EFECTIS ERA AVRASYA
TEST VE BELGELENDİRME A.Ş.

Fire Test Laboratory

Notified Body
Nr: 2184

Test
TS EN ISO/IEC 17025
AB-0556-T

AB-0556-T
ERA-25-045
03-25

CLASSIFICATION OF REACTION TO FIRE

IN ACCORDANCE WITH

EN 13501-6:2018

Sponsor	SAMM TEKNOLOJİ İLETİŞİM SAN. VE TİC. A.Ş. Gebze OSB Mah. 800. Sk. No: 802 Gebze, Kocaeli/TÜRKİYE
Tested and prepared by	EFECTIS ERA AVRASYA TEST VE BELGELENDİRME A.Ş. Dilovası OSB Mah. Fırat Cad. No: 18 Dilovası, Kocaeli / TÜRKİYE
Product name	I-VS9(ZN-AY)H 2,70mm Indoor Drop Fiber Optic Cable
Report no.	ERA-25-045
Issue number	1/2
Date of issue	13.03.2025

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 "*I-VS9(ZN-AY)H 2,70mm Indoor Drop Fiber Optic Cable"* in accordance with the procedures given in EN 13501-6:2018.

2. DETAILS OF CLASSIFIED PRODUCT

2.1. General:

I-VS9(ZN-AY)H 2,70mm Indoor Drop Fiber Optic Cable 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:

I-VS9(ZN-AY)H 2,70mm Indoor Drop Fiber Optic Cable are fully described in the test reports in support of the classification listed in clause 3.1.

Manufactured plant: SAMM TEKNOLOJİ İLETİŞİM SAN. VE TİC. A.Ş.
Gebze OSB Mah. 800. Sk. No: 802 Gebze, Kocaeli/TÜRKİYE

Tested product types:

Product name	Fibre count	Tube count	External overall diameter [mm]	Cable structure
I-VS9(ZN-AY)H 2,70mm Indoor Drop Fiber Optic Cable	1	1	2,7	LSZH-FR , Aramid yarn, LSZH, Fibre

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
EFECTIS ERA AVRASYA TEST VE BELGELENDİRME A.Ş.	SAMM TEKNOLOJİ İLETİŞİM SAN. VE TİC. A.Ş.	FTST25227	EN 50399:2022
		FTST25228	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
		FTST25229	EN 60754-2:2014 EN 60754-2:2016/A1:2020
		FTST25230	EN 61034-2:2005 EN 61034-2:2005/A2:2020

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	93	(-)
EN 50399	Fs (m) Peak HRR (kW) THR_{1200s} (MJ) FIGRA (W/s) Peak SPR (m^2/s) TSP_{1200s} (m^2) Flaming droplet(s)/particle (s)	1	0,41 15,9 7,9 53,0 0,020 15,7 Yok	(-) (-) (-) (-) (-) (-) (-)
EN 60754-2	pH Conductivity (µS/mm)	3 3	5,57 0,79	(-) (-)
EN 61034-2	Transmittance (%)	1	84,4	(-)
(-): 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[(1)]	H (mm)	(-)	93	≤ 425 (B2ca)
EN 50399[(1)]	Peak HRR (kW) THR_{1200s} (MJ) FIGRA (W/s) Peak SPR (m^2/s) TSP_{1200s} (m^2) Flaming droplet(s)/particle (s)	(-)	0,41 15,9 7,9 53,0 0,020 15,7 Yok	≤ 1,5 (B2ca) ≤ 30 (B2ca) ≤ 15 (B2ca) ≤ 150 (B2ca) ≤ 0,25 (s1) ≤ 50 (s1) Yok (d0)
EN 60754-2[(1)]	pH Conductivity (µS/mm)	(-) (-)	5,57 0,79	> 4,3 (a1) < 2,5 (a1)
EN 61034-2[(1)]	Transmittance (%)	(-)	84,4	≥ 80 % (s1a)
(-): Not applicable				

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1. Reference of classification

This classification has been carried out in accordance with the clauses 9.6, 9.9.3, 9.10, 9.11 of EN 13501-6:2018.

4.2. Classification

I-VS9(ZN-AY)H 2,70mm Indoor Drop Fiber Optic Cable in relation to its reaction to fire behaviour is classified:

$B2_{ca}$

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 *I-VS9(ZN-AY)H 2,70mm Indoor Drop Fiber Optic Cable* is:

Fire behaviour		Smoke production			Flaming droplets			Acidity	
$B2_{ca}$	-	s	1a	,	d	0	,	a	1

Reaction to fire classification: $B2_{ca}$-s1a,d0,a1

4.3. Field of application

This classification is valid for the following product:

Parameters as determined in the extended application process according to EN 50576:2022

Cable family	I-VS9(ZN-AY)H 2,70mm Indoor Drop Fiber Optic Cable
Cable family specified in EN 50576:2022	Optical fibre cable
External overall diameter [mm]	2,7
Fibre number	1
Tube number	1
Colour	Indifferent
Fibre type	Indifferent
Shape	Circular
Manufacturing plant	Article 2.2
Cable structure	
LSZH-FR outer sheath	
Aramid yarn peripheral strength member	
LSZH tight buffer	
Fibre	

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.

Signed:

e-signed

.....

Uğur ÇAVAŞ

Person in the charge of tests

Approval:

e-signed

.....

Ali BAYRAKTAR

Laboratory manager