

**UK-TYPE EXAMINATION CERTIFICATE**

**Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**  
**UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1**

- UK-Type Examination Certificate Number: **BAS21UKEX0757X – Issue 1**
- Product: **Euroswitch Vibration Sensors – VS Series**
- Manufacturer: **Longvale Limited**
- Address: **Lancaster Park, Needwood, Burton-upon-Trent, Staffordshire, DE13 9PD**
- This re-issued certificate extends UK-Type Examination Certificate No. BAS21UKEX0757X 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.
- SGS Baseefa, Approved Body number 1180, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), 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 Schedule 1 of the Regulations.
- The examination and test results are recorded in confidential Report No. **See certificate history**.
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014**
- except in respect of those requirements listed at item 18 of the Schedule.
- 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.
- This UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- The marking of the product shall include the following :

**Ex II 2 GD Ex db IIC T6\* Gb**

**Ex tb IIIC T85°C\* Db (Ta -40°C to +70°C)\* IP66/67/68**

**\* Alternative Temperature Class and ambient temperature markings are permitted – see schedule**

SGS Baseefa Customer Reference No. **5323**

Project File No. **23/0118**

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**R S SINCLAIR**

**TECHNICAL MANAGER**

**On behalf of SGS Baseefa Limited**

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**13 Schedule**

**14 Certificate Number BAS21UKEX0757X – Issue 1**

**15 Description of Product**

The accelerometer units are all manufactured from stainless steel and comprise either:-

A cylindrical enclosure with a circular mounting plate, and a threaded cover locked by a M4 x 6mm long socket head screw.

The Model VS-10GAR1-321-P1R1000020 enclosure houses a single accelerometer module in a stainless steel mounting insert, and a two way terminal assembly.

The Model VS-10GAR3-321-P1R1000267 enclosure houses three separate accelerometers in a stainless steel mounting insert, and three individual two way terminal assemblies.

An M20 or 1/2" NPT cable entry is provided to accommodate a suitably certified flameproof cable entry device. Internal and external earth connection facilities are provided.

These units may have a variety of Temperature Class/ambient combinations as follows:

T6/T85°C, Ta = -40°C to +70°C

T5/T100°C, Ta = -40°C to +85°C

T4/T135°C, Ta = -40°C to +90°C

T3/T200°C, Ta = -40°C to +90°C

or

The model VS-W has an alternative body consists of a cylindrical enclosure that is directly mounted via a threaded hole in the base, and a threaded cover. This model houses a single accelerometer potted into the bottom of the enclosure along with a 4 way terminal block for electrical connection to the accelerometer. The W series of bodies come with either a side entry point, designated WL, or a cover (back) entry point, designated W, either entry can be M20 or 1/2" NPT

These units may have a variety of Temperature Class/ambient combinations as follows:

