

Accutrol provides the following sound data as sound power levels for supply, exhaust and radiated operating conditions.

For reference:

Discharge sound is the noise emitted from the valve and transmitted through the supply duct into the room. Discharge (supply) sound travels in the same direction as airflow.

Exhaust sound is the noise emitted from the valve and transmitted through the exhaust duct into the room. Exhaust sound travels against the direction of airflow.

Radiated sound is sound emitted through the valve body and into the surrounding space.

NC VALUES

		Noise Criteria (NC)							
Size	CFM	Discharge				Radiated			
		ΔPs				ΔPs			
		0.5"	1.0"	2.0"	3.0"	0.5"	1.0"	2.0"	3.0"
8	100	-	-	-	22	-	21	-	23
	300	-	-	22	31	-	24	27	30
	500	-	-	24	34	-	28	30	32
	600	-	-	29	35	20	23	28	32
	700	24	20	31	35	26	22	27	32
10	150	-	-	-	-	-	-	-	20
	300	-	-	20	-	-	-	23	25
	500	-	-	24	28	-	-	35	30
	800	-	22	30	33	-	22	26	31
	1000	-	23	32	37	-	22	28	32
12	200	-	-	-	20	-	-	21	23
	400	-	-	25	30	-	-	24	26
	800	-	21	30	36	-	-	24	28
	1200	-	24	32	37	-	21	25	30
	1500	-	25	34	38	-	21	28	31
14	200	-	-	27	34	-	-	24	28
	600	-	22	30	36	-	-	24	30
	1000	-	21	24	27	-	21	28	33
	1600	-	23	36	39	-	21	36	39
	2200	-	22	39	46	-	23	34	44

		Noise Criteria (NC)							
Size	CFM	Discharge				Radiated			
		ΔPs				ΔPs			
		0.5"	1.0"	2.0"	3.0"	0.5"	1.0"	2.0"	3.0"
12x18	200	-	-	22	25	-	22	28	33
	600	-	21	34	37	-	21	35	40
	1000	-	23	40	46	-	24	35	46
	1800	-	30	40	45	20	24	36	43
	2000	-	28	43	46	23	27	35	43
12x24	400	-	-	-	20	-	20	26	36
	1200	-	-	27	33	-	23	34	39
	2000	-	21	30	36	-	25	35	40
	2400	-	24	32	37	-	25	35	40
	3000	-	25	29	38	23	26	35	41
12x36	600	-	22	25	28	-	23	30	34
	1800	-	27	40	43	-	25	40	43
	3000	20	26	43	50	-	27	39	47
	4200	-	34	44	49	23	27	40	46
	4500	20	33	46	49	26	31	39	47
12x48	800	-	-	20	26	-	24	30	40
	2400	-	22	31	36	-	26	37	43
	4000	-	25	34	39	20	28	37	43
	5600	-	27	36	40	22	28	38	43
	6000	22	29	37	42	25	30	37	45

ΔPs is the difference in static pressure from inlet to discharge ▪ Dash (-) in space denotes NC value less than 20
 ▪ Sound data based on tests conducted in accordance with ARI standard 880-98

OCTAVE BAND SOUND ATTENUATION FACTORS

Radiated Sound	Octave Band						Notes
	2	3	4	5	6	7	
Environmental Effect	2	1	0	0	0	0	Per ARI 885-98
Ceiling/Space Effect	16	18	20	26	31	36	Mineral Fiber Tile, 5/8 inch - 20lb./cubic foot
Total dB Reduction	18	19	20	26	31	36	

Discharge Sound	Octave Band						Notes
	2	3	4	5	6	7	
Environmental Effect	2	1	0	0	0	0	Per ARI 885-98
Duct Lining	2	6	12	25	29	18	5 foot, 1-inch Fiberglass duct lining
End Reflection	9	5	2	0	0	0	8-inch Termination to Diffuser
5 ft., 8 in Flex Duct	6	10	18	20	21	12	Vinyl core Flex
Space Effect	5	6	7	8	9	10	2500 cubic foot room, 5 feet from source
Total dB Reduction	24	28	39	53	59	40	

The following dB adjustments are used, ARI 885-98 for the calculation of NC above 300 CFM

Radiated Sound	Octave Band					
	2	3	4	5	6	7
300-700 CFM	2	1	1	-2	-5	-1
Over 700 CFM	4	3	2	-2	-7	-1

All specifications are subject to change without notice.

