

# Performance: US Units

## NOZZLES

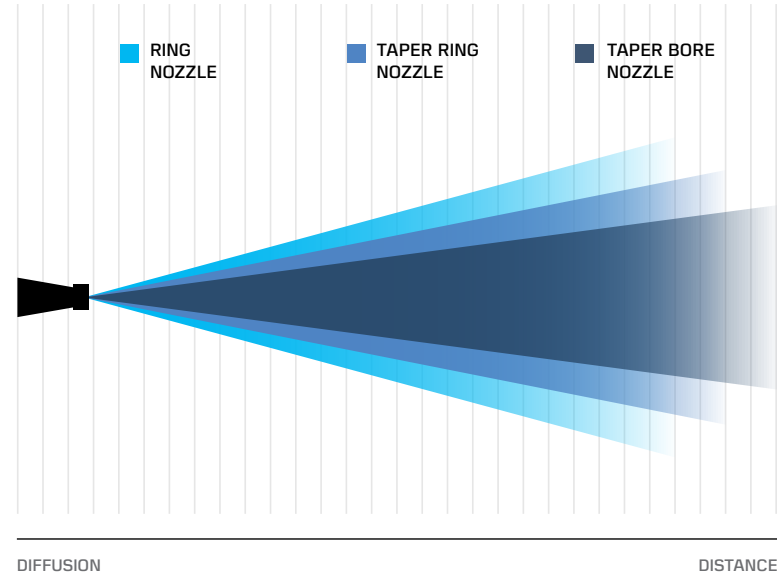
### TAPER BORE

### TAPER RING

### RING



### STREAM DIFFUSION



## 75 SERIES

■ TAPER RING NOZZLE: 24° Trajectory

Pressure PSI	0.4 in 10.2 mm		0.45 in 11.4 mm		0.5 in 12.7 mm		0.55 in 14.0 mm		0.6 in 15.2 mm		0.65 in 16.5 mm		0.7 in 17.8 mm		0.75 in 19.1 mm		0.8 in 20.3 mm	
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)
25	-	-	-	-	-	-	42	73	50	78	59	81	69	84	80	87	91	91
30	-	-	-	-	37	79	45	79	55	83	64	86	75	91	87	94	99	96
35	-	-	32	77	40	82	49	86	59	89	69	96	81	98	93	101	106	104
40	27	75	35	80	43	86	52	90	63	95	74	99	87	102	98	107	112	111
45	29	78	37	84	46	90	56	95	67	99	79	103	91	107	104	112	118	115
50	30	81	39	87	48	93	59	98	70	102	83	106	95	110	109	115	123	119
55	32	83	41	90	50	97	62	102	74	107	87	111	100	115	115	120	130	124
60	33	85	42	92	53	99	64	104	77	110	91	114	104	119	120	123	136	127
65	35	86	44	95	55	103	67	108	80	114	95	119	109	124	125	127	142	132
70	36	88	45	97	57	105	69	111	83	116	98	122	113	127	129	130	147	135
75	37	90	47	101	59	109	72	114	86	120	101	125	117	131	134	134	153	139
80	39	91	49	104	61	111	74	117	89	122	105	128	121	133	138	137	158	142

## 100 SERIES

### TAPER BORE NOZZLE: 24° Trajectory

Pressure PSI	0.5 in 12.7 mm		0.55 in 14.0 mm		0.6 in 15.2 mm		0.65 in 16.5 mm		0.7 in 17.8 mm		0.75 in 19.1 mm		0.8 in 20.3 mm		0.85 in 21.6 mm		0.9 in 22.9 mm		1 in 25.4 mm	
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)
40	47	96	57	101	66	107	78	111	91	115	103	120	118	125	134	128	152	131	-	-
50	50	103	64	108	74	113	87	118	100	123	115	128	130	133	150	137	165	140	204	150
60	55	108	69	114	81	120	96	125	110	130	126	135	143	140	164	144	182	148	224	158
70	60	113	75	119	88	125	103	132	120	138	136	142	155	148	177	151	197	155	243	169
80	64	118	79	124	94	130	110	137	128	143	146	148	165	153	189	157	210	163	258	177
90	68	123	83	129	100	135	117	142	135	148	155	153	175	158	201	163	223	168	274	181
100	72	128	87	134	106	140	123	147	143	153	163	158	185	163	212	168	235	173	289	186
110	76	133	92	139	111	145	129	152	150	158	171	162	195	168	222	172	247	178	304	190

