



Steamer Nozzle Flow Tester/Diffuser (shown mounted)



Shown with Optional 30° Elbow

Steamer Nozzle Flow Tester/Diffusers

- Designed for 4 1/2" NST hydrant nozzles
- Measure flow rates up to 2800 gpm with consistent accuracy
- Screened diffuser protects adjacent property from water and stone damage

This easy-to-use flow tester/diffuser provides consistent accuracy for large water flows. Each flow tester features a lightweight barrel with NST swivel fitting and diffuser. Barrels include a gauge and a replaceable pitot tube that is correctly positioned in the stream of water. Reading flow rate in gpm is as simple as reading gauge pressure and selecting the corresponding flow rate from the tables provided.

The stream from a large 4 1/2" hydrant outlet contains voids; meaning that the entire stream of water is not solid. For this reason, standard circular orifice flow formulas alone will not provide accurate results with 4 1/2" hydrant barrels. The table provided with each flow tester/diffuser shows flow calculations and factory-recommended correction factors for hydrants with industry standard 0.90 nozzle coefficients.

Nozzle coefficients are defined on page 555. If you have hydrants with nozzle coefficients other than 0.90, we can provide custom tables at no charge. Contact USABlueBook for more information.

Kits Include:

- Hard-coated aluminum barrel with 4 1/2" NST swivel fitting and diffuser
- Replaceable pitot tube
- 4" 160 psi liquid-filled gauge with quick-disconnect connection (±1% accuracy)
- Heavy mesh diffuser screen
- Hard carrying case

DESCRIPTION	STOCK #	EACH
Flow Tester/Diffuser, 4 1/2" NST	40054	\$

Replacement Items & Accessories

DESCRIPTION	STOCK #	EACH
Replacement 4 1/2" Pitot Tube Assembly	12093	\$
Replacement QC(M) with Bleed Valve	12082	

If you flush out the hydrant prior to installing the flow tester/diffuser, you can avoid damage to the pitot tube caused by small stones.

operator notes

2 1/2" Nozzle Flow Tester/Diffusers

- Mounted pitot tube eliminates the problems of hand-held pitot tubes
- Designed for 2 1/2" NST nozzles

This accurate, portable hydrant flow tester/diffuser is a terrific value for hydrant flow testing. The aluminum barrel sets the pitot tube in the correct position and standardizes the nozzle flow coefficient for all hydrants. Pitot tube is easily replaceable if damaged.

Gauge mounts via combination bleeder valve/quick disconnect fitting, which lets you rotate the gauge to any position for easy reading, or remove the gauge for transport. Unit includes flow charts for easy conversion of gauge psi readings to gpm. Flow tube range is 500 to 1860 gpm (10 to 140 psi)*.

Diffuser screen screws on to either the elbow or straight tube assembly. It enhances water diffusion and prevents rocks from being discharged with the water stream, while creating no noticeable back pressure. The optional 30° elbow features a swivel connection that lets you direct flow while keeping your gauge in an easy-reading position.

Kits Include:

- 2 1/2" heavy-duty coated aluminum barrel with mounted pitot tube and 2 1/2" NST swivel fitting
- 4" 160 psi liquid-filled gauge with quick-disconnect connection (±1% accuracy)
- Heavy mesh diffuser screen
- Hard carrying case



DESCRIPTION	GAUGE INCREMENTS	STOCK #	EACH
Flow Tester/Diffuser, 2 1/2" NST	2 psi	40053	\$

Replacement Items & Accessories

DESCRIPTION	STOCK #	EACH
30° Elbow with Swivel Connection	40055	\$
Optional 160 1860 Gauge	12081	
Replacement Pitot Tube Assembly	12085	
Replacement QC(M) with Bleed Valve	12082	

*1860 gpm is equivalent to a 140 psi pitot reading which is the maximum flow tube capacity.