

NEK Kabel AS  
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Norge

## Reaction to fire classification report for electrical cables

### 1 Introduction

This classification report defines the classification assigned to the cable family “PFSK” in accordance with the procedure given in EN 13501-6:2014.

### 2 Details of classified product

#### 2.1 General

The cables in the cable family “PFSK” are defined as copper communication and control cables.

According to the owner of this classification report, these products comply with the European product specification EN 50575:2014+A1:2016.

#### 2.2 Product description

The cable family named “PFSK” is fully described in the test reports provided in support of classification listed in clause 3.1.

Table 1. Cables included in the cable family.

Name		Diameter Ø (mm)
PFSK	4 x 0.22	4.4
PFSK	6 x 0.22	5.4
PFSK	8 x 0.22	5.8
PFSK	12 x 0.22	6.8
PFSK	18 x 0.22	8.0
PFSK	25 x 0.22	9.4
PFSK	36 x 0.22	10.8
PFSK	2 x 0.50	6.0
PFSK	3 x 0.50	6.4
PFSK	4 x 0.50	7.0
PFSK	6 x 0.50	8.0
PFSK	8 x 0.50	8.5
PFSK	12 x 0.50	10.1

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Name		Diameter Ø (mm)
PFSK	18 x 0.50	11.6
PFSK	25 x 0.50	13.9
PFSK	36 x 0.50	16.1

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

#### 3.1 Reports/extended application reports

Table 2. Reports forming the basis for this classification.

Name of laboratory	Name of sponsor	Test report reference no	Accredited test methods
RISE	NEK Kabel AS	7P03453-2	EN 60332-1-2:2004/ A1:2015/A11:2016
RISE	NEK Kabel AS	7P03453-3	EN 60332-1-2:2004/ A1:2015/A11:2016
RISE	NEK Kabel AS	7P03453-10	CLC/TS 50576:2016

#### 3.2 Results

The test results listed below show the worst case as found in the test program performed and reported according to the table above. The tests have been carried out on cables covering the diameter range according to CLC/TS 50576:2016.

Table 3. Test results showing the worst case as found in the test program performed.

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean <i>m</i>	Compliance with parameters
EN 60332-1-2		2		
	$H \leq 425 \text{ mm}$		(-)	Compliant

(-) : not applicable

### 4 Classification and field of application

#### 4.1 Reference and direct field of application

This classification has been carried out in accordance with EN 13501-6:2014.

## 4.2 Classification

The product family called “PFSK” in relation to its reaction to fire behaviour is classified:

$$E_{ca}$$

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

Fire behaviour
$E_{ca}$

**Reaction to fire classification:  $E_{ca}$**

## 4.3 Field of application

This classification is valid for the following cable parameters as determined in the extended application process according to CLC/TS 50576:2016. All cables in the cable family named “PFSK”, as specified in table 1, with parameters within the ranges:

$$4.4 \text{ mm} \leq d \leq 16.1 \text{ mm}$$

The classification is valid for all end use applications.

## 5 Limitations

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

The classification assigned to the cable family in this report is appropriate to the declaration of performance by the manufacturer within the context of system 3 of assessment and verification of constancy of performance and CE marking under Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR). The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.

### **RISE Research Institutes of Sweden AB Safety - Fire Research, Fire Dynamics**

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