

# Coaxial Cables, Connectors, and Adapters



# SSB-Electronic GmbH

## from Engineering Office to RF Specialist

SSB-Electronic was founded as an engineering office for telecommunications in 1976. Since then, we have been a reliable partner for the design, manufacturing, and distribution of devices, assemblies, and customized solutions in the field of radio frequency technology and communications engineering. Our international customer base includes industrial companies, research institutes, authorities, security services, and aid organizations.

Since our establishment, we have utilized our comprehensive expertise in the high-frequency domain to address market developments with innovative products. The trend towards higher frequencies and the customer demand for optimized attenuation and optimal cable adaptation led to the development of low loss coaxial cables and matching connectors in 1989. Our coaxial cable brands - Aircell®, Aircom®, and Ecoflex® - have since set standards and established themselves as the European standard in telecommunications.

Rising demands for fire protection and the increasing use of coaxial cables in challenging environmental conditions led to the development of Ecoflex Heatex® and SeaTex®

coaxial cables. Ecoflex cables with Heatex coating are halogen-free, flame-retardant, exhibit low flame spread, and are suitable for use in buildings, installations, and hazardous areas. Our SeaTex coaxial cables are tailored to the specific requirements of the maritime sector. These specialized cables meet the SHF2 standard and are suitable for applications in shipbuilding and saltwater-corrosive environments.

In our in-house high-frequency laboratory, our products and RF design concepts are constantly optimized and developed using measurement and analysis instruments up to 13 GHz. We place great importance on ensuring that our coaxial cables have almost no interference points throughout the frequency range, minimizing the potential for signal reflections. Our connectors are equipped with enhanced surfaces (e.g., white bronze) to increase their intermodulation resistance, as well as corrosion and oxidation resistance.

SSB-Electronic will continue to offer innovative products and continuously improved services that are always a step ahead of their time.

#### Facts & Figures

1976	Founding of SSB-Electronic by Bernd Bartkowiak
	and Rolf Albert as an engineering office for
	communications technology in Iserlohn
1929	Introduction of the first coavial cable

2008	Introduction of halogen-free and flame-retardant
	coaxial cables under the brand Heatex® for
	environments with elevated fire protection
	requirements

- Change in management: Peter Schulte-Nölle becomes the new owner and managing director
- 2010 Relocation of the company from Iserlohn to Lippstadt
- 2016 Location change within the industrial area Am Mondschein in Lippstadt to the current location Am Pulverhäuschen
- 2017 Introduction of weather-resistant coaxial cables of the SeaTex® series for marine and offshore applications
- 2017 Implementation of the quality management system with successful certification according to ISO 9001:2015
- 2018 Acquisition of VF-Feintechnik GmbH a company developing and manufacturing access control

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**Handling Instructions** 

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### Quality

High-quality and flawless products that meet customer requirements are fundamental to customer satisfaction for us. Our high standard of quality extends from thorough supplier evaluations and incoming goods inspections to production. Our products are manufactured according to the highest quality standards. In our high-frequency laboratory, they undergo extensive testing and scrutiny by our quality assurance team.

Our company is certified according to ISO 9001:2015. We continuously work to ensure and improve the quality of our processes and structures.

### **Social Responsibility**

In addition to product quality, we place great emphasis on responsible and sustainable actions, including towards our workforce. We promote fair and respectful collaboration. Appreciation and transparency characterize communication within our company.

We provide our employees with opportunities for professional development. As an IHK-certified company, we regularly train and support our apprentices as they enter the workforce.

Family-friendliness is an integral part of our daily operations. Through specific offers and measures, we ensure family-friendly working conditions, actively contributing to the compatibility of family and work.

By collaborating with local schools, universities, and suppliers, we strengthen our local community.

### Sustainability

For us, responsible and sustainable action also means producing our products with consideration for the environment. Compliance with all laws, regulations, and provisions is a matter of course for us.

Increasing the longevity of our products, avoiding hazardous substances such as lead, asbestos, or fluorinated hydrocarbons, and reducing environmental impact are integral parts of our corporate philosophy. We consistently align our daily actions with these goals.

Our products comply with European environmental directives:

- Directive 2011/65/EU RoHS
   (Restriction of Hazardous Substances)
   for the use of certain hazardous substances
   in electrical and electronic devices
- Directive 2012/19/EU WEEE
   (Waste Electrical and Electronic Equipment)
   for the disposal of electrical and electronic components and devices
- Regulation 1907/2006/EG REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) for the registration, evaluation, authorization, and restriction of chemicals







# **SSB – Your B2B Partner**

# Custom Solutions for Trade, Commerce & Industry

SSB-Electronic is your expert for innovative and powerful connectivity solutions across various industries. With our extensive experience in cables, connectors, and amplifier technology, we provide reliable solutions for demanding applications.

Our customers in industry, trade, and the public sector benefit from our comprehensive portfolio of cables, specifically optimized for the requirements of various applications.

#### Our customers worldwide come from industries such as:

- Building Construction / Fire Protection
- Railway Construction
- Shipbuilding / Maritime / Offshore
- Bus Construction
- Mobile Communications / 5G
- Wind Turbine Construction / Energy
- Audio / Video Technology
- IT / Computer Technology

Our cables not only meet the highest standards of quality and functionality but also ensure halogen-free and flame-retardant properties. This is crucial in buildings, rail, and road vehicles or ships to ensure passenger and staff safety. Our portfolio also includes cables designed for extreme conditions on land and at sea, exhibiting high resistance to heat, cold, oils, saltwater, UV radiation, and weather influences.

Our cable solutions comply with national and international standards, such as EN 50575, EN 45545-2, UN/ECE-R 118, etc., and possess all relevant approvals and certifications for the mentioned applications.

