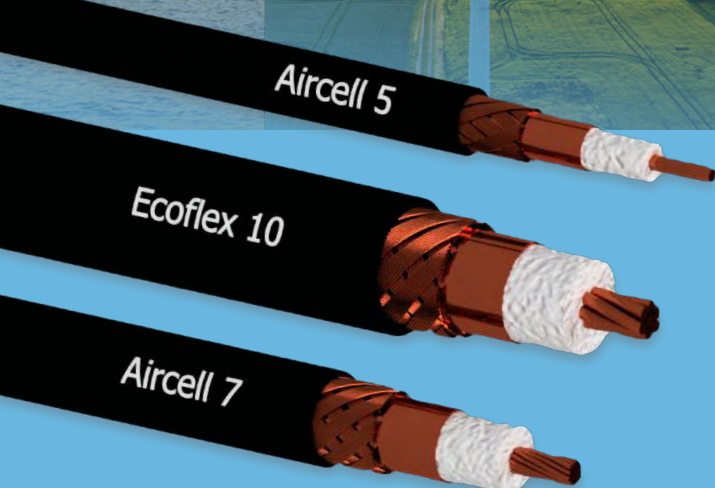


# Coaxial Cables, Connectors, and Adapters

for Industry, Transportation, and Communication



***You need the  
best connection!***

# Fire Classes of Coaxial Cables

According to the EU Construction Products Regulation



The Construction Products Regulation No. 305/2011 (CPR) establishes uniform rules for the use of construction products within buildings and is implemented in all EU member states through the standard EN 50575. Cables, as construction products, are assigned to specific performance classes based on their fire behavior. Flame retardancy, smoke development, and halogen-free properties play a crucial role. Each fire class entails specific requirements for quality control.

The CPR thus establishes a unified system for the classification, evaluation, and certification of construction products for all EU countries. The aim is to enhance fire

safety in buildings. The use of certified cables is intended to provide more time for evacuation and facilitate the rescue of individuals in case of a fire.

Since July 1, 2017, our coaxial cables have been classified according to the CPR. They are appropriately labeled with a CE marking, and the Declarations of Performance (DoP) can be found on our website: [www.ssb-electronic.com](http://www.ssb-electronic.com).

The following overview illustrates the classification of our coaxial cables into fire classes and their suitable areas of application.

Coaxial Cable	Euroclass according to EN 50575	Safety Requirement in Buildings	Application Area	Classification Criteria	AVCP System (Assessment and Verification of Constancy of Performance)
Aircell 5 Aircell 7 Ecoflex 10 Ecoflex 10 PLUS Ecoflex 15 Ecoflex 15 PLUS Aircom Premium	Eca	low	<b>Cables for Standard Applications</b>  Buildings with low height, low user density, in apartments.	Flame spread EN 60332-1-2 H ≤ 425 mm	<b>System 3</b>  Initial type-testing by third-party notified testing laboratory  Factory production control (FCB) by the manufacturer
Ecoflex 10 PLUS Heatex Ecoflex 10 FRNC	Cca s1 d0 a1	high	<b>Cables for higher fire safety requirements</b>  In high-rise buildings, structural facilities, offices, retail premises, restaurants, hotels, underground garages, schools, dormitories, correctional facilities, leisure/amusement parks, etc.	Flame spread EN 60332-1-2 H ≤ 425 mm  Heat release, vertical flame spread EN 50399 FS ≤ 2.0 m THR ≤ 30 MJ max. HRR ≤ 60 kW FIGRA ≤ 300 W/s Ignition source = 20.5 kW	<b>System 1+</b>  Initial type-testing by third-party notified product certification body  Regular factory audits by notified certification body  Continuous audit testing of samples by third-party notified product certification body  Factory production control (FCB) by the manufacturer
Ecoflex 15 PLUS Heatex Ecoflex 15 FRNC	Cca s2 d2 a1			Smoke emission EN 50399/EN 61034-2 s1, s1a, s1b, s2, s3	
Aircell 5 Heatex Aircell 7 Heatex	Cca s1 d0 a1			Acidity/Corrosiveness EN 60754-2 a1, a2, a3  Burning Droplets EN 50399 d0, d1, d2	

Explanation:

Smoke emission

- s1: Low smoke emission, slow spread  
TSP ≤ 50 m<sup>2</sup>, max. SPR ≤ 0.25 m<sup>2</sup>/s
- s1a: Transmittance ≥ 80 %
- s1b: Transmittance ≥ 60 % < 80 %
- s2: Moderate smoke emission and spread  
TSP ≤ 400 m<sup>2</sup>, max. SPR ≤ 1.5 m<sup>2</sup>/s
- s3: Not specified

Dripping of burning material

- d0: No burning droplets or particles
- d1: No burning droplets or particles longer than 10 seconds
- d2: Not specified

Acidity of combustion gases

- a1: Slightly corrosive smoke gases, conductivity < 2.5 µS/mm and pH > 4.3
- a2: Average corrosive smoke gases, conductivity < 10 µS/mm and pH > 4.3
- a3: Not specified

Abbreviations:

- H: Vertical Flame Spread (mm)
- FS: Vertical Flame Spread (m)
- THR: Total Heat Release
- HRR: Max. Heat Release Rate
- FIGRA: Fire Growth Rate Index
- TSP: Total Smoke Production
- SPR: Max. Smoke Production Rate (m<sup>2</sup>/s)



# Aircell® 5

thin, low-loss, and stray radiation resistant



Aircell 5 is a flexible and thin coaxial cable with a 5 mm outer diameter designed for the frequency range from DC to 10 GHz. Its low-loss characteristics in relation to its diameter and compatibility with standard RG 58 connectors make it the preferred choice not only for Wireless LAN applications but also for general RF communications.

The low attenuation of Aircell 5 is achieved through advanced manufacturing techniques and a low-loss PE-LLC dielectric with a foaming rate of more than 70%. This unique dielectric not only ensures low attenuation but also provides water resistance and long-term stability. Aircell 5 features a solid inner conductor extruded from low-oxygen copper (OFC). Additional advantages of this cable include double shielding, consisting of overlapping 100% tight copper foil and an additional shield braiding of bare copper wires with 70% coverage. The copper foil is coated with PE to prevent cracking due to short radius bends. The black PVC jacket of Aircell 5 is UV-stabilized.

As Aircell 5 shares the same dimensions as RG 58 type cables (5 mm outer diameter), it is compatible with almost all standard coaxial connectors designed for 5 mm coaxial cables. Aircell 5 is the ideal choice when a thin, low-loss, and microwave-rated cable is required, suitable for numerous RF applications.

### Key features

Diameter	5.0 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	29.54 dB
f max	10 GHz
Euroclass according to EN 50575	Eca

### Characteristics

- Insulation material according to DIN EN 50290-2-23 (VDE 0819), Tab. 2/A (HD 624.3)
- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- Flame-retardant according to IEC 60332-1-2
- Flame-retardant according to UN/ECE-R 118:2019-06 § 6.2.6, ISO 6722-1:2011-10 § 5.22
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

### Technical Data

Inner conductor	bare copper wire
Inner conductor Ø	1 × 1.13 mm
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	3.1 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	70 %
Outer conductor Ø	3.7 mm
Jacket	PVC black, UV-stabilized
Weight	35 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	100 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 20.5 Ω/km
DC-resistance outer conductor	22 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	4 kV
Max. voltage	2.5 kV

### Aircell 5 RG 58/U RG 213/U

Capacitance	78 pF/m	102 pF/m	101 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation (dB/100m)			
10 MHz	2.78	5.00	2.00
100 MHz	8.93	17.00	7.00
500 MHz	20.49	39.00	17.00
1000 MHz	29.54	54.60	22.50
3000 MHz	53.57	118.00	58.50

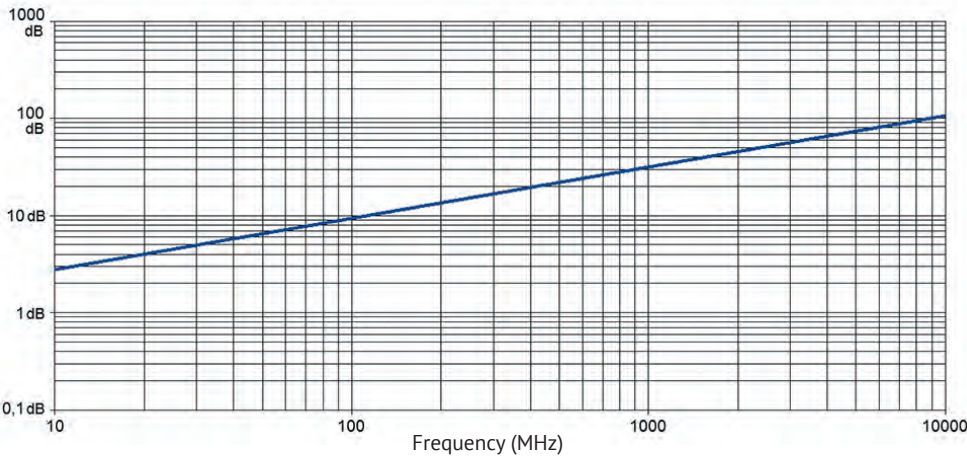
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	1.97	1000 MHz	29.54
10 MHz	2.78	1296 MHz	33.92
50 MHz	6.28	1500 MHz	36.70
100 MHz	8.93	1800 MHz	40.50
144 MHz	10.76	2000 MHz	42.88
200 MHz	12.74	2400 MHz	47.38
300 MHz	15.70	3000 MHz	53.57
432 MHz	18.99	4000 MHz	62.88
500 MHz	20.49	5000 MHz	71.30
800 MHz	26.24	6000 MHz	78.85
		10000 MHz	106.40

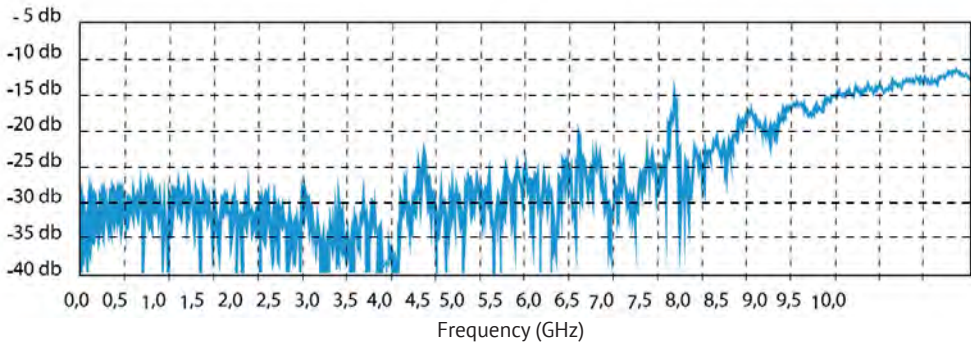
### Max. Power Handling (W at 40 °C)

10 MHz	1.885	3000 MHz	98
100 MHz	587	4000 MHz	83
500 MHz	256	5000 MHz	74
1000 MHz	178	6000 MHz	66
2000 MHz	122	10000 MHz	49

### Typ. Attenuation (dB/100 m at 20 °C)



### Typ. Return Loss





# Aircell® 5 Heatex®

low-loss, halogen-free, flame-retardant,  
suitable for installation in buildings  
and for railway applications



Aircell 5 Heatex is a flexible and thin coaxial cable with a 5 mm outer diameter designed for the frequency range from DC to 10 GHz. Its low-loss characteristics and compatibility with standard RG 58 connectors make it the top choice not only for Wireless LAN applications but also for general RF communications.

The low attenuation of Aircell 5 Heatex is achieved through advanced manufacturing techniques and a low-loss PE-LLC dielectric with a foaming rate of more than 70%. This unique dielectric not only ensures low attenuation but also provides water resistance and long-term stability. Aircell 5 Heatex features a solid inner conductor extruded from low-oxygen copper. Additional advantages of this cable include double shielding, consisting of overlapping 100% tight copper foil and an additional shield braiding of bare copper wires with 70% coverage. The copper foil is coated with PE to prevent foil cracking due to short-radius bends.

The jacket of the cable is made of a halogen-free and flame-retardant copolymer. Thanks to this Heatex jacket, the cable has a low fire load, low flame propagation, limited smoke emission, and reduced production of toxic and corrosive gases. With the fire protection rating Cca, Aircell 5 Heatex is approved for installation in public buildings.

Aircell 5 Heatex is certified for railway applications for both interior and exterior use, meeting the requirements of sets R15 and R16 of the EN45545-2 standard.

## Key features

Diameter	5.0 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	29.54 dB
<b>f max</b>	<b>10 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Cca</b>

## Characteristics

- Certified according to EN 45545-2:2013+A1:2015 and EN 45545-2:2020 Requirement Sets R15 + R16 for railway applications
- Flame resistance tested according to EN 60332-1-2:2004 + A1:2015 + A11:2016 and EN 60332-1-3:2004 + A1:2015
- Smoke density tested according to DIN EN 61034-2:2005
- Smoke gas toxicity tested according to EN 50305:2002 Sec. 9.2
- Vertical flame spread tested according to EN 50305:2002 Sec. 9.1.2 (Bundle test for cables Ø ≤ 6 mm)
- Halogen-free tested according to DIN EN 50306-1:2003
- Halogen acid gas content tested according to DIN EN 60754-1:2015 (HCL < 0.5 %)
- Acidity of the combustion gases tested according to DIN EN 60754-2:2015 (pH value > 4.3)
- Conductivity of the combustion gases tested according to DIN EN 60754-2:2015 (< 10.0 µS/mm)
- Fluorine content tested according to EN 60684-2:2011 Sec. 45.2 Procedure A (< 0.1 %)
- Insulation material according to DIN EN 50290-2-23 (VDE 0819), Tab. 2/A (HD 624.3)
- Jacket material according to DIN EN 50290-2-27 (HD 624.7)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- UV-resistant

## Technical Data

Inner conductor	bare copper wire
Inner conductor Ø	1 × 1.13 mm
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	3.1 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	70 %
Outer conductor Ø	3.7 mm
Jacket	thermoplastic copolymer (FRNC) black
Weight	37 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	100 N

## Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 20.5 Ω/km
DC-resistance outer conductor	22 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	4 kV
Max. voltage	2.5 kV

## Aircell 5 Heatex RG 58/U RG 213/U

Capacitance	78 pF/m	102 pF/m	101 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation (dB/100m)			
10 MHz	2.78	5.00	2.00
100 MHz	8.93	17.00	7.00
500 MHz	20.49	39.00	17.00
1000 MHz	29.54	54.60	22.50
3000 MHz	53.57	118.00	58.50

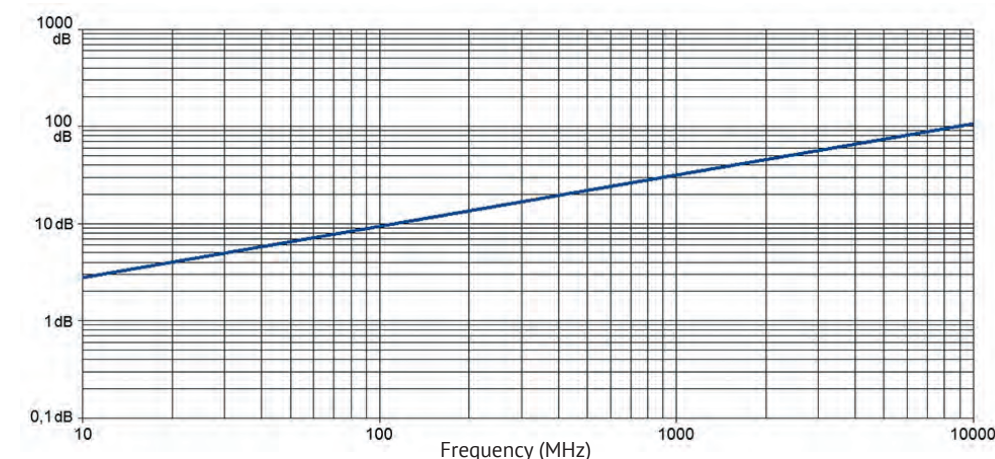
## Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	1.97	1000 MHz	29.54
10 MHz	2.78	1296 MHz	33.92
50 MHz	6.28	1500 MHz	36.70
100 MHz	8.93	1800 MHz	40.50
144 MHz	10.76	2000 MHz	42.88
200 MHz	12.74	2400 MHz	47.38
300 MHz	15.70	3000 MHz	53.57
432 MHz	18.99	4000 MHz	62.88
500 MHz	20.49	5000 MHz	71.30
800 MHz	26.24	6000 MHz	78.85
		10000 MHz	106.40

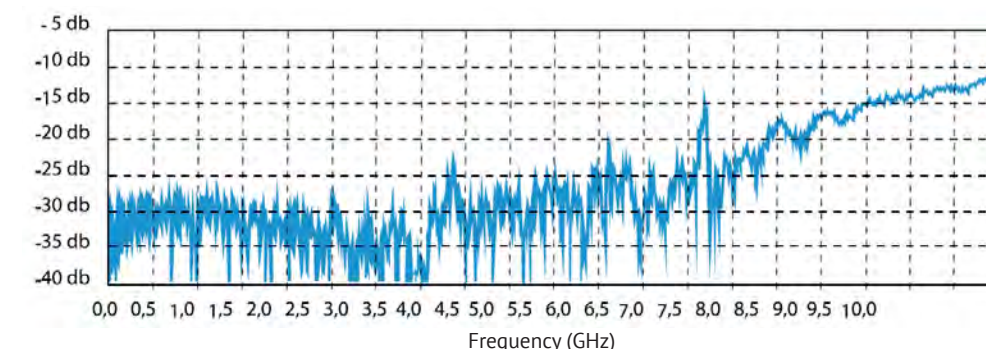
## Max. Power Handling (W at 40 °C)

10 MHz	1.885	3000 MHz	98
100 MHz	587	4000 MHz	83
500 MHz	256	5000 MHz	74
1000 MHz	178	6000 MHz	66
2000 MHz	122	10000 MHz	49

## Typ. Attenuation (dB/100 m at 20 °C)



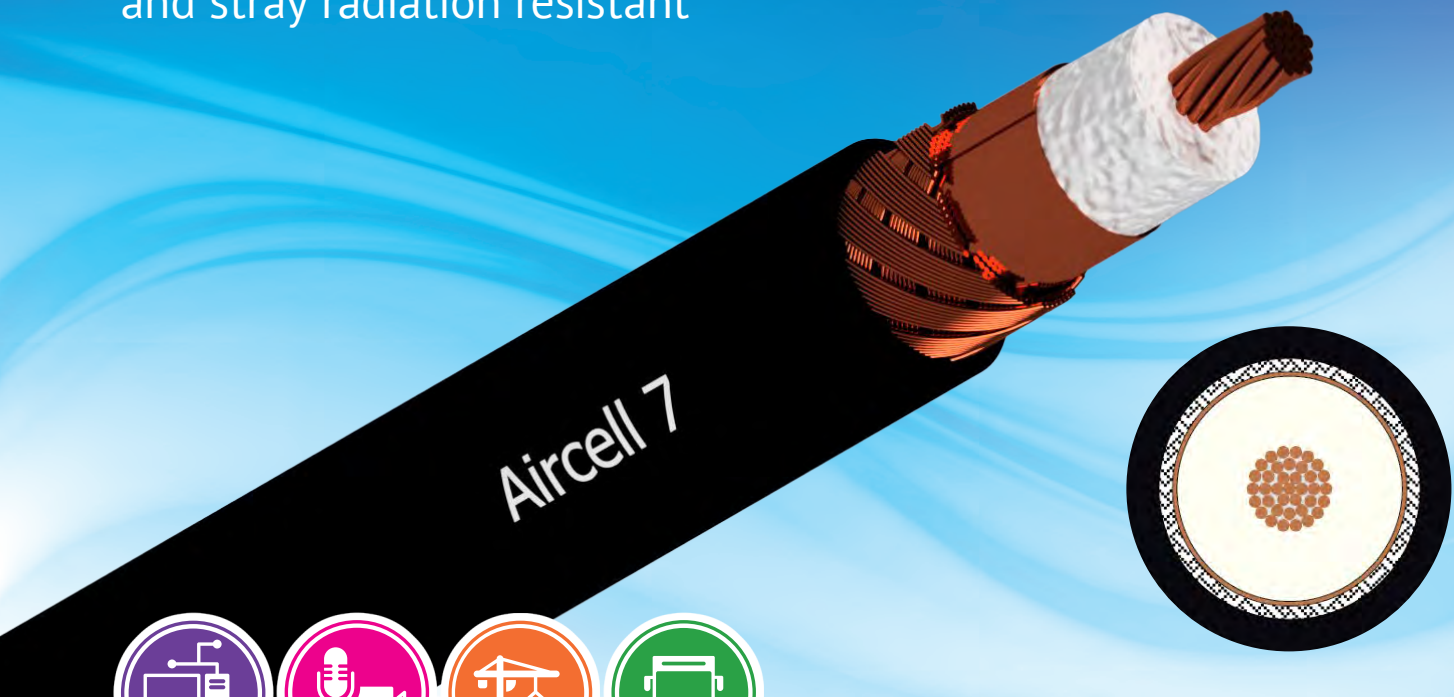
## Typ. Return Loss





# Aircell® 7

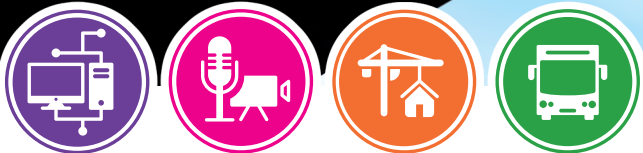
highly flexible, low-loss,  
and stray radiation resistant



Aircell 7 is an ultraflexible coaxial cable designed for frequencies up to 6 GHz. Due to its low loss in relation to the outer diameter and the small bending radius, the cable can be used for numerous RF applications.

The low attenuation of Aircell 7 is achieved by using advanced manufacturing techniques and low-loss PE-LLC dielectric with a foaming rate of more than 70%. This unique dielectric also offers water resistance and long-term stability. The inner conductor, containing 19 stranded bare copper wires of low oxygen copper (OFC), provides the cable its remarkable flexibility. Further advantages of this cable include the use of double shielding, which is constructed of overlapping 100% tight copper foil and an additional shield braiding of bare copper wires with 85% coverage. The copper foil has an applied PE coating that prevents foil cracking due to short-radius bends. The black PVC jacket of Aircell 7 is UV-stabilized.

Aircell 7 is the right choice when a super flexible, low loss, and microwave-rated cable is required. It can be used for numerous RF applications.



