

ChemFlyer | CST

Manufacturer's Declaration


Manufacturer

ChemValve-Schmid AG | Duennernstrasse 540 | CH-4716 Welschenrohr
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Product

ChemFlyer | CST PTFE lined butterfly valve, inc. manually and automatically actuated

Subject

Explosion Prevention

Hereby the manufacturer, ChemValve-Schmid AG, declares that the ChemFlyer | CST butterfly valve, to which this declaration relates, does not fall within the scope of "Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres (recast)". This assessment is based on §38 - 'Simple' products - from the ATEX 2014/34/EU Guidelines, 1st Edition April 2016. Hence, the conformity assessment pursuant to said directive is omitted.

Disc			Liner			Backup			Body		
P	PFA	EX _{min}	P	PTFE	EX _{min}	S	Silicone (VMQ)	N/A	G	5.3103	EX _{max}
C	PFAc	EX _{max}	T	mPTFE	EX _{min}	V	FKM	N/A	S	Stainless Steel	EX _{max}
S	Duplex	EX _{max}	C	mPTFEc	EX _{max}	E	EPDM	N/A	C	Carbon Steel	EX _{max}
F	Duplex p	EX _{max}	U	UHMPE	EX _{min}	D	FKMs	N/A	K	VECF	EX _{max}
J	Stainlees Steel p	EX _{max}	K	PTFEc	EX _{max}						
G	Stainless Steel e-p	EX _{max}									
T	Titanium	EX _{max}									
H	Hastelloy C	EX _{max}									

The risk analysis and assessment of ignition sources by the manufacturer, together with the test report IBExU IB-13-8-014 on 22/02/2013, proves that butterfly valves of the type **EX_{max}** - whereby the disc, liner and body are composed entirely of conductive materials - cannot be charged, so they do not have their own potential source of ignition.


In contrast, butterfly valves of the type **EX_{min}** only ensure that any electrostatic charges caused by the friction of aerosols or liquid droplets on internal insulating materials are specifically controlled by means of a grounding cable and safely discharged.

This results in the following table, which displays the permissible zones and operating media, according to Directive 1999/92/EC, for each product type:

Design Type	Zone 0	Zone 20	Zone 1	Zone 21	Zone 2	Zone 22	Operating Media
EX_{max}	Yes	Yes	Yes	Yes	Yes	Yes	Unlimited
EX_{min}	Yes	Yes	Yes	Yes	Yes	Yes	Limited*

* Aerosols and liquid droplets can cause electrostatic charges in internal components

Further Information:

- The ChemFlyer | CST butterfly valve may not bear the specific ATEX-mark  nor the EX-mark in accordance with Directive 2014/34/EU!
- The instructions in the operating manual must be followed!
- The assembly of the ChemFlyer | CST butterfly valve with a pneumatic or electric actuator does not create any additional potential sources of ignition!
- Upon delivery of the ChemFlyer | CST butterfly valve together with pneumatic and electric actuators, the manufacturer will provide the correspondent ATEX declarations of conformity.
- The requirements according to TRGS 727 chapter 8 regarding grounding and potential equalisation must be observed!
- The responsibility for the safe use and operation of the device in potentially explosive atmospheres lies with the operator, who must produce an explosion protection document in accordance with Directive 1999/92/EC. This declaration of conformity serves as a safety statement and the manufacturer recommends that this be listed in the annex to the explosion protection document.
- If accessories are provided by the customer (e.g. actuators, limit switches, etc.), the operator is responsible for ensuring that these accessories are appropriately compliant!

Welschenrohr, 05.05.2022



Pascal Willi
Leiter Qualitätsmanagement