#### Further reasons for collaborating with us:

- We provide personalized advice and develop tailored solutions for your project.
- We conduct all necessary tests and measurements to ensure the quality of our cables.
- We ensure fast delivery of your goods.
- Upon request, we customize your cables and lines according to your specifications and deliver them ready for installation.





# **Our Product Range**



#### **Coaxial Cables & Coaxial Connectors**

- Low Loss Coaxial Cables
- Coaxial Connectors of all standards
- Coaxial Adapters



### **SDR Technology**

- Receivers (Perseus, Winradio)
- Transceivers



#### **Radio Electronics**

- Preamplifiers, Amplifiers
- Remote Power Splitters, Sequencers
- Antenna Switches





#### **High-Frequency Design**

- HF Circuit Design and Simulation
- Digital Circuit Design
- HF Component Design (Power Amplifiers, etc.)



#### Accessories

- Coaxial Relays, Attenuators, Terminal Loads
- Mounting Clamps, Grounding Kits, Lightning Protection
- Tools (Crimping Pliers, Cable Cutters)

# **Assembled Coaxial Cables**

### Tailored to Your Specifications

Share your application or installation requirements with us. As professional cable assemblers, we swiftly and impeccably manufacture your desired cable, accommodating even special requests with ease. Unlike many other companies in the industry, all our cable assemblies undergo precise high-frequency testing.

We deliver on promises that others merely make!

Take advantage of our cable configurator at www.ssb-electronic.com and order your desired coaxial cable with just a few clicks.

Choose from our low attenuation coaxial cable types, coaxial connectors of all common standards, and optional strain relief.



### **Your Benefits**

- High-quality coaxial cables
- Precision craftsmanship in assembly
- Accurate HF measurements before and after assembly
- Assembly exclusively in Germany
- Detailed test certificate
- Cable testing at the selected frequency in the range of 100 KHz - 20.000 MHz, including a test report
- Swift delivery after ordering
- Special solutions such as phase-matched coaxial cables for antenna arrays







# 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.

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

#### Explanation:

#### Smoke emission

- s1: Low smoke emission, slow spread TSP ≤ 50 m², max. SPR ≤ 0.25 m²/s
- s1a: Transmittance ≥ 80 %
- s1b: Transmittance ≥ 60 % < 80 %
- s2: Moderate smoke emission and spread TSP ≤ 400 m², max. SPR ≤ 1.5 m²/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  $\mu$ S/mm and pH > 4.3
- a2: Average corrosive smoke gases, conductivity < 10  $\mu$ S/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)

# **Areas of Application**

for SSB Coaxial Cables



### **IT & Computer Technology**

Highly flexible and low attenuation coaxial cables

Aircell 5 14	Ecoflex 5 28	Ecoflex 15 FRNC 42
Aircell 5 Heatex 16	Ecoflex 7 30	Ecoflex 15 Plus 44
Aircell 7 18	Ecoflex 10 32	Ecoflex 15 Plus Heatex 46
Aricell 7 Heatex 20	Ecoflex 10 FRNC 34	H155 SSB 56
Aircom Premium 22	Ecoflex 10 Plus 36	H155 PE SSB 58
Aricom Premium FRNC 24	Ecoflex 10 Plus Heatex 38	
Aircom 15 26	Ecoflex 15 40	



### **Audio & Video**

Highly flexible and low attenuation coaxial cables

Aircell 7	18
Ecoflex 7	30



### **Fire Protection**

Flame-retardant coaxial cables with Euroclass Cca according to EN 50575

Aircell 5 Heatex	16	Ecoflex 10 Plus Heatex	38
Aricell 7 Heatex	20	Ecoflex 15 FRNC	42
Fcoflex 10 FRNC	34	Fcoflex 15 Plus Heatex	46



### **Building Construction**

Coaxial cables with Euroclasses Fca, Dca, and Cca according to EN 50575

Aircell 5 14	Aircom 15 26	Ecoflex 10 Plus Heatex 38
Aircell 5 Heatex 16	Ecoflex 5 28	Ecoflex 15 40
Aircell 7 18	Ecoflex 7 30	Ecoflex 15 FRNC 42
Aricell 7 Heatex 20	Ecoflex 10 32	Ecoflex 15 Plus 44
Aircom Premium 22	Ecoflex 10 FRNC 34	Ecoflex 15 Plus Heatex 46
Aricom Premium FRNC 24	Ecoflex 10 Plus 36	



### **Mobile Communications**

Intermodulation-resistant coaxial cables

Aircom Premium 22	Ecoflex 10 Plus 36	Ecoflex 15 Plus Heatex 46
Aricom Premium FRNC 24	Ecoflex 10 Plus Heatex 38	H155 SSB 56
Aircom 15 26	Ecoflex 15 40	H155 PE SSB 58
Ecoflex 10 32	Ecoflex 15 FRNC 42	
Ecoflex 10 FRNC 34	Ecoflex 15 Plus 44	



#### **Bus Construction**

Flame-retardant coaxial cables with UN/ECE-R 118 approval

Aircell 5	14
Aircell 7	18
Ecoflex 10	32



### **Railway Construction**

Flame-retardant coaxial cables certified according to EN 45545-2

Aircell 5 Heatex	16
Aricell 7 Heatex	20
Ecoflex 10 Plus Heatex	38
Ecoflex 15 Plus Heatex	46



### Shipbuilding

Coaxial cables with DNV certification for harsh environmental conditions

Seatex 5	48
Seatex 7	50
Seatex 10	52
Seatex 15	54



### **Wind Turbine Construction**

Coaxial cables with DNV certification for harsh environmental conditions

Seatex 5	 48
Seatex 7	 50
Seatex 10	 52
Seatex 15	 54



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**

 $\begin{array}{ll} \mbox{Diameter} & 5.0 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 29.54 \mbox{ dB} \\ \mbox{f max} & \mbox{10 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Eca} \\ \end{array}$ 

