Saratoga Safeguard Solutions, LLC

2-1/2" Flow Testing Diffusers

Our hand held ***Made in USA*** diffuser line is an excellent choice for economical flushing and flow testing. The main diffuser and 2-1/2" NH female swivel are made from light weight aluminum verses steel. For convenience we offer a heavy duty plastic case (optional) with strong metal latches verses plastic.

2-1/2" light weight aluminum fire hydrant flow testing diffuser, choice of dual read gauge with quick disconnects.

PART #	DESCRIPTION
HFD25US100	Diffuser 100PSI/1680GPM Gauge
HFD25US160	Diffuser 160PSI/2120GPM Gauge

2-1/2" light weight aluminum fire hydrant flow testing diffuser, choice of dual read gauge with quick disconnects and heavy duty case.

PART #	DESCRIPTION
HFD25US100-KIT	Diffuser 100PSI/1680GPM Gauge
HFD25US160-KIT	Diffuser 160PSI/2120GPM Gauge

2-1/2" heavy duty carrying case with metal latches. This case is designed with a spare gauge recess, case can also accommodate rocker or pin lug connections.

PART #	DESCRIPTION
HDPC25-CASE	Heavy Duty Carrying Case

1/4" 3-Way Valve, Snubber & 3/8" Male NPT x 1/4" Female NPT Pitot Tube.

PART #	DESCRIPTION
PTA-25	Complete Pitot Assembly
PT25	Pitot Tube

Dual read gauges for PSI & GPM.

PART #	DESCRIPTION
GFGDR100	Dual Read Gauge, 100 PSI / 1680 GPM
GFGDR160	Dual Read Gauge, 160 PSI / 2120 GPM

CAUTION: Always wear proper PPE when conducting flow testing or flushing. Make sure all connections are tight and no pedestrian or vehicular traffic is in the path of the waters flow.

Saratoga Safeguard Solutions

Home of the HYDRO-HITCH

Personal Protective Equipment

- We recommend wearing at least the basic PPE when conducting flow testing and flushing.
- Safety Glasses, Goggles or Face Shield




Instructions & Care:

Before Flow Testing:

- **Inspect the fire hydrant & discharge area**
  - Are nozzle caps in place, threads clean and not damaged, operating nut functional?
  - Survey the safest direction and angle to flow water.
  - Consider installing a slow closing gate valve to reduce water hammer (Optional).

1) Carefully inspect your diffuser, is the 2-1/2" NH female swivel moving freely and threads not damaged?
2) Make sure the glycerin filled dual read gauge needle is resting on the pin to the left at 0 psi. If needle is not resting on the pin replace with new undamaged gauge before proceeding.
3) If the dual read gauge isn't inserted into the diffuser do this now.
4) Slowly remove 2-1/2" fire hydrant cap and make sure the hydrant nozzle is not under pressure. If the cap is safe to remove install the gate valve (Optional) followed by the flow testing diffuser now.
5) Before tightening the 2-1/2" diffuser carefully aim and position the baffle downward towards the road away from any pedestrian or vehicular traffic. In some cases the flow may be more desirable releasing upward into a vacant lot, wooded area, etc. **ALWAYS** be aware of **safety hazards** when choosing this option i.e. (electrical, property, etc.).
6) Slowly open the fire hydrant and check the water discharge for safe flow until fully opened (If a safety concern arises shut down hydrant right away and reposition the baffle/discharge pattern).
7) If 1/4" pitot assembly valve is open and air has been purged slowly close valve 180 degrees and read the gauge after a few minutes for PSI and GPM (Sometimes an average needs to be taken as water pressure may rise and fall 5 –10 psi depending on main location of pumps, tanks, etc.).
8) Once complete slowly shut the fire hydrant off until water stops, remove diffuser and install nozzle cap (With a dry barrel hydrant make sure fire hydrant barrel is draining before installing nozzle cap).
9) After any testing is complete for the day make sure water has drained from the pitot assembly and remove gauge quick disconnect and shake until water stops dripping from gauge connection.

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