

深圳市能點科技有限公司

SHENZHEN EPT TECHNOLOGY CO., LTD.

規格書 SPECIFICATION



D1CS-D54

單點電容液位感測器

Single-point Capacitive level sensor



版本 Version : D

日期 Date : 2018.06.07

www.eptsz.com

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本規格書為相應產品作業之標準，在客戶確認後，會作為生產、供貨的依據。如有特殊要求，可告知联系你的市场部人员，并出具承认书。

This specification is the standard for the operation of the corresponding products. It will be used as the basis for production and supply after confirmation by the customer. If you have special requirements, please contact our sales and issue an acknowledgement.

2. 應用領域/Application

飲水機/ Water dispenser

熱水器/Water heater

印表機/Printers

醫療設備/Medical devices or equipment

需要偵測液體的電器，設備等/Electrical appliances and equipment's etc. requiring liquid-level control

3. 產品特徵/Product features

無機械運動部件、可靠性高

No mechanical moving components and with high reliability

體積小、成本低

Small in size and low in cost

只需貼於容器外壁即可使用，非常方便安裝

Simply locate the sensor to outside the liquid container (low temp) for detection. Easy assembly.

超低待機功耗

Low Power Consumption

符合 RoHS 要求

The sensor itself satisfies RoHS requirements

防水等級 IP62

Waterproofing standard IP62

4. 電氣參數特性/ Electrical Specification (Ta=25°C)

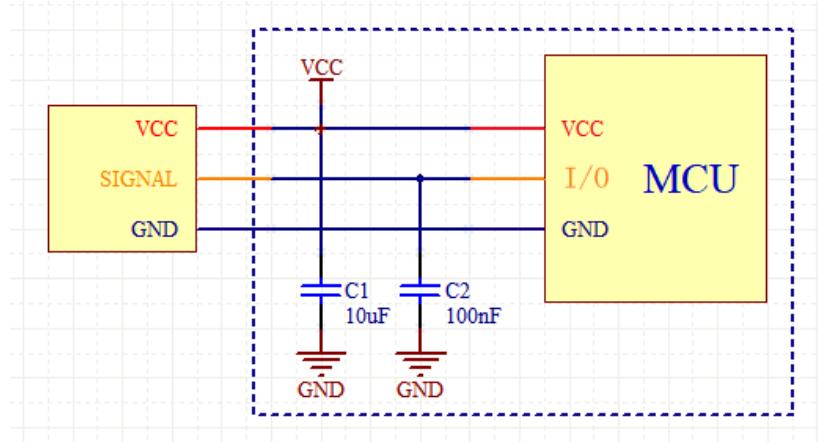
參數/Parameter		符號/Symbol	條件/Condition	最小值/Min	典型/Typ	最大值/Max	單位/Units
直流特性/DC characteristic	工作電壓/Working Voltage	VDD		4.5	5	5.5	V
	電流/current	IDD	VDD = 5V 有水狀態/in water	10	15	20	mA
			VDD = 5V 無水狀態/in air	15	20	25	mA
	消耗功率 power consumption	PD	VDD = 5V 有水狀態/in water	50	75	100	mW
			VDD = 5V 無水狀態/in air	75	100	125	mW
	有水狀態輸出電壓/output voltage in water	VO1	VDD = 5V Ta = 25°C	0.0	0.0	0.30	V
	無水狀態輸出電壓/output voltage in air	VO2	VDD = 5V Ta = 25°C	4.5	5	5.3	V
	輸出源電流/output current	IOL	VDD = 5V Ta = 25°C	—	10	—	mA
	輸出灌電流/output current	IOH	VDD = 5V Ta = 25°C	—	20	—	mA
極限值/limit value	響應時間/response time		VDD = 5V Ta = 25°C	—	1	—	s
	工作溫度/Operating Temperature	Topr	VDD = 5V	-20	—	65	°C
	儲存溫度/Storage Temperature	Tstg	—	-40	—	85	°C
	工作壽命/Working Time	Wt	VDD = 5V Totg = 25°C	—	50000	—	h



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5. 推薦應用電路/Recommended Application Circuit