### TAPER RING NOZZLE: 24° Trajectory

Pressure PSI	0.50 in 12.7 mm		0.55 in 14.0 mm		0.63 in 16.0 mm		0.67 in 17.0 mm		0.71 in 18.0 mm		0.75 in 19.0 mm		0.79 in 20.0 mm		0.83 in 21.0 mm		0.87 in 22.0 mm		0.91 in 23.0 mm		0.94 in 24.0 mm	
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)
40	43	94	53	98	67	106	76	110	86	113	98	117	110	121	125	125	136	127	151	130	166	138
50	48	99	59	105	75	112	85	116	97	120	110	125	123	129	139	133	152	136	169	140	185	144
60	53	107	65	112	83	120	94	123	106	127	120	132	135	137	153	141	167	143	186	147	203	152
70	57	111	70	117	89	125	101	130	114	134	130	139	146	143	165	148	180	150	200	155	219	160
80	61	114	75	121	95	130	108	135	122	139	139	144	156	149	176	153	193	157	214	162	235	168
90	65	119	80	125	101	134	115	139	130	145	147	150	166	154	187	159	204	162	227	167	249	173
100	69	124	84	130	107	139	121	144	137	149	155	154	175	159	197	164	216	167	240	172	262	178
110	72	129	88	135	112	144	127	149	143	154	163	159	183	163	207	168	226	171	251	177	275	182

### RING NOZZLE: 24° Trajectory

Pressure PSI	0.604 in 15.3 mm		0.71 in 18.0 mm		0.77 in 19.6 mm		0.81 in 20.6 mm		0.86 in 21.8 mm		0.89 in 22.6 mm		0.93 in 23.6 mm		0.96 in 24.4 mm	
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)
40	47	93	66	104	78	106	91	108	103	112	118	118	134	119	152	121
50	52	100	74	110	88	113	100	115	115	120	129	125	150	128	167	130
60	57	105	81	118	96	120	110	123	125	130	141	135	164	138	183	140
70	61	110	88	123	104	125	118	130	135	138	152	145	177	148	198	150
80	65	115	94	128	111	133	127	138	145	143	163	150	189	153	211	158
90	69	120	99	133	117	138	134	143	154	148	173	155	201	158	224	163
100	72	123	105	135	124	140	142	148	162	153	182	160	212	163	236	168
110	75	125	110	138	130	145	149	153	170	158	191	163	222	168	248	173

# Performance: US Units

## 150 SERIES

### TAPER BORE NOZZLE: 24° Trajectory

Pressure PSI	0.7 in 17.8 mm		0.8 in 20.3 mm		0.9 in 22.9 mm		1 in 25.4 mm		1.1 in 27.9 mm		1.2 in 30.5 mm		1.3 in 33.0 mm		1.4 in 35.6 mm	
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)
50	100	125	130	135	165	145	205	155	255	165	300	173	350	180	408	187
60	110	133	143	143	182	153	225	163	275	173	330	183	385	190	446	198
70	120	140	155	150	197	160	245	170	295	180	355	190	415	198	483	206
80	128	145	165	155	210	168	260	178	315	188	380	198	445	205	516	214
90	135	150	175	160	223	173	275	183	335	195	405	205	475	213	547	221
100	143	155	185	165	235	178	290	188	355	200	425	210	500	220	577	229
110	150	160	195	170	247	183	305	193	370	205	445	215	525	225	605	236
120	157	165	204	175	258	188	320	198	385	210	465	220	545	230	632	241

### TAPER RING NOZZLE: 24° Trajectory

Pressure PSI	0.71 in 18.0 mm		0.75 in 19.0 mm		0.79 in 20.0 mm		0.83 in 21.0 mm		0.87 in 22.0 mm		0.91 in 23.0 mm		0.94 in 24.0 mm		0.98 in 25.0 mm		1.02 in 26.0 mm		1.06 in 27.0 mm		1.10 in 28.0		1.14 in 29.0 mm		1.18 in 30.0 mm		
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm
50	88	119	99	123	111	127	123	131	135	135	149	139	164	143	179	147	196	151	214	155	233	159	253	163	274	167	
60	97	125	109	130	121	134	134	138	148	142	163	147	179	151	196	155	214	159	234	163	255	167	277	172	301	176	
70	105	134	117	138	131	142	144	146	159	150	176	154	194	158	212	162	231	166	253	170	276	175	300	179	325	183	
80	112	135	126	140	140	145	154	150	170	155	188	160	207	165	226	169	247	173	271	178	295	182	320	187	347	191	
90	118	140	133	145	148	150	164	155	181	160	199	165	220	170	241	175	262	179	287	184	313	189	340	194	368	198	
100	125	144	141	149	156	154	173	160	191	165	210	170	231	175	254	179	277	183	303	188	330	193	358	198	388	203	
110	131	150	147	155	164	160	181	165	200	170	220	175	243	180	266	184	290	188	317	194	346	199	375	204	407	208	
120	137	155	154	160	171	165	189	170	209	175	230	180	253	185	277	189	303	193	331	199	361	204	392	209	425	213	

