



Statement for Application of directive ATEX 2014/34/EU for Equipment and Components intended for Use in Potentially Explosive Atmospheres

Equipment/Component type

Rotary Valve

Type(s): RDB series, RDC series, RDMC series, RDH series, RGH series, RDL series, RDP series, RDS series, RDT series, RGT series, RDW series, RDM series, RGW series, RGM series

Manufactured and submitted for Examination

Hefei Teclion Machinery Industry Co., Ltd.

Address

36A, WanYang industry park, Shuangfeng Economy Development Zone, Changfeng county, Hefei city, Anhui Province, China

Basis for Examination

Annex II of the European directive ATEX 2014/34/EU

Standard Basis

EN 1127- 1: 2019; EN ISO 80079-36: 2016

EN ISO 80079-37: 2016

Suitable Area



II 2/- G Ex h IIC T* Gb

II 2/- D Ex h IIIC T* Db

Offer Number

245829155

Test Result

The design of product is enough to lower the Explosion risk to an acceptable level.

<u>Expert(s):</u>	<u>Title:</u>	<u>Signature:</u>	<u>Date:</u>
Ms. He Mei	Project manager Explosion Protection Industrial Services & Cybersecurity Greater China		24.01.2024

<u>Reviewer(s):</u>	<u>Title:</u>	<u>Signature/Stamp:</u>	<u>Date:</u>
Mr. Zhang Xiaolong	General Manager Explosion Protection Industrial Services & Cybersecurity Greater China	 	24.01.2024

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1) Equipment/Component type:

Equipment	Model series
Rotary valve	RDB series, RDC series, RDMC series, RDH series, RGH series, RDL series, RDP series, RDS series, RDT series, RGT series, RDW series, RDM series, RGW series, RGM series

Details of change:

1. Change of Ex marking based on the original statement with report no. A1622014.001.
2. Change the address of manufacturer.

2) Description:

The rotary valve is exclusively for discharging, feeding, continuous conveying and conveying system. The rotary valve has been built in accordance with the status of technology and the recognized safety regulations. The rotary valves are not suitable for chemically unstable products.

The rotating speed of the rotary valve is less than 1m/s. The material of the rotary valve body is stainless steel, carbon steel or cast iron.

Depending on the material conveyed inside the rotary valve, the T-class (Tx) is defined as follows:

Temperature class - Tx	Maximum material temperature	Ambient temperature
T6	80°C	-20°C - +60°C
T5	95°C	-20°C - +60°C
T4	130°C	-20°C - +60°C
T3	195°C	-20°C - +60°C
T2	260°C	-20°C - +60°C

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

Nr.	Description	Date	Pages	Document No.
	Rotary valve			
1.	Drawings of RDB series	2021-07	2	-
2.	Name plate of RDB	-	1	-
3.	Drawings of RDC & RDMC series	2021-09	2	-
4.	Name plate of RDC	-	1	-
5.	Name plate of RDMC	-	1	-
6.	Drawings of RDH & RGH series	2020-06	2	-
7.	Name plate of RDH	-	1	-
8.	Name plate of RGH	-	1	-
9.	Drawings of RDL series	2021-07	2	-
10.	Name plate of RDL	-	1	-
11.	Drawings of RDP series	2021-12	2	-
12.	Name plate of RDP	-	1	-
13.	Drawings of RDS series	2021-12	2	-
14.	Name plate of RDS	-	1	-

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15.	Drawings of RDT & RGT series	2020-06	2	-
16.	Name plate of RDT	-	1	-
17.	Name plate of RGT	-	1	-
18.	Drawings of RDW & RDM series	2021-07	2	-
19.	Name plate of RDW	-	1	-
20.	Name plate of RDM	-	1	-
21.	Drawings of RGW & RGM series	2021-01	2	-
22.	Name plate of RGW	-	1	-
23.	Name plate of RGM	-	1	-
24.	Material report of 304	2021-09-08	1	-
25.	Material report of 316L	2021-09-15	1	-
26.	Material report of AISI304	2021-10-02	1	-
27.	Material report of CF8	2021-01-24	1	-
28.	Risk_Assessment_ATEX_2014_34_EU	2022-03-03	7	KS/CX 03-09-01
29.	Operating Manual	-	52	MR2020-01
30.	Design calculation	-	6	-

3) Technical Data:


Ambient temperature: -20°C – +60°C

The detailed information: see technical documentation approved.

4) Marking:

The suggested marking is with following information:

- Name / address
- Type / Size
- Serial Number

- ATEX 2014/34/EU Marking:  II 2/- G Ex h IIC T* Gb
II 2/- D Ex h IIIC T* Db

5) Test result, Conditions for the safe Use or safe Application / Application Instructions:

1. Put the rotary valve in a clean/cool, non-corrosive place for storage. For a long storage of the rotary valve, the sealing parts must be verified prior to use.
2. When installed, avoid direct impact to the rotary valve which may damage the rotary valve or produce ignition source in the hazardous area.
3. The user manual shall be observed for installation, maintenance and repair of the equipment.
4. The rotary valves can be used in gas or dust explosive atmospheres (internal), the equipment is forbidden to be used in Zone 0 and Zone 20.
5. The equipment shall be connected to the grounding system when installed.
6. For other operation conditions or information, we refer to the user manual provided with the equipment.

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