

# 1 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.: **TRAC12ATEX0050X (incorporating variations V1 to V3)**

4 Product: **Valve Position Monitor, SRA series variants 14, 16, 17, 25, 40, 42, 43, 52, 53, 55, 56, 58, 59, 70, 92, 93, 94, 95, 96, 97.**

5 Manufacturer: **Imtex Controls Ltd.,**

6 Address: **Unit 4, Tenth Avenue, Deeside Industrial Park, Deeside, Flintshire, CH5 2UA  
United Kingdom**

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 report **TRA-010425-33-00A & TRA-028383-33-00A.**

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

**EN 60079-0:2009**

**EN 60079-1:2007**


**EN 60079-31:2009**

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:


 **II 2 G D**

**Ex d IIB+H2 T4/T6 Gb**

**Ex tb IIIC T130°C/ T85°C Db**

**Tamb = -50°C to +60°C (T6) & -50°C to +85°C (T4)**

Applicable for cover type C110141.

 **II 2 G D**

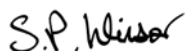
**Ex d IIC T4/T6 Gb**

**Ex tb IIIC T130°C/ T85°C Db**

**Tamb = -50°C to +60°C (T6) & -50°C to +85°C (T4)**

Applicable for cover type C110142.

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.



S P Winsor, Certification Manager

Issue date: 2019-FF-€1

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CSF355-NL 1.0

**13 SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE**  
**14 CERTIFICATE NUMBER TRAC12ATEX0050X (incorporating variations V1 to V3)**

**15 Description of Product**

The SRA series Valve Position Monitors are designed to provide high accuracy feedback of valve position for use with plant control systems and can be used in hazardous gas or explosive dust atmospheres. The equipment is mounted to a valve via a mounting plate and mounting kit. The enclosure is constructed from Aluminium and is of a two part construction, a cylindrical shape approximately 100mm in height by 145mm diameter. A shaft on the bottom of the SRA is physically linked to the valve and passes into the SRA flameproof IP6X enclosure. This shaft can be linked internally to a variety of components, micro switches, transmitters, reed switches, etc depending on the end user requirements. An output shaft on the top of the SRA can provide a physical 'open/closed' type of visual indication via a polycarbonate dome which houses a red/green tile type indicator.

There are many options available for the internal components that can be fitted but the enclosure is the same for all models. Two entry ports into the enclosure can be supplied as M20, M25, 1/2 or 3/4 NPT threaded entries. A breakdown of the models covered by this approval is given below:

Type SRA

FUNCTION	ENCLOSURE	CONDUIT	OUTPUT DRIVE	INDICATOR	FEATURE
14 - (2) DPDT Mechanical Switch up to 10 amps @ 125/250 VAC up to 0.5 amps @ 125 VDC	9 - Aluminium Cover & Housing	5 - (2) M20 x 1.5	L - 15mm NAMUR Output	R - RED CLOSED / GREEN OPEN (ABS material of construction)	- IXX - Feature Designator See Note 1 below
16 - (2) SPDT Mechanical Switch up to 10 amps @ 125/250 VAC up to 0.5 amps @ 125 VDC		8 - (1) 3/4" & (1) 1/2" NPT	M - 25mm NAMUR Output	B - BLUE CLOSED / WHITE OPEN (ABS material of construction)	
17 - (2) SPDT Gold Contact Mechanical Switch up to 1 amp @ 125 VAC up to 0.5 amps @ 30VDC		B - (2) 1/2" NPT	S - 2 Pin Drive	E - RED CLOSED / YELLOW OPEN (ABS material of construction)	
25 - (2) SPDT Reed Switch Max Current: 3 Amps Max Power: 100 Watts/VA		D - (2) M25 x 1.5		W - RED CLOSED / WHITE OPEN (ABS material of construction)	
40 - (2) SPST or SPDT Reed Switch 0.15 Amps @ 125VAC/30VDC		E - (1) M25 & (1) M20		Y - NAVY BLUE CLOSED / YELLOW OPEN (ABS material of construction)	
42 - (2) V3 Style Proximity Sensor Op Voltages (sensor dependent) 10 to 60VDC 10 to 250VAC		F - (2) 3/4" NPT		O - NO VISUAL INDICATOR	
43 - (2) Non V3 Style Proximity Sensor Op Voltages (sensor dependent) 10 to 60VDC 10 to 250VAC					
52 - (3 or 4) V3 Style Proximity Sensor Op Voltages (sensor dependent) 10 to 60VDC 10 to 250VAC					
53 - (3 or 4) Non V3 Style Proximity Sensor Op Voltages (sensor dependent) 10 to 60VDC 10 to 250VAC					
55 - (3 or 4) SPDT Mechanical Switch up to 11 amps @ 125/250 VAC up to 0.5 amps @ 125 VDC					
56 - (3 or 4) SPDT Gold Contact Mechanical Switch up to 1 amp @ 125 VAC up to 0.5 amps @ 30VDC					
58 - (3 or 4) SPDT Reed Switch Max Current: 3 Amps Max Power: 100 Watts/VA					
59 - (3 or 4) SPST or SPDT Reed Switch 0.15 Amps @ 125VAC/30VDC					
70 - POSITION TRANSMITTER 4-20mA @ 10 - 40 VDC monitor may include up to 2 additional switch/sensors from functions 16, 17, 25, 40, 42, 43, 45					

