

PERFORMANCE DATA

TBD2 – Curved Pattern Controller, 1 Slot

Model TBD2100 1 in. Slot Width

	Flow Rate (cfm)	50	75	100	125	150	175	200
Model = 24 in. 6 in. Diameter Inlet	Total Pressure (in. w.g.)	0.031	0.070	0.124	0.194	0.279	0.380	0.496
	Static Pressure (in. w.g.)	0.027	0.061	0.108	0.169	0.243	0.330	0.432
	Sound (NC)	-	18	27	34	39	43	47
	Throw (ft.)	3-6-11	6-8-17	7-11-20	9-14-23	11-17-25	13-19-27	15-20-29
	Flow Rate (cfm)	50	80	110	140	170	200	230
Model = 24 in. 8 in. Diameter Inlet	Total Pressure (in. w.g.)	0.023	0.060	0.113	0.182	0.269	0.372	0.492
	Static Pressure (in. w.g.)	0.022	0.056	0.106	0.172	0.254	0.352	0.465
	Sound (NC)	-	17	26	33	39	44	48
	Throw (ft.)	4-7-13	7-11-21	10-15-25	13-19-28	15-22-31	18-23-33	21-25-36
	Flow Rate (cfm)	75	105	135	165	195	225	255
Model = 24 in. 10 in. Diameter Inlet	Total Pressure (in. w.g.)	0.042	0.082	0.136	0.203	0.283	0.377	0.484
	Static Pressure (in. w.g.)	0.041	0.080	0.132	0.197	0.275	0.366	0.470
	Sound (NC)	-	22	30	36	40	45	48
	Throw (ft.)	8-12-23	11-16-27	14-21-31	17-24-34	20-26-37	23-28-39	24-30-42
	Flow Rate (cfm)	80	120	160	200	240	280	320
Model = 48 in. 6 in. Diameter Inlet	Total Pressure (in. w.g.)	0.027	0.061	0.109	0.171	0.246	0.334	0.437
	Static Pressure (in. w.g.)	0.017	0.038	0.068	0.106	0.152	0.207	0.271
	Sound (NC)	-	16	24	31	36	41	45
	Throw (ft.)	1-3-8	3-6-12	5-8-14	7-10-16	8-12-18	9-13-19	11-14-20
	Flow Rate (cfm)	100	150	200	250	300	350	400
Model = 48 in. 8 in. Diameter Inlet	Total Pressure (in. w.g.)	0.032	0.072	0.128	0.200	0.288	0.392	0.512
	Static Pressure (in. w.g.)	0.027	0.060	0.107	0.168	0.242	0.329	0.430
	Sound (NC)	-	19	27	34	39	44	48
	Throw (ft.)	3-6-12	6-9-16	8-12-19	10-15-21	12-16-23	14-17-25	15-19-26
	Flow Rate (cfm)	100	160	220	280	340	400	460
Model = 48 in. 10 in. Diameter Inlet	Total Pressure (in. w.g.)	0.026	0.065	0.124	0.201	0.296	0.409	0.541
	Static Pressure (in. w.g.)	0.023	0.060	0.114	0.184	0.271	0.376	0.497
	Sound (NC)	-	18	27	34	40	45	49
	Throw (ft.)	4-7-14	8-11-19	10-15-22	13-17-25	16-19-27	17-21-29	18-22-31
	Flow Rate (cfm)	150	200	250	300	350	400	450
Model = 48 in. 12 in. Diameter Inlet	Total Pressure (in. w.g.)	0.048	0.085	0.133	0.192	0.261	0.341	0.432
	Static Pressure (in. w.g.)	0.046	0.081	0.127	0.183	0.249	0.325	0.411
	Sound (NC)	-	22	29	34	39	43	46
	Throw (ft.)	8-12-20	11-16-23	13-18-25	16-20-28	17-21-30	19-23-32	20-24-34
	Flow Rate (cfm)	150	200	250	300	350	400	450

