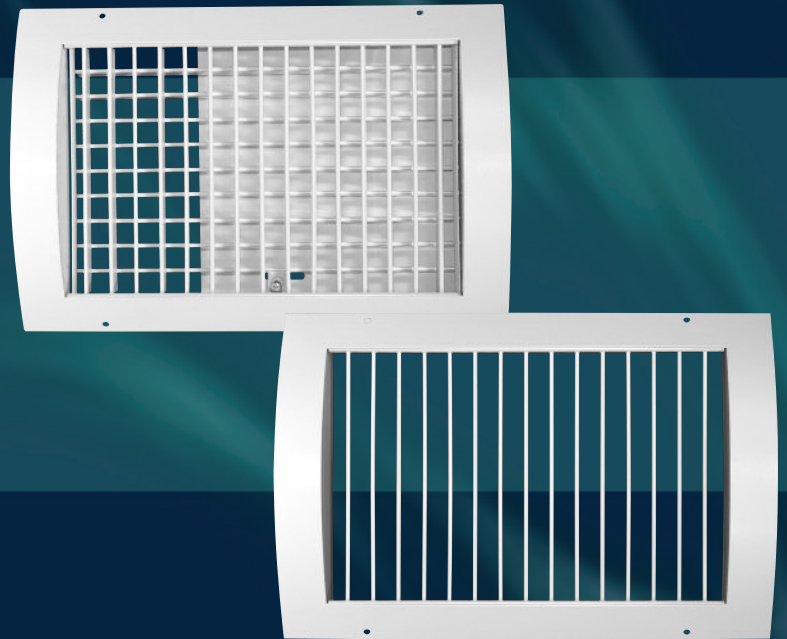


Curved Spiral Duct Grilles

Double Deflection &
Single Deflection



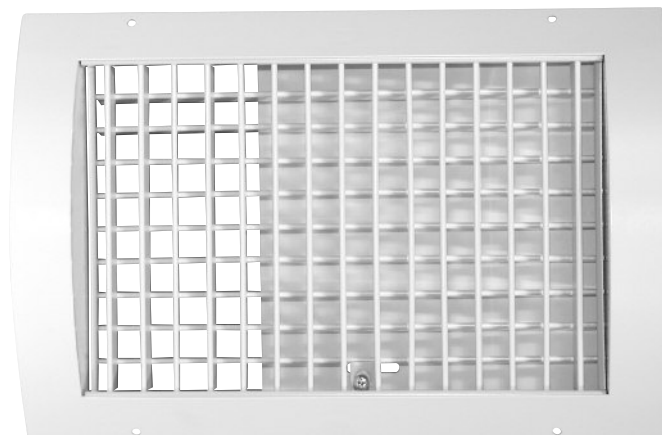
Full Radius Design

Range of Finishes Available

Double Deflection Curved Spiral Duct Grilles

- True Full Radius Design
- Supply

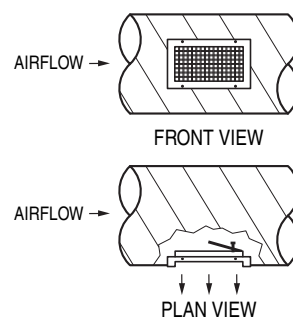
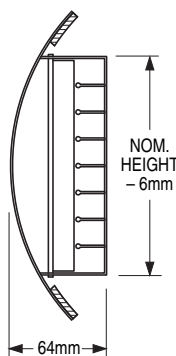
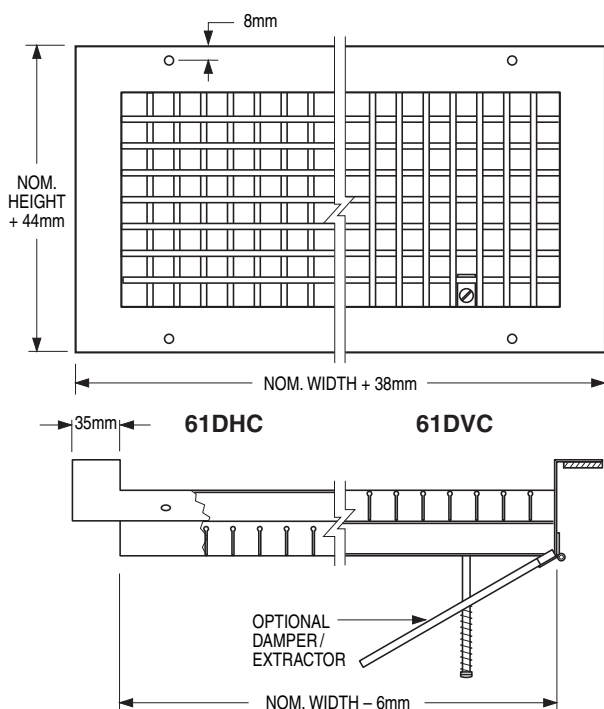
Models:
61DVC and 61DHC



