

## Class B



## RG 11 U/4 (Cu/Al)

### Kullanım Alanları

Bina içi CATV dağıtım kablosu ve düşük zayıflama istenen SMATV (uydu anten) sistemlerde bağlantı kablosu olarak kullanılır.

### Kablo Yapısı

<b>İç İletken</b>	Ø 1.63 mm Elektrolitik Bakır
<b>İzolasyon</b>	Ø 7.20 mm Fiziksel Köpüklü Skin/Foam/Skin PE
<b>1. Ekran</b>	Alüminyum Folyo (İzoleye Yapışık)
<b>2. Ekran</b>	Alüminyum Tellerden Örgü
<b>Dış Kılıf</b>	Ø 10.00 mm PVC

### Teknik Özellikler

<b>Kablo Ağırlığı</b>	90 kg/km
<b>Bakır Ağırlığı</b>	19.7 kg/km
<b>Min. Bük. Yarı Çapı</b>	65 mm
<b>Maks. Gergi Kuvveti</b>	200 N
<b>Çalışma Sıcaklığı</b>	-30 °C ... +70 °C
<b>Ambalaj</b>	500 / 1000 m

### Elektriksel Özellikler

<b>Empedans</b>	75 ± 3 Ω
<b>Kapasitans</b>	53 ± 2 pF/m
<b>Yayımlama Hızı</b>	% 84
<b>Yalıtım Direnci</b>	> 2 GΩxkm
<b>Çalışma Voltajı</b>	2000 V
<b>Test Voltajı</b>	5000 V
<b>İç İletken Direnci</b>	< 8.5 Ω/km

### Zayıflamalar (20°C)

<b>5 MHz</b>	1.40 dB/100m
<b>50 MHz</b>	3.10 dB/100m
<b>230 MHz</b>	6.30 dB/100m
<b>470 MHz</b>	9.20 dB/100m
<b>860 MHz</b>	12.80 dB/100m
<b>1000 MHz</b>	14.20 dB/100m
<b>1200 MHz</b>	15.30 dB/100m
<b>2150 MHz</b>	20.90 dB/100m
<b>3000 MHz</b>	26.10 dB/100m

### Geri Dönüş Kaybı (20°C)

<b>5-470 MHz</b>	> 26 dB
<b>470-1200 MHz</b>	> 23 dB
<b>1200-2000 MHz</b>	> 20 dB
<b>2000-3000 MHz</b>	> 18 dB

### Transfer Empedansı

<b>5-30 MHz</b>	≤ 15 mΩ/m
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### Ekranlama Zayıflaması

<b>30-1200 MHz</b>	≥ 75 dB
<b>1200-2000 MHz</b>	≥ 65 dB
<b>2000-3000 MHz</b>	≥ 55 dB

### Standartlar

<b>Ekranlama Sınıfı</b>	EN 50117-2-4	Class B
<b>CPR Sınıfı</b>	E <sub>ca</sub>	
<b>Alev Geciktiricilik</b>	EN 60332-1-2	

### Application

These types of cables are used for indoor CATV distributions and connections of SMATV systems which require low attenuations.

### Cable Construction

<b>Inner Conductor</b>	Ø 1.63 mm Bare Copper
<b>Insulation</b>	Ø 7.20 mm Gas Injected Skin/Foam/Skin PE
<b>1<sup>st</sup> Shielding</b>	Aluminum Foil (Bonded to the Insulation)
<b>2<sup>nd</sup> Shielding</b>	Aluminum Wire Braiding
<b>Outer Sheath</b>	Ø 10.00 mm PVC

### Technical Properties

<b>Cable Weight</b>	90 kg/km
<b>Copper Weight</b>	19.7 kg/km
<b>Min. Bending Radius</b>	65 mm
<b>Max. Tensile Strength</b>	200 N
<b>Temperature Range</b>	-30 °C ... +70 °C
<b>Packing</b>	500 / 1000 m

### Electrical Properties

<b>Impedance</b>	75 ± 3 Ω
<b>Capacitance</b>	53 ± 2 pF/m
<b>Velocity of Propagation</b>	84 %
<b>Insulation Resistance</b>	> 2 GΩxkm
<b>Operating Voltage</b>	2000 V
<b>Test Voltage</b>	5000 V
<b>Inner Conductor DCR</b>	< 8.5 Ω/km

