

# 74C068 SH C 500V ... Cu2/5 K3 EG NA

## 74C068 SH C 500V 7x1 Cu2 K3 EG NA

### Contact

Market information  
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Control cables CST 74C068 for nuclear power plants, 500V halogen-free. These cables, installed outside the containment area (K3), are unarmed and designed with copper braid shield.

## DESCRIPTION

### Applications

These control cables allow connection to a variety of industrial equipment from control room. Many of them require anti-inductive screen (EMI).

### Design

#### Conductor:

- Stranded (class 2) or flexible (class 5) plain copper

#### Insulation:

- Zero halogen (SH), cross linked

#### Assembling:

- Polyester tape (optional)

#### Overall screen:

- Copper wire braid (CWB) R ≥ 80%

#### Outer sheath:

- Low smoke, zero halogen (LSZH)

- Colour: Grey

### Core identification

Black cores printed with white numbers

Optional: with Y/G core

### Marking

NEXANS 279 Nber of cores & cross-section Cu EG CST 74 C 068 K3 SH 0.3/0.5 (0.6)  
kV YYYY Manufacturing number + metric marking



### STANDARDS

**International** IEC 60228;  
IEC 60332-3-23; IEC 60754-1;  
IEC 61034-2

**National** NF C 32-070/C1



Halogen free  
IEC 60754-1/IEC  
60754-2



Operating temp.  
-20 - 60 °C



Smoke density  
EN/IEC 61034-2



Fire retardant  
NFC 32070 C1/IEC  
60332-3-23(B)



Electro magnetic  
interference  
resistance  
Yes



U.V resistance  
Yes



Life cycle 60years  
Yes



Max. conductor  
temp. in service  
90 °C

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## CHARACTERISTICS

### Construction characteristics

Conductor material	Plain copper
Type of conductor	Stranded, Class 2
Insulation	Halogen-free
Screen	Copper Braid
Outer sheath	LSZH
Halogen free	IEC 60754-1/IEC 60754-2

### Dimensional characteristics

Conductor cross-section	1 mm <sup>2</sup>
Number of cores	7
Conductor diameter	1.3 mm
Diameter over insulation	2.58 mm
Diameter over screen	8.5 mm
Minimum outer diameter	10.4 mm
Maximum outer diameter	12.3 mm
Approximate weight	246 kg/km

### Electrical characteristics

Max. DC resistance of the conductor at 20°C	18.1 Ohm/km
Maximum DC resistance of the conductor at 90°C	23.000 Ohm/km
Reactance at 50 Hz	0.1 Ohm/km
Short Circuit Current 0,3 s Max	0.26 kA
Short Circuit Current 1 s Max	0.14 kA
Impedance at 50 Hz	18.1 Ohm
Voltage Drop	36.9 V/A.km
Calorific Power	2 MJ/m

### Usage characteristics

Operating temperature, range	-20 - 60 °C
Smoke density	EN/IEC 61034-2
Fire retardant	NFC 32070 C1/IEC 60332-3-23(B)
Electro magnetic interference resistance	Yes
U.V resistance	Yes
Life cycle 60years	Yes
Max. conductor temperature in service	90 °C
Nuclear Classification	Class 1 E Non LOCA/K3

## SELLING AND DELIVERY INFORMATION

Minimum bending radius:

- 10 x outer diameter
- To be doubled during laying operations