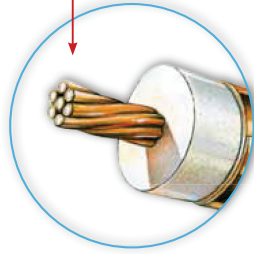


Ecoflex 10 Plus HEATEX



Stranded center conductor with aluminium core and welded 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 **Ecoflex10 Plus-Heatex** comes with an innovative cable design, which again improves the good HF characteristics of the ECOFLEX 10 – standard cable.

Ecoflex 10 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: – 5.8% at 6 GHz
- » Lower cable weight: – 33%
- » 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 10 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 10 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 10 Plus-Heatex!**

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

Ecoflex 10 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 +ZEN 50268
- Corrosiveness of combustible Gases**
HD 602-1 EN 50267-2-3 IEC 60754-2

Technical data

Centre conductor	Hybrid, aluminium core 7 x 1.0 mm
Centre conductor Ø	2.85 mm
Dielectric	PE, low-loss compound
Dielectric Ø	7.25 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	10.2 mm
Weight	103 g/m
Min. bending radius	one single bending 40 mm 15 repeated bendings 80 mm
Temperature range	storage -70 to +85°C installation -40 to +60°C operation -55 to +85°C
Pulling strength	4 daN

Typ. attenuation (dB/100 m @ 20°C)

5 MHz	1000 MHz	14.0
10 MHz	1296 MHz	16.2
50 MHz	1500 MHz	17.6
100 MHz	1800 MHz	19.5
144 MHz	2000 MHz	20.6
200 MHz	2400 MHz	22.9
300 MHz	3000 MHz	26.0
432 MHz	4000 MHz	30.7
500 MHz	5000 MHz	35.1
800 MHz	6000 MHz	39.1
	8000 MHz	46.6

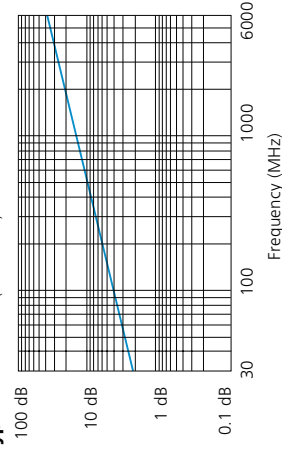
Max. power handling (W @ 40°C)

10 MHz	3000 MHz	190
100 MHz	4000 MHz	160
500 MHz	5000 MHz	140
1000 MHz	6000 MHz	130
2000 MHz		240

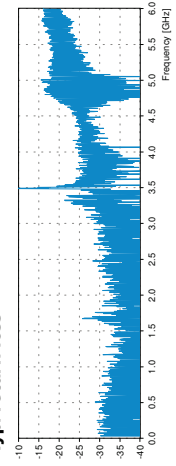
Electrical specifications

Impedance	50 Ω
Capacity	78 pF/m
Velocity factor	0.85
fmax	8 GHz
Screening efficiency @ 1 GHz	> 90 dB
DC-resistance: Centre conductor	5.4 Ω/km
Outer conductor	8.4 Ω/km
RF peak voltage	1kV

Typ. attenuation (dB/100 m) @ 20°C



Typ. return loss



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