### Attenuations (20°C)

<b>5 MHz</b>	1.40 dB/100m
<b>50 MHz</b>	3.10 dB/100m
<b>230 MHz</b>	6.30 dB/100m
<b>470 MHz</b>	9.20 dB/100m
<b>860 MHz</b>	12.80 dB/100m
<b>1000 MHz</b>	14.20 dB/100m
<b>1200 MHz</b>	15.30 dB/100m
<b>2150 MHz</b>	20.90 dB/100m
<b>3000 MHz</b>	26.10 dB/100m

### Return Loss (20°C)

<b>5-470 MHz</b>	> 26 dB
<b>470-1200 MHz</b>	> 23 dB
<b>1200-2000 MHz</b>	> 20 dB
<b>2000-3000 MHz</b>	> 18 dB

### Transfer Impedance

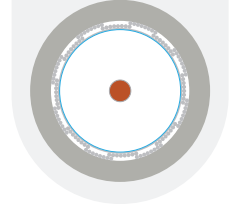
<b>5-30 MHz</b>	≤ 50 mΩ/m
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### Screening Attenuation

<b>30-1200 MHz</b>	≥ 75 dB
<b>1200-2000 MHz</b>	≥ 65 dB
<b>2000-3000 MHz</b>	≥ 55 dB

### Standards

<b>Screening Class</b>	EN 50117-2-4	Class B
<b>Euro Class</b>	E <sub>ca</sub>	
<b>Flame Retardancy</b>	EN 60332-1-2	



**Class B**



## RG 11 U/4 (Cu/Al) HFFR

### Kullanım Alanları

Bina içi CATV dağıtım kablosu ve düşük zayıflama istenen SMATV (uydu anten) sistemlerde bağlantı kablosu olarak kullanılır. Halogen Free Compound sayesinde, alev geciktirici özelliğe sahiptir. İnsan yoğunluğu fazla olan yapılarda bu tip HFFR özellikli kabloların kullanılması önerilmektedir.

### Kablo Yapısı

**İç İletken**  
Ø 1.63 mm Elektrolitik Bakır

**İzolasyon**  
Ø 7.20 mm Fiziksel Köpüklü  
Skin/Foam/Skin PE

**1. Ekran**  
Alüminyum Folyo  
(İzoleye Yapışık)

**2. Ekran**  
Alüminyum Tellerden Örgü

**Dış Kılıf**  
Ø 10.00 mm HFFR\*

### Teknik Özellikler

**Kablo Ağırlığı** 92 kg/km  
**Bakır Ağırlığı** 19.7 kg/km  
**Min. Bük. Yarı Çapı** 65 mm  
**Maks. Gergi Kuvveti** 200 N  
**Çalışma Sıcaklığı** -30 °C ... +70 °C  
**Ambalaj** 500 / 1000 m

### Elektriksel Özellikler

**Empedans** 75 ± 3 Ω  
**Kapasitans** 53 ± 2 pF/m  
**Yayıma Hızı** % 84  
**Yalıtım Direnci** > 2 GΩxkm  
**Çalışma Voltajı** 2000 V  
**Test Voltajı** 5000 V  
**İç İletken Direnci** < 8.5 Ω/km

### Zayıflamalar (20°C)

5 MHz 1.40 dB/100m  
50 MHz 3.10 dB/100m  
230 MHz 6.30 dB/100m  
470 MHz 9.20 dB/100m  
860 MHz 12.80 dB/100m  
1000 MHz 14.20 dB/100m  
1200 MHz 15.30 dB/100m  
2150 MHz 20.90 dB/100m  
3000 MHz 26.10 dB/100m

### Geri Dönüş Kaybı (20°C)

5-470 MHz > 26 dB  
470-1200 MHz > 23 dB  
1200-2000 MHz > 20 dB  
2000-3000 MHz > 18 dB

### Transfer Empedansı

5-30 MHz ≤ 15 mΩ/m

### Ekranlama Zayıflaması

30-1200 MHz ≥ 75 dB  
1200-2000 MHz ≥ 65 dB  
2000-3000 MHz ≥ 55 dB

### Standartlar

**Ekranlama Sınıfı** Class B  
EN 50117-2-4

**CPR Sınıfı**  
D<sub>ca</sub>

**Alev Geciktiricilik**  
EN 60332-1-2

**Korozif Gaz Testi**  
TS EN 60754-2

**Duman Yoğunluğu**  
EN 61034-2

### Application

These types of cables are used for indoor CATV distributions and connections of SMATV systems which require low attenuations. These cables are Halogen Free, Non Corrosive and Flame retardant, thanks to the HFFR Compound that has been used on their construction.

