



**LOW IMPACT FIRE PROTECTION FOR SENSITIVE AIRCRAFT HANGER INFRASTRUCTURE AND ASSETS**

The ARCHER Pop-up Foam Fire Sprinkler is specialised fit-for-purpose low-impact fire suppression technology designed to protect key aircraft hangar, apron & helipad / helideck infrastructure and the critical high-value aircraft assets and personnel within.



Figure 1 – Pop-Up Foam Sprinklers Operational

ARCHER Pop-up Foam Fire Sprinklers not only provide superior protection against the loss of life and/or asset (fire protection performance), but also provides superior mitigation against loss or interruption of just-as-valuable operations and function (recovery and system/facility operations & function continuity performance).

Loss of life/asset, nor interruption of operations & function, either is not an option. Critical operational & personnel sovereign defence & security (or commercial) capability is at stake, and protection of both: life & asset, and operations & function, is paramount. Protection of one at the mercy of the other compromises posture.



Figure 2 A & B – Pop-Up Foam Sprinkler on Standby and Operational

Whilst providing a high level of fire protection performance by way of deluge foam fire suppression capability, ARCHER Pop-up Foam Fire Sprinklers are a low-impact “low-level” “low-expansion” foam system installed in the area’s floor, and when operated, sprays firefighting foam low to the floor area only (including under-wing), is not destructive and has minimal impact on equipment and personnel within the environs of the hangar, including aircraft and their sophisticated avionics and components, ensuring the highest levels of recovery and system/facility operations & function continuity performance.

**Manufacturer’s Certificate of Conformance is available for each batch manufactured, including material certificates.**

**COMPLIANCE**

- ✓ Complies with Defence MFPE
- ✓ Complies with ADFA 11



Figure 3 – Pop-Up Foam Sprinkler Operational

**UNIQUE AND SUPERIOR LOW-IMPACT SOLUTION**

- ✓ Excellent firefighting performance
- ✓ Excellent recovery and system/facility operations & function continuity performance
- ✓ Less detrimental effects of fire-fighting foam on aircraft avionics and components
- ✓ Less downtime for clean up after discharge
- ✓ Less water storage requirement
- ✓ Less firefighting foam to be contained and disposed after a discharge
- ✓ Minimises damage to aircrafts, people and equipment
- ✓ Low level and discreet from floor level, (as opposed to traditional overhead system/foam sprinkler)

**Non-Disclosure**

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**EXCELLENT RECOVERY AND SYSTEM/FACILITY OPERATIONS AND FUNCTION**

“Low-level” pop-up foam fire sprinkler systems are advantageous over other systems regarding the safety of life and assets such as:

- harsh powerful oscillating fire-fighting monitors/cannons/nozzles designed to blast large volumes of firefighting foam over large distances at high velocity.
- & overhead high-powered high- or medium-expansion foam deluge systems designed to non-discriminately flood/fill large voluminous spaces quickly, including foam flooding/covering and entering any equipment positioned therein.

Compared to both these solutions that when implemented in sensitive areas such as an aircraft hangar, cause high levels of collateral damage and can have devastating affects not only on the sensitive and sophisticated aircraft and associated equipment in their path of discharge, but also on the personnel within the environs at time of actuation, with the increased likelihood of personal injury, slips, trips, falls and disorientation, all impeding the ability to egress safely.



Figure 4 – Pop-Up Foam Sprinklers in Action

The ARCHER Foam Pop-Up Sprinkler utilises low-impact, non-destructive, “low-level”, “low-expansion” foam, which apart from its excellent firefighting performance, has excellent recovery and system/facility operations and function, because of the less detrimental



Figure 5 – Safe for Firefighters and Operators while in Operation

**KIND TO FIREFIGHTERS**

ARCHER Pop-up Foam Fire Sprinklers are also “kind” and low-impact on Firefighters. No need for Firefighters to:

- ✓ “duck and weave” an automated oscillating monitors’ powerful always-moving water foam jet cannon; or
- ✓ expose themselves and wade through deep, possibly over-head high, disorientating high-expansion foam, hiding trip hazards and other obstacles for firefighting hoses to be snagged on.



