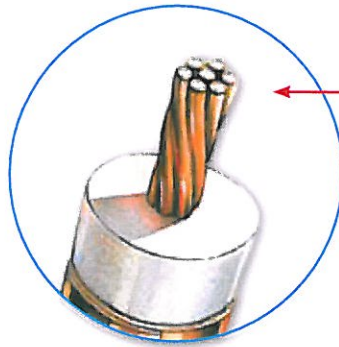


# Ecoflex 15 Plus HEATEX



Stranded center conductor with aluminium core and weldet copper shield

## Combines excellent HF characteristics with all fire protection requirements

- › Very low longitudinal attenuation
- › High flexibility
- › Halogen-free
- › Complies with all relevant fire protection demands

The new **Ecoflex15 Plus-Heatex** comes with an innovative cable design which again improves the good HF characteristics of the ECOFLEX 15 – standard cable.

**Ecoflex 15 Plus-Heatex** uses a high precision Hybrid inner conductor, made of seven single aluminium core wires with welded OFC copper coat. The surface finish and the corresponding HF characteristics of this inner conductor are significantly better than conventional stranded copper wire. The result is impressive:

- › Significantly lower longitudinal attenuation: – 11% at 6 GHz
- › Lower cable weight: – 22%
- › Usable frequency range extended to 8 GHz
- › Excellent flexibility

A further plus is the double shielding: an overlapping copper foil and an overlying copper braid guarantee a high shielding factor of >90 dB@1 GHz.

**Ecoflex 15 Plus-HEATEX** is predestined for operation in buildings, ships and applications in fire-endangered areas. The UV stabilisation of the robust HEATEX coats also allows an unlimited outdoor use.

**Ecoflex 15 Plus-Heatex** is hardly inflammable and offers a low fire propagation.

**Heatex** coats are halogen-free, low-smoke and include no reaction-friendly elements like fluorine, chlorine and bromine. In comparison, standard coaxial cables with PVC coats (polyvinyl chloride) are not halogen-free and hence must not be used in fire-hazardous areas. A critical point of PVC cables is their propagation of flames in case of fire – a danger that is safely eliminated by **Ecoflex 15 Plus-Heatex!**

Available standard lengths 25 m, 50 m, 100 m, 200 m, 500 m.

**Ecoflex 15 Plus-Heatex** complies with the following norms:

(Further information regarding tests at [www.ssb.de](http://www.ssb.de))

### Fire behaviour

EN 50265-2-1 IEC 60332-1  
DIN 5510-2

### Cable bundle test

IEC 60332-3-24

### Smoke density

IEC 61034 -1+2 EN 50268

### Corrosiveness of combustible Gases

HD 602-1 EN 50267-2-3 IEC 60754-2

### Technical data

Centre conductor .....	Hybrid, aluminium core, copper shield, 7 x 1.55 mm
Centre conductor Ø .....	4.5 mm
Dielectric .....	PE, low-loss compound
Dielectric Ø .....	11.3 mm
Outer conductor 1 .....	copper foil, PE coated
Shielding factor .....	100 %
Outer conductor 2 .....	copper braid
Shielding factor .....	72 %
Sheath .....	black heatex, UV-resistant
Outer diameter Ø .....	14.6 mm
Weight .....	201 g/m
Min. bending radius.....one single bending .....	70 mm
15 repeated bendings.....	140 mm
Temperature range .....	storage .....
installation .....	-70 bis +85°C
operation .....	-40 bis +60°C
operation .....	-55 bis +85°C
Pulling strength .....	10 daN

### Typ. attenuation (dB/100 m @ 20°C)

5 MHz .....	0.58	1000 MHz .....	9.1
10 MHz .....	0.83	1296 MHz .....	10.5
50 MHz .....	1.87	1500 MHz .....	11.4
100 MHz .....	2.67	1800 MHz .....	12.6
144 MHz .....	3.23	2000 MHz .....	13.4
200 MHz .....	3.83	2400 MHz .....	14.9
300 MHz .....	4.75	3000 MHz .....	16.9
432 MHz .....	5.8	4000 MHz .....	20.0
500 MHz .....	6.2	5000 MHz .....	22.9
800 MHz .....	8.0	6000 MHz .....	25.6
		8000 MHz .....	30.5

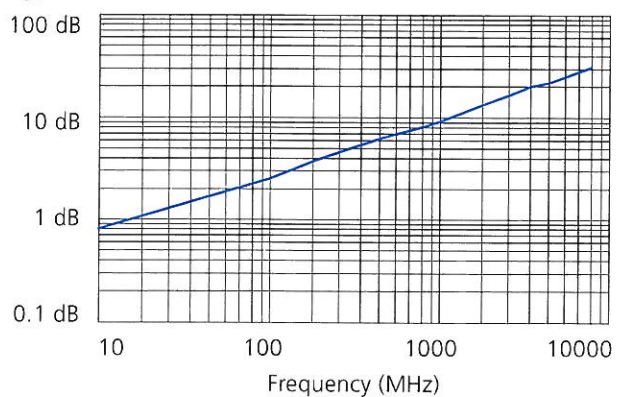
### Max. power handling (W @ 40°C)

10 MHz .....	6710	2000 MHz .....	410
100 MHz .....	2070	3000 MHz .....	330
500 MHz .....	890	4000 MHz .....	280
1000 MHz .....	610	6000 MHz .....	220
		8000 MHz .....	180

### Electrical specifications

Impedance .....	50 Ω
Capacity .....	77 pF/m
Velocity factor .....	0.86
fmax .....	8 GHz
Screening efficiency @ 1 GHz .....	> 90 dB
DC-resistance: Centre conductor .....	2.2 Ω/km
Outer conductor .....	5.15 Ω/km
RF peak voltage .....	1.55 kV

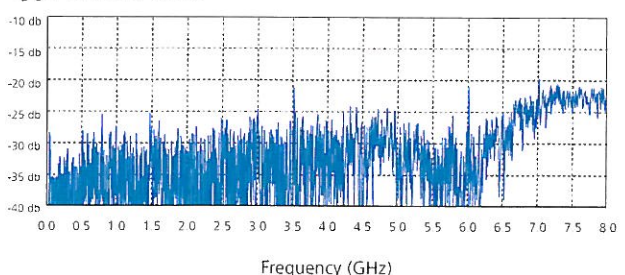
### Typ. attenuation (dB/100 m) @ 20°C



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

Capacity .....	77 pF/m	101 pF/m	102 pF/m
Velocity factor .....	0.86	0.66	0.66
Attenuation (dB/100 m)			
10 MHz .....	0.83	2.0	5.0
100 MHz .....	2.67	7.0	17.0
500 MHz .....	6.2	17.0	39.0
1000 MHz .....	9.1	22.5	54.6
3000 MHz .....	16.9	58.5	118

### Typ. return loss



Due to production tolerances the return loss may have different characteristics.