



Classification Report No.: 220502-01/02 CLASS

1. Introduction

This classification report defines the classification assigned to **pbflex® 500-S** 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)**

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

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® 500-S** is defined as electric flexible shielded cables for power, control, measuring, control technology according to ČSN EN 50575 (EN 50575)

2.2 Product description

The product **pbflex® 500-S** is described below

Standard:**Rated voltage:**

Uo/U 300/500V

Conductor:

Cu fine wire strand, class 5 according to EN 60228

Insulation:

The insulation material is PVC type Y12 (T12) according to DIN VDE 0207 part 4

Core identification:

According to HD 308 S2, color and numbered core

Inner covering:

Type pbflex® 500-S shielding with tinned copper braid

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.	pbicable s.r.o. Kravařská 451/9 709 00 Ostrava Česká Republika	220502-01/02	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-S** in relation to its reaction to fire behaviour is classified:

E_{ca}

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

Fire behaviour		Smoke production				Flaming droplets			Acidity	
E_{ca}	-	-	-	-	,	-	-	,	-	-

i.e. **E_{ca}**

Reaction to fire classification: E_{ca}

4.3 Field of application

This classification is valid for the family of electric flexible shielded cables for power, control, measuring, control technology **pbflex® 500-S** 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 ²	Outer Diameter (mm)	Reaction to Fire Classification
pbflex® 500-S	1 x 0,5	3,7	Eca
pbflex® 500-S	2 x 0,5	5,7	Eca
pbflex® 500-S	3 G 0,5	5,9	Eca
pbflex® 500-S	3 x 0,5	5,9	Eca
pbflex® 500-S	4 G 0,5	6,4	Eca
pbflex® 500-S	4 x 0,5	6,4	Eca
pbflex® 500-S	5 G 0,5	6,9	Eca
pbflex® 500-S	5 x 0,5	6,9	Eca
pbflex® 500-S	6 G 0,5	7,6	Eca
pbflex® 500-S	6 x 0,5	7,6	Eca
pbflex® 500-S	7 G 0,5	7,6	Eca
pbflex® 500-S	7 x 0,5	7,6	Eca
pbflex® 500-S	8 G 0,5	8,1	Eca
pbflex® 500-S	8 x 0,5	8,1	Eca
pbflex® 500-S	10 G 0,5	9,6	Eca
pbflex® 500-S	10 x 0,5	9,6	Eca
pbflex® 500-S	12 G 0,5	9,7	Eca
pbflex® 500-S	12 x 0,5	9,7	Eca
pbflex® 500-S	14 G 0,5	10,2	Eca
pbflex® 500-S	14 x 0,5	10,2	Eca
pbflex® 500-S	16 G 0,5	11,0	Eca
pbflex® 500-S	16 x 0,5	11,0	Eca
pbflex® 500-S	18 G 0,5	11,5	Eca
pbflex® 500-S	18 x 0,5	11,5	Eca
pbflex® 500-S	20 G 0,5	12,3	Eca
pbflex® 500-S	20 x 0,5	12,3	Eca
pbflex® 500-S	21 G 0,5	12,3	Eca
pbflex® 500-S	21 x 0,5	12,3	Eca
pbflex® 500-S	25 G 0,5	13,7	Eca
pbflex® 500-S	25 x 0,5	13,7	Eca
pbflex® 500-S	30 G 0,5	14,4	Eca
pbflex® 500-S	30 x 0,5	14,4	Eca
pbflex® 500-S	32 G 0,5	14,9	Eca
pbflex® 500-S	32 x 0,5	14,9	Eca
pbflex® 500-S	34 G 0,5	15,5	Eca

