Hydrant Flow Pitot Tube Kit

The hand held Pitot tube is one of the most efficient and accurate methods of measuring water discharge from hose nozzles, hydrants or other type open orifices.

Kit comes complete with Quick Disconnect Pitot tube, One Gauge with Rubber cover for protection in a case. Pitot Tube is machined from a solid Brass Hex stock & is chrome Plated for corrosive resistance. It has a solid grip even with one hand. The gauge is mounted with a quick connect fitting that can be easily connected to the male Pin on the Pitot Tube. It can be easily rotated in any direction for comfortable reading.

The Pressure Gauges are Liquid Filled with stainless steel case +/- 1.6% full scale accuracy in ranges 0-60Psi, 0-100Psi, 0-160Psi, 0-200Psi & 0-300Psi. The Gauges have a rubber boot for protection. Digital Gauges have +/- 1% full scale accuracy. Also available are 4" Dial Dual Read PSI/GPM gauges in 60Psi/1300GPM, 100Psi/1680GPM and 160Psi/2120GPM for measuring pressure as well as gallons per minute in $2\frac{1}{2}$ " Hydrants with 0.9 coefficient

Pitot Blades

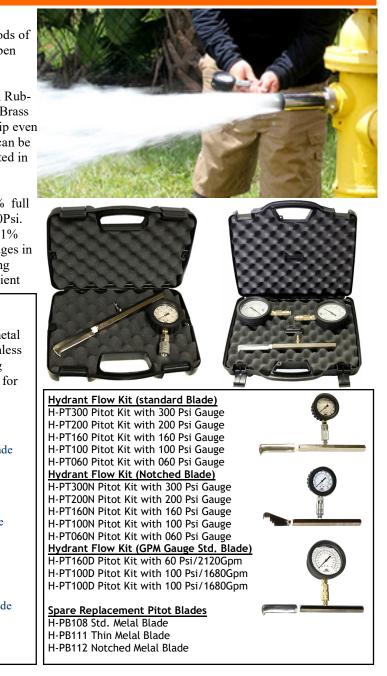
Three styles of Pitot Blades are available. chrome- plated standard metal Blade, thin Metal Blade and a thin Notched Blade all with integral stainless steel tube. Thin Blades have reduced turbulence of water and splashing while testing. The notched metal blade with an integral SS tube allows for easy center placement of the orifice on the hydrant nozzle.



H-PB108 Standard Metal Blade

H-PB111 Thin SS Metal Blade

H-PB108 Notched Metal Blade



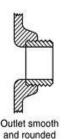
Discharge Flow Rate

The rate of discharge from a flowing hydrant relative to the Pitot pressure reading is dependent on three factors:

- the Pitot pressure reading
- the interior diameter of the hydrant nozzle, and
- the "coefficient" of the hydrant nozzle

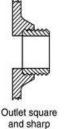
The hydrant nozzle interior diameter should be carefully measured. Most hydrants have a nozzle interior diameter of $2\frac{1}{2}$ ".

The hydrant nozzle coefficient is a factor that allows for the hydraulic entrance losses as the water enters the nozzle from the hydrant barrel. Most new hydrants have a rounded shoulder at the nozzle. Coefficient of this type of nozzle has been determined to be 0.9



UL / FM

(coef. 0.90)



(coef. 0.80)



Source: NFPA 291