Models 61DVC and 61DHC Curved Spiral Duct Supply Grilles are for use in exposed spiral duct applications requiring maximum flexibility. The front set of blades has the greatest effect on the air pattern, therefore should be selected based on particular requirements. Vertical front blades will control the spread and throw distance of the air pattern where as horizontal front blades will control the rise and drop of the air pattern, typically directing warm air downwards or cool air upwards. The innovative design incorporates a unique one piece frame, rolled to match the required duct radius, which eliminates any visible lines in the corners of the grille, enhancing the appearance. The grille frame mounts flush with the spiral duct and thus reduces the labour and installation cost by eliminating the need to fabricate stand-off saddles.

Features:

- Unique one piece, corrosion-resistant steel frame, with a 35mm face border, rolled to match required duct radius.
- Custom fabricated to fit only a single specified duct diameter.
- A dual set of individually adjustable, friction pivoted, extruded aluminium "teardrop" blades on 19mm centres.
- Supplied with Type A screw holes and mounting screws as standard.
- Standard finish is AW Appliance White Polyester Powder Finish, Semi Gloss as standard. Other finishes are available.
- A thick foam gasket is provided to ensure a tight seal to duct.
- An extensive range of sizes are available.
- Optional DEX Damper/Extractor (Air Scoop) is available.



Available Sizes

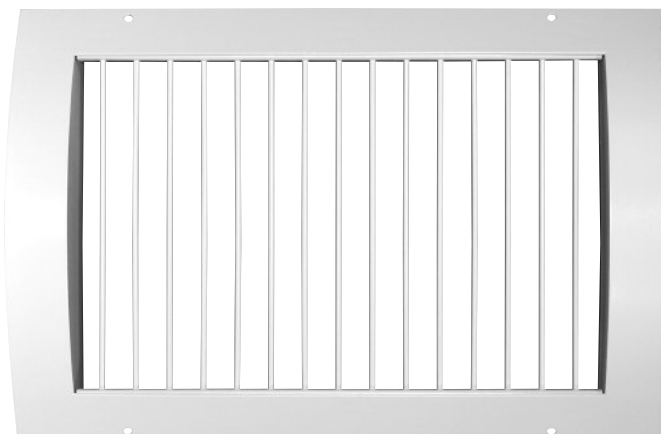
Width Min. - Max.	Height	Duct Diameter Min. - Max.
254 - 1219	76	152 - 914
254 - 1219	102	152 - 914
254 - 1219	152	203 - 914
254 - 1219	203	254 - 914
254 - 1219	254	305 - 914
305 - 914	305	356 - 914

Duct diameters in even sizes only. Grilles available in nominal 25mm increments in width.

Single Deflection Curved Spiral Duct Grilles

- True Full Radius Design
- Supply

Models:
61SVC and 61SHC

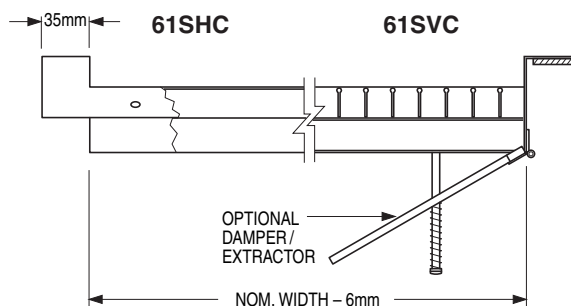
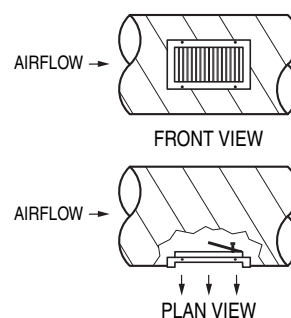
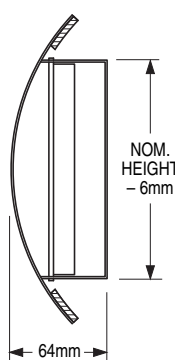
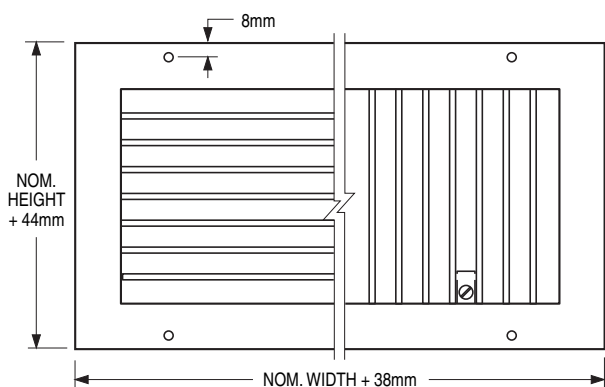


