



Classification Report No.: 220502-01/01 CLASS

## 1. Introduction

This classification report defines the classification assigned to **pbflex® 500** in accordance with the procedures given in ČSN EN 13501-6: ed.2:2019 (EN 13501-6:2018)



### CLASSIFICATION OF REACTION TO FIRE

#### FOR ELECTRIC CABLES

IN ACCORDANCE WITH ČSN EN 13501-6: ed.2:2019 (EN 13501-6:2018)

<b>Sponsor:</b>	<b>pb cable s.r.o.</b> Kravařská 451/9, 709 00 Ostrava Česká Republika
<b>Prepared by:</b>	<b>ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV, s.p.</b> Pod Lisem 129, 171 02, Prague 8 - Troja Czech Republic
<b>Notified Body No.:</b>	<b>1014</b>
<b>Product name:</b>	<b>pbflex® 500</b>
<b>Classification report No.:</b>	<b>220502-01/01 CLASS</b>
<b>Issue number:</b>	<b>1</b>
<b>Date of issue:</b>	<b>20.05.2022</b>

This classification report consists of **11** pages and may only be used or reproduced in its entirety.

## 2. Details of classified product

### 2.1 General

The product **pbflex<sup>®</sup> 500** is defined as electric flexible cables according to ČSN EN 50575 (EN 50575)

### 2.2 Product description

The product **pbflex<sup>®</sup> 500** is described below

**Standard:**

**Rated voltage:**

U<sub>o</sub>/U 300/500V

**Conductor:**

Cu fine wire strand, class 5 according to EN 60228

**Insulation:**

The insulation material is PVC type YI2 (TI2) according to DIN VDE 0207 part 4

**Core identification:**

According to HD 308 S2, color and numbered core

**Inner covering:**

Type pbflex<sup>®</sup> 500 without shielding

**Outer sheath:**

The sheathing material is PVC type YM2 (TM2) according to DIN VDE 0207 part 5

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

#### 3.1 Reports

Enter details of report here as applicable

Name of Laboratory	Name of sponsor	Report ref. No.	Test method and date/field of application rules and date
ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV, s.p.	pbccable s.r.o. Kravařská 451/9 709 00 Ostrava Česká Republika	220502-01/01	EN 60332-1-2

#### 3.2 Results

Test method and test number	Parameter	No. Tests	Results	
			Continuous parameter - mean m	Compliance with parameters
EN 60332-1-2	Flame spread $H \leq 425$ mm	2	N/A	P
N/A – not applicable, P – Pass, F – Fail				

#### 4. Classification and field of application

##### 4.1 Reference of classification

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

##### 4.2 Classification

The product **pbflex® 500** in relation to its reaction to fire behaviour is classified:

**E<sub>ca</sub>**

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

Fire behaviour		Smoke production				Flaming droplets			Acidity	
<b>E<sub>ca</sub></b>	-	-	-	-	,	-	-	,	-	-

i.e. **E<sub>ca</sub>**

**Reaction to fire classification: E<sub>ca</sub>**

### 4.3 Field of application

This classification is valid for the family of electric flexible cables **pbflex® 500** described in section 2 and listed below as determined in the extended application process (**EXAP**) according to CLC/TS 50576:2016