Model TBD2150 1-1/2 in. Slot Width

	Flow Rate (cfm)	50	75	100	125	150	175	200
Model = 24 in. 6 in. Diameter Inlet	Total Pressure (in. w.g.)	0.028	0.063	0.113	0.176	0.253	0.345	0.450
	Static Pressure (in. w.g.)	0.024	0.054	0.096	0.151	0.217	0.295	0.386
	Sound (NC)	-	17	25	32	37	42	46
	Throw (ft.)	3-5-11	5-8-16	7-11-20	9-14-22	11-16-25	13-19-26	14-20-28
	Flow Rate (cfm)	50	80	110	140	170	200	230
Model = 24 in. 8 in. Diameter Inlet	Total Pressure (in. w.g.)	0.021	0.054	0.102	0.166	0.244	0.338	0.447
	Static Pressure (in. w.g.)	0.020	0.051	0.096	0.156	0.229	0.317	0.420
	Sound (NC)	-	15	25	32	38	42	47
	Throw (ft.)	4-7-13	7-11-21	10-15-24	12-18-27	15-21-30	18-23-33	20-25-35
	Flow Rate (cfm)	75	105	135	165	195	225	255
Model = 24 in. 10 in. Diameter Inlet	Total Pressure (in. w.g.)	0.038	0.074	0.123	0.184	0.257	0.342	0.439
	Static Pressure (in. w.g.)	0.037	0.072	0.119	0.178	0.249	0.331	0.426
	Sound (NC)	-	21	28	34	39	43	47
	Throw (ft.)	8-12-22	11-16-26	14-21-30	17-23-33	20-26-36	22-27-39	24-29-41
	Flow Rate (cfm)	75	105	135	165	195	225	255

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70 – 2006 Method of Testing for Rating the Performance of Air Outlets and Inlets.
2. Airflow is in cubic feet per minute [cfm].
3. NC, sound pressure levels, are based on a room absorption of 10 dB re 10⁻¹² Watts, and a single diffuser/grille.
4. Blanks "-" indicate an NC level below 15.
5. All pressures are in inches of water column [in. w.g.].
6. Pressures not listed can be calculated using the following formula:
Ptotal = Pstatic + Pvelocity
7. Throw data is based on supply air and room air being at isothermal conditions.
8. Throw data is given in feet [ft] to terminal velocities of:
150 fpm (minimum)
100 fpm (middle)
50 fpm (maximum)
9. Does not include effects of ceiling radiation damper (TBD2-FR).

PERFORMANCE DATA

TBD2 – Curved Pattern Controller, 1 Slot (continued)

Model = 48 in. 6 in. Diameter Inlet	Flow Rate (cfm)	80	125	170	215	260	305	350
	Total Pressure (in. w.g.)	0.025	0.061	0.112	0.179	0.262	0.361	0.475
	Static Pressure (in. w.g.)	0.014	0.035	0.065	0.104	0.153	0.210	0.277
	Sound (NC)	-	15	24	31	37	42	46
	Throw (ft.)	1-3-8	3-6-12	6-8-15	7-11-16	9-13-18	10-14-20	11-15-21
Model = 48 in. 8 in. Diameter Inlet	Flow Rate (cfm)	90	145	200	255	310	365	420
	Total Pressure (in. w.g.)	0.024	0.061	0.116	0.189	0.279	0.387	0.513
	Static Pressure (in. w.g.)	0.019	0.050	0.096	0.156	0.230	0.319	0.423
	Sound (NC)	-	16	26	33	39	43	48
	Throw (ft.)	2-5-11	6-9-16	8-12-16	10-15-21	12-16-23	14-17-25	15-19-26
Model = 48 in. 10 in. Diameter Inlet	Flow Rate (cfm)	110	175	240	305	370	435	500
	Total Pressure (in. w.g.)	0.028	0.071	0.134	0.216	0.318	0.440	0.582
	Static Pressure (in. w.g.)	0.026	0.065	0.122	0.197	0.290	0.401	0.529
	Sound (NC)	-	19	28	35	41	46	50
	Throw (ft.)	5-8-15	8-12-19	11-16-22	14-18-25	16-20-28	17-21-30	19-23-32
Model = 48 in. 12 in. Diameter Inlet	Flow Rate (cfm)	150	200	250	300	350	400	450
	Total Pressure (in. w.g.)	0.044	0.078	0.121	0.174	0.237	0.310	0.393
	Static Pressure (in. w.g.)	0.041	0.073	0.115	0.165	0.225	0.294	0.372
	Sound (NC)	-	21	27	33	37	41	45
	Throw (ft.)	8-12-19	10-16-22	13-18-25	16-19-27	17-21-30	18-22-32	19-24-34

For Performance Notes, see previous page.