## Key features

Diameter	7.3 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	20.44 dB
f max	6 GHz
Euroclass according to EN 50575	Eca

## Characteristics

- Conductor/screen material according to DIN EN 13602 Cu-ETP-A
- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- Flame-retardant according to IEC 60332-1-2
- Flame-retardant according to UN/ECE-R 118:2019-06 § 6.2.6, ISO 6722-1:2011-10 § 5.22
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

## Technical Data

Inner conductor	Stranded copper (Cu) wire
Inner conductor Ø	1.9 mm (19 × 0.38 mm, 14 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	5.0 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	85 %
Outer conductor Ø	5.7 mm
Jacket	PVC black, UV-stabilized
Weight	70 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	300 N

## Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 9.0 Ω/km
DC-resistance outer conductor	8.7 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	10 kV
Max. voltage	8 kV

## Aircell 7 RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	2.09	2.00	5.00
100 MHz	5.97	7.00	17.00
500 MHz	13.98	17.00	39.00
1000 MHz	20.44	22.50	54.60
3000 MHz	38.84	58.50	118.00

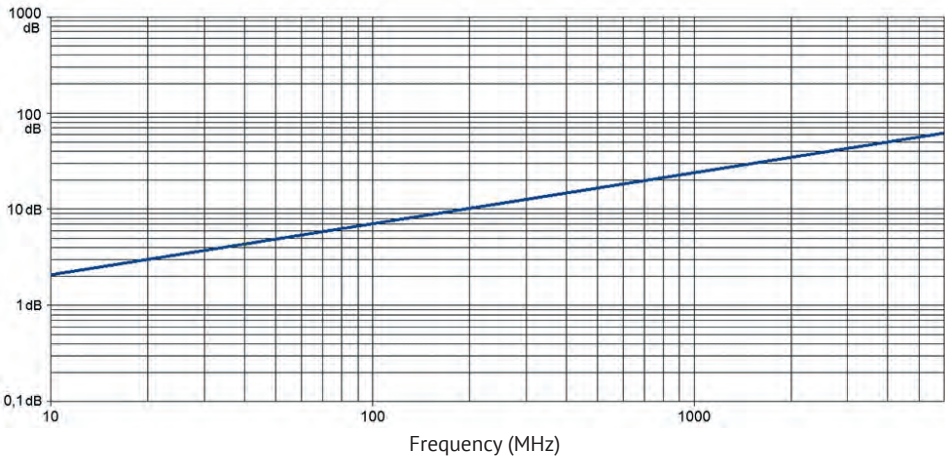
## Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	1.52	1000 MHz	20.44
10 MHz	2.09	1296 MHz	23.60
50 MHz	4.29	1500 MHz	25.73
100 MHz	5.97	1800 MHz	28.50
144 MHz	7.22	2000 MHz	30.29
200 MHz	8.59	2400 MHz	33.82
300 MHz	10.64	3000 MHz	38.84
432 MHz	12.92	4000 MHz	46.66
500 MHz	13.98	5000 MHz	54.19
800 MHz	18.05	6000 MHz	61.66

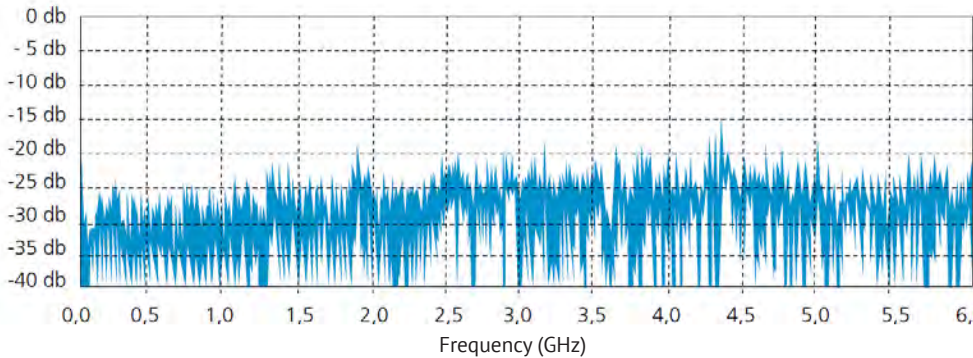
## Max. Power Handling (W at 40 °C)

10 MHz	2.040	2400 MHz	118
100 MHz	620	3000 MHz	104
500 MHz	260	4000 MHz	89
1000 MHz	191	5000 MHz	78
2000 MHz	131	6000 MHz	70

## Typ. Attenuation (dB/100 m at 20 °C)



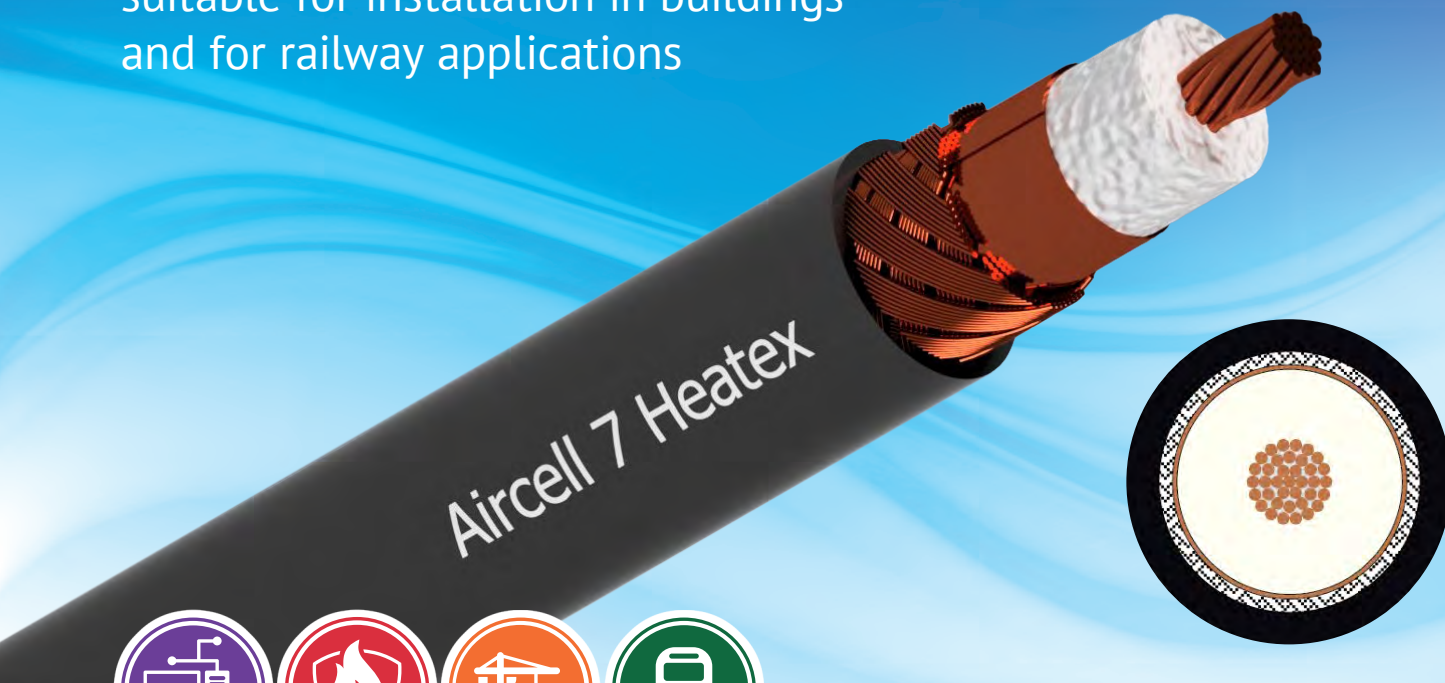
## Typ. Return Loss





# Aircell® 7 Heatex®

highly flexible, halogen-free, flame-retardant,  
suitable for installation in buildings  
and for railway applications



Aircell 7 Heatex is an ultraflexible coaxial cable designed for frequencies up to 6 GHz. Due to its low loss in relation to the outer diameter and the small bending radius the cable can be used for numerous RF applications.

The low attenuation of Aircell 7 Heatex is achieved by using advanced manufacturing techniques and low loss PE-LLC dielectric with a foaming rate of more than 70%. This unique dielectric also offers water resistance and long term stability. The inner conductor containing 19 stranded bare copper wires of low oxygen copper (OFC) provide the cable its remarkable flexibility. Further advantages of this cable include the use of double shielding which is constructed of overlapping 100 % tight copper foil and an additional shield braiding of bare copper wires with 85 % coverage. The copper foil has an applied PE coating which prevents foil cracking due to short radius bends. The jacket of the cable is made of a halogen-free and flame retardant copolymer. Due to this Heatex jacket, the cable has a low fire load, low flame propagation, limited smoke emission and reduced production of toxic and corrosive gases. With the fire protection rating Cca Aircell 7 Heatex is approved for installation in public buildings.

Aircell 7 Heatex is certified for railway applications for interior and exterior use according requirement sets R15 and R16 of the EN45545-2 standard.

## Key features

Diameter	7.3 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	20.44 dB
<b>f max</b>	<b>6 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Cca</b>

## Characteristics

- Certified according to EN 45545-2:2013+A1:2015 and EN 45545-2:2020 Requirement Sets R15 + R16 for railway applications
- Flame resistance tested according to EN 60332-1-2:2004 + A1:2015 + A11:2016 and EN 60332-1-3:2004 + A1:2015
- Smoke density tested according to DIN EN 61034-2:2005
- Smoke gas toxicity tested according to EN 50305:2002 Sec. 9.2
- Vertical flame spread tested according to EN 50305:2002 Sec. 9.1.1. (for cables with a diameter 6 mm < Ø < 12 mm)
- Halogen-free tested according to DIN EN 50306-1:2003
- Halogen acid gas content tested according to DIN EN 60754-1:2015 (HCl < 0.5 %)
- Acidity of the combustion gases tested according to DIN EN 60754-2:2015 (pH value > 4.3)
- Conductivity of the combustion gases tested according to DIN EN 60754-2:2015 (< 10.0 µS/mm)
- Fluorine content tested according to EN 60684-2:2011 Sec. 45.2 Procedure A (< 0.1 %).
- Jacket material according to DIN EN 50290-2-27 (HD 624.7)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- UV-resistant

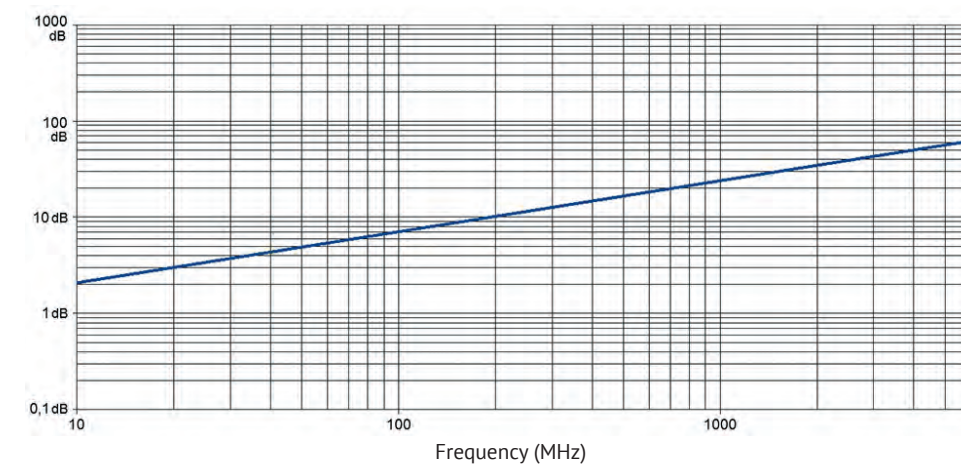
## Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	1.9 mm (19 × 0.38 mm, 14 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	5.0 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	85 %
Outer conductor Ø	5.7 mm
Jacket	thermoplastic copolymer (FRNC) black
Weight	73 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-40 to +80 °C Storage, Installation, Operation
Pulling strength	300 N

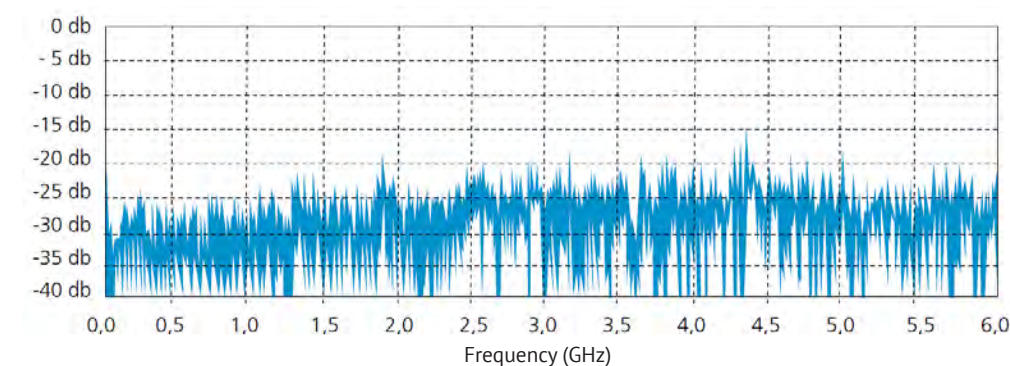
## Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 9.0 Ω/km
DC-resistance outer conductor	8.7 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	10 kV
Max. voltage	8 kV

## Typ. Attenuation (dB/100 m at 20 °C)



## Typ. Return Loss



	Aircell 7 Heatex	RG 213/U	RG 58/U
Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	2.09	2.00	5.00
100 MHz	5.97	7.00	17.00
500 MHz	13.98	17.00	39.00
1000 MHz	20.44	22.50	54.60
3000 MHz	38.84	58.50	118.00

## Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	1.52	1000 MHz	20.44
10 MHz	2.09	1296 MHz	23.60
50 MHz	4.29	1500 MHz	25.73
100 MHz	5.97	1800 MHz	28.50
144 MHz	7.22	2000 MHz	30.29
200 MHz	8.59	2400 MHz	33.82
300 MHz	10.64	3000 MHz	38.84
432 MHz	12.92	4000 MHz	46.66
500 MHz	13.98	5000 MHz	54.19
800 MHz	18.05	6000 MHz	61.66

## Max. Power Handling (W at 40 °C)

10 MHz	2.040	2400 MHz	118
100 MHz	620	3000 MHz	104
500 MHz	260	4000 MHz	89
1000 MHz	191	5000 MHz	78
2000 MHz	131	6000 MHz	70



# Aircom® Premium

very low-loss up to 12 GHz



Aircom Premium is an ultra-low attenuation coaxial cable with an upper frequency limit of 12 GHz. It is characterized by its low weight and very low attenuation. The highly precise-shaped aluminium inner conductor is surrounded by a copper foil that is applied and welded to the inner conductor. The skin effect ensures a high-performance RF transmission. The precise shapeability of the aluminium core is responsible for virtually no disturbances throughout the entire frequency range. Additionally, this new cable from the Aircom family is highly suitable for digital modulation methods, being very low in intermodulation.

The extremely low attenuation of Aircom Premium is achieved through a low attenuation PE dielectric. The material is also resistant to moisture. To achieve good shielding attenuation with low losses, the outer conductor of Aircom Premium is made of two layers of copper: a thin, overlapping copper foil is applied with a shielding braid covering 75 %. The foil is PE-coated on the inside, protecting against cracking in case of a one-time too small bending radius. The black PVC outer jacket of Aircom Premium is UV-stabilized.

Aircom Premium is a coaxial cable for most applications in telecommunications and radio technology: it is flexible, low in attenuation, and secure against radiation interference.

### Key features

Diameter	10.2 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	11.88 dB
<b>f max</b>	<b>12 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Eca</b>

### Characteristics

- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- Flame-retardant according to IEC 60332-1-2
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

### Technical Data

Inner conductor	Hybrid CCA – bare copper-clad aluminium wire
Inner conductor Ø	1 × 2.75 mm
Dielectric	blue foamed cellular polyethylene (PE) with skin
Dielectric Ø	7.2 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	7.9 mm
Jacket	PVC black, UV-stabilized
Weight	99 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	650 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 5.0 Ω/km
DC-resistance outer conductor	7.3 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	9 kV
Max. voltage	7 kV

### Aircom Premium RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	1.05	2.00	5.00
100 MHz	3.42	7.00	17.00
500 MHz	8.08	17.00	39.00
1000 MHz	11.88	22.50	54.60
3000 MHz	21.85	58.50	118.00

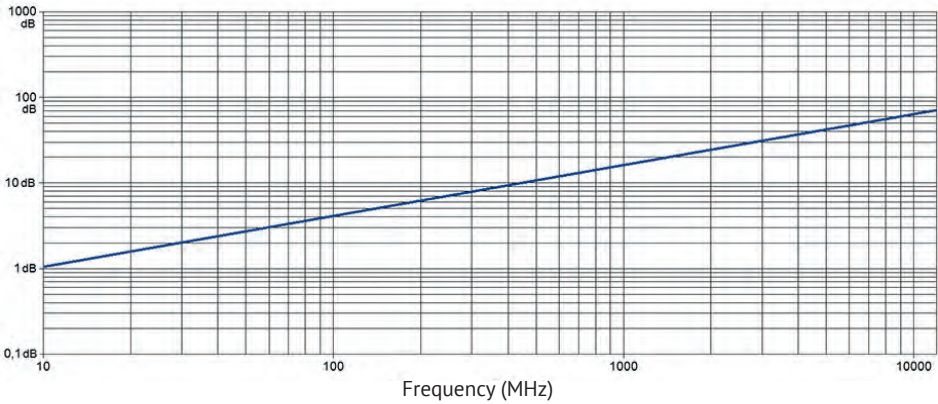
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	1.03	1500 MHz	14.28
10 MHz	1.05	1800 MHz	16.16
50 MHz	2.09	2000 MHz	17.29
100 MHz	3.42	2400 MHz	19.00
144 MHz	3.90	3000 MHz	21.85
200 MHz	4.51	4000 MHz	25.65
300 MHz	5.70	5000 MHz	29.45
432 MHz	7.22	6000 MHz	33.25
500 MHz	8.08	8000 MHz	42.75
800 MHz	10.55	10000 MHz	57.00
1000 MHz	11.88	12000 MHz	71.25
1296 MHz	13.38		

### Max. Power Handling (W at 40 °C)

10 MHz	4.700	3000 MHz	230
100 MHz	1400	4000 MHz	190
500 MHz	620	5000 MHz	170
1000 MHz	420	6000 MHz	150
2000 MHz	290	8000 MHz	130
2400 MHz	260	10000 MHz	100
		12000 MHz	80

### Typ. Attenuation (dB/100 m at 20 °C)



# Aircom® Premium FRNC

ultra low-loss up to 12 GHz  
and halogen-free



Aircom Premium FRNC is an ultra-low attenuation coaxial cable with an upper frequency limit of 12 GHz. It is characterized by its low weight and very low attenuation. The highly precise-shaped aluminium inner conductor is surrounded by a copper foil that is applied and welded to the inner conductor. The skin effect ensures a high-performance RF transmission. The precise shapeability of the aluminium core is responsible for virtually no disturbances throughout the entire frequency range. Additionally, this new cable from the Aircom family is highly suitable for digital modulation methods, being very low in intermodulation.

The extremely low attenuation of Aircom Premium FRNC is achieved through a low attenuation PE dielectric. The material is also resistant to moisture. To achieve good shielding attenuation with low losses, the outer conductor of Aircom Premium FRNC is made of two layers of copper: a thin, overlapping copper foil is applied with a shielding braid covering 75 %. The foil is PE-coated on the inside, protecting against cracking in case of a one-time too small bending radius. The jacket of the cable is made of a special thermoplastic copolymer, the halogen-free, flame-retardant material FRNC (Flame Retardant Non Corrosive). This gives Aircom Premium FRNC a low fire load, low fire spread, and minimal smoke development.

Aircom Premium FRNC is a coaxial cable for most applications in telecommunications and radio technology: it is flexible, low in attenuation, and secure against radiation interference.

### Key features

Diameter	10.2 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	11.88 dB
<b>f max</b>	<b>12 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Fca</b>

### Characteristics

- Jacket material according to DIN EN 50290-2-27 (HD 624.7)
- Flame-retardant according to IEC 60332-1-2
- Manufactured according to DIN EN 45545-2 Table 5 R15 HL2
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- Corrosivity of the combustion gases according to IEC 60754-2
- Smoke density according to IEC 61034
- UV-resistant

### Technical Data

Inner conductor	Hybrid CCA – bare copper-clad aluminium wire
Inner conductor Ø	1 × 2.75 mm
Dielectric	blue foamed cellular polyethylene (PE) with skin
Dielectric Ø	7.2 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	7.9 mm
Jacket	thermoplastic copolymer (FRNC) black
Weight	108 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	650 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 5.0 Ω/km
DC-resistance outer conductor	7.3 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	9 kV
Max. voltage	7 kV

	Aircom Premium FRNC	RG 213/U	RG 58/U
Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	1.05	2.00	5.00
100 MHz	3.42	7.00	17.00
500 MHz	8.08	17.00	39.00
1000 MHz	11.88	22.50	54.60
3000 MHz	21.85	58.50	118.00

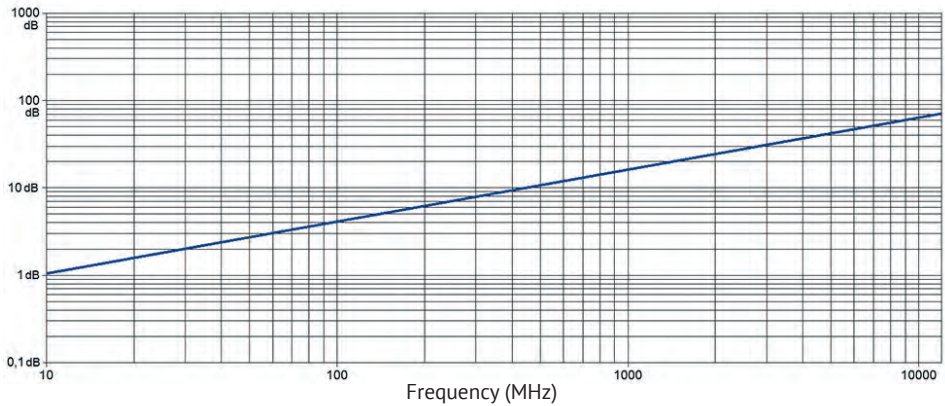
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	1.03	1500 MHz	14.28
10 MHz	1.05	1800 MHz	16.16
50 MHz	2.09	2000 MHz	17.29
100 MHz	3.42	2400 MHz	19.00
144 MHz	3.90	3000 MHz	21.85
200 MHz	4.51	4000 MHz	25.65
300 MHz	5.70	5000 MHz	29.45
432 MHz	7.22	6000 MHz	33.25
500 MHz	8.08	8000 MHz	42.75
800 MHz	10.55	10000 MHz	57.00
1000 MHz	11.88	12000 MHz	71.25

### Max. Power Handling (W at 40 °C)

10 MHz	4.700	3000 MHz	230
100 MHz	1400	4000 MHz	190
500 MHz	620	5000 MHz	170
1000 MHz	420	6000 MHz	150
2000 MHz	290	8000 MHz	130
2400 MHz	260	10000 MHz	100
		12000 MHz	80

### Typ. Attenuation (dB/100 m at 20 °C)





# Aircom<sup>®</sup> 15

ultra low-loss up to 10 GHz



Aircom 15 is an ultra-low-loss coaxial cable designed for a maximum frequency of 10 GHz. It is distinguished by its lightweight construction and very low attenuation. This cable is precision-manufactured with a hybrid inner conductor made of copper-clad aluminum wire (CCA), where the copper cladding covers the inner aluminum core. The combination of copper's excellent electrical conductivity and aluminum's lightweight properties in this composite material makes Aircom 15 ideal for a wide range of RF applications.

