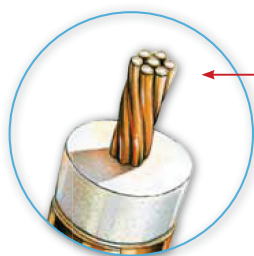




Ecoflex 15 Plus HEATEX



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)

Fire behaviour

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

Cable bundle test

IEC 60332-3-24

Smoke density

IEC 61034 -1+2EN 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
.....	-55 bis +85°C
Pulling strength	10 daN

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

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

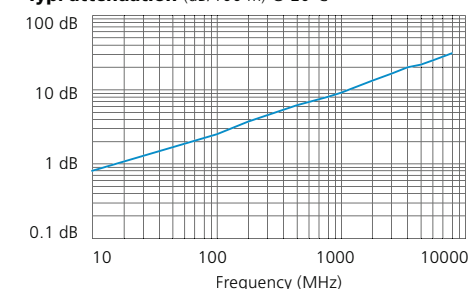
Typ. attenuation (dB/100 m @ 20°C)

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

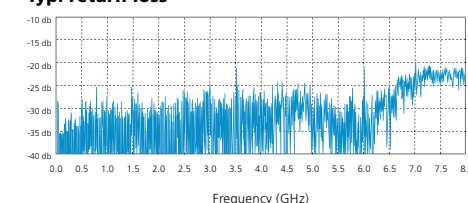
Max. power handling (W @ 40°C)

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

Typ. attenuation (dB/100 m) @ 20°C



Typ. return loss



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