

# Certificate of compliance

## Optic liquid level sensors

### OPW Fluid Transfer Group Europe BV

Product identification	- 5-wire models	5300E and 5300N
	- 2-wire models	5350E, 5650E, 5650U, 5030U and 5000E
Certification basis	- IEC 61508:2010, parts 1, 2 and 3	
	- IEC 61511:2017, part 1	
	- EN 13922:2020	
Assessment basis	- FMEA studies	
	- Feedback from the installed base	
	- Audit which confirms OPW's implemented management system	

#### Assessment results

Architecture type	B
SFF	>90%
Systematic capability	SC 2
$\lambda_{DU}$	$1.1 \cdot 10^{-9}$ / hour
$PFD_{avg}$	$3 \cdot 10^{-5}$ (single sensor, test interval: 4 years)
Condition	The output signal of the sensors is pulsed. The pulsed signal disappears if the sensor is wetted. Sensor failure leads as well to loss of the pulsed signal. The Monitor (converter unit between sensor(s) and Clients safety system) shall detect disappearance of the pulsed signal and immediately switch over to non-permissive status.
Sensor integrity	<b>SIL 2</b>
Reference documents	doc. 21040-1 SIL assessment report doc. H72790 Probe safety manual
Certificate number	21040A
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Expire date	4 January 2027



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