

Manufacturer's Declaration

Functional safety according to DIN EN 61511-1

ChemValve-Schmid AG, Duennernstrasse 540, CH-4716 Welschenrohr, hereby declares as the manufacturer that the valves of model series

CST – PTFE and modified PTFE-lined butterfly valves

are suitable for use in a safety-instrumented system in accordance with DIN EN 61511-1, provided that the associated safety instructions are complied with. The following values can be used to determine the probability of failure on demand pursuant to DIN EN 61508-6.

SIL	Suitable for use by technical safety systems with safety integrity level	2 Low demand mode
T _i ¹⁾	Recommended function test interval [h]	4380h
HFT ²⁾	Hardware fault tolerance	0 (1oo1)
PFD _{av}	Average probability of dangerous failure of a safety function on demand	4.97 x 10 ⁻⁶
λ _{DU}	Rate of undetected and dangerous failures [1/h]	2.27 x 10 ⁻⁹

¹⁾ in accordance with DIN EN 61508-6

²⁾ in accordance with DIN EN 61511-1, Chapter 11.4

The evidence that the above valves are suitable for use in technical safety functions is based on the manufacturer's own fundamental assessment of functional safety, and on extensive operational experience from a variety of process applications, such as in the chemical, food and pharmaceutical industries.

The probability of failure on demand is particularly influenced by the operating conditions, such as operating mode, physical environment (temperature, pressure, vibrations, etc.), type of process media and the design of the sealing system. It is therefore commended that maintenance intervals and repeat testing be established in consultation with the manufacturer. Additional information and limitations are set out in the valid operating instructions and/or product documentation valid at any given time.

Welschenrohr, 09/10/2014



Benno Schmid
Managing Director



Christoph Schmid
Marketing & Quality Management