#### **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
elocity 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

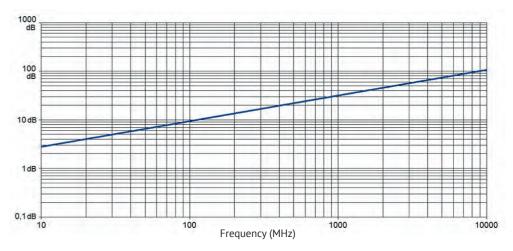
#### Typ. Attenuation (dB/100 m at 20 °C)

	• •	•	
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

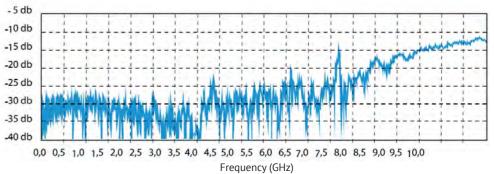
#### Max. Power Handling (W at 40 °C)

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 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 $5.0 \pm 0.2 \text{ mm}$ Impedance $50 \pm 2 \Omega$ Attenuation at 1 GHz/100 m29.54 dBf max10 GHzEuroclass according to EN 50575Cca

#### **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 %)</li>
- 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 (<  $10.0 \mu S/mm$ )
- 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 facto	or	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

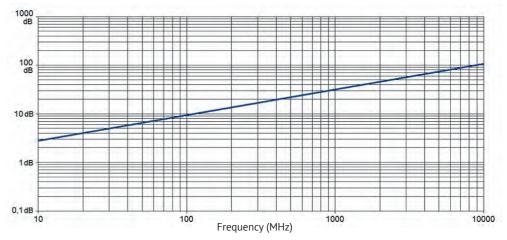
#### Typ. Attenuation (dB/100 m at 20 °C)

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

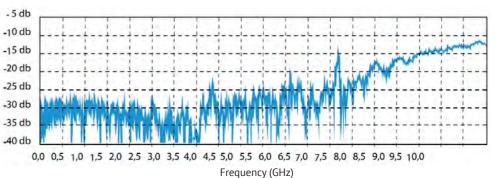
#### Max. Power Handling (W at 40 °C)

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



 $_{16}$ 



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**

 $\begin{array}{ll} \mbox{Diameter} & 7.3 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 20.44 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Eca} \end{array}$ 

#### **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

apacitance	78 pF/m	101 pF/m	102 pF/m
elocity factor	0.85	0.66	0.66
ttenuation(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

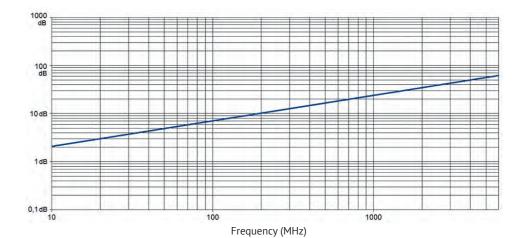
#### Typ. Attenuation (dB/100 m at 20 °C)

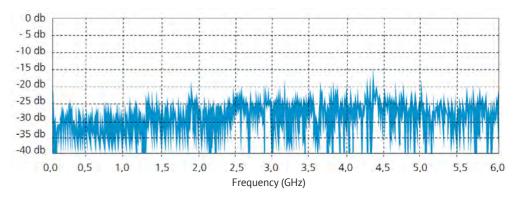
5 MHz	1.52	1000 MHz	20.44
10 MHz	2.09	1296 MHz	23.60
50 MHz	4.29	1500 MHz	25.73
100 MHz	5.97	1800 MHz	28.50
144 MHz	7.22	2000 MHz	30.29
200 MHz	8.59	2400 MHz	33.82
300 MHz	10.64	3000 MHz	38.84
432 MHz	12.92	4000 MHz	46.66
500 MHz	13.98	5000 MHz	54.19
800 MHz	18.05	6000 MHz	61.66

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

# Typ. Attenuation (dB/100 m at 20°C)







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**

 $\begin{array}{ll} \mbox{Diameter} & 7.3 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 20.44 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Cca} \\ \end{array}$ 

#### **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)</li>
- · 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 %)</li>
- 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  $\mu$ S/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

#### 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

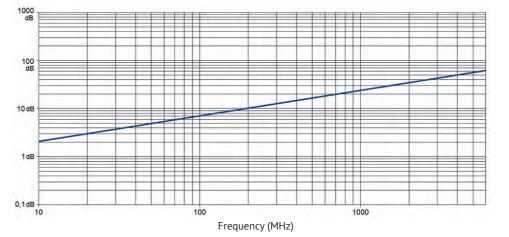
#### Typ. Attenuation (dB/100 m at 20 °C)

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

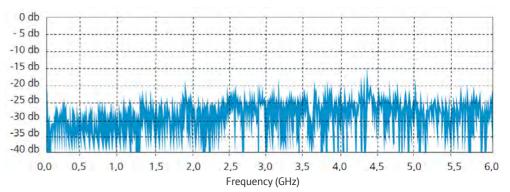
#### Max. Power Handling (W at 40 °C)

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

# Typ. Attenuation (dB/100 m at 20°C)



#### Typ. Return Loss





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 12 GHz Euroclass according to EN 50575

#### **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)

#### **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

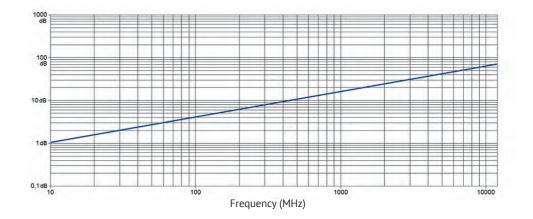
#### Typ. Attenuation (dB/100 m at 20 °C)

