



Temperature Switch

RT Series

Model RT

Switzer data sheet TS-RT-00

Applications

- Pumps
- Compressors
- Filters
- Hydraulic Systems
- Power Packs
- Turbines
- Circuit breakers

Special Features

- Wide Adjustable Range
- Adjustable On-Off Differential
- In-built sturdy snap action Mechanism
- Repeatability $\pm 1\%$
- Weatherproof to IP:67

Description

RT Series of **Temperature Switches** have a vapour filled thermal system, which consists of a sensing bulb, capillary tube and a bellows element. The entire unit contains a charge which reacts to temperature variations at the sensing bulb, so that pressure on the bellows increases on rising temperature. The bellows movement due to this increase in pressure is utilised to operate the switch.

Available in various ranges to control temperature upto 300°C, with high over-temperature limits. RT temperature switches are available with a selection of capillary lengths. The vapour filled system features small bulb sizes making installation easy.



MODEL RT TEMPERATURE SWITCH

Wherever, bulb of temperature switch is exposed to pressure, corrosive fluid or high velocity, a thermowell must be used. Threaded or flanged thermowells, with length and materials as per application requirement are available.

RT series temperature switches have an excellent record backed by our responsive manufacturing facility. Special application assistance is always available.

Applications include pumps, compressors, filters, evaporators, heat exchangers, lubrication systems, hydraulic systems, marine equipment, heating and air conditioning equipment, turbines, generators, circuit-breakers etc.

Ordering Matrix

MODELS / RANGES

Type	Capillary Length Meters (M)	Code No.	Range (°C)	Adjustable Differential Setting (°C)				Max Bulb Temp (°C)
				Contact System / S Type Microswitch		D Type Microswitch		
				At Min. Temp.	At Max Temp.	At Min. Temp.	At Max Temp.	
RT-101	3	017 – 5127	25 to 90	2.4 to 10	3.5 to 20	5.5 to 11	7 to 22	300
	5	017 – 5128						
	8	017 – 5129						
RT-107	3	017 – 5167	70 to 150	6 to 25	1.8 to 6	12 to 28	4 to 6	215
	5	017 – 5168						
	8	017 – 5169						
RT-120	3 ^①	017 – 5206	120 to 215	7 to 30	1.8 to 9	14 to 32	4 to 9	260
	5	017 – 5209						
	8 ^①	017 – 5207						
RT-123	3 ^①	017 – 5221	150 to 250	6.5 to 30	1.8 to 9	13 to 32	4 to 9	300
	5	017 – 5222						
	8 ^①	017 – 5223						
RT-124	3	017 – 5228	200 to 300	5 to 25	2.5 to 10	10 to 30	5 to 12	350
	5	017 – 5229						
	8	017 – 5230						

- ① These are non-standard Thermal Systems. Available only on extended delivery basis.
2. 10 & 12 Meters long Thermal Systems are available on request. Contact Sales for price and delivery.

Ordering Matrix Contd.,

A.	SENSING ELEMENT
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Code Material

NONE Tin plated copper bulb & copper capillary with SS armouring on capillary

B.	SWITCH ELEMENT
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NONE 1 No SPDT / 10A Res 4A Ind.
380V AC, 12W 220V DC – Std.

S ONE SPDT Microswitch - 15A Res. 250VAC
DC Rating : 0.5A 110V /0.25A 220V /8A 24V-Res
0.2A 110V /0.10A 220V / 7A 24V-Ind.

D DPDT microswitch, 10A 125/250V AC, 2A 480V
AC, 0.25A 250V DC

C.	ENCLOSURE
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NONE DMC enclosure weatherproof to IP:67 as per
IEC:60529-2001–std.

ADC Die cast Aluminium enclosure weatherproof to
IP:67 as per IEC:60529-2001

D	ACCESSORIES
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B1 3/4" NPT Brass bulb pocket 111 mm length

B2 1/2" BSP Brass bulb pocket 111 mm length

BC4 316SS bulb and 316SS capillary with 304SS
armour

CGB 1/2" NPTM Nickel plated Brass cable gland

CGN 1/2" NPTM Nylon cable gland

PC Plug in Connector (please specify 3 PIN / 7 PIN /
9 PIN while ordering)

XTW Non standard thermowell – consult factory

S1 3/4" NPT 304 SS bulb pocket 111 mm length

S2 1/2" NPT 304 SS bulb pocket 111 mm length

TG Identification Tagging

NOTES

1. For RT–124 SS bulb & capillary only are standard.
2. Maximum ambient temperature 70°C.
3. Temperature switch are supplied with Seal Cap and window cover. Range adjustable knob and blind cover is optional.
4. Bulb pocket of 111 mm long is available in brass (codes B1 & B2) and in 304SS (codes S1 & S2)
5. Non-std. Thermowells (Code 'XTW') in Brass, 304SS or 316 SS with other dimensions in welded tube or barstock construction available. Consult factory.
6. Select Model Number from Codes shown below :