### Cable Construction

**Inner Conductor**  
Ø 1.63 mm Bare Copper

**Insulation**  
Ø 7.20 mm Gas Injected  
Skin/Foam/Skin PE

**1<sup>st</sup> Shielding**  
Aluminum Foil  
(Bonded to the Insulation)

**2<sup>nd</sup> Shielding**  
Aluminum Wire Braiding

**Outer Sheath**  
Ø 10.00 mm HFFR\*

### Technical Properties

**Cable Weight** 92 kg/km  
**Copper Weight** 19.7 kg/km  
**Min. Bending Radius** 65 mm  
**Max. Tensile Strength** 200 N  
**Temperature Range** -30 °C ... +70 °C  
**Packing** 500 / 1000 m

### Electrical Properties

**Impedance** 75 ± 3 Ω  
**Capacitance** 53 ± 2 pF/m  
**Velocity of Propagation** 84 %  
**Insulation Resistance** > 2 GΩxkm  
**Operating Voltage** 2000 V  
**Test Voltage** 5000 V  
**Inner Conductor DCR** < 8.5 Ω/km

### Attenuations (20°C)

5 MHz 1.40 dB/100m  
50 MHz 3.10 dB/100m  
230 MHz 6.30 dB/100m  
470 MHz 9.20 dB/100m  
860 MHz 12.80 dB/100m  
1000 MHz 14.20 dB/100m  
1200 MHz 15.30 dB/100m  
2150 MHz 20.90 dB/100m  
3000 MHz 26.10 dB/100m

### Return Loss (20°C)

5-470 MHz > 26 dB  
470-1200 MHz > 23 dB  
1200-2000 MHz > 20 dB  
2000-3000 MHz > 18 dB

### Transfer Impedance

5-30 MHz ≤ 15 mΩ/m

### Screening Attenuation

30-1200 MHz ≥ 75 dB  
1200-2000 MHz ≥ 65 dB  
2000-3000 MHz ≥ 55 dB

### Standards

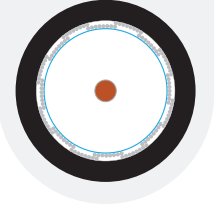
**Screening Class** Class B  
EN 50117-2-4

**Euro Class**  
D<sub>ca</sub>

**Flame Retardancy**  
EN 60332-1-2

**Corrosive Gases Test**  
TS EN 60754-2

**Smoke Density**  
EN 61034-2



**Class B**



## RG 11 U/4 (Cu/Al) PE

### Kullanım Alanları

CATV dağıtım kablosu ve düşük zayıflama istenen SMATV (uydu anten) sistemlerde bağlantı kablosu olarak kullanılır, harici ortamlarda kullanıma uygundur.

### Kablo Yapısı

<b>İç İletken</b>	Ø 1.63 mm Elektrolitik Bakır
<b>İzolasyon</b>	Ø 7.20 mm Fiziksel Köpüklü Skin/Foam/Skin PE
<b>1. Ekran</b>	Alüminyum Folyo (İzoleye Yapışık)
<b>2. Ekran</b>	Alüminyum Tellerden Örgü
<b>Dış Kılıf</b>	Ø 10.00 mm PE

### Teknik Özellikler

<b>Kablo Ağırlığı</b>	77 kg/km
<b>Bakır Ağırlığı</b>	19 kg/km
<b>Min. Bük. Yarı Çapı</b>	65 mm
<b>Maks. Gergi Kuvveti</b>	200 N
<b>Çalışma Sıcaklığı</b>	-40 °C ... +70 °C
<b>Ambalaj</b>	500 / 1000 m