The aluminum core's precise formability ensures minimal impurities across the entire frequency range, contributing to a high-performance RF line through the skin effect. Additionally, Aircom 15 is well-suited for digital transmission modes, thanks to its outstanding PIM (passive intermodulation) performance.

The cable's remarkably low attenuation is achieved through a low-loss PE dielectric, which also provides resistance to moisture. Aircom 15 features double shielding, comprising a thin, overlapping aluminum foil and an additional shield braiding made of tinned copper wires with 70% coverage. The black PVC jacket of Aircom 15 is UV-stabilized. This cable is particularly well-suited for mobile communication, antenna system installations, and various other RF and 5G applications.



### Key features

Diameter	10.2 ± 0.3 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	8.7 dB
<b>f max</b>	<b>10 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Fca</b>

### Characteristics

- Conductor material according to DIN EN 13602 Cu-ETP-A
- Screen material according to DIN EN 13602 Cu-ETP-A...B
- Insulation material according to DIN EN 50290-2-23 (VDE 0819), Table L/MD (HD 624.3)
- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

### Technical Data

Inner conductor	Hybrid CCA – bare copper-clad aluminium wire
Inner conductor Ø	1 × 4.4 mm
Dielectric	blue foamed cellular polyethylene (PE) with skin
Dielectric Ø	11.3 mm
Outer conductor 1	aluminium-laminated foil overlapping
Shielding factor	100 %
Outer conductor 2	shield braiding of tinned copper wires
Shielding factor	70 %
Outer conductor Ø	12.1 mm
Jacket	PVC black, UV-stabilized
Weight	166 kg/km
Min. Bending radius	5 × Ø single, 10 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	1400 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 80 dB
DC-resistance inner conductor	≤ 2.0 Ω/km
DC-resistance outer conductor	5 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	9 kV
Max. voltage	7 kV

	Aircom 15	RG 213/U	RG 58/U
Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	0.70	2.00	5.00
100 MHz	2.40	7.00	17.00
500 MHz	5.80	17.00	39.00
1000 MHz	8.70	22.50	54.60
3000 MHz	16.90	58.50	118.00

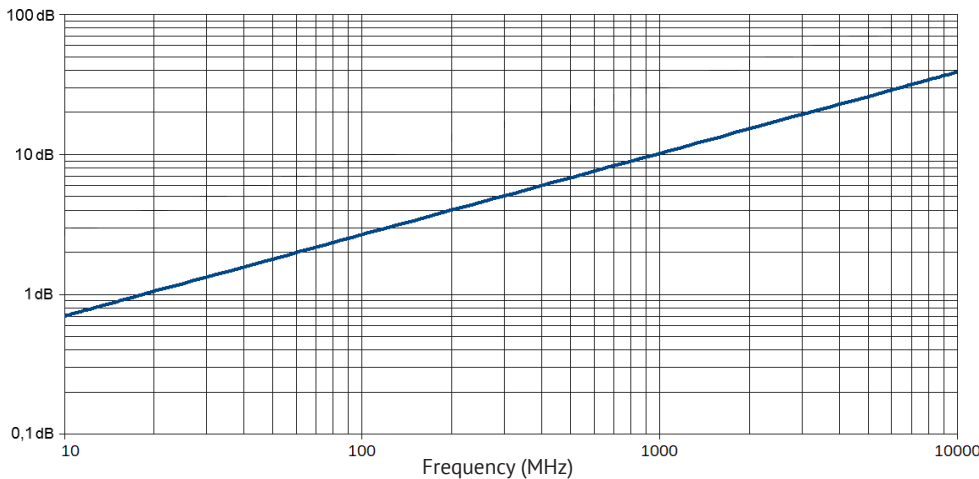
### Typ. Attenuation (dB/100 m at 20 °C)

10 MHz	0.70	1296 MHz	10.00
20 MHz	0.90	1500 MHz	10.90
50 MHz	1.46	1800 MHz	12.20
100 MHz	2.40	2000 MHz	13.10
144 MHz	2.77	2400 MHz	14.70
200 MHz	3.25	3000 MHz	16.90
300 MHz	4.10	4000 MHz	20.20
432 MHz	5.23	5000 MHz	23.50
500 MHz	5.80	6000 MHz	26.50
800 MHz	7.60	8000 MHz	32.10
1000 MHz	8.70	10000 MHz	37.50

### Max. Power Handling (W at 40 °C)

10 MHz	8700	3000 MHz	375
100 MHz	2660	5000 MHz	270
500 MHz	1100	6000 MHz	240
1000 MHz	740	8000 MHz	195
2000 MHz	470	10000 MHz	170
2400 MHz	430		

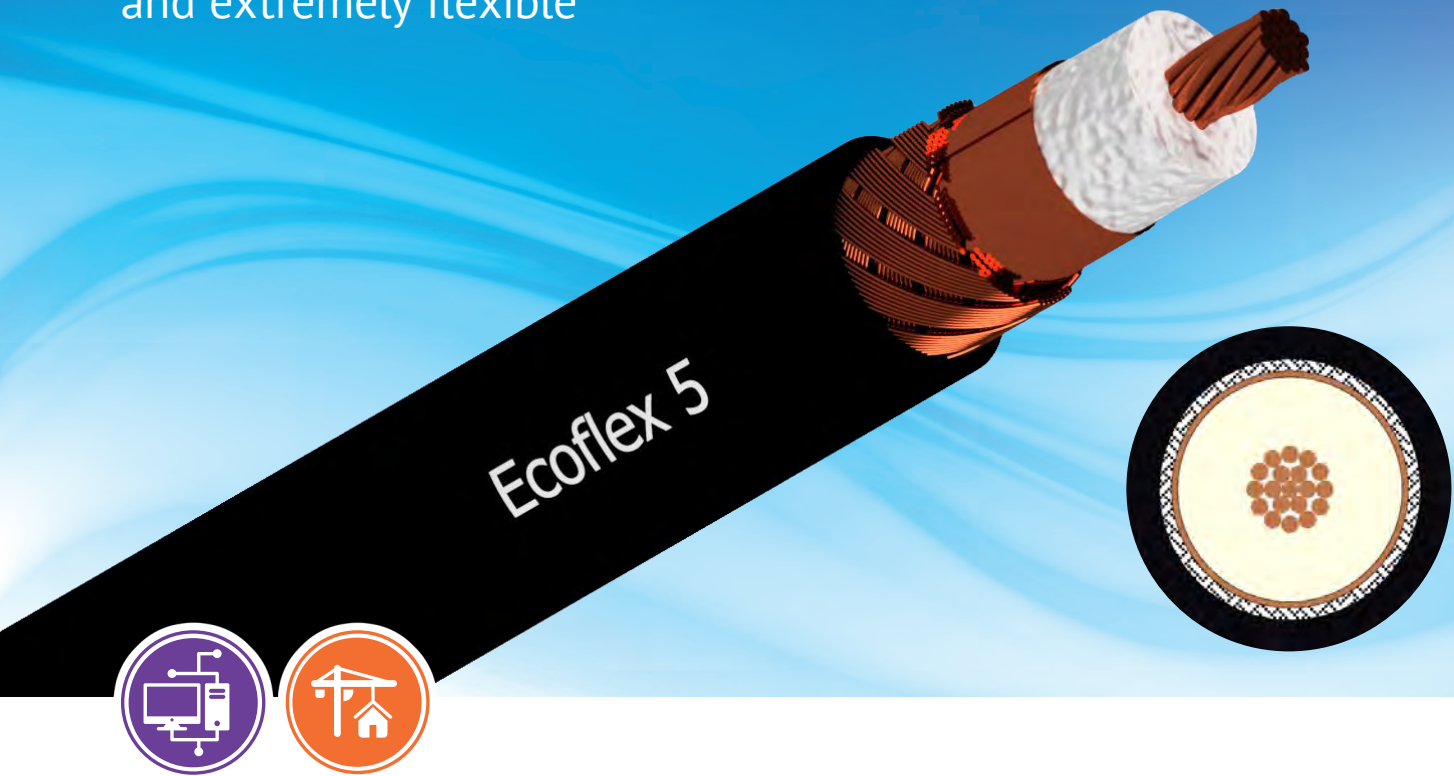
### Typ. Attenuation (dB/100 m at 20 °C)





# Ecoflex<sup>®</sup> 5

thin, very low-loss,  
and extremely flexible



Ecoflex 5 is a thin and extremely flexible coaxial cable designed for frequencies up to 6 GHz. Due to its low loss in relation to the outer diameter of 5,5 mm and the very small bending radius the cable can be used for numerous RF applications.

The low attenuation values of Ecoflex 5 are achieved by using advanced manufacturing techniques and low loss PE-LLC dielectric with a foaming rate of more than 70 %. This unique dielectric also offers water resistance and long term stability. The inner conductor of Ecoflex 5 contains 19 stranded bare copper wires with diameter of 0,287 mm each, manufactured from low oxygen copper (OFC). Such inner conductor structure provide the cable its remarkable flexibility. Further advantages of this cable include the use of double shielding which is constructed of overlapping 100 % tight copper foil and an additional shield braiding of bare copper wires with 80 % coverage. The copper foil has an applied PE coating which prevents foil cracking due to short radius bends. The black PVC jacket of Ecoflex 5 is UV-stabilized.

Ecoflex 5 is an innovative coaxial cable, which is the right choice, when an extremely flexible, very low loss, and microwave rated cable is required. It can be used for numerous RF applications.

## Key features

Diameter	5.0 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	26.13 dB
<b>f max</b>	<b>6 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Fca</b>

## Characteristics

- Insulation material according to DIN EN 50290-2-23 (VDE 0819), Tab. 2/A (HD 624.3)
- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- Flame-retardant according to IEC 60332-1-2
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

## Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	1.44 mm (19 × 0.287 mm, 17 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	3.7 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	80 %
Outer conductor Ø	4.2 mm
Jacket	PVC black
Weight	42 kg/km
Min. Bending radius	5 × Ø single, 10 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	150 N

## Electrical Data at 20 °C

Capacitance (1 kHz)	≈ 82 nF/km
Velocity factor	0.80
Shielding attenuation 1 GHz	≥ 85 dB
DC-resistance inner conductor	≤ 15 Ω/km
DC-resistance outer conductor	17 Ω/km
Insulation resistance	≥ 5 GΩ*km
Test Voltage DC (wire/screen)	4 kV
Max. voltage	2.5 kV

## Ecoflex 5 RG 58/U RG 213/U

Capacitance	82 pF/m	102 pF/m	101 pF/m
Velocity factor	0.80	0.66	0.66
Attenuation(dB/100m)			
10 MHz	2.66	5.00	2.00
100 MHz	7.60	17.00	7.00
500 MHz	18.05	39.00	17.00
1000 MHz	26.13	54.60	22.50
3000 MHz	49.40	118.00	58.50

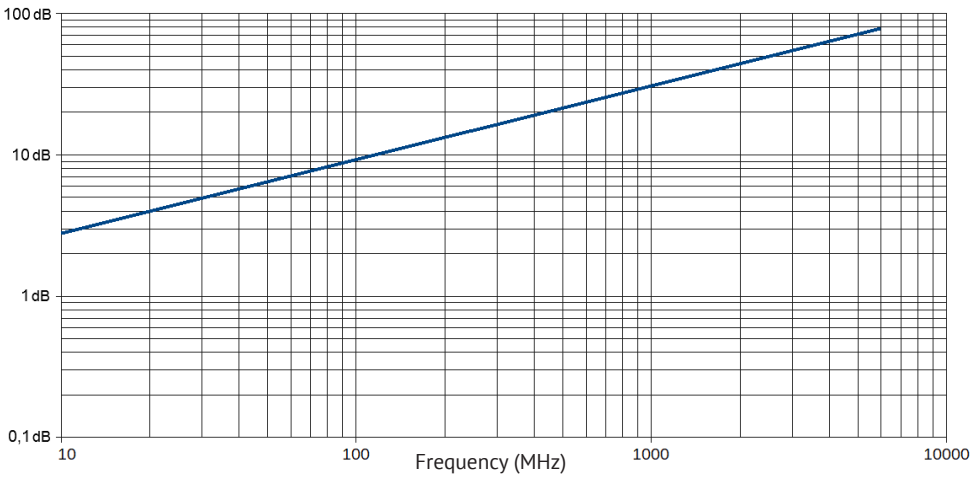
## Typ. Attenuation (dB/100 m at 20 °C)

10 MHz	2.66	1000 MHz	26.13
20 MHz	3.80	1296 MHz	29.93
50 MHz	5.32	1500 MHz	32.59
100 MHz	7.60	1800 MHz	36.39
144 MHz	8.74	2000 MHz	38.95
200 MHz	10.21	2400 MHz	43.23
300 MHz	12.83	3000 MHz	49.40
432 MHz	16.29	4000 MHz	57.95
500 MHz	18.05	5000 MHz	66.03
800 MHz	22.90	6000 MHz	74.10

## Max. Power Handling (W at 40 °C)

10 MHz	1.200	1000 MHz	123
20 MHz	914	2000 MHz	84
50 MHz	575	3000 MHz	67
100 MHz	405	4000 MHz	58
500 MHz	177	6000 MHz	45

## Typ. Attenuation (dB/100 m at 20 °C)





# Ecoflex<sup>®</sup> 7

extremely low-loss and highly flexible



Ecoflex 7 is a highly flexible coaxial cable designed for the frequency range up to 6 GHz. The extremely low attenuation and small bending radius of this cable make it interesting and recommended for many applications in high-frequency technology.

The excellent attenuation values of Ecoflex 7 are achieved by using a low attenuation PE-LLC dielectric with a gas content of over 70 %. This material is also resistant to moisture. The inner conductor of Ecoflex 7 consists of 19 stranded wires with a diameter of 0.38 mm each, made of low-oxygen copper. This inner conductor structure allows for extraordinary flexibility of the cable. To achieve good shielding attenuation, the outer conductor of Ecoflex 7 is designed with two layers: a thin, overlapping copper foil is covered with a copper shielding braid with a covering degree of 85 %.

The foil is PE-coated on the inside, protecting it against cracking in case of a too small bending radius. The black PVC outer jacket of Ecoflex 7 is UV-stabilized.

Ecoflex 7 is an innovative and versatile coaxial cable suitable for numerous applications, being extremely flexible, extremely low in attenuation, and radiation-resistant.

### Key features

Diameter	7.3 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	18.43 dB
<b>f max</b>	<b>6 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Eca</b>

### Characteristics

- Conductor/screen material according to DIN EN 13602 Cu-ETP-A
- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- Flame-retardant according to IEC 60332-1-2
- Flame-retardant according to ECE-R 118 Amendment Series 02, Paragraph 6.2.6 with ISO 6722-1:2012 Paragraph 12
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

### Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	1.9 mm (19 × 0.38 mm, 14 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	5.0 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	85 %
Outer conductor Ø	5.7 mm
Jacket	PVC black, UV-resistant
Weight	70 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	300 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 9.0 Ω/km
DC-resistance outer conductor	8.7 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	10 kV
Max. voltage	8 kV

### Ecoflex 7 RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	1.88	2.00	5.00
100 MHz	5.37	7.00	17.00
500 MHz	12.59	17.00	39.00
1000 MHz	18.43	22.50	54.60
3000 MHz	34.96	58.50	118.00

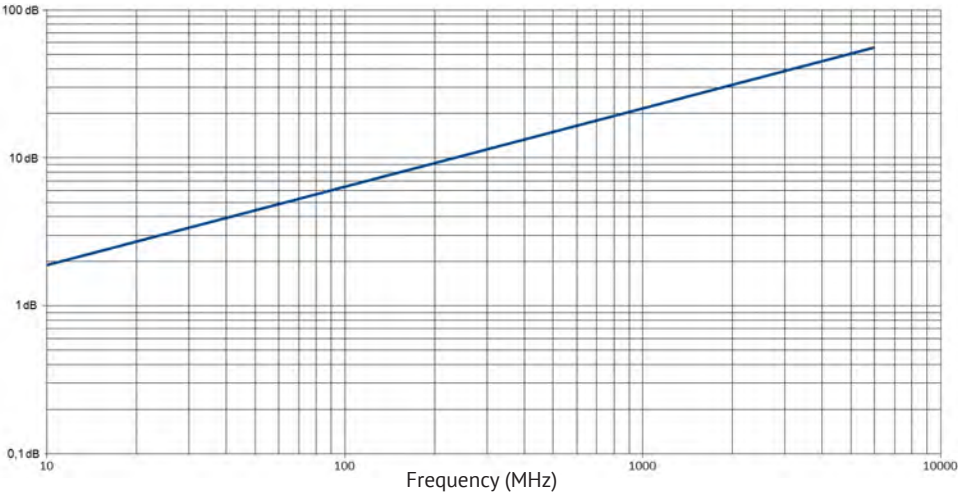
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	1.33	1000 MHz	18.43
10 MHz	1.88	1296 MHz	20.71
50 MHz	3.33	1500 MHz	22.99
100 MHz	5.37	1800 MHz	25.46
144 MHz	6.08	2000 MHz	27.27
200 MHz	7.13	2400 MHz	30.40
300 MHz	8.93	3000 MHz	34.96
432 MHz	11.40	4000 MHz	41.99
500 MHz	12.59	5000 MHz	48.83
800 MHz	15.96	6000 MHz	55.48

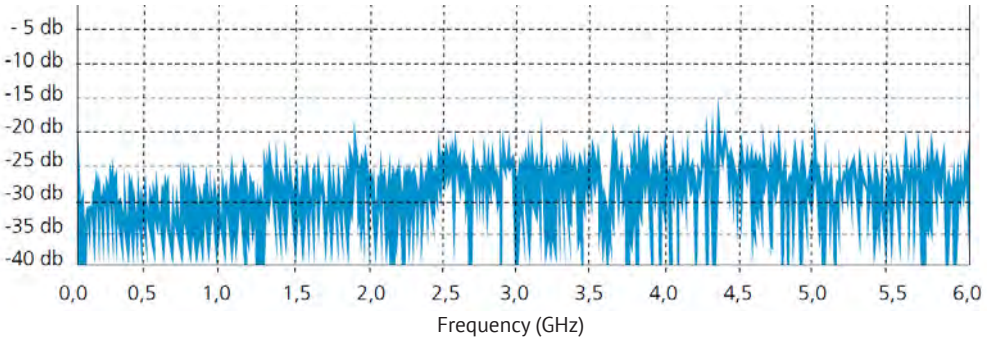
### Max. Power Handling (W at 40 °C)

10 MHz	2.040	2400 MHz	118
100 MHz	620	3000 MHz	104
500 MHz	260	4000 MHz	89
1000 MHz	191	5000 MHz	78
2000 MHz	131	6000 MHz	70

### Typ. Attenuation (dB/100 m at 20 °C)



### Typ. Return Loss





# Ecoflex<sup>®</sup> 10

extremely flexible and low-loss



Ecoflex 10 is a flexible and very low-loss 50 ohm coaxial cable designed for the frequency range up to 6 GHz. State-of-the-art production methods and the use of a low attenuation PE-LLC dielectric with a gas content of over 70 % enable low attenuation values that set standards for flexible coaxial cables of this size.

The high flexibility of Ecoflex 10 is ensured by a 7-strand stranded inner conductor made of low-oxygen copper. The inner conductor is compressed, calibrated, and then provided with a pre-coating in a special process to achieve good attenuation and matching values. Another advantage is the double shielding: an overlapping copper foil and an overlying copper braid ensure a high shielding effectiveness of > 90 dB at 1 GHz.

The black PVC outer jacket of Ecoflex 10 is UV-stabilized. To simplify installation, a high-quality solder-free N connector has been developed, which can be assembled in a few minutes without special tools. Ecoflex 10 is a modern coaxial cable for all applications in high-frequency technology: low attenuation, flexible, radiation-resistant, and usable into the microwave range.