AccuValve EXHAUST Sound Performance Data

OCTAVE BAND DISCHARGE SOUND POWER LEVEL (dB re. 10 ⁻¹² Watts)																									
Size	CFM	0.5" ΔPs (125 Pa)						1.0" ΔPs (250 Pa)						2.0" ΔPs (500 Pa)						3.0" ΔPs (750 Pa)					
		125	250	500	1K	2K	4K	125	250	500	1K	2K	4K	125	250	500	1K	2K	4K	125	250	500	1K	2K	4K
		2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7
8	100	48	41	45	45	46	39	53	46	50	49	50	51	53	50	50	53	52	55	57	55	56	56	58	
	300	51	48	50	47	45	41	57	52	53	53	52	49	61	59	58	59	59	57	65	63	62	62	63	61
	500	52	53	52	51	48	45	58	56	55	56	53	52	64	62	61	63	61	61	67	65	63	64	64	63
	600	53	56	53	55	52	49	60	58	57	59	55	55	64	64	62	64	63	63	68	66	64	65	65	65
	700	54	56	53	55	52	49	61	59	58	60	56	56	66	65	63	64	66	65	68	67	65	66	68	67
10	150	48	46	45	43	48	40	52	49	47	45	50	54	55	53	52	51	54	61	56	56	52	53	55	61
	300	50	46	46	45	48	41	57	51	52	51	53	55	62	58	58	57	58	61	58	58	55	55	57	61
	500	53	48	48	46	47	42	59	55	53	54	54	52	66	60	58	59	60	61	69	65	62	61	63	64
	800	54	49	48	49	50	43	62	57	55	56	58	53	68	64	62	62	63	62	71	66	65	64	66	65
	1000	53	53	51	55	57	50	63	57	55	57	58	54	70	66	63	63	66	64	74	70	68	67	70	69
12	200	48	43	41	45	51	42	52	46	45	48	57	57	61	54	51	53	57	64	62	59	56	56	59	62
	400	51	49	49	46	51	46	56	53	53	53	55	55	62	57	55	56	58	61	63	62	59	60	62	63
	800	52	50	49	48	51	52	60	58	55	56	57	58	66	63	60	62	62	62	69	67	63	65	66	65
	1200	52	52	49	53	55	57	61	58	55	57	59	60	69	67	63	64	66	65	73	71	67	69	70	69
	1500	53	53	50	55	57	58	63	59	55	59	60	61	69	66	63	64	66	66	74	72	67	70	71	70
14	200	39	35	32	32	28	24	45	36	37	40	39	32	47	40	41	44	46	45	51	43	42	46	49	49
	600	44	45	44	48	46	42	50	46	45	48	48	43	54	52	51	53	54	51	56	55	53	54	55	54
	1000	46	46	47	48	47	42	53	52	51	53	53	49	58	55	53	56	57	53	62	60	57	60	61	58
	1600	50	49	48	52	52	43	55	53	52	56	59	52	61	59	56	60	63	56	65	63	59	62	65	60
	2200	56	52	47	55	62	48	57	56	54	59	63	55	63	62	61	63	66	61	67	65	64	65	67	63
12x18	200	49	41	41	43	44	37	55	47	43	44	48	46	57	53	48	48	52	54	60	57	51	50	56	61
	600	49	43	43	46	46	38	58	52	49	52	53	49	67	64	55	55	58	59	67	69	60	55	58	61
	1000	51	46	46	49	47	38	59	52	51	54	54	50	70	64	59	60	62	60	75	73	66	65	66	67
	1800	52	49	49	52	52	42	61	56	53	58	59	52	70	68	60	62	63	60	75	73	66	66	66	66
	2000	54	52	51	54	56	48	60	56	54	59	60	53	73	69	62	65	66	66	75	74	67	67	67	66
12x24	400	45	42	42	41	39	34	51	46	46	47	49	51	56	53	54	55	61	66	65	64	62	60	64	66
	1200	48	44	45	45	42	35	55	51	53	52	52	49	64	60	60	58	60	61	67	64	64	62	66	66
	2000	54	46	45	44	46	36	55	53	54	55	55	50	62	60	62	61	63	62	66	64	65	64	66	66
	2400	56	50	48	48	52	41	57	54	55	55	57	50	64	61	63	62	64	61	68	65	66	66	67	66
	3000	62	55	51	53	58	48	60	55	53	55	59	50	65	62	63	63	64	61	69	67	68	68	69	67
12x36	600	52	44	44	46	47	40	58	50	46	47	51	49	60	56	51	51	55	57	63	60	54	53	59	64
	1800	52	46	46	49	49	41	61	55	52	55	56	52	70	67	58	58	61	62	70	72	63	58	61	64
	3000	54	49	49	52	50	41	62	55	54	57	57	53	73	67	62	63	65	63	78	76	69	68	69	70
	4200	55	52	52	55	55	45	64	59	56	61	62	55	73	71	63	65	66	63	78	76	69	69	69	69
	4500	57	55	54	57	59	51	63	59	57	62	63	56	76	72	65	68	69	69	78	77	70	70	70	69
12x48	800	48	45	45	44	42	37	54	49	49	50	52	54	59	56	57	58	64	69	68	67	65	63	67	69
	2400	51	47	48	48	45	38	58	54	56	55	55	52	67	63	63	61	63	64	70	67	67	65	69	69
	4000	57	49	48	47	49	39	58	56	57	58	58	53	65	63	65	64	66	65	69	67	68	67	69	69
	5600	59	53	51	51	55	44	60	57	58	58	60	53	67	64	66	65	67	64	71	68	69	69	70	69
	6000	65	58	54	56	61	51	63	58	56	58	62	53	68	65	66	66	67	64	72	70	71	71	72	70

