

Performance Data



USR34 Series

Duct Size	Core Eff. Area (ft ²)	Neck Velocity (FPM) Velocity Pressure	300		400			500			600			700			800			1000			1200			1400			
			0.004	0.008	0.013	0.018	0.025	0.033	0.051	0.074	0.1																		
10x3	0.139	CFM	42		55			69			83			97			111			139			166			194			
		NC	<20		<20			<20			20			20-25			25			30			35			40			
		Throw(ft.)	3	4	5	5	6	7	6	7	8.5	6	7.5	8.5	8	9	12.5	9	10	13	10	11.5	15	12	13	21	15	17	25
12x3	0.168	CFM	50		67			84			101			117			134			168			201			235			
		NC	<20		<20			<20			20			20-25			25			30			35			40			
		Throw(ft.)	4	4.5	5.5	5	6	7.5	7	8	9	7	8	10	9	10	14	10	11	14.5	11	13	20	13	14.5	23	17	19	28
10x4 14x3	0.191	CFM	57		76			95			115			134			153			191			229			267			
		NC	<20		<20			<20			20			25			30			35			40			45			
		Throw(ft.)	5	5.5	6.5	6	7	9	8	9	11	9	10	14	11	12	16	12	13.5	18	14	16	24	16	18	28	19	22	32
12x4 16x3	0.231	CFM	69		92			116			139			162			185			231			277			323			
		NC	<20		<20			<20			20			25			30			35			40			45			
		Throw(ft.)	5	5.5	6.5	6	7	9	8	9	11	9	10	14	11	12	16	12	13.5	18	14	16	24	16	18	28	19	22	32
18x3	0.255	CFM	76		102			127			153			178			204			255			306			357			
		NC	<20		<20			<20			20			25			30			35			40			45			
		Throw(ft.)	5	6	7	7	8	10	9	10	12	10	11	15	12	13	18	13	14	19	15	17	26	18	20	31	20	23	37
10x6	0.299	CFM	90		120			150			180			210			240			299			359			419			
		NC	<20		<20			<20			20			25			30			35			40			45			
		Throw(ft.)	5	6.5	7.5	7	8	10	10	11	13	11	12	16	13	14.5	20	14	16	22	16	19	29	19	22	34	22	26	40
16x4	0.311	CFM	93		125			156			187			218			249			311			374			436			
		NC	<20		<20			<20			20			25			30			35			40			45			
		Throw(ft.)	5	6.5	7.5	7	8	10	10	11	13	11	12	16	13	14.5	20	14	16	22	16	19	29	19	22	34	22	26	40
12x6	0.362	CFM	109		145			181			217			254			290			362			435			507			
		NC	<20		<20			<20			20			25			30			35			40			45-50			
		Throw(ft.)	6	7	8	8	9	11	10	11.5	14	12	13	18	14	16	21	16	18	24	18	21	32	22	26	38	25	30	44
14x6	0.425	CFM	128		170			213			255			298			340			425			510			595			
		NC	<20		<20			<20			20			25			30			35			40			45-50			
		Throw(ft.)	6	7.5	9	9	10	12	11	12	14.5	12	13.5	19	14	16	22	17	19	25	19	22	33	22	26	39	25	30	45
30x3	0.430	CFM	129		172			215			258			301			344			430			515			601			
		NC	<20		<20			<20			20			25			30			35			40			45-50			
		Throw(ft.)	6	7.5	9	9	10	12	11	12	14.5	12	13.5	19	14	16	22	17	19	25	19	22	33	22	26	39	25	30	45
16x6 24x4	0.472	CFM	142		189			236			283			330			377			472			566			660			
		NC	<20		<20			<20			20			25			30			35			40			45-50			
		Throw	7	8	10	9	10	12	11	12.5	16	13	14.5	20	15	17	23	17	20	26	19	22	34	23	27	40	26	31	46
18x6 36x3	0.551	CFM	165		220			276			331			386			441			551			661			772			
		NC	<20		<20			<20			20			25			30			35			40			45-50			
		Throw(ft.)	7	8	10	9	10	12	11	12.5	16	13	14.5	20	15	17	23	17	20	27	20	23	34	23	27	41	26	31	47
14x8	0.580	CFM	174		232			290			348			406			464			580			695			811			
		NC	<20		<20			<20			20			25			30			35			40			45-50			
		Throw(ft.)	7	8	10	9	10.5	12.5	12	13	17	13	15	21	16	18	24	18	21	28	20	23	36	24	28	43	28	33	49
20x6 30x4	0.614	CFM	184		246			307			368			430			491			614			737			860			
		NC	<20		<20			<20			20			25			30			35			40			45-50			
		Throw	7	8.5	10.5	9	10.5	13	12	13.5	17	14	15.5	21	16	18	25	18	21	28	20	24	37	25	29	44	29	34	51

