

Product Features

- *Bimetallic Switch, Snap-Action or Creep-Action switching*
- *Compact Stainless steel or Brass body design*
- *Shock and vibration resistant*
- *Hermetically sealed, NEMA 4 & IP65*
- *Tamper-proof preset temperature set-point*
- *Temperature range from 5°C to 204°C (41°F to 400°F)*
- *Proof pressure up to 500 Psi*
- *Best value and easy installation*

Description

TSA02 Series are economic, bi-metallic, factory preset temperature switches. They feature a one-piece brass or welded stainless thermo-well design which houses a SPST bimetallic switch. It comes standard with 1/2" NPT process and conduit connections. Probe lengths are limited to 3" (76mm for Brass and 12" (30mm) for Stainless Steel with 1.5" (25 mm) being a standard.

A bi-metal disk, mounted in the tip of the probe, provides fast thermal response and rapid positive contact action when the preset temperature is reached. It resets automatically on cooling. Switching action is SPST, wired normally open or normally closed. Some can be used as controlling thermostats which cycle open and close more rapidly to maintain temperature level.

Specifications

Snap Action Models

Resistive Load Ratings : 120 VAC, 15 Amps, 100,000 Cycles
240 VAC, 10 Amps, Resistive, 100,000 Cycles

Inductive Load Ratings : 120 VAC, 5.8FLA, 34.8LRA, 6,000 Cycles
240 VAC, 2.9FLA, 17.4LRA, 6,000 Cycles

Operating Temp. Range : 5°C to 204°C (41°F to 400°F)

Differential Temp. Range : 8°C to 20°C (15°F to 36°F)

Creep Action Models

Resistive Load Ratings : 120/240 VAC, 6 Amps, 100,000 Cycles

Inductive Load Ratings : 120 VAC, 5 Amps, 100,000 Cycles

Operating Temp. Range : 5°C to 204°C (41°F to 400°F)

Differential Temp. Range : None to 2°C below setpoint - creep action

Performance : Snap Action and Creep Action Models

Accuracy : ±5°C (±9°F) max., consult Intempco for other tolerances

Insulation Resistance : 100 Megaohms at 500 VDC

Switch Action : SPST open or close on temperature rise

Circuit Resistance : 50 miliohms max. (initial value) ohms

Dielectric Strength : 1500 VAC ternbals to case (1 min)

Amb. Operating Temperature : -50°C....200°C (-58 °F....392°F)

Max. Operating Pressure : 500 PSI up to 200°C (±392°F)

Environmental Protection : Meets NEMA 6P, IP67, hermetically sealed

Mechanical Properties : Snap Action and Creep Action Models

Body and Tube : Stainless steel or brass

Headfill : Black epoxy potting, 150°C (±302°F) max.

Contacts : Fine silver, gold contacts available

Housing Dimensions : See catalog sheets and dwgs.

Cable Materials : PVC, Fiberglass, Teflon®, SS armor over Teflon®



Applications

- *Air compressors*
- *HVAC*
- *Heaters*
- *Refrigeration*
- *Cooking equipment*
- *Hydraulic systems*
- *Diesel/Automotive engines*
- *Mining*
- *OEM equipment*

- *Information furnished by Intempco is believed to be accurate and reliable. However, no responsibility is assumed by Intempco for its use.*
- *Specifications subject to change without notice.*