### TAPER RING NOZZLE: 24° Trajectory

Pressure PSI	1.22 in 31.0 mm		1.26 in 32.0 mm		1.30 in 33.0 mm		1.34 in 34.0 mm	
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)
50	296	170	319	174	344	177	369	179
60	325	180	350	184	377	187	405	189
70	351	187	378	191	407	194	437	197
80	375	195	404	199	435	202	467	205
90	398	202	429	206	461	209	495	212
100	419	207	452	212	486	215	522	218
110	440	213	474	217	510	220	548	223
120	459	218	495	222	533	225	572	229

### RING NOZZLE: 24° Trajectory

Pressure PSI	0.86 in 21.8 mm		0.97 in 24.6 mm		1.08 in 27.4 mm		1.18 in 30.0 mm		1.26 in 32.0 mm		1.34 in 34.0 mm		1.41 in 35.8 mm	
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)
50	100	123	130	133	165	143	205	150	255	160	300	168	350	175
60	110	130	143	140	182	150	225	158	275	168	330	175	385	183
70	120	135	155	145	197	155	245	165	295	175	355	183	415	190
80	128	140	165	150	210	160	260	170	315	180	380	190	445	198
90	135	145	175	155	223	165	275	175	335	185	405	195	475	203
100	143	150	185	160	235	170	290	180	355	190	425	200	500	208
110	150	155	195	165	247	175	305	185	370	195	445	205	525	213
120	157	158	204	168	258	180	320	190	385	200	465	210	545	218

## 200 SERIES

### TAPER BORE NOZZLE: 27° Trajectory

Pressure PSI	1.05 in 26.7 mm		1.1 in 27.9 mm		1.2 in 30.5 mm		1.3 in 33.0 mm		1.4 in 35.6 mm		1.5 in 38.1 mm		1.6 in 40.6 mm		1.75 in 44.5		1.9 in 48.3 mm	
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)
60	250	173	285	178	330	188	385	195	445	205	515	215	585	223	695	235	825	248
70	270	180	310	190	355	198	415	205	480	215	555	225	630	233	755	248	890	258
80	290	188	330	198	380	205	445	215	515	225	590	235	675	243	805	258	950	268
90	310	195	350	205	405	213	475	223	545	233	625	243	715	253	855	268	1005	278
100	325	200	370	210	425	220	500	230	575	240	660	250	755	260	900	275	1060	288
110	340	205	390	215	445	225	525	235	605	248	695	258	790	268	945	283	1110	295
120	355	210	405	220	465	230	545	240	630	253	725	265	825	275	985	290	1160	303
130	370	213	425	223	485	233	565	243	655	258	755	270	860	280	1025	295	1210	310

### RING NOZZLE: 27° Trajectory

Pressure PSI	1.29 in 32.8		1.46 in 37.1 mm		1.56 in 39.6 mm		1.66 in 42.2 mm		1.74 in 44.2 mm		1.83 in 46.5 mm		1.93 in 49.0 mm	
	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)	gpm	Rad. (ft)
50	230	163	300	178	350	185	410	195	470	203	535	210	640	218
60	250	170	330	185	385	195	445	205	515	213	585	220	695	228
70	270	178	355	193	415	203	480	213	555	220	630	228	755	238
80	290	185	380	200	445	210	515	220	590	228	675	235	805	245
90	310	190	405	208	475	218	545	228	625	235	715	243	855	253
100	325	195	425	213	500	223	575	233	660	240	755	250	900	260
110	340	200	445	218	525	228	605	238	695	245	790	255	945	268
120	355	205	465	223	545	233	630	243	725	250	825	260	985	273
130	370	208	485	225	565	235	655	245	755	253	860	263	1025	275

