

Fire Suppression Sprinkler and Deflector

Abstract

A fire suppression sprinkler has a deflector with two slots aligned with the deflector support arms. The two slots extend from opposite sides of a periphery of the deflector along a common line which passes through the sprinkler's flow axis. The two slots extend to a point which underlies the sprinkler's nose at the ends of the support arms to which the deflector is attached. Other slots extend from the periphery of the deflector along lines which do not pass through the sprinkler flow axis. The other slots extend to points in spaced relation to the nose. Regions of the deflector periphery surrounding the first and second slots are closer to the flow axis than other regions of the periphery. The area of each of the first and second slots is greater than the area of any other slot in the deflector plate.

Figure 1