

Fire Test Laboratory

**Notified Body
Nr: 2184**

AB-0556-T

ERA-23-335

01-24

**CLASSIFICATION OF REACTION TO FIRE
IN ACCORDANCE WITH
EN 13501-6:2018**

Sponsor	ETK KABLO SANAYİ VE TİCARET ANONİM ŞİRKETİ Osmangazi Mah. Müstesna Sok. No: 37, Sancaktepe, İstanbul / TÜRKİYE
Tested and prepared by	EFFECTIS ERA AVRASYA TEST VE BELGELENDİRME A.Ş. Dilovası OSB Mah. Fırat Cad. No: 18 Dilovası, Kocaeli / TÜRKİYE
Product name	Cat 6A S-FTP LSZH SWA LSZH - 4x2x0,25 mm ² - 11,9 mm
Report no.	ERA-23-335
Issue number	1/2
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This classification report consist of 5 pages and may only be used or reproduced in its entirety.

1. INTRODUCTION

This classification report defines the classification assigned to “Cat 6A S-FTP LSZH SWA LSZH - 4x2x0,25 mm² - 11,9 mm” in accordance with the procedures given in EN 13501-6:2018.

2. DETAILS OF CLASSIFIED PRODUCT

2.1. General:

Cat 6A S-FTP LSZH SWA LSZH - 4x2x0,25 mm² - 11,9 mm is defined as a “type of classified product”. Its classification is valid for the following end use application:

EN 50575:2014/A1:2016 - Power, control and communication cables - Cables for general applications in construction works subject to reaction to fire requirements

2.2. Description:

Cat 6A S-FTP LSZH SWA LSZH - 4x2x0,25 mm² - 11,9 mm is fully described in the test reports in support of the classification listed in clause 3.1.

Manufactured plant: ETK KABLO SANAYİ VE TİCARET ANONİM ŞİRKETİ
Osmangazi Mah. Müstesna Sok. No: 37, Sancaktepe, İstanbul / TÜRKİYE

Tested product types:

Product name	Nominal voltage [V]	Cross section area [mm ²]	External overall diameter [mm]	Cable structure
Cat 6A S-FTP LSZH SWA LSZH	125	4x2x0,25	11,9	UV resistant HFFR outer sheath, Steel wire armour, UV resistant HFFR inner sheath, Tinned copper wire braiding, Tinned copper earthing wire, AL-PET individual screen, Foamed polyethylene clad with solid polyethylene, Solid bare copper conductor (Class 1)

3. REPORTS AND RESULTS IN SUPPORT OF CLASSIFICATION

3.1. Reports

Name of laboratory	Name of sponsor	Report ref. no.	Test method and date Field of application rules and date
EFFECTIS ERA AVRASYA TEST VE BELGELENDİRME A.Ş.	ETK KABLO SANAYİ VE TİCARET ANONİM ŞİRKETİ	FTST231356	EN 50399:2022
		FTST231357	EN 60332-1-2:2004 EN 60332-1-2:2004/A1:2015 EN 60332-1-2:2004/A11:2016 EN 60332-1-2:2004/A12:2020
		FTST231358	EN 60754-2:2014 EN 60754-2:2016/A1:2020

3.2. Results

Test method	Parameter	Number of test	Result	
			Continuous parameter mean (m)	Compliance parameters
EN 60332-1-2 Flame exposition: 60 s	H (mm)	1	92	(-)
EN 50399	Fs (m)	1	1,18	(-)
	Peak HRR (kW)		38,1	(-)
	THR _{1200s} (MJ)		13,2	(-)
	FIGRA (W/s)		77	(-)
	Peak SPR (m ² /s)		0,04	(-)
	TSP _{1200s} (m ²)		23,4	(-)
	Flaming droplet(s)/particle (s)		3, 27, 24	(-)
EN 60754-2	pH	3	5,46	(-)
	Conductivity (μS/mm)	3	0,69	(-)

(-): Not applicable

The table below shows the worst results of the classification parameters:

Test method	Parameter	Safety margin	Classification result	Compliance parameters
EN 60332-1-2	H (mm)	(-)	92	≤ 425 (Dca)
EN 50399	Peak HRR (kW)	(-)	38,1	≤ 400 (Dca)*
	THR _{1200s} (MJ)		13,2	≤ 70 (Dca)*
	FIGRA (W/s)		77	≤ 1300 (Dca)*
	Peak SPR (m ² /s)		0,04	≤ 0,25 (s1)
	TSP _{1200s} (m ²)		23,4	≤ 50 (s1)
	Flaming droplet(s)/particle (s)		27	> 10 (d2)
EN 60754-2	pH	(-)	5,46	> 4,3 (a1)
	Conductivity (μS/mm)	(-)	0,69	< 2,5 (a1)

(-): Not applicable
(Dca)*: The product was evaluated for this class upon the request of the sponsor, although the achieved results corresponding to a better class

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1. Reference of classification

This classification has been carried out in accordance with the clauses 9.4, 9.9.2, 9.10, 9.11 of EN 13501-6:2018.

4.2. Classification

Cat 6A S-FTP LSZH SWA LSZH - 4x2x0,25 mm² - 11,9 mm in relation to its reaction to fire behaviour is classified:

D_{ca}

The additional classification in relation to smoke production is:

s1

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

d2

The additional classification in relation to acidity is:

a1

The format of the reaction to fire classification for *Cat 6A S-FTP LSZH SWA LSZH - 4x2x0,25 mm² - 11,9 mm* is:

E25 - 11111111												
Fire behaviour		Smoke production			Flaming droplets			Acidity				
D _{ca}	-	s	1		,	d	2		,	a	1	

Reaction to fire classification: D_{ca}-s1,d2,a1

4.3. Field of application

This classification is valid for the following product:

Parameters as determined in the extended application process according to *CLC/TS 50576:2022*

Cable	Cat 6A S-FTP LSZH SWA LSZH - 4x2x0,25 mm ²
Cable family specified in CLC/TS 50576:2022	S/FTP metallic braid overall / screened twisted pair Communication cable
External overall diameter [mm]	11,9
χ parameter	0
Colour	Indifferent
Shape	Circular
Flexibility	Rigid
Manufacturing plant	Article 2.2
Cable structure	
UV resistant HFFR outer sheath	
Steel wire armour	
UV resistant HFFR inner sheath	
Tinned copper wire braiding	
Tinned copper earthing wire	
AL-PET individual screen	
Foamed polyethylene clad with solid polyethylene	
Solid bare copper conductor (Class 1)	

The classification is valid for all end use applications.

5. LIMITATION

5.1. Restrictions

This classification report is valid provided that the technical specifications of product are within the limits in accordance with the field of application clause 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 305/2011/EU Construction Products Regulation.

The manufacturer has made a declaration, which is held on file. This confirms that the products design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate.

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:



Approval:

e-signed

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Uğur ÇAVAŞ
Person in the charge of tests

e-signed

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Ali BAYRAKTAR
Laboratory manager