# Performance: Metric Units

## 75 SERIES

■ TAPER RING NOZZLE: 24° Trajectory

Pressure BAR	0.40 in 10.2 mm		0.45 in 11.4 mm		0.50 in 12.7 mm		0.55 in 14.0 mm		0.60 in 15.2 mm		0.65 in 16.5 mm		0.70 in 17.8 mm		0.75 in 19.1 mm		0.80 in 20.3 mm	
	m <sup>3</sup> /hr	Rad. (m)	m <sup>3</sup> /hr	Rad. (m)	m <sup>3</sup> /hr	Rad. (m)	m <sup>3</sup> /hr	Rad. (m)	m <sup>3</sup> /hr	Rad. (m)	m <sup>3</sup> /hr	Rad. (m)	m <sup>3</sup> /hr	Rad. (m)	m <sup>3</sup> /hr	Rad. (m)	m <sup>3</sup> /hr	Rad. (m)
1.75	-	-	-	-	-	-	9.5	22.5	11.5	24.0	13.4	25.0	15.7	26.0	18.2	27.0	20.6	28.0
2.0	-	-	-	-	8.3	24.0	10.2	24.0	12.2	25.0	14.4	26.5	16.8	27.5	19.3	28.5	22.0	29.5
2.5	-	-	7.5	24.0	9.3	25.5	11.4	26.0	13.7	27.5	16.0	28.5	18.7	29.5	21.5	31.0	24.4	32.0
3.0	6.4	23.5	8.2	25.0	10.2	27.0	12.4	28.0	14.9	29.5	17.6	31.0	20.4	32.0	23.4	33.0	26.6	34.5
3.5	6.9	24.5	8.9	26.5	11.0	28.5	13.4	30.0	16.1	31.5	19.0	33.0	22.0	34.0	25.2	35.5	28.6	36.5
4.0	7.4	25.5	9.5	27.5	11.8	30.0	14.3	31.5	17.2	33.0	20.3	34.5	23.4	36.0	26.8	37.0	30.5	38.5
4.5	7.9	26.5	10.0	29.0	12.5	31.5	15.2	33.0	18.2	34.5	21.5	36.0	24.8	37.5	28.3	39.0	32.2	40.0
5.0	8.3	27.0	10.5	30.0	13.2	32.5	16.0	34.5	19.2	36.0	22.7	37.5	26.1	39.0	29.8	40.5	33.9	41.5
5.5	8.8	27.5	11.0	31.5	13.8	34.0	16.8	35.5	20.1	37.0	23.8	39.0	27.3	40.5	31.2	41.5	35.5	43.0



## 100 SERIES

### TAPER BORE NOZZLE: 24° Trajectory

Pressure BAR	0.50 in 12.7 mm		0.55 in 14.0 mm		0.60 in 15.2 mm		0.65 in 16.5 mm		0.70 in 17.8 mm		0.75 in 19.1 mm		0.80 in 20.3 mm		0.85 in 21.6 mm		0.90 in 22.9 mm		1.00 in 25.4 mm	
	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)
2.75	10.4	29.5	13.0	31.0	14.9	32.5	17.7	34.0	20.5	35.0	23.3	36.5	26.6	38.0	30.4	39.0	34.0	40.0	-	-
3.0	10.8	30.0	13.5	31.5	15.6	33.0	18.5	34.5	21.4	36.0	24.4	37.5	27.7	39.0	31.7	40.0	35.5	41.0	43.3	43.5
3.5	11.7	31.0	14.5	33.0	16.9	34.5	20.0	36.0	23.1	37.5	26.3	39.0	30.0	40.5	34.3	42.0	38.3	43.0	46.8	46.0
4.0	12.5	32.5	15.5	34.0	18.1	36.0	21.3	37.5	24.7	39.0	28.2	40.5	32.0	42.5	36.6	43.5	40.8	44.5	50.0	48.0
4.5	13.2	33.5	16.3	35.5	19.3	37.0	22.6	39.0	26.2	40.5	29.9	42.0	34.0	44.0	38.9	45.0	43.3	46.5	53.0	50.0
5.0	13.9	34.5	17.1	36.5	20.3	38.5	23.8	40.5	27.6	42.0	31.5	43.5	35.8	45.0	41.0	46.5	45.5	48.0	55.9	52.0
5.5	14.6	36.0	17.9	38.0	21.4	39.5	25.0	41.5	29.0	43.5	33.1	45.0	37.5	46.5	43.0	48.0	47.7	49.5	58.7	53.5
6.0	15.2	37.0	18.7	39.0	22.3	41.0	26.1	43.0	30.3	44.5	34.5	46.0	39.2	47.5	44.9	49.0	49.8	50.5	61.3	55.0
6.5	15.8	38.0	19.4	40.0	23.3	42.0	27.2	44.0	31.5	46.0	36.0	47.5	40.8	49.0	46.7	50.5	51.8	52.0	63.8	56.0
7.0	16.4	39.0	20.0	41.0	24.2	43.0	28.2	45.0	32.7	47.0	37.3	48.5	42.3	50.0	48.4	51.5	53.7	53.0	66.2	57.0
7.5	17.0	40.0	20.7	42.0	25.1	44.0	29.2	46.0	33.8	47.5	38.6	49.5	43.8	51.0	50.1	52.5	55.5	54.0	68.5	57.5

