

by Honeywell

## Description

The Thermotech 302 Series Rate Compensation Heat Detectors are normally-open devices designed especially for fire detection and alarm systems. The 302 Series operates within a controlled range of two to three degrees of their set points, regardless of the speed or rate of temperature rise. These detectors are available in either 135° F or 194° F ratings.

## Principles of Operation

The 302 Series rate-compensation heat detectors respond and activate the fire alarm immediately whenever the ambient temperature reaches the preset temperature setting. Under rapid heat rise conditions, the rate-compensation feature enables the detector to respond one to three degrees ahead of the setting. At the same time, however, it does not respond to momentary temperature fluctuations below the selected protection level, thus eliminating false alarms. When temperature drops back down below the protection level, the detector automatically resets itself.

## Application Information

The 302 Series detectors have a smooth-ceiling UL rating of 50' x 50' (15.24 x 15.24 meters) and they are the only type of heat detectors having such a rating on both fixed temperature and rate compensation.

## Specifications

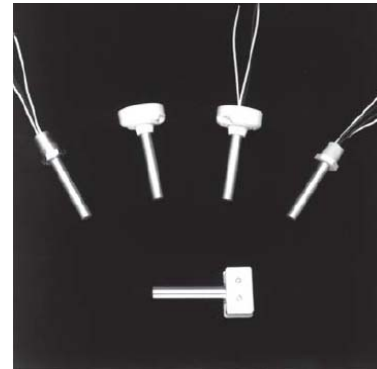
### Dimensions:

Total overall length: 4-1/8"  
Base diameter: 2"

### Electrical Ratings:

<b>Voltage:</b>	<b>Current:</b>
6-125 VAC	5 amps
6-25 VDC	1 amp
125 VDC	0.5 amp

## Rate-Compensation Heat Detector



## Features

- Initiates an immediate response. The 302 Series activates whenever ambient air temperature reaches a detector's setting, eliminating the thermal time lag inherent in conventional heat detectors
- Eliminates false alarms. The 302 Series do not respond to momentary temperature fluctuations below the selected temperature
- Supports universal application. The 302 Series can be used in all areas for any type of occupancy
- Self-restoring
- Built with a hermetically sealed, shock resistant corrosion resistant, and tamper-proof

SIGNALING



**LISTED**  
S539  
E35018A



7300-1703:0131

## Product Line Information

Part Number	Description
302-135:	135°F Interior Vertical Mounting, FM and UL (See Note 1).
302-194:	194°F Interior Vertical Mounting, FM and UL (See Note 1).
302-AW-135:	135°F All-Weather Vertical Mounting, FM and UL (See Note 2).
302-AW-194:	194°F All-Weather Vertical Mounting, FM and UL (See Note 2).
302-ET-135:	135°F All-Weather Vertical Mounting, FM and UL (See Note 3).
302-ET-194:	194°F All-Weather Vertical Mounting, FM and UL (See Note 3).
302-EPM-135:	135°F Explosion-Proof Mounting, UL (See Note 4).
302-EPM-194:	194°F Explosion Proof Mounting, UL (See Note 4).
AP-P:	Decorative white plastic adaptor plate for mounting 302 and 302-AM to 4" outlet box.

### NOTES:

**Note 1:** For interior mounting in any atmosphere that is compatible with terminal screw type connections. UL rating 50' x 50' (15.24 x 15.24 meters).

**Note 2:** Hermetically sealed for moisture-proof or dust-proof installations. Requires no special backbox when the all-weather leads are properly spliced to 'THW' or equivalent type wire.

**Note 3:** Hermetically sealed for moisture-proof or dust-proof installations. Requires no special backbox. Has plastic hexagonal wrench grip bushing with 1/2" (1.27 cm) conduit threads for attachment to threaded hub cover, or any special outlet box.

**Note 4:** Explosion-proof for installation in hazardous locations. Has hexagonal wrench grip bushing with 1/2" (1.27 cm) conduit threads for attachment to threaded hub cover of Series JL fixture fitting as manufactured by Killark Electric Co., or equal.

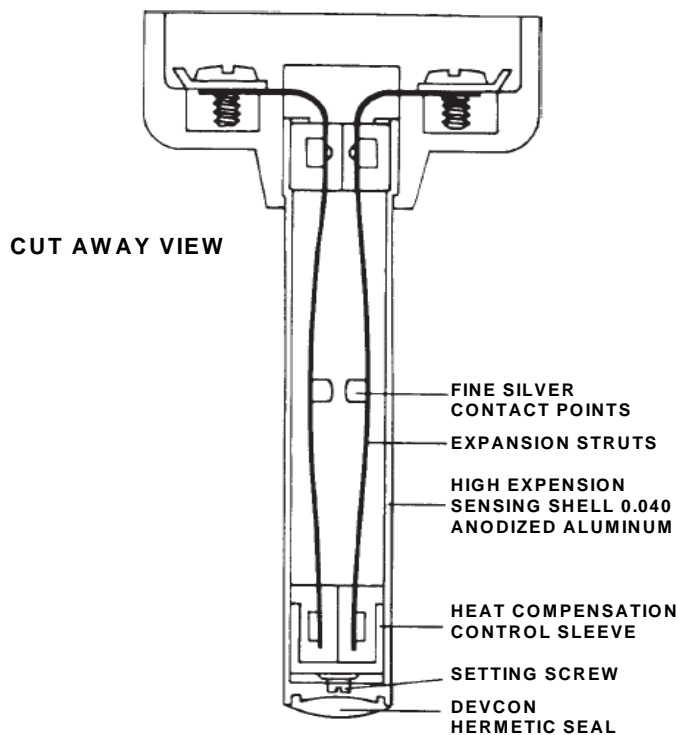


Figure 1 Thermotech 302 Series