TBD2 – Curved Pattern Controller, 2 Slot, 1-Way Discharge

Model TBD2100 1 in. Slot Width

Model = 24 in. 6 in. Diameter Inlet	Flow Rate (cfm)	90	125	160	195	230	265	300
	Total Pressure (in. w.g.)	0.058	0.112	0.184	0.273	0.379	0.503	0.645
	Static Pressure (in. w.g.)	0.045	0.087	0.142	0.211	0.294	0.390	0.500
	Sound (NC)	16	25	33	38	43	47	51
	Throw (ft.)	5-8-16	8-11-20	10-15-22	12-17-25	14-19-27	16-20-29	18-22-31
Model = 24 in. 8 in. Diameter Inlet	Flow Rate (cfm)	90	135	180	225	270	315	360
	Total Pressure (in. w.g.)	0.033	0.074	0.131	0.204	0.294	0.400	0.523
	Static Pressure (in. w.g.)	0.029	0.064	0.114	0.178	0.257	0.349	0.456
	Sound (NC)	-	20	29	35	40	45	49
	Throw (ft.)	7-10-19	10-15-24	13-19-27	17-22-31	19-24-33	21-26-36	22-27-39
Model = 24 in. 10 in. Diameter Inlet	Flow Rate (cfm)	100	155	210	265	320	375	430
	Total Pressure (in. w.g.)	0.026	0.062	0.114	0.181	0.264	0.363	0.477
	Static Pressure (in. w.g.)	0.024	0.057	0.105	0.167	0.243	0.333	0.438
	Sound (NC)	-	18	27	34	40	44	48
	Throw (ft.)	9-13-23	13-20-28	18-23-33	21-26-37	24-29-41	25-31-44	27-33-47
Model = 48 in. 6 in. Diameter Inlet	Flow Rate (cfm)	150	195	240	285	330	375	420
	Total Pressure (in. w.g.)	0.078	0.132	0.200	0.281	0.377	0.487	0.611
	Static Pressure (in. w.g.)	0.042	0.070	0.106	0.150	0.201	0.260	0.326
	Sound (NC)	19	26	32	38	42	46	49
	Throw (ft.)	3-6-12	5-8-14	7-10-15	8-12-17	9-13-18	10-13-19	11-14-20
Model = 48 in. 8 in. Diameter Inlet	Flow Rate (cfm)	170	225	280	335	390	445	500
	Total Pressure (in. w.g.)	0.056	0.099	0.153	0.219	0.296	0.386	0.487
	Static Pressure (in. w.g.)	0.042	0.073	0.113	0.161	0.219	0.285	0.359
	Sound (NC)	15	23	30	35	39	43	47
	Throw (ft.)	6-8-15	7-11-17	9-13-19	11-15-21	13-16-22	14-17-24	15-18-25
Model = 48 in. 10 in. Diameter Inlet	Flow Rate (cfm)	175	240	305	370	435	500	565
	Total Pressure (in. w.g.)	0.038	0.072	0.116	0.171	0.236	0.312	0.398
	Static Pressure (in. w.g.)	0.032	0.060	0.097	0.142	0.196	0.259	0.331
	Sound (NC)	-	19	26	32	37	41	44
	Throw (ft.)	7-10-17	9-14-20	12-16-22	14-17-24	15-19-26	16-20-28	17-21-30
Model = 48 in. 12 in. Diameter Inlet	Flow Rate (cfm)	200	275	350	425	500	575	650
	Total Pressure (in. w.g.)	0.035	0.065	0.106	0.156	0.216	0.286	0.366
	Static Pressure (in. w.g.)	0.031	0.058	0.094	0.138	0.191	0.253	0.323
	Sound (NC)	-	18	26	31	36	40	44
	Throw (ft.)	9-13-20	12-16-23	15-18-26	16-20-29	18-22-31	19-23-33	20-25-35

For Performance Notes, see end of section.

