



STATIC HEAD PRESSURE DOSING FOR SEPTIC FIELDS (SHORT FORM WORKSHEET)

NET STATIC HEAD REQUIRED FOR SELECTED SQUIRT HEIGHTS - WORKED EXAMPLE

Project Name, Date _____

No. of 3/16" Orifices	20	30	40	50	60	70	80	90	100	110	120
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2 FT. MIN. SQUIRT HEIGHT

Net Static Head - ft.	3.6	3.9	4.1	4.7	5.3	6.4	7.4	9.0	10.7	12.7	14.7
Flow Rate US Gals./min.	12.6	18.9	25.2	31.5	37.8	44.1	50.4	56.7	63.0	69.3	75.6

3 FT. MIN. SQUIRT HEIGHT

Net Static Head - ft.	5.2	5.6	6.2	6.9	7.9	9.2	11.0	13.3	16.0	19.0	22.0
Flow Rate US Gals./min.	15.6	23.4	31.2	39.0	46.8	54.6	62.4	70.2	78.0	85.8	93.6

5 FT. MIN. SQUIRT HEIGHT

Net Static Head - ft.	8.7	9.4	10.3	11.5	13.2	15.4	18.4	22.1	26.6	31.5	36.7
Flow Rate US Gals./min.	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0	110.0	120.0

(Figures derived from experimental data)

SPECIFICATIONS:

Net Static Head includes friction loss through 30' of 2" transport pipe, manifold, laterals and orifices.

See Additional Friction Head Loss for longer transport pipes.

3" 'Flout' Dosing Unit.

Nominal Accuracy ± 15%

- (a) Net Static Head available (Dosing tank to field)
- (b) Orifice diameter (inches)
- (c) Number of orifices
- (d) Equiv. no. of 3/16" orifices: (c) X =
- (e) Min. Squirt Height (ft.) (see above selection)
- (f) Min. Net Static Head required (from above table)
- (g) Flow rate US Gals./min. (from above table)

ADDITIONAL FRICTION HEAD LOSS IN TRANSPORT PIPE LENGTH IN EXCESS OF 30 FT.

Note: If friction loss is too great use vented 3" pipe in upper section of transport pipe. (see hook-up diagram)
For complete data see www.premierplastics.com

- (h) Length of transport pipe over 30 ft.
- (i) Flow rate US Gals./min. from (g)
- (j) Friction loss per 100ft. 2" pipe (from table)
- (k) Additional Friction Loss (h)/100 x (j) ft.
- (l) Total Static Head required (f) + (k)

ADDITIONAL TRANSPORT PIPE FRICTION HEAD LOSS TABLE

Feet of Water per 100ft. of Pipe

US Gals./min	2" Pipe	3" Pipe
10	0.25	-
15	0.52	-
20	0.86	0.13
25	1.29	0.19
30	1.81	0.26
35	2.42	0.35
40	3.11	0.44
45	3.84	0.55
50	4.67	0.66
55	5.64	0.80
60	6.60	0.93
65	7.72	1.09
70	8.83	1.24
75	10.13	1.41
80	11.43	1.58
85	12.84	1.76
90	14.26	1.98
95	15.86	2.20
100	17.46	2.42
110	21.30	2.96
120	25.13	3.51

Pipe equiv. 90° elbow - 20' 45° elbow - 12'

MULTIPLIER TO CONVERT NO. OF ORIFICES TO EQUIV. NO. OF 3/16" ORIFICES

1/8"	5/32"	7/32"
0.44	0.69	1.36

see line (d)