

February 28, 2017

NFPA 13, 2016, 23.4.4.8.1 (I) requires that the friction loss across [vane-type water flow switches](#) 2 inches and smaller be included in the fire sprinkler hydraulic calculations. As each community, County, State or local AHJ adopts this standard, Potter can expect to receive telephone calls related to this topic. Potter Flow Switches products are manufactured and tested to [UL Standard 346](#).

[UL Standard 346](#) allows a maximum pressure drop of 3 psig (20.7 kPa) for flowswitches up to and including 4" and 1 psi in flowswitches 5" and larger. Potter's flow switches meet or improve upon that requirement.

The actual friction loss may be substantially less than the UL requirement. Field testing may be used to verify this. However, in the absence of field testing, using the 3 psig (20.7 kPa) figure is a conservative approach.

This response is consistent with the requirements of [NFPA 13](#), 24.4.4.7 "Table 24.4.2.7 shall be used to determine the equivalent length of pipe for fittings and devices unless manufacturer's test data indicate that other factors are appropriate."

This memorandum is not confidential and may be distributed as needed.

Regards,



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