



제2021-051598-01-1호

안전인증서

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위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제84조 및 같은 법 시행규칙 제110조제1항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

pH/ORP, ISFET Sensors

형식·모델(용량·등급) / 인증번호

*PS****-...(Ex ia IIC T3/T4/T6 Ga) / 21-KA4BO-0621X

인증기준

고용노동부고시 제2021-22호

인증조건

1. 제조공장

·본 인증서는 'Dieselstr. 24, 70839 Gerlingen, Germany'에서 생산하는 제품에 한함.

2. 제품개요

- 이 제품은 전용 케이블과 전기적으로 차단된 유도결합으로 연결되는 유체매질 측정 센서임.
- 본질안전을 위한 전기적 파라미터: $P_i = 180 \text{ mW}$ ($U_i, I_i = n/a$, 전용 관련기기에서 제한, $C_i, L_i = n/a$)
- 사용주위온도: 별첨2 참조
- 공정온도: 별첨2 참조

3. 인증범위: 별첨1 참조

4. 안전한 사용을 위한 조건

·관련 IECEx 인증서(IECEx BVS 19.0056X issue No.2) 3 페이지 SPECIFIC CONDITIONS OF USE 참조

5. 인증(변경)사항: 없음.

6. 그 밖의 사항

- 안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수
- 본 안전인증서는 반드시 관련 IECEx 인증서(IECEx BVS 19.0056X issue No.2)와 함께 사용

2021년 9월 17일

한국산업기술시험원장





제2021-051598-01-1호(2/2)

인 증 조 건

[별첨1] 형식별 인증범위 및 방폭마킹

·pH/ORP Sensor: (a)PS(bb)E-*****+*

(a)	C, O, OC
(bb)	11, 12, 16, 31, 41, 52, 61, 62, 71, 72, 76, 91, 92, 96
*	방폭성능에 영향을 주지 않는 제품코드임

·ISFET Sensor: (a)PS(bb)(c)-*****+*

(a)	C, O, OC
(bb)	47, 77, 97
(c)	D, E
*	방폭성능에 영향을 주지 않는 제품코드임

·형식별 방폭마킹

형식	방폭마킹
*PS11E-*****+*, *PS12E-*****+*, *PS16E-*****+*, *PS41E-*****+*, *PS42E-*****+*, *PS61E-*****+*, *PS62E-*****+*, *PS71E-*****+*, *PS72E-*****+*, *PS76E-*****+*, *PS47D-*****+*, *PS47E-*****+*, *PS77D-*****+*, *PS77E-*****+*	Ex ia IIC T3/T4/T6 Ga
*PS31E-*****+*, *PS91E-*****+*, *PS92E-*****+*, *PS96E-*****+*, *PS97D-*****+*, *PS97E-*****+*	Ex ia IIC T4/T6 Ga

[별첨3] 공정온도 및 사용주위온도

형식	온도 등급	공정온도	사용주위온도	형식	온도 등급	공정온도	사용주위온도	
*PS11E-*****+*, *PS12E-*****+*, *PS16E-*****+*, *PS41E-*****+*, *PS42E-*****+*, *PS72E-*****+*	T3	$-15\text{ }^{\circ}\text{C} \leq T_p \leq +135\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$	*PS91E-*****+*, *PS92E-*****+*, *PS96E-*****+*	T4	$0\text{ }^{\circ}\text{C} \leq T_p \leq +110\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +80\text{ }^{\circ}\text{C}$	
	T4	$-15\text{ }^{\circ}\text{C} \leq T_p \leq +120\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +75\text{ }^{\circ}\text{C}$		$0\text{ }^{\circ}\text{C} \leq T_p \leq +100\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$		
		$-15\text{ }^{\circ}\text{C} \leq T_p \leq +110\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +80\text{ }^{\circ}\text{C}$		$0\text{ }^{\circ}\text{C} \leq T_p \leq +90\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +90\text{ }^{\circ}\text{C}$		
		$-15\text{ }^{\circ}\text{C} \leq T_p \leq +100\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$		T6	$0\text{ }^{\circ}\text{C} \leq T_p \leq +70\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$	
		$-15\text{ }^{\circ}\text{C} \leq T_p \leq +90\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +90\text{ }^{\circ}\text{C}$		T3	$-15\text{ }^{\circ}\text{C} \leq T_p \leq +135\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$	
		$-15\text{ }^{\circ}\text{C} \leq T_p \leq +70\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$			T4	$-15\text{ }^{\circ}\text{C} \leq T_p \leq +115\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +75\text{ }^{\circ}\text{C}$
*PS61E-*****+*, *PS62E-*****+*, *PS71E-*****+*, *PS76E-*****+*	T3	$0\text{ }^{\circ}\text{C} \leq T_p \leq +140\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$	*PS47D-*****+*, *PS47E-*****+*, *PS77D-*****+*, *PS77E-*****+*	T4		$-15\text{ }^{\circ}\text{C} \leq T_p \leq +110\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +80\text{ }^{\circ}\text{C}$
	T4	$0\text{ }^{\circ}\text{C} \leq T_p \leq +120\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +75\text{ }^{\circ}\text{C}$				$-15\text{ }^{\circ}\text{C} \leq T_p \leq +100\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$
		$0\text{ }^{\circ}\text{C} \leq T_p \leq +110\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +80\text{ }^{\circ}\text{C}$				$-15\text{ }^{\circ}\text{C} \leq T_p \leq +90\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +90\text{ }^{\circ}\text{C}$
		$0\text{ }^{\circ}\text{C} \leq T_p \leq +100\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$				T6	$-15\text{ }^{\circ}\text{C} \leq T_p \leq +65\text{ }^{\circ}\text{C}$
		$0\text{ }^{\circ}\text{C} \leq T_p \leq +90\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +90\text{ }^{\circ}\text{C}$			T4		$-15\text{ }^{\circ}\text{C} \leq T_p \leq +110\text{ }^{\circ}\text{C}$
	T6	$0\text{ }^{\circ}\text{C} \leq T_p \leq +70\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$		*PS97D-*****+*, *PS97E-*****+*		T4	$-15\text{ }^{\circ}\text{C} \leq T_p \leq +100\text{ }^{\circ}\text{C}$
*PS31E-*****+*	T4	$0\text{ }^{\circ}\text{C} \leq T_p \leq +80\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +90\text{ }^{\circ}\text{C}$	T6		$-15\text{ }^{\circ}\text{C} \leq T_p \leq +90\text{ }^{\circ}\text{C}$		$-15\text{ }^{\circ}\text{C} \leq T_a \leq +90\text{ }^{\circ}\text{C}$
	T6	$0\text{ }^{\circ}\text{C} \leq T_p \leq +70\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$		$-15\text{ }^{\circ}\text{C} \leq T_p \leq +65\text{ }^{\circ}\text{C}$	$-15\text{ }^{\circ}\text{C} \leq T_a \leq +65\text{ }^{\circ}\text{C}$		