

NFD

Dovetail Flat Fan

DESIGN FEATURES

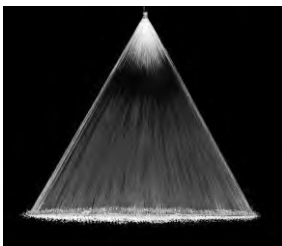
- Dovetail joint guarantees alignment of interchangeable tips
- Dimensionally compatible with other dovetail systems
- Tips offset 5° or 15° for overlapping spray patterns
- Tapered overlapping spray provides uniform coverage
- Male, female and welded connections
- Other sizes available upon request

SPRAY CHARACTERISTICS

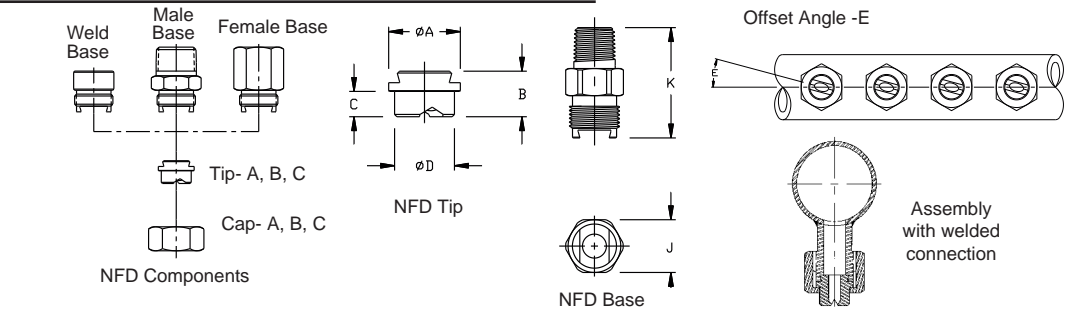
Spray pattern: Flat Fan
Spray angles: 20°, 30°, 45°, 60°, 90° and 120°. Special angles are available on request
Flow rates: 0.04 to 157 gpm



Metal



Fan 45°



Dimensions are approximate. Check with BETE for critical dimension applications.

NFD Flow Rates and Dimensions

Fan, 20°, 30°, 45°, 60°, 90°, 120° Spray Angles, 1/4", 3/8", 1/2", 3/4" and 1-1/4" Pipe Size, or Welded Connections

Cap & Tip Size	Nozzle Number	Base Sizes* Available	K Factor	GALLONS PER MINUTE @ PSI									Equiv. Orifice Dia. (in.)	Approximate Tip Dimensions (in.)					Wt. (Oz.)	BSP NPT Pipe	Approx. Base Dim. (in.)	
				10 PSI	20 PSI	40 PSI	60 PSI	80 PSI	100 PSI	200 PSI	400 PSI	A		B	C	D	E	J			K	
A	NFD 010	1/4 3/8 1/2	0.016	0.049	0.070	0.10	0.12	0.14	0.16	0.22	0.31	0.028	0.58	5°	1.5	1/4"	0.69	1.44				
	NFD 014	1/4 3/8 1/2	0.022	0.070	0.10	0.14	0.17	0.20	0.22	0.31	0.44	0.035										
	NFD 019	1/4 3/8 1/2	0.031	0.10	0.14	0.19	0.24	0.28	0.31	0.44	0.62	0.039										
	NFD 031	1/4 3/8 1/2	0.049	0.15	0.22	0.31	0.38	0.44	0.49	0.69	0.98	0.047										
	NFD 039	1/4 3/8 1/2	0.061	0.19	0.27	0.39	0.47	0.55	0.61	0.87	1.22	0.053										
	NFD 050	1/4 3/8 1/2	0.078	0.25	0.35	0.50	0.61	0.70	0.78	1.10	1.56	0.059										
	NFD 059	1/4 3/8 1/2	0.093	0.29	0.42	0.59	0.72	0.83	0.93	1.32	1.86	0.065	0.47	3/8"	0.69	1.44						
	NFD 077	1/4 3/8 1/2	0.122	0.39	0.55	0.77	0.95	1.10	1.22	1.73	2.44	0.079										
	NFD 097	1/4 3/8 1/2	0.154	0.49	0.69	0.97	1.19	1.38	1.54	2.18	3.08	0.087										
	NFD 12	1/4 3/8 1/2	0.196	0.62	0.88	1.24	1.52	1.75	1.96	2.77	3.92	0.098	0.94	6.0	1/2"	0.88	1.75					
	NFD 15	1/4 3/8 1/2	0.233	0.74	1.04	1.47	1.80	2.08	2.33	3.30	4.66	0.106										
	NFD 49	1/4 3/8 1/2	0.781	2.47	3.49	4.94	6.05	6.98	7.81	11.0	15.6	0.197										
NFD 20	3/4	0.309	0.98	1.38	1.95	2.39	2.76	3.09	4.37	6.18	0.118											
NFD 25	3/4	0.392	1.24	1.75	2.48	3.04	3.50	3.92	5.54	7.84	0.138											
NFD 31	3/4	0.488	1.54	2.18	3.09	3.78	4.37	4.88	6.90	9.76	0.157											
NFD 39	3/4	0.612	1.94	2.74	3.87	4.74	5.48	6.12	8.65	12.2	0.177	0.59	15°	3/4"	1.12	2.00						
NFD 50	3/4	0.785	2.48	3.51	4.95	6.08	7.02	7.85	11.1	15.6	0.197											
NFD 62	3/4	0.981	3.10	4.39	6.21	7.60	8.77	9.81	13.9	19.6	0.217											
NFD 77	3/4	1.22	3.87	5.48	7.72	9.49	11.0	12.2	17.2	24.4	0.236											
NFD 87	3/4	1.37	4.34	6.14	8.66	10.6	12.3	13.7	19.4	27.4	0.252											
NFD 104	3/4	1.64	5.19	7.34	10.4	12.7	14.7	16.4	23.2	32.8	0.283											
NFD 124	3/4	1.96	6.20	8.77	12.4	15.2	17.5	19.6	27.7	39.2	0.315	0.79	1-1/4"	1.75	2.50							
NFD 155	3/4	2.45	7.75	11.0	15.5	19.0	21.9	24.5	34.6	49.0	0.354											
NFD 195	3/4	3.08	9.75	13.8	19.5	23.9	27.6	30.8	43.6	61.6	0.394											
C	NFD 124	1- 1/4	1.96	6.20	8.77	12.4	15.2	17.5	19.6	27.7	39.2	0.315	1.51	0.87	0.53	1.26	15°	8.0				
	NFD 195	1- 1/4	3.08	9.75	13.8	19.5	23.9	27.6	30.8	43.6	61.6	0.394										
	NFD 309	1- 1/4	4.88	15.4	21.8	30.9	37.8	43.7	48.8	69.1	97.6	0.475										
	NFD 496**	1- 1/4	7.85	24.8	35.1	49.6	60.8	70.2	78.5	111	157	0.591										

**NFD 496 not available in 120°

Flow Rate (GPM) = K √PSI *NPT, BSP, male or female or weldable pipe connections. Dimensions are for male base; female and weldable vary.

Standard Materials: Brass, 303 Stainless Steel and 316 Stainless Steel. Weldable adapters also available in mild steel.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

TO ORDER: specify pipe size, connection type, nozzle number, spray angle, and material.