

TSC SERIES TEMPERATURE SENSOR

APPLICATION

TSC series of NTC 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)

CHARACTERISTICS

TEMPERATURE SENSITIVE ELEMENT: Imported NTC temperature sensitive element

WORKING RANGE: 0~50°C

MAX. TEMPERATURE FOR THE TERMINAL BOX: 70°C

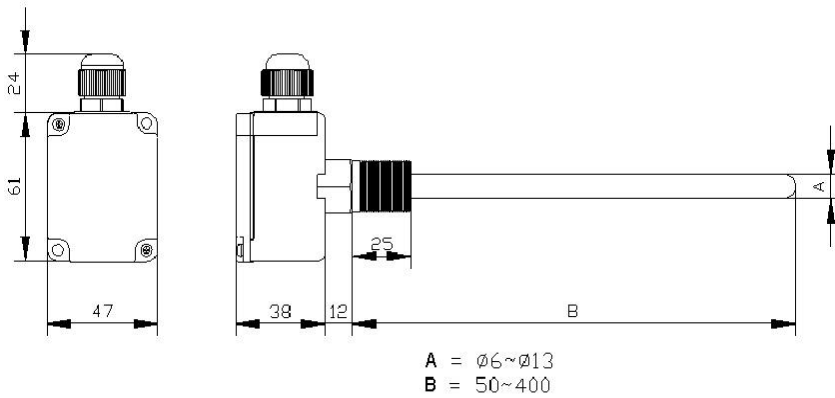
MATERIAL OF THE TERMINAL BOX: High intensions fireproof PC engineering plastic

INSTALLATION MODE: Screw connection, inserted mode

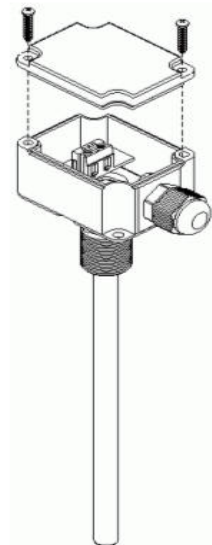
MATERIAL OF WIRING TERMINAL: Fireproof ABS engineering plastic

PROTECTION CLASS: IP54

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



(Fig. 2)



(Fig. 3)

SPECIFICATIONS (See the following datasheet and Fig.2)

MODEL	SENSITIVE ELEMENT	TEMPERATURE RANGE	ROD DIAMETER A	ROD LENGTH B
TSC-8112-103B39	NTC 10K	0~120°C	Φ8	120
TSC-8118-103B39				180
TSC-8212-103B39			Φ10	120
TSC-8218-103B39				180

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. It must be assured that the terminal of the sensor is not in contact with any objects so as to avoid the damage of the sensor or wrong operation. More details please refer to the Installation Diagram (Fig. 3).

RELATIONS BETWEEN TEMPERATURE AND RESISTANCE OF TSC-8xxx-103B39

TEMPERATURE °C	RESISTANCE Ω	TEMPERATURE °C	RESISTANCE Ω	TEMPERATURE °C	RESISTANCE Ω
0	32600	17	14318.0	34	6810.50
1	30985	18	13676.9	35	6534.00
2	29459	19	13068.1	36	6270.00
3	28017	20	12489.8	37	6018.00
4	26654	21	11940.3	38	5778.00
5	25365	22	11418.0	39	5548.70
6	24145.2	23	10921.4	40	5330.00
7	22991.4	24	10449.2	41	5120.00
8	21899.2	25	10000.0	42	4920.00
9	20865.2	26	9572.60	43	4729.00
10	19885.8	27	9165.80	44	4547.00
11	18957.9	28	8778.50	45	4372.00
12	18078.6	29	8409.60	46	4205.00
13	17245.0	30	8058.30	47	4045.00
14	16454.5	31	7723.60	48	3893.00
15	15704.7	32	7404.60	49	3746.30
16	14993.2	33	7100.58	50	3606.00

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

*For other models please refer to SENSOR MODEL DESCRIPTION.