Models 61SVC and 61SHC Curved Spiral Duct Supply Grilles are for use in exposed spiral duct applications requiring adjustment in a single horizontal or vertical plane. The vertical blades will control the spread and throw distance of the air pattern to accommodate various layouts. Horizontal blades will control the rise and drop of the air pattern, typically directing warm air downwards or cool air upwards.

The innovative design incorporates a unique one piece frame, rolled to match the required duct radius, which eliminates any visible lines in the corners of the grille, enhancing the appearance. The grille frame mounts flush with the spiral duct and thus reduces the labour and installation cost by eliminating the need to fabricate stand-off saddles.

Features:

- Unique one piece, corrosion-resistant steel frame, with a 35mm face border, rolled to match required duct radius.
- Custom fabricated to fit only a single duct diameter.
- A single set of individually adjustable, friction pivoted, extruded aluminium "teardrop" blades on 19mm centres.
- Supplied with Type A screw holes and mounting screws as standard.
- Standard finish is AW Appliance White Polyester Powder Finish, Semi Gloss as standard. Other finishes are available.
- A thick foam gasket is provided to ensure a tight seal to duct.
- An extensive range of sizes are available.
- Optional DEX Damper/Extractor (Air Scoop) is available.



Available Sizes

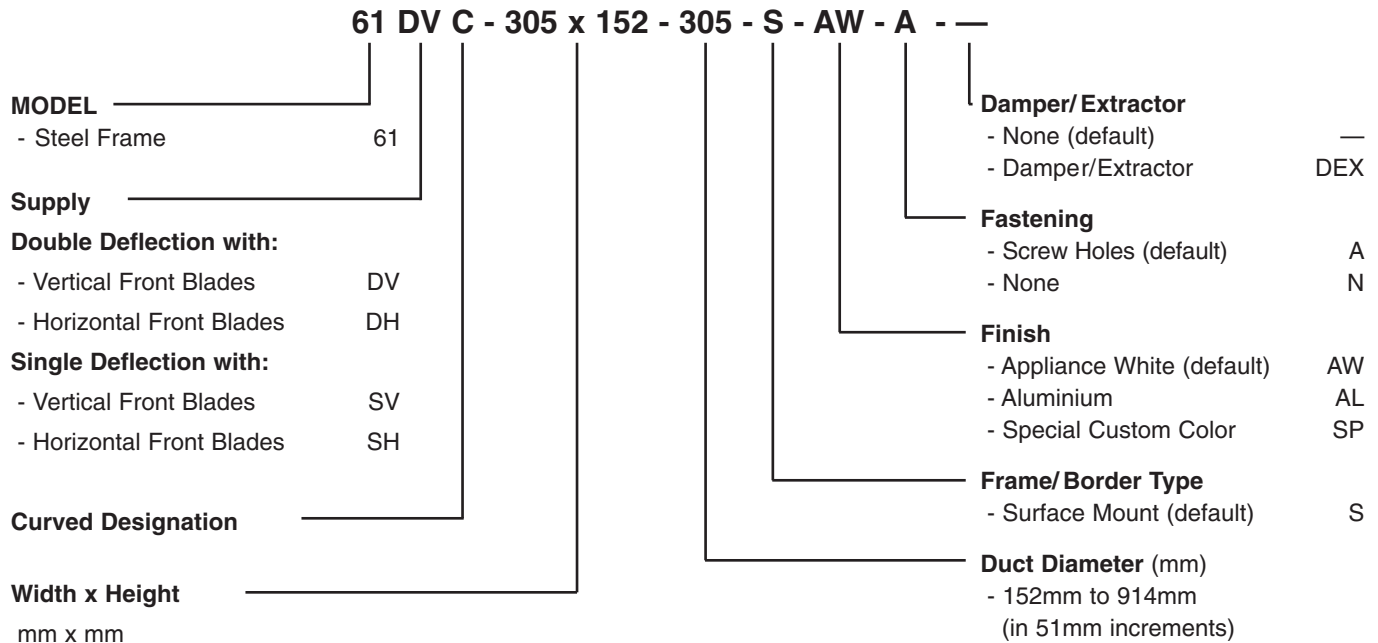
Width Min. - Max.	Height	Duct Diameter Min. - Max.
254 - 1219	76	152 - 914
254 - 1219	102	152 - 914
254 - 1219	152	203 - 914
254 - 1219	203	254 - 914
254 - 1219	254	305 - 914
305 - 914	305	356 - 914

