

# 2" PITOTLESS NOZZLE™

**PN2THD - 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
10	1973	2001
11	2069	2099
12	2161	2192
13	2249	2282
14	2334	2368
15	2416	2451
16	2495	2531
17	2572	2609
18	2646	2685
19	2719	2759
20	2790	2830
21	2858	2900
22	2926	2968
23	2991	3035
24	3056	3100
25	3119	3164
26	3181	3227
27	3241	3288
28	3301	3349
29	3359	3408
30	3417	3466

	HM2H OA	
PSI	LPM	LPM
31	3473	3524
32	3529	3580
33	3583	3635
34	3637	3690
35	3690	3744
36	3743	3797
37	3794	3849
38	3845	3901
39	3895	3952
40	3945	4003
41	3994	4052
42	4042	4101
43	4090	4150
44	4138	4198
45	4184	4245
46	4231	4292
47	4276	4339
48	4322	4385
49	4366	4430
50	4411	4475
51	4455	4519

	HM2H	OA
PSI	LPM	LPM
52	4498	4564
53	4541	4607
54	4584	4650
55	4626	4693
56	4668	4736
57	4709	4778
58	4750	4820
59	4791	4861
60	4832	4902
61	4872	4943
62	4912	4983
63	4951	5023
64	4990	5063
65	5029	5102
66	5068	5141
67	5106	5180
68	5144	5219
69	5181	5257
70	5219	5295





# 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 1/2" NH male thread for connection to The Hose Monster

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

### PITOTLESS NOZZLE™ USE

#### WITH THE MODEL II, 2 ½ HOSE MONSTER™ OR FLUSHER

Insert the male outlet of the Pitotless Nozzle into the swivel coupling of the Hose Monster. Hand-tighten plus about a quarter -turn using a rocker lug spanner wrench on the swivel coupling and a pin lug spanner wrench (WSPA104) for a holdback on the Pitotless Nozzle. Attach the male end of a hose into the swivel coupling on the Pitotless Nozzle, hand-tighten plus about a quarter turn using spanner wrenches. The pitot / flow splitter must remain on either unit in order to collect accurate flow rates. 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<sup>™</sup> for any repairs.

	LHM	OA		LHM	OA
	GPM	GPM	PSI	GРM	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	42.0		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>