



Systems Components



SIL-11001

SIL Declaration of Conformity

Functional Safety according to IEC 61508

Endress+Hauser Yamanashi Co., Ltd.

862-1 Mitsukunugi, Sakaigawa-cho, Fuefuki-shi, Yamanashi Prefecture, 406-0846 Japan

Declares as manufacturer, that the level gauge

Proservo NMS

is suitable for the use in safety-instrumented system according to IEC 61508 / IEC 61511, if the functional safety manual SD00337G/08 and following characteristics are observed:

Product	Analogue output 4 to 20 mA	Alarm relay contact output
Safety functions	Level Range,	Level MAX, Level MIN,
	Error related to level measurement	Error related to level measurement
SIL ^{3]}	2	
HFT	0	
Device type	Туре В	
SFF	94%	95%
PFD_{avg} (T _i = 1 year)	3.63 x 10 ⁻⁴	2.71 x 10 ⁻⁴
Proof test interval	Recommended: 2 year	
λs ¹	679.19 FIT	635.33 FIT
λ _D ^{1]}	679.19 FIT	635.33 FIT
λ _{DU} ¹⁾	82.97 FIT	61.77 FIT
MTBF ^{2]}	84 years	89 years
¹⁾ according to Siemens SN29500 ²⁾ according to Siemens SN29500, including faults outside the safety function		

³⁾ consideration according to IEC 61511-1 clause 11.4.4

The device, including software and the modification process, was passed on the basis of proven-in-use.

Yamanashi, 19 April 2011

Endress+Hauser Yamanashi Co.,Ltd.

(General Manager)

