ORIGINAL BIG GUN

PLASTIC TAPER RING NOZZLES FOR THE **100 SERIES BIG GUN®** SPRINKLERS

12700	**100TR PLASTIC CAP + BODY**
12469	100TR PLASTIC CAP
12782	100TR PLASTIC BODY
12470-0127	12.7 mm TR100 PLASTIC NOZZLE
12470-014	14 mm TR100 PLASTIC NOZZLE
12470-016	16 mm TR100 PLASTIC NOZZLE
12470-017	17 mm TR100 PLASTIC NOZZLE
12470-018	18 mm TR100 PLASTIC NOZZLE
12470-019	19 mm TR100 PLASTIC NOZZLE
12470-020	20 mm TR100 PLASTIC NOZZLE
12470-021	21 mm TR100 PLASTIC NOZZLE
12470-022	22 mm TR100 PLASTIC NOZZLE
12470-023	23 mm TR100 PLASTIC NOZZLE
12470-024	24 mm TR100 PLASTIC NOZZLE

Nozzle Samples to Show Range

100 TAPER RING NOZZLE — 24° TRAJECTORY — **U.S. UNITS**

Pressure (PSI)	0.50"		0.55"		0.63"		0.67"		0.71"		0.75"		0.79"		0.83"		0.87"		0.91"		0.95"	
	12.7 mm		14 mm		16 mm		17 mm		18 mm		19 mm		20 mm		21 mm		22 mm		23 mm		24 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	39	94	49	98	67	106	76	110	86	113	98	117	110	121	125	125	136	127	151	130	166	138
50	44	99	55	105	75	112	85	116	97	120	110	125	123	129	139	133	152	136	169	140	185	144
60	50	107	62	112	83	120	94	123	106	127	120	132	135	137	153	141	167	143	186	147	203	152
70	52	111	65	117	89	125	101	130	114	134	130	139	146	143	165	148	180	150	200	155	219	160
80	56	114	70	121	95	130	108	135	122	139	139	144	156	149	176	153	193	157	214	162	235	168
90	60	119	75	125	101	134	115	139	130	145	147	150	166	154	187	159	204	162	227	167	249	173
100	63	124	79	130	107	139	121	144	137	149	155	154	175	159	197	164	216	167	240	172	262	178
110	67	129	82	135	112	144	127	149	143	154	163	159	183	163	207	168	226	171	251	177	275	182

100 TAPER RING NOZZLE — 24° TRAJECTORY — **METRIC UNITS**

Pressure (bar)	12.7 mm			14 mm			16 mm			17 mm			18 mm			19 mm			20 mm			21 mm			22 mm			23 mm			24 mm		
	0.50"			0.55"			0.63"			0.67"			0.71"			0.75"			0.79"			0.83"			0.87"			0.91"			0.95"		
	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)
2.75	2.5	8.9	28.5	3.1	11.2	30.0	4.2	15.2	32.5	4.8	17.3	33.5	5.4	19.6	34.5	6.2	22.3	35.5	6.9	24.9	37.0	7.9	28.3	38.0	8.6	30.8	38.5	9.5	34.3	39.5	10.4	37.6	41.5
3	2.6	9.3	29.0	3.2	11.7	31.0	4.4	15.9	33.0	5.0	18.0	34.0	5.7	20.5	35.0	6.5	23.2	36.5	7.2	26.1	38.0	8.2	29.6	39.0	9.0	32.2	39.5	9.9	35.8	40.5	10.9	39.3	42.5
3.5	2.8	10.1	30.5	3.5	12.6	32.0	4.8	17.2	34.5	5.4	19.5	35.5	6.1	22.1	37.0	7.0	25.1	38.0	7.8	28.2	39.5	8.9	31.9	40.5	9.7	34.8	41.5	10.7	38.7	42.5	11.8	42.4	44.5
4	3.0	10.8	31.5	3.8	13.5	33.5	5.1	18.4	36.0	5.8	20.9	37.0	6.6	23.6	38.5	7.5	26.8	39.5	8.4	30.1	41.5	9.5	34.1	42.5	10.3	37.2	43.0	11.5	41.4	44.5	12.6	45.3	46.0
4.5	3.2	11.5	33.0	4.0	14.4	34.5	5.4	19.5	37.0	6.2	22.2	38.5	7.0	25.1	40.0	7.9	28.5	41.5	8.9	32.0	43.0	10.0	36.2	44.0	11.0	39.5	45.0	12.2	43.9	46.0	13.4	48.1	48.0
5	3.4	12.2	34.0	4.2	15.2	36.0	5.7	20.6	38.5	6.5	23.4	40.0	7.3	26.4	41.0	8.3	30.0	42.5	9.4	33.7	44.0	10.6	38.1	45.5	11.6	41.7	46.5	12.9	46.3	48.0	14.1	50.7	49.5
5.5	3.6	12.8	35.0	4.4	15.9	37.0	6.0	21.6	39.5	6.8	24.5	41.0	7.7	27.7	42.5	8.7	31.5	44.0	9.8	35.4	45.5	11.1	40.0	47.0	12.1	43.7	47.5	13.5	48.6	49.0	14.8	53.2	51.0
6	3.7	13.4	36.0	4.6	16.7	38.0	6.3	22.6	40.5	7.1	25.6	42.0	8.0	29.0	43.5	9.1	32.9	45.0	10.3	37.0	46.5	11.6	41.8	48.0	12.7	45.7	49.0	14.1	50.7	50.5	15.4	55.6	52.0
6.5	3.9	14.0	37.0	4.8	17.3	39.0	6.5	23.5	41.5	7.4	26.7	43.0	8.4	30.1	45.0	9.5	34.2	46.5	10.7	38.5	47.5	12.1	43.5	49.0	13.2	47.5	50.0	14.7	52.8	52.0	16.1	57.8	53.5
7	4.0	14.5	38.0	5.0	18.0	40.0	6.8	24.4	43.0	7.7	27.7	44.5	8.7	31.3	46.0	9.9	35.5	47.5	11.1	40.0	48.5	12.5	45.1	50.0	13.7	49.3	51.0	15.2	54.8	53.0	16.7	60.0	54.5
7.5	4.2	15.0	39.0	5.2	18.7	40.5	7.0	25.3	44.0	8.0	28.7	45.5	9.0	32.4	47.0	10.2	36.8	48.0	11.5	41.4	49.5	13.0	46.7	51.0	14.2	51.1	52.0	15.8	56.8	54.0	17.3	62.1	55.5