71		•	
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





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**

 $\begin{array}{lll} \mbox{Diameter} & 10.2 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 11.88 \mbox{ dB} \\ \mbox{f max} & \mbox{12 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Fca} \end{array}$ 

#### **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
3000 MHz	21.85	58.50	11

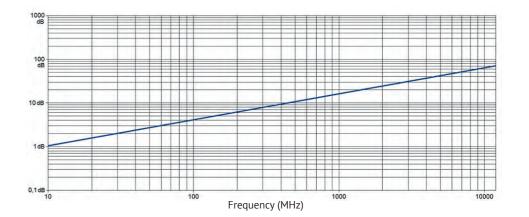
#### Typ. Attenuation (dB/100 m at 20 °C)

-			
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 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**

 $\begin{array}{lll} \mbox{Diameter} & 10.2 \pm 0.3 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 8.7 \mbox{ dB} \\ \mbox{f max} & \mbox{10 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Fca} \end{array}$ 

#### **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

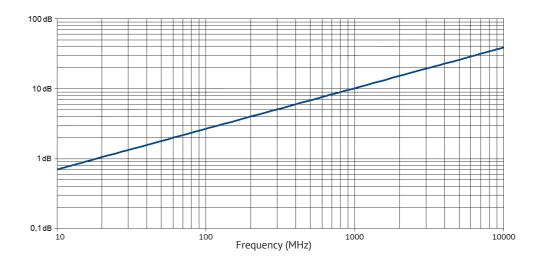
#### Typ. Attenuation (dB/100 m at 20 °C)

• •	• •	•	
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 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, manufatured 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**

 $\begin{array}{lll} \mbox{Diameter} & 5.0 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 26.13 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Fca} \end{array}$ 

#### **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)
- $\cdot$  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/1	L00m)			
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

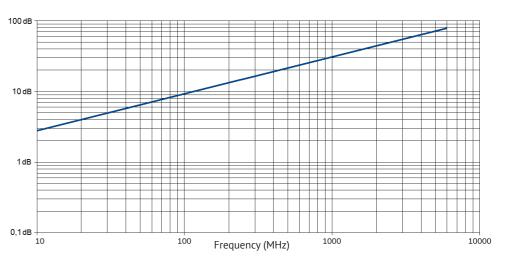
#### Typ. Attenuation (dB/100 m at 20 °C)

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 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**

 $\begin{array}{ll} \mbox{Diameter} & 7.3 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \mbox{ }\Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 18.43 \mbox{ dB} \\ \mbox{\bf f max} & \mbox{\bf 6 GHz} \\ \mbox{\bf Euroclass according to EN 50575} & \mbox{\bf Eca} \\ \end{array}$ 

#### **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

apacitance	78 pF/m	101 pF/m	102 pF/m
elocity factor	0.85	0.66	0.66
ttenuation(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

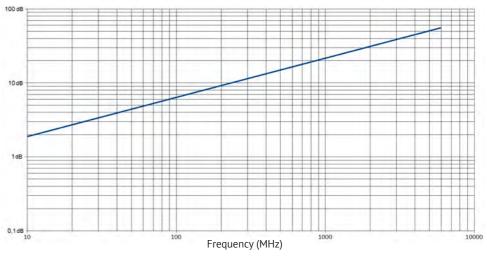
#### Typ. Attenuation (dB/100 m at 20 °C)

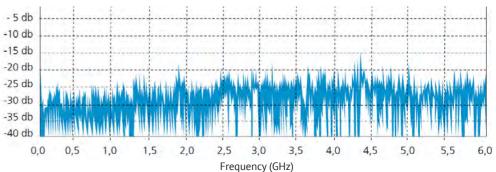
•			•	
	5 MHz	1.33	1000 MHz	18.43
	10 MHz	1.88	1296 MHz	20.71
	50 MHz	3.33	1500 MHz	22.99
	100 MHz	5.37	1800 MHz	25.46
	144 MHz	6.08	2000 MHz	27.27
	200 MHz	7.13	2400 MHz	30.40
	300 MHz	8.93	3000 MHz	34.96
	432 MHz	11.40	4000 MHz	41.99
	500 MHz	12.59	5000 MHz	48.83
	800 MHz	15.96	6000 MHz	55.48

#### 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)







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**

 $\begin{array}{ll} \mbox{Diameter} & 10.2 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 13.49 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Eca} \\ \end{array}$ 

#### **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  $\S$  6.2.6, ISO 6722-1:2011-10  $\S$  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

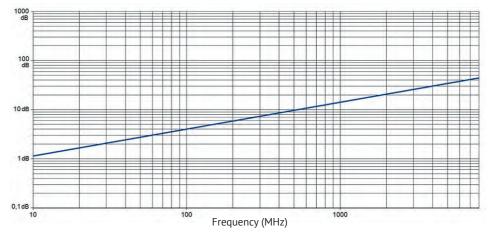
#### Typ. Attenuation (dB/100 m at 20 °C)

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

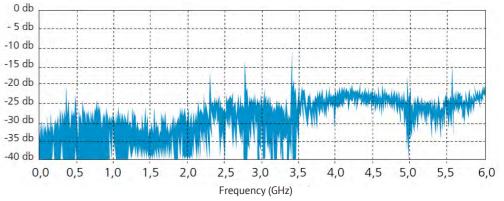
#### Max. Power Handling (W at 40 °C)

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



-10 db

 $\frac{32}{33}$ 



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 6 GHz Euroclass according to EN 50575

#### **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  $\boldsymbol{\cdot}$  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