### Key features

Diameter	10.2 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	13.49 dB
f max	6 GHz
Euroclass according to EN 50575	Eca

### Characteristics

- Conductor material according to DIN EN 13602 Cu-ETP-A
- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- Flame-retardant according to IEC 60332-1-2
- Flame-retardant according to UN/ECE-R 118:2019-06 § 6.2.6, ISO 6722-1:2011-10 § 5.22
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

### Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	2.85 mm (7 × 1.0 mm, 10 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	7.2 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	7.9 mm
Jacket	PVC black, UV-stabilized
Weight	129 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	600 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 3.5 Ω/km
DC-resistance outer conductor	6.6 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

### Ecoflex 10 RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	1.14	2.00	5.00
100 MHz	3.80	7.00	17.00
500 MHz	9.12	17.00	39.00
1000 MHz	13.49	22.50	54.60
3000 MHz	25.37	58.50	118.00

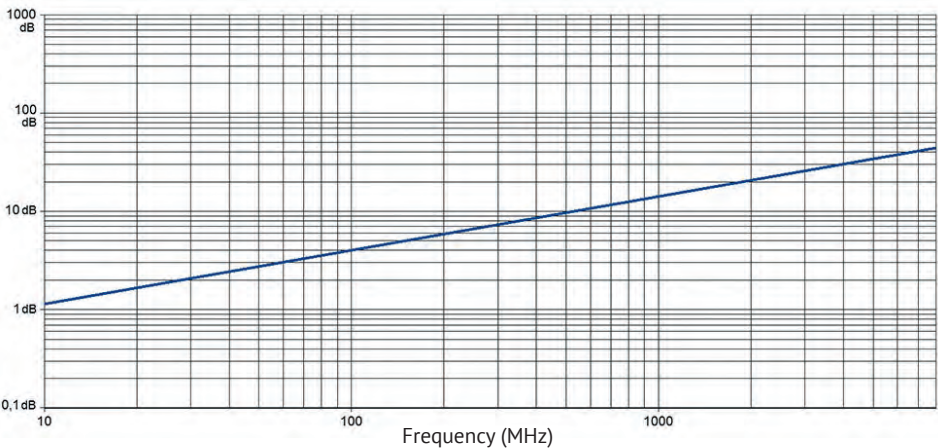
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.76	1000 MHz	13.49
10 MHz	1.14	1296 MHz	15.68
50 MHz	2.66	1500 MHz	17.01
100 MHz	3.80	1800 MHz	18.91
144 MHz	4.66	2000 MHz	20.14
200 MHz	5.51	2400 MHz	22.42
300 MHz	6.94	3000 MHz	25.37
432 MHz	8.46	4000 MHz	29.55
500 MHz	9.12	5000 MHz	33.44
800 MHz	11.88	6000 MHz	37.05

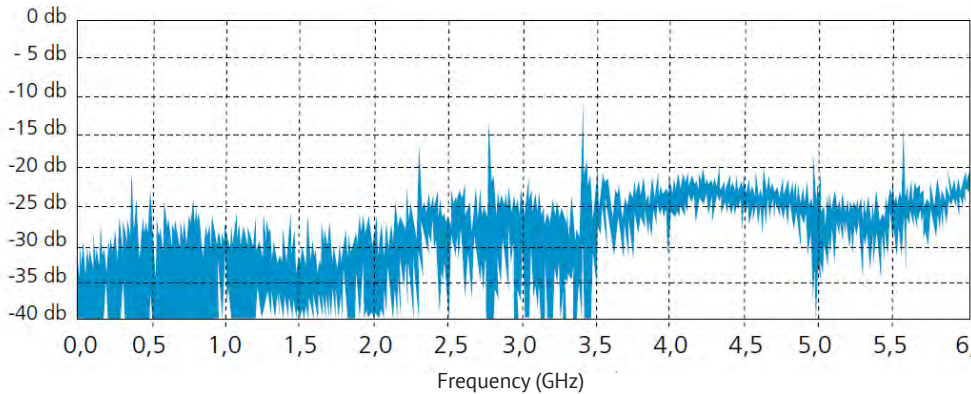
### Max. Power Handling (W at 40 °C)

10 MHz	3.960	2400 MHz	210
100 MHz	1.210	3000 MHz	180
500 MHz	510	4000 MHz	150
1000 MHz	350	5000 MHz	130
2000 MHz	230	6000 MHz	120

### Typ. Attenuation (dB/100 m at 20 °C)



### Typ. Return Loss





# Ecoflex® 10 FRNC

extremely flexible, low-loss  
and halogen-free



Ecoflex 10 FRNC is a flexible and very low-loss 50 ohm coaxial cable designed for the frequency range up to 6 GHz. State-of-the-art production methods and the use of a low attenuation PE-LLC dielectric with a gas content of over 70% enable low attenuation values that set standards for flexible coaxial cables of this size.

The high flexibility of Ecoflex 10 FRNC is ensured by a 7-strand stranded inner conductor made of low-oxygen copper. The inner conductor is compressed, calibrated, and then provided with a pre-coating in a special process to achieve good attenuation and matching values. Another advantage is the double shielding: an overlapping copper foil and an overlying copper braid ensure a high shielding effectiveness of > 90 dB at 1 GHz.

The jacket of the cable is made of a special thermoplastic copolymer, the halogen-free, flame-retardant material FRNC (Flame Retardant Non Corrosive). Therefore, Ecoflex 10 FRNC has low fire load, low fire propagation, and minimal smoke production. Due to the fire protection class Cca, Ecoflex 10 FRNC is suitable for installation in public buildings.

## Key features

Diameter	10.2 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	13.49 dB
<b>f max</b>	<b>6 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Cca</b>

## Characteristics

- Certified according to EN 50575:2014 + A1:2016 for applications in buildings with requirements for fire behavior
- Flame retardancy tested according to DIN EN 60332-1-2:2005-06 + DIN EN 60332-1-1:2017-09
- Heat release tested according to DIN EN 50399:2017-02
- Vertical flame spread tested according to DIN EN 50399:2017-02
- Smoke production tested according to DIN EN 50399:2017-02
- Burning droplets tested according to DIN EN 50399:2017-02
- Acidity of combustion gases tested according to DIN EN 60754-2:2015-08 (pH value > 4.3)
- Conductivity of combustion gases tested according to DIN EN 60754-2:2015-08 (< 2.5 µS/mm)
- Smoke density according to IEC 61034
- Jacket material according to DIN EN 50290-2-27 (HD 624.7)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- UV-resistant
- Manufactured according to DIN EN 45545-2 Table 5 R15 HL2

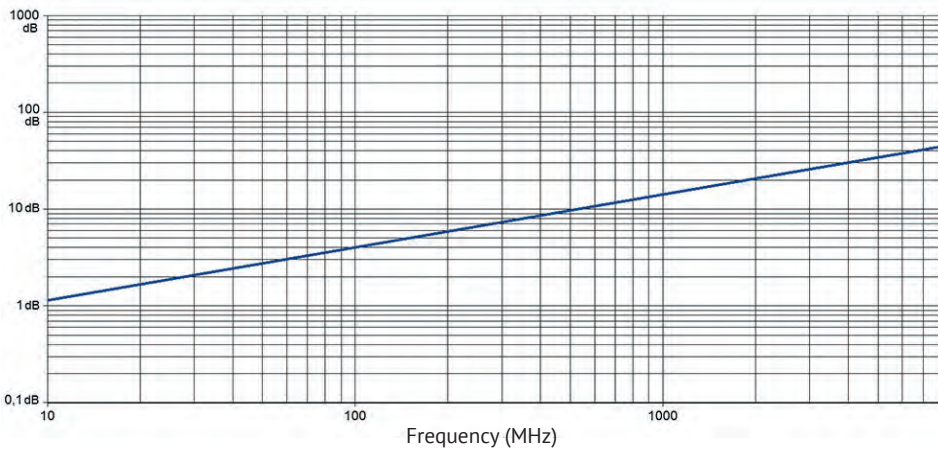
## Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	2.85 mm (7 × 1.0 mm, 10 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	7.2 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	7.9 mm
Jacket	highly flexible thermoplastic copolymer (FRNC) black
Weight	136 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	600 N

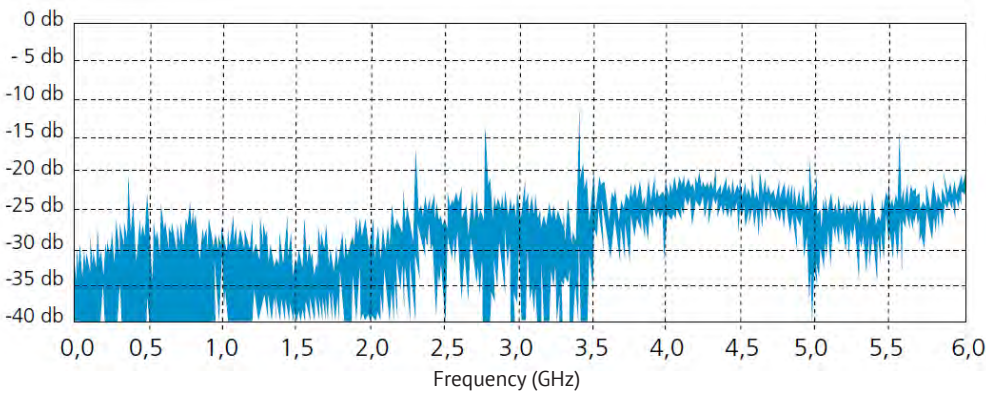
## Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 3.5 Ω/km
DC-resistance outer conductor	6.6 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

## Typ. Attenuation (dB/100 m at 20 °C)



## Typ. Return Loss



	Ecoflex 10 FRNC	RG 213/U	RG 58/U
Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	1.14	2.00	5.00
100 MHz	3.80	7.00	17.00
500 MHz	9.12	17.00	39.00
1000 MHz	13.49	22.50	54.60
3000 MHz	25.37	58.50	118.00

## Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.76	1000 MHz	13.49
10 MHz	1.14	1296 MHz	15.68
50 MHz	2.66	1500 MHz	17.01
100 MHz	3.80	1800 MHz	18.91
144 MHz	4.66	2000 MHz	20.14
200 MHz	5.51	2400 MHz	22.42
300 MHz	6.94	3000 MHz	25.37
432 MHz	8.46	4000 MHz	29.55
500 MHz	9.12	5000 MHz	33.44
800 MHz	11.88	6000 MHz	37.05

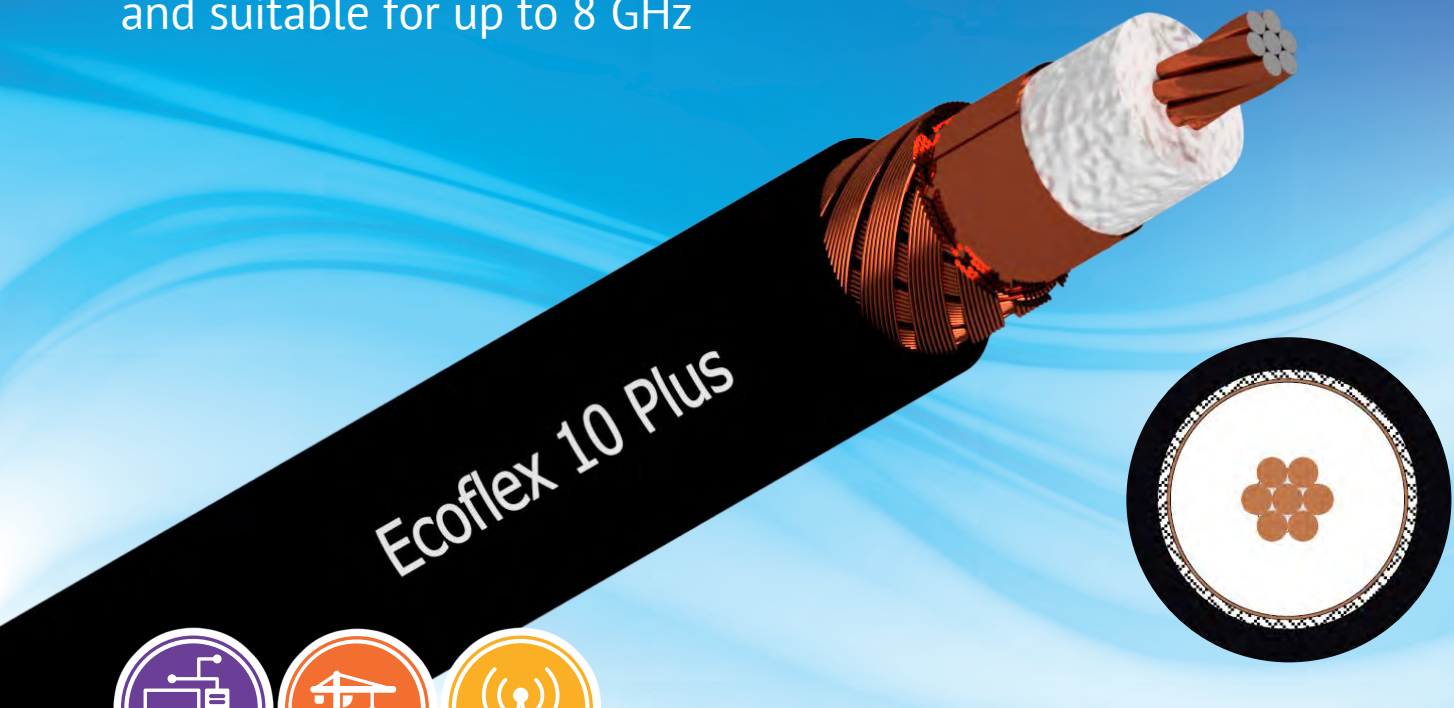
## Max. Power Handling (W at 40 °C)

10 MHz	3.960	2400 MHz	210
100 MHz	1.210	3000 MHz	180
500 MHz	510	4000 MHz	150
1000 MHz	350	5000 MHz	130
2000 MHz	230	6000 MHz	120



# Ecoflex<sup>®</sup> 10 Plus

extremely flexible, low-loss,  
and suitable for up to 8 GHz



Ecoflex 10 Plus is a highly flexible, low-loss coaxial cable specifically designed for operation up to 8 GHz. State-of-the-art production methods and the use of a low attenuation PE-LLC dielectric with a gas content of over 70 % enable very low attenuation values. The Ecoflex 10 Plus sets new standards for flexible coaxial cables.

The high flexibility of Ecoflex 10 Plus is ensured by a 7-strand hybrid inner conductor with an aluminium core and welded copper jacket. The inner conductor is twisted, compressed, calibrated, and then provided with a pre-coating in precise production steps to achieve very good attenuation and matching values. Another advantage is the double shielding. An overlapping copper foil and an overlying copper braid ensure a high shielding effectiveness of > 90 dB at 1 GHz. The copper foil has a PE coating that prevents cracks in the copper foil from forming due to small bending radii. The black PVC outer jacket of Ecoflex 10 Plus is UV-stabilized.

In addition to a complete range of standard connectors, a user-friendly solder-free N connector has been specially developed for the Ecoflex 10 Plus. The connector can be installed in a few minutes without special tools. Ecoflex 10 Plus is the innovative coaxial cable for all applications in high-frequency technology: low attenuation, ultra-flexible, radiation-resistant, and usable in the microwave range.

### Key features

Diameter	10.2 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	13.49 dB
<b>f max</b>	<b>8 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Eca</b>

### Characteristics

- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- Flame-retardant according to IEC 60332-1-2
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

### Technical Data

Inner conductor	Hybrid CCA – copper-clad aluminium stranded wire
Inner conductor Ø	2.85 mm (7 × 1.0 mm, 10 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	7.2 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	7.9 mm
Jacket	PVC black, UV-stabilized
Weight	96 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	600 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 5.4 Ω/km
DC-resistance outer conductor	6.6 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

### Ecoflex 10 Plus RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	1.14	2.00	5.00
100 MHz	3.80	7.00	17.00
500 MHz	9.12	17.00	39.00
1000 MHz	13.49	22.50	54.60
3000 MHz	25.37	58.50	118.00

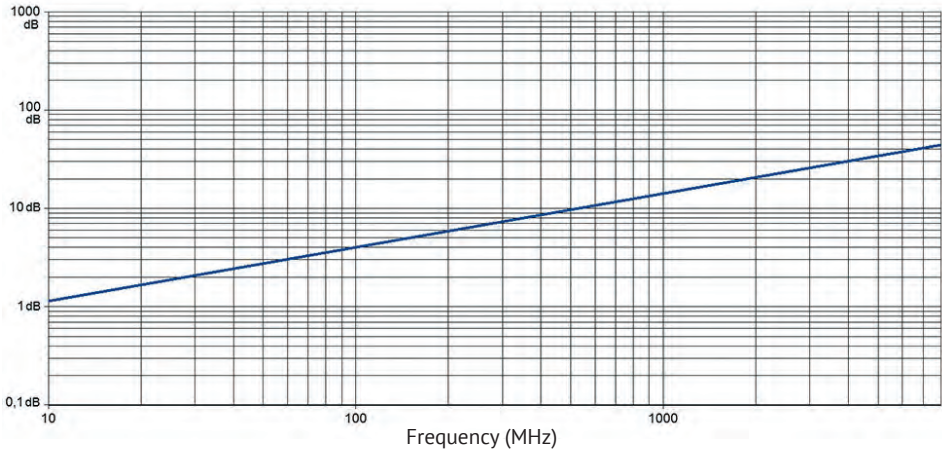
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.76	1000 MHz	13.49
10 MHz	1.14	1296 MHz	15.68
50 MHz	2.66	1500 MHz	17.01
100 MHz	3.80	1800 MHz	18.91
144 MHz	4.66	2000 MHz	20.14
200 MHz	5.51	2400 MHz	22.42
300 MHz	6.94	3000 MHz	25.37
432 MHz	8.46	4000 MHz	29.55
500 MHz	9.12	5000 MHz	33.44
800 MHz	11.88	6000 MHz	37.05
		8000 MHz	44.08

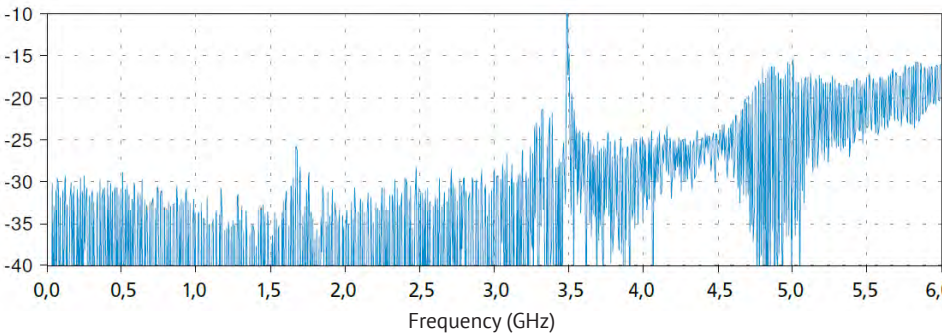
### Max. Power Handling (W at 40 °C)

10 MHz	3.100	2400 MHz	175
100 MHz	960	3000 MHz	154
500 MHz	413	4000 MHz	130
1000 MHz	285	5000 MHz	115
2000 MHz	194	6000 MHz	100
		8000 MHz	86

### Typ. Attenuation (dB/100 m at 20 °C)



### Typ. Return Loss





# Ecoflex® 10 Plus Heatex®

flame-retardant, halogen-free,  
suitable for installation in buildings  
and for railway applications



Ecoflex 10 Plus Heatex is a halogen-free and flame-retardant coaxial cable designed for installation in buildings, facilities, and high-risk areas.

Ecoflex cables with Heatex jackets are flame-resistant and have minimal fire propagation. Heatex jackets are low-smoke, ensuring visibility of escape routes in case of a fire. Heatex jackets are halogen-free and do not contain reactive elements such as fluorine, chlorine, and bromine. They do not produce corrosive gases that could lead to significant property damage. The UV stability of the robust Heatex jacket allows for exterior use without limitations.

Ecoflex 10 Plus Heatex features a 7-strand hybrid inner conductor with an aluminium core and welded copper jacket. The surface characteristics and corresponding RF properties are significantly better than those of conventional copper strands. Another advantage is the double shielding: an overlapping copper foil and an overlying copper braid ensure a high shielding effectiveness of > 90 dB at 1 GHz.

Due to its Cca fire protection class, Ecoflex 10 Plus Heatex is suitable for installation in public buildings. Ecoflex 10 Plus Heatex is certified for railway applications for interior/ exterior use according to the R15 and R16 requirement sets of EN 45545-2 standard.

## Key features

Diameter	10.2 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	13.49 dB
f max	8 GHz
Euroclass according to EN 50575	Cca

## Characteristics

- Certified according to EN 45545-2:2013+A1:2015 and EN 45545-2:2020 Requirement Sets R15 + R16 for railway applications
- Flame resistance tested according to EN 60332-1-2:2004 + A1:2015 + A11:2016 and EN 60332-1-3:2004 + A1:2015
- Smoke density tested according to DIN EN 61034-2:2005
- Smoke gas toxicity tested according to EN 50305:2002 Sec. 9.2
- Vertical flame spread tested according to EN 50305:2002 Sec. 9.1.1. (for cables with a diameter 6 mm < Ø < 12 mm)
- Halogen-free tested according to DIN EN 50306-1:2003
- Halogen acid gas content tested according to DIN EN 60754-1:2015 (HCl < 0.5 %)
- Acidity of the combustion gases tested according to DIN EN 60754-2:2015 (pH value > 4.3)
- Conductivity of the combustion gases tested according to DIN EN 60754-2:2015 (< 10.0 µS/mm)
- Fluorine content tested according to EN 60684-2:2011 Sec. 45.2 Procedure A (< 0.1 %)
- Jacket material according to DIN EN 50290-2-27 (HD 624.7)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- UV-resistant

## Technical Data

Inner conductor	Hybrid CCA – copper-clad aluminium stranded wire
Inner conductor Ø	2.85 mm (7 × 1.0 mm, 10 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	7.2 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	7.9 mm
Jacket	highly flexible thermoplastic copolymer (FRNC) black
Weight	106 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	600 N

## Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 5.1 Ω/km
DC-resistance outer conductor	6.6 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

	Ecoflex 10 Plus Heatex	RG 213/U	RG 58/U
Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	1.14	2.00	5.00
100 MHz	3.80	7.00	17.00
500 MHz	9.12	17.00	39.00
1000 MHz	13.49	22.50	54.60
3000 MHz	25.37	58.50	118.00

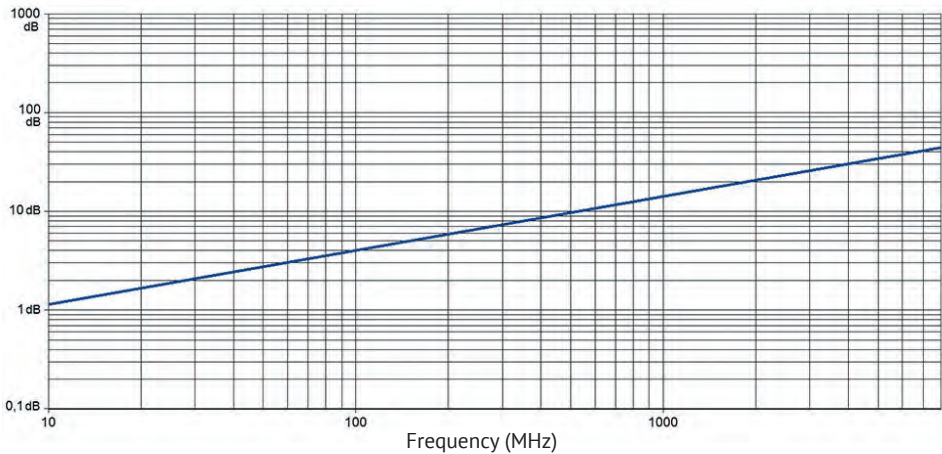
## Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.76	1000 MHz	13.49
10 MHz	1.14	1296 MHz	15.68
50 MHz	2.66	1500 MHz	17.01
100 MHz	3.80	1800 MHz	18.91
144 MHz	4.66	2000 MHz	20.14
200 MHz	5.51	2400 MHz	22.42
300 MHz	6.94	3000 MHz	25.37
432 MHz	8.46	4000 MHz	29.55
500 MHz	9.12	5000 MHz	33.44
800 MHz	11.88	6000 MHz	37.05
		8000 MHz	44.08