Cable identification	Nr. of Cores x cross section mm <sup>2</sup>	Outer Diameter (mm)	Reaction to Fire Classification
pbflex® 500	2 x 0,5	4,8	Eca
pbflex® 500	3 G 0,5	5,1	Eca
pbflex® 500	3 x 0,5	5,1	Eca
pbflex® 500	4 G 0,5	5,5	Eca
pbflex® 500	4 x 0,5	5,5	Eca
pbflex® 500	5 G 0,5	6,2	Eca
pbflex® 500	5 x 0,5	6,2	Eca
pbflex® 500	6 G 0,5	6,7	Eca
pbflex® 500	7 G 0,5	6,7	Eca
pbflex® 500	7 x 0,5	6,7	Eca
pbflex® 500	8 G 0,5	7,4	Eca
pbflex® 500	8 x 0,5	7,4	Eca
pbflex® 500	10 G 0,5	8,3	Eca
pbflex® 500	12 G 0,5	8,7	Eca
pbflex® 500	12 x 0,5	8,7	Eca
pbflex® 500	14 G 0,5	9,5	Eca
pbflex® 500	16 G 0,5	10,0	Eca
pbflex® 500	18 G 0,5	10,7	Eca
pbflex® 500	20 G 0,5	11,3	Eca
pbflex® 500	21 G 0,5	11,3	Eca
pbflex® 500	25 G 0,5	12,6	Eca
pbflex® 500	30 G 0,5	13,5	Eca
pbflex® 500	32 G 0,5	14,0	Eca
pbflex® 500	34 G 0,5	14,3	Eca
pbflex® 500	40 G 0,5	15,3	Eca
pbflex® 500	42 G 0,5	15,8	Eca
pbflex® 500	50 G 0,5	17,5	Eca
pbflex® 500	52 G 0,5	17,5	Eca
pbflex® 500	61 G 0,5	18,5	Eca
pbflex® 500	65 G 0,5	19,4	Eca
pbflex® 500	80 G 0,5	21,4	Eca
pbflex® 500	100 G 0,5	24,0	Eca
pbflex® 500	2 x 0,75	5,3	Eca
pbflex® 500	3 G 0,75	5,6	Eca
pbflex® 500	3 x 0,75	5,6	Eca



pbflex® 500	4 G 0,75	6,3	Eca
pbflex® 500	4 x 0,75	6,3	Eca
pbflex® 500	5 G 0,75	6,9	Eca
pbflex® 500	5 x 0,75	6,9	Eca
pbflex® 500	6 G 0,75	7,5	Eca
pbflex® 500	6 x 0,75	7,5	Eca
pbflex® 500	7 G 0,75	7,5	Eca
pbflex® 500	7 x 0,75	7,5	Eca
pbflex® 500	8 G 0,75	7,5	Eca
pbflex® 500	8 x 0,75	8,3	Eca
pbflex® 500	9 G 0,75	8,9	Eca
pbflex® 500	9 x 0,75	8,9	Eca
pbflex® 500	10 G 0,75	8,3	Eca
pbflex® 500	12 G 0,75	9,8	Eca
pbflex® 500	12 x 0,75	9,8	Eca
pbflex® 500	14 G 0,75	10,6	Eca
pbflex® 500	15 G 0,75	11,4	Eca
pbflex® 500	18 G 0,75	12,2	Eca
pbflex® 500	18 G 0,75	12,2	Eca
pbflex® 500	20 G 0,75	12,7	Eca
pbflex® 500	21 G 0,75	12,7	Eca
pbflex® 500	25 G 0,75	14,3	Eca
pbflex® 500	27 G 0,75	14,6	Eca
pbflex® 500	30 G 0,75	15,0	Eca
pbflex® 500	32 G 0,75	15,9	Eca
pbflex® 500	34 G 0,75	16,5	Eca
pbflex® 500	37 G 0,75	16,7	Eca
pbflex® 500	40 G 0,75	17,2	Eca
pbflex® 500	41 G 0,75	18,1	Eca
pbflex® 500	42 G 0,75	18,1	Eca
pbflex® 500	50 G 0,75	19,8	Eca
pbflex® 500	61 G 0,75	21,2	Eca
pbflex® 500	65 G 0,75	21,8	Eca
pbflex® 500	80 G 0,75	24,4	Eca
pbflex® 500	100 G 0,75	27,0	Eca
pbflex® 500	2x1	5,6	Eca
pbflex® 500	3G1	5,9	Eca
pbflex® 500	3x1	5,9	Eca
pbflex® 500	4G1	6,6	Eca
pbflex® 500	4x1	6,6	Eca
pbflex® 500	5G1	7,3	Eca
pbflex® 500	5x1	7,3	Eca
pbflex® 500	6G1	8,1	Eca
pbflex® 500	7G1	8,1	Eca
pbflex® 500	7x1	8,1	Eca