REV	DRAWN	DATE	CHK'D	ECO	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:
	PT	22.6.12		12-1883	
A	PT	2.1.13		12-1973	
B	PT	7.7.15		15-2386	

92 - (1) DeviceNet VCT Module Op Voltage - 24VDC Max Current 100mA	93 - (1) Foundation Fieldbus VCT Module (bus powered) Op Voltage - 5.5VDC Max Current 5mA	94 - (1) Foundation Fieldbus VCT Module (external power) Op Voltage - 24VDC Max Current 200mA	95 - (1) Modbus VCT Module Op Voltage - 24VDC Max Current 100mA	96 - (1) AS-Interface VCT Module Op Voltage - 24-30VDC Max Current 100mA	97 - (1) AS-Interface VCT Module (extended addressing) Op Voltage - 24 - 30VDC Max Current 100mA
<b>Part Number Compilation:</b> <b>SRA16S5SR-I00</b> Type Designator      Function      Enclosure      Conduit Entry      Output Drive      Indicator      Feature					
<b>NOTE 1:</b> The exact detail of switches/sensors/transmitters fitted in the monitor is not fully specified by the basic part number. The 'feature designator' provides a mechanism for cross-referencing to a centralised log establish the make and model of parts fitted in a given unit.					
<b>NOTE 2:</b> Only Functions 14, 16, 17, 25, 40, 42, 43 and 70 can be supplied with cover C110142 and hence be IIC certified.					
<b>FURTHER NOTES:</b> The maximum permitted power that can be dissipated within a monitor is specified on drawing A160189 and the electrical characteristics and ratings of the components fitted must not allow this value to be exceeded.					
<b>TITLE:</b> Type SRA - Exd Master Model Description					

## SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

CERTIFICATE NUMBER TRAC12ATEX0050X (incorporating variations V1 to V3)

16 Test report No. (associated with this certificate issue): TRA-028383-33-00A

### 17 Specific Conditions of Use

1. Installation should be carried out by suitably trained personnel to an applicable Code of Practice (e.g. IEC/EN60079-14).
2. Only suitably IP and Ex d certified and temperature rated cable glands, thread adaptors and blanking plugs are permitted for use with ATEX/IECEx flameproof enclosures.
3. For units operating at +85°C, cable, cable glands or conductors in conduit shall be rated +100°C (minimum).
4. Monitor includes external plastic parts and presents electrostatic hazard: Clean only with a damp cloth.
5. Do not install on an external source of heating or cooling e.g. by hot/cold air blowing temperature units.
6. Monitor should not be opened when energised or an explosive atmosphere may be present.
7. The cover screws (13) must be loosened before opening and re-tightened before the monitor re-enters service.
8. The equipment shall not be subjected to a buildup of dust and is to be cleaned regularly to prevent a layer of dust forming on the enclosure.

### 18 Essential Health and Safety Requirements (Directive Annex II)

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:

<u>Clause</u>	<u>Subject</u>
None	None

### 19 Drawings and Documents

The list of controlled manufacturer's drawings and documents is given in Appendix A to this schedule.