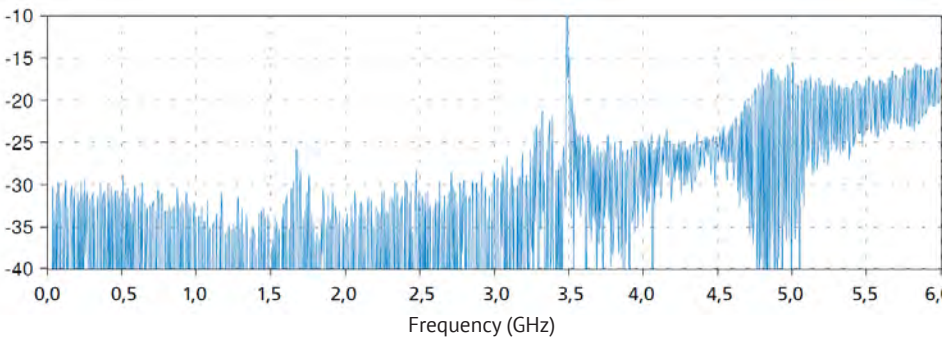
## Max. Power Handling (W at 40 °C)

10 MHz	3,100	2400 MHz	175
100 MHz	960	3000 MHz	154
500 MHz	413	4000 MHz	130
1000 MHz	285	5000 MHz	115
2000 MHz	194	6000 MHz	100
		8000 MHz	86

## Typ. Attenuation (dB/100 m at 20 °C)



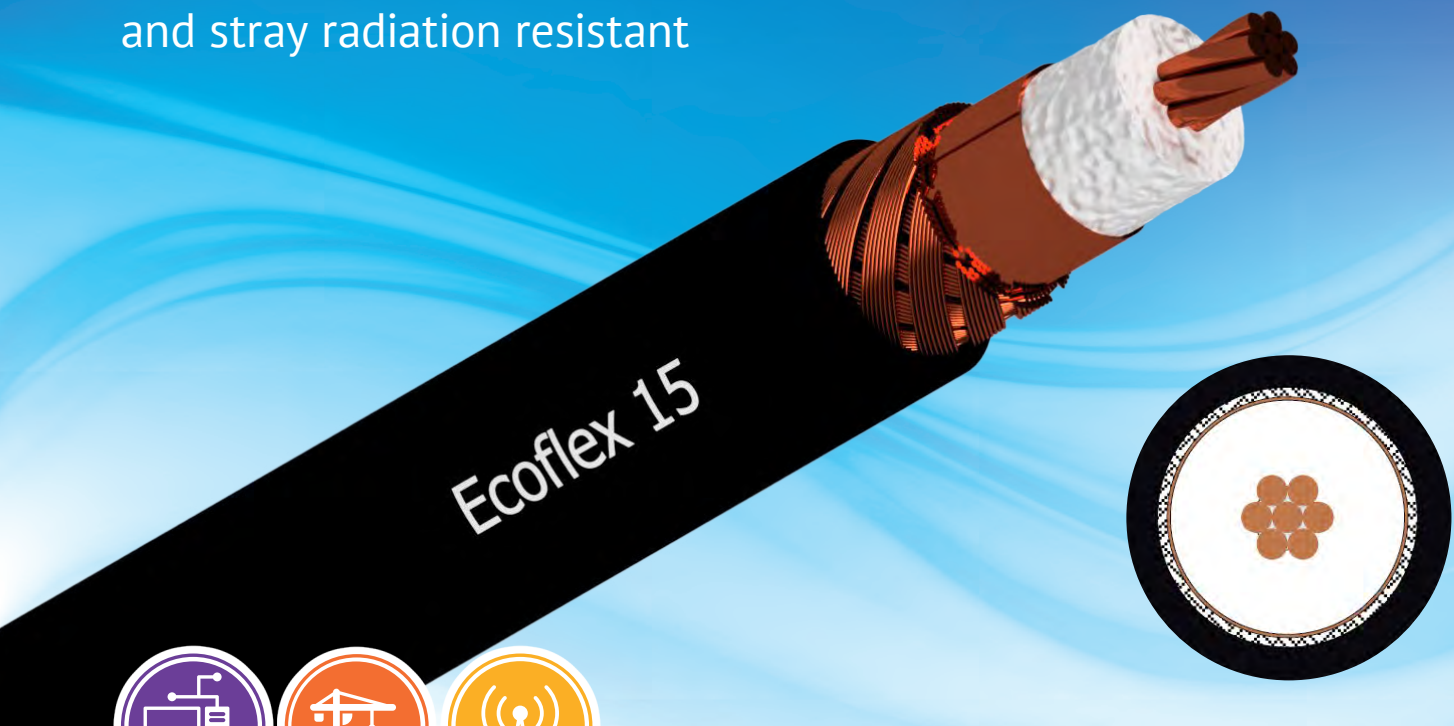
## Typ. Return Loss





# Ecoflex<sup>®</sup> 15

flexible, low-loss,  
and stray radiation resistant



Ecoflex 15 is a flexible and very low-loss 50 ohm coaxial cable for the frequency range up to 6 GHz. State-of-the-art production methods and the use of a low attenuation PE-LLC dielectric with a gas content of over 70 % enable low attenuation values.

The special design of Ecoflex 15 combines the excellent attenuation values of rigid 1/2" cables with a solid inner conductor with the easy installation of flexible coaxial cables with stranded inner conductors. The good flexibility of Ecoflex 15 is ensured by a 7-strand stranded inner conductor made of low-oxygen copper. The inner conductor is compressed, calibrated, and then coated with a pre-coating in a special process to achieve good attenuation and matching values. Another advantage is the double shielding: an overlapping copper foil and an overlying copper braid ensure a high shielding effectiveness of > 90 dB at 1 GHz.

The black PVC outer jacket of Ecoflex 15 is UV-stabilized. To simplify installation, solder-free connectors of the N, UHF, and 7-16 DIN standards have been developed, which can be assembled without special tools in a short time. Ecoflex 15 is a modern coaxial cable for all applications in high-frequency technology: low attenuation, flexible, electromagnetic interference-resistant, and usable up to the microwave range.

Especially for longer runs and critical connections where every "dB" counts, Ecoflex 15 offers significant advantages.

### Key features

Diameter	14.6 ± 0.3 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	9.80 dB
<b>f max</b>	<b>6 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Eca</b>

### Characteristics

- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- Flame-retardant according to IEC 60332-1-2
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

### Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	4.5 mm (7 × 1.5 mm)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	11.3 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	12.1 mm
Jacket	PVC black, UV-stabilized
Weight	245 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	1300 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 1.5 Ω/km
DC-resistance outer conductor	5.0 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

### Ecoflex 15 RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	0.86	2.00	5.00
100 MHz	2.81	7.00	17.00
500 MHz	6.70	17.00	39.00
1000 MHz	9.80	22.50	54.60
3000 MHz	18.30	58.50	118.00

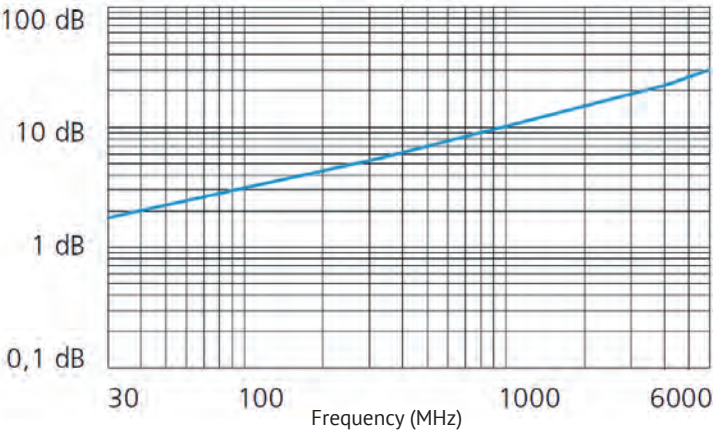
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.60	1000 MHz	9.80
10 MHz	0.86	1296 MHz	11.40
50 MHz	1.96	1500 MHz	12.40
100 MHz	2.81	1800 MHz	13.80
144 MHz	3.40	2000 MHz	14.60
200 MHz	4.05	2400 MHz	16.20
300 MHz	5.00	3000 MHz	18.30
432 MHz	6.10	4000 MHz	21.60
500 MHz	6.70	5000 MHz	24.60
800 MHz	8.60	6000 MHz	27.50

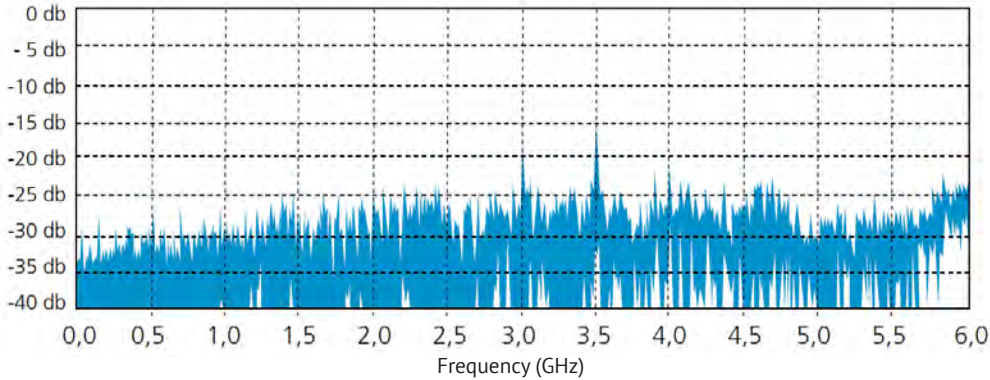
### Max. Power Handling (W at 40 °C)

10 MHz	6.327	2400 MHz	326
100 MHz	1.928	3000 MHz	284
500 MHz	810	4000 MHz	237
1000 MHz	547	5000 MHz	206
2000 MHz	364	6000 MHz	183

Typ. Attenuation  
(dB/100 m at 20 °C)



Typ. Return Loss





# Ecoflex<sup>®</sup> 15 FRNC

flexible, very low-loss, stray radiation resistant,  
and halogen-free



Ecoflex 15 FRNC is a flexible and very low attenuation 50 ohm coaxial cable for the frequency range up to 6 GHz. State-of-the-art production methods and the use of a low attenuation PE-LLC dielectric with a gas content of over 70 % enable low attenuation values.

The special design of Ecoflex 15 FRNC combines the excellent attenuation values of rigid 1/2" cables with a solid inner conductor with the easy installation of flexible coaxial cables with stranded inner conductors. The good flexibility of Ecoflex 15 FRNC is ensured by a 7-strand stranded inner conductor made of low-oxygen copper. The inner conductor is compressed, calibrated, and then coated with a pre-coating in a special process to achieve good attenuation and matching values. Another advantage is the double shielding: an overlapping copper foil and an overlying copper braid ensure a high shielding effectiveness of > 90 dB at 1 GHz.

The outer jacket of the cable is made of a special thermoplastic copolymer, the halogen-free, flame-retardant material FRNC (Flame Retardant Non Corrosive). This makes Ecoflex 15 FRNC have a low fire load, low flame spread, and minimal smoke development. Due to the fire protection class Cca, Ecoflex 15 FRNC is suitable for installation in public buildings.

### Key features

Diameter	14.6 ± 0.3 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	9.80 dB
<b>f max</b>	<b>6 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Cca</b>

### Characteristics

- Certified according to EN 50575:2014 + A1:2016 for applications in buildings with requirements for fire behavior
- Flame retardancy tested according to DIN EN 60332-1-2:2005-06 + DIN EN 60332-1-1:2017-09
- Heat release tested according to DIN EN 50399:2017-02
- Vertical flame spread tested according to DIN EN 50399:2017-02
- Smoke production tested according to DIN EN 50399:2017-02
- Burning droplets tested according to DIN EN 50399:2017-02
- Acidity of combustion gases tested according to DIN EN 60754-2:2015-08 (pH value > 4.3)
- Conductivity of combustion gases tested according to DIN EN 60754-2:2015-08 (< 2.5 µS/mm)
- Smoke density according to IEC 61034
- Jacket material according to DIN EN 50290-2-27 (HD 624.7)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- UV-resistant
- Manufactured according to DIN EN 45545-2 Table 5 R15 HL2

### Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	4.5 mm (7 × 1.5 mm)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	11.3 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	12.1 mm
Jacket	highly flexible thermoplastic copolymer (FRNC) black
Weight	184 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	1300 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 2.5 Ω/km
DC-resistance outer conductor	5.0 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

### Ecoflex 15 FRNC RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	0.86	2.00	5.00
100 MHz	2.81	7.00	17.00
500 MHz	6.70	17.00	39.00
1000 MHz	9.80	22.50	54.60
3000 MHz	18.30	58.50	118.00

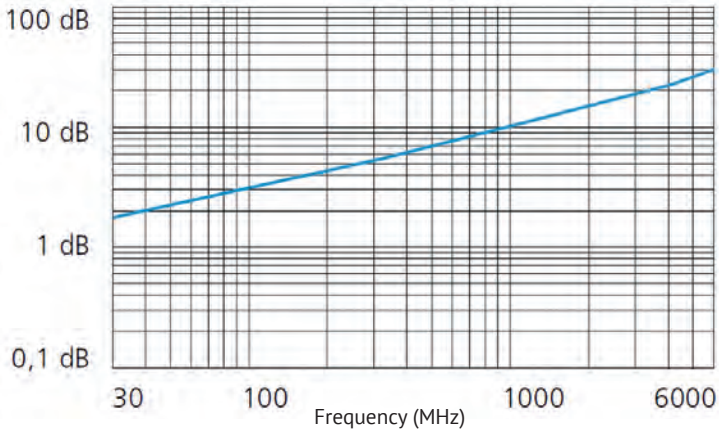
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.60	1000 MHz	9.80
10 MHz	0.86	1296 MHz	11.40
50 MHz	1.96	1500 MHz	12.40
100 MHz	2.81	1800 MHz	13.80
144 MHz	3.40	2000 MHz	14.60
200 MHz	4.05	2400 MHz	16.20
300 MHz	5.00	3000 MHz	18.30
432 MHz	6.10	4000 MHz	21.60
500 MHz	6.70	5000 MHz	24.60
800 MHz	8.60	6000 MHz	27.50

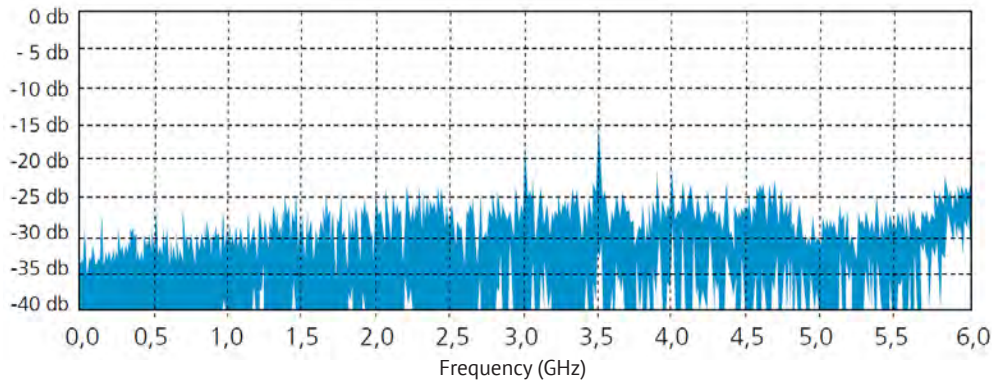
### Max. Power Handling (W at 40 °C)

10 MHz	6.327	2400 MHz	326
100 MHz	1.928	3000 MHz	284
500 MHz	810	4000 MHz	237
1000 MHz	547	5000 MHz	206
2000 MHz	364	6000 MHz	183

Typ. Attenuation  
(dB/100 m at 20 °C)



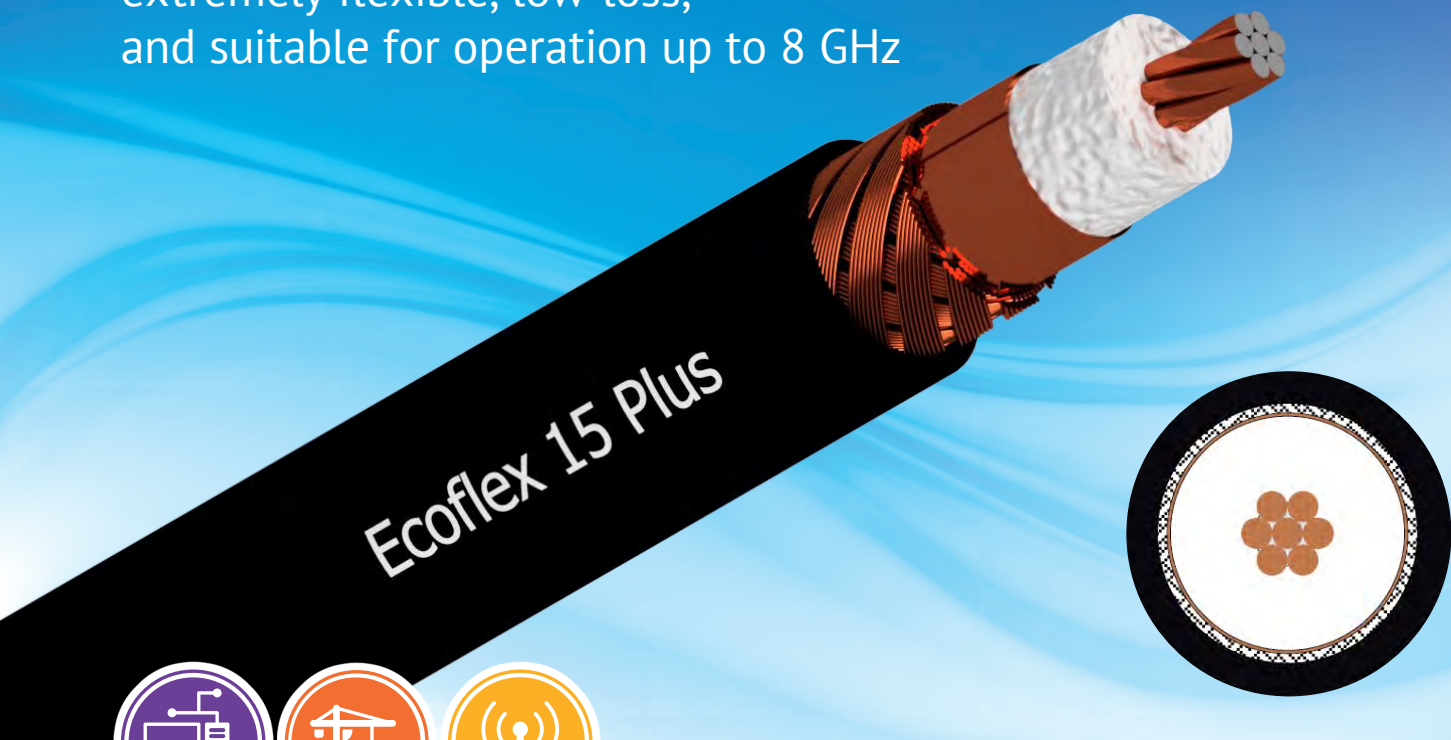
Typ. Return Loss





# Ecoflex® 15 Plus

extremely flexible, low-loss,  
and suitable for operation up to 8 GHz



Ecoflex 15 Plus features remarkable electrical and mechanical improvements. The design and use of materials are optimized for minimal loss, an increased maximum frequency by 2 GHz, excellent installation properties, high long-term stability, and, not least, low weight. These optimal physical properties are achieved by using a precision hybrid inner conductor with a micro-welded copper jacket and aluminium core.

Ecoflex 15 Plus is an extremely flexible and very low attenuation 50-ohm coaxial cable for use up to 8 GHz. State-of-the-art production methods and the use of a low attenuation PE-LLC dielectric with a gas content of over 70 % enable very favorable attenuation values. The innovative design of Ecoflex 15 Plus combines the extremely low attenuation properties of 1/2" cables with rigid inner conductors with the mechanical properties of flexible but lossy standard coaxial cables with stranded inner conductors, making it an ideal combination.

The good flexibility of Ecoflex 15 Plus is ensured by a 7-strand hybrid inner conductor with an aluminium core and welded copper jacket. The inner conductor is stranded, compressed, calibrated, and then coated with a pre-coating in highly precise production steps to achieve very good attenuation and matching values. Another advantage is the double shielding: an overlapping copper foil and an overlying copper braid ensure a high shielding effectiveness of > 90 dB at 1 GHz. The black PVC outer jacket of Ecoflex 15 Plus is UV-stabilized.

To simplify installation, solder-free connectors of the N, UHF, and 7-16 DIN standards have been developed, providing optimal contact and can be easily and quickly assembled without special tools.

Ecoflex 15 Plus is a modern coaxial cable for many applications in high-frequency technology: low attenuation, long-term stable, flexible, radiation-resistant, and usable up to the microwave range.