pbflex® 500	8G1	8,8	Eca
pbflex® 500	9G1	9,7	Eca
pbflex® 500	10 G 1	9,8	Eca
pbflex® 500	10 x 1	9,8	Eca
pbflex® 500	12 G 1	10,4	Eca
pbflex® 500	12 x 1	10,4	Eca
pbflex® 500	14 G 1	134,0	Eca
pbflex® 500	16 G 1	12,3	Eca
pbflex® 500	18 G 1	12,9	Eca
pbflex® 500	18 x 1	12,9	Eca
pbflex® 500	19 G 1	12,9	Eca
pbflex® 500	20 G 1	13,8	Eca
pbflex® 500	20 x 1	13,8	Eca
pbflex® 500	21 G 1	13,8	Eca
pbflex® 500	24 G 1	15,1	Eca
pbflex® 500	25 G 1	15,4	Eca
pbflex® 500	25 x 1	15,4	Eca
pbflex® 500	26 G 1	15,5	Eca
pbflex® 500	27 G 1	15,6	Eca
pbflex® 500	30 x 1	16,4	Eca
pbflex® 500	34 G 1	17,7	Eca
pbflex® 500	36 G 1	17,9	Eca
pbflex® 500	37 G 1	17,9	Eca
pbflex® 500	40 G 1	18,5	Eca
pbflex® 500	40 x 1	18,5	Eca
pbflex® 500	41 G 1	19,5	Eca
pbflex® 500	42 G 1	19,5	Eca
pbflex® 500	50 G 1	21,3	Eca
pbflex® 500	56 G 1	21,9	Eca
pbflex® 500	61 G 1	22,5	Eca
pbflex® 500	65 G 1	23,6	Eca
pbflex® 500	80 G 1	26,1	Eca
pbflex® 500	100 G 1	28,8	Eca
pbflex® 500	2 x 1,5	6,4	Eca
pbflex® 500	3 G 1,5	6,8	Eca
pbflex® 500	3 x 1,5	6,8	Eca
pbflex® 500	4 G 1,5	7,4	Eca
pbflex® 500	4 x 1,5	7,4	Eca
pbflex® 500	5 G 1,5	8,3	Eca
pbflex® 500	5 x 1,5	8,3	Eca
pbflex® 500	6 G 1,5	9,2	Eca
pbflex® 500	7 G 1,5	9,2	Eca
pbflex® 500	7 x 1,5	9,2	Eca
pbflex® 500	8 G 1,5	10,0	Eca
pbflex® 500	9 G 1,5	10,9	Eca

pbflex® 500	10 G 1,5	10,9	Eca
pbflex® 500	11 G 1,5	11,6	Eca
pbflex® 500	12 G 1,5	11,8	Eca
pbflex® 500	12 x 1,5	11,8	Eca
pbflex® 500	14 G 1,5	13,0	Eca
pbflex® 500	16 G 1,5	13,9	Eca
pbflex® 500	18 G 1,5	14,6	Eca
pbflex® 500	19 G 1,5	14,6	Eca
pbflex® 500	20 G 1,5	15,6	Eca
pbflex® 500	21 G 1,5	15,6	Eca
pbflex® 500	25 G 1,5	17,4	Eca
pbflex® 500	27 G 1,5	17,5	Eca
pbflex® 500	32 G 1,5	19,2	Eca
pbflex® 500	34 G 1,5	20,0	Eca
pbflex® 500	37 G 1,5	20,2	Eca
pbflex® 500	41 G 1,5	21,8	Eca
pbflex® 500	42 G 1,5	21,8	Eca
pbflex® 500	50 G 1,5	24,2	Eca
pbflex® 500	56 G 1,5	24,9	Eca
pbflex® 500	61 G 1,5	25,8	Eca
pbflex® 500	65 G 1,5	26,8	Eca
pbflex® 500	80 G 1,5	29,8	Eca
pbflex® 500	100 G 1,5	33,2	Eca
pbflex® 500	2 x 2,5	7,8	Eca
pbflex® 500	3 G 2,5	8,3	Eca
pbflex® 500	3 x 2,5	8,3	Eca
pbflex® 500	4 G 2,5	9,2	Eca
pbflex® 500	4 x 2,5	9,2	Eca
pbflex® 500	5 G 2,5	10,1	Eca
pbflex® 500	5 x 2,5	10,1	Eca
pbflex® 500	7 G 2,5	11,2	Eca
pbflex® 500	7 x 2,5	11,2	Eca
pbflex® 500	8 G 2,5	12,3	Eca
pbflex® 500	10 G 2,5	14,1	Eca
pbflex® 500	12 G 2,5	14,8	Eca
pbflex® 500	14 G 2,5	16,0	Eca
pbflex® 500	18 G 2,5	18,2	Eca
pbflex® 500	21 G 2,5	19,2	Eca
pbflex® 500	25 G 2,5	21,6	Eca
pbflex® 500	34 G 2,5	24,8	Eca
pbflex® 500	42 G 2,5	27,4	Eca
pbflex® 500	50 G 2,5	30,0	Eca
pbflex® 500	61 G 2,5	32,0	Eca
pbflex® 500	100 G 2,5	41,4	Eca
pbflex® 500	2 x 4	9,2	Eca