### TAPER RING NOZZLE: 24° Trajectory

Pressure BAR	0.50 in 12.7 mm		0.55 in 14.0 mm		0.63 in 16.0 mm		0.67 in 17.0 mm		0.71 in 18.0 mm		0.75 in 19.0 mm		0.79 in 20.0 mm		0.83 in 21.0 mm		0.87 in 22.0 mm		0.91 in 23.0 mm		0.94 in 24.0 mm	
	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)
2.75	9.7	28.5	12.0	30.0	15.2	32.5	17.3	33.5	19.6	34.5	22.3	35.5	24.9	37.0	28.3	38.0	30.8	38.5	34.3	39.5	37.6	41.5
3.0	10.2	29.0	12.5	30.5	15.9	33.0	18.0	34.0	20.5	35.0	23.2	36.5	26.1	38.0	29.5	39.0	32.2	39.5	35.8	40.5	39.3	42.5
3.5	11.0	30.5	13.5	32.0	17.2	34.5	19.5	35.5	22.1	37.0	25.1	38.0	28.2	39.5	31.9	40.5	34.8	41.5	38.7	42.5	42.4	44.5
4.0	11.8	31.5	14.5	33.5	18.4	36.0	20.9	37.0	23.6	38.5	26.8	40.0	30.1	41.0	34.1	42.5	37.2	43.0	41.4	44.5	45.3	46.0
4.5	12.5	33.0	15.4	34.5	19.5	37.0	22.2	38.5	25.1	40.0	28.5	41.5	32.0	42.5	36.2	44.0	39.5	45.0	43.9	46.0	48.1	47.5
5.0	13.2	34.0	16.2	35.5	20.6	38.5	23.4	39.5	26.4	41.0	30.0	42.5	33.7	44.0	38.1	45.5	41.7	46.5	46.3	47.5	50.7	49.5
5.5	13.9	35.0	17.0	37.0	21.6	39.5	24.5	41.0	27.7	42.5	31.5	44.0	35.4	45.5	40.0	46.5	43.7	47.5	48.6	49.0	53.2	50.5
6.0	14.5	36.0	17.8	38.0	22.6	40.5	25.6	42.0	29.0	43.5	32.9	45.0	37.0	46.5	41.8	48.0	45.7	49.0	50.7	50.5	55.6	52.0
6.5	15.1	37.0	18.5	39.0	23.5	41.5	26.7	43.0	30.1	44.5	34.2	46.0	38.5	47.5	43.5	49.0	47.5	50.0	52.8	51.5	57.8	53.5
7.0	15.7	38.0	19.2	40.0	24.4	42.5	27.7	44.0	31.3	45.5	35.5	47.0	40.0	48.5	45.1	50.0	49.3	51.0	54.8	52.5	60.0	54.5
7.5	16.3	39.0	19.9	41.0	25.3	43.5	28.7	45.0	32.4	46.5	36.8	48.0	41.4	49.5	46.7	51.0	51.1	52.0	56.8	53.5	62.1	55.5

### RING NOZZLE: 24° Trajectory

Pressure BAR	0.60 in 15.3 mm		0.71 in 18.0 mm		0.77 in 19.6 mm		0.81 in 20.6 mm		0.86 in 21.8 mm		0.89 in 22.6 mm		0.93 in 23.6 mm		0.96 in 24.4 mm	
	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)
2.75	10.7	28.5	15.0	31.5	17.8	32.0	20.5	32.5	23.3	34.0	26.5	35.5	30.4	36.0	34.2	36.5
3.0	11.1	29.0	15.7	32.5	18.6	33.0	21.4	33.5	24.3	35.0	27.6	36.5	31.7	37.5	35.7	38.0
3.5	11.9	30.5	16.9	34.0	20.0	34.5	23.0	35.5	26.3	37.0	29.7	39.0	34.3	39.5	38.5	40.0
4.0	12.7	32.0	18.1	35.5	21.4	36.0	24.6	37.0	28.1	39.0	31.7	41.0	36.6	41.5	41.1	42.5
4.5	13.4	33.0	19.2	36.5	22.7	37.5	26.1	38.5	29.8	40.5	33.6	42.5	38.9	43.5	43.5	44.5
5.0	14.1	34.0	20.3	38.0	24.0	39.0	27.5	40.0	31.3	42.0	35.3	44.5	41.0	45.0	45.8	46.0
5.5	14.7	35.0	21.3	39.0	25.1	40.0	28.8	41.5	32.9	43.5	37.0	45.5	43.0	46.5	48.0	47.5
6.0	15.3	36.0	22.2	40.0	26.3	41.0	30.0	43.0	34.3	44.5	38.6	47.0	44.9	48.0	50.0	49.0
6.5	15.9	37.0	23.1	40.5	27.3	42.0	31.2	44.0	35.7	46.0	40.1	48.0	46.7	49.0	52.0	50.5
7.0	16.5	37.5	24.0	41.5	28.4	43.0	32.4	45.5	37.1	47.0	41.6	49.0	48.4	50.0	54.0	51.5
7.5	17.0	38.0	24.9	42.0	29.4	44.0	33.5	46.5	38.3	47.5	43.0	49.5	50.1	50.5	55.8	52.5