#### 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

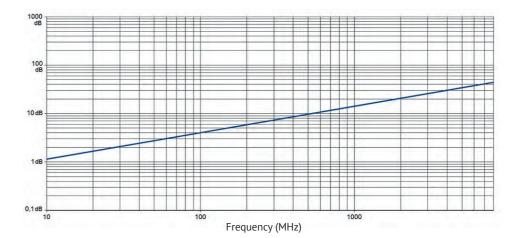
#### Typ. Attenuation (dB/100 m at 20 °C)

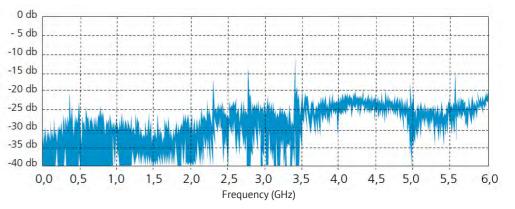
5 MHz	0.76	1000 MHz	13.49
10 MHz	1.14	1296 MHz	15.68
50 MHz	2.66	1500 MHz	17.01
100 MHz	3.80	1800 MHz	18.91
144 MHz	4.66	2000 MHz	20.14
200 MHz	5.51	2400 MHz	22.42
300 MHz	6.94	3000 MHz	25.37
432 MHz	8.46	4000 MHz	29.55
500 MHz	9.12	5000 MHz	33.44
800 MHz	11.88	6000 MHz	37.05

#### 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

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







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**

 $\begin{array}{lll} \mbox{Diameter} & 10.2 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 13.49 \mbox{ dB} \\ \mbox{f max} & 8 \mbox{ GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Eca} \\ \end{array}$ 

#### **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 strandec 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

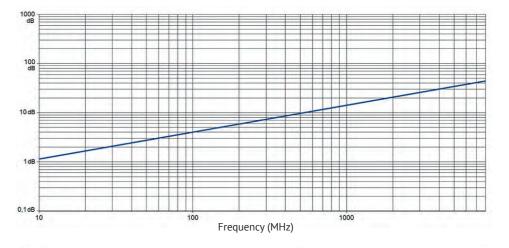
#### Typ. Attenuation (dB/100 m at 20 °C)

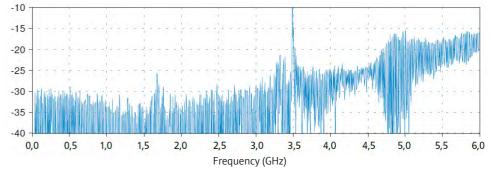
-		•	•	
	5 MHz	0.76	1000 MHz	13.49
	10 MHz	1.14	1296 MHz	15.68
	50 MHz	2.66	1500 MHz	17.01
	100 MHz	3.80	1800 MHz	18.91
	144 MHz	4.66	2000 MHz	20.14
	200 MHz	5.51	2400 MHz	22.42
	300 MHz	6.94	3000 MHz	25.37
	432 MHz	8.46	4000 MHz	29.55
	500 MHz	9.12	5000 MHz	33.44
	800 MHz	11.88	6000 MHz	37.05
			8000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







Ecoflex 10 Plus Heater

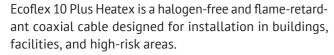












Ecoflex cables with Heatex jackets are flame-resistant and have minimal fire propagation. Heatex jackets are low-smoke, ensuring visibility of escape routes in case of a fire. Heatex jackets are halogen-free and do not contain reactive elements such as fluorine, chlorine, and bromine. They do not produce 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**

 $\begin{array}{lll} \mbox{Diameter} & 10.2 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 13.49 \mbox{ dB} \\ \mbox{f max} & \mbox{8 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Cca} \\ \end{array}$ 

#### **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
- $\cdot$  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.
- Vertical flame spread tested according to EN 50305:2002 Sec. 9.1.1. (for cables with a diameter 6 mm <  $\emptyset$  < 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 %)</li>
- 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  $\mu$ S/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 strandec 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

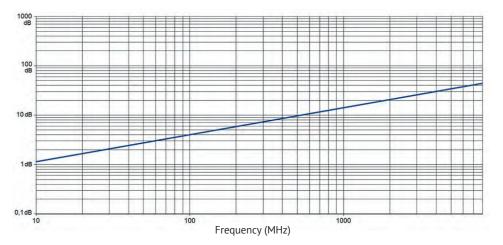
#### Typ. Attenuation (dB/100 m at 20 °C)

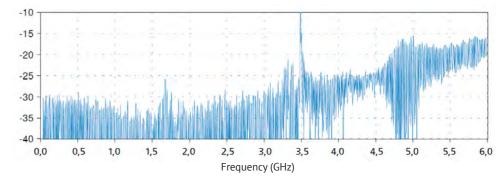
		•	
5 MHz	0.76	1000 MHz	13.49
10 MHz	1.14	1296 MHz	15.68
50 MHz	2.66	1500 MHz	17.01
100 MHz	3.80	1800 MHz	18.91
144 MHz	4.66	2000 MHz	20.14
200 MHz	5.51	2400 MHz	22.42
300 MHz	6.94	3000 MHz	25.37
432 MHz	8.46	4000 MHz	29.55
500 MHz	9.12	5000 MHz	33.44
800 MHz	11.88	6000 MHz	37.05
		8000 MHz	44.08

#### 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)







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**

 $\begin{array}{ll} \mbox{Diameter} & 14.6 \pm 0.3 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 9.80 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Eca} \\ \end{array}$ 

#### **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

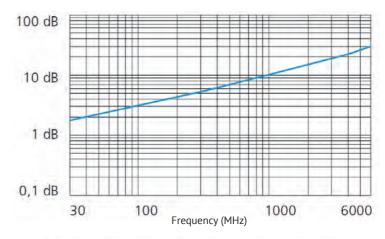
#### Typ. Attenuation (dB/100 m at 20 °C)

