

1 EU - TYPE EXAMINATION CERTIFICATE

2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 EU - Type Examination Certificate **Baseefa15ATEX0142 – Issue 2**
Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **Light Sensor Type MiniVLS**

5 Manufacturer: **Compact Instruments Limited**

6 Address: **61-65 Lever Street, Bolton, Lancashire, BL3 2AB**

7 This re-issued certificate extends EC Type Examination Certificate No. **Baseefa15ATEX0142** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Fimko Oy, Notified Body number 0598, 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.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See Certificate History**

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


EN IEC 60079-0: 2018 EN 60079-11: 2012 EN 60079-28: 2015

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to the 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 the product shall include the following:

 **II 1 G Ex ia op is IIC T4 Ga (-20 °C ≤ Ta ≤ +40 °C)**

SGS Fimko Oy Customer Reference No. **4099**

Project File No. **21/0345**

This document is issued by the Company subject to their General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of their intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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Schedule

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Certificate Number Baseefa15ATEX0142 – Issue 2

15 Description of Product

The Light Sensor Type MiniVLS is an optical sensor designed to measure the speed of rotating shafts. It produces an optical beam and the reflection of the beam from a reflective surface, e.g. on a rotating shaft, is detected by a photo-transistor. Any reflections from a target will be processed by the signal conditioning, an event which is indicated by the LED on the unit and a change in voltage on the output.

The Light Sensor Type MiniVLS contains electronic components mounted on a printed circuit board (PCB). The PCB is mounted on the optical block assembly, along with an optical source and a phototransistor. Lenses at the front of the assembly focus the outgoing and incoming reflected light.

The whole assembly is housed in stainless steel tube with a sealing 'O' ring between an internal tube ridge and the lens inside. The unit is filled with epoxy potting compound.

External connections are made at the screw-locking connector which is mounted in the end cap.

The type number MiniVLS may be suffixed with various characters to signify the following variants:

MiniVLS111/ia	Threaded Body, Laser
MiniVLS211/ia	Plain Body, Laser

Terminal Parameters

Pin 1 w.r.t Pin 3	Pin 2 w.r.t Pin 3
$U_i = 6V$	$U_o = 6V$
$I_i = \text{self-limiting}$	$I_o = 12mA$
$P_i = \text{self-limiting}$	$P_o = 14mW$
$C_i = 3.2\mu F$	$C_i = \text{zero}$
$L_i = \text{zero}$	$L_i = \text{zero}$

16 Report Number

GB/BAS/ExTR21.0144/00

17 Specific Conditions of Use

None

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
P0654	1 of 1	1.2	26/07/2021	MiniVLS Type 'ia' label details Certificate No. Baseefa15ATEX0142, IECEX BAS 15.0032
P0653	1 of 1	1.1	09/08/2016	Ex minivls pcb
C001036	1 of 1	1.2	26-08-2015	EX MiniVLS Schematic
P0652	1 of 1	1.0	29-07-2015	MiniVLS Ex Assembly Drawing Schedule Cased

The above drawings are common to BAS21UKEX0531, and held with, IECEX BAS 15.0032.

There are no drawings submitted that are not to be re-stamped with the new certificate issue.

20 Certificate History

Certificate No.	Date	Comments
Baseefa15ATEX0142	2 December 2015	The release of the prime certificate. The associated test and is documented in Test Report No. GB/BAS/ExTR15.0072/00.
Baseefa15ATEX0142 Issue 1	16 June 2016	This issue permits minor changes to the marking label. The associated test and is documented in Test Report No. GB/BAS/ExTR16.0168/00.
Baseefa15ATEX0142 Issue 2	23 September 2021	This issue of the certificate confirms the current design meets the requirements of EN IEC 60079-0: 2018 and also permits a minor label update to incorporate additional certification marks. The test and assessment are recorded in Test Report GB/BAS/ExTR21.0144/00 and held with Project No. 21/0345.

For drawings applicable to each issue, see original of that issue.