### Key features

Diameter	14.6 ± 0.3 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	9.80 dB
<b>f max</b>	<b>8 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Eca</b>

### Characteristics

- Jacket material according to DIN EN 50290-2-22 (VDE 0819), compound type TM 52 (HD 624.2)
- Flame-retardant according to IEC 60332-1-2
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- UV-resistant

### Technical Data

Inner conductor	Hybrid CCA – copper-clad aluminium stranded wire
Inner conductor Ø	4.5 mm (7 × 1.5 mm)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	11.3 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	12.1 mm
Jacket	PVC black, UV-stabilized
Weight	167 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	1300 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 2.5 Ω/km
DC-resistance outer conductor	5.0 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

### Ecoflex 15 Plus RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	0.86	2.00	5.00
100 MHz	2.81	7.00	17.00
500 MHz	6.70	17.00	39.00
1000 MHz	9.80	22.50	54.60
3000 MHz	18.30	58.50	118.00

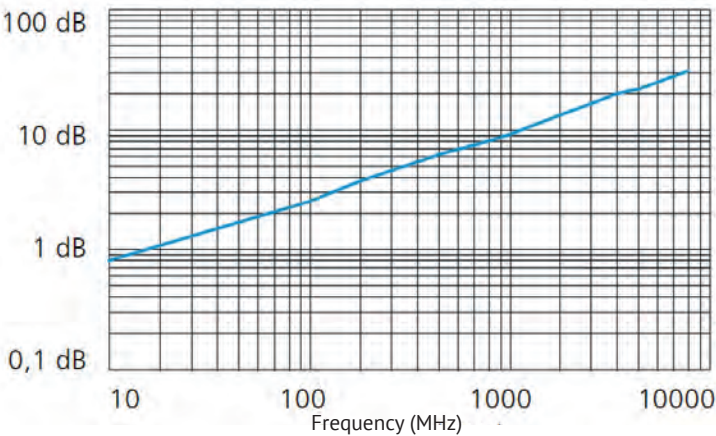
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.60	1000 MHz	9.80
10 MHz	0.86	1296 MHz	11.40
50 MHz	1.96	1500 MHz	12.40
100 MHz	2.81	1800 MHz	13.80
144 MHz	3.40	2000 MHz	14.60
200 MHz	4.05	2400 MHz	16.20
300 MHz	5.00	3000 MHz	18.30
432 MHz	6.10	4000 MHz	21.60
500 MHz	6.70	5000 MHz	24.60
800 MHz	8.60	6000 MHz	27.50
		8000 MHz	32.70

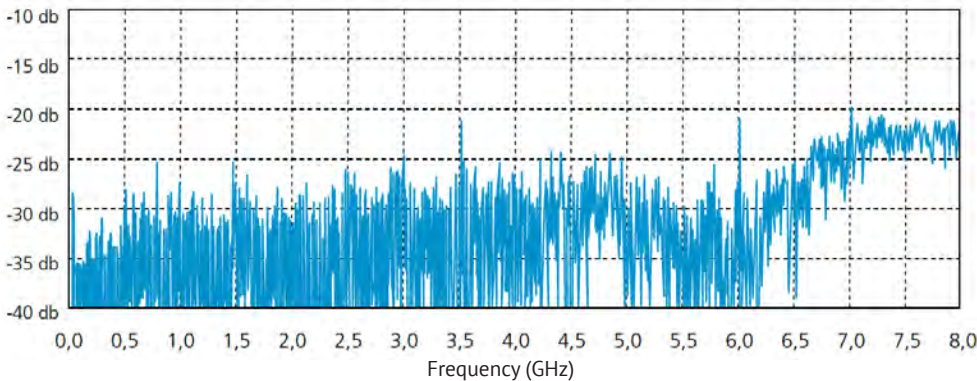
### Max. Power Handling (W at 40 °C)

10 MHz	5.021	2400 MHz	270
100 MHz	1.542	3000 MHz	236
500 MHz	655	4000 MHz	198
1000 MHz	446	5000 MHz	173
2000 MHz	300	6000 MHz	154
		8000 MHz	129

Typ. Attenuation  
(dB/100 m at 20 °C)



Typ. Return Loss





# Ecoflex® 15 Plus Heatex®

flame-retardant, halogen-free,  
suitable for installation in buildings  
and for railway applications



Ecoflex 15 Plus Heatex is a halogen-free and flame-retardant coaxial cable designed for installation in buildings, facilities, and areas at risk. Ecoflex cables with Heatex jackets are flame-resistant and have low flame propagation. Heatex jackets produce low smoke, ensuring clear escape routes in case of a fire. Being halogen-free, they do not contain reactive elements like fluorine, chlorine, and bromine, preventing the generation of corrosive gases that can lead to significant damage. The UV stability of the durable Heatex jacket also allows for unrestricted exterior use.

Ecoflex 15 Plus Heatex features a 7-strand hybrid inner conductor with an aluminium core and welded copper jacket. The surface characteristics and corresponding RF properties are significantly better than those of conventional copper strands. Another advantage is the double shielding: an overlapping copper foil and an overlying copper braid ensure a high shielding factor of > 90 dB at 1 GHz.

Due to its fire protection class Cca, Ecoflex 15 Plus Heatex is suitable for installation in public buildings. It is certified for railway applications for interior/exterior use according to the requirements sets R15 and R16 of the EN 45545-2 standard.

### Key features

Diameter	14.6 ± 0.3 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	9.80 dB
<b>f max</b>	<b>8 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Cca</b>

### Characteristics

- Certified according to EN 45545-2:2013+A1:2015 and EN 45545-2:2020 Requirement Sets R15 + R16 for railway applications
- Flame resistance tested according to EN 60332-1-2:2004 + A1:2015 + A11:2016 and EN 60332-1-3:2004 + A1:2015
- Smoke density tested according to DIN EN 61034-2:2005
- Smoke gas toxicity tested according to EN 50305:2002 Sec. 9.2
- Vertical flame spread tested according to EN 60332-3-24:2009 (Test method C, cable Ø ≥ 12 mm)
- Halogen-free tested according to DIN EN 50306-1:2003
- Halogen acid gas content tested according to DIN EN 60754-1:2015 (HCl < 0.5 %)
- Acidity of the combustion gases tested according to DIN EN 60754-2:2015 (pH value > 4.3)
- Conductivity of the combustion gases tested according to DIN EN 60754-2:2015 (< 10.0 µS/mm)
- Fluorine content tested according to EN 60684-2:2011 Sec. 45.2 Procedure A (< 0.1 %)
- Jacket material according to DIN EN 50290-2-27 (HD 624.7)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- UV-resistant

### Technical Data

Inner conductor	Hybrid CCA – copper-clad aluminium stranded wire
Inner conductor Ø	4.5 mm (7 × 1.5 mm)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	11.3 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	12.1 mm
Jacket	highly flexible thermoplastic copolymer (FRNC) black
Weight	184 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	1300 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 2.5 Ω/km
DC-resistance outer conductor	5.0 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

### Ecoflex 15 Plus Heatex RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	0.86	2.00	5.00
100 MHz	2.81	7.00	17.00
500 MHz	6.70	17.00	39.00
1000 MHz	9.80	22.50	54.60
3000 MHz	18.30	58.50	118.00

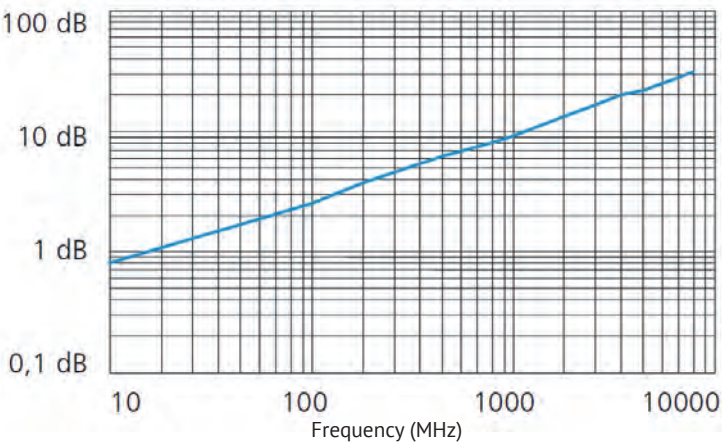
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.60	1000 MHz	9.80
10 MHz	0.86	1296 MHz	11.40
50 MHz	1.96	1500 MHz	12.40
100 MHz	2.81	1800 MHz	13.80
144 MHz	3.40	2000 MHz	14.60
200 MHz	4.05	2400 MHz	16.20
300 MHz	5.00	3000 MHz	18.30
432 MHz	6.10	4000 MHz	21.60
500 MHz	6.70	5000 MHz	24.60
800 MHz	8.60	6000 MHz	27.50
		8000 MHz	32.70

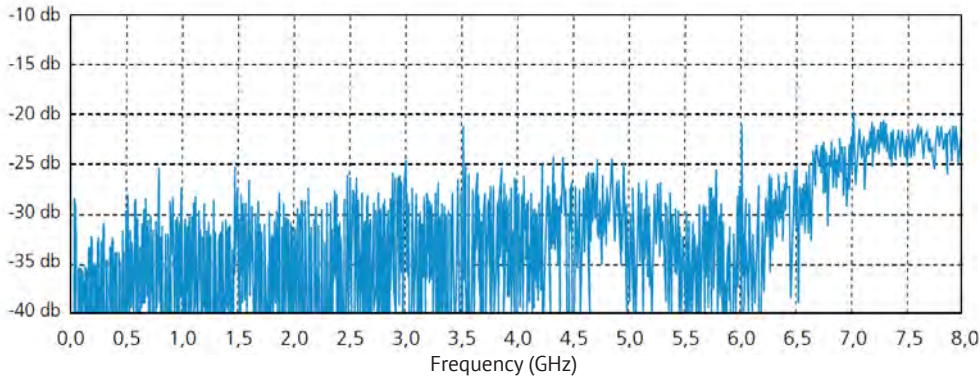
### Max. Power Handling (W at 40 °C)

10 MHz	5.021	2400 MHz	270
100 MHz	1.542	3000 MHz	236
500 MHz	655	4000 MHz	198
1000 MHz	446	5000 MHz	173
2000 MHz	300	6000 MHz	154
		8000 MHz	129

Typ. Attenuation  
(dB/100 m at 20 °C)



Typ. Return Loss





# SeaTex<sup>®</sup> 5

thin, low-loss, stray radiation-resistant,  
and designed for marine applications



SeaTex 5 is a low-loss, halogen-free, highly flexible communication coaxial cable specially designed for marine and offshore applications. It holds the worldwide SHF shipbuilding approval (DNV certificate) and is suitable for deployment on ships, oil platforms, drilling rigs, and wind turbines. The outer jacket of SeaTex 5 is made of a special thermoplastic copolymer (SHF2), providing the cable with high resistance to heat, cold, oils, saltwater, UV radiation, and weather conditions, ensuring a long lifespan in harsh environments.

Based on the proven Aircell 5, SeaTex 5 features excellent attenuation values, and its flexibility and small bending radius allow for installation in tight spaces. Therefore, SeaTex 5 combines the advantages of Aircell coaxial cables with the requirements of maritime applications. The product is specified up to 10 GHz and can be used in a temperature range of -55 to 85°C.

### Key features

Diameter	5.0 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	31.09 dB
<b>f max</b>	<b>10 GHz</b>

### Characteristics

- Insulation material according to DIN EN 50290-2-23 (VDE 0819), Tab. 2/A (HD 624.3)
- Jacket material according to IEC 60092-360 (IEC 60092-359) SHF2
- Wall thickness of the cable jacket according to IEC 60092-376
- Flame-retardant according to IEC 60332-3-22 (Cat. A)
- Flame-retardant according to IEC 60332-1-2
- Oil-resistant according to EN 60811-2-1 (24 hrs/100 °C)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- Corrosivity of the combustion gases according to IEC 60754-2
- Smoke density according to IEC 61034
- UV-resistant
- Approved for marine and offshore applications
- DNV certificate no. TAE00001JX



### Technical Data

Inner conductor	bare copper wire
Inner conductor Ø	1 × 1.13 mm
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	3.1 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	70 %
Outer conductor Ø	3.7 mm
Jacket	special thermoplastic copolymer (SHF2) black
Weight	36 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	100 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 20.5 Ω/km
DC-resistance outer conductor	17 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	4 kV
Max. voltage	2.5 kV

### SeaTex 5    RG 58/U    RG 213/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	2.93	5.00	2.00
100 MHz	9.40	17.00	7.00
500 MHz	21.57	39.00	17.00
1000 MHz	31.09	54.60	22.50
3000 MHz	56.39	118.00	58.50

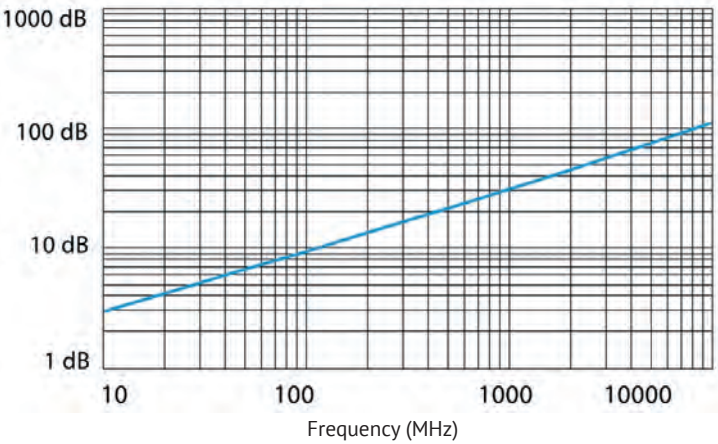
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	2.07	1000 MHz	31.09
10 MHz	2.93	1296 MHz	35.71
50 MHz	6.61	1500 MHz	38.63
100 MHz	9.40	1800 MHz	42.63
144 MHz	11.33	2000 MHz	45.14
200 MHz	13.41	2400 MHz	49.87
300 MHz	16.53	3000 MHz	56.39
432 MHz	19.99	4000 MHz	66.19
500 MHz	21.57	5000 MHz	75.05
800 MHz	27.62	6000 MHz	83.00
		10000 MHz	112.00

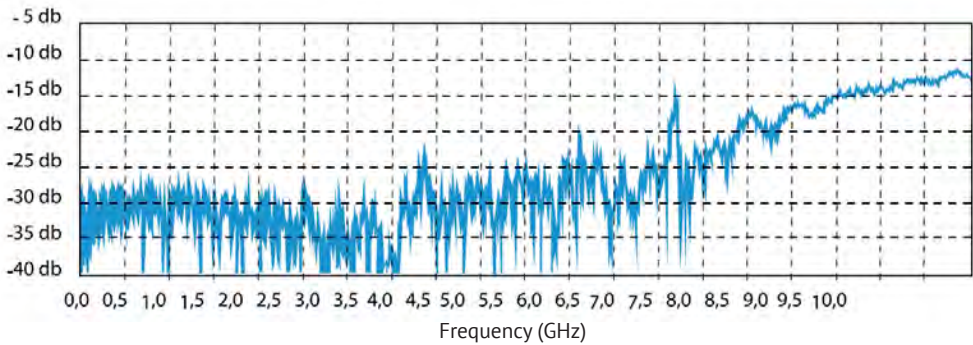
### Max. Power Handling (W at 40 °C)

10 MHz	1.885	3000 MHz	98
100 MHz	587	4000 MHz	83
500 MHz	256	5000 MHz	74
1000 MHz	178	6000 MHz	66
2000 MHz	122	10000 MHz	49

Typ. Attenuation  
(dB/100 m at 20°C)



Typ. Return Loss





# SeaTex<sup>®</sup> 7

ultra-flexible, low-loss, stray radiation-resistant,  
and designed for marine applications



SeaTex 7 is a low-loss, halogen-free, highly flexible communication coaxial cable specially designed for marine and offshore applications. It holds the worldwide SHF shipbuilding approval (DNV certificate) and is suitable for deployment on ships, oil platforms, drilling rigs, and wind turbines. The outer jacket of SeaTex 7 is made of a special thermoplastic copolymer (SHF2), providing the cable with high resistance to heat, cold, oils, saltwater, UV radiation, and weather conditions, ensuring a long lifespan in harsh environments.

Based on the proven Aircell 7, SeaTex 7 features excellent attenuation values, and its flexibility and small bending radius allow for installation in tight spaces. Therefore, SeaTex 7 combines the advantages of Aircell coaxial cables with the requirements of maritime applications. The product is specified up to 6 GHz and can be used in a temperature range of -55 to 85°C.

### Key features

Diameter	7.3 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	21.52 dB
<b>f max</b>	<b>6 GHz</b>

### Characteristics

- Conductor/screen material according to DIN EN 13602 Cu-ETP-R
- Screen material according to DIN EN 13602 Cu-ETP-A
- Insulation material according to ISO 6722-1 Chap. 5.14, Class "A", bending diameter 80 mm
- Jacket material according to IEC 60092-360 (IEC 60092-359) SHF2
- Wall thickness of the cable jacket according to IEC 60092-376
- Flame-retardant according to IEC 60332-3-22 (Cat. A)
- Flame-retardant according to IEC 60332-1-2
- Oil-resistant according to EN 60811-2-1 (24 hrs/100 °C)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- Corrosivity of the combustion gases according to IEC 60754-2
- Smoke density according to IEC 61034
- UV-resistant
- Approved for marine and offshore applications
- DNV certificate no. TAE00001JX



### Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	1.9 mm (19 × 0.38 mm, 14 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	5.0 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	85 %
Outer conductor Ø	5.7 mm
Jacket	special thermoplastic copolymer (SHF2) black
Weight	73 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation
Pulling strength	300 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 9 Ω/km
DC-resistance outer conductor	8.7 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	10 kV
Max. voltage	8 kV

### SeaTex 7    RG 58/U    RG 213/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	2.20	5.00	2.00
100 MHz	6.28	17.00	7.00
500 MHz	14.72	39.00	17.00
1000 MHz	21.52	54.60	22.50
3000 MHz	40.88	118.00	58.50

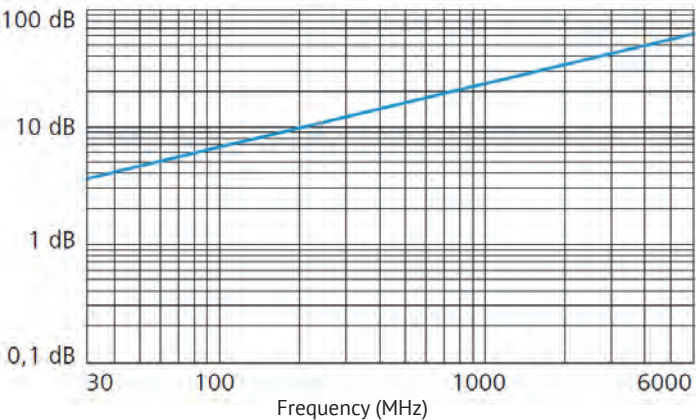
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	1.60	1000 MHz	21.52
10 MHz	2.20	1296 MHz	24.84
50 MHz	4.52	1500 MHz	27.08
100 MHz	6.28	1800 MHz	30.00
144 MHz	7.60	2000 MHz	31.88
200 MHz	9.04	2400 MHz	35.60
300 MHz	11.20	3000 MHz	40.88
432 MHz	13.60	4000 MHz	49.12
500 MHz	14.72	5000 MHz	57.04
800 MHz	19.00	6000 MHz	64.90

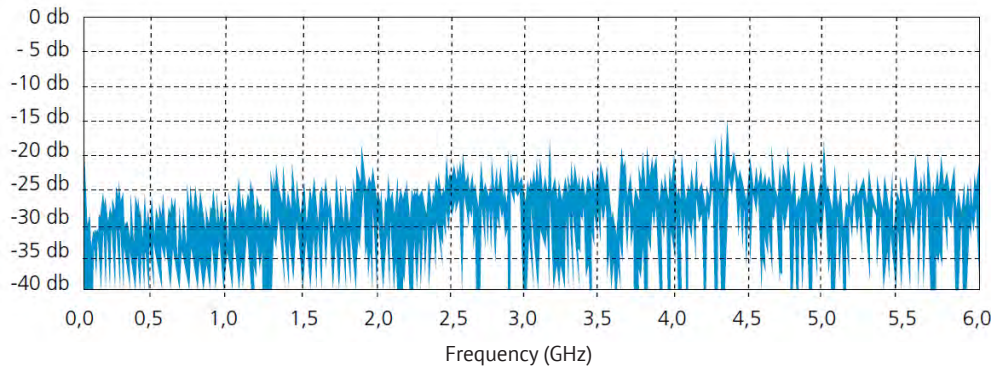
### Max. Power Handling (W at 40 °C)

10 MHz	2.040	2400 MHz	118
100 MHz	620	3000 MHz	104
500 MHz	260	4000 MHz	89
1000 MHz	191	5000 MHz	78
2000 MHz	131	6000 MHz	70

Typ. Attenuation  
(dB/100 m at 20 °C)



Typ. Return Loss





# SeaTex® 10

ultra-flexible, low-loss,  
and designed for marine applications



SeaTex 10 is a low-loss, halogen-free, highly flexible communication coaxial cable specially designed for marine and offshore applications. It holds the worldwide SHF shipbuilding approval (DNV certificate) and is suitable for deployment on ships, oil platforms, drilling rigs, and wind turbines. The outer jacket of SeaTex 10 is made of a special thermoplastic copolymer (SHF2), providing the cable with high resistance to heat, cold, oils, saltwater, UV radiation, and weather conditions, ensuring a long lifespan in harsh environments.

Based on the proven Ecoflex 10, SeaTex 10 features excellent attenuation values, and its flexibility and small bending radius allow for installation in tight spaces. Therefore, SeaTex 10 combines the advantages of Ecoflex coaxial cables with the requirements of maritime applications. The product is specified up to 6 GHz and can be used in a temperature range of -55 to 85°C.

### Key features

Diameter	10.2 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	14.20 dB
f max	6 GHz

### Characteristics

- Conductor/screen material according to DIN EN 13602 Cu-ETP-R
- Screen material according to DIN EN 13602 Cu-ETP-A
- Insulation material according to ISO 6722-1 Chap. 5.14, Class "A", bending diameter 80 mm
- Jacket material according to IEC 60092-360 (IEC 60092-359) SHF2
- Wall thickness of the cable jacket according to IEC 60092-376
- Flame-retardant according to IEC 60332-3-22 (Cat. A)
- Flame-retardant according to IEC 60332-1-2
- Oil-resistant according to EN 60811-2-1 (24 hrs/100 °C)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- Corrosivity of the combustion gases according to IEC 60754-2
- Smoke density according to IEC 61034
- UV-resistant
- Approved for marine and offshore applications
- DNV certificate no. TAE00001JX



### Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	2.85 mm (7 × 1.0 mm, 10 AWG)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	7.2 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	7.9 mm
Jacket	special thermoplastic copolymer (SHF2) black
Weight	135 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	600 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 3.5 Ω/km
DC-resistance outer conductor	6.6 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

### SeaTex 10 RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	1.20	2.00	5.00
100 MHz	4.00	7.00	17.00
500 MHz	9.60	17.00	39.00
1000 MHz	14.20	22.50	54.60
3000 MHz	26.70	58.50	118.00

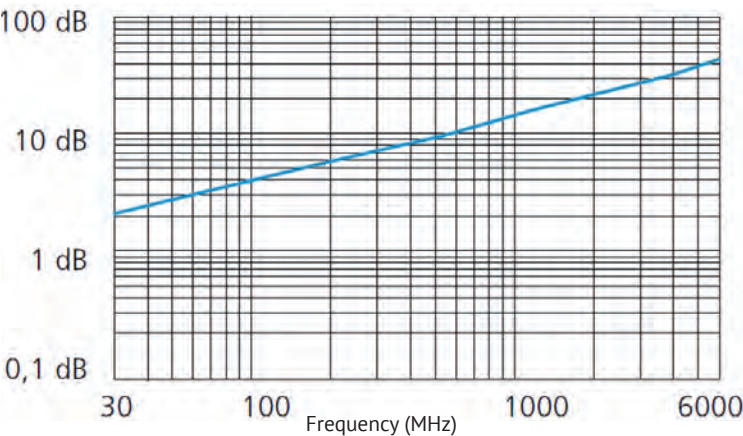
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.80	1000 MHz	14.20
10 MHz	1.20	1296 MHz	16.50
50 MHz	2.80	1500 MHz	17.90
100 MHz	4.00	1800 MHz	19.90
144 MHz	4.90	2000 MHz	21.20
200 MHz	5.80	2400 MHz	23.60
300 MHz	7.30	3000 MHz	26.70
432 MHz	8.90	4000 MHz	31.10
500 MHz	9.60	5000 MHz	35.20
800 MHz	12.50	6000 MHz	39.00

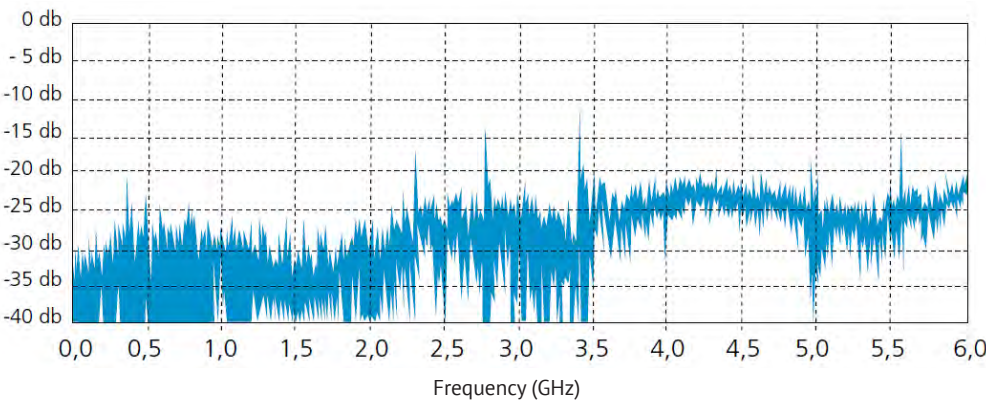
### Max. Power Handling (W at 40 °C)

10 MHz	3.960	2400 MHz	210
100 MHz	1.210	3000 MHz	180
500 MHz	510	4000 MHz	150
1000 MHz	350	5000 MHz	130
2000 MHz	230	6000 MHz	120

Typ. Attenuation  
(dB/100 m at 20 °C)



Typ. Return Loss





# SeaTex<sup>®</sup> 15

flexible, low-loss, stray radiation resistant  
and designed for marine applications



SeaTex 15 is a low-loss, halogen-free, highly flexible communication coaxial cable specially designed for marine and offshore applications. It holds the worldwide SHF shipbuilding approval (DNV certificate) and is suitable for deployment on ships, oil platforms, drilling rigs, and wind turbines. The outer jacket of SeaTex 15 is made of a special thermoplastic copolymer (SHF2), providing the cable with high resistance to heat, cold, oils, saltwater, UV radiation, and weather conditions, ensuring a long lifespan in harsh environments.