### Elektriksel Özellikler

<b>Empedans</b>	75 ± 3 Ω
<b>Kapasitans</b>	53 ± 2 pF/m
<b>Yayıma Hızı</b>	% 84
<b>Yalıtım Direnci</b>	> 2 GΩxkm
<b>Çalışma Voltajı</b>	2000 V
<b>Test Voltajı</b>	5000 V
<b>İç İletken Direnci</b>	< 8.5 Ω/km

### Zayıflamalar (20°C)

<b>5 MHz</b>	1.40 dB/100m
<b>50 MHz</b>	3.10 dB/100m
<b>230 MHz</b>	6.30 dB/100m
<b>470 MHz</b>	9.20 dB/100m
<b>860 MHz</b>	12.80 dB/100m
<b>1000 MHz</b>	14.20 dB/100m
<b>1200 MHz</b>	15.30 dB/100m
<b>2150 MHz</b>	20.90 dB/100m
<b>3000 MHz</b>	26.10 dB/100m

### Geri Dönüş Kaybı (20°C)

<b>5-470 MHz</b>	> 26 dB
<b>470-1200 MHz</b>	> 23 dB
<b>1200-2000 MHz</b>	> 20 dB
<b>2000-3000 MHz</b>	> 18 dB

### Transfer Empedansı

<b>5-30 MHz</b>	≤ 15 mΩ/m
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### Ekranlama Zayıflaması

<b>30-1200 MHz</b>	≥ 75 dB
<b>1200-2000 MHz</b>	≥ 65 dB
<b>2000-3000 MHz</b>	≥ 55 dB

### Standartlar

<b>Ekranlama Sınıfı</b>	Class B
<b>EN 50117-2-5</b>	
<b>CPR Sınıfı</b>	F <sub>ca</sub>

### Application

These types of cables are used for outdoor CATV distributions and connections of SMATV systems which require low attenuations.

### Cable Construction

<b>Inner Conductor</b>	Ø 1.63 mm Bare Copper
<b>Insulation</b>	Ø 7.20 mm Gas Injected Skin/Foam/Skin PE
<b>1<sup>st</sup> Shielding</b>	Aluminum Foil (Bonded to the Insulation)
<b>2<sup>nd</sup> Shielding</b>	Aluminum Wire Braiding
<b>Outer Sheath</b>	Ø 10.00 mm PE

### Technical Properties

<b>Cable Weight</b>	77 kg/km
<b>Copper Weight</b>	19 kg/km
<b>Min. Bending Radius</b>	65 mm
<b>Max. Tensile Strength</b>	200 N
<b>Temperature Range</b>	-40 °C ... +70 °C
<b>Packing</b>	500 / 1000 m

### Electrical Properties

<b>Impedance</b>	75 ± 3 Ω
<b>Capacitance</b>	53 ± 2 pF/m
<b>Velocity of Propagation</b>	84 %
<b>Insulation Resistance</b>	> 2 GΩxkm
<b>Operating Voltage</b>	2000 V
<b>Test Voltage</b>	5000 V
<b>Inner Conductor DCR</b>	< 8.5 Ω/km

### Attenuations (20°C)

<b>5 MHz</b>	1.40 dB/100m
<b>50 MHz</b>	3.10 dB/100m
<b>230 MHz</b>	6.30 dB/100m
<b>470 MHz</b>	9.20 dB/100m
<b>860 MHz</b>	12.80 dB/100m
<b>1000 MHz</b>	14.20 dB/100m
<b>1200 MHz</b>	15.30 dB/100m
<b>2150 MHz</b>	20.90 dB/100m
<b>3000 MHz</b>	26.10 dB/100m

### Return Loss (20°C)

<b>5-470 MHz</b>	> 26 dB
<b>470-1200 MHz</b>	> 23 dB
<b>1200-2000 MHz</b>	> 20 dB
<b>2000-3000 MHz</b>	> 18 dB

### Transfer Impedance

<b>5-30 MHz</b>	≤ 50 mΩ/m
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### Screening Attenuation

<b>30-1200 MHz</b>	≥ 75 dB
<b>1200-2000 MHz</b>	≥ 65 dB
<b>2000-3000 MHz</b>	≥ 55 dB

### Standards

<b>Screening Class</b>	Class B
<b>EN 50117-2-5</b>	
<b>Euro Class</b>	F <sub>ca</sub>