Duct diameters in even sizes only. Grilles available in nominal 25mm increments in width.

How To Specify or To Order

(Show complete Model Number and Size, unless "Default" is desired)

Curved Spiral Duct Supply Grilles – Model Series 6100C



Notes:

- Advanced Air recommends the selection of vertical front blades on supply models for the majority of applications.
- Refer to "Available Sizes" table on page 2 or 3 for grille height/ duct diameter limitations.
- For a standard grille with no special requirements, the "default" will automatically be selected. For example, a double deflection grille with vertical front blades is Model 61DVC. Unit will be supplied with screw holes and AW Appliance White Polyester Powder semi-gloss finish.

Performance Notes

- Performance data is based on double deflection grille without damper / extractor.
- 0°, 22.5° and 45° represent vertical blade deflection angles and horizontal spread.
- Throw values are given for terminal velocities of 0.5 and 0.25 m/s fpm under isothermal conditions, direct duct mounted grille, exposed duct with no ceiling effect.

- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.
- Noise Criteria (values) based on 10 dB room absorption, re 10-12 watts @ 0° deflection.

NC Corrections for Blade Deflection and Damper/Extractor set at 45 degrees (add).

Model Type	Damper/ Extractor	Blade Deflection		
		0°	22 1/2°	45°
Double Deflection	With	+5	+7	+12
	Without	0	+2	+7
Single Deflection	With	+1	+3	+10
	Without	-4	-2	+5

Pressure Drop Correction Factors for Grilles with Damper/Extractor set at 45°

Blade Deflection	0°	22.5°	45°
Double defl. Factor	x 2.00	x 2.08	x 2.23
Single defl. Factor	x 1.83	x 1.91	x 2.13

Performance Data

Curved Spiral Duct Supply Grilles • 6100C Series
 Models: 61DVC, 61DHC, 61SVC, 61SHC

