

HANDLINE Flow & Nozzle Reaction Chart

Note: For Nozzles with Serial # TFT-H465101 and/or Manufactured after 12/01/2003

100 PSI = 100 PSI HANDLINE 75 PSI = 75 PSI HANDLINE

PUMP DISCHARGE PRESSURE (PSI)	1 1/2" HOSE						1 3/4" HOSE						2" HOSE						2-1/2" HOSE					
	150 ft.		200 ft.		250 ft.		150 ft.		200 ft.		250 ft.		150 ft.		200 ft.		250 ft.		150 ft.		200 ft.		250 ft.	
	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI	100 PSI	75 PSI
50	47 16	49 17	46 15	47 15	45 14	45 15	50 18	51 18	49 17	50 17	47 16	48 16	52 19	53 20	51 18	51 18	50 18	51 18	53 20	54 20	52 19	53 20	52 19	53 20
75	59 25	64 26	58 23	60 24	56 30	57 32	60 26	72 31	59 25	66 27	58 25	63 25	63 27	90 39	62 26	80 34	61 25	75 32	65 20	122 55	65 30	115 51	65 30	110 44
100	85 42	96 41	69 31	84 35	65 30	75 32	82 40	115 50	76 36	102 45	72 35	92 40	100 50	148 66	91 45	127 58	85 41	120 53	135 70	255 121	127 65	222 105	122 63	205 108
125	100 50	123 55	90 45	109 44	82 40	98 43	120 61	147 67	107 55	130 57	97 108	118 54	142 74	198 93	137 71	175 80	126 65	157 72	245 134	300 155	223 120	290 146	205 110	280 135
150	126 55	145 65	111 55	127 56	101 49	116 51	150 78	177 82	165 65	156 68	122 63	141 64	197 106	240 114	175 93	210 98	149 79	190 88	323 182	327 187	312 175	317 177	281 155	307 165
175	142 75	166 76	130 66	145 65	117 60	130 58	178 95	204 95	156 83	174 78	142 75	160 73	239 130	278 134	210 113	242 115	190 101	217 102	351 217	352 220	340 204	340 203	330 190	330 191
200	165 87	185 85	146 75	160 73	134 67	145 65	203 109	222 105	177 94	198 94	160 84	180 74	275 151	296 152	243 123	271 130	218 118	244 115	375 252	376 247	362 231	364 252	352 217	352 219
225	185 98	201 94	161 85	176 81	146 86	157 72	227 124	250 119	197 106	216 101	177 94	194 90	310 172	314 174	270 148	290 146	242 132	267 127	---	---	---	---	373 245	375 247
250	201 106	217 102	174 92	189 87	157 83	170 79	247 135	269 123	216 116	233 110	194 103	209 98	320 180	330 190	295 164	305 163	265 145	285 140	---	---	---	---	394 270	395 275

(1) Number on top in each box indicates flow (GPM), and number on bottom indicates nozzle reaction (LBS).
 (2) Flows may vary with brand or condition of hose. (3) Flows are approximate and do not reflect losses in preconnect piping.

HANDLINE Flow & Nozzle Reaction Chart

Note: For Nozzles with Serial # TFT-H465101 and/or Manufactured after 12/01/2003

7 BAR = 7 BAR HANDLINE 5 BAR = 5 BAR HANDLINE

PUMP DISCHARGE PRESSURE (BAR)	38mm HOSE						45mm HOSE						50mm HOSE						65mm HOSE					
	45M		60M		75M		45M		60M		75M		45M		60M		75M		45M		60M		75M	
	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR	7 BAR	5 BAR
3.5	178 7	185 8	174 7	178 7	170 6	170 7	189 8	193 8	185 8	189 8	178 7	182 7	197 9	201 9	193 8	193 8	189 8	193 8	201 9	204 9	197 9	201 9	197 9	201 9
5.2	223 11	242 12	220 10	227 11	212 13	216 10	227 12	273 14	223 11	250 12	220 11	238 11	238 12	341 18	235 12	303 15	231 11	284 15	246 14	462 25	246 14	435 21	246 14	416 20
7	322 19	363 19	261 14	318 16	246 14	284 15	310 18	435 23	288 16	386 20	273 16	348 17	379 23	560 30	344 26	481 26	322 19	454 24	511 32	968 55	481 29	840 48	462 29	776 49
8.6	379 23	466 25	341 20	413 20	310 18	371 20	454 28	556 30	405 25	492 26	367 25	447 25	538 34	750 42	519 32	662 36	477 29	594 33	927 61	1136 70	844 54	1098 66	776 50	1060 61
10	477 29	549 29	420 25	481 25	382 22	439 23	568 35	670 37	625 29	591 31	462 29	534 29	746 48	908 52	662 42	795 44	564 36	719 40	1223 83	1238 85	1181 79	1200 80	1064 70	1162 75
12	538 34	628 34	492 30	549 29	443 27	492 26	674 43	772 43	591 37	659 35	538 34	606 33	905 59	1052 61	795 51	916 52	719 46	821 46	1329 98	1332 100	1287 93	1287 92	1249 86	1249 87
14	625 40	700 38	553 34	606 33	507 30	549 29	768 49	840 48	670 37	700 43	606 38	681 38	1041 68	1120 69	920 56	1026 59	825 54	924 52	1420 114	1423 112	1370 105	1378 114	1332 98	1332 99
15.5	700 44	761 43	609 39	666 37	553 39	594 33	859 56	946 54	746 48	818 46	670 42	734 41	1173 78	1189 79	1022 67	1098 66	916 60	1011 58	---	---	---	---	1412 111	1420 112
17	761 48	821 46	659 42	715 39	594 38	644 36	935 61	1018 56	818 53	882 50	734 47	791 44	1211 82	1249 86	1117 74	1155 74	1003 66	1079 64	---	---	---	---	1491 122	1495 125

(1) Number on top in each box indicates flow (LPM), and number on bottom indicates nozzle reaction (KG).
 (2) Flows may vary with brand or condition of hose. (3) Flows are approximate and do not reflect losses in preconnect piping.

The previous charts are specific examples of maximum flow rates for particular situations. Friction losses may vary due to differences in hose construction resulting in flows different than those shown. For situations or lengths of hose not listed on the chart, approximate flows can be calculated using conventional hydraulics.