
3.518.2.4.3.0150.0.0006	6	1.5	15.3	177.9	289	100/500/1000
3.518.2.4.3.0150.0.0007	7	1.5	15.4	203.7	325	100/500/1000
3.518.2.4.3.0150.0.0008	8	1.5	16.7	236.6	367	100/500/1000
3.518.2.4.3.0150.0.0009	9	1.5	19.7	268.3	425	100/500/1000
3.518.2.4.3.0150.0.0010	10	1.5	19.8	294.2	463	100/500/1000
3.518.2.4.3.0150.0.0012	12	1.5	20.5	353.1	539	100/500/1000
3.518.2.4.3.0150.0.0014	14	1.5	21.6	404.8	610	100/500/1000
3.518.2.4.3.0150.0.0016	16	1.5	23	459.9	692	100/500/1000
Part Number	Pair Count	Conductor Diameter (mm ²)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Approx. Weight (kg/km)	Packing Lengths (m)
3.518.2.4.3.0250.0.0002	2	2.5	11.2	102.7	190	100/500/1000
3.518.2.4.3.0250.0.0003	3	2.5	14.4	149.8	258	100/500/1000
3.518.2.4.3.0250.0.0004	4	2.5	16	199.4	334	100/500/1000
3.518.2.4.3.0250.0.0005	5	2.5	17.5	248.3	402	100/500/1000
3.518.2.4.3.0250.0.0006	6	2.5	19.2	293.3	472	100/500/1000
3.518.2.4.3.0250.0.0007	7	2.5	19.3	339.4	533	100/500/1000
3.518.2.4.3.0250.0.0008	8	2.5	21	385	594	100/500/1000
3.518.2.4.3.0250.0.0009	9	2.5	24.9	436.8	694	100/500/1000
3.518.2.4.3.0250.0.0010	10	2.5	24.9	479.9	747	100/500/1000
3.518.2.4.3.0250.0.0012	12	2.5	25.7	572.8	866	100/500/1000