FirePro.

# BTA (Bulb Thermal Actuator)

**Data Sheet** 



# FirePro.

# **BTA Technical Data Sheet**

# Bulb Thermal Actuators, Series FP-BTA



# TECHNICAL INFORMATION

- Bulb according to BSEN12259, UL199, LPCB 291A/02
- Thermal Actuator consists of (a)Thermo Lock with Glass Retort, (b) Spring Transmission of percussive mechanism, which initiates the capsule, (c) Safety Ring and Pin during transportation
- Temperature Rating in °C: 57, 68, 79, 93, 141, 182
- Bulb Colours: Orange 57 °C, Red 68 °C, Yellow 79
   °C, Green 93 °C, Blue 141 °C, Mauve 182 °C.
- Length 20mm, Diameter 3mm.
- During operation the liquid within the bulb will expand until the required operational temperature is reached. At this point the glass bulb will 'burst', allowing the thermal mechanism to actuate the built-in firing pin, which in turn initiates the capsule, and causes ignition of the FPC solid compound in Generator activator.
- Strength (Crush Load), kN, 4.1
- Response Time Index RTI 24m/s.
- The surface area of the glass is maximised to allow optimum conductivity of heat from surrounding air to bulb liquid
- The super fast THERMO BULB is a high performance fast response THERMO BULB featuring improved strength and sensitivity characteristics. The response time is 25% faster than of the standard fast bulb with superior strength condition.

**SUITABLE FOR:** electrical panels/cabinets, generator/boiler rooms, obstructive accessible areas, etc

NOTE: ALWAYS RECOMMEND OPTIMUM SOLUTION

## **Component Assembly - Disassembly**

FirePro **DOES NOT ALLOW** the replacement of the glass bulb, which is already pre-installed on the BTA unit. The BTA unit is made up of various delicate mechanical components that are carefully assembled and adjusted prior to dispatch as a complete assembled unit, ensuring with this way the proper and reliable operation of the unit. Please note that all threads of the BTA mechanism are secured using Loctite.

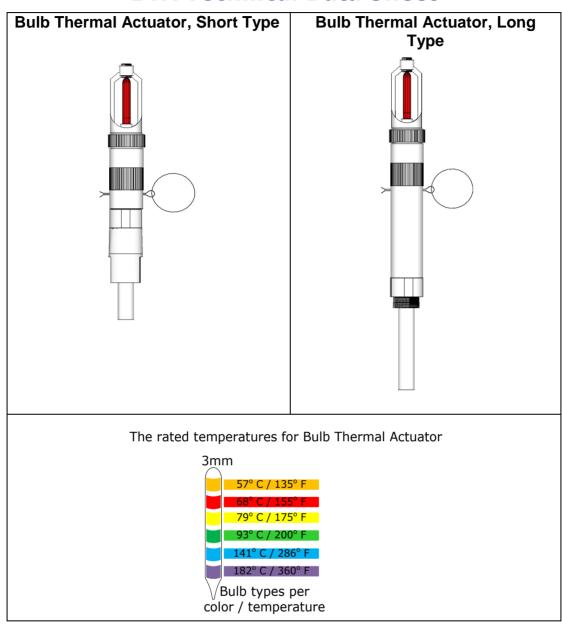
**DO NOT ATTEMPT** to tamper or apply any external force to the BTA during the installation. Ensure that the safety pin is free to move prior to removing it (from device) when installation is completed.





# FirePro.

# **BTA Technical Data Sheet**



# **Component Usage - Application**

The BTA needs to be handled with care, as its operation is dependent on a fragile glass bulb. Glass bulbs are used for fixed land applications in the absence of vibrations or shocks. The glass bulb of the BTA is susceptible to external shocks/vibrations and could break if installed in a wrong application.

BTA **MUST NOT** be used in harsh environments in the presence of intense vibrations or subjected to external forces/shocks, such as industrial heavy vehicles, railway vehicles, marine applications, close proximity to engines/generators, etc.

# **PRODUCT DISCLAIMERS**

FirePro Systems makes no representations or warranties of any kind, either express or implied, statutory or otherwise, including but not limited to warranties of merchantability, fitness for a particular purpose, of title, or of non-infringement of third party rights, including the intellectual property rights of others.

### LIMITATION OF LIABILITY

In no event, regardless of cause, shall FirePro Systems be liable for any indirect, special, incidental, punitive or consequential damages of any kind, whether arising under breach of contract, tort (including negligence), strict liability or otherwise, even if advised of the possibility of such damages.

# NOTE

FirePro is constantly updating its products and systems to the state of the art and therefore reserves the right to make changes in design, equipment and technology. You cannot therefore base any claims on the data, illustrations or descriptions contained in this literature.