PERFORMANCE DATA

TBD2 – Curved Pattern Controller, 2 Slot, 1-Way Discharge (continued)

Model TBD2150 1-1/2 in. Slot Width

Model = 24 in. 6 in. Diameter Inlet	Flow Rate (cfm)	90	125	160	195	230	265	300
	Total Pressure (in. w.g.)	0.047	0.090	0.148	0.220	0.305	0.405	0.52
	Static Pressure (in. w.g.)	0.034	0.065	0.106	0.158	0.220	0.292	0.374
	Sound (NC)	-	22	29	35	40	44	48
	Throw (ft.)	5-8-15	7-11-19	9-14-21	11-16-23	13-18-25	15-19-27	17-20-29
Model = 24 in. 8 in. Diameter Inlet	Flow Rate (cfm)	90	135	180	225	270	315	360
	Total Pressure (in. w.g.)	0.026	0.059	0.105	0.164	0.237	0.322	0.421
	Static Pressure (in. w.g.)	0.022	0.050	0.089	0.138	0.199	0.271	0.355
	Sound (NC)	-	16	25	32	37	41	45
	Throw (ft.)	6-9-18	9-14-22	12-18-26	15-20-29	18-22-32	20-24-34	21-26-37
Model = 24 in. 10 in. Diameter Inlet	Flow Rate (cfm)	100	155	210	265	320	375	430
	Total Pressure (in. w.g.)	0.021	0.050	0.092	0.146	0.213	0.292	0.384
	Static Pressure (in. w.g.)	0.019	0.045	0.082	0.131	0.191	0.263	0.346
	Sound (NC)	-	15	24	31	36	41	45
	Throw (ft.)	8-12-22	12-19-27	17-22-31	20-25-35	22-27-39	24-30-42	26-32-45
Model = 48 in. 6 in. Diameter Inlet	Flow Rate (cfm)	150	200	250	300	350	400	450
	Total Pressure (in. w.g.)	0.064	0.113	0.177	0.254	0.346	0.452	0.572
	Static Pressure (in. w.g.)	0.027	0.048	0.076	0.109	0.148	0.193	0.245
	Sound (NC)	15	24	30	36	40	44	48
	Throw (ft.)	3-6-11	5-8-13	6-10-15	8-11-16	9-12-17	10-13-19	11-14-20
Model = 48 in. 8 in. Diameter Inlet	Flow Rate (cfm)	180	240	300	360	420	480	540
	Total Pressure (in. w.g.)	0.051	0.092	0.143	0.206	0.280	0.366	0.463
	Static Pressure (in. w.g.)	0.035	0.062	0.097	0.140	0.190	0.248	0.314
	Sound (NC)	-	22	28	34	38	42	46
	Throw (ft.)	6-8-14	7-11-17	9-13-19	11-14-20	13-16-22	14-17-24	14-18-25
Model = 48 in. 10 in. Diameter Inlet	Flow Rate (cfm)	220	290	360	430	500	570	640
	Total Pressure (in. w.g.)	0.049	0.086	0.132	0.188	0.254	0.330	0.417
	Static Pressure (in. w.g.)	0.039	0.068	0.105	0.149	0.202	0.262	0.331
	Sound (NC)	-	21	28	33	38	41	45
	Throw (ft.)	8-12-18	10-14-20	13-16-23	14-18-25	16-19-27	17-20-29	18-22-30
Model = 48 in. 12 in. Diameter Inlet	Flow Rate (cfm)	275	355	435	515	595	675	755
	Total Pressure (in. w.g.)	0.053	0.089	0.134	0.187	0.250	0.322	0.403
	Static Pressure (in. w.g.)	0.046	0.076	0.115	0.161	0.214	0.276	0.345
	Sound (NC)	15	23	29	34	38	42	45
	Throw (ft.)	11-15-22	14-18-25	16-19-27	17-21-30	19-23-32	20-24-34	21-26-36

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100 fpm (middle)
50 fpm (maximum)
9. Does not include effects of ceiling radiation damper (TBD2-FR).