



# NEXT GENERATION PITOT TUBE PROTECTION

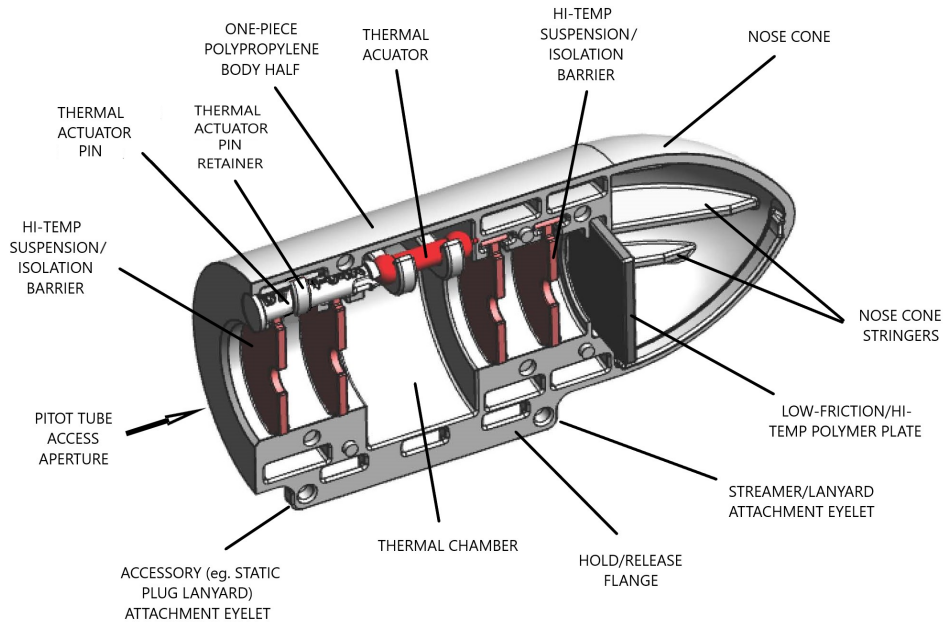
## PITOTSHIELD V2™ SMARTCOVER™ SAFETY PITOT COVERS Structural and Functional Overview



Scan For PSV2  
Spec Sheet



Scan for Active-  
Release Videos



Scan For PSV2  
Web Page

The PitotShield V2™ Smartcover™ consists of two major parts. First is a replaceable, upgradeable Remove Before Flight (RBF) Streamer with a nylon ring attachment. The second part is a polymer body manufactured as two major components using Selective Laser Sintering (SLS), an innovative additive manufacturing technology. Within the body is a patented heat-resistant suspension/isolation system with five distinct functions:

1. Several silicone elastomer isolation barriers suspend the polymer body from the pitot tube to prevent contact and melting of the polymer should pitot heat be activated with the pitot cover in place.
2. The barriers guide and hold the pitot tube tip against a flat, protective temperature-resistant fluoropolymer plate to ensure that no contamination infiltrates the pitot tube tip. Because of the flexing of the isolation barriers, once the pitot cover is placed fully onto the pitot tube, it cannot be released without increased reverse force sufficient to prolapse the barriers. To remove the pitot cover from the pitot tube, an initial holding force from the flexed barriers must be overcome until the barriers are prolapsed, at which point the pitot cover body can be readily slid forward off the pitot tube.
3. The physical flexibility of the suspension system facilitates one size pitot cover fitting 90+% of the various sizes and shapes of pitot tubes.
4. The isolation barriers form a thermal chamber within the body surrounding the pitot tube. This chamber has a release actuator which, upon reaching a specified temperature, will trigger separation of the two body halves.
5. Simultaneously with release of the body, the isolation barriers aid ejection.

**Additional features of the PitotShield V2™ SmartCover™** are eyelets on either end of the lower hold/release flange. One eyelet is the attachment point for the RBF streamer while the other can be an attachment point for lanyards from static plugs and/or AOA covers to augment ADS System protection.