



1 CONFORMITÉ EUROPÉENE

EU - TYPE EXAMINATION CERTIFICATE

2 Product or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU – Annex III

3 EU - Type Examination Certificate No.:

n EF

ERO24ATEX0014X

4 Product:

Alarm Sounder and Beacon Range

PF-IS-SM-105, PF-IS-BM-*, PF-IS-CM-105-*

(* as 3 letter lens colour identifier)

5 Manufacturer: Pepperl+Fuchs SE

6 Address: Lilienthalstraße 200, 68307 Mannheim, Germany

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Element Materials Technology, Notified Body number 2812, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports

TRA-026803-33-00A, TRA-036546-33-00A, TRA-043502-33-00A,

TRA-026799-33-00A, TRA-036546-33-02A, TRA-043502-33-02A,

TRA-026802-33-00A, TRA-036546-33-01A, TRA-043502-33-01A,

TRA-054461-33-00A, TRA-064378-33-00A, TRA-064314-32-00A.

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-11:2012

Except in respect of those requirements listed at section 18 of the schedule.

- 10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.
- 11 This EU TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 12 The marking of this product shall include the following:

€x IM1 Exial Ma

-40 °C ≤ Ta ≤ +60 °C

⟨Ex⟩ II 1 G D Ex ia IIC T* Ga

Ex ia IIC T* Ga -40 °C ≤ Ta ≤ +60 °C

Ex ia IIIC T*°C Da

T* See section 15

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the Element Materials Technology Ex Certification Scheme.

SP Wilson

S P Winsor, Certification Manager

Issue date: 2025-01-30 Page 1 of 6 CSF355-NL 5.0



13 SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

14 CERTIFICATE NUMBER ERO24ATEX0014X

15 Description of Product

The equipment PF-IS-SM-105, PF-IS-BM-*, PF-IS-CM-105-* are a range of intrinsically safe 'ia' signalling devices designed to give audible and / or visual warning signals when activated. The devices either operate as a sounder (PF-IS-SM*), beacon (PF-IS-BM*) or combined sounder beacon (PF-IS-CM*). The sounder and sounder beacon models contain a transducer to provide an audible warning, the beacon and sounder beacon models contain divergent LEDs to provide a visual warning.

All models are designed for use in hazardous gas environments (Zone 0), dust environments (Zone 20) and mining environments (Group 1 equipment).

Power is supplied by ATEX approved barriers only. All enclosures are completely non-metallic and have an IP 66 rating. The enclosure can be of various colours such as red or white and the lenses can be of various colours such as red, amber, green, blue or clear.

The devices are for use in fixed installations.

The optical radiation output of the apparatus with respect to explosion protection is covered in this certificate based on exception 1 to the scope of IEC 60079-28:2015.

Ex Marking	
PF-IS-BM-*	PF-IS-SM-105
PF-IS-CM-105-*	
€ I M1	€x 1 M1
€ II 1 G D	€ II1GD
Ex ia I Ma	Ex ia I Ma
Ex ia IIC T5 Ga	Ex ia IIC T6 Ga
Ex ia IIIC T ₂₀₀ 85 °C Da	Ex ia IIIC T ₂₀₀ 85 °C Da
-40 °C ≤ Ta ≤ +60 °C	-40 °C ≤ Ta ≤ +60 °C

Table of maximum entity parameters			
Parameter	Barrier supply		
Ui	28 V		
li	93 mA		
Pi	660 mW		
Ci	0 μF		
Li	0 μΗ		

Page 2 of 6 CSF355-NL 5.0

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE CERTIFICATE NUMBER ERO24ATEX0014X

16 Test Report No. (as added for this issue of the certificate): TRA-064314-32-00A.

17 Specific Conditions of Use:

- 1. Clean equipment regularly to prevent dust build-up with a damp or anti-static cloth only.
- 2. Equipment only suitable for fixed installations.
- 3. Installation shall be carried out in accordance with the relevant, local code of practice for Ex equipment, e.g. EN & IEC 60079-14, EN 50628 and IEC 60079-25 and that capacitance and inductance limits are not exceeded by distributed capacitance (Cc) or distributed inductance (Lc) due to cable length.



Attention is drawn to the operating and installation instructions which may contain useful information in relation to conditions of use.

18 Essential Health and Safety Requirements (Directive Annex II)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

19 Drawings and Documents

The list of controlled technical documentation is given in Appendix A to this schedule.

20 Routine Tests

None.

