

Fort Walton Beach Fire Department - Form SOG FT1002T

Truck 6 Friction Loss Chart

Chief Nozzle, 50/150-1-3/4" Hose							1 1/4" Smooth Bore, 2-1/2" Hose						
	Hose Length						325 GPM	Hose Length					
	150	200	250	300	350	400		100	150	200	250	300	350
165 GPM	80	95	110	125	140	155		66	74	82	90	98	106
200 GPM	85	100	115	130	145	160							

Fill in with 3" @ 4psi per 100'

Fill in with 3" @ 5 psi per 100'

FRICTION LOSS CHART (Per 100' of Pump Connected Hose)				
GPM	1 1/4"	2 1/2"	3"	5"
	100	6	2	1
125	10	3	2	
150	13	4	3	
175	15	6	3	
180	20	**	**	
200	24	8	4	
300		16	10	
400		25	12	1
500		30	22	2
600		50	25	3
700			32	4
800			45	5
1000				6
1200				9
1500				14
2000				26

STARTING ENGINE PRESSURES	
	psi
Elkhart RAM Monitor	100
Deck Gun/ FOG	100
Foam Eductor	200
Relay or Supply, 5" Hose	20+FL
Standpipe/Sprinkler	150
High Rise Pack	75

STANDARD NOZZLE PRESSURE	
	psi
Elkhart Chief Nozzles	50
Sprinkler Head	30
Solid Tip, Handline	50
Solid Tip Master Stream	80
High Rise Nozzle	50
Elkhart Low Pressure Automatic	75
Master Fog Nozzles (SM1250)	75

FRICTION LOSS FACTORS

	psi	Standard Pump Pressures for T-6				
		Line	Type	Nozzle	EP	GPM
STANDPIPE	25					
SPRINKLER	25	1 3/4	SB	15/16"	100	200
PORTABLE FOAM EDUCTOR	65	1 3/4	FOG	50/150	100	200
Friction Loss per floor	5	2 1/2	SB	1 1/4"	80	325
WYE/REDUCER	5	All pre-connects figured at 200' lengths				
DECK GUN BASE	15					
CRITICAL VELOCITY-POSS	GPM					
1 3/4	275					
2 1/2	600					
3	900					

SOLID TIP GPM/SNP CHART			
HANDLINES(NP=50)		MASTER STM(NP=80)	
TIP	GPM	TIP	GPM
7/8"	160	1 1/4"	400
15/16"	185		
1"	210	1 1/2"	600
1 1/8"	265	1 3/4"	800
1 1/4"	325	2"	1000