All specifications are subject to change without notice.

Notes:

Exhaust sound is the noise emitted from the valve and transmitted through the exhaust duct into the room.

Exhaust sound travels against the direction of airflow.

ΔPs = difference in pressure across the valve

Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 130-1996

For sound Power Level performance data at different flow rates or pressures, contact Accutrol (www.accutrollc.com)

AccuValve Supply (Discharge) Sound Performance Data

OCTAVE BAND DISCHARGE SOUND POWER LEVEL (dB re. 10 ⁻¹² Watts)																									
Size	CFM	0.5" ΔPs (125 Pa)						1.0" ΔPs (250 Pa)						2.0" ΔPs (500 Pa)						3.0" ΔPs (750 Pa)					
		125	250	500	1K	2K	4K	125	250	500	1K	2K	4K	125	250	500	1K	2K	4K	125	250	500	1K	2K	4K
		2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7
8	100	47	48	48	46	46	42	52	49	48	49	51	51	54	54	53	54	54	54	56	62	61	60	60	59
	300	49	49	49	47	47	44	56	56	54	54	54	52	60	61	58	58	59	57	65	69	65	64	67	64
	500	52	51	51	54	50	47	58	58	57	57	56	54	61	63	59	59	59	58	68	72	67	65	67	66
	600	53	53	54	56	52	50	60	60	56	59	58	56	65	68	63	63	64	63	69	72	67	66	68	66
	700	55	55	55	59	56	54	60	60	58	60	59	58	66	69	64	64	66	64	69	73	67	66	68	67
10	150	46	42	38	44	47	41	54	52	50	50	54	53	56	57	54	54	56	58	60	62	58	57	59	59
	300	49	47	45	47	50	43	57	54	52	54	56	54	62	63	60	60	64	60	65	67	63	63	67	63
	500	52	50	48	49	49	45	59	57	53	54	55	54	66	65	59	60	63	62	69	70	64	65	68	66
	800	55	51	49	53	54	47	63	60	56	58	59	56	67	68	62	62	63	62	70	72	66	65	67	66
	1000	57	53	51	56	56	51	63	61	56	59	60	57	69	69	64	64	65	64	71	73	68	67	68	67
12	200	44	38	36	45	59	46	53	47	46	50	61	56	56	55	52	54	59	60	61	60	56	58	62	61
	400	49	48	47	49	51	44	58	57	54	56	59	56	63	64	61	62	62	62	66	68	64	65	66	65
	800	53	52	50	50	50	46	61	59	54	56	57	54	66	66	60	63	64	63	70	71	65	67	69	67
	1200	55	53	50	54	54	48	64	61	57	60	60	58	68	68	62	64	65	63	72	72	66	68	69	68
	1500	59	55	52	57	59	54	64	62	57	61	62	59	69	69	63	66	66	64	73	74	68	69	70	69
