

# 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.

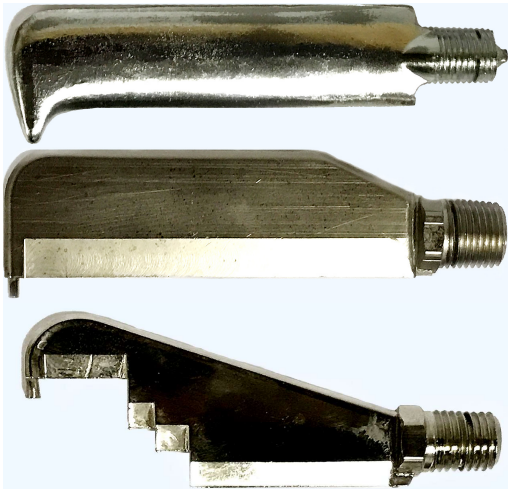
Kit comes complete with Quick Disconnect Pitot tube, One Gauge with Rubber cover for protection in a case. Pitot Tube is machined from a solid Brass Hex stock & is chrome Plated for corrosive resistance. It has a solid grip even with one hand. The gauge is mounted with a quick connect fitting that can 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 2½" 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



### Hydrant Flow Kit (standard Blade)

H-PT300 Pitot Kit with 300 Psi Gauge  
H-PT200 Pitot Kit with 200 Psi Gauge  
H-PT160 Pitot Kit with 160 Psi Gauge  
H-PT100 Pitot Kit with 100 Psi Gauge  
H-PT060 Pitot Kit with 060 Psi Gauge

### Hydrant Flow Kit (Notched Blade)

H-PT300N Pitot Kit with 300 Psi Gauge  
H-PT200N Pitot Kit with 200 Psi Gauge  
H-PT160N Pitot Kit with 160 Psi Gauge  
H-PT100N Pitot Kit with 100 Psi Gauge  
H-PT060N Pitot Kit with 060 Psi Gauge

### Hydrant Flow Kit (GPM Gauge Std. Blade)

H-PT160D Pitot Kit with 60 Psi/2120Gpm  
H-PT100D Pitot Kit with 100 Psi/1680Gpm  
H-PT100D Pitot Kit with 100 Psi/1680Gpm

### Spare Replacement Pitot Blades

H-PB108 Std. Metal Blade  
H-PB111 Thin Metal Blade  
H-PB112 Notched Metal Blade



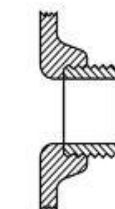
## Discharge Flow Rate

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

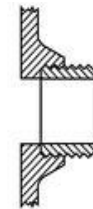
- the Pitot pressure reading
- the interior diameter of the hydrant nozzle, and
- the "coefficient" of the hydrant nozzle

The hydrant nozzle interior diameter should be carefully measured. Most hydrants have a nozzle interior diameter of 2½".

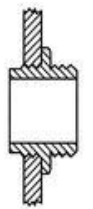
The hydrant nozzle coefficient is a factor that allows for the hydraulic entrance losses as the water enters the nozzle from the hydrant barrel. Most new hydrants have a rounded shoulder at the nozzle. Coefficient of this type of nozzle has been determined to be 0.9



Outlet smooth  
and rounded  
(coef. 0.90)



Outlet square  
and sharp  
(coef. 0.80)



Outlet square and  
projecting into barrel  
(coef. 0.70)

Source: NFPA 291

