

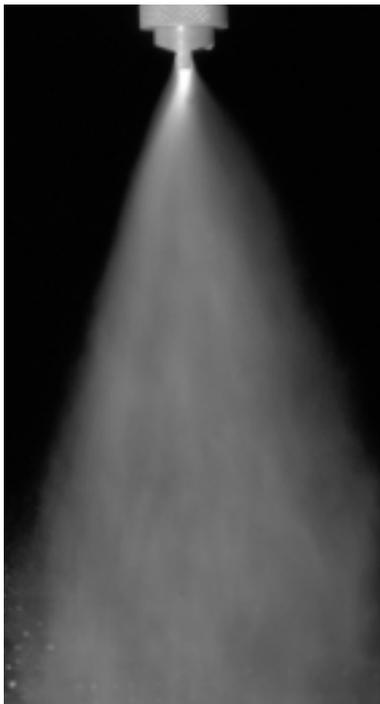


SPRAY CHARACTERISTICS

- The Delavan AL air atomising series spray nozzles offer the user a wide variety of spray patterns, flow rates and atomisation. Unlike hydraulic or pressurised nozzles where the energy from the pressure of the liquid is used to atomise, the AL series of nozzles use the energy of a pressurised gas (typically air) to atomise the liquid. This allows the liquid to be fed under lower pressure and still achieve fine atomisation. This is also advantageous for abrasive or high viscosity liquids.
- The nozzles are so designed that flow rates from almost no flow, as in the siphon-fed, to over four litres per minute can be achieved. (For higher flow rates in an air atomised spray, refer to Delavan's Swirl-Air series.)
- The low flow rates and air atomisation combine to give the AL series extremely fine atomisation. Droplet sizes below 50 microns Sauter Mean Diameter can be expected. In the lower flow rates, droplet sizes below 20 micron SMD are not uncommon.
- The mechanics of the atomisation in the AL series are of two types. The internal mix nozzle design provides for the gas and liquid to mix internally in the nozzle. For a given liquid pressure an increase in gas pressure will result in a decrease in liquid flow and a decrease in droplet size. A decrease in gas pressure will do the reverse to the liquid.
- The external mix nozzle has the gas flow intersect the liquid flow at the face of the nozzle. The liquid flow can remain constant while the atomisation and spray pattern can be modified with adjustments in gas pressure. The liquid supply can be siphoned, gravity or pressure fed.
- The Delavan internal and external air atomising series provide excellent atomisation with a simpler and less expensive nozzle.

CONSTRUCTION AND MATERIALS

- Standard materials of construction are 316 Stainless Steel and ENP Brass.
- The seals between mating surfaces are in PTFE and the O-Ring seals are in Viton although other materials can be supplied on request.
- Standard inlet connections are 1/8" BSPP and 1/4" BSPP with other sizes available to special order.



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