TSP SERIES TEMPERATURE SENSOR

APPLICATION

TSP series of PT temperature sensor is one kind of TS series temperature sensor. It has the advantages of high sensitivity, high stability, erosion resistance, long service life and convenient installation, etc. It can measure the temperature of air or water quickly and accurately in HVAC application, and send the signals to the control system so as to control the temperature of air or water accurately. Not only each part but also the whole assembly of this series product have precise techniques and good quality control, and have been passed through strictly testing.



(Fig. 1)

TSP-6104-102

SPECIFICATIONS

TEMPERATURE SENSITIVE ELEMENT: Imported PT temperature sensitive element

WORKING RANGE: 0~50°C

INSTALLATION MODE: Inserted mode

WIRING LENGTH: 1000mm PROTECTION CLASS: IP54

ROD MATERIAL: Stainless steel casing with bolt SELECT PIPE BOLT: WT-6004-01 (for DN15 pipe)

WT-6004-02 (for DN20 pipe)

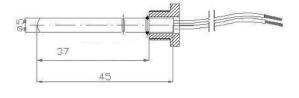


Fig. 2

MATERIAL OF BOLT: Brass

HOUSING AND DIMENSIONS PLEASE REFER TO Fig. 1 and Fig. 2

TSP-8118-102

SPECIFICATIONS

TEMPERATURE SENSITIVE ELEMENT: Imported PT temperature sensitive element

WORKING RANGE: 0~50°C

MAX. TEMPERATURE FOR THE TERMINAL BOX: 70°C

MATERIAL OF THE TERMINAL BOX: High intensions fireproof PC engineering plastic

INSTALLATION MODE: Screw connection, inserted mode

MATERIAL OF WIRING TERMINAL: Fireproof ABS engineering plastic

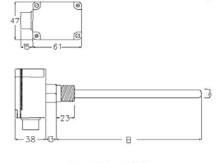
PROTECTION CLASS: IP54

ROD MATERIAL: Brass (Ni-plated on the surface)

HOUSING AND DIMENSIONS PLEASE REFER TO Fig. 3 and Fig. 4



Fig. 3



B=50-400 $A=\emptyset 6-\emptyset 13$

Fig. 4

^{*} The above dimensions are for the standard products, we can do other dimensions according to customers' requirements.

TSP-7205-102

SPECIFICATIONS

TEMPERATURE SENSITIVE ELEMENT: Imported PT temperature

sensitive element

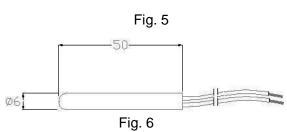
WORKING RANGE: 0~50°C

INSTALLATION MODE: Binded mode

WIRING LENGTH: 300mm PROTECTION CLASS: IP54 ROD MATERIAL: Brass

HOUSING AND DIMENSIONS PLEASE REFER TO Fig. 5

and Fig. 6



SHEET 1: RELATION BETWEEN TEMPERATURE AND RESISTANCE OF TSP SENSOR

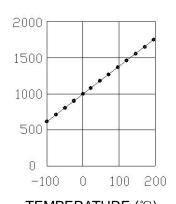
TEMPERATURE	RESISTANCE	TEMPERATURE	RESISTANCE	TEMPERATURE	RESISTANCE
$^{\circ}$	Ω	$^{\circ}$	Ω	$^{\circ}\!\mathbb{C}$	Ω
0	1000	17	1063.75	34	1127.5
1	1003.75	18	1067.5	35	1131.25
2	1007.5	19	1071.25	36	1135
3	1011.25	20	1075	37	1138.75
4	1015	21	1078.75	38	1142.5
5	1018.75	22	1082.5	39	1146.25
6	1022.5	23	1086.25	40	1150
7	1026.25	24	1090	41	1153.75
8	1030	25	1093.75	42	1157.5
9	1033.75	26	1097.5	43	1161.25
10	1037.5	27	1101.25	44	1165
11	1041.25	28	1105	45	1168.75
12	1045	29	1108.75	46	1172.5
13	1048.75	30	1112.5	47	1176.25
14	1052.5	31	1116.25	48	1180
15	1056.25	32	1120	49	1183.75
16	1060	33	1123.75	50	1187.5

^{*}All the above data will be changed without prior notice.

INSTALLATION INSTRUCTION

Because the sensitivity of this series sensor is very high, the sensor must be installed in the most suitable place so as to get the best efficiency. It is suggested that the connecting wire should not exceed 50m.

Resistance(Ω)



TEMPERATURE ($^{\circ}$)

SHEET 2