

## Ecoflex 10 Plus Heatex &

## Ecoflex 10 Plus HEATEX



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-hazardeous 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+2EN 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
DielectricPE, low-loss compound
Dielectric Ø
Outer conductor 1 copper foil, PE coated
Shielding factor
Outer conductor 2copper braid
Shielding factor
Sheath black heatex, UV-resistant
Outer diameter Ø10.2 mm
Weight103 g/m
Min. bending radius one single bending40 mm
15 repeated bendings 80 mm
Temperature rangestorage70 to +85°C
installation40 to +60°C
operation55 to +85°C
Pulling strength

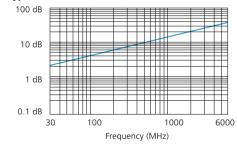
Electrical specifications	
Impedance	50 <sup>Ω</sup>
Capacity	78 pF/m
Velocity factor	0,85
fmax	. 8 GHz
Screening efficiency @ 1 GHz	> 90 dB
DC-resistance: Centre conductor 5.	4 Ω/km
Outer conductor 8.	4
RF peak voltage	1kV

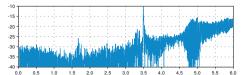
Ecoflex 10 Plus Heatex RG 213/U RG 58/U
Capacity78 pF/m101 pF/m 102 pF/m
Velocity factor 0.85 0.66 0.66
Attenuation (dB/100 m)
10 MHz 1.3 2.0 5.0
100 MHz 4.1 7.017.0
500 MHz 9.6 17.0 39.0
1000 MHz 14.0 22.554.6
3000 MHz 26.0 58.5 118

Typ. attenuation (dB/100 m @ 20°C)			
5 MHz0.9	1000 MHz14.0		
10 MHz1.3	1296 MHz16.2		
50 MHz2.85	1500 MHz17.6		
100 MHz4.1	1800 MHz19.5		
144 MHz5.0	2000 MHz20.6		
200 MHz5.9	2400 MHz22.9		
300 MHz7.4	3000 MHz26.0		
432 MHz8.9	4000 MHz30.7		
500 MHz9.6	5000 MHz35.1		
800 MHz12.4	6000 MHz39.1		
	8000 MHz46.6		

Max. power handling	(W @ 40°C)
10 MHz3860	3000 MHz190
100 MHz1190	4000 MHz160
500 MHz510	5000 MHz140
1000 MHz350	6000 MHz130
2000 MHz240	

Typ. attenuation (dB/100 m) @ 20°C





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

Typ. return loss