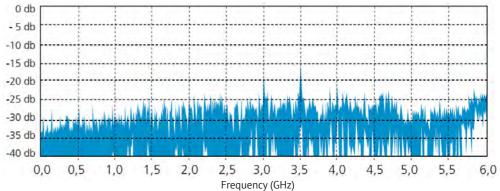
5 MHz	0.60	1000 MHz	9.80
10 MHz	0.86	1296 MHz	11.40
50 MHz	1.96	1500 MHz	12.40
100 MHz	2.81	1800 MHz	13.80
144 MHz	3.40	2000 MHz	14.60
200 MHz	4.05	2400 MHz	16.20
300 MHz	5.00	3000 MHz	18.30
432 MHz	6.10	4000 MHz	21.60
500 MHz	6.70	5000 MHz	24.60
800 MHz	8.60	6000 MHz	27.50

#### Max. Power Handling (W at 40 °C)

326
284
23
206
183
2

# Typ. Attenuation (dB/100 m at 20°C)







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 $14.6 \pm 0.3 \text{ mm}$ Impedance $50 \pm 2 \Omega$ Attenuation at 1 GHz/100 m9.80 dBf max6 GHzEuroclass according to EN 50575Cca

#### **Characteristics**

- Certified according to EN 50575:2014 + A1:2016 for applications in buildings with requirements for fire behavior
- $\boldsymbol{\cdot}$  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)</li>
- · 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
- $\bullet$  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 (FRN 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
/elocity 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

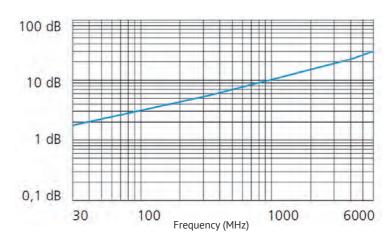
#### Typ. Attenuation (dB/100 m at 20 °C)

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	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

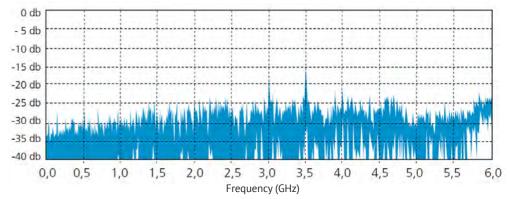
#### Max. Power Handling (W at 40 °C)

	3 (	•	
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 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**

 $\begin{array}{lll} \mbox{Diameter} & 14.6 \pm 0.3 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 9.80 \mbox{ dB} \\ \mbox{f max} & \mbox{8 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Eca} \end{array}$ 

#### **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

pacitance	78 pF/m	101 pF/m	102 pF/m
locity factor	0.85	0.66	0.66
tenuation(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

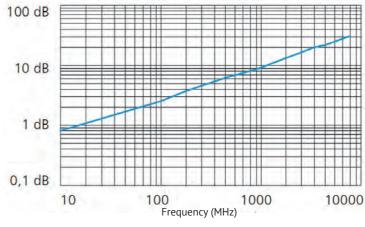
#### Typ. Attenuation (dB/100 m at 20 °C)

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

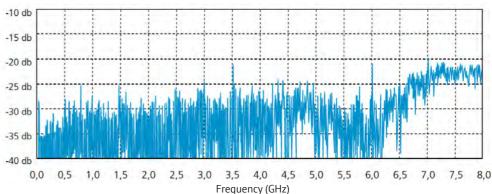
#### Max. Power Handling (W at 40 °C)

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



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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**

 $\begin{array}{lll} \mbox{Diameter} & 14.6 \pm 0.3 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 9.80 \mbox{ dB} \\ \mbox{f max} & \mbox{8 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Cca} \end{array}$ 

#### **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)
- $\cdot$  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 %)</li>
- 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)</li>
- 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)	/8 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

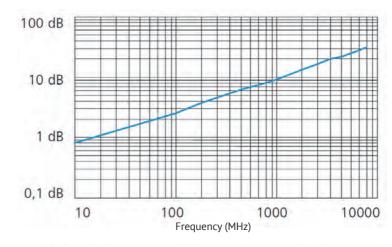
#### Typ. Attenuation (dB/100 m at 20 °C)

·yp.	Attendation	(ab) 100 m at 20	<b>C)</b>	
	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
4	432 MHz	6.10	4000 MHz	21.60
!	500 MHz	6.70	5000 MHz	24.60
8	800 MHz	8.60	6000 MHz	27.50
			8000 MHz	32.70

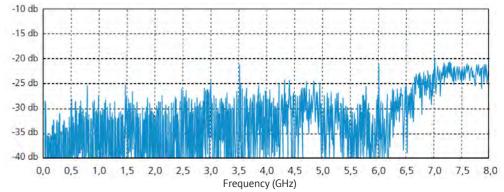
#### Max. Power Handling (W at 40 °C)

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 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**

 $\begin{array}{ll} \mbox{Diameter} & 5.0 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 31.09 \mbox{ dB} \\ \mbox{f max} & \mbox{10 GHz} \end{array}$ 

#### **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)
- $\cdot$  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
- $\boldsymbol{\cdot}$  Smoke density according to IEC 61034
- UV-resistant
- $\boldsymbol{\cdot}$  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

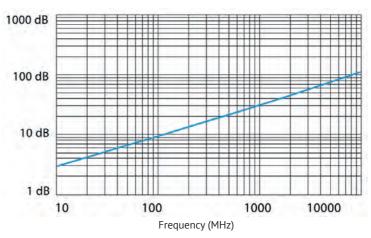
#### Typ. Attenuation (dB/100 m at 20 °C)