Radii are based on a 24° trajectory. 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.

TAPER RING NOZZLE. This nozzle combines the changeability of a Ring Nozzle with some of the efficiency of a Taper Bore Nozzle.

848 Airport Road, Walla Walla, Washington 99362 U.S.A. / Tel: +1 509.525.7660 / Fax: +1 509.525.7907 / nelsonirrigation.com

NELSON

ORIGINAL BIG GUN

PLASTIC TAPER RING NOZZLES FOR THE **150 SERIES BIG GUN®** SPRINKLERS

12701	**150TR PLASTIC CAP + BODY**
12467	150TR PLASTIC CAP
12781	150TR PLASTIC BODY
12468-021	21 mm TR150 PLASTIC NOZZLE
12468-022	22 mm TR150 PLASTIC NOZZLE
12468-023	23 mm TR150 PLASTIC NOZZLE
12468-024	24 mm TR150 PLASTIC NOZZLE
12468-025	25 mm TR150 PLASTIC NOZZLE
12468-026	26 mm TR150 PLASTIC NOZZLE
12468-027	27 mm TR150 PLASTIC NOZZLE
12468-028	28 mm TR150 PLASTIC NOZZLE
12468-029	29 mm TR150 PLASTIC NOZZLE
12468-030	30 mm TR150 PLASTIC NOZZLE
12468-031	31 mm TR150 PLASTIC NOZZLE
12468-032	32 mm TR150 PLASTIC NOZZLE
12468-033	33 mm TR150 PLASTIC NOZZLE
12468-034	34 mm TR150 PLASTIC NOZZLE

150 TAPER RING NOZZLE — 24° TRAJECTORY — **U.S. UNITS**

Pressure (PSI)	0.83" 21 mm		0.87" 22 mm		0.91" 23 mm		0.95" 24 mm		0.98" 25 mm		1.02" 26 mm		1.06" 27 mm		1.10" 28 mm		1.14" 29 mm		1.18" 30 mm		1.22" 31 mm		1.26" 32 mm		1.30" 33 mm		1.34" 34 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	RAD. (FT)
50	123	131	135	135	149	139	164	143	179	147	196	151	214	155	233	159	253	163	274	167	296	170	319	174	344	177	369	179
60	134	138	148	142	163	147	179	151	196	155	214	159	234	163	255	167	277	172	301	176	325	180	350	184	377	187	405	189
70	144	146	159	150	176	154	194	158	212	162	231	166	253	170	276	175	300	179	325	183	351	187	378	191	407	194	437	197
80	154	150	170	155	188	160	207	165	226	169	247	173	271	178	295	182	320	187	347	191	375	195	404	199	435	202	467	205
90	164	155	181	160	199	165	220	170	241	175	262	179	287	184	313	189	340	194	368	198	398	202	429	206	461	209	495	212
100	173	160	191	165	210	170	231	175	254	179	277	183	303	188	330	193	358	198	388	203	419	207	452	212	486	215	522	218
110	181	165	200	170	220	175	243	180	266	184	290	188	317	194	346	199	375	204	407	208	440	213	474	217	510	220	548	223
120	189	170	209	175	230	180	253	185	277	189	303	193	331	199	361	204	392	209	425	213	459	218	495	222	533	225	572	229

