

# PERFORMANCE DATA

**Models:** ST-HC Separate set points for VAV heating and VAV cooling.  
ST-C One set point for VAV cooling only.

## Performance Chart – I-P (Inch Pound)

Nominal Length in	Inlet Diameter in	Inlet Static Pressure in wg	Maximum Flow CFM	Maximum Flow		25% Maximum Flow	
				Throw - Feet* @ $v_i=50/100/150$ FPM	NC	Throw - Feet* @ $v_i=50/100/150$ FPM	NC
6	5 15/16"	0.05	105	3/1/<1	<15	1/<1/<1	<15
		• 0.09	141	4/2/1	17	2/<1/<1	<15
		0.10	150	4/2/1	17	2/<1/<1	<15
		0.15	180	5/3/1	25	3/1/<1	<15
		0.20	210	6/4/2	29	4/1/1	<15
		0.25	240	7/5/3	32	4/2/2	21
8	7 15/16"	0.05	165	5/2/1	<15	2/1/<1	<15
		0.10	235	7/3/2	18	3/1/<1	<15
		• 0.14	255	7/3/2	21	3/1/<1	16
		0.15	285	8/4/3	25	4/1/1	17
		0.20	330	9/5/3	30	4/2/1	20
		0.25	380	9/6/4	34	5/3/2	25
10	9 15/16"	0.05	255	6/3/2	<15	3/1/<1	<15
		0.10	360	8/5/2	23	3/1/<1	<15
		0.15	408	9/6/3	26	4/1/1	16
		• 0.17	440	9/6/4	28	4/2/1	17
		0.20	510	10/7/5	32	5/3/2	22
		0.25	570	11/8/6	26	6/4/3	26
12	11 15/16"	0.05	335	8/6/2	<15	4/1/<1	<15
		0.10	470	10/7/4	25	5/2/1	<15
		• 0.12	580	11/8/5	31	6/2/1	21
		0.15	616	11/9/6	33	6/2/1	23
		0.20	670	12/10/7	35	7/3/2	27
		0.25	740	13/11/9	38	8/5/2	31

**Performance Notes:**

- \* Denotes 750 fpm/3.81 m/s inlet velocity.
- \* Throw data is for air 20°F 11°C lower than room temperature. Throws for isothermal air are 40 to 50% greater.
- <sup>1</sup>NC based on Lw(10<sup>-12</sup> watts reference) -10db
- Ratings independently verified by Inchcape Testing Services, ETL Testing Laboratories.
- Tested in accordance with ANSI/ASHRAE 70-1991, ANSI S12.31, ARI 890-2001, ISO 5219 and ISO 3741.
- When bypassing air into the plenum at the diffuser with Acutherm R-Rings, throws may be as low as 90% of, and the NC 2db higher than, those listed in the performance chart.
- When blocking for direction with the Acutherm directional baffles, the air volume for a given static pressure is reduced from maximum flow listed in the performance chart by:

Inlet Designation	Reduction		
	3-Way	2-Way Opposite	2-Way Corner
6	0.99	1.00	0.99
8	0.97	0.87	0.86
10	0.88	0.72	0.75
12	0.85	0.77	0.65