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			0.004	0.008	0.013	0.018	0.025	0.033	0.051	0.074	0.1																	
18x8 24x6	0.751	CFM	225		300			376			451			526			601			751			901			1051		
		NC	<20		<20			<20			20			25			30			35-40			40-45			>55		
		Throw	8	9	11	10	11.5	14.5	14	16	19	15	17	23	17	20	27	19	22	30	22	26	40	27	32	48	31	37
20x8	0.837	CFM	251		335			418			502			586			669			837			1004			1171		
		NC	<20		<20			<20			20			25			30			35-40			40-45			>55		
		Throw(ft.)	9	10	12	11	12.5	15	14	16	20	16	18	24	18	21	29	21	24	32	24	29	43	28	34	52	33	40
30x6	0.929	CFM	279		372			464			557			650			743			929			1115			1300		
		NC	<20		<20			20			25			30			30-35			35-40			40-45			>55		
		Throw	10	11	13.5	13	15	19	16	19	23	18	21	28	20	24	35	23	28	38	27	33	50	34	41	59	38	47
20x10	1.059	CFM	318		424			530			636			742			848			1059			1271			1483		
		NC	<20		<20			20			25			30			30-35			35-40			40-45			>55		
		Throw(ft.)	10	11.5	14.5	14	16	20	17	20	24	19	22	30	22	26	37	25	30	40	29	35	53	35	42	62	40	49
18x12	1.151	CFM	345		460			575			690			805			921			1151			1381			1611		
		NC	<20		<20			20			25			30			30-35			35-40			40-45			>55		
		Throw(ft.)	10	11.5	14.5	14	16	20	17	20	24	20	23	31	22	26	37	26	31	41	29	35	53	35	42	64	43	53
30x8	1.266	CFM	380		506			633			759			886			1012			1266			1519			1772		
		NC	<20		<20			20			25			30			30-35			35-40			40-45			>55		
		Throw	10	12	15	15	17	21	18	21	24	20	23	33	24	28	39	27	32	43	30	36	56	37	44	66	45	55
24x12	1.545	CFM	463		618			772			927			1081			1236			1545			1854			2163		
		NC	<20		<20			20			25			30			30-35			35-40			40-45			>55		
		Throw(ft.)	13	14.5	18	17	19	23	20	23	28	23	27	37	27	32	43	30	36	48	35	42	64	40	50	76	48	59
30x12	1.939	CFM	582		776			969			1163			1357			1551			1939			2327			2714		
		NC	<20		<20			20			25			30			30-35			35-40			45-50			>55		
		Throw(ft.)	14	16	20	19	22	26	22	26	32	25	30	40	29	35	47	33	40	54	38	47	71	46	57	85	53	66
36x12	2.333	CFM	700		933			1167			1400			1633			1866			2333			2800			3266		
		NC	<20		<20			20			25			30			30-35			35-40			45-50			>55		
		Throw(ft.)	15	17	21	20	23	29	25	29	35	28	33	45	32	38	52	36	44	60	42	52	78	50	62	94	59	73

Performance Notes:

- 1) Performance data calculated with blades set at 0°
- 2) Engineering based off nominal face dimension
- 3) Throw values are measured in feet for terminal velocities of 150/100/50 FPM
- 4) Throw data is based on supply air and room air both at isothermal conditions
- 5) Effective core areas listed in chart are defined as the measurement of space between the blades actually utilized by the air
- 6) Data obtained from tests conducted in accordance with ANSI/ASHRAE standard 70-2006