



FUNCTIONAL SAFETY THAT'S FEMA'S CORE COMPETENCE

SIL Certification as per IEC 61508-2
MTTFd values as per DIN EN ISO 13849-1

All SIL2-certified FEMA pressure switches, thermostats, and 2-wire transmitters at a glance:

Pressure switches -1 to 63 bar

- DCM, DNM, DNS, VCM, VNM, VNS, DGM

Differential pressure switches 4 mbar to 10 bar

- DDCM

Pressure monitors and limiters 0.6 to 40 bar

- DWR, DWAM, DWAMV, SDBAM, FD

Thermostats -20 to 130 °C

- TAM, TRM, TX

All ex pressure switches & thermostats

- Ex-DCM, Ex-DDCM, Ex-DGM, Ex-DNM, Ex-DNS, Ex-DWR, Ex-VCM, Ex-VNM, Ex-VNS, Ex-TAM, Ex-TRM, Ex-TX

2-Wire pressure transmitters -1 to 40 bar

- PTS..., PTH...-A2



FUNCTIONAL SAFETY FOR YOUR PLANTS

The commonly used term **FUNCTIONAL SAFETY** has become a central concept for controlling unexpected disturbances in the areas of vehicle construction, power plant construction, the chemicals industry, and machine construction.

New standards have been introduced for plant construction. And for the construction of field devices, IEC 61508-2 (on the functional safety of safety-relevant electrical / electronic / programmable electronic systems) was also developed. It pertains to the manufacture of suitable safety-relevant components for the chemical engineering sector.

The introduction of the Machinery Directive RL/2006/42/EC harmonizes DIN EN ISO 13849-1 (Safety of Machinery– Safety-Related Parts of a

Control System – Part 1: General principles for design) and also calls for “Functional Safety.”

FEMA by Honeywell, in cooperation with our service partner EXIDA, had the standards-compliant development of our PTS and PTH-A2 2-wire pressure transmitters verified. Further, in the context of an FMEDA in late 2011, we determined the parameters necessary for the calculation of Functional Safety for all of our mechanical pressure switches and thermostats.

Parameter as per IEC 61508-2:

SFF: Safe Failure Fraction (fraction of faults which do not cause a failure)

PFD-av: Probability of Failure on Demand (the average probability of a failure when the Safety Function is demanded)

SIL: Safety Integrity Level

Parameters as per DIN EN ISO 13849-1:

MTTFd: Mean Time To Failure dangerous

PL: Performance Level

PFH: Probability of Failure per Hour

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Please send me the following info material:

- FEMA Catalog
- SIL Information
- ATEX Information



You can reach your FEMA SIL2 experts under the following number:
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