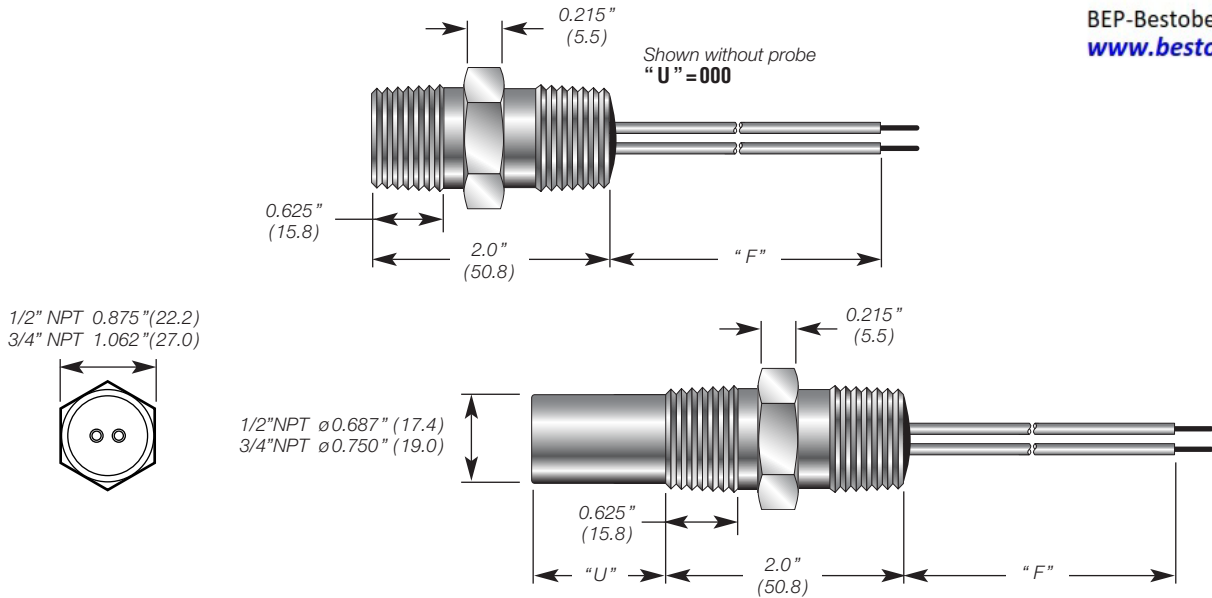
TSA02

Bimetallic Temperature Switch
w/ Snap Action or Creep Action Outputs

BESTOBELL
AQUATRONIX

SINCE / DEPUIS 1953

BEP-Bestobell
www.bestobell.com



Custom Builder

MODEL	1	2	3	4	5	6	7	8
TSA02	-	-	-	-	-	-	-	-

BOX 1 CODE	Calibrated Temperature Range
---	5°C to 204°C (41 / 400°F)

Notes:

- TSA01 temperature switches are factory pre-set to an accuracy of $\pm 5^\circ\text{C}$ ($\pm 9^\circ\text{F}$) or better within the calibrated temperature range.
- Indicate the desired value in $^\circ\text{C}$ or $^\circ\text{F}$ of set-point in Box1 in 5°C or 10°F increments or see web site at www.intempco.com.

Ex.: **050C** = 50°C set-point
290F = 290°F set-point

BOX 2 CODE	Output Type
AA	Snap Action - NO
BA	Snap Action - NC
CA	Creep Action - NO
DA	Creep Action - NC

Other outouts are available; consult Intempco

BOX 3 CODE	Set Point Direction
R	Rising (heating-increasing) direction

BOX 4 CODE	Thermowell Material
B	Brass ("U"=3.0" max.)
S	Stainless 316/316L ("U"=12.0" max.)

Other materials available; consult Intempco

BOX 5 CODE	Immersion Length "U"
---	In 0.1" increments, 1.0" max. Ex.: 010 = 1.0" long, 0.5" Std.

BOX 6 CODE	Process Fitting Type
EN	1/2" NPT male
FN	3/4" NPT male

Other fitting sizes available; consult Intempco

BOX 7 CODE	Lead Wire & Termination Type
GN	Fiberglass insulation, two single cond. 18 AWG, 260°C (500°F) max.
FG	Fiberglass, singles and jacket, 200°C (392°F) max.
PN	PVC insulation, two single cond. 18 AWG, 90°C (195°F) max.
PV	PVC insulation, singles & jacket 18 AWG, 90°C (195°F) max.
TN	Teflon [®] , two single lead wires, 200°C (392°F) max.
TF	Teflon [®] on singles and jacket, 18 AWG, 200°C (392°F) max.
TA	Teflon [®] with SS armor, 18 AWG, 200°C (392°F) max.
TB	Teflon [®] with SS overbraid, 18 AWG, 200°C (392°F) max.
W2	Aluminum housing, screw cover, general purpose, 1/2" NPT conduit
W3	Aluminum housing, screw cover, general purpose, 3/4" NPT conduit

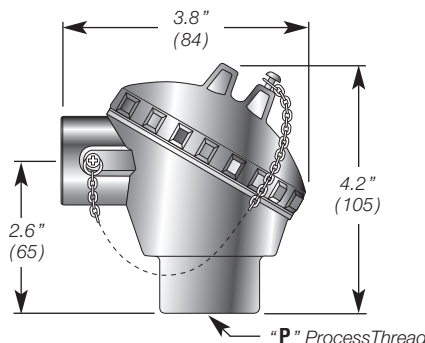
Notes:

- Std. wires are 18AWG stranded and nickel plated.
- For other Output Types see web site at www.intempco.com or consult Intempco.

BOX 8 CODE	Extension Cable Length "F"
---	In inches Ex.: 060 = 60" long

Note : Leads "F" length 18" and less are single conductor Teflon[®] insulation, 18 AWG

Head Dimensions



BESTOBELL
AQUATRONIX

SINCE/DEPUIS 1953

Head Office
2880 Argenta Road, Unit 3
Mississauga, ON L5N 7X8
salesdesk@bestobell.com
1-800-668-3979
www.bestobell.com

Montréal Office
970 Montée de Liesse, #204
St.Laurent, QC H4T 1W7
ventes@bestobell.com
1-877-331-1225

Atlantic Office
166 North Side Road
Riverport, NS B0J 2W0
dmossman@bestobell.com
902-529-0355

Since 1953, Quality Products to Sense, Measure & Control
Depuis 1953, Produits De Qualités Pour Détecter, Mesurer & Contrôler

www.bestobell.com

TSA02.0