



# FOAMPRO®

Precision foam every time

## 1600 Series Calibration Chart

### DISCHARGE OF SMOOTH NOZZLE - GALLONS PER MINUTE

Nozzle Pressure	1/2	3/4	1	1-1/4	1-1/2	1-3/4	2	2-1/4	Nozzle Pressure
6	18	41	72	113	163	223	292	369	6
8	21	47	84	131	188	257	336	427	8
10	23	53	93	146	211	288	376	477	10
12	25	58	102	160	231	315	412	522	12
14	27	63	110	173	249	340	445	564	14
16	29	67	118	185	267	364	475	603	16
18	31	71	125	196	283	386	504	640	18
20	33	75	132	206	298	407	532	674	20
22	35	78	139	216	313	427	557	707	22
24	36	81	145	226	327	446	582	739	24
26	38	85	151	235	340	464	606	769	26
28	39	88	157	244	353	481	629	799	28
30	40	91	162	253	365	498	651	826	30
32	42	94	167	261	377	514	673	854	32
34	43	97	172	269	389	530	693	880	34
36	44	100	177	277	400	546	713	905	36
38	45	102	182	285	411	561	733	930	38
40	47	105	187	292	422	575	752	954	40
42	48	108	192	299	432	589	770	978	42
44	49	110	196	306	442	603	788	1000	44
46	50	113	200	313	452	617	806	1021	46
48	51	115	205	320	462	630	824	1043	48
50	52	118	209	326	472	643	841	1065	50
52	53	120	213	333	481	655	857	1087	52
54	54	122	217	339	490	668	873	1108	54
56	55	124	221	345	499	680	889	1129	56
58	56	127	225	351	508	692	905	1149	58
60	57	129	229	357	517	704	920	1168	60
62	58	131	233	363	525	716	936	1187	62
64	59	133	237	369	533	727	951	1206	64
66	60	135	240	375	542	738	965	1224	66
68	61	137	244	381	550	750	980	1242	68
70	61	139	247	386	558	761	994	1260	70
72	62	141	251	391	566	771	1008	1278	72
74	63	143	254	397	574	782	1023	1296	74
76	64	145	258	402	582	792	1036	1313	76
78	65	147	261	407	589	803	1050	1330	78
80	66	149	264	413	596	813	1063	1347	80
82	67	151	268	418	604	823	1076	1364	82
84	67	152	271	423	611	833	1089	1380	84
86	68	154	274	428	618	843	1102	1396	86
88	69	156	277	433	626	853	1115	1413	88
90	70	158	280	438	633	862	1128	1429	90
92	70	160	283	443	640	872	1140	1445	92
94	71	161	286	447	647	881	1152	1460	94
96	72	163	289	452	654	890	1164	1476	96
98	73	165	292	456	660	900	1176	1491	98
100	74	166	295	461	667	909	1189	1506	100
105	76	170	303	473	683	932	1218	1542	105
110	77	174	310	484	699	954	1247	1579	110
115	79	178	317	495	715	975	1275	1615	115
120	81	182	324	505	730	996	1303	1649	120

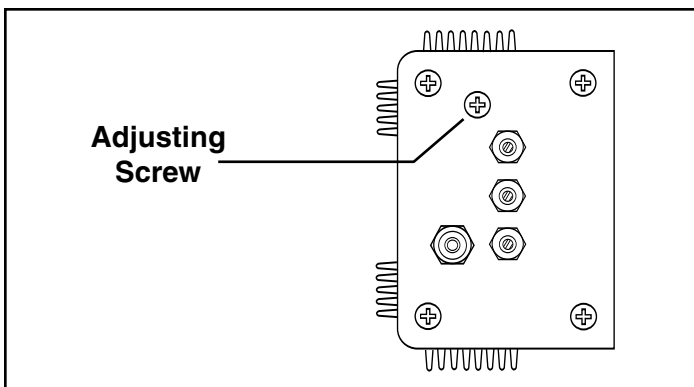
# CALIBRATION AND SETUP INSTRUCTIONS

## CALIBRATION

The FoamPro System 1600/1601 and flowmeter have been calibrated at the factory. To recalibrate the system, the following procedure may be followed:

1. Turn the CAL/INJECT valve to the CALIBRATE or FLUSH position. Provide a container to collect the output that will be coming from the foam pump.
2. Start the main water flow and set it to a known rate and pressure.
3. Set the injection rate to any specific setting (usually 0.5% or 1.0%).
4. Turn on the Model 1600/1601 and run it for 3 to 5 minutes. Foam will pump into the container.
5. Measure the amount of foam in the container and compare that to the calculated amount (main flow rate X injection rate X minutes flowed [100 gpm, X 0.005 (0.5%) injection rate, X 5 minutes = 2.5 gal. output]). If the amounts are significantly different, remove the small black screw and o-ring on the motor driver box with a 3/32 allen wrench. With a small slotted screwdriver, adjust the screw inside the driver module. If the measured flow is above what is expected, turn the screw clockwise. If the measured flow is below what is expected, turn the screw counterclockwise.
6. Repeat Steps 1 through 5 again and make any further adjustments required.
7. Replace the adjustment cover screw after calibration has been completed. This keeps water and dirt from entering the driver module and prevents serious damage to the unit.

NOTE: The viscosity of different foam concentrates may have an effect on the amount of foam concentrate that is injected into the water stream. When calibrating the system, use the foam concentrate that will be used most frequently during normal operations. When different viscosity foam concentrates are used, the actual concentrate injection may vary as much as 10%.



## PRESSURE RELIEF VALVE ADJUSTMENT

The pressure relief valve is factory tested and preset at 400 psi (28 BAR). During normal installation and operation the relief valve will not require adjustment. The following procedures are provided if adjustment is necessary in field installation. DO NOT set the relief valve above 400 psi [28 BAR].

Perform this adjustment after the foam pump has been primed.

1. Determine the maximum pressure that will be needed to discharge foam solution. (For example: The maximum foam injection pressure should be approximately 50 psi [3.5 BAR] higher than the maximum operating pressure as set forth by department policy.)
2. Gather the items required for reading concentrate injection pressure. A 0-500 psi [0 to 34.5 BAR] test quality gauge, 500 psi [34.5 BAR] hoses and fittings to connect to the injector line from the foam pump.
3. Disconnect the injector from the foam line and connect the pressure gauge to it.
4. Screw the pressure adjustment nut on top of the valve all of the way down until it stops.
5. Unscrew the pressure adjustment nut counterclockwise 10 full turns. This will place it in a position to relieve at low pressure.  
**CAUTION:** DO NOT run FoamPro 1600/1601 for more than one minute dead headed against the pressure gauge as the foam pump will overheat.
6. Operate the foam pump as described in the Foam Pump Priming Check Section.
7. While the foam pump is running, slowly screw the Pressure Adjustment Nut down clockwise until the desired pressure is reached. Apply tamper proof type sealant to pressure relief valve adjustment nut so that it does not move accidentally.
8. Stop the foam pump.  
**WARNING:** Slowly loosen the foam pressure line fittings and allow the pressure to escape. Protect face and eyes from any potential spray which may occur.
9. Reconnect the foam line to the injector fitting. The pressure relief valve is now set.

**1 gallon = 3.785 liters or 0.833 Imp. Gal.**