







**Statement for application
of directive 94/9/EC
for Equipment and Components
intended for Use in Potentially Explosive
Atmospheres**

Equipment/Component type	Pneumatic Actuator (Double acting/spring return)
Manufactured and submitted for Examination	Wuxi BELEF Pneumatic Actuators Co.,Ltd.
Address	No. 6.8-1, Xinshi road, supporting zone of Huishan, economic development area,Wuxi China.
Basis for Examination	Annex II of the ATEX directive 94/9/EC
Standard Basis	EN 1127- 1: 2011 EN 13463- 1:2009
Intended Use	Zone 1, IIC, T6 ~ T3 Zone 21, IIIC, T80DegC ~ T150DegC
Offer Number	1142005100
Test Result	After Examination, the equipment was found not to be in the scope of the directive 94/9/EC. It has no potential ignition sources.

<u>Expert(s):</u>	<u>Title:</u>	<u>Signature:</u>	<u>Date:</u>
Mr. Morton Ma	Project Engineer (ATEX/IECEx)	 	19.05.2015

<u>Reviewer:</u>	<u>Title:</u>	<u>Signature/Stamp:</u>	<u>Date:</u>
Mr. Ing. Kristof De Gersem, MSc.	Manager Explosion Protection (ATEX/IECEx)	 	20.05.2015

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1) Equipment/Component type:

Double acting/spring return:

(A052D/S,A063D/S,A075D/S,A083D/S,A92D/S,A105D/S,A125D/S,A140D/S,A160D/S,A190D/S,A210D/S,A240D/S,A270D/S,A300D/S and A350D/S);

(B045D/S,B052D/S,B063D/S,B075D/S,B083D/S,B92D/S,B105D/S,B125D/S,B140D/S,B160D/S,

B190D/S,B210D/S,B240D/S,B270D/S,B300D/S,B350D/S and B400D/S);

(D/S: D - Double acting, S - Spring return)

2) Description

The actuator is applied for rotary pneumatic valve mechanism (below content abbreviations pneumatic actuator), it composes all kinds of pneumatic actuator with ball valve, butterfly valve, plug valve, etc, and used for pipeline's automatic control and centralization control. And its conditions of use are as follows:

- Operation pressure: 0.4~0.8Mpa.
- Operation temperature and medium(air) temperature:
 - Standard: -20DegC~+80DegC, O-ring NBR.
 - Low temperature: -40DegC~+80DegC, O-ring Si or low temperature type NBR.
 - High temperature: -20DegC~+150DegC, O-ring Viton.
- Operating media: Filtered by 50um clean air, or dry, the non-corrosive gas, non-flammable gas or oil(silicone oil).
- Work linear speed of the piston outside diameter: 0.131m/s ~ 0.013m/s.

Documentation: (As referred to the technical documentation file stored at TÜV Rheinland archives-

Nr.	Description	from	Pages	signature am / from
Pneumatic Actuator- Double acting/spring return				
1.	Drawings	Apr. 2015	6	Mrs. Wang
2.	Design Calculation	Apr. 2015	3	Mrs. Wang
3.	User manual	Apr. 2015	2	Mrs. Wang
	Annex:			
4.	ATEX Valve Hazard Analysis Report	Apr. 2015	7	Mrs. Wang
5.	ISO 9001:2008 Certificate	May.2015	1	Mrs. Wang
6.	Material Certificate	Apr. 2015	9	Mrs. Wang
7.	Wuxi BELEF Company Standard & BELEF assembly technology	Apr. 2015	6 & 15	Mrs. Wang
8.	Final test report & Surface finishing method and thickness	May. 2014	1 & 3	Mrs. Wang
9.	Seal material dimension Specification	June. 2014	4	Mrs. Wang

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3) Technical Data

Seal ring / Washer / Bearing	Body / Piston / Pinion / End cap	Material of Spring
PTFE NBR VITON SILICONE	Body: Aluminium alloy-6005-T5 Piston: AlSi ₉ Mg Pinion: Alloy steel 45# End cap: AlSi ₁₀ Mg	55CrSi

Note: Surface of equipment is covered by non-conductive coating, but the thickness of coating is 30µm ~ 33µm.

4) Marking

The marking with following information's:

- Name / address
- Type / Size
- Serial Number: include date of manufacturing
- ATEX 94/9/EC Marking: No ATEX 94/9/EC marking is allowed (product is excluded from the directive 94/9/EC)
- Suggested Marking: For use in Zone 1, IIC, T6 ~ T3
 Zone 21, IIIC, T80DegC ~ T150DegC

5) Testresult, Conditions for the safe usage or safe Application / Application instructions

1. After Examination, the equipment was found not to be in the scope of the directive 94/9/EC. It has no potential ignition sources.
2. After the actuator has been put into service, regularly checking for leakages, tightness checks of connections and checks on condensed water in the discharge gas path are needed.
3. Put the actuators in a clean/cool, non-corrosive place for storage. For a long storage of the actuators, the sealing parts must be verified prior to use.
4. When installed, avoid instant impact to the actuator by the valve or by others metallic parts which may damage the actuator parts or produce ignition source in the hazardous area.
5. The user manual shall be observed for installation, maintenance and repair of the equipment.
6. The equipment can be used in gas- or dust explosive atmospheres, the equipment is forbidden to use in a Zone 0 and Zone 20.
7. The equipment shall be connected to the grounding system when installed.
8. For other operation conditions or information, refer to the user manual issued with the equipment.

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