



Foam/Water Deluge Sprinkler System

When the detector (1) is activated by fire, pressure in the release system escapes, allowing the pneumatic actuator (2) to open. This releases pressure from the priming chamber (3) which allows the deluge valve to open. Trim piping, tied into the priming chamber of the Halar-coated concentrate control valve (4), allows that valve to open at approximately the same time, opening the foam concentrate line to the sprinkler system. The outer shell of the bladder tank (5), pressurized by system water, squeezes foam concentrate out to the proportioner (6). As water flows through the venturi area of the proportioner, a metered pressure drop draws foam concentrate into the system water creating a foam solution mixed to the appropriate ratios. This solution then flows through the sprinkler piping and out to the open sprinklers or nozzles (7).