Based on the proven Ecoflex 15, SeaTex 15 features excellent attenuation values, and its flexibility and small bending radius allow for installation in tight spaces. Therefore, SeaTex 15 combines the advantages of Ecoflex coaxial cables with the requirements of maritime applications. The product is specified up to 6 GHz and can be used in a temperature range of -55 to 85°C.

### Key features

Diameter	14.6 ± 0.2 mm
Impedance	50 ± 2 Ω
Attenuation at 1 GHz/100 m	9.80 dB
f max	6 GHz

### Characteristics

- Conductor/screen material according to DIN EN 13602 Cu-ETP-R
- Screen material according to DIN EN 13602 Cu-ETP-A
- Insulation material according to ISO 6722-1 Chap. 5.14, Class "A", bending diameter 120 mm
- Jacket material according to IEC 60092-360 (IEC 60092-359) SHF2
- Wall thickness of the cable jacket according to IEC 60092-376
- Flame-retardant according to IEC 60332-3-22 (Cat. A)
- Flame-retardant according to IEC 60332-1-2
- Oil-resistant according to EN 60811-2-1 (24 hrs/100 °C)
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- Fire-resistant, low smoke, halogen-free (LSZH)
- Corrosivity of the combustion gases according to IEC 60754-2
- Smoke density according to IEC 61034
- UV-resistant
- Approved for marine and offshore applications
- DNV certificate no. TAE00001JX



### Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	4.5 mm (7 × 1.5 mm)
Dielectric	foamed cellular polyethylene (PE) with skin
Dielectric Ø	11.3 mm
Outer conductor 1	overlapping copper (Cu) foil
Shielding factor	100 %
Outer conductor 2	Copper (Cu) shield braiding of bare copper wires
Shielding factor	75 %
Outer conductor Ø	12.1 mm
Jacket	special thermoplastic copolymer (SHF2) black
Weight	262 kg/km
Min. Bending radius	4 × Ø single, 8 × Ø repeated
Temperature range	-55 to +85 °C transport & fixed installation -40 to +85 °C mobile application
Pulling strength	1300 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	78 nF/km
Velocity factor	0.85
Shielding attenuation 1 GHz	≥ 90 dB
DC-resistance inner conductor	≤ 1.5 Ω/km
DC-resistance outer conductor	5.0 Ω/km
Insulation resistance	≥ 10 GΩ*km
Test Voltage DC (wire/screen)	7 kV
Max. voltage	5 kV

### SeaTex 15 RG 213/U RG 58/U

Capacitance	78 pF/m	101 pF/m	102 pF/m
Velocity factor	0.85	0.66	0.66
Attenuation(dB/100m)			
10 MHz	0.86	2.00	5.00
100 MHz	2.81	7.00	17.00
500 MHz	6.70	17.00	39.00
1000 MHz	9.80	22.50	54.60
3000 MHz	18.30	58.50	118.00

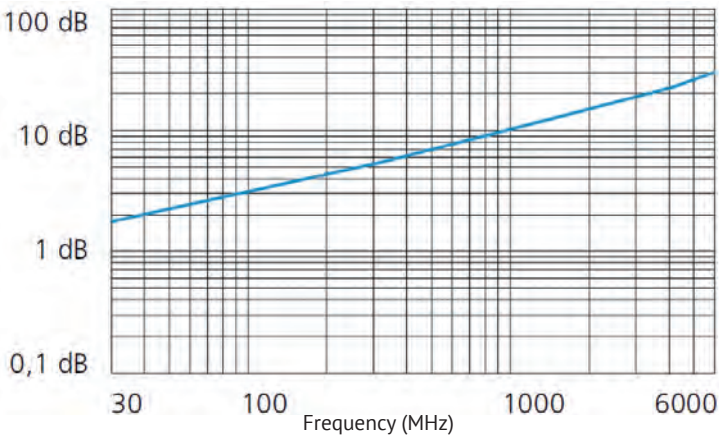
### Typ. Attenuation (dB/100 m at 20 °C)

5 MHz	0.60	1000 MHz	9.80
10 MHz	0.86	1296 MHz	11.40
50 MHz	1.96	1500 MHz	12.40
100 MHz	2.81	1800 MHz	13.80
144 MHz	3.40	2000 MHz	14.60
200 MHz	4.05	2400 MHz	16.20
300 MHz	5.00	3000 MHz	18.30
432 MHz	6.10	4000 MHz	21.60
500 MHz	6.70	5000 MHz	24.60
800 MHz	8.60	6000 MHz	27.50

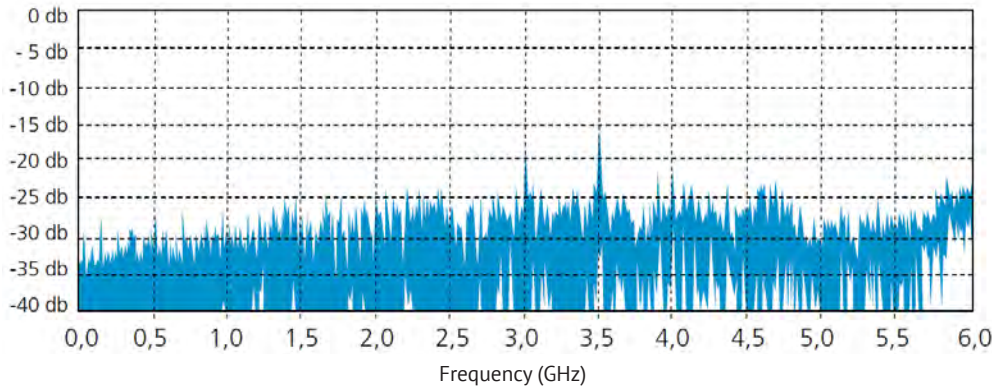
### Max. Power Handling (W at 40 °C)

10 MHz	6.327	2400 MHz	326
100 MHz	1.928	3000 MHz	284
500 MHz	810	4000 MHz	237
1000 MHz	547	5000 MHz	206
2000 MHz	364	6000 MHz	183

Typ. Attenuation  
(dB/100 m at 20 °C)



Typ. Return Loss





# H155 SSB

low-loss and ultra-flexible



H155 by SSB-Electronic is a thin and extremely flexible coaxial cable for the frequency range up to 6 GHz. Due to the low attenuation and the great flexibility, this cable can be used for many applications in communications and radio technology.

The inner conductor of the cable consists of 19 stranded copper wires, each with a diameter of 0.28 mm. This structure of the inner conductor enables the outstanding flexibility of the cable. The extremely low attenuation of H155 is achieved through a low-loss PE dielectric. In order to achieve good shielding attenuation, the outer conductor of the cable has two layers. At first, the aluminum-PET-aluminium foil is used, with a special, particularly tear-resistant and heat-resistant Mylar® polyester as the PET layer. A shield braiding of tinned copper wires with a coverage of 75% is applied to this foil. The cable has a UV-resistant PVC outer jacket.

H155 by SSB-Electronic is suitable for numerous applications in WLAN, GPS, CB and mobile communications, short antenna feed lines, and many other high-frequency applications.

### Key features

Diameter	5.4 ± 0.2 mm
Impedance	50 ± 4 Ω
Attenuation at 1 GHz/100 m	29.60 dB
<b>f max</b>	<b>6 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Fca</b>

### Characteristics

- Flame-retardant according to IEC 60332-1-2
- UV-resistant according to IEC 61196-1-212
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- REACH compliant

### Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	1.42 mm (19 × 0.28 mm)
Dielectric	foamed cellular polyethylene (PE)
Dielectric Ø	3.9 mm
Outer conductor 1	Aluminum-Mylar®Polyester-Aluminum foil
Shielding factor	100 %
Outer conductor 2	shield braiding of tinned copper wires
Shielding factor	75 %
Outer conductor Ø	4.3 mm ± 0.2 mm
Jacket	PVC black, UV-resistant
Weight	41 kg/km
Min. Bending radius	5 × Ø single, 10 × Ø repeated
Temperature range	-20 to +70 °C
Pulling strength	200 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	80 nF/km
Velocity factor	0.80
DC-resistance inner conductor	15.4 Ω/km
DC-resistance outer conductor	17.0 Ω/km
Insulation resistance	≥ 5 GΩ*km
Test Voltage DC (wire/screen)	AC 1.0 kV
Max. voltage	2.5 kV

### H155 SSB RG 58/U RG 213/U

Capacitance	80 pF/m	102 pF/m	101 pF/m
Velocity factor	0.80	0.66	0.66
Attenuation (dB/100m)			
10 MHz	3.20	5.00	2.00
100 MHz	9.10	17.00	7.00
500 MHz	20.00	39.00	17.00
1000 MHz	29.60	54.60	22.50
3000 MHz	56.30	118.00	58.50

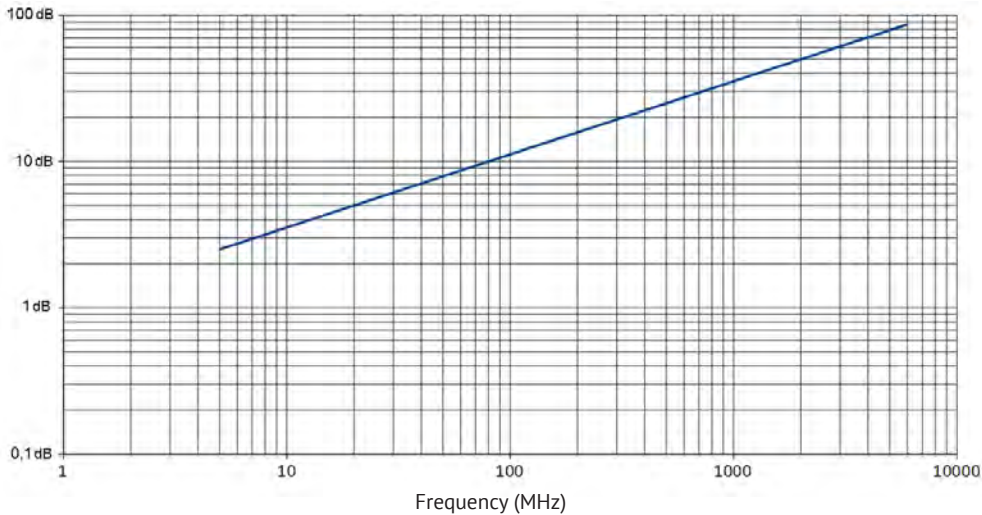
### Typ. Attenuation (dB/100 m at 20 °C)

10 MHz	3.20	1296 MHz	33.90
20 MHz	4.40	1500 MHz	36.80
50 MHz	6.90	1750 MHz	40.30
100 MHz	9.10	1800 MHz	40.90
144 MHz	10.55	2000 MHz	43.70
200 MHz	12.40	2400 MHz	49.10
230 MHz	13.40	3000 MHz	56.30
300 MHz	15.30	3600 MHz	62.90
400 MHz	18.00	4000 MHz	67.00
432 MHz	18.70	4800 MHz	75.10
500 MHz	20.00	5000 MHz	77.10
800 MHz	26.10	5400 MHz	80.80
1000 MHz	29.60	6000 MHz	86.50

### Max. Power Handling (kW at 20 °C)

50 MHz	0.9	2400 MHz	0.10
230 MHz	0.4	3000 MHz	0.09
400 MHz	0.3	3600 MHz	0.08
800 MHz	0.2	4800 MHz	0.06
1000 MHz	0.17	5400 MHz	0.06
1750 MHz	0.12	6000 MHz	0.05

### Typ. Attenuation (dB/100 m at 20 °C)





# H155 PE SSB

low-loss and ultra-flexible



H155 PE by SSB-Electronic is a thin and extremely flexible coaxial cable for the frequency range up to 6 GHz. Due to the low attenuation and the great flexibility, this cable can be used for many applications in communications and radio technology.

The inner conductor of the cable consists of 19 stranded copper wires, each with a diameter of 0.28 mm. This structure of the inner conductor enables the outstanding flexibility of the cable. The extremely low attenuation of H155 is achieved through a low-loss PE dielectric. In order to achieve good shielding attenuation, the outer conductor of the cable has two layers. At first, the aluminum-PET-aluminium foil is used, with a special, particularly tear-resistant and heat-resistant Mylar® polyester as the PET layer. A shield braiding of tinned copper wires with a coverage of 75% is applied to this foil. The cable has a PE outer jacket.

H155 PE by SSB-Electronic is suitable for numerous applications in WLAN, GPS, CB, and mobile communications, short antenna feed lines, and many other high-frequency applications.

### Key features

Diameter	5.4 ± 0.2 mm
Impedance	50 ± 4 Ω
Attenuation at 1 GHz/100 m	29.60 dB
<b>f max</b>	<b>6 GHz</b>
<b>Euroclass according to EN 50575</b>	<b>Fca</b>

### Characteristics

- Flame-retardant according to IEC 60332-1-2
- UV-resistant according to IEC 61196-1-212
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- REACH compliant

### Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	1.42 mm (19 × 0.28 mm)
Dielectric	foamed cellular polyethylene (PE)
Dielectric Ø	3.9 mm
Outer conductor 1	Aluminum-Mylar®Polyester-Aluminum foil
Shielding factor	100 %
Outer conductor 2	shield braiding of tinned copper wires
Shielding factor	75 %
Outer conductor Ø	4.3 mm ± 0.2 mm
Jacket	Polyethylen (PE)
Weight	41 kg/km
Min. Bending radius	5 × Ø single, 10 × Ø repeated
Temperature range	-40 to +80 °C
Pulling strength	200 N

### Electrical Data at 20 °C

Capacitance (1 kHz)	80 nF/km
Velocity factor	0.80
DC-resistance inner conductor	15.4 Ω/km
DC-resistance outer conductor	17.0 Ω/km
Insulation resistance	≥ 5 GΩ*km
Test Voltage DC (wire/screen)	AC 1.0 kV
Max. voltage	2.5 kV

### H155 PE SSB RG 58/U RG 213/U

Capacitance	80 pF/m	102 pF/m	101 pF/m
Velocity factor	0.80	0.66	0.66
Attenuation (dB/100m)			
10 MHz	3.20	5.00	2.00
100 MHz	9.10	17.00	7.00
500 MHz	20.00	39.00	17.00
1000 MHz	29.60	54.60	22.50
3000 MHz	56.30	118.00	58.50

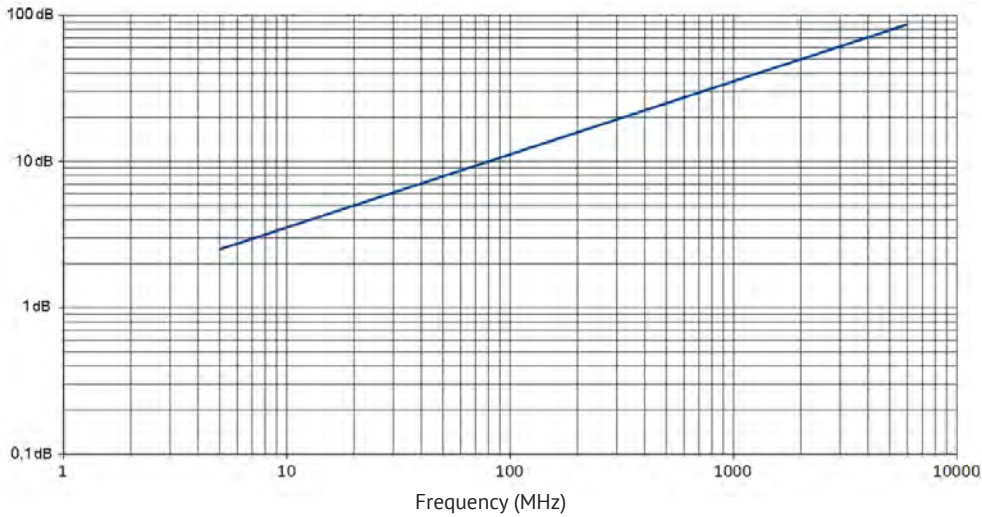
### Typ. Attenuation (dB/100 m at 20 °C)

10 MHz	3.20	1296 MHz	33.90
20 MHz	4.40	1500 MHz	36.80
50 MHz	6.90	1750 MHz	40.30
100 MHz	9.10	1800 MHz	40.90
144 MHz	10.55	2000 MHz	43.70
200 MHz	12.40	2400 MHz	49.10
230 MHz	13.40	3000 MHz	56.30
300 MHz	15.30	3600 MHz	62.90
400 MHz	18.00	4000 MHz	67.00
432 MHz	18.70	4800 MHz	75.10
500 MHz	20.00	5000 MHz	77.10
800 MHz	26.10	5400 MHz	80.80
1000 MHz	29.60	6000 MHz	86.50

### Max. Power Handling (kW at 20 °C)

50 MHz	0.9	2400 MHz	0.10
230 MHz	0.4	3000 MHz	0.09
400 MHz	0.3	3600 MHz	0.08
800 MHz	0.2	4800 MHz	0.06
1000 MHz	0.17	5400 MHz	0.06
1750 MHz	0.12	6000 MHz	0.05