150 TAPER RING NOZZLE — 24° TRAJECTORY — **METRIC UNITS**

Pressure (bar)	21 mm 0.83"			22 mm 0.87"			23 mm 0.91"			24 mm 0.95"			25 mm 0.98"			26 mm 1.02"			27 mm 1.06"			28 mm 1.10"			29 mm 1.14"			30 mm 1.18"			31 mm 1.22"			32 mm 1.26"			33 mm 1.30"			34 mm 1.34"		
	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)	L/S	M³/HR	RAD. (M)
3.5	7.8	28.0	40.5	8.6	30.9	41.5	9.5	34.1	43.0	10.4	37.5	43.5	11.4	41.0	45.0	12.4	44.8	46.0	13.6	49.0	47.0	14.8	53.3	48.5	16.1	57.9	50.0	17.4	62.8	51.0	18.8	67.8	52.5	20.3	73.1	53.0	21.9	78.7	54.5	23.5	84.5	55.0
4	8.3	29.9	41.5	9.2	33.0	43.0	10.1	36.4	44.5	11.1	40.1	45.5	12.2	43.8	47.0	13.3	47.8	48.0	14.5	52.3	49.0	15.8	57.0	50.5	17.2	61.9	52.0	18.6	67.1	53.0	20.1	72.5	54.0	21.7	78.1	55.5	23.4	84.2	56.0	25.1	90.3	57.0
4.5	8.8	31.7	43.0	9.7	35.0	44.5	10.7	38.6	46.0	11.8	42.5	47.0	12.9	46.5	48.5	14.1	50.7	49.5	15.4	55.5	51.0	16.8	60.5	52.5	18.2	65.7	53.5	19.8	71.2	55.0	21.4	76.9	56.0	23.0	82.9	57.0	24.8	89.3	58.0	26.6	95.8	59.0
5	9.3	33.4	44.5	10.2	36.9	46.0	11.3	40.7	47.5	12.4	44.8	48.5	13.6	49.0	50.0	14.9	53.5	51.0	16.3	58.5	52.5	17.7	63.8	54.0	19.2	69.2	55.5	20.8	75.1	56.5	22.5	81.1	57.5	24.3	87.4	59.0	26.1	94.1	60.0	28.1	101.0	60.5
5.5	9.7	35.1	45.5	10.7	38.7	47.0	11.8	42.6	49.0	13.0	47.0	50.0	14.3	51.4	51.5	15.6	56.1	52.5	17.0	61.4	54.0	18.6	66.9	55.5	20.2	72.6	57.0	21.9	78.7	58.0	23.6	85.0	59.5	25.5	91.6	60.5	27.4	98.7	61.5	29.4	105.9	62.5
6	10.2	36.6	47.0	11.2	40.4	48.5	12.4	44.5	50.0	13.6	49.0	51.5	14.9	53.7	52.5	16.3	58.6	54.0	17.8	64.1	55.5	19.4	69.9	57.0	21.1	75.8	58.5	22.8	82.2	59.5	24.7	88.8	61.0	26.6	95.7	62.0	28.6	103.0	63.0	30.7	110.6	64.0
6.5	10.6	38.1	48.0	11.7	42.0	49.5	12.9	46.3	51.5	14.2	51.0	52.5	15.5	55.9	54.0	16.9	61.0	55.0	18.5	66.7	57.0	20.2	72.7	58.0	21.9	78.9	59.5	23.8	85.6	61.0	25.7	92.5	62.0	27.7	99.7	63.5	29.8	107.2	64.5	32.0	115.2	65.5
7	11.0	39.5	49.0	12.1	43.6	51.0	13.3	48.0	52.5	14.7	52.9	54.0	16.1	58.0	55.0	17.6	63.3	56.5	19.2	69.2	58.0	21.0	75.5	59.5	22.8	81.9	61.0	24.7	88.8	62.5	26.7	96.0	63.5	28.7	103.4	65.0	30.9	111.3	65.5	33.2	119.5	67.0
7.5	11.4	40.9	50.5	12.5	45.2	52.0	13.8	49.7	53.5	15.2	54.8	55.0	16.7	60.0	56.0	18.2	65.5	57.5	19.9	71.7	59.0	21.7	78.1	60.5	23.6	84.8	62.0	25.5	91.9	63.5	27.6	99.3	65.0	29.7	107.1	66.0	32.0	115.2	67.0	34.4	123.7	68.0
8	11.7	42.2	51.5	13.0	46.6	53.0	14.3	51.3	54.5	15.7	56.6	56.0	17.2	62.0	57.0	18.8	67.6	58.5	20.6	74.0	60.0	22.4	80.7	61.5	24.3	87.6	63.0	26.4	94.9	64.5	28.5	102.6	66.0	30.7	110.6	67.0	33.0	119.0	68.0	35.5	127.7	69.0

Radii are based on a 24° trajectory. 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. TAPER RING NOZZLE. This nozzle combines the changeability of a Ring Nozzle with some of the efficiency of a Taper Bore Nozzle.

848 Airport Road, Walla Walla, Washington 99362 U.S.A. / Tel: +1 509.525.7660 / Fax: +1 509.525.7907 / nelsonirrigation.com

NELSON