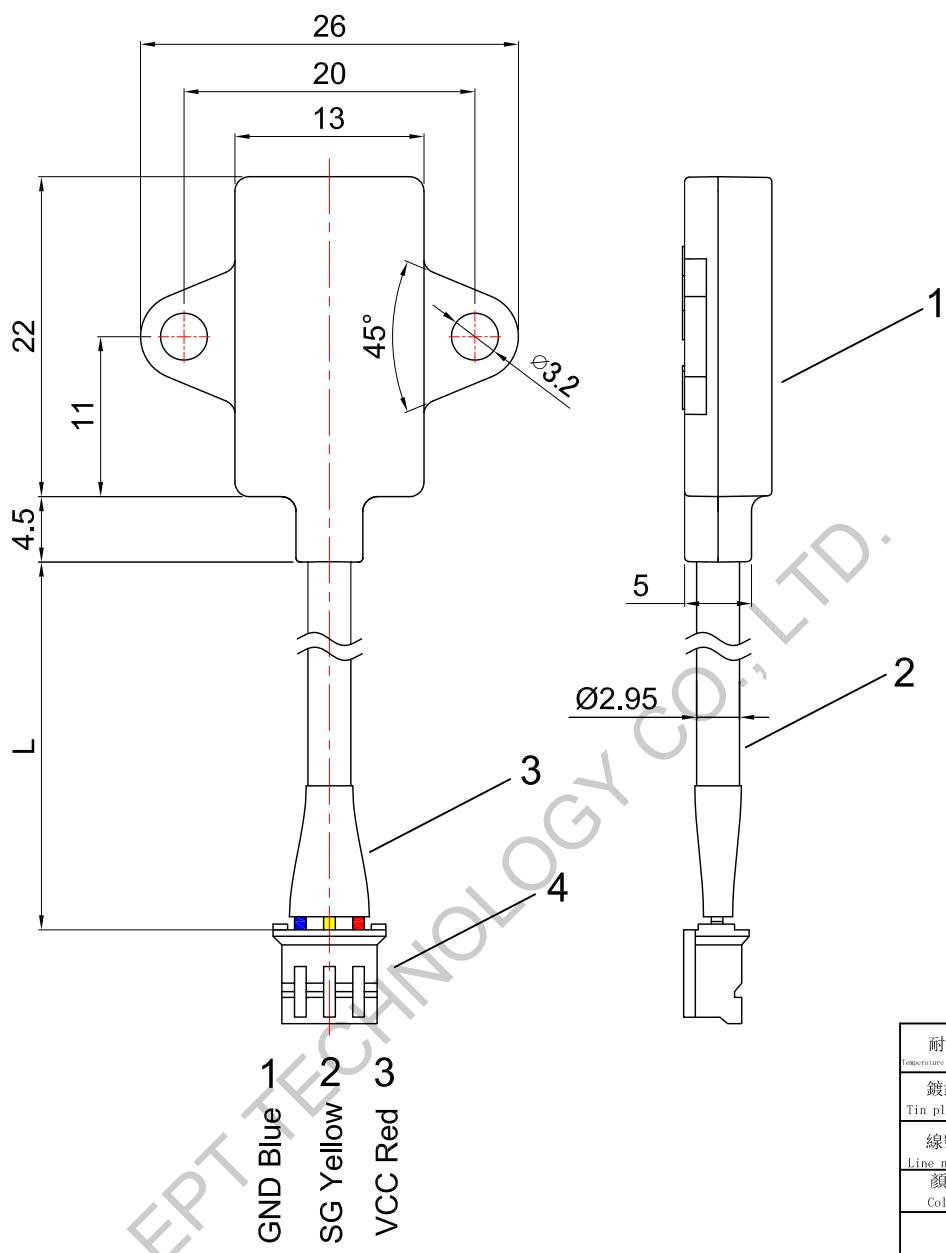
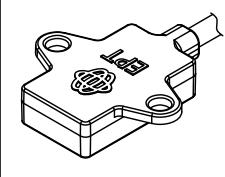


6. 尺寸和推薦安裝/Outline Drawing and Recommended installation



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耐溫 Temperature resistance	*	耐壓 Withstand voltage	*
鍍錫 Tin plating	*	長度 Length	300±20
線號 Line number	*	編號 Numbering	*
顏色 Colour	Black	型號 Model	*
線材規格 Wire specification			

