THERMOCOAX
from vision to reality

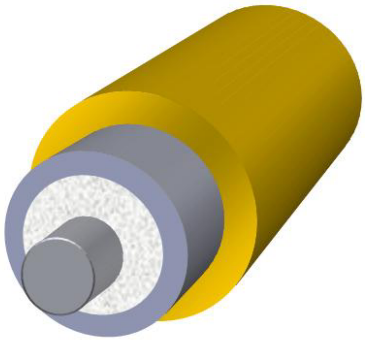
Mineral insulated signal transmission cables: Low capacitance

These cables are assigned to be used at very high temperature (600°C) and under very aggressive media.

They are specifically suitable for the transmission of hyper frequency signals up to 20 GHz.

Radars, civil or military transmitters, equipment for television, satellite broadcasting, electronic devices for medical, nuclear... are among the possible fields of applications for this kind of THERMOCOAX cables.

Their design gives them exceptional mechanical and electrical features to facilitate their use. As for instance, the standing wave ration (SWR) is only <17.7 dB and complies with the MIL-T81492 standard. Moreover, the attenuation of this cable remains very low at 0.5 Db/m/GHz up to 20 GHz for an outer diameter of 3 mm.



Type / Material	1 C CAc 10 Si 50 Ohms	1 C CAc 15 Si 50 Ohms	1 C CAc 20 Si 50 Ohms	1 C CAc 30 Si 50 Ohms
Sheath	Sheath: copper lined stainless steel 304L			
Conductor	Core: copper			
Insulant	Insulant: mineral powder with low dielectrical constancy			
Electrical characteristics				
Insulation resistance (500 V DC)	≥ 10^{13} ohms.m at room temperature ≥ 10^{7} ohms.m at 300°C			
Line capacity	≈ 110 pF/m ± 5 %			
Characteristic mpedance	≈ 50 ohms ± 6 %			
Dimensions				
Outer diameter (mm)	1 ± 0.03 mm	1.5 ±0.03 mm	2 ±0.03 mm	3 ±0.03 mm
Manufacturing length (mm)	From 10 m to 80 m	From 10 m to 60 m	From 10 m to 60 m	From 10 m to 60 m

Particular specifications

On request, the THERMOCOAX cables can be submitted to several tests such as :

- helium leak test,
- steam tightness test,
- material analysis,
- electrical and metallurgical tests,

according to specifications stipulated by the customer and

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