Figure 6 – Typically Discreet installation of ARCHER Pop-Up Foam Sprinklers

**APPLICATIONS & MARKETS**

- ✓ Aircraft Hangers
- ✓ Helidecks
- ✓ Aerospace
- ✓ Defence
- ✓ Large Asset Protection



Figure 7 – Pop-Up Foam Sprinkler Tube

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TECHNICAL DATA

<b>Type:</b>	Aspirating, automatic pop-up type	<b>Body:</b>	316 Stainless Steel
<b>Mounting:</b>	In floor	<b>Outer Slide Tube:</b>	316 Stainless Steel
<b>Discharge rate:</b>	82 L/min @ 350 kPa	<b>Pop-Up Tube:</b>	316 Stainless Steel
<b>Spray pattern:</b>	7.5 meter diameter @ 350 kPa 450 mm maximum height above floor	<b>Seals:</b>	Nitrile
<b>Min. operating pressure:</b>	210 kPa	<b>Deflector:</b>	316 Stainless Steel
<b>Inlet connection:</b>	Bottom entry, Pipe thread ISO 7 – Rp 1 (Female 1" (DN25) BSP Parallel)	<b>Blow-off Cap:</b>	316 Stainless Steel (etch primed and sprayed standard colour signal red)
<b>Configuration:</b>	Flanged top casting for flush mounting in concrete floor. Fully retracting pop-up tube and deflector with a protective blow-off cap (standard colour signal red).		
		<b>Total Assembly:</b>	1.9kg
		<b>Flanged Body:</b>	1.2kg

OPTIONAL

**AE12-007/8 Spanner:** for installation and removal of pop-up & outer slide tubes and deflector assembly.

**AE12-007/9 Special Service Tool:** to remove blow-off cap and perform pull test.

**AE12-007/7 Alignment and Pressure Test Plug:** recommended to be used during installation.

**Colour:** selection for protection/blow-off cap.



Figure 2 A - AE12-007/8 Spanner



Figure 2 B - AE12-007/9 Special Service Tool



Figure 2 C - AE12-007/7 - Alignment and Pressure Test Plug

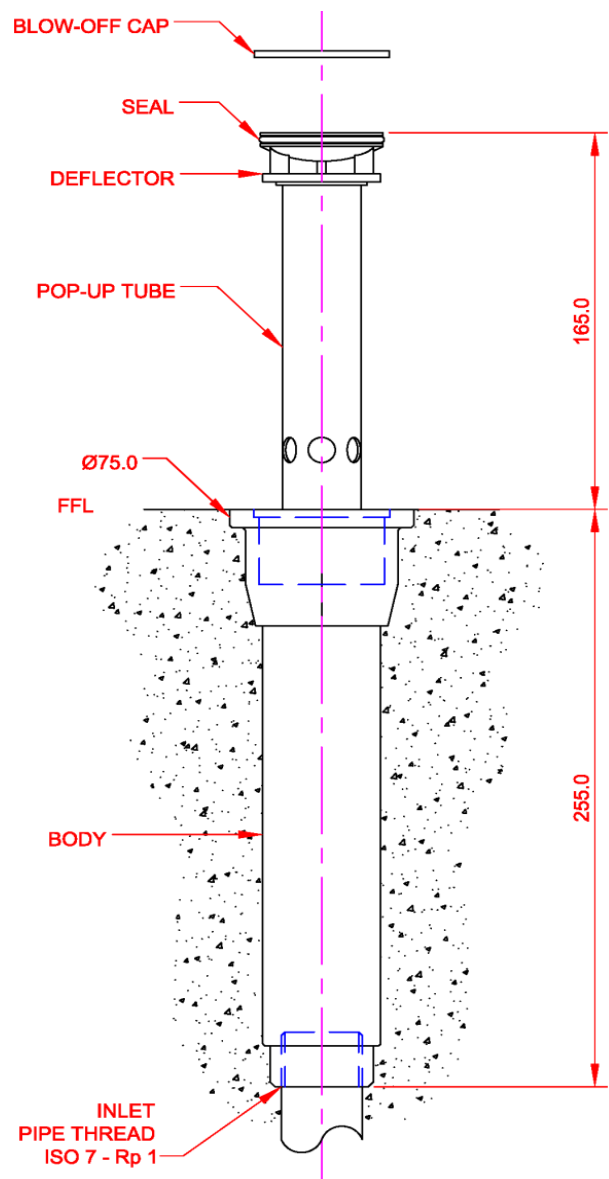


Figure 3 – Overview of the Model AE12-450/1

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