



1 **TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 09ATEX6180X** Issue: **0**

4 Equipment: **Type SPU220A Series and Type SPU225A Series of Solenoid Valves**

5 Applicant: **Shako Co., Ltd.**

6 Address: No. 492-1, Sec. 1  
Wan Shou Rd  
Kwei Shan Hsiang  
Taoyuan Hsien, 33350  
Taiwan

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

8 Sira Certification Service certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 2 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 13463-1:2001 EN 13463-5:2003

10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

12 The marking of the equipment shall include the following:



II 2 GD c T4 130°C  
Ta = -10°C to + 50°C

D R Stubbings BA MIET  
Certification Manager

Project Number 51A19297  
C. Index 25

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## SCHEDULE

### TYPE EXAMINATION CERTIFICATE

Sira 09ATEX6180X  
Issue 0

#### 13 DESCRIPTION OF EQUIPMENT

The Type SPU220A Series and Type SPU225A Series Solenoid Valves comprise a solenoid, a diaphragm assembly and a stainless steel valve body. Operation of the solenoid results in a corresponding movement of the diaphragm, which in turn causes the valve body to open and allow the passage of the associated process fluid, through the valve.

The solenoid is separately certified under certificate PTB 03 ATEX 2086 X.

The equipment is rated at up to 240 V, 9.2 W, a.c., and up to 24 V, 10.1 W d.c. The maximum associated process fluid pressure is 15 kgf/cm<sup>2</sup> and the maximum process fluid temperature is 80°C.

#### 14 DESCRIPTIVE DOCUMENTS

##### 14.1 Drawings

Refer to Certificate Annexe.

##### 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	18 June 2009	R51A19297A	The release of the prime certificate.

#### 15 SPECIAL CONDITIONS FOR SAFE USE

15.1 The user must ensure compliance with the Special Conditions For Safe Use which are associated with the solenoid certificate PTB 03 ATEX 2086 X.

15.2 The maximum permitted process fluid temperature is 80°C.

#### 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed reports listed in Section 14.2.

#### 17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of Type Examination Certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 Each unit must be subjected to a routine hydrostatic test at 1.5 times the maximum working pressure.

# Certificate Annexe

**Certificate Number:** Sira 09ATEX6180X  
**Equipment:** Type SPU220A Series and Type SPU225A Series of Solenoid Valves  
**Applicant:** Shako Co., Ltd.



## Issue 0

Drawing No.	Sheet	Rev.	Date (Sira Stamp)	Title
SPU220-03	1 & 2	-	10 Jun 09	General Arrangement SPU220-03
01	1 of 1	-	10 Jun 09	Body SPU220-03
SPU220-04	1 & 2	-	10 Jun 09	General Arrangement SPU220-04
01	-	-	10 Jun 09	Body SPU220-04
SPU220-06	1 & 2	-	10 Jun 09	General Arrangement SPU220-06
01	1 of 1	-	10 Jun 09	Body SPU220-06
07	1 of 1	-	10 Jun 09	Body Cover SPU220-06
16	1 of 1	-	10 Jun 09	Diaphragm SPU220-06
07	1 of 1	-	10 Jun 09	Body Cover SPU220-03 & 04
16	1 of 1	-	10 Jun 09	Diaphragm SPU220-03 & 04
04	1 of 1	-	10 Jun 09	Orifice Adaptor SPU220
05	1 of 1	-	10 Jun 09	Plunger SPU220
06	1 of 1	-	10 Jun 09	Gasket SPU220
09	1 of 1	-	10 Jun 09	Gasket SPU220
10	1 of 1	-	10 Jun 09	Armature SPU220
11	1 of 1	-	10 Jun 09	Rubber Seal SPU220
13	1 of 1	-	10 Jun 09	Nut SPU220
SP U220	1 & 2	-	10 Jun 09	Label SPU220
SPU225-03	1 & 2	-	10 Jun 09	General Arrangement SPU225-03
SPU225-04	1 & 2	-	10 Jun 09	General Arrangement SPU225-04
01	1 of 1	-	10 Jun 09	Body SPU225 -03 & 04
02	1 of 1	-	10 Jun 09	Body Cover SPU225-03 & 04
03	1 of 1	-	10 Jun 09	Diaphragm SPU225-03 & 04
SPU225-06	1 & 2	-	10 Jun 09	General Arrangement SPU225-06
SPU225-08	1 & 2	-	10 Jun 09	General Arrangement SPU225-08
SPU225-20	1 & 2	-	10 Jun 09	General Arrangement SPU225-20
01	1 of 1	-	10 Jun 09	Body SPU225 -06, 08 & 20
02	1 of 1	-	10 Jun 09	Body Cover SPU225-06, 08 & 20
03	1 of 1	-	10 Jun 09	Diaphragm SPU225-06, 08 & 20
SPU225-12	1 & 2	-	10 Jun 09	General Arrangement SPU225-12
SPU225-14	1 & 2	-	10 Jun 09	General Arrangement SPU225-14
01	-	-	10 Jun 09	Body SPU225-12 & 14
02	-	-	10 Jun 09	Body Cover SPU225-12 & 14
03	-	-	10 Jun 09	Diaphragm SPU225-12 & 14
10	-	-	10 Jun 09	Plunger SPU225
08	-	-	10 Jun 09	Armature SPU225
16	-	-	10 Jun 09	Nut SPU225
SPU225	1 & 2	-	10 Jun 09	Label SPU225

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