

# 1 ¾" PITOTLESS NOZZLE™

# **PN1.75THD - LPM FLOW CHART**

## 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.

## HM2H | 2 1/2" Hose Monster Model II or Flusher with flow splitter (HM2H, HM2HF)

Use this column if the Pitotless Nozzle is connected to the 2 1/2" Hose Monster or Flusher. The built-in pitot or flow splitter must be installed for accuracy.

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

Find this flow chart and other resources at:

hosemonster.com/resources

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	HM2H	OA
PSI	LPM	LPM
5.2*		947
5.5*	947	
10	1276	1313
11	1338	1377
12	1398	1438
13	1455	1497
14	1510	1554
15	1563	1608
16	1614	1661
17	1664	1712
18	1712	1762
19	1759	1810
20	1804	1857
21	1849	1903
22	1892	1948
23	1935	1991
24	1977	2034
25	2017	2076
26	2057	2117
27	2097	2158
28	2135	2197
29	2173	2236
30	2210	2274
31	2246	2312
32	2282	2349
33	2318	2385
34	2353	2421
35	2387	2456

	HM2H	OA		HM2H	OA
SI	LPM	LPM	PSI	LPM	LPM
2*		947	36	2421	2491
.5*	947		37	2454	2526
.0	1276	1313	38	2487	2560
1	1338	1377	39	2520	2593
2	1398	1438	40	2552	2626
.3	1455	1497	41	2584	2659
.4	1510	1554	42	2615	2691
.5	1563	1608	43	2646	2723
.6	1614	1661	44	2676	2754
.7	1664	1712	45	2707	2785
.8	1712	1762	46	2737	2816
9	1759	1810	47	2766	2847
20	1804	1857	48	2795	2877
21	1849	1903	49	2824	2907
22	1892	1948	50	2853	2936
23	1935	1991	51	2881	2965
24	1977	2034	52	2910	2994
25	2017	2076	53	2937	3023
26	2057	2117	54	2965	3051
27	2097	2158	55	2992	3079
28	2135	2197	56	3019	3107
29	2173	2236	57	3046	3135
30	2210	2274	58	3073	3162
81	2246	2312	59	3099	3189
32	2282	2349	60	3125	3216
33	2318	2385	61	3151	3243
34	2353	2421	62	3177	3269
35	2387	2456	63	3203	3296

	HM2H	OA	
PSI	LPM	LPM	
64	3228	3322	
65	3253	3348	
66	3278	3373	
67	3303	3399	
68	3327	3424	
69	3352	3449	
70	3376	3474	
71	3400	3499	
72	3424	3523	
73	3447	3548	
74	3471	3572	
75	3494	3596	
76	3517	3620	
77	3541	3643	
78	3563	3667	
79	3586	3691	
80	3609	3714	

<sup>\*</sup> Special flow rate point determined to be within the acceptable limitations of accuracy.



# PITOTLESS NOZZLE™

# THREADED INSTRUCTIONS

The Pitotless Nozzle™ Threaded (PN#THD) must be used in conjunction with the 2 ½" Hose Monster Model II (HM2H, HM2HF) or attached directly to a hydrant or test header valve discharging into open atmosphere.

Note: If you intend to use the Pitotless Nozzle with the Little Hose Monster (HML), then a Pitotless Nozzle Grooved (PN#GRV) is required. Do not use the Pitotless Nozzle Threaded (PN#THD) with the Little Hose Monster. Call us if you are considering a configuration not listed here.

# PITOTLESS NOZZLE™ SETUP

The gauge connection on the Pitotless Nozzle<sup>™</sup> 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.

# Gauge Port Quick Disconnect 2 ½" NH male thread for connection to The Hose Monster

Female Swivel Coupling Inlet 2½" NH (or your thread spec)

# PITOTLESS NOZZLE™ USE

#### WITH 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.

#### 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.

## WARNING

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

	LHM	OA		LHM	OA
	GРM	GPM		GPM	GPM
10	533	282	41	1080	570
11	559	295	42	1093	577
12	584	308	43	1106	584
13	608	321	44	1119	591
14	631	333	45	1131	597
15	653	345	46	1144	604
16	675	356	47	1156	610
17	695	367	48	1169	617
18	716	378	49	1181	623
19	735	388	50	1193	630
20	754	398	51	1205	636
21	773	408	52	1216	642
22	791	418	53	1228	648
23	809	427	54	1239	654
24	000	400		1051	000

## **FLOW CHARTS**

Pitotless Nozzle<sup>™</sup> 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<sup>™</sup> is attached to a Little Hose Monster. Use the "Open Atmosphere" flows if the Pitotless Nozzle<sup>™</sup> 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 <a href="https://www.hosemonster.com">www.hosemonster.com</a>