T6/T85°C, Ta = -55°C to +70°C

T6/T85°C, Ta = -20°C to +70°C

T5/T100°C, Ta = -55°C to +85°C

T4/T135°C, Ta = -55°C to +90°C

T3/T200°C, Ta = -55°C to +90°C

The accelerometer modules are rated 12-30Vdc with a 4-20mA output

## Vibration Sensor - Part Number Matrix

A Longview brand

	VSE	-	X	X	X	X	-	X	-	X
Stud Mount	M6x1.0	-	A				-		-	
	1/4"-28 UNF	-	B				-		-	
	M8x1.25	-	C				-		-	
	3/8"-24 UNF	-	D				-		-	
	1/4" NPT	-	E				-		-	
	M16x2.0 Quick Fit	-	F				-		-	
Certification	IECEX & ATEX Markings	-		3			-		-	
	ATEX/IECEX & UL/CSA Markings	-		B			-		-	
	Multiple Certification Markings (Exd only)	-		D			-		-	
	Other regional Exd certification	-		F - Z			-		-	
Housing Material	Stainless Steel 316L	-			2		-		-	
Certified Temp.	T6/T85°C = -20°C to +70°C	-				1	-		-	
	T4/T135°C = -55°C to +90°C	-				2	-		-	
Output	ICP Voltage - Acceleration Output - 10mV/g	-					-	1	-	
	ICP Voltage - Acceleration Output - 50mV/g	-					-	2	-	
	ICP Voltage - Acceleration Output - 100mV/g	-					-	3	-	
	ICP Voltage - Acceleration Output - 500mV/g	-					-	4	-	
	ICP Voltage - Velocity Output - 100 mV/ips (4mV/mm/s)	-					-	6	-	
	4-20mA - Acceleration Output - 5g RMS	-					-	A	-	
	4-20mA - Acceleration Output - 10g RMS	-					-	B	-	
	4-20mA - Acceleration Output - 20g RMS	-					-	C	-	
	4-20mA - Acceleration Output - 50g RMS	-					-	D	-	
	4-20mA - Acceleration Output - 5g Peak	-					-	E	-	
	4-20mA - Acceleration Output - 10g Peak	-					-	F	-	
	4-20mA - Acceleration Output - 20g Peak	-					-	G	-	
	4-20mA - Acceleration Output - 50g Peak	-					-	H	-	
	4-20mA - Velocity Output - 10mm/s RMS	-					-	J	-	
	4-20mA - Velocity Output - 20mm/s RMS	-					-	K	-	
	4-20mA - Velocity Output - 100mm/s RMS	-					-	L	-	
	4-20mA - Velocity Output - 0.5 ips RMS	-					-	M	-	
	4-20mA - Velocity Output - 1 ips RMS	-					-	N	-	
	4-20mA - Velocity Output - 2 ips RMS	-					-	O	-	
	4-20mA - Velocity Output - 10mm/s Peak	-					-	P	-	
	4-20mA - Velocity Output - 20mm/s Peak	-					-	Q	-	
	4-20mA - Velocity Output - 100mm/s Peak	-					-	R	-	
	4-20mA - Velocity Output - 0.5 ips Peak	-					-	S	-	
	4-20mA - Velocity Output - 1 ips Peak	-					-	T	-	
	4-20mA - Velocity Output - 2 ips Peak	-					-	U	-	
Connection Options										
	Wireable Connection Head - Top Entry 1/2" NPT	-					-		-	W
	Wireable Connection Head - Side Entry 1/2" NPT	-					-		-	WL
	Wireable Connection Head - Top Entry M20x1.5	-					-		-	W-M20
	Wireable Connection Head - Side Entry M20x1.5	-					-		-	WL-M20
	Customer specific (not affecting certification)						-		-	(X...)

### 16 Report Number

See certificate history

### 17 Specific Conditions of Use

- When used in dust atmospheres the installer shall ensure that the cable entry threads are sealed to maintain the IP66/67 rating.

## **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:

<b>Clause</b>	<b>Subject</b>	<b>Compliance</b>
13	LVD type requirements	Standards require manufacturer's declaration, supplied.
14	Overloading of equipment (protection relays, etc.)	Covered by installation rules and manufacturer's instructions
21(1)	External effects	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions
21(2)	Aggressive substances, etc.	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions

## **19 Drawings and Documents**

No new drawings submitted for this issue of certificate:

Current drawings which remain unaffected by this issue:

<b>Number</b>	<b>Sheet</b>	<b>Issue</b>	<b>Date</b>	<b>Description</b>
ENG016		C	28/10/2021	Label Marking Details

For all other drawings refer to Baseefa15ATEX0172X latest issue

## **20 Certificate History**

<b>Certificate No.</b>	<b>Date</b>	<b>Comments</b>
BAS21UKEX0757X	3 December 2021	The release of the prime certificate. The associated test and assessment against the requirements of EN IEC 60079-0:2018, EN 60079-1:2014 and EN 60079-31:2014 is documented in Test Report GB/BAS/ExTR21.0180/00.
BAS21UKEX0757X - Issue 1	25 July 2023	To accommodate a one piece construction against the currently welded construction  SGS certification report GB/SGS/ExTR23.0031/00 refers.

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