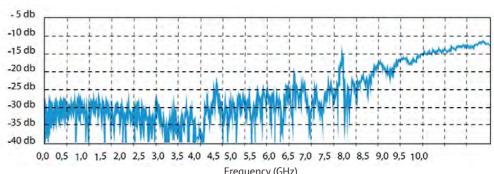
		•	
5 MHz	2.07	1000 MHz	31.09
10 MHz	2.93	1296 MHz	35.71
50 MHz	6.61	1500 MHz	38.63
100 MHz	9.40	1800 MHz	42.63
144 MHz	11.33	2000 MHz	45.14
200 MHz	13.41	2400 MHz	49.87
300 MHz	16.53	3000 MHz	56.39
432 MHz	19.99	4000 MHz	66.19
500 MHz	21.57	5000 MHz	75.05
800 MHz	27.62	6000 MHz	83.00
		10000 MHz	112.00

#### 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)







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**

 $\begin{array}{ll} \mbox{Diameter} & 7.3 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 21.52 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \end{array}$ 

#### **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
- $\boldsymbol{\cdot}$  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)
- $\boldsymbol{\cdot}$  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

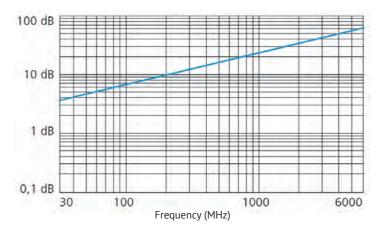
#### Typ. Attenuation (dB/100 m at 20 °C)

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	5 MHz	1.60	1000 MHz	21.52
	10 MHz	2.20	1296 MHz	24.84
	50 MHz	4.52	1500 MHz	27.08
1	00 MHz	6.28	1800 MHz	30.00
1	44 MHz	7.60	2000 MHz	31.88
2	00 MHz	9.04	2400 MHz	35.60
3	00 MHz	11.20	3000 MHz	40.88
4	32 MHz	13.60	4000 MHz	49.12
5	00 MHz	14.72	5000 MHz	57.04
8	00 MHz	19.00	6000 MHz	64.90

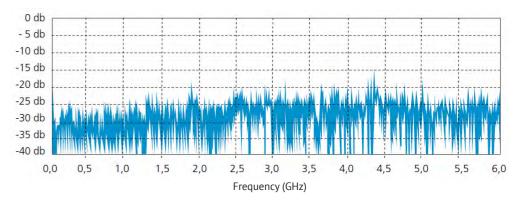
#### Max. Power Handling (W at 40 °C)

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 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**

 $\begin{array}{ll} \mbox{Diameter} & 10.2 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 14.20 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \end{array}$ 

#### **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
- $\cdot$  Jacket material according to IEC 60092-360 (IEC 60092-359) SHF2
- $\boldsymbol{\cdot}$  Wall thickness of the cable jacket according to IEC 60092-376
- Flame-retardant according to IEC 60332-3-22 (Cat. A)
- $\cdot$  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)
- $\cdot$  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

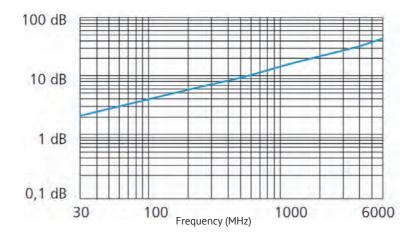
#### Typ. Attenuation (dB/100 m at 20 °C)

		• •	•	
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

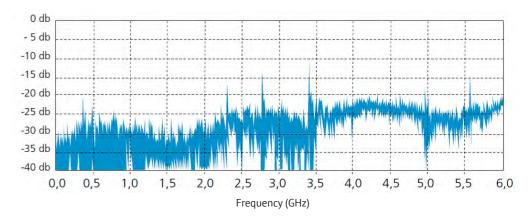
#### Max. Power Handling (W at 40 °C)

	3 (	•	
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



 $^{-2}$ 



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**

 $\begin{array}{ll} \mbox{Diameter} & 14.6 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 2 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 9.80 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \end{array}$ 

#### **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)
- $\cdot$  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
/elocity 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

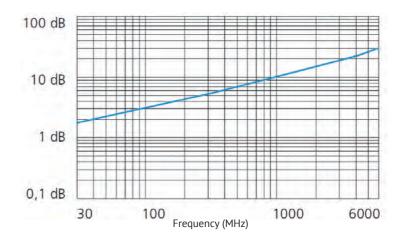
#### Typ. Attenuation (dB/100 m at 20 °C)

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

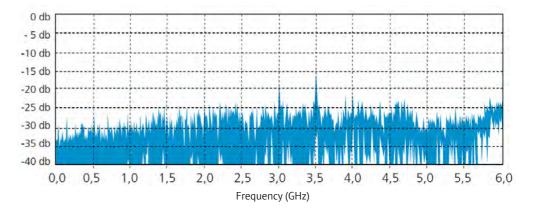
#### Max. Power Handling (W at 40 °C)

	3 (		
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 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 aluminium-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**

 $\begin{array}{lll} \mbox{Diameter} & 5.4 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 4 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 29.60 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Fca} \end{array}$ 

#### **Characteristics**

- $\cdot$  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**

80 nF/km
0.80
15.4 Ω/km
17.0 Ω/km
≥ 5 GΩ*km
AC 1.0 kV
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

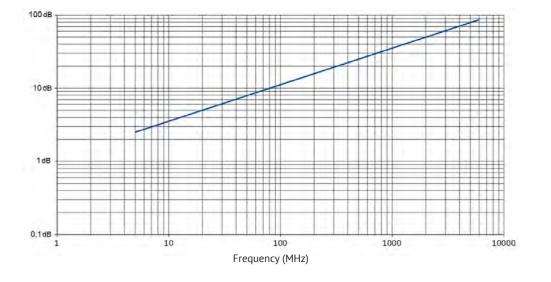
#### Typ. Attenuation (dB/100 m at 20 °C)

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 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 aluminium-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.

applications in WLAN, GPS, CB, and mobile communications, short antenna feed lines, and many other high-frequency applications.

