

Electronic Control Cables

Fire Resistant Cables

LIHH-TP (FE180 / PH120)

RoHS REACH 



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.
- 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 - 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
10xD 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

LIHH-TP (FE180 / PH120)

Part Number	Pair Count	Conductor Diameter (mm ²)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Approx. Weight (kg/km)	Packing Lengths (m)
3.513.2.4.3.0050.0.0001	1	0.5	5.4	8.9	34	100/500/1000
3.513.2.4.3.0050.0.0002	2	0.5	7	17.7	55	100/500/1000
3.513.2.4.3.0050.0.0003	3	0.5	8.1	26.6	75	100/500/1000
3.513.2.4.3.0050.0.0004	4	0.5	9.8	35.4	101	100/500/1000
3.513.2.4.3.0050.0.0005	5	0.5	10.3	44.3	117	100/500/1000
3.513.2.4.3.0050.0.0006	6	0.5	10.9	53.1	137	100/500/1000
3.513.2.4.3.0050.0.0007	7	0.5	11.9	62	158	100/500/1000
3.513.2.4.3.0050.0.0008	8	0.5	12.3	70.8	175	100/500/1000
3.513.2.4.3.0050.0.0009	9	0.5	13	79.7	195	100/500/1000
3.513.2.4.3.0050.0.0010	10	0.5	13.6	88.5	212	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)
3.513.2.4.3.0075.0.0001	1	0.75	5.9	13.3	42	100/500/1000
3.513.2.4.3.0075.0.0002	2	0.75	7.8	26.6	71	100/500/1000
3.513.2.4.3.0075.0.0003	3	0.75	9	39.9	98	100/500/1000
3.513.2.4.3.0075.0.0004	4	0.75	10.9	53.1	131	100/500/1000
3.513.2.4.3.0075.0.0005	5	0.75	11.4	66.4	153	100/500/1000
3.513.2.4.3.0075.0.0006	6	0.75	12.1	79.7	178	100/500/1000
3.513.2.4.3.0075.0.0007	7	0.75	13.1	92.9	206	100/500/1000
3.513.2.4.3.0075.0.0008	8	0.75	13.6	106.2	228	100/500/1000
3.513.2.4.3.0075.0.0009	9	0.75	14.4	119.5	255	100/500/1000
3.513.2.4.3.0075.0.0010	10	0.75	15	132.7	278	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)
3.513.2.4.3.0100.0.0001	1	1	6.1	16.6	46	100/500/1000
3.513.2.4.3.0100.0.0002	2	1	8.1	33.2	79	100/500/1000
3.513.2.4.3.0100.0.0003	3	1	9.4	49.8	110	100/500/1000
3.513.2.4.3.0100.0.0004	4	1	11.5	66.4	148	100/500/1000
3.513.2.4.3.0100.0.0005	5	1	12	83	173	100/500/1000
3.513.2.4.3.0100.0.0006	6	1	12.7	99.6	203	100/500/1000
3.513.2.4.3.0100.0.0007	7	1	13.8	116.2	235	100/500/1000
3.513.2.4.3.0100.0.0008	8	1	14.4	132.7	261	100/500/1000
3.513.2.4.3.0100.0.0009	9	1	15.2	149.3	292	100/500/1000
3.513.2.4.3.0100.0.0010	10	1	15.9	165.9	319	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)
3.513.2.4.3.0150.0.0001	1	1.5	6.8	25.9	61	100/500/1000
3.513.2.4.3.0150.0.0002	2	1.5	9.1	51.7	106	100/500/1000
3.513.2.4.3.0150.0.0003	3	1.5	10.5	77.6	148	100/500/1000
3.513.2.4.3.0150.0.0004	4	1.5	12.9	103.4	198	100/500/1000
3.513.2.4.3.0150.0.0005	5	1.5	13.4	129.3	234	100/500/1000
3.513.2.4.3.0150.0.0006	6	1.5	14.3	155.1	275	100/500/1000
3.513.2.4.3.0150.0.0007	7	1.5	15.6	181	319	100/500/1000
3.513.2.4.3.0150.0.0008	8	1.5	16.2	206.8	355	100/500/1000
3.513.2.4.3.0150.0.0009	9	1.5	17.1	232.6	398	100/500/1000
3.513.2.4.3.0150.0.0010	10	1.5	17.9	258.5	435	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)
3.513.2.4.3.0250.0.0001	1	2.5	8	43.1	87	100/500/1000
3.513.2.4.3.0250.0.0002	2	2.5	10.9	86.2	158	100/500/1000
3.513.2.4.3.0250.0.0003	3	2.5	12.8	129.3	226	100/500/1000
3.513.2.4.3.0250.0.0004	4	2.5	15.7	172.3	303	100/500/1000
3.513.2.4.3.0250.0.0005	5	2.5	16.4	215.4	361	100/500/1000