

Reference	Nozzle Type & Location	Flow in gpm	Pipe Fittings Size & Devices	Pipe Eqiv. Length	Friction Loss psi/ft	Req. psi	Notes
701 to L71	5.60 q Q	19.50 19.50	1.049 120 E T	lgth ftg tot	4.333 7.000 11.330	Pt Pf Pe	12.13 1.41 -1.59
702 to L72	5.60 q Q	19.75 19.75	1.049 120 E T	lgth ftg tot	5.000 7.000 12.000	Pt Pf Pe	12.44 1.53 -1.59
703 to L73	5.60 q Q	20.31 20.31	1.049 120 3E	lgth ftg tot	2.000 6.000 8.000	Pt Pf Pe	13.15 1.07 -0.43
704 to L74	5.60 q Q	20.58 20.58	1.049 120 3E	lgth ftg tot	2.000 6.000 8.000	Pt Pf Pe	13.51 1.10 -0.43
705 to L75	5.60 q Q	23.60 23.60	1.049 120 3E	lgth ftg tot	2.000 6.000 8.000	Pt Pf Pe	17.76 1.41 -0.43
706 to L76	5.60 q Q	23.60 23.60	1.049 120 2E T	lgth ftg tot	2.000 9.000 11.000	Pt Pf Pe	17.76 1.94 -0.43
707 to L77	5.60 q Q	24.76 24.76	1.049 120 3E	lgth ftg tot	2.000 6.000 8.000	Pt Pf Pe	19.55 1.55 -0.43
708 to L78	5.60 q Q	25.53 25.53	1.049 120 2E T	lgth ftg tot	2.000 9.000 11.000	Pt Pf Pe	20.78 2.25 -0.43
709 to L79	5.60 q Q	29.33 29.33	1.049 120 3E	lgth ftg tot	2.000 6.000 8.000	Pt Pf Pe	27.44 2.11 -0.43
710 to L80	5.60 q Q	31.96 31.96	1.049 120 2E T	lgth ftg tot	5.000 9.000 14.000	Pt Pf Pe	32.58 4.34 -0.43
711 to L81	5.60 q Q	32.65 32.65	1.049 120 E T	lgth ftg tot	2.500 7.000 9.500	Pt Pf Pe	34.00 3.06 -0.43
712 to 713	5.60 q Q	27.69 27.69	1.049 120 E	lgth ftg tot	8.000 2.000 10.000	Pt Pf Pe	24.44 2.38 0.00

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713 to L83	5.60 q Q	29.00 56.69	1.049 120 E T	lgth ftg tot	4.000 7.000 11.000	0.894	Pt Pf Pe 26.82 9.84 0.43
714 to L84	5.60 q Q	32.40 32.40	1.049 120 E T	lgth ftg tot	3.000 7.000 10.000	0.318	Pt Pf Pe 33.48 3.18 0.43
715 to L85	5.60 q Q	32.46 32.46	1.049 120 2E T	lgth ftg tot	5.000 9.000 14.000	0.319	Pt Pf Pe 33.61 4.46 -0.43
716 to L86	5.60 q Q	31.81 31.81	1.049 120 E 2T	lgth ftg tot	7.500 12.000 19.500	0.307	Pt Pf Pe 32.27 5.99 -0.43
717 to L87	5.60 q Q	33.03 33.03	1.049 120 E T	lgth ftg tot	4.500 7.000 11.500	0.329	Pt Pf Pe 34.80 3.79 -0.43
L71 to L72	q Q	0.00 19.50	1.380 120 E	lgth ftg tot	10.250 3.000 13.250	0.033	Pt Pf Pe 11.95 0.43 0.00
L72 to T71	q Q	0.00 39.26	1.380 120 2E	lgth ftg tot	16.500 6.000 22.500	0.119	Pt Pf Pe 12.38 2.68 0.00
L73 to T71	q Q	0.00 20.31	1.049 120 T	lgth ftg tot	4.500 5.000 9.500	0.134	Pt Pf Pe 13.79 1.27 0.00
L74 to T71	q Q	0.00 20.58	1.049 120 T	lgth ftg tot	1.500 5.000 6.500	0.137	Pt Pf Pe 14.17 0.89 0.00
L75 to T72	q Q	0.00 23.60	1.049 120 T	lgth ftg tot	4.500 5.000 9.500	0.177	Pt Pf Pe 18.74 1.68 0.00
L76 to T72	q Q	0.00 23.60	1.049 120 T	lgth ftg tot	1.500 5.000 6.500	0.177	Pt Pf Pe 19.27 1.15 0.00
L77 to L78	q Q	0.00 24.76	1.049 120	lgth ftg tot	10.000 0.000 10.000	0.193	Pt Pf Pe 20.66 1.93 0.00