### **Key features**

 $\begin{array}{lll} \mbox{Diameter} & 5.4 \pm 0.2 \mbox{ mm} \\ \mbox{Impedance} & 50 \pm 4 \ \Omega \\ \mbox{Attenuation at 1 GHz/100 m} & 29.60 \mbox{ dB} \\ \mbox{f max} & \mbox{6 GHz} \\ \mbox{Euroclass according to EN 50575} & \mbox{Fca} \end{array}$ 

#### **Characteristics**

- $\cdot$  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**

80 nF/km
0.80
15.4 Ω/km
17.0 Ω/km
≥ 5 GΩ*km
AC 1.0 kV
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

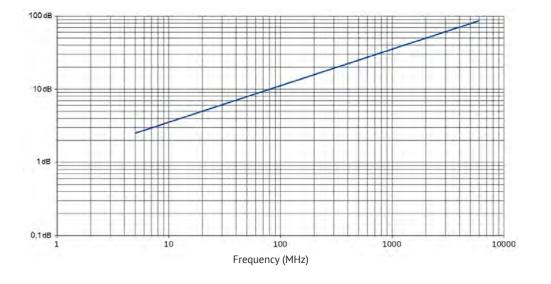
#### Typ. Attenuation (dB/100 m at 20 °C)

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)



a PE outer Jacket.

H155 PE by SSB-Electronic is suitable for numerous applications in WLAN, GPS, CB, and mobile communications,

## **Coaxial Connectors N**

Connector	Item No.	Suitable for	Inner conductor	Outer conductor	Material Isolator	Material gasket in mating face	Surface of Bod Other Metal Pa Except Pin	arts, Surface	Weight	SWR @ 3 GHz	Impedance	Frequency up to	Return Loss	Insertion Loss
N male	7700	Aircell 5	solder	screw	PTFE	silicone	nickel-plated t	orass 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 b	orass gold-plated	33 g	<1.1	50 Ω	6 GHz	<ul><li>≤ -33.8dB @ 1GHz;</li><li>≤ -28.7dB @ 3GHz;</li><li>≤ -22.0dB @ 11GHz</li></ul>	≤ 0.05 dB
N female (crimp)	7703	Aircell 5	solder	crimp	PTFE	-	nickel-plated b	orass 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 b	prass 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 t	orass 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 b	orass 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 b	orass 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 b	orass 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 b	orass 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 b	orass 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 b	orass 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 b	prass 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 t	orass 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 b	orass 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 b	orass 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 b	orass 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 b	orass 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 b	orass 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 suri		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 surf		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 surf		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 Hea- tex/SeaTex	solderless	screw	PTFE	silicone	brass with CuSnZn3 surf		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 suri		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 surf		74 g	<1.06	50 Ω	11 GHz	<ul><li>≤ -33.6dB @ 1GHz;</li><li>≤ -32.5dB @ 4GHz;</li><li>≤ -29.3dB @ 11GHz</li></ul>	≤ 0.05 dB
N male (solderless)	7395	Ecoflex 15 / Plus	clamp	screw	PTFE	silicone	nickel-plated t	orass 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	<ul><li>&lt; -32.4dB @ 1GHz;</li><li>&lt; -28.1dB @ 3GHz;</li><li>&lt; -23.0dB @ 11GHz</li></ul>	≤ 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	РОМ	-	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 Bo Other Metal P Except Pi	Parts, Surface	Weight	SWR @ 3 GHz		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 sur		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 witl CuSnZn3 sur		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 sur		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 witl CuSnZn3 sur		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	SMA	SMA RP	UHF	UHF	BNC	BNC	BNC female	TNC	TNC	TNC-RP	FME	7-16 DIN	7-16 DIN	N	N	N female		N-RP
BNC female	<b>male</b> 8733	female	male	female	male	female	male	female	female	male	male	male	female	male	female	male	(flange)	female	male
BNC female	0733					8738													
BNC male		8732				0730													
BNC male		0732		8730															
BNC male				0730			8739												
BNC male							0/3/	8737											
BNC male								0737	8734										
BNC male									0734			8744							
N female												0/11							8711
N female			8762																0711
N female			0702								8710								
N female											0710			8709					
N female							8701							0707					
N female							0701								8722				
N female															0722		8724		
N female	8705																0,21		
N female	0.03									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						

# **Handling Instructions**

for coaxial cables



Our coaxial cables are very durable and designed for continuous use. As consumables, they are intended for one-time installation. Whether installed in buildings, on ships and oil platforms in rough seas, or for mobile use – the applications of our coaxial cables are diverse. Proper handling of coaxial cables is crucial for their durability in every application.

Please refer to the data sheet of each cable for specific technical details such as temperature range, bending radius, etc. Coaxial cables damaged due to improper use are excluded from claims. All information is provided without guarantee and subject to change.

To ensure smooth operation and maximize the lifespan of our coaxial cables, we recommend following the guidelines for cable handling provided.

- Avoid strong mechanical stress on the coaxial cable, such as severe bending, stepping on, sharp edges, unnecessary cuts, etc.
- Do not expose your coaxial cables to high temperatures (>85 °C).
- Avoid direct contact of the coaxial cable with corrosive liquids.
- If possible, avoid constant and severe bending of the cable. Over time, this can cause damage to the outer conductor. Our coaxial cables are not suitable for drag chains and rotors.
- Pay attention to the tensile stress on your coaxial cable. If cables are installed vertically over longer distances, they must be secured at certain intervals to minimize tensile load.



# **Contact**

Do you have questions about our products or a specific application?

Then give us a call or send us an email.

We will get back to you as soon as possible.

We appreciate feedback, questions, and your suggestions.





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