



HOLLOW POINT



The Hollow Point from WILLIAMS FIRE & HAZARD CONTROL is an air aspirating foam discharging device designed to protect against a fully involved surface fire for cone roof or fixed roof storage tanks. The Hollow Point is to be installed in the shell of a closed roof flammable liquid storage tank and can be used to replace existing foam chambers. It discharges foam solution piped from outside the hazard area, either connected to a fixed system or supplied in a semi-fixed scenario by portable fire apparatus.

Conventional foam chambers are designed to simply pour foam onto the liquid fuel surface from the circumference of the tank. The foam then runs across the liquid surface using only gravity as its means of propulsion via the static head from the piled up foam near the tank wall. By contrast, each Hollow Point has three discharging points: the center stream towards the center of the tank and left and right points close to the tank wall. The center stream projects air aspirated foam solution into the tank with such a velocity that it pushes the foam toward the center of the tank. At the same time, the foam from the left/right discharge points protects the area near the tank wall. As the foam begins to accumulate in the center, it will then start to flow outwards to the tank wall, during which time the foam solution at the tank wall will begin to flow toward the center of the tank closing the gap in between the two.

Each Hollow Point is designed to flow up to 1,000 gpm (3,785 Lpm). Approximately 600 gpm (2,271 Lpm) is delivered through the center stream projecting toward the center of the tank with approximately 200 gpm (757 Lpm) projecting left and right against the tank wall. This flow rate is regulated by the internal jet just upstream of the aeration holes. Air is introduced to the stream at the aeration holes by the Venturi effect created by the internal jet. This expands the foam before it leaves the Hollow Point, producing aspirated foam to land on the liquid surface. This aeration is intended to create a relatively low expansion compared to other devices in order to maintain a small foam bubble size. This kind of foam is best suited for quickly and effectively running across a liquid surface. Together with a favorable flow rate through multiple purposefully engineered discharging points on each head, the Hollow Point provides quick coverage and extinguishment of the tank fire. It is a much more effective foam discharging device than conventional foam chambers.

Each Hollow Point is designed to flow 707 – 1,000 gpm (2,676-3,785 L/min) at pressures of 50 – 100 psi (3.4 – 6.9 Bar). It is suitable to protect closed roof tanks up to 260' (79 m) in diameter. However, Hollow Point is not recommended for protections of alcohol or polar solvent fuels.

The Hollow Point nozzles are fitted with a Teflon style vapor seal that prevents tank vapors from escaping the tank through the nozzle's air aspiration holes. This vapor seal is ruptured upon activation of the nozzles and can be replaced easily by separating two flanges and sliding in a new unit.

Hollow Point is manufactured from 316 stainless steel with stainless steel screens on the air inlets. Each unit has a 4" flat face ANSI 150 lb inlet flange and available with either a 4", 6", 8" or 10" mounting flange to fit into existing tank shell holes. For new installations (or for instances where new holes will be cut), it is recommended to use the unit with 4" mounting flange.

Ordering Information

Multiple Hollow Point devices will be required for each tank size. When ordering, please supply the following information:

- Inlet pressure available at the base of the Hollow Point system (100 psi or 6.9 bar inlet pressure is recommended for optimum foam quality, but lower pressure may be acceptable)
- Tank diameter
- Product in the tank
- Foam to be used
- Existing foam system (if any).

Part Number	Description
11726	Hollow Point with 4" inlet flange and 4" mounting flange
11727	Hollow Point with 4" inlet flange and 6" mounting flange
11728	Hollow Point with 4" inlet flange and 8" mounting flange
11729	Hollow Point with 4" inlet flange and 10" mounting flange

Notes:

Low flow Hollow Point nozzle is available for small tanks up to 50 ft (15 m) in diameter.

Each Hollow Point device comes with durable red polyurethane paint, inlet flange gasket, stud bolt mounting flange, bolts and nuts. Mounting clamps and piping are not included.