

Fort Walton Beach Fire Department - Form SOG FT1002E

E-7/ E-6 Friction Loss Chart

Chief Nozzle, 50/150-1-3/4" Hose							1 1/4" Smooth Bore, 2-1/2" Hose						
Hose Length							Hose Length						
	150	200	250	300	350	400	325 GPM	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'

FRICITION LOSS CHART (Per 100' of Ponn Conquest Hose)							STARTING ENGINE PRESSURES	
GPM	1 1/4"	2 1/2"	3"	5"	Siamese			psi
					2 - 3"		Elkhart RAM Monitor	100
100	6	2	1				Deck Gun/ FOG	100
125	10	3	2				Foam Eductor	200
150	13	4	3		1		Relay or Supply, 5" Hose	20+FL
175	15	6	3		1		Standpipe/Sprinkler	150
180	20	**	**		1		High Rise Pack	75
200	24	8	4		2		STANDARD NOZZLE PRESSURE	
300		16	10		4			psi
400		25	12	1	6		Elkhart Chief Nozzles	50
500		30	22	2	8		Sprinkler Head	30
600		50	25	3	12		Solid Tip, Handline	50
700			32	4	14		Solid Tip Master Stream	80
800			45	5	22		High Rise Nozzle	50
1000				6	32		Elkhart Low Pressure Automatic	75
1200				9	50		Master Fog Nozzles (SM1250)	75
1500				14	88			
2000				26				

FRICITION LOSS FACTORS

	psi	Standard Pump Pressures for E-7 & E-6				
		Line	Type	Nozzle	EP	GPM
STANDPIPE	25	1 3/4	SB	15/16"	100	200
SPRINKLER	25	1 3/4	FOG	50/150	100	200
PORTABLE FOAM EDUCTOR	65	2 1/2	SB	1 1/4"	80	325
Friction Loss per floor	5	All pre-connects figured at 200' lengths				
WYE/REDUCER	5					
DECK GUN BASE	15					
CRITICAL VELOCITY-PONS	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