Duct Size (mm)	Alternative Size (mm)	Core Area (m ²)	Core Velocity (m/s)		1.5	2	2.5	3	3.5	4	5	6	7
			Pressure Drop (Pa)	0°	22.5°	45°	3	6	9	13	18	23	16
254 x 76		0.014	Flowrate (l/s)	21	28	35	42	50	57	71	85	99	
			NC Level	-	-	-	13	18	22	28	34	39	
			Throw (m)	0°	1.2 2.4	1.5 2.7	1.8 3.4	2.4 4.0	3.0 4.3	3.4 4.6	3.7 4.9	4.0 5.5	4.3 5.8
305 x 76		0.018	Flowrate (l/s)	27	36	45	54	63	72	90	108	126	
			NC Level	-	-	-	14	19	23	29	35	41	
			Throw (m)	0°	1.5 2.7	1.8 3.4	2.4 4.0	3.0 4.3	3.4 4.6	3.4 4.9	4.0 5.5	4.3 5.8	4.6 6.4
254 x 102	356 x 76	0.020	Flowrate (l/s)	31	42	52	62	73	83	104	125	145	
			NC Level	-	-	-	14	19	23	29	35	41	
			Throw (m)	0°	1.5 3.0	2.1 3.7	2.7 4.0	3.0 4.6	3.4 4.9	3.7 5.2	4.3 5.8	4.6 6.1	4.9 6.7
305 x 102	406 x 76	0.025	Flowrate (l/s)	38	51	64	76	89	102	127	153	178	
			NC Level	-	-	10	15	20	24	30	36	41	
			Throw (m)	0°	1.8 3.4	2.4 4.0	3.0 4.3	3.4 4.9	4.0 5.5	4.0 5.8	4.6 6.4	4.9 6.7	5.2 7.6
457 x 76		0.027	Flowrate (l/s)	41	55	68	82	96	109	137	164	192	
			NC Level	-	-	11	16	21	25	31	37	42	
			Throw (m)	0°	1.8 3.7	2.7 4.3	3.4 4.6	3.7 5.2	4.0 5.8	4.3 6.1	4.9 6.7	5.2 7.3	5.5 7.9
508 x 76	254 x 152 356 x 102	0.030	Flowrate (l/s)	45	60	76	91	106	121	151	181	211	
			NC Level	-	-	11	16	21	25	31	37	42	
			Throw (m)	0°	1.8 4.0	2.7 4.6	3.4 5.2	4.0 5.5	4.3 6.1	4.6 6.4	4.9 7.0	5.5 7.6	5.8 8.2
406 x 102	559 x 76	0.033	Flowrate (l/s)	51	68	85	102	119	136	170	204	238	
			NC Level	-	-	12	17	22	26	32	38	43	
			Throw (m)	0°	1.8 4.0	3.0 4.6	3.4 5.5	4.0 5.8	4.6 6.1	4.6 6.7	5.2 7.3	5.5 7.9	6.1 8.5
305 x 152	457 x 102 610 x 76	0.039	Flowrate (l/s)	59	79	99	119	139	159	198	238	277	
			NC Level	-	-	12	17	22	26	32	38	43	
			Throw (m)	0°	1.8 4.0	3.0 4.6	3.4 5.5	4.0 5.8	4.6 6.4	4.6 6.7	5.2 7.3	6.1 8.2	6.1 8.8
508 x 102	711 x 76	0.042	Flowrate (l/s)	64	85	106	127	149	170	212	255	297	
			NC Level	-	-	13	18	23	26	32	39	43	
			Throw (m)	0°	2.1 4.3	3.0 4.6	3.7 5.2	4.0 5.5	4.3 5.8	4.6 6.7	5.2 7.3	5.5 7.6	6.1 8.5
356 x 152	254 x 203 559 x 102	0.046	Flowrate (l/s)	71	94	118	142	165	189	236	283	330	
			NC Level	-	-	13	18	23	27	33	39	44	
			Throw (m)	0°	2.4 3.7	3.4 4.9	4.0 5.5	4.3 6.1	4.6 6.7	4.9 7.0	5.5 7.6	6.1 8.5	6.7 9.1
305 x 203	406 x 152 610 x 102 813 x 76	0.054	Flowrate (l/s)	82	109	137	164	192	219	274	328	383	
			NC Level	-	-	14	19	24	28	34	40	45	
			Throw (m)	0°	2.4 4.6	3.4 5.2	4.0 5.8	4.6 6.4	4.9 6.7	5.2 7.3	5.8 8.2	6.4 8.8	6.7 9.8
254 x 254	660 x 102 864 x 76	0.057	Flowrate (l/s)	86	115	144	173	202	230	288	345	403	
			NC Level	-	-	14	19	24	28	34	40	45	
			Throw (m)	0°	2.4 4.6	3.4 5.2	4.0 6.1	4.6 6.4	4.9 6.7	5.2 7.6	6.1 8.2	6.4 9.1	6.7 9.8

For performance data notes, please refer to page 4.