### Typ. Attenuation (dB/100 m at 20 °C)





Coaxial Connectors N

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face		Surface of Body & Other Metal Parts, Except Pin	Pin Surface	Weight	SWR @ 3 GHz	Impedance	Frequency up to	Return Loss	Insertion Loss
N male	7700	Aircell 5	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	33 g	<1.1	50 Ω	6 GHz	≤ -32.9dB @ 1GHz; ≤ -26.5dB @ 3GHz; ≤ -21.4dB @ 11GHz	≤ 0.01 dB
N male (crimp)	7701	Aircell 5	solder	crimp	PTFE	silicone		nickel-plated brass	gold-plated	33 g	<1.1	50 Ω	6 GHz	≤ -33.8dB @ 1GHz; ≤ -28.7dB @ 3GHz; ≤ -22.0dB @ 11GHz	≤ 0.05 dB
N female (crimp)	7703	Aircell 5	solder	crimp	PTFE	-		nickel-plated brass	gold-plated	23 g	<1.1	50 Ω	6 GHz	≤ -33.8dB @ 1GHz; ≤ -28.7dB @ 3GHz; ≤ -22.0dB @ 11GHz	≤ 0.05 dB
N male right-angle	7704	Aircell 5	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	35 g	<1.1	50 Ω	6 GHz	≤ -33.8dB @ 1GHz; ≤ -28.7dB @ 3GHz; ≤ -22.0dB @ 11GHz	≤ 0.05 dB
N male right-angle (crimp)	7705	Aircell 5	solder	crimp	PTFE	silicone		nickel-plated brass	gold-plated	36 g	<1.1	50 Ω	6 GHz	≤ -44.0dB @ 1GHz; ≤ -29.5dB @ 3GHz; ≤ -28.0dB @ 11GHz	≤ 0.05 dB
N flange female	7708	Aircell 5	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	51 g	<1.1	50 Ω	6 GHz	≤ -37.7dB @ 1GHz; ≤ -30.0dB @ 3GHz; ≤ -29.9dB @ 11GHz	≤ 0.05 dB
N female	7393	Aircell 7	solder	screw	PTFE	-		nickel-plated brass	gold-plated	50 g	<1.1	50 Ω	6 GHz	≤ -20dB @ 10GHz	≤ 0.05 dB
N male	7392	Aircell 7	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	59 g	<1.05	50 Ω	10 GHz	≤ -27.5dB @ 11GHz; ≤ -36.1dB @ 3GHz; ≤ -39.6dB @ 1GHz	≤ 0.05 dB
N male (crimp)	7371	Aircell 7	solder	crimp	PTFE	silicone		nickel-plated brass	gold-plated	31 g	<1.05	50 Ω	4 GHz	≤ -27.5dB @ 11GHz; ≤ -36.1dB @ 3GHz; ≤ -39.6dB @ 1GHz	≤ 0.05 dB
N male right-angle	7399	Aircell 7	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	83 g	<1.05	50 Ω	4 GHz	≤ -20dB @ 10GHz	≤ 0.05 dB
N female	7364	Aircom / Ecoflex 10	solder	screw	PTFE	-		nickel-plated brass	gold-plated	60 g	<1.05	50 Ω	3.5 GHz	≤ -33.2dB @ 11GHz; ≤ -36.4dB @ 3GHz; ≤ -47.5dB @ 1GHz	≤ 0.05 dB
N male	7367	Aircom / Ecoflex 10	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	55 g	<1.06	50 Ω	10 GHz	≤ -30.0dB @ 11GHz; ≤ -31.6dB @ 3GHz; ≤ -39.9dB @ 1GHz	≤ 0.05 dB
N female (crimp)	7370	Ecoflex 10	solder	crimp	PTFE	-		nickel-plated brass	gold-plated	31 g	<1.05	50 Ω	4 GHz	≤ -51.4dB @ 1GHz; ≤ -37.2dB @ 4GHz; ≤ -30.9dB @ 11GHz	≤ 0.05 dB
N male (crimp)	7366	Ecoflex 10	solder or crimp	crimp	PTFE	silicone		nickel-plated brass	gold-plated	31 g	<1.05	50 Ω	4 GHz	≤ -32.4dB @ 11GHz; ≤ -35.6dB @ 3GHz; ≤ -42.5dB @ 1GHz	≤ 0.05 dB
N female (solderless)	7373	Ecoflex 10	solderless	screw	PTFE	-		nickel-plated brass	gold-plated	60 g	<1.05	50 Ω	1 GHz	≤ -33.2dB @ 11GHz; ≤ -36.4dB @ 3GHz; ≤ -47.5dB @ 1GHz	≤ 0.05 dB
N male (solderless)	7383	Ecoflex 10	solderless	screw	PTFE	silicone		nickel-plated brass	gold-plated	55 g	<1.05	50 Ω	10 GHz	≤ -32.4dB @ 11GHz; ≤ -35.6dB @ 3GHz; ≤ -42.5dB @ 1GHz	≤ 0.05 dB
N male Slotted	7401	Ecoflex 10	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	55 g	<1.05	50 Ω	10 GHz	≤ -30.0dB @ 11GHz; ≤ -31.6dB @ 3GHz; ≤ -39.9dB @ 1GHz	≤ 0.05 dB
N male right-angle	7360	Aircom / Ecoflex 10	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	90 g	<1.06	50 Ω	4 GHz	≤ -29.1dB @ 11GHz; ≤ -31.5dB @ 3GHz; ≤ -35.4dB @ 1GHz	≤ 0.05 dB
N male right-angle	7360 HTX	Aircom / Ecoflex 10 FRNC / SeaTex	solder	screw	PTFE	silicone		brass with CuSnZn3 surface	gold-plated	90 g	<1.06	50 Ω	4 GHz	≤ -29.1dB @ 11GHz; ≤ -31.5dB @ 3GHz; ≤ -35.4dB @ 1GHz	≤ 0.05 dB
N female	7361	Ecoflex 10 FRNC / SeaTex	solderless	screw	PTFE	-		brass with CuSnZn3 surface	gold-plated	60 g	<1.05	50 Ω	3 GHz	≤ -38.6dB @ 1GHz; ≤ -33.7dB @ 3GHz; ≤ -38.7dB @ 11GHz	≤ 0.05 dB
N male	7368	Ecoflex 10 FRNC/ SeaTex	solder	screw	PTFE	-		brass with CuSnZn3 surface	gold-plated	69 g	<1.06	50 Ω	10 GHz	≤ -41.2dB @ 1GHz; ≤ -32.0dB @ 3GHz; ≤ -31.2dB @ 11GHz	≤ 0.05 dB
N male (solderless)	7369	Ecoflex 10 Plus Heatex/SeaTex	solderless	screw	PTFE	silicone		brass with CuSnZn3 surface	gold-plated	55 g	<1.06	50 Ω	10 GHz	≤ -41.2dB @ 1GHz; ≤ -32.0dB @ 3GHz; ≤ -31.2dB @ 11GHz	≤ 0.05 dB
N male (solderless)	7351	Ecoflex 15 FRNC/ SeaTex	solderless	screw	PTFE	silicone		brass with CuSnZn3 surface	gold-plated	88 g	<1.06	50 Ω	11 GHz	≤ -29.1dB @ 11GHz; ≤ -31.5dB @ 3GHz; ≤ -35.4dB @ 1GHz	≤ 0.05 dB
N female (solderless)	7352	Ecoflex 15 FRNC/ SeaTex	solderless	screw	PTFE	silicone		brass with CuSnZn3 surface	gold-plated	74 g	<1.06	50 Ω	11 GHz	≤ -33.6dB @ 1GHz; ≤ -32.5dB @ 4GHz; ≤ -29.3dB @ 11GHz	≤ 0.05 dB
N male (solderless)	7395	Ecoflex 15 / Plus	clamp	screw	PTFE	silicone		nickel-plated brass	gold-plated	78 g	<1.06	50 Ω	11 GHz	≤ -29.1dB @ 11GHz; ≤ -31.5dB @ 3GHz; ≤ -35.4dB @ 1GHz	≤ 0.05 dB



Coaxial Connectors BNC

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face	Surface of Body & Other Metal Parts, Except Pin	Pin Surface	Weight	SWR @ 3 GHz	Impedance	Frequency up to	Return Loss	Insertion Loss
BNC female	7722	Aircell 5	solder	screw	PTFE	-	nickel-plated brass	gold-plated	19 g	<1.1	50 Ω	3 GHz	≤ -46.4dB @ 0.5GHz; ≤ -42.9dB @ 1GHz; ≤ -26.5dB @ 3GHz	≤ 0.05 dB
BNC male	7720	Aircell 5	solder	screw	PTFE	silicone	nickel-plated brass	gold-plated	18 g	<1.21	50 Ω	4 GHz	≤ -45.1dB @ 0.5GHz; ≤ -32.3dB @ 1GHz; ≤ -20.8dB @ 3GHz	≤ 0.05 dB
BNC female (crimp)	7723	Aircell 5	solder	crimp	PTFE	-	nickel-plated brass	gold-plated	10 g	<1.09	50 Ω	4 GHz	≤ -35.9dB @ 0.5GHz; ≤ -35.2dB @ 1GHz; ≤ -27.8dB @ 3GHz	≤ 0.05 dB
BNC male (crimp)	7721	Aircell 5	solder	crimp	PTFE	silicone	nickel-plated brass	gold-plated	8 g	<1.21	50 Ω	4 GHz	≤ -45.1dB @ 0.5GHz; ≤ -32.3dB @ 1GHz; ≤ -20.8dB @ 3GHz	≤ 0.05 dB
BNC mounting female (crimp)	7727	Aircell 5	solder	crimp	PTFE	-	nickel-plated brass	gold-plated	17 g	<1.1	50 Ω	4 GHz	≤ -35.8dB @ 0.5GHz; ≤ -31.0dB @ 1GHz; ≤ -27.3dB @ 3GHz	≤ 0.05 dB
BNC female	7389	Aircell 7	solder	screw	PTFE	-	nickel-plated brass	gold-plated	37 g	<1.04	50 Ω	3 GHz	≤ -35.8dB @ 11GHz; ≤ -36.2dB @ 3GHz; ≤ -38.9dB @ 1GHz	≤ 0.05 dB
BNC male	7391	Aircell 7	solder	screw	PTFE	-	nickel-plated brass	gold-plated	39 g	<1.04	50 Ω	3 GHz	≤ -35.8dB @ 11GHz; ≤ -36.2dB @ 3GHz; ≤ -38.9dB @ 1GHz	≤ 0.05 dB
BNC male (crimp)	7375	Aircell 7	crimp	crimp	PTFE	silicone	nickel-plated brass	gold-plated	11 g	<1.23	50 Ω	4 GHz	≤ -20dB @ 3GHz	≤ 0.05 dB
BNC female	7386	Aircom / Ecoflex 10	solder	screw	PTFE	-	nickel-plated brass	gold-plated	56 g	<1.23	50 Ω	3 GHz	≤ -20dB @ 3GHz	≤ 0.05 dB
BNC male	7379	Aircom / Ecoflex 10	solder	screw	PTFE	-	nickel-plated brass	gold-plated	54 g	<1.02	50 Ω	2.5 GHz	≤ -39.3dB @ 11GHz; ≤ -43.6dB @ 3GHz; ≤ -49.0dB @ 1GHz	≤ 0.05 dB

Coaxial Connectors TNC

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face	Surface of Body & Other Metal Parts, Except Pin	Pin Surface	Weight	SWR @ 3 GHz	Impedance	Frequency up to	Return Loss	Insertion Loss
TNC female	7742	Aircell 5	solder	screw	PTFE	silicone	nickel-plated brass	gold-plated	13 g	<1.06	50 Ω	6 GHz	≤ -35.8dB @ 1GHz; ≤ -31.6dB @ 3GHz; ≤ -31.7dB @ 11GHz	≤ 0.05 dB
TNC male	7740	Aircell 5	solder	screw	PTFE	silicone	nickel-plated brass	gold-plated	20 g	<1.15	50 Ω	6 GHz	≤ -27.6dB @ 1GHz; ≤ -23.2dB @ 3GHz; ≤ -27.4dB @ 11GHz	≤ 0.05 dB
TNC female (crimp)	7743	Aircell 5	solder	crimp	PTFE	-	nickel-plated brass	gold-plated	13 g	<1.12	50 Ω	6 GHz	≤ -30.1dB @ 1GHz; ≤ -25.4dB @ 3GHz; ≤ -29.4dB @ 11GHz	≤ 0.05 dB
TNC male (crimp)	7741	Aircell 5	solder	crimp	PTFE	-	nickel-plated brass	gold-plated	13 g	<1.1	50 Ω	6 GHz	≤ -31.4dB @ 1GHz; ≤ -27.3dB @ 3GHz; ≤ -29.9dB @ 11GHz	≤ 0.05 dB
TNC male right-angle (crimp)	7745	Aircell 5	solder	crimp	PTFE	-	nickel-plated brass	gold-plated	21 g	<1.09	50 Ω	4 GHz	≤ -32.4dB @ 1GHz; ≤ -28.1dB @ 3GHz; ≤ -23.0dB @ 11GHz	≤ 0.05 dB
TNC-RP male (crimp)	7746	Aircell 5	solder	crimp	PTFE	-	nickel-plated brass	gold-plated	13 g	<1.04	50 Ω	6 GHz	≤ -23.5dB @ 1GHz; ≤ -36.6dB @ 3GHz; ≤ -29.4dB @ 11GHz	≤ 0.05 dB
TNC male	7396	Aircell 7	solder	screw	PTFE	-	nickel-plated brass	gold-plated	44 g	<1.12	50 Ω	3 GHz	≤ -25dB @ 3GHz	≤ 0.05 dB
TNC male (crimp)	7374	Aircell 7	crimp	crimp	POM	-	nickel-plated brass	gold-plated	16 g	<1.12	50 Ω	4 GHz	≤ -25dB @ 3GHz	≤ 0.05 dB
TNC male	7382	Aircom / Ecoflex 10	solder	screw	PTFE	-	brass with CuSnZn3 surface	gold-plated	50 g	<1.05	50 Ω	3 GHz	≤ -29.4dB @ 11GHz; ≤ -33.3dB @ 3GHz; ≤ -40.5dB @ 1GHz	≤ 0.05 dB
TNC-RP male	7384	Aircom / Ecoflex 10	solder	screw	PTFE	-	brass with CuSnZn3 surface	gold-plated	60 g	<1.12	50 Ω	3 GHz	≤ -25dB @ 3GHz	≤ 0.05 dB



# Coaxial Connectors SMA

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face		Surface of Body & Other Metal Parts, Except Pin	Pin Surface	Weight	SWR @ 3 GHz	Impedance	Frequency up to	Return Loss	Insertion Loss
SMA female (crimp)	7751	Aircell 5	crimp	crimp	PTFE	-		nickel-plated brass	gold-plated	5 g	<1.1	50 Ω	8 GHz	≤ -32.6dB @ 1GHz; ≤ -25.4dB @ 4GHz; ≤ -23.9dB @ 12.4GHz	≤ 0.05 dB
SMA male (crimp)	7750	Aircell 5	solder	crimp	PTFE	silicone		brass gold-plated	gold-plated	10 g	<1.1	50 Ω	8 GHz	≤ -32.6dB @ 1GHz; ≤ -25.4dB @ 4GHz; ≤ -23.9dB @ 12.4GHz	≤ 0.05 dB
SMA-RP female (crimp)	7756	Aircell 5	solder	crimp	PTFE	-		nickel-plated brass	gold-plated	10 g	<1.05	50 Ω	8 GHz	≤ -40.7dB @ 1GHz; ≤ -33.7dB @ 4GHz; ≤ -29.1dB @ 12.4GHz	≤ 0.05 dB
SMA-RP male (crimp)	7755		solder	crimp	PTFE	silicone		brass gold-plated	gold-plated	7 g	<1.05	50 Ω	8 GHz	≤ -44.8dB @ 1GHz; ≤ -30.0dB @ 4GHz; ≤ -30.7dB @ 12.4GHz	≤ 0.05 dB
SMA male right-angle (crimp)	7752	Aircell 5	solder	crimp	PTFE	silicone		brass gold-plated	gold-plated	10 g	<1.12	50 Ω	8 GHz	≤ -32.6dB @ 1GHz; ≤ -25.4dB @ 4GHz; ≤ -23.9dB @ 12.4GHz	≤ 0.05 dB
SMA male	7385	Aircell 7	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	25 g	<1.12	50 Ω	6 GHz	≤ -25dB @ 4GHz	≤ 0.05 dB
SMA male (crimp)	7387	Aircell 7	crimp	crimp	PTFE	-		nickel-plated brass	gold-plated	7 g	<1.12	50 Ω	6 GHz	≤ -25dB @ 4GHz	≤ 0.05 dB
SMA male	7362	Aircom / Ecoflex 10	solder	solder	PTFE	silicone		brass with CuSnZn3 surface	gold-plated	34 g	<1.12	50 Ω	11 GHz	≤ -25dB @ 4GHz	≤ 0.05 dB
SMA male RP	7365	Aircom / Ecoflex 10	solder	screw	PTFE	silicone		brass with CuSnZn3 surface	gold-plated	34 g	<1.03	50 Ω	11 GHz	≤ -43.4dB @ 1GHz; ≤ -38.2dB @ 4GHz; ≤ -26.5dB @ 12.4GHz	≤ 0.05 dB
SMA male RP	7381	Aircell 7	solder	screw	PTFE	silicone		nickel-plated brass	gold-plated	25 g	<1.03	50 Ω	6 GHz	≤ -43.4dB @ 1GHz; ≤ -38.2dB @ 4GHz; ≤ -26.5dB @ 12.4GHz	≤ 0.05 dB

# Coaxial Connectors UHF

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face		Surface of Body & Other Metal Parts, Except Pin	Pin Surface	Weight	SWR @ 3 GHz	Impedance	Frequency up to	Return Loss	Insertion Loss
UHF male	7760	Aircell 5	solder	screw	PTFE	-		nickel-plated brass	gold-plated	17 g	<1.04	50 Ω	1 GHz	≤ -36.4dB @ 0.2GHz	≤ 0.05 dB
UHF male (crimp)	7762	Aircell 5	solder	crimp	PTFE	-		nickel-plated brass	gold-plated	19 g	<1.06	50 Ω	1 GHz	≤ -31.5dB @ 0.2GHz	≤ 0.05 dB
UHF male (standard)	7390	Aircell 7	solder	screw	PTFE	-		nickel-plated brass	gold-plated	44 g	<1.07	50 Ω	1 GHz	≤ -30.9dB @ 200MHz	≤ 0.05 dB
UHF male PRO	7394	Aircell 7	solder	screw	PTFE	-		nickel-plated brass	gold-plated	44 g	<1.07	50 Ω	1 GHz	≤ -30.9dB @ 200MHz	≤ 0.05 dB
UHF male	7377	Ecoflex 10 / / Aircom	solder	screw	PTFE	-		nickel-plated brass	gold-plated	23 g	<1.12	50 Ω	200 MHz	≤ -25dB @ 200MHz	≤ 0.05 dB
UHF male PRO	7378	Aircom / Ecoflex 10	solder	screw	PTFE	-		nickel-plated brass	gold-plated	44 g	<1.06	50 Ω	200 MHz	≤ -23.6dB @ 1GHz; ≤ -30.4dB @ 500MHz; ≤ -32.4dB @ 200MHz	≤ 0.05 dB
UHF male (solderless)	7350	Ecoflex 15 / Plus	clamp	screw	PTFE	-		nickel-plated brass	gold-plated	78 g	<1.12	50 Ω	200 MHz	≤ -25dB @ 1GHz	≤ 0.05 dB
UHF Flange female	7340	-	-	-	PTFE	-		nickel-plated brass	gold-plated	22 g	<1.12	50 Ω	200 MHz	≤ -25dB @ 1GHz	≤ 0.05 dB

# Coaxial Connectors 7-16 DIN

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face		Surface of Body & Other Metal Parts, Except Pin	Pin Surface	Weight	SWR @ 3 GHz	Impedance	Frequency up to	Return Loss	Insertion Loss
7-16 DIN male	7380	Aircom / Ecoflex 10	solder	screw	PTFE	-		nickel-plated brass	silver-plated	106 g	<1.06	50 Ω	6 GHz	≤ -40.7dB @ 1GHz; ≤ -30.7dB @ 3GHz; ≤ -32.8dB @ 7.5GHz	≤ 0.05 dB
7-16 DIN female	7388	Aircom / Ecoflex 10	solder	screw	PTFE	-		nickel-plated brass	silver-plated	106 g	<1.04	50 Ω	6 GHz	≤ -45.9dB @ 1GHz; ≤ -36.3dB @ 3GHz; ≤ -28.3dB @ 7.5GHz	≤ 0.05 dB
7-16 DIN female (solderless)	7349	Ecoflex 15 / Plus	clamp	screw	PTFE	-		nickel-plated brass	silver-plated	110 g	<1.04	50 Ω	6 GHz	≤ -45.8dB @ 1GHz; ≤ -36.2dB @ 3GHz; ≤ -28.1dB @ 7.5GHz	≤ 0.05 dB
7-16 DIN male (solderless)	7398	Ecoflex 15 / Plus	clamp	screw	PTFE	silicone		nickel-plated brass	silver-plated	146 g	<1.04	50 Ω	6 GHz	≤ -45.9dB @ 1GHz; ≤ -36.3dB @ 3GHz; ≤ -28.3dB @ 7.5GHz	≤ 0.05 dB



Coaxial Connectors FME

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face		Surface of Body & Other Metal Parts, Except Pin	Pin Surface	Weight	SWR @ 3 GHz	Impedance	Frequency up to	Return Loss	Insertion Loss
FME female (crimp)	7808	Aircell 5	solder	crimp	Delrin	-		nickel-plated brass	gold-plated	10 g	<1.12	50 Ω	4 GHz	≤ -25dB @ 2GHz	≤ 0.05 dB
FME male (crimp)	7807	Aircell 5	solder	crimp	PTFE	-		nickel-plated brass	gold-plated	10 g	<1.1	50 Ω	4 GHz	≤ -32.9dB @ 1GHz; ≤ -26.5dB @ 3GHz; ≤ -21.4dB @ 11GHz	≤ 0.01 dB
FME female (crimp)	7806	Aircell 7	solder	crimp	Delrin	-		nickel-plated brass	gold-plated	12 g	<1.12	50 Ω	2 GHz	≤ -33.9dB @ 0.5GHz; ≤ -29.8dB @ 1GHz; ≤ -25.1dB @ 2GHz	≤ 0.05 dB
FME male (crimp)	7805	Aircell 7	solder	crimp	PTFE	-		nickel-plated brass	gold-plated	12 g	<1.04	50 Ω	2 GHz	≤ -32.9dB @ 0.5GHz; ≤ -30.7dB @ 1GHz; ≤ -36.1dB @ 2GHz	≤ 0.05 dB

Coaxial Connectors 4.3-10

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face		Surface of Body & Other Metal Parts, Except Pin	Pin Surface	Weight	SWR @ 3 GHz	Impedance	Frequency up to	Return Loss	Insertion Loss
SSB Snap-In 4.3-10 Straight Crimp	7500	Aircom Premium Aircell 5	crimp	crimp	PTFE	silicone		brass with CuSnZn3 surface	Cu2Ag5	33 g	<1.04	50 Ω	6 GHz	1GHz - 40dB; 2.5GHz - 35dB	≤ 0.05 dB
SSB Snap-In 4.3-10 Straight Clamp	7501	Aircom Premium Aircell 5	clamp	clamp	PTFE	silicone		brass with CuSnZn3 surface	Cu2Ag5	61 g	<1.07	50 Ω	6 GHz	1GHz - 35dB; 2GHz - 32dB; 6GHz - 28dB	≤ 0.05 dB
SSB Snap-In 4.3-10 Angle Crimp	7502	Aircom Premium Aircell 5	solder	crimp	PTFE	silicone		brass with CuSnZn3 surface	Cu2Ag5	49 g	<1.07	50 Ω	6 GHz	1GHz - 34dB; 2GHz - 28dB; 6GHz - 17dB	≤ 0.05 dB
SSB Snap-In 4.3-10 Flange Cassis female	7503	Aircom Premium Aircell 5	solder	-	PTFE	-		brass with CuSnZn3 surface	Cu2Ag5	25 g	<1.07	50 Ω	6 GHz	1 GHz - 38 dB 2.5 GHz - 32 dB	≤ 0.05 dB

Coaxial Connectors NEX 10

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face		Surface of Body & Other Metal Parts, Except Pin	Pin Surface	Weight	VSWR	Impedance	Frequency up to	Return Loss	Insertion Loss
Nex10 male – Ecoflex 10 / Aircom Premium	7810	Aircom Premium Ecoflex 10	solder	crimp	PTFE	silicone		brass with HEP2R surface	silver-plated	26 g	≤ 1.15 @ DC-6 GHz; ≤ 1.35 @ 6-12 GHz	50 Ω	12 GHz	< -36 dB @ DC-4 GHz; < -34 dB @ 4-6 GHz; < -30 dB @ 6-12 GHz*	≤ 0.05 dB
Nex10 female – Ecoflex 10 / Aircom Premium	7811	Aircom Premium Aircell 5	solder	crimp	PTFE	-		brass with HEP2R surface	silver-plated	24 g	≤ 1.15 @ DC-6 GHz; ≤ 1.35 @ 6-12 GHz	50 Ω	12 GHz	< -36 dB @ DC-4 GHz; < -34 dB @ 4-6 GHz; < -30 dB @ 6-12 GHz	≤ 0.05 dB

# Coaxial Adapters

Adapter	SMA male	SMA female	SMA RP male	UHF female	UHF male	BNC female	BNC male	BNC female female		TNC female	TNC male	TNC-RP male	FME male	7-16 DIN female	7-16 DIN male	N female	N male	N female (flange)	N female female	N-RP male
BNC female	8733																			
BNC female						8738														
BNC male	8732																			
BNC male				8730																
BNC male							8739													
BNC male								8737												
BNC male										8734										
BNC male													8744							
N female																				8711
N female			8762																	
N female											8710									
N female															8709					
N female							8701													
N female																8722				
N female																		8724		
N female	8705																			
N female											8707									
N female				8703																
N right-angle female																	8720			
N male						8700														
N male																			8721	
N male																	8723			
N male	8704																			
N male										8706										
N male				8702																
FME male													8743							
FME male		8745																		
FME male	8742																			
SMA female		8760																		
UHF male					8782															
7-16 DIN female														8770						