Model Number to be ordered as Type–A–B–C–D

Type	Sensing Element A	Switch Element B	Enclosure C	Accessories D
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Example : **RT101(5M)–D–ADC–S1–FS 50 / 60°C**

Type RT–101 (Range 25 to 90°C)

5M Long Capillary

DPDT microswitch 10A Res.125/250V AC

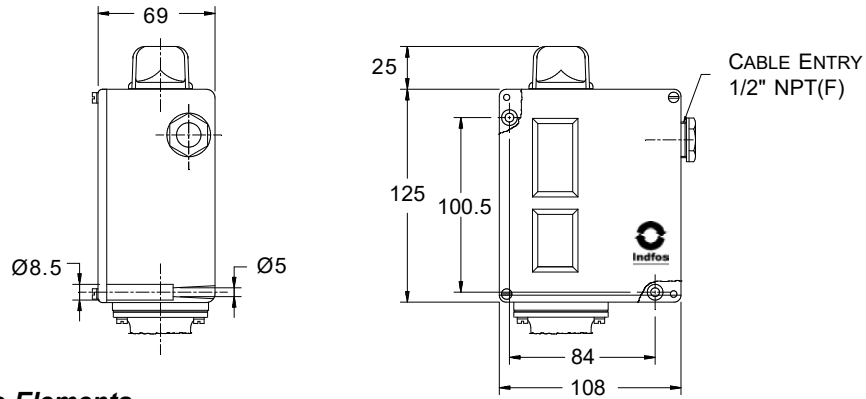
Die Cast Aluminium enclosure weatherproof to IP:66

3/4" NPT, 304 SS bulb pocket 111 mm length

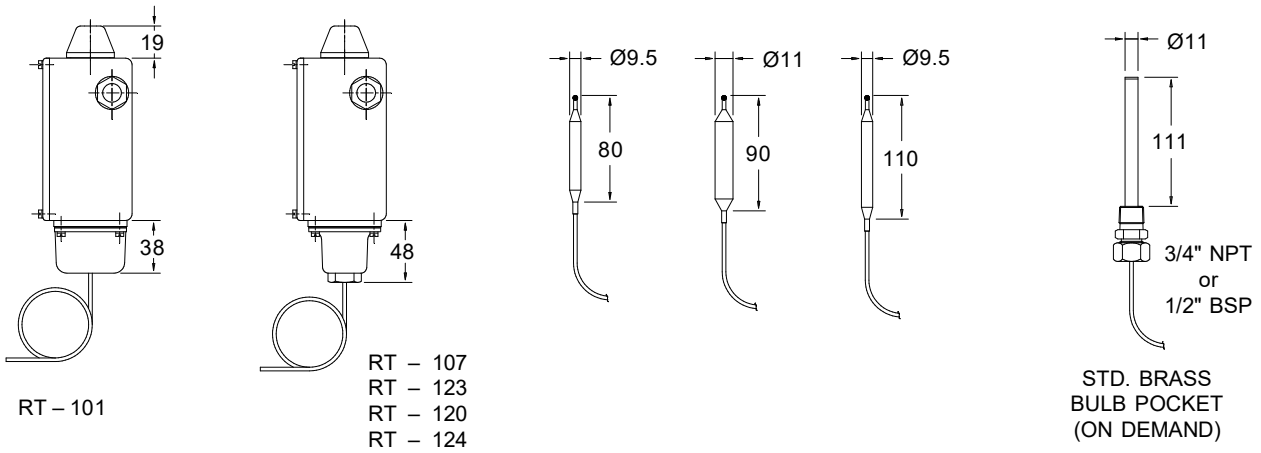
Factory setting at 50°C to 60°C

Mounting Dimensions

Enclosure only



With Temperature Elements



RT - 101

RT - 107
RT - 123
RT - 120
RT - 124

STD. BRASS
BULB POCKET
(ON DEMAND)

MODEL	CAPILLARY LENGTH (M)	BULB DIA	BULB LENGTH
RT-101	3	9.5	80
RT-120	3, 5, 8, 10 & 12		
RT-101	5, 8, 10 & 12	9.5	110
RT-107	3, 5, 8, 10 & 12		
RT-123	3, 5, 8, 10 & 12	11	90
RT-124	3, 5, 8, 10 & 12		

Note : Following Thermal Systems are Non-std.
RT-120 (3 & 8); RT-123 (8) and 10 & 12 metre capillary in all models.

All dimensions are in mm

The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.



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