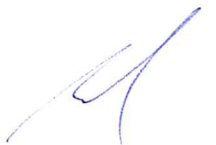


pbflex® 500	3 G 4	9,8	Eca
pbflex® 500	4 G 4	10,9	Eca
pbflex® 500	5 G 4	12,1	Eca
pbflex® 500	7 G 4	13,2	Eca
pbflex® 500	8 G 4	14,7	Eca
pbflex® 500	10 G 4	16,8	Eca
pbflex® 500	12 G 4	17,7	Eca
pbflex® 500	2 x 6	11,9	Eca
pbflex® 500	3 G 6	11,9	Eca
pbflex® 500	4 G 6	13,0	Eca
pbflex® 500	5 G 6	14,5	Eca
pbflex® 500	7 G 6	16,2	Eca
pbflex® 500	3 G 10	14,9	Eca
pbflex® 500	4 G 10	16,5	Eca
pbflex® 500	5 G 10	18,3	Eca
pbflex® 500	7 G 10	20,2	Eca
pbflex® 500	3 G 16	18,3	Eca
pbflex® 500	4 G 16	20,1	Eca
pbflex® 500	5 G 16	22,6	Eca
pbflex® 500	7 G 16	24,8	Eca
pbflex® 500	3 G 25	22,3	Eca
pbflex® 500	4 G 25	25,0	Eca
pbflex® 500	5 G 25	27,7	Eca
pbflex® 500	7 G 25	30,6	Eca
pbflex® 500	3 G 35	25,9	Eca
pbflex® 500	4 G 35	28,7	Eca
pbflex® 500	5 G 35	31,9	Eca
pbflex® 500	3 G 50	30,8	Eca
pbflex® 500	4 G 50	34,1	Eca
pbflex® 500	5 G 50	38,1	Eca
pbflex® 500	3 G 70	36,4	Eca
pbflex® 500	4 G 70	40,2	Eca
pbflex® 500	5 G 70	44,7	Eca
pbflex® 500	3 G 95	41,3	Eca
pbflex® 500	4 G 95	46,0	Eca
pbflex® 500	5 G 95	50,7	Eca
pbflex® 500	4 G 120	51,0	Eca
pbflex® 500	5 G 120	53,0	Eca
pbflex® 500	4 G 150	57,2	Eca
pbflex® 500	4 G 185	63,0	Eca
pbflex® 500	4 G 240	64,0	Eca

**Intended use of the product:**

Cables are used for power, control measuring, control technology with the objective of limiting the generation and spread of fire and smoke.

Supply of electricity in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke.



## 5. Limitations

This classification will be valid until:

- The test method remains unchanged
- Product standard or technical approval remains unchanged
- Constructional or material modifications do not exceed limits of the field of application defined in section 4.3.

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

The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Regulation.

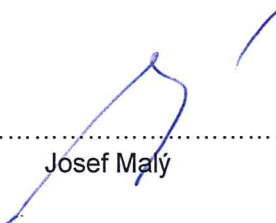
The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.

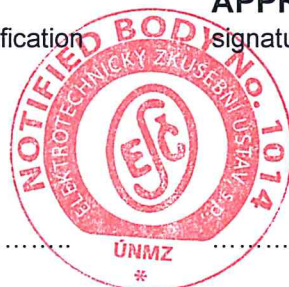
### SIGNED

signature of person undertaking classification

### APPROVED

signature of person authorizing this report

  
.....  
Josef Malý



  
.....  
Miroslav Sedláček