21 Photographs







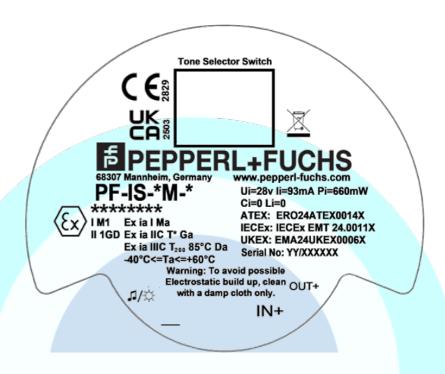
PF-IS-BM Mini Beacon

Page 3 of 6 CSF355-NL 5.0

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE CERTIFICATE NUMBER ERO24ATEX0014X

22 **Details of Markings**

Label 1 located on internal of base plate.



Label 2 located on external of deep base.





ATEX: ERO24ATEX0014X **IECEx: IECEx EMT 24.0011X** Ex ia IIIC T₂₀₀ 85°C Da UNEA: EINAZ TOILE COM Ui=28v Ii=93mA Pi=660mW Ci=0 Li=0

Serial No: YY/XXXXXX

Warning: To avoid possible Electrostatic build up, clean with a damp cloth only.

23 **Certificate History**

Original certificate 2025-01-30 First issue.

This certificate is a consolidated certificate and reflects the latest status of the certification, including all variations and amendments.

Page 4 of 6 CSF355-NL 5.0

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE CERTIFICATE NUMBER ERO24ATEX0014X

24 Notes to CE marking

In respect of CE Marking, Element Materials Technology accepts no responsibility for the compliance of the product against all applicable Directives in all applications.

25 Notes to this certificate

Element Materials Technology certification reference: ERO041508P77 (GU-PPFQ-0001).

Throughout this certificate, the date format yyyy-mm-dd (year-month-day) is used.

Notified Body number 2812 is the designation for Element Materials Technology Rotterdam BV.

26 Conditions for the validity of this certificate

This certificate remains valid for so long as:

- (i) The equipment listed in section 4 is manufactured in accordance with the documents listed in Appendix A of this certificate.
- (ii) The standards listed in section 9 of this certificate continue to satisfy the Essential Health and Safety Requirements of Annex II of Directive 2014/34/EU and the generally acknowledged state of the art (e.g. as determined by the publishers of those standards).

Page 5 of 6 CSF355-NL 5.0

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE CERTIFICATE NUMBER ERO24ATEX0014X

APPENDIX A - TECHNICAL DOCUMENTS

Title:	Drawing No.:	Rev. Level:	Date:
Drawings common to all models:			
Product Label	S00151PF	1	2025-01-09
Brief Instructions Alarm Sounder PF-IS-SM-105 Signal Beacon PF-IS-BM-* Alarm Sounder/Signal Beacon PF-IS-CM-105-*	TDOCT-9666* see Note 1	A	2025-01-
Sounder and Sounder Beacon General Assembly (2 sheets – Page 1)	IS-GA001	6	2018-12-17
Circuit Board Potting	XS0200-xxP	3	2017-02-27
Conformal Coating Application	XS0200-xxPC	4	2018-12-05
Critical Spacing	E00607	8	2018-12-05
Intrinsically Safe Potting Jig	M00131	Α	2017-01-12
IS O Ring	M00133	1	2017-03-06
Intrinsically Safe Circuit Sounder Beacon	MOF152	9	2018-11-29
Intrinsically Safe Project – BOM	MOF152BOM	9	2018-12-17
92 x 1.8 O-Ring NBR70	18-185852	01	2013-04-16
Wiper Contact	18-185906	01	2013-02-06
Sonos Hole Bung	18-185907	01	2012-11-15
Sonos PCB Holder with Cutout (3 sheets)	18-185959	03	2015-10-19
Sonos Red Deep Base MkII 4 Pin	HSG6890	01	2015-10-23
Transducer to Cavity Gasket	M00130	2	2017-02-27
IS Inner Cavity to Cover Gasket	M00132	1	2017-03-06
Intrinsically Safe Transducer Holder	M00134	A	2018-02-21
Transducer	M00427	4	2017-02-27
Sonos Outer Cover (2 sheets)	18-185802	03	2013-01-23
Sonos Inner Cavity	18-185983	02B	2013-01-23

Note 1

Page 6 of 6 CSF355-NL 5.0

^{*} Drawing no. format 3 letters to define language and one letter to define the revision e.g. TDOCT-9666A_ENG.