control cable with screen and extra thick insulation

HSC30





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APPLICATIONS

- current slope cable for decoupling units
- output cable for power supplies with high isolation voltage

ELECTRICAL DATA

PARAMETER	ADDITIONAL INFORMATION	MIN	TYP	MAX	UNIT
test voltage	conductor - conductor	2,5			kV
(50Hz AC, 1 min.)	conductor - screen	1,5			
conductor resistance				19,5	0hm/km
isolation resistance		20			M0hm*km
working voltage [AC]	conductor - conductor			300	V

MECHANICAL DATA

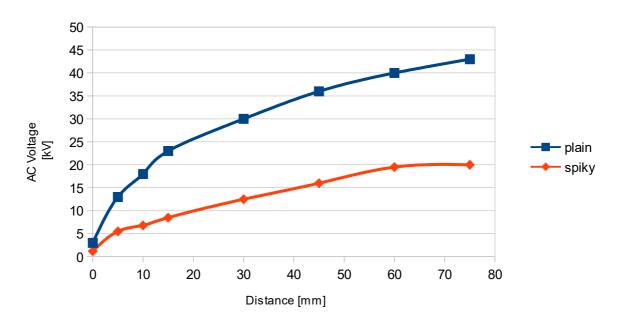
PARAMETER	ADDITIONAL INFORMATION	MIN	TYP	MAX	UNIT
conductor	2x stranded copper		1,0		mm²
sheath diameter		9,75	10	10,25	mm
bending radius	onetime	80			mm
	repeated	160			
temperature range	moving	-5		80	°C
	non-moving	-30		80	

TYPICAL PARTIAL DISCHARGE CHARACTERISTICS (in free air)

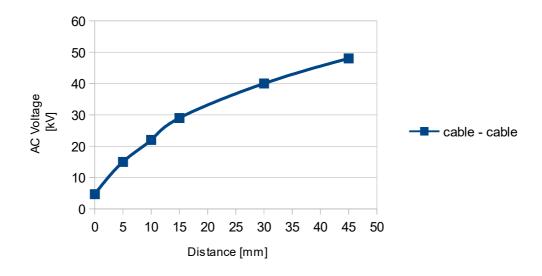
To ensure long-term stability partial discharges must be avoided. The diagram shows the absolute minimum distances of HSC30 to achieve a partial discharge free operation.

Due to the relationship between the structure of the surface and the homogeneity of the electric field two different graphs are given. One for a plain conducting surface next to the cable (favorable case) and one for a spiky conductor pointing to the cable (worst case).

Usually applications lie somewhere in between.

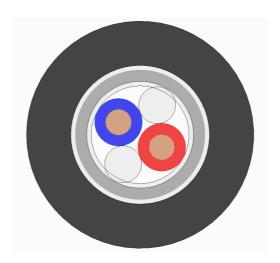


For two HSC30 cables with different potential routed next to each the following minimal distances should be used for partial free operation:

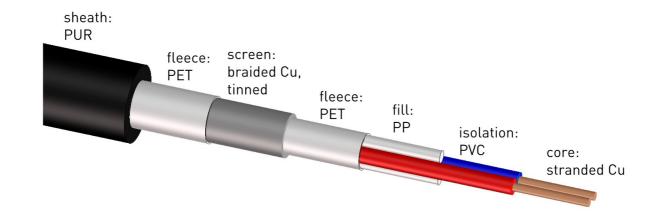


Because of the dependancy on manifold ambient conditions the absence of partial discharges should be checked for each application seperately.

CROSS SECTION



USED MATERIALS



IMPORTANT NOTICE

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