### 20 Routine Tests

1. The enclosures shall be subjected to a routine pressure test in accordance with EN 60079-1:2007, Clause 16.1. As a result, there shall be no permanent deformation or damage to the joints or enclosure. The enclosures shall be tested at a pressure of:
  - SRA IIB+H2 Version at a minimum pressure of 10.3 bar for at least 10 seconds.
  - SRA IIC Version at a minimum pressure of 14.6 bar for at least 10 seconds.

### 21 Specific Conditions for Manufacture

None.

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22 Photographs



23 Details of Markings

IEC Cert No: IECEx TRC 12.0022X  
ATEX Cert No: TRAC 12ATEX 0050X

Model: SRA

Serial No:

Exd IIB+H2 T4/T6 Gb Tamb = -50°C to +60/+85°C  
Ex tb IIIC T130°C/T85°C Db IP6

WARNING! POTENTIAL ELECTROSTATIC HAZARD - SEE INSTRUCTIONS  
WARNING! DO NOT OPEN WHEN ENERGISED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT  
WARNING! FOR Tamb +85°C, CABLE, GLANDS or CONDUCTORS IN CONDUIT SHALL BE RATED +100°C (min)

**imtexcontrols**  
Deeside, Flintshire - UK  
www.imtex-controls.com

CONSULT INSTRUCTIONS PRIOR TO INSTALLATION, OPERATION or MAINTENANCE

II 2 GD 0518

IEC Cert No: IECEx TRC 12.0022X  
ATEX Cert No: TRAC 12ATEX 0050X

Model: SRA

Serial No:

Exd IIC T4/T6 Gb Tamb = -50°C to +60/+85°C  
Ex tb IIIC T130°C/T85°C Db IP6

WARNING! POTENTIAL ELECTROSTATIC HAZARD - SEE INSTRUCTIONS  
WARNING! DO NOT OPEN WHEN ENERGISED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT  
WARNING! FOR Tamb +85°C, CABLE, GLANDS or CONDUCTORS IN CONDUIT SHALL BE RATED +100°C (min)

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II 2 GD 0518

## SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

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#### 24 Details of Variations to this Certificate

This certificate is a consolidated certificate and reflects the latest status of the certification, including the following variations:

- Variation V1 – Change of address and update of label.
- Variation V2 – Addition of IIC variant using small cover C110142 and update to drawings.
- Variation V3 - This certificate was originally issued by Notified Body number 0891 under Directive 2014/34/EU. The technical file has been transferred to Element Notified Body number 2812 without further assessment or evaluation.

#### 25 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.

#### 26 Notes to this certificate

Element Materials Technology certification reference: NR-IMTQ-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.

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. Variation 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.

**SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE****CERTIFICATE NUMBER TRAC12ATEX0050X (incorporating variations V1 to V3)****APPENDIX A - LIST OF CONTROLLED MANUFACTURER'S DOCUMENTS**

<b>Title:</b>	<b>Drawing No.:</b>	<b>Rev. Level:</b>	<b>Date:</b>
Type SRA – Exd Master Model Description	A190280	B	2015-07-07
SRA Cover IIB+H2 Version	C110141	E	2016-05-10
SRA Shaft Assembly	J100408	A	2012-10-22
Flamepath Gap Analysis – SRA – Exd	J100413	B	2016-05-11
SRA Housing Small	C100180	D	2013-01-02
Gap Analysis – SRA w/ 4 x Mech Switch - Exd	J100407	*	2012-07-05
SRA Assembly – Requirements for Exd Monitor	J100409	A	2016-05-11
SRA Free Volume Calculation	J100410	A	2016-05-11
110.74 ID x 1.78 - EPDM	BS-542-EPDM	*	2012-07-05
98.5 x 1.5 O-Ring – EPDM	A170031	*	2009-07-21
External Earthing Clamp	A100353	*	2008-09-22
Exd Title Plate – SRA Unit	A160189	C	2015-07-07
SRA w/2 x Mech – ATEX	SRA 1695 MR-IOO	C	2015-07-07
SRA w/transmitter & 2 x A140077	SRA7095MR-ISW	*	2013-01-02
Installation, Operating and Maintenance SRA – IECEx / ATEX (Sheets 1 to 3)	A190291	A	2016-05-10
SRA Small Cover - IIC	C110142	B	2016-05-10

\*no information provided.