pbflex® 500-S	34 x 0,5	15,5	Eca
pbflex® 500-S	36 G 0,5	15,5	Eca
pbflex® 500-S	36 x 0,5	15,5	Eca
pbflex® 500-S	40 G 0,5	16,5	Eca
pbflex® 500-S	40 x 0,5	16,5	Eca
pbflex® 500-S	42 G 0,5	17,2	Eca
pbflex® 500-S	42 x 0,5	17,2	Eca
pbflex® 500-S	50 G 0,5	18,5	Eca
pbflex® 500-S	50 x 0,5	18,5	Eca
pbflex® 500-S	61 G 0,5	19,7	Eca
pbflex® 500-S	61 x 0,5	19,7	Eca
pbflex® 500-S	80 G 0,5	22,6	Eca
pbflex® 500-S	80 x 0,5	22,6	Eca
pbflex® 500-S	100 G 0,5	24,9	Eca
pbflex® 500-S	100 x 0,5	24,9	Eca
pbflex® 500-S	2 x 0,75	6,1	Eca
pbflex® 500-S	3 G 0,75	6,3	Eca
pbflex® 500-S	3 x 0,75	6,3	Eca
pbflex® 500-S	4 G 0,75	6,8	Eca
pbflex® 500-S	4 x 0,75	6,8	Eca
pbflex® 500-S	5 G 0,75	7,4	Eca
pbflex® 500-S	5 x 0,75	7,4	Eca
pbflex® 500-S	6 G 0,75	8,2	Eca
pbflex® 500-S	6 x 0,75	8,2	Eca
pbflex® 500-S	7 G 0,75	8,2	Eca
pbflex® 500-S	7 x 0,75	8,2	Eca
pbflex® 500-S	8 G 0,75	9,0	Eca
pbflex® 500-S	8 x 0,75	9,0	Eca
pbflex® 500-S	10 G 0,75	10,3	Eca
pbflex® 500-S	10 x 0,75	10,3	Eca
pbflex® 500-S	12 G 0,75	10,5	Eca
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pbflex® 500-S	42 G 0,75	18,5	Eca
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pbflex® 500-S	50 G 0,75	20,3	Eca
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pbflex® 500-S	61 G 0,75	22,0	Eca
pbflex® 500-S	61 x 0,75	22,0	Eca
pbflex® 500-S	80 G 0,75	25,3	Eca
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pbflex® 500-S	6 G 1	8,7	Eca
pbflex® 500-S	6 x 1	8,7	Eca
pbflex® 500-S	7 G 1	8,7	Eca
pbflex® 500-S	7 x 1	8,7	Eca
pbflex® 500-S	8 G 1	9,6	Eca
pbflex® 500-S	8 x 1	9,6	Eca
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pbflex® 500-S	50 G 1	22,0	Eca
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pbflex® 500-S	50 x 1,5	25,0	Eca
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pbflex® 500-S	5 G 2,5	10,8	Eca
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pbflex® 500-S	7 G 2,5	11,9	Eca
pbflex® 500-S	7 x 2,5	11,9	Eca
pbflex® 500-S	10 G 2,5	15,5	Eca
pbflex® 500-S	10 x 2,5	15,5	Eca
pbflex® 500-S	12 G 2,5	15,8	Eca
pbflex® 500-S	12 x 2,5	15,8	Eca
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pbflex® 500-S	2 x 4	10,0	Eca
pbflex® 500-S	3 G 4	10,6	Eca
pbflex® 500-S	3 x 4	10,6	Eca
pbflex® 500-S	4 G 4	11,6	Eca
pbflex® 500-S	4 x 4	11,6	Eca



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pbflex® 500-S	5 x 4	12,8	Eca
pbflex® 500-S	7 G 4	14,2	Eca
pbflex® 500-S	7 x 4	14,2	Eca
pbflex® 500-S	2 x 6	11,7	Eca
pbflex® 500-S	3 G 6	12,5	Eca
pbflex® 500-S	3 x 6	12,5	Eca
pbflex® 500-S	4 G 6	13,8	Eca
pbflex® 500-S	4 x 6	13,8	Eca
pbflex® 500-S	5 G 6	15,4	Eca
pbflex® 500-S	5 x 6	15,4	Eca
pbflex® 500-S	7 G 6	17,0	Eca
pbflex® 500-S	7 x 6	17,0	Eca
pbflex® 500-S	2 x 10	14,5	Eca
pbflex® 500-S	3 G 10	15,6	Eca
pbflex® 500-S	3 x 10	15,6	Eca
pbflex® 500-S	4 G 10	17,2	Eca
pbflex® 500-S	4 x 10	17,2	Eca
pbflex® 500-S	5 G 10	19,1	Eca
pbflex® 500-S	5 x 10	19,1	Eca
pbflex® 500-S	7 G 10	21,2	Eca
pbflex® 500-S	7 x 10	21,2	Eca
pbflex® 500-S	4 G 16	20,3	Eca
pbflex® 500-S	5 G 16	22,2	Eca
pbflex® 500-S	4 G 25	24,7	Eca
pbflex® 500-S	5 G 25	27,4	Eca
pbflex® 500-S	4 G 35	28,4	Eca
pbflex® 500-S	5 G 35	31,6	Eca
pbflex® 500-S	4 G 50	34,2	Eca
pbflex® 500-S	5 G 50	33,5	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.

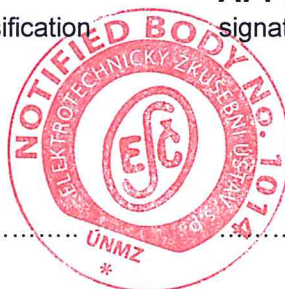
SIGNED

signature of person undertaking classification

APPROVED

signature of person authorizing this report

.....
Josef Malý



.....
Miroslav Sedláček