14	200	41	36	34	35	34	28	49	40	39	39	41	37	52	45	44	46	48	47	55	48	45	48	51	51
	600	47	46	44	48	48	47	54	47	47	48	50	47	60	54	53	54	57	52	63	58	56	57	60	56
	1000	50	48	47	50	49	46	57	53	51	53	55	53	64	58	55	57	59	55	69	63	59	60	63	59
	1600	56	54	50	54	55	52	59	56	53	57	59	55	67	62	58	59	62	59	71	66	62	62	65	62
	2200	56	55	52	56	60	50	62	60	57	59	61	58	68	65	63	64	66	63	73	69	65	64	67	64
12x18	200	54	45	45	48	51	46	61	55	50	52	55	53	65	62	56	56	60	60	66	64	59	59	63	64
	600	52	45	46	49	52	47	64	58	52	54	58	56	73	71	59	58	62	63	74	75	65	62	64	66
	1000	57	50	48	52	53	48	63	56	53	56	59	57	76	70	60	61	64	65	81	78	69	65	68	70
	1800	56	50	50	54	55	49	68	64	55	59	61	60	77	73	63	63	66	65	81	78	68	66	69	69
	2000	57	52	52	56	57	51	67	62	56	60	62	59	78	75	65	65	68	67	81	79	72	68	70	70
12x24	400	47	45	46	47	47	41	59	55	54	54	57	53	62	60	58	59	63	64	74	72	66	65	68	68
	1200	53	51	48	49	50	44	60	58	55	57	59	55	69	65	62	62	65	64	75	72	67	65	69	69
	2000	56	51	49	51	52	45	59	57	56	58	59	55	70	68	63	63	67	66	73	73	68	67	71	70
	2400	56	52	49	51	53	45	61	58	55	58	60	55	71	68	64	64	68	67	74	74	69	68	72	71
	3000	59	56	52	54	58	49	64	62	57	61	62	59	71	66	64	65	69	66	77	75	70	69	73	72
12x36	600	57	48	48	51	54	49	64	58	53	55	58	56	68	65	59	59	63	63	69	67	62	62	66	67
	1800	55	48	49	52	55	50	67	61	55	57	61	59	76	74	62	61	65	66	77	78	68	65	67	69
	3000	60	53	51	55	56	51	66	59	56	59	62	60	79	73	63	64	67	68	84	81	72	68	71	73
	4200	59	53	53	57	58	52	71	67	58	62	64	63	80	76	66	66	69	68	84	81	71	69	72	72
	4500	60	55	55	59	60	54	70	65	59	63	65	62	81	78	68	68	71	70	84	82	75	71	73	73
12x48	800	47	41	39	49	62	49	56	50	49	53	64	59	59	58	55	57	62	63	64	63	59	61	65	64
	2400	52	51	50	52	54	47	61	60	57	59	62	59	66	67	64	65	65	65	69	71	67	68	69	68
	4000	56	55	53	53	53	49	64	62	57	59	60	57	69	69	63	66	67	66	73	74	68	70	72	70
	5600	59	56	53	57	57	51	67	64	60	63	63	61	71	71	65	67	68	66	75	75	69	71	72	71
	6000	62	58	55	60	62	57	67	65	60	64	65	62	72	72	66	69	69	67	76	77	71	72	73	72

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AccuValve Radiated Sound Performance Data

