



**JEDNOSTKA NOTYFIKOWANA Nr 1488  
INSTYTUT TECHNIKI BUDOWLANEJ**

**ZAKŁAD CERTYFIKACJI**

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AC 020

**CERTIFICATE OF CONSTANCY OF PERFORMANCE  
1488-CPR-0975/W**

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

**Components of voice alarm systems  
- Loudspeakers type PF-54TD-EN, PF-53T-EN**

general identification, intended use and performance of the product are described  
in the Annex No. Z-1488-CPR-0975/W  
which is an integral part of this certificate

placed on the market under the name or trade mark of:

**FONESTAR SISTEMAS, S.A.  
Poligono Trascueto S/N - 39600  
Revilla de Camargo  
Cantabria  
Spain**

and produced in the manufacturing plant:

**886-826**

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard:

**EN 54-24:2008**

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product.

This certificate was first issued on 28.12.2021 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

HEAD  
of the Certification Department

Katarzyna Hatowska, M.Sc. Eng.



DEPUTY DIRECTOR  
of Instytut Techniki Budowlanej

Anna Panek, M.Sc. Eng.

Warsaw, 28.12.2021

**ANNEX No. Z-1488-CPR-0975/W page 1/1**  
which is integral part of the certificate No. 1488-CPR-0975/W

**Components of voice alarm systems  
- Loudspeakers type PF-54TD-EN, PF-53T-EN**

List of essential characteristics of construction product according to EN 54-24:2008

| Essential characteristics of the product                                      | EN 54-24:2008 | Mandated level and/or class | Assessment |
|---|---------------|-----------------------------|------------|
|   | Clause        |                             |            |
| <b>Performance parameters under fire conditions</b>                           |               |                             |            |
| Frequency response limit  | 4.2           | -                           | pass       |
| Reproducibility   | 5.2           | -                           | pass       |
| Rated impedance   | 5.3           | -                           | pass       |
| Horizontal and vertical coverage angles                                       | 5.4           | -                           | pass       |
| Maximum sound pressure level  | 5.5           | -                           | pass       |
| <b>Operational reliability</b>  |               |                             |            |
| Durability  | 4.3           | -                           | pass       |
| Construction  | 4.4           | -                           | pass       |
| Marking and data  | 4.5           | -                           | pass       |
| Rated noise power (durability)  | 5.6           | -                           | pass       |
| Enclosure protection  | 5.18          | -                           | pass       |
| <b>Durability of operational reliability, temperature resistance</b>          |               |                             |            |
| Dry heat (operational)  | 5.7           | -                           | pass       |
| Dry heat (endurance)  | 5.8           | -                           | pass       |
| Cold (operational)  | 5.9           | -                           | pass       |
| <b>Durability of operational reliability, humidity resistance</b>             |               |                             |            |
| Damp heat, cyclic (operational)   | 5.10          | -                           | pass       |
| Damp heat, steady state (endurance)   | 5.11          | -                           | pass       |
| Damp heat, cyclic (endurance)   | 5.12          | -                           | pass       |
| <b>Durability of operational reliability, corrosion resistance</b>            |               |                             |            |
| Sulphur dioxide corrosion (endurance)   | 5.13          | -                           | pass       |
| <b>Durability of operational reliability, impact and vibration resistance</b> |               |                             |            |
| Impact (operational)  | 5.15          | -                           | pass       |
| Vibration, sinusoidal (operational)   | 5.16          | -                           | pass       |
| Vibration, sinusoidal (endurance)   | 5.17          | -                           | pass       |

Declared intended use of the product: **Fire Safety**

**Basic technical parameters:**

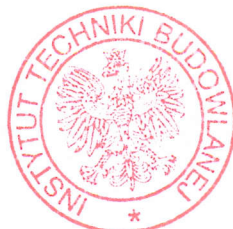
|   | PF-54TD-EN  | PF-53T-EN                                    |
|---|---|--|
| Type of loudspeaker:  | Sound projector   |  |
| Environmental type:   | B type  |  |
| Type of transformer:  | MT-20-1003  |  |
| Rated noise power [W]:  | 20  |  |
| Rated noise power for 100V line, for each taps [W]:             | 20; 10; 5   |  |
| Loudspeaker rated impedance [ $\Omega$ ]:                       | 8   |  |
| Impedance of transformer for particular terminals [ $\Omega$ ]: | 500-1000-2000   |  |
| Sensitivity (1W/4m)*:   | 76  | 80   |
| SPL (rated noise power /4m) [dB]                                | 89  | 90   |
| Supply voltage [W]:   | 100   |  |
| Operating temperature:  | from -25°C to +70°C   |  |
| Enclosure protection (IP) acc. to EN 60529:                     | IP 33C  |  |
| Dimensions (diameter x depth) with enclosure [mm]:              | Ø146x186  | Ø140x207                                     |
| Weight [kg]:  | 3,2   | 2,4  |
| Enclosure material:   | enclosure, mounting bracket:<br>extruded aluminum alloy, grill: steel | enclosure, mounting bracket, grill:<br>steel |

\*Value measured for the noise signal acc. to 5.6 of PN-EN 54-24:2008

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Anna Panek, M.Sc. Eng.

Warsaw, 28.12.2021



**INSTYTUT TECHNIKI BUDOWLANEJ**  
**CERTIFICATION DEPARTMENT**

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**CERTIFICATION MARK**

The company:

**FONESTAR SISTEMAS, S.A.**  
**Poligono Trascueto S/N - 39600**  
**Revilla de Camargo**  
**Cantabria**  
**Spain**

being the manufacturer of the products:

**Components of voice alarm systems**  
**- Loudspeakers type PF-54TD-EN, PF-53T-EN**

is authorized to use  
the ITB certification mark „WYRÓB BUDOWLANY”  
during the period of validity of the certificate no. 1488-CPR-0975/W



**1488-CPR-0975/W**

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