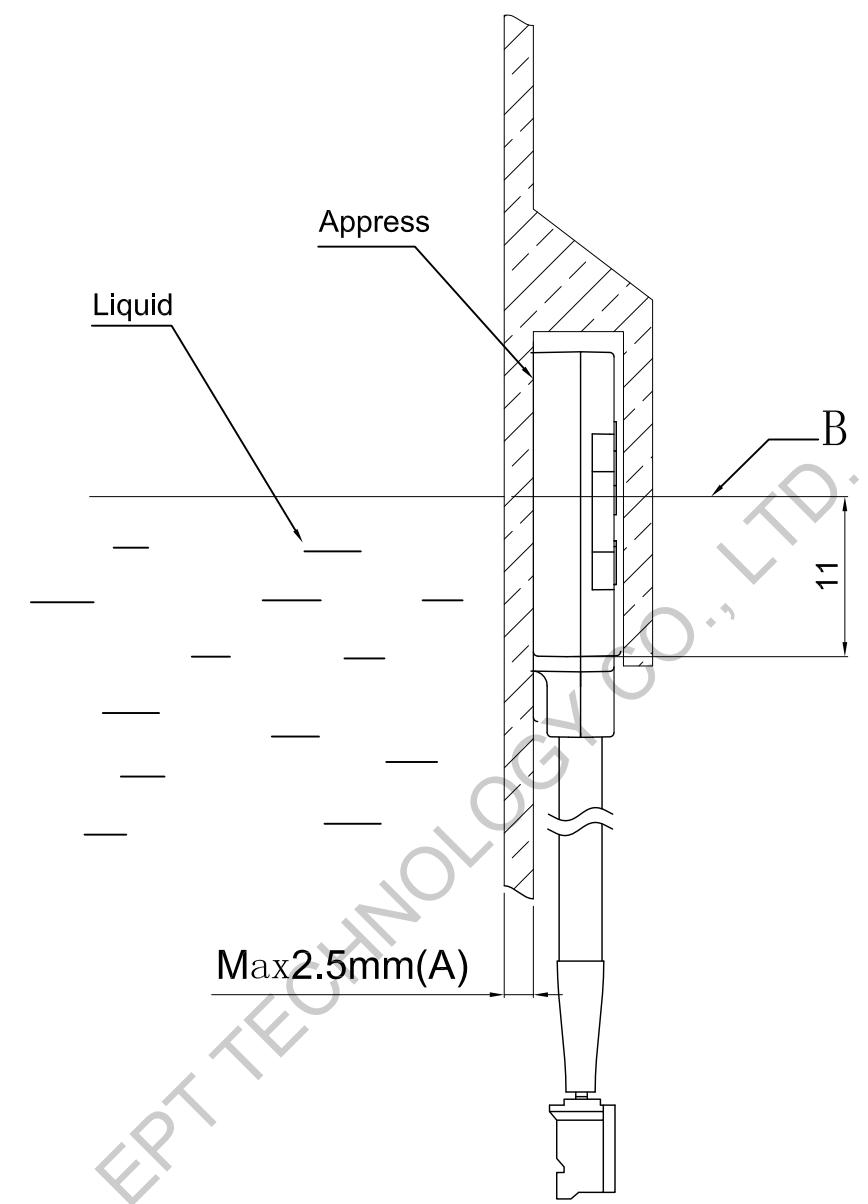
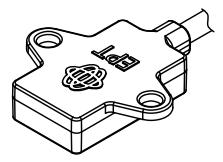
腳距 Foot distance	2.0	孔數 Number of holes	3
顏色 Colour	White	型號 Model	PH
端子規格 Terminal Specifications			

4	端子 Terminal	1	
3	熱收縮管 Heat shrink tube	1	
2	線材 Wire	1	
1	感測器主體 Sensor body	1	
編號 NO.	名稱 Name	數量 QTY	備註 P.S.



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設計 Designer	Zhou	材料 Material	*	單位 Unit	mm	產品名 Product Name	D1CS-D	日期 Date	18-06-07				
檢查 Checked	Zhou	表面處理 Finish	*	比例 Scale	*								
審批 Approver	Wei	數量 Quantity	*	篇幅 Size	A4	頁面內容 Page content	產品圖 Product drawing	版本 REV	D				
一般公差 Tolerances	0-10	±0.25	備註 Remarks	0.8	視圖 View								
	10-35	±0.35											
	35-70	±0.45											
1	2	3	4	5	6								



A: 水箱壁的厚度/A: Water tank thickness.

B: 水位檢測臨界點 $\pm 4\text{mm}$ /B:Water level detecting critical point $\pm 4\text{mm}$.

注意：水箱的材料不應該是金屬/Notes: The material of water tank should not be metal.



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設計 Designer	Zhou	材料 Material	*	單位 Unit	mm				
檢查 Checked	Zhou	表面處理 Finish	*	比例 Scale	*				
審批 Approver	Wei	數量 Quantity	*	篇幅 Size	A4				
一般公差 Tolerances	0-10	± 0.25	0.8 	備註 Remarks	*	頁面內容 Page content	產品安裝示意圖 Product Assembly Diagram	日期 Date	18-06-07
	10-35	± 0.35		視圖 View		圖號 DWG NO.	*	版本 REV	D
	35-70	± 0.45						頁數 Pages No.	2/2
	1	2	3	4	5	6			