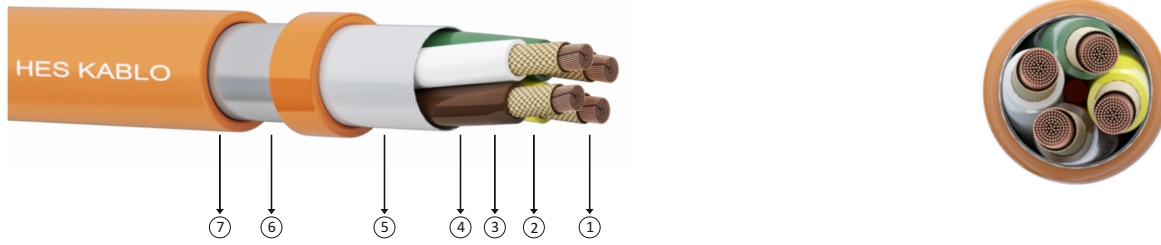


# LIH(St)H FE-180 / PH-120



**Code:** LIH(St)H FE-180 / PH-120 **Standard:** TS 13734, VDE 0812, TSE K 178

- LI** : Bundle wire
- H** : HFFR (Halogen free flame retardant)
- (St)** : Aluminum foil
- FE-...** : Insulation continuity of cable is determined according to the declared period. (FE-180 = 180 Minutes etc)
- PH-...** : Functional shock resistant cable

### Technical Properties

- Operating Temperature : -5 °C / + 70 °C
- Storage Temperature : -30 °C / + 70 °C
- Min. bending radius (fixed) : 7,5 x D
- Min. bending radius (moved) : 15 x D

### Electrical Properties

Cross-Section (mm <sup>2</sup> )	Current Carrying Capacity (A)
0,75	13
1	16
1,5	20
2,5	25

### Fire Performance Tests

- Vertical Flame Spread / EN 60332-1-2, IEC 60332-1-2, DIN EN 60332-1-2 (VDE 0482-332-1-2)
- Vertical Flame Spread - Category C / EN 60332-3-24, IEC 60332-3-24, DIN EN 60332-3-24 (VDE 0482-332-3-24)
- Circuit Integrity / IEC 60331-21, DIN IEC 60331-21 (VDE 0482-331-21)
- Pulse Generator Circuit Integrity EN 50200 / , DIN EN 50200 (VDE 0482-200)
- Pulse Generator Circuit Integrity EN 50362 / , DIN EN 50362 (VDE 0482-362)
- Determination of Halogen Acid Gas Amount / EN 60754-1, IEC 60754-1, DIN EN 60754-1 (VDE 0482-754-1)
- Acidity Determination and Conductivity / EN 60754-2, IEC 60754-2, DIN EN 60754-2 (VDE 0482-754-2)
- Smoke Density / EN 61034-2, IEC 61034-2, DIN EN 61034-2 (VDE 0482-1034-2)

### Construction

- 1- Flexible copper conductor / Class 5 (EN 60228, IEC 60228, DIN VDE 0295)
- 2- Mica Tape
- 3- HFFR insulation (EN 50290-2-26)
- 4- Single twist in layers
- 5- Separator tape
- 6- Glass Fiber Tape
- 7- AL-PET Tape
- 8- HFFR Sheath (EN 50290-2-27)

### Applications

Appropriate for use in narrow space implementations thanks to its flexible structure, these cables can be used in instrument and control engineering, industrial electronics, computer and office engineering, indoor communication, audio and security systems and fire notification systems in places with electromagnetics interference. It should be preferred in closed crowd places for its features such as keeping poisonous gas when burning, not transmitting flame and low smoke intensity.

Number of Cores and Cross-Section	Outer Diameter (Approx)	Copper Weight (Approx)	Cable Weight (Approx)	Conductor Resistance (max.)	Operating Voltage	Delivery Length
mm <sup>2</sup>	mm	kg/km	kg/km	Ω/km	(V)	m
2x0,75	7,0	15,3	53	26,0	500	500 / 1000
3x0,75	7,4	22,0	67	26,0	500	500 / 1000
4x0,75	8,0	28,8	82	26,0	500	500 / 1000
5x0,75	8,7	35,5	99	26,0	500	500 / 1000
6x0,75	9,6	42,3	121	26,0	500	500 / 1000
7x0,75	9,6	49,0	128	26,0	500	500 / 1000
8x0,75	10,6	55,7	158	26,0	500	500 / 1000
10x0,75	12,2	69,2	195	26,0	500	500 / 1000
12x0,75	12,6	82,7	211	26,0	500	500 / 1000

Number of Cores and Cross-Section	Outer Diameter (Approx)	Copper Weight (Approx)	Cable Weight (Approx)	Conductor Resistance (max.)	Operating Voltage	Delivery Length
mm <sup>2</sup>	mm	kg/km	kg/km	Ω/km	(V)	m
2x1,0	7,4	19,8	61	19,5	500	500 / 1000
3x1,0	7,8	28,8	78	19,5	500	500 / 1000
4x1,0	8,5	37,8	96	19,5	500	500 / 1000
5x1,0	9,4	46,8	121	19,5	500	500 / 1000
6x1,0	10,2	55,7	142	19,5	500	500 / 1000
7x1,0	10,2	64,7	152	19,5	500	500 / 1000
8x1,0	11,4	73,7	187	19,5	500	500 / 1000
10x1,0	13,1	91,7	230	19,5	500	500 / 1000
12x1,0	13,5	109,7	251	19,5	500	500 / 1000
2x1,5	8,4	28,1	78	13,3	900	500 / 1000
3x1,5	9,1	41,3	106	13,3	900	500 / 1000
4x1,5	9,9	54,5	132	13,3	900	500 / 1000
5x1,5	10,8	67,7	161	13,3	900	500 / 1000
6x1,5	11,9	80,8	199	13,3	900	500 / 1000
7x1,5	11,9	94,0	213	13,3	900	500 / 1000
8x1,5	13,3	107,2	263	13,3	900	500 / 1000
10x1,5	15,1	133,5	312	13,3	900	500 / 1000
12x1,5	15,6	159,8	341	13,3	900	500 / 1000
2x2,5	9,3	42,2	102	7,98	900	500 / 1000
3x2,5	9,9	62,4	135	7,98	900	500 / 1000
4x2,5	10,8	82,6	169	7,98	900	500 / 1000
5x2,5	12,0	102,8	216	7,98	900	500 / 1000
6x2,5	13,0	123,0	256	7,98	900	500 / 1000
7x2,5	13,0	143,2	277	7,98	900	500 / 1000
8x2,5	14,6	163,4	341	7,98	900	500 / 1000
10x2,5	16,7	203,7	415	7,98	900	500 / 1000
12x2,5	17,3	244,1	457	7,98	900	500 / 1000