

LANCASTER FIRE DEPT.

Pump Discharge Pressure Chart

FOG NOZZLE HANDLINE DISCHARGE PRESSURES						
		DISCHARGE PRESSURE				
Hose Diameter	GPM	100'	150'	200'	250'	300'
1 "	10	---		130		
1 "	40			200		
1 3/4 "	95	115	120	130	135	145
1 3/4 " FOAM	95	185	195	200	210	215
1 3/4 "	125	125	135	150	160	175
1 3/4 "	150	135	150	170	190	205
1 3/4 "	175	150	170	195	220	260
1 3/4 "	200	160	190	220	255	280
2 1/2 "	125	105	105	105	110	110
2 1/2 "	150	105	110	110	115	115
2 1/2 "	200	110	115	115	120	125
2 1/2 "	250	115	120	125	130	140
3 "	125	105	105	105	105	105
3 "	150	105	105	105	105	105
3 "	200	105	105	105	110	110
3 "	250	105	105	110	110	115

* Fog Nozzle discharge pressures are designed to deliver 100 psi at the nozzle

SMOOTH BORE HANDLINE DISCHARGE PRESSURES						
2 1/2" Hose Diameter		DISCHARGE PRESSURE				
Tip Size	GPM	100'	150'	200'	250'	300'
1 "	210	60	60	70	70	75
1 1/8 "	266	65	70	80	85	95
1 1/4 "	328	70	80	90	100	110
3" Hose Diameter		DISCHARGE PRESSURE				
Tip Size	GPM	100'	150'	200'	250'	300'
1 "	210	55	55	60	60	60
1 1/8 "	266	55	55	60	60	65
1 1/4 "	328	60	65	70	70	75

* Smooth Bore Nozzle "Hand Line" discharge pressures are designed to deliver 50 psi at the nozzle

Automatic Sprinkler Connections - 150 PSI (use standpipe table if applicable)
Relay Pumping - 100 PSI (may be increased as directed by receiving apparatus)
Ladder Pipe with Fog Nozzle - 220 PSI for 1000 GPM (elevation of 75')
Ladder Pipe with 2" Smoothbore Tip - 200 PSI for 1000 GPM (elevation of 75')
Deck Gun with Fog Nozzle - 110 PSI (all GPM settings)

Deck Gun - 90 PSI (all tips)	
Tip Size	GPM
1 3/8 "	500
1 1/2 "	600
1 3/4 "	800
2 "	1050

Ground Monitor - (with 100' Dual 3" Lines)			
Tip Size	GPM	Discharge PSI	200' of 3"
1 3/8 "	500	110	add 5 psi
1 1/2 "	600	115	add 10 psi
1 3/4 "	800	120	add 15 psi
2 "	1050	125	add 20 psi

* Smooth Bore Nozzle "Master Stream" discharge pressures are designed to deliver 80 psi at the nozzle