# Performance: Metric Units

## 150 SERIES

### TAPER BORE NOZZLE: 24° Trajectory

Pressure BAR	0.70 in 17.8 mm		0.80 in 20.3 mm		0.90 in 22.9 mm		1.00 in 25.4 mm		1.10 in 27.9 mm		1.20 in 30.5 mm		1.30 in 33.0 mm		1.40 in 35.6 mm	
	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)
3.5	23.0	38.5	29.8	41.5	37.9	44.5	47.0	47.5	57.8	50.5	68.8	53.0	80.2	55.0	93.3	57.5
4.0	24.6	40.0	31.9	43.0	40.5	46.0	50.3	49.0	61.7	52.0	73.5	55.0	85.9	57.0	99.8	59.5
4.5	26.1	41.5	33.9	44.5	43.0	48.0	53.3	51.0	65.3	54.0	78.0	57.0	91.2	59.0	105.8	61.5
5.0	27.6	43.0	35.7	46.0	45.4	49.5	56.2	52.5	68.6	55.5	82.2	58.5	96.2	61.0	111.6	63.5
5.5	28.9	44.0	37.5	47.0	47.7	50.5	59.0	54.0	71.9	57.0	86.2	60.0	101.0	62.5	117.0	65.0
6.0	30.3	45.5	39.2	48.5	49.8	52.0	61.6	55.0	74.9	58.5	90.0	61.5	105.6	64.0	122.2	67.0
6.5	31.5	46.5	40.9	49.5	51.9	53.5	64.2	56.5	77.9	60.0	93.7	63.0	110.0	65.5	127.2	68.5
7.0	32.7	47.5	42.4	50.5	53.9	54.5	66.6	57.5	80.7	61.0	97.3	64.5	114.2	67.0	132.0	70.0
7.5	33.9	48.5	44.0	51.5	55.8	55.5	68.9	58.5	83.4	62.5	100.7	65.5	118.3	68.5	136.7	71.5
8.0	35.1	49.5	45.4	52.5	57.6	56.5	71.2	59.5	86.0	63.5	104.0	66.5	122.3	69.5	141.1	72.5
8.25	35.6	50.0	46.2	53.0	58.5	57.0	72.3	60.0	87.3	64.0	105.6	67.0	124.2	70.0	143.3	73.5

### TAPER RING NOZZLE: 24° Trajectory

Pressure BAR	0.71 in 18.0 mm		0.75 in 19.0 mm		0.79 in 20.0 mm		0.83 in 21.0 mm		0.87 in 22.0 mm		0.91 in 23.0 mm		0.94 in 24.0 mm		0.98 in 25.0 mm		1.02 in 26.0 mm		1.06 in 27.0 mm		1.10 in 28.0 mm		1.14 in 29.0 mm		1.18 in 30.0 mm	
	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)	m³/hr	Rad.(m)
3.5	20.2	36.5	22.7	38.0	25.4	39.0	28.0	40.0	30.9	41.5	34.1	42.5	37.5	44.0	41.0	45.0	44.8	46.0	49.0	47.5	53.3	48.5	57.9	50.0	62.8	51.0
4.0	21.6	38.0	24.3	39.0	27.1	40.5	29.9	41.5	33.0	43.0	36.4	44.0	40.1	45.5	43.8	46.5	47.8	48.0	52.3	49.0	57.0	50.5	61.9	52.0	67.1	53.0
4.5	22.9	39.0	25.7	40.5	28.7	41.5	31.7	43.0	35.0	44.5	38.6	46.0	42.5	47.0	46.5	48.5	50.7	49.5	55.5	51.0	60.5	52.0	65.7	53.5	71.2	54.5
5.0	24.2	40.0	27.1	41.5	30.3	43.0	33.4	44.5	36.9	46.0	40.7	47.0	44.8	48.5	49.0	50.0	53.5	51.0	58.5	52.5	63.8	54.0	69.2	55.0	75.1	56.5
5.5	25.3	41.5	28.5	43.0	31.7	44.0	35.1	45.5	38.7	47.0	42.6	48.5	47.0	50.0	51.4	51.0	56.1	52.5	61.4	54.0	66.9	55.5	72.6	57.0	78.7	58.0
6.0	26.5	42.5	29.8	44.0	33.1	45.5	36.6	47.0	40.4	48.5	44.5	50.0	49.0	51.5	53.7	52.5	58.6	54.0	64.1	55.5	69.9	56.5	75.8	58.0	82.2	59.5
6.5	27.6	43.5	31.0	45.0	34.5	46.5	38.1	48.0	42.0	49.5	46.3	51.0	51.0	52.5	55.9	54.0	61.0	55.0	66.7	56.5	72.7	58.0	78.9	59.5	85.6	61.0
7.0	28.6	44.5	32.2	46.0	35.7	47.5	39.5	49.0	43.6	50.5	48.0	52.0	52.9	53.5	58.0	55.0	63.3	56.0	69.2	58.0	75.5	59.5	81.9	61.0	88.8	62.0
7.5	29.6	45.5	33.3	47.0	37.0	48.5	40.9	50.0	45.2	51.5	49.7	53.0	54.8	54.5	60.0	56.0	65.5	57.5	71.7	59.0	78.1	60.5	84.8	62.0	91.9	63.5
8.0	30.6	46.5	34.4	48.0	38.2	49.5	42.2	51.0	46.6	52.5	51.3	54.0	56.6	55.5	62.0	57.0	67.6	58.0	74.0	60.0	80.7	61.5	87.6	63.0	94.9	64.5
8.25	31.1	47.0	34.9	48.5	38.8	50.0	42.8	51.5	47.4	53.0	52.1	54.5	57.5	56.0	63.0	57.5	68.7	58.5	75.2	60.5	82.0	62.0	88.9	63.5	96.4	65.0

