



# ANTI-SIPHON EJECTOR

## -INNOVATION & QUALITY-

When the piping layout of an ejector installation allows for the possibility of a siphon effect when the vacuum-feed system is not in operation, it is necessary to take steps to prevent the siphon effect from feeding chemicals when they are not called for.

The most common situations in which siphoning might occur are when the solution line or the pipe into which the solution is injected, drains down after shut down.



Shown above: EOA-10C-AS

Archer Instruments manufactures an Anti-Siphon ejector, specifically designed to prevent the injection of chemical when siphoning may occur. The design incorporates a spring-loaded anti-siphon valve that responds to the pressure immediately upstream of the internal Venturi nozzle.

During normal ejector operation, the water pressure will ensure the anti-siphon valve remains closed. This valve is normally closed under spring pressure. However, additional water pressure helps to fully close and seal the valve. At very low pressures some water may seep from the valve.

The anti-siphon valve is designed to open during the vacuum levels typically associated with the siphon effect. This range of vacuum is slightly below atmospheric pressure, typically between 1" Hg and 5" Hg.

The ejector always incorporates a spring-loaded check valve, to prevent water from entering the vacuum lines. And the anti-siphon valve is designed to open at lower vacuum levels than the check valve. This breaks the siphon and prevents chemical from being fed.