

APPLICATION

Single core, high security cable, insulated with thermoplastic halogen-free compound. Recommended for indoor use, fixed installations, in public areas such as hospitals, hotels, shopping malls, halls, computer, communication centers and in all general places with large number of people and electrical /electronic equipment.

CABLE DESIGNATION

Cu / LSHF:H07Z1-U H07Z1-R H07Z1-K

CONSTRUCTION CHARACTERISTICS

Conductor

Copper (plain annealed): Solid class 1: (H07Z1-U)
Rigid stranded class 2: (H07Z1-R)
Flexible Class 5: (H07Z1-K)

Insulation

LSHF – Low Smoke Halogen Free thermoplastic compound, fire retardant.

GENERAL CHARACTERISTICS

Construction and test standards	IEC 60228 BS EN 50525-3-31
Rated voltage U_0/U	450/750 V
Test voltage	2500 V a.c. 5 minutes
Conductor maximum operating temperature	70°C
Maximum short-circuit temperature	160°C (t ≤ 5s)
Minimum bending radius (mm)	9 x d
Maximum pulling force over conductor (N)	15 x S
Flame retardant	IEC 60332-1-2 · EN 60332-1-2 (cable vertically mounted,length of charred cable ≤ 540 mm)
Fire retardant	IEC 60332-3-24 · EN 60332-3-24 (bunch of cables vertically mounted on a ladder,length of charred cable ≤ 2.5 m)
Halogen free	
Low smoke	IEC 61034-2 · EN 61034-2 (cable light transmittance ≥ 60%)
Low toxicity	IEC 60754-1 · EN 50267-2-1 (halogen acid gas content ≤ 0.5%)
Low corrosivity	IEC 60754-2 · EN 50267-2-2 (pH ≥4.3 · conductivity ≤ 10µS/mm)

S – conductor cross-section (mm²)
d – cable outer diameter (mm)



LOW VOLTAGE CABLES

GENERAL WIRING CABLES

H07Z1-U H07Z1-R H07Z1-K

Single Core Non - Sheathed - Fire Retardent - Halogen Free - BS EN 50525-3-31

ELECTRICAL AND DIMENSIONAL CHARACTERISTICS

Cable composition n.º cond. x cross-section (mm²)	Approximate outer diameter (mm)	Approximate weight (kg/km)	Current carrying capacity One circuit inside embedded conduits T = 30°C (A)	
			2 charged conductors	3 charged conductors
H07Z1-U				
1 x 1.5	3.0	20	17.5	15.5
1 x 2.5	3.5	30	24	21
1 x 4	4.0	45	32	28
1 x 6	4.5	65	41	36
1 x 10	5.7	91	57	50
H07Z1-R				
1 x 1.5	3.0	20	17.5	15.5
1 x 2.5	3.7	35	24	21
1 x 4	4.2	50	32	28
1 x 6	5.0	70	41	36
1 x 10	6.5	110	57	50
1 x 16	7.5	180	76	68
1 x 25	9.0	265	101	89
1 x 35	10.0	350	125	110
1 x 50	11.5	490	151	134
1 x 70	13.5	695	192	171
1 x 95	15.5	960	232	207
1 x 120	17.0	1180	269	239
1 x 150	19.0	1450	300	262
1 x 185	21.0	1825	341	296
1 x 240	24.0	2395	400	346
1 x 300	26.5	3025	456	394
1 x 400	30.0	3845	546	467
1 x 500	34.0	4830	626	533
1 x 630	39.0	6180	720	611
H07Z1-K				
1x1.5	3.0	20	17.5	15.5
1 x 2.5	3.7	35	24	21
1 x 4	4.2	50	32	28
1 x 6	5.0	70	41	36
1 x 10	6.5	110	57	50
1 x 16	7.9	185	76	68
1 x 25	9.5	270	101	89
1 x 35	11.0	365	125	110
1 x 50	13.5	515	151	134
1 x 70	15.0	705	192	171
1 x 95	16.5	975	232	207
1 x 120	18.5	1185	269	239
1 x 150	20.5	1455	300	262
1 x 185	22.5	1835	341	296
1 x 240	28.0	2410	400	346

Other compositions are available, contact info@fast-cables.com for information.
Only one circuit is considered.