



## J-H(St)H...Lg



### Kullanım Alanları

Elektronik yangın kontrol sistemlerindeki, sabit tesisatlarda yangın ihbar kablosu olarak kullanılır. Yapılarında kullanılan HFFR malzeme sayesinde alev dayanıklıdır. Yanmaları halinde zehirli gaz ve siyah duman çıkarmazlar.

### Kablo Yapısı

#### İç İletken

Elektrolitik Bakır Tel  
EN, IEC 60228

#### İzolasyon

HFFR, DIN VDE 0815 izole renk kodlamasına uygun  
70 °C, EN 50290-2-26

#### Büküm

Çiftler halinde bükülü damarlar

#### Polyester

Pet Bant

#### Toprak İletken

Kalaylı Bakır Toprak Teli

#### Folyo

Al-Pet Folyo

#### Dış Kılıf

HFFR, RAL 3000 Kırmızı  
EN 50290-2-27

### Teknik Özellikler

#### Çalışma Sıcaklığı

-30°C ... + 70°C

#### Min. Bük. Yarı Çapı

10 x D

#### Çalışma Gerilimi

300 V

#### Yalıtım Direnci

100 MΩ km

#### Maks. Kapasitans

100 nF/km

#### Maks. Kapasite Dengesizliği

300 pF / 500 m

#### Test Gerilimi

≤ 1.00 mm

800 V

≥ 1.00 mm<sup>2</sup>

1000 V

#### Ambalaj

500 / 1000 m

### Standartlar

TS 13767

#### CPR Sınıfı

B2<sub>ca</sub>

#### Alev Geciktiricilik

EN 60332-1-2

#### Duman Yoğunluğu Testi

EN 61034-2

#### Korozif Gaz Testi

TS EN 60754-2

### Application

These cables are used fire alarm connections in the electronic fire control systems at fixed indoor installations. Thanks to the HFFR material that is used in these cables, they are flame retardant, moreover they do not extract poisonous gases and black smoke when they are in fire.

### Cable Construction

#### Inner Conductor

Electrolytic Copper Wire  
EN, IEC 60228

#### Insulation

HFFR, DIN VDE 0815 Suitable for isolated color  
70 °C, EN 50290-2-26

#### Stranding

Pairs twisted in layers

#### Polyester

Pet Band

#### Drain Wire

Tinned Copper Drain Wire

#### Foil

Al-Pet Foil

#### Outer Sheath

HFFR, RAL 3000 Red  
EN 50290-2-27

### Technical Properties

#### Operating Temperature

-30°C ... + 70°C

#### Min. Bending Radius

10 x D

#### Operating Voltage

300 V

#### Insulation Resistance

100 MΩ km

#### Max. Capacitance

100 nF/km

#### Max. Capacitance Unbalance

300 pF / 500 m

#### Test Voltage

≤ 1.00 mm

800 V

≥ 1.00 mm<sup>2</sup>

1000 V

#### Packing

500 / 1000 m

### Standards

TS 13767

#### Euro Class

B2<sub>ca</sub>

#### Flame Retardancy

EN 60332-1-2

#### Smoke Density Test

EN 61034-2

#### Corrosive Gases Test

EN 60754-2

İletken Çapı Cross Section (mm) (mm <sup>2</sup> )	İletken Direnci Conductor Resistance (Ohm/km @ 20 °C)
0.60 mm	130
0.80 mm	73.2
1.00 mm	44.4
1.00 mm <sup>2</sup>	36.2
1.50 mm <sup>2</sup>	24.2
2.50 mm <sup>2</sup>	14.8

Damar Sayısı x Kesit No. Of Cores x Cross Section (mm <sup>2</sup> )	Kablo Çapı Overall Diameter (mm)	Bakır Ağırlığı Copper Weight (kg/km)	Kablo Ağırlığı Cable Weight (kg/km)
1 x 2 x 0.60	4.4	8.0	25
2 x 2 x 0.60	5.1	14.0	35
3 x 2 x 0.60	6.1	17.0	47
4 x 2 x 0.60	6.5	23.0	56
5 x 2 x 0.60	7.0	28.0	65
6 x 2 x 0.60	7.5	34.0	74
8 x 2 x 0.60	7.9	45.0	90
10 x 2 x 0.60	9.0	57.0	111
12 x 2 x 0.60	9.4	68.0	127
14 x 2 x 0.60	9.9	79.0	143
16 x 2 x 0.60	10.4	90.0	159
20 x 2 x 0.60	11.3	111.0	191
1 x 2 x 0.80	5.6	11.0	38
2 x 2 x 0.80	6.7	21.0	57
3 x 2 x 0.80	8.2	30.0	79
4 x 2 x 0.80	9.0	40.0	97
5 x 2 x 0.80	9.8	49.0	115
6 x 2 x 0.80	10.6	59.0	132
8 x 2 x 0.80	11.2	78.0	164
10 x 2 x 0.80	13.2	99.0	213
12 x 2 x 0.80	13.8	119.0	245
14 x 2 x 0.80	14.7	138.0	279
16 x 2 x 0.80	15.5	157.0	311
20 x 2 x 0.80	17.0	196.0	377
1 x 2 x 1.00	6.2	19.0	56
2 x 2 x 1.00	8.1	33.0	86
4 x 2 x 1.00	10.6	78.0	165
1 x 2 x 1.50	6.8	32.0	71
2 x 2 x 1.50	9.6	57.0	126
4 x 2 x 1.50	11.3	111.0	199
1 x 2 x 2.50	7.8	49.0	98
2 x 2 x 2.50	10.6	100.0	168
4 x 2 x 2.50	14.1	182.6	314