OCTAVE BAND DISCHARGE SOUND POWER LEVEL (dB re. 10 ⁻¹² Watts)																									
Size	CFM	0.5" ΔPs (125 Pa)						1.0" ΔPs (250 Pa)						2.0" ΔPs (500 Pa)						3.0" ΔPs (750 Pa)					
		125	250	500	1K	2K	4K	125	250	500	1K	2K	4K	125	250	500	1K	2K	4K	125	250	500	1K	2K	4K
		2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7
8	100	46	37	28	24	24	22	50	41	45	41	38	36	49	41	42	39	39	39	51	45	47	43	44	43
	300	45	38	39	37	34	28	49	42	48	45	43	38	51	48	51	52	51	49	53	51	53	54	53	51
	500	46	39	39	38	38	32	50	43	52	43	43	39	53	49	53	50	50	47	55	53	55	54	54	52
	600	46	39	44	39	39	33	49	43	46	43	43	40	53	50	52	50	51	47	55	54	55	53	54	52
	700	49	41	51	42	43	36	50	43	46	43	45	41	53	51	51	49	51	48	56	55	56	53	54	52
10	150	43	35	33	31	33	32	51	40	39	38	40	40	50	43	43	43	47	45	52	46	44	46	50	49
	300	46	39	36	35	33	36	51	42	41	41	41	42	52	47	47	46	48	48	54	51	50	49	52	52
	500	43	38	37	36	34	33	50	43	43	43	42	41	55	50	49	48	50	48	58	56	54	51	53	53
	800	46	39	40	40	40	38	51	46	46	44	44	44	54	52	50	50	51	49	58	57	54	53	54	53
	1000	49	40	44	42	42	40	52	47	46	45	46	45	57	53	52	51	51	51	58	57	55	54	55	54
12	200	44	36	37	35	38	29	49	40	41	43	42	45	50	45	45	46	48	51	53	47	47	48	51	51
	400	45	37	38	37	34	30	50	42	43	45	43	44	52	48	48	50	50	49	55	51	50	52	53	51
	800	44	38	37	37	34	30	49	44	43	44	44	40	53	50	48	50	51	48	57	55	52	53	54	53
	1200	46	39	42	37	36	31	50	46	44	44	44	40	55	52	50	50	51	48	58	56	53	53	54	54
	1500	50	43	42	41	40	35	52	46	45	44	44	40	57	54	51	51	51	49	60	58	54	54	54	54
14	200	35	29	27	28	26	21	44	33	31	35	35	32	42	35	39	44	45	43	46	38	42	48	49	48
	600	35	31	30	32	29	24	39	35	37	37	37	33	44	41	45	46	46	43	48	46	49	50	51	49
	1000	35	33	33	33	31	26	43	38	39	39	39	35	46	44	46	46	46	43	50	48	51	51	51	49
	1600	39	35	35	34	33	25	43	40	41	41	43	37	47	47	48	48	48	45	51	50	52	52	52	49
	2200	42	40	42	39	43	32	43	42	43	42	44	36	48	48	49	49	48	45	52	52	54	53	52	50
12x18	200	47	40	34	29	26	22	56	49	40	33	31	27	61	56	48	43	41	37	64	60	55	49	46	43
	600	46	41	35	30	27	22	56	49	41	34	33	28	67	61	51	44	42	39	70	65	57	50	47	43
	1000	47	43	37	31	27	23	57	51	43	36	34	30	66	60	52	44	42	38	74	66	58	50	47	43
	1800	52	47	44	34	33	23	57	52	46	38	36	29	67	63	55	48	45	40	72	69	60	51	48	43
	2000	51	49	47	37	36	26	57	54	51	41	39	30	66	62	56	49	45	39	73	69	61	53	49	44
12x24	400	46	42	35	27	23	21	53	49	44	33	30	30	57	54	48	40	40	41	64	63	57	47	45	43
	1200	49	45	41	36	32	28	55	51	44	36	31	28	63	60	53	44	40	40	68	65	58	48	46	44
	2000	52	45	40	32	29	22	56	53	46	38	34	29	63	61	54	45	41	40	66	66	58	49	46	44
	2400	52	47	43	37	37	29	56	53	46	39	36	30	64	61	54	46	42	40	67	66	59	50	47	45
	3000	53	50	46	39	38	29	57	54	49	41	39	32	62	61	55	47	43	41	68	67	61	52	49	46
12x36	600	50	43	37	32	29	25	59	52	43	36	34	30	64	59	51	46	44	40	67	63	58	52	49	46
	1800	49	44	38	33	30	25	59	52	44	38	36	31	70	64	54	47	45	42	73	68	60	53	50	46
	3000	50	46	40	34	30	26	60	54	46	39	37	33	69	63	55	47	45	41	77	69	61	53	50	46
	4200	55	50	47	37	36	26	60	55	50	41	39	32	70	66	59	51	48	43	75	72	63	54	51	46
	4500	54	52	50	40	39	30	60	57	54	44	42	33	69	65	59	52	48	42	76	72	64	56	52	47
12x48	800	49	45	38	30	26	24	56	52	47	36	33	33	60	57	51	43	43	44	67	66	60	50	48	46
	2400	52	48	44	39	35	31	58	54	47	39	34	31	66	63	56	47	43	43	71	68	61	51	49	47
	4000	55	48	43	35	32	25	59	56	49	41	37	32	66	64	57	48	44	43	69	69	61	52	49	47
	5600	55	50	46	40	40	32	59	56	49	42	39	33	67	64	57	49	45	43	70	69	62	53	50	48
	6000	56	53	49	42	41	32	60	57	52	44	42	35	65	64	58	50	46	44	71	70	64	55	52	49

All specifications are subject to change without notice.

Notes:

Radiated sound is the noise emitted through the valve body and into the surrounding space.

ΔPs = difference in pressure across the valve

Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 130-1996

For sound Power Level performance data at different flow rates or pressures, contact Accutrol (www.accutrollc.com)