### TAPER RING NOZZLE: 24° Trajectory

Pressure BAR	1.22 in 31.0 mm		1.26 in 32.0 mm		1.30 in 33.0 mm		1.34 in 34.0 mm	
	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)
3.5	67.8	52.0	73.1	53.0	78.7	54.0	84.5	55.0
4.0	72.5	54.0	78.1	55.0	84.2	56.0	90.3	57.0
4.5	76.9	56.0	82.9	57.0	89.3	58.0	95.8	59.0
5.0	81.1	57.5	87.4	59.0	94.1	60.0	101.0	60.5
5.5	85.0	59.5	91.6	60.5	98.7	61.5	105.9	62.5
6.0	88.8	61.0	95.7	62.0	103.0	63.0	110.6	64.0
6.5	92.5	62.0	99.7	63.5	107.2	64.5	115.2	65.5
7.0	96.0	63.5	103.4	64.5	111.3	66.0	119.5	66.5
7.5	99.3	64.5	107.1	66.0	115.2	67.0	123.7	68.0
8.0	102.6	65.5	110.6	67.0	119.0	68.0	127.7	69.0
8.25	104.2	66.0	112.3	67.5	120.8	68.5	129.7	69.5

### RING NOZZLE: 24° Trajectory

Pressure BAR	0.86 in 21.8 mm		0.97 in 24.6 mm		1.08 in 27.4 mm		1.18 in 30.0 mm		1.26 in 32.0 mm		1.34 in 34.0 mm		1.41 in 35.8 mm	
	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)
3.5	23.0	37.5	29.8	40.5	37.9	44.0	47.0	46.0	57.8	49.0	68.8	51.0	80.2	53.5
4.0	24.6	39.0	31.9	42.0	40.5	45.0	50.3	47.5	61.7	50.5	73.5	53.0	85.9	55.5
4.5	26.1	40.5	33.9	43.5	43.0	46.5	53.3	49.0	65.3	52.0	78.0	54.5	91.2	57.0
5.0	27.6	41.5	35.7	44.5	45.4	47.5	56.2	50.5	68.6	53.5	82.2	56.0	96.2	58.5
5.5	28.9	43.0	37.5	46.0	47.7	49.0	59.0	51.5	71.9	55.0	86.2	57.5	101.0	60.0
6.0	30.3	44.0	39.2	47.0	49.8	50.0	61.6	53.0	74.9	56.0	90.0	59.0	105.6	61.0
6.5	31.5	45.0	40.9	48.0	51.9	51.0	64.2	54.0	77.9	57.0	93.7	60.0	110.0	62.5
7.0	32.7	46.0	42.4	49.0	53.9	52.0	66.6	55.5	80.7	58.5	97.3	61.5	114.2	63.5
7.5	33.9	47.0	44.0	50.0	55.8	53.0	68.9	56.5	83.4	59.5	100.7	62.5	118.3	64.5
8.0	35.1	47.5	45.4	50.5	57.6	54.0	71.2	57.5	86.0	60.5	104.0	63.5	122.3	65.5
8.25	35.6	48.0	46.2	51.0	58.5	54.5	72.3	57.5	87.3	61.0	105.6	64.0	124.2	66.0

