



1" PITOTLESS NOZZLE™

PN1GRV FLOW CHART

Little Hose Monster™			Open Atmosphere			Little Hose Monster™			Open Atmosphere		
PSI	GPM	GPM		PSI	GPM	GPM		PSI	GPM	GPM	
3	47	48		42	176	180					
4	54	55		43	178	182					
5	61	62		44	180	184					
6	67	68		45	182	186					
7	72	73		46	184	188					
8	77	78		47	186	190					
9	82	83		48	188	192					
10	86	88		49	190	194					
11	90	92		50	192	196					
12	94	96		51	194	198					
13	98	100		52	196	200					
14	102	104		53	198	202					
15	105	107		54	200	204					
16	109	111		55	202	205					
17	112	114		56	204	207					
18	115	118		57	205	209					
19	119	121		58	207	211					
20	122	124		59	209	213					
21	125	127		60	211	215					
22	128	130		61	212	216					
23	130	133		62	214	218					
24	133	136		63	216	220					
25	136	139		64	218	222					
26	139	141		65	219	223					
27	141	144		66	221	225					
28	144	147		67	223	227					
29	146	149		68	224	228					
30	149	152		69	226	230					
31	151	154		70	228	232					
32	154	157		71	229	233					
33	156	159		72	231	235					
34	159	162		73	232	237					
35	161	164		74	234	238					
36	163	166		75	236	240					
37	165	168		76	237	241					
38	168	171		77	239	243					
39	170	173		78	240	245					
40	172	175		79	242	246					
41	174	177		80	243	248					

This device is FM approved

The pressure vs. flow rate data developed within this flow chart is based on the average K-factor measured during laboratory testing. This data has been determined to be within the acceptable limitations for accuracy.

It is the user's responsibility to verify that the correct chart and column is being used.

- **Little Hose Monster™ (HML).** Use this column when the Pitotless Nozzle is connected to a Little Hose Monster.

- **Open Atmosphere.** Use this column when the Pitotless Nozzle is connected directly to a test header or hydrant flowing openly to atmosphere.

Additional copies of flow charts are available at:
www.hosemonster.com





Pitotless Nozzle™ Grooved

INSTRUCTIONS

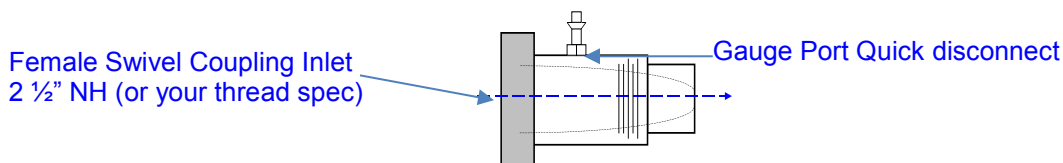
US Patent 6,874,375

The Pitotless Nozzle Grooved (PN#GRV) must be used with the Little Hose Monster (HML) or attached directly to a hydrant or test header valve discharging into open atmosphere. The flow chart has columns entitled Little Hose Monster™ and Open Atmosphere. Be sure to use the appropriate column to determine flow rates. *Call us if you are considering a configuration not listed here.*

SETUP

The gauge connection on the Pitotless Nozzle is a factory-installed male end of a quick disconnect coupling. One female counterpart is included and additional ones can be purchased separately. Attach the female end of the quick disconnect coupling directly to the gauge or remote reader adapter and use the quick disconnect feature to attach and remove. Do not remove the male quick disconnect from the Pitotless Nozzle as it will damage the threads on the Pitotless Nozzle.

We recommend a gauge with an accuracy rating of ½% or better and of a suitable range.



Using the Pitotless Nozzle with the Little Hose Monster™

Line up the Pitotless Nozzle outlet at the inlet of the Little Hose Monster with the gauge port rotated to 45° off either side of vertical. Push the Nozzle all the way in until the latch lever arms hook into the groove. Rotate the Nozzle right or left until the latch levers snap parallel to the body and the gauge port is in the desired position. The gauge port can be positioned so that a gauge can be viewed in a vertical position, or horizontal to the left or right side of the Little Hose Monster. Insert the locking pins all the way through the pinhole and latch-lever arm. When the Pitotless Nozzle is installed, securely attach a hose using a spanner wrench. Make sure the hose lays flat and is not twisted.

If using the Pitotless Nozzle on a Hydrant or Test Header Valve

The Pitotless Nozzle must be attached securely to a pump test header valve or hydrant. Secure the female swivel coupling of the Pitotless Nozzle directly to a hydrant nozzle or test header valve. The Pitotless Nozzle points in the direction the water will flow. Clear water discharge path.

Flow Charts

Pitotless Nozzle flow charts must be used to determine discharge flow rate. The use of flow charts of a different device or size will result in incorrect readings. Within the flow chart is a column for "Little Hose Monster" and for "Open Atmosphere". Use the "Little Hose Monster" flows if the Pitotless Nozzle is attached to a Little Hose Monster. Use the "Open Atmosphere" flows if the Pitotless Nozzle is attached directly on a hydrant or test header valve discharging out into the open. Flow charts are provided with the Pitotless Nozzle and additional copies are available on our website at www.HoseMonster.com

WARNING:

- **Do not** attach the Pitotless Nozzle to the end of a hose unless the Hose Monster is attached to it or unless it is permanently secured.
- **Do not** attach a hose to the male outlet end of the Pitotless Nozzle under any circumstance. The resulting backpressure will distort flow rate measurement.
- **Do not** remove the quick disconnect gauge port fitting. The aluminum threads will be damaged. Contact The Hose Monster Company directly for any repairs.



MANUFACTURED BY:
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