Performance Data

Curved Spiral Duct Supply Grilles • 6100C Series

Models: 61DVC, 61DHC, 61SVC, 61SHC

Duct Size (mm)	Alternative Size (mm)	Core Area (m ²)	Core Velocity (m/s)		1.5	2	2.5	3	3.5	4	5	6	7	
			Pressure Drop (Pa)	0°	22.5°	45°	3	6	9	13	18	23	16	23
457 x 152		0.060	Flowrate (l/s)	92	123	153	184	215	245	245	307	368	429	
			NC Level	-	-	15	20	25	29	35	41	41	46	46
			Throw (m)	0°	2.4 4.6	3.4 5.5	4.3 6.1	4.6 6.7	5.2 7.3	5.5 7.6	6.1 8.5	6.7 9.8	7.3 10.4	7.3 10.4
305 x 254		0.069	Flowrate (l/s)	105	140	175	210	244	279	349	419	489		
			NC Level	-	-	15	20	25	29	35	41	41	46	46
			Throw (m)	0°	2.7 5.2	3.7 5.8	4.6 6.7	5.2 7.0	5.5 7.6	5.8 8.2	6.7 9.1	7.0 10.4	7.6 11.0	7.6 11.0
559 x 152	406 x 203	0.074	Flowrate (l/s)	113	151	189	227	264	302	378	453	529		
			NC Level	-	-	16	21	26	30	36	42	42	47	47
			Throw (m)	0°	2.7 5.5	4.0 6.1	4.6 6.7	5.5 7.6	5.8 8.2	6.1 8.8	6.7 9.8	7.6 10.7	8.2 11.3	8.2 11.3
305 x 305	356 x 254	0.084	Flowrate (l/s)	127	170	212	255	297	340	425	510	595		
			NC Level	-	-	16	21	26	30	36	42	42	47	47
			Throw (m)	0°	3.0 5.5	4.0 6.1	4.9 7.0	5.5 7.6	5.8 8.2	6.1 8.8	7.0 10.1	7.6 11.0	8.2 11.9	8.2 11.9
457 x 254		0.105	Flowrate (l/s)	160	213	267	320	373	427	533	640	747		
			NC Level	-	10	17	22	27	31	37	43	43	48	48
			Throw (m)	0°	3.4 6.1	4.3 7.0	5.5 7.6	6.1 8.5	6.4 9.1	7.0 9.8	7.6 11.0	8.5 12.2	9.1 13.1	9.1 13.1
610 x 203	406 x 305 508 x 254	0.111	Flowrate (l/s)	170	227	283	340	396	453	566	680	793		
			NC Level	-	10	17	22	27	31	37	43	43	48	48
			Throw (m)	0°	4.0 7.0	5.5 8.2	6.1 8.8	7.0 10.1	7.6 11.0	8.2 11.6	8.8 12.8	10.1 14.0	11.0 15.2	11.0 15.2
457 x 305	559 x 254	0.127	Flowrate (l/s)	194	259	323	388	453	517	647	776	905		
			NC Level	-	11	18	23	28	32	38	44	44	49	49
			Throw (m)	0°	4.0 7.0	5.5 8.2	6.4 9.1	7.0 10.1	7.6 11.0	8.2 11.6	9.1 13.1	10.1 14.3	11.0 15.2	11.0 15.2
610 x 254	508 x 305 762 x 203	0.141	Flowrate (l/s)	215	287	359	430	502	574	717	861	1004		
			NC Level	-	11	18	23	28	32	38	44	44	49	49
			Throw (m)	0°	4.0 7.6	5.5 8.8	6.7 9.8	7.6 10.7	8.2 11.3	8.8 12.2	9.8 13.7	10.7 14.9	11.3 16.2	11.3 16.2
813 x 203	559 x 305	0.150	Flowrate (l/s)	228	304	380	456	532	608	760	912	1064		
			NC Level	-	11	18	23	28	32	38	44	44	49	49
			Throw (m)	0°	4.3 7.9	5.5 8.8	6.7 10.1	7.9 11.0	8.5 11.9	8.8 12.5	10.1 14.3	11.0 15.5	11.9 16.8	11.9 16.8
610 x 305	762 x 254 914 x 203	0.172	Flowrate (l/s)	262	349	437	524	611	698	873	1048	1222		
			NC Level	-	12	19	24	29	33	39	45	45	50	50
			Throw (m)	0°	4.3 8.2	5.8 9.4	7.0 10.4	8.2 11.6	8.5 12.5	9.4 13.1	10.4 14.6	11.6 16.2	12.5 17.4	12.5 17.4
813 x 254	711 x 305	0.190	Flowrate (l/s)	289	385	481	578	674	770	963	1155	1348		
			NC Level	-	12	19	24	29	33	39	45	45	50	50
			Throw (m)	0°	4.6 8.5	6.1 10.1	7.6 11.0	8.5 12.2	9.1 13.1	10.1 14.0	11.0 15.8	12.2 17.4	13.1 18.6	13.1 18.6
762 x 305	914 x 254	0.216	Flowrate (l/s)	328	438	547	657	766	876	1095	1314	1533		
			NC Level	-	13	20	25	30	34	40	46	46	51	51
			Throw (m)	0°	4.9 9.1	6.7 10.7	8.2 11.9	9.1 13.1	10.1 14.3	10.7 15.2	11.3 16.8	13.1 18.3	14.3 20.1	14.3 20.1

For performance data notes, please refer to page 4.