

# