



# CLASSIFICATION REPORT

## of reaction to fire for electric cables

### 1 Introduction

This classification report defines the classification assigned to the cable types  
*Coaxial Cable RF50Z 1/2" S*  
in accordance with the procedures given in EN 13501-6.

## CLASSIFICATION OF REACTION TO FIRE FOR ELECTRIC CABLES IN ACCORDANCE WITH EN 13501-6

<b>Sponsor:</b>	ZHUHAI HANSEN TECHNOLOGY CO.,LTD No.1, Zhufeng Road Xinqing Science & Technology Ind. Park 519180 ZHUHAI Guangdong China
<b>Prepared by:</b>	VDE Prüf- und Zertifizierungsinstitut GmbH* Merianstraße 28, 63069 Offenbach, Deutsch- land
<b>Notified Body No:</b>	0366*
<b>Product name:</b>	Coaxial Cable RF50Z 1/2" S
<b>Classification report No:</b>	5022029/02-1
<b>Issue number:</b>	1
<b>Date of issue:</b>	2017-07-29

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*\* To be used for CE marking only*



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### 2 Details of classified product

#### 2.1 General

The product *Coaxial Cable RF50Z 1/2"S* is defined as an *electric cable*<sup>1</sup>.

\* To be used for CE marking

#### 2.2 Product description

The product *Coaxial Cable RF50Z 1/2"S* is described below or is described in the reports provided in support of classification listed in 3.1.

Product description:

**Designation of cable family acc. to standard:** N/A

**Underlying standard / specification:** Construction Data sheet "Low Loss Radio Frequency Coaxial Cable"  
RF50Z 1/2"S  
Issued 2017-01-25

**Rated voltage:** N/A

**Relevant design information:**

**Inner conductor:** Copper-Clad Aluminium Wire,  
diameter 3,6 mm

**Outer conductor:** Helical corrugated copper  
diameter 12,0 mm

**Used materials:** Dielectric: PE (HS001)  
Sheath: LSZH (3628)

**Sheath wall thickness:** 0,8 mm

**Constructional elements relevant for defining the cable family: (e.g. metallic tapes, non-combustible tapes...)**

N/A

<sup>1</sup> Definition according to EN 50575.



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### 3 Reports and results in support of this classification

#### 3.1 Reports

Name of Laboratory	Name of sponsor	Report ref. no.	Test method and date
VDE Institute	ZHUHAI HAN-SEN TECHNOLOGY CO.,LTD	235804-CC4-2	2017-06-23 <input checked="" type="checkbox"/> EN 60332-1-2 <input checked="" type="checkbox"/> EN 50399 <input checked="" type="checkbox"/> EN 61034-2 <input type="checkbox"/> EN 60754-2
VDE Institute	ZHUHAI HAN-SEN TECHNOLOGY CO.,LTD	235804-CC4-14	2017-07-25 <input type="checkbox"/> EN 60332-1-2 <input type="checkbox"/> EN 50399 <input type="checkbox"/> EN 61034-2 <input checked="" type="checkbox"/> EN 60754-2



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### 3.2 Results

Test method and test number	Parameter	No. tests <sup>2</sup>	Results <sup>3</sup>	
			Continuous parameter – mean m	Compliance with parameters
Test for vertical flame propagation for a single insulated wire or cable (EN 60332-1-2)	H	3	N/A	Compliant
Heat release and smoke production measurement on cables during flame spread test (EN 50399)	Flame spread	1	0,68 m	N/A
	THR <sub>1200</sub>		2 MJ	N/A
	HRR <sub>av</sub>		6 kW	N/A
	FIGRA		37 W/s	N/A
	TSP <sub>1200</sub>		6 m <sup>2</sup>	N/A
	SPR <sub>av</sub>		0,01 m <sup>2</sup> /s	N/A
	Flaming drop-lets / particles		N/A	Compliant d0
Measurement of smoke density of cables burning under defined conditions (EN 61034-2)	Minimum value of transmission	1	90%	N/A
Determination of acidity (by pH measurement) and conductivity (EN 60754-2)	Conductivity	1	0,7 µS/mm	N/A
	pH		4,6	N/A

<sup>2</sup> According to EN 13501-6: Number of individual measurements necessary to obtain a result value; does not refer to the number of tests through the application of EXAP rules according to TS 50576.

<sup>3</sup> When applying EXAP rules according to TS 50576, only the results that contribute to the classification are listed.



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### 4 Classification and field of application

#### 4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-6.

#### 4.2 Classification

The product *Coaxial Cable RF50Z 1/2"S* in relation to its reaction to fire behaviour is classified:

**B2<sub>ca</sub>**

The additional classification in relation to smoke production is:

**s1a**

The additional classification in relation to flaming droplets / particles is:

**d0**

The additional classification in relation to acidity is:

**a1**

The format of the reaction to fire classification for electric cables is:

Fire behaviour	Smoke production	Flaming droplets	Acidity
B2 <sub>ca</sub>	- s 1a	- d 0	- a 1

i.e. **B2<sub>ca</sub>-s1a,d0,a1**



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### 4.3 Field of application

This classification is valid for the following product parameters as determined in the expanded application process according on CLC/TS 50576:

**No application of CLC/TS 50576, the report is only valid for the cable type described in section 2.2.**

The classification is valid for all end use applications.

### 5 Limitations

This classification document does not represent type approval or certification of the product.

#### SIGNED

J. Bör

Creator of the classification report

#### APPROVED

D. Staemmler

Head of the Notified Body  
Construction Products Regulation