

# MTTF-Certificate

Basis of calculation: EN/IEC 61709 (SN 29500)

The calculated values apply under the following requirements

**SNA:** Stationary operation in well-maintained premises (Ground Benign)  
**Tu:** 40°C average components-ambient temperature  
**Zf:** Continuous operation; stress 8760 h per year  
**Fit:** 1 fit = 1 failure per 10<sup>9</sup> components-hours  
**λ:** Failure rate in 1 / time unit

## Calculation formula:

MTTF<sub>D</sub> according to the report "Test Report I No. 23.520.39/19-152-VT01/I"

**Product:** SENSORswitches capacitive  
**Type:** safeCAP SC4  
Calculation carried out by: CAPTRON Electronic GmbH und H&K Systemtechnik GmbH  
Date: 07.12.2020

**MTBF:** 364 years  
**MTTF:** 364 years  
**MTTF<sub>D</sub>:** 100 years  
**Worst Case MTTF<sub>D</sub>:** 100 years  
**λ:** 31,36 Fit  
**DC<sub>AVG</sub>** 99,00%  
**T<sub>M</sub>** 20 years

## Explanations:

- The information is given without any warranty.
- The listed product is not a safety component according to machinery directive 2006/42/EG.

Olching, 05.08.2022