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L78 to T73	q Q	0.00 50.29	1.049 120 T	lgth ftg tot	6.500 5.000 11.500	Pt Pf Pe	22.59 8.24 0.00
L79 to T73	q Q	0.00 29.33	1.049 120 T	lgth ftg tot	1.500 5.000 6.500	Pt Pf Pe	29.12 1.72 0.00
L80 to L81	q Q	0.00 238.92	4.260 120	lgth ftg tot	10.000 0.000 10.000	Pt Pf Pe	36.49 0.14 0.00
L81 to M72	q Q	0.00 271.57	4.260 120 T	lgth ftg tot	3.750 26.334 30.080	Pt Pf Pe	36.63 0.53 0.00
L83 to L84	q Q	0.00 56.69	4.260 120	lgth ftg tot	2.000 0.000 2.000	Pt Pf Pe	37.09 0.00 0.00
L84 to M72	q Q	0.00 89.09	4.260 120 T	lgth ftg tot	3.000 26.334 29.330	Pt Pf Pe	37.09 0.07 0.00
L85 to L86	q Q	0.00 393.12	4.260 120	lgth ftg tot	5.250 0.000 5.250	Pt Pf Pe	37.64 0.18 0.00
L86 to L87	q Q	0.00 424.92	4.260 120	lgth ftg tot	8.250 0.000 8.250	Pt Pf Pe	37.82 0.33 0.00
L87 to M73	q Q	0.00 457.95	4.260 120 E T BV	lgth ftg tot	4.000 55.302 59.300	Pt Pf Pe	38.15 2.75 0.00
T71 to T72	q Q	0.00 80.15	1.380 120	lgth ftg tot	12.000 0.000 12.000	Pt Pf Pe	15.06 5.36 0.00
T72 to M71	q Q	0.00 127.34	1.380 120 T	lgth ftg tot	8.000 6.000 14.000	Pt Pf Pe	20.42 14.71 0.00
T73 to M71	q Q	0.00 79.62	1.380 120 T	lgth ftg tot	3.750 6.000 9.750	Pt Pf Pe	30.83 4.30 0.00

Reference	Nozzle Type & Location	Flow in gpm	Pipe Fittings Size & inches Devices	Pipe Eqiv. Length	Friction Loss psi/ft	Req. psi	Notes
M71 to L80	q Q	0.00 206.96	2.635 120	lgth ftg tot	12.250 0.000 12.250	Pt Pf Pe	35.13 1.36 0.00
M72 to L85	q Q	0.00 360.66	4.260 120	lgth ftg tot	16.083 0.000 16.080	Pt Pf Pe	37.16 0.48 0.00
M73 to TOR	q Q	0.00 457.95	6.357 120 6E T GV	lgth ftg tot	135.000 147.109 282.110	Pt Pf Pe	40.90 1.86 26.00
TOR to BF2	q Q	0.00 457.95	6.357 120 23 T	lgth ftg tot	9.000 60.720 69.720	Pt Pf Pe	68.76 0.46 3.90
BF2 to BF1	q Q	0.00 457.95	6.065 120 FDPLD	lgth ftg tot	4.000 0.000 4.000	Pt Pf Pe	73.12 FDPLD = 2.20 2.17 0.00
BF1 to DI	q Q	0.00 457.95	6.065 120 E	lgth ftg tot	2.000 14.000 16.000	Pt Pf Pe	75.32 0.13 0.43
DI to HD2	q Q	0.00 457.95	8.510 140 5E T GV	lgth ftg tot	85.000 234.520 319.520	Pt Pf Pe	75.89 0.38 2.60
HD2 to BF4	Hose q Q	720.00 1,177.95	10.520 140 2E	lgth ftg tot	20.000 74.181 94.180	Pt Pf Pe	78.87 0.23 -3.03
BF4 to BF3	q Q	0.00 1,177.95	10.020 140 FDPLD	lgth ftg tot	5.000 0.000 5.000	Pt Pf Pe	76.07 FDPLD = 2.37 2.36 0.00
BF3 to POC	q Q	0.00 1,177.95	10.520 140 3E 2GV T	lgth ftg tot	165.000 212.429 377.430	Pt Pf Pe	78.44 0.92 3.03
	Source Qt	1,427.95				Pt	82.40