## 200 SERIES

### TAPER BORE NOZZLE: 27° Trajectory

Pressure BAR	1.05 in 26.7 mm		1.1 in 27.9 mm		1.2 in 30.5 mm		1.3 in 33.0 mm		1.4 in 35.6 mm		1.5 in 38.1 mm		1.6 in 40.6 mm		1.75 in 44.5 mm		1.9 in 48.3 mm	
	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)
4.0	55.9	52.0	63.7	54.0	73.6	56.5	86.1	58.5	99.4	62.0	114.7	65.0	130.5	67.0	155.7	71.0	184.1	74.5
4.5	59.4	54.0	67.6	56.0	78.1	58.5	91.3	61.0	105.4	64.0	121.6	67.0	138.4	69.5	165.1	73.5	195.2	77.0
5.0	62.6	55.5	71.4	58.0	82.3	60.5	96.3	63.5	111.2	66.5	128.1	69.5	145.9	72.0	174.1	76.0	205.6	79.5
5.5	65.7	57.0	75.0	60.0	86.3	62.5	101.0	65.5	116.6	68.5	134.3	71.5	153.0	74.0	182.6	78.5	215.5	81.5
6.0	68.7	58.5	78.4	61.5	90.1	64.5	105.5	67.0	121.8	70.0	140.2	73.0	159.8	76.0	190.7	80.5	224.9	84.0
6.5	71.5	60.0	81.6	63.0	93.8	66.0	109.9	69.0	126.8	72.0	145.9	75.0	166.3	78.0	198.5	82.5	234.0	86.0
7.0	74.3	61.5	84.8	64.5	97.3	67.0	114.0	70.5	131.6	73.5	151.4	76.5	172.5	79.5	206.0	84.5	242.7	88.0
7.5	76.9	62.5	87.8	65.5	100.7	68.5	118.0	71.5	136.3	75.0	156.6	78.5	178.6	81.5	213.2	86.0	251.1	89.5
8.0	79.5	63.5	90.8	66.5	104.0	69.5	121.9	72.5	140.7	76.5	161.7	80.0	184.4	83.0	220.2	87.5	259.2	91.5
8.5	81.9	64.0	93.6	67.0	107.2	70.5	125.7	73.5	145.1	77.5	166.7	81.0	190.1	84.5	227.0	89.0	267.1	93.0
9.0	84.3	65.0	96.4	68.0	110.3	71.0	129.4	74.0	149.3	78.5	171.5	82.5	195.6	85.5	233.6	90.0	274.7	94.5

### RING NOZZLE: 27° Trajectory

Pressure BAR	1.29 in 32.8 mm		1.46 in 37.1 mm		1.56 in 39.6 mm		1.66 in 42.2 mm		1.74 in 44.2 mm		1.83 in 46.5 mm		1.93 in 49.0 mm	
	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)	m³/hr	Rad. (m)
3.5	52.4	49.5	68.8	54.0	80.3	56.5	93.3	59.5	107.4	62.0	122.3	64.0	146.0	66.5
4.0	56.1	51.5	73.5	56.0	85.9	58.5	99.7	62.0	114.8	64.0	130.6	66.5	156.0	69.0
4.5	59.5	53.0	78.0	58.0	91.2	60.5	105.7	63.5	121.6	66.0	138.5	68.5	165.4	71.0
5.0	62.7	54.5	82.2	59.5	96.2	62.5	111.4	65.5	128.2	67.5	146.0	70.0	174.3	73.0
5.5	65.8	56.0	86.2	61.0	100.9	64.0	116.8	67.0	134.3	69.5	153.1	72.0	182.7	75.0
6.0	68.7	57.5	90.1	62.5	105.5	65.5	121.9	68.5	140.3	71.0	159.8	73.5	190.8	76.5
6.5	71.5	58.5	93.7	64.0	109.8	67.0	126.9	70.0	145.9	72.5	166.3	75.0	198.5	78.0
7.0	74.3	60.0	97.3	65.0	114.0	68.0	131.6	71.0	151.4	73.5	172.5	76.0	206.0	79.5
7.5	76.9	61.0	100.7	66.0	118.1	69.5	136.2	72.5	156.6	74.5	178.6	77.5	213.2	81.0
8.0	79.4	62.0	104.0	67.0	122.0	70.0	140.6	73.5	161.7	75.5	184.4	78.5	220.1	82.0
8.5	81.9	62.5	107.2	68.0	125.8	71.0	144.9	74.0	166.6	76.5	190.0	79.5	226.8	83.0
9.0	84.2	63.5	110.3	69.0	129.5	71.5	149.1	75.0	171.4	77.0	195.5	80.5	233.4	84.0

Radii are based on a 24° trajectory for the 75, 100, and 150 Series and 27° trajectory for the 200 Series. The lower trajectory angles result in better wind fighting ability, but reduced throw distances. Throw reduction depends upon nozzle flow rate. In general, the throw distance is reduced approximately 3% with each 3° drop in trajectory angle. Use of the wedge insert to modify trajectory will affect distance. Big Gun® performance data has been obtained under ideal test conditions and may be adversely affected by wind, poor hydraulic entrance conditions or other factors. Test riser height of 3 feet (0.91 meters) above measurement surface. No representation regarding droplet condition, uniformity, application rate, or suitability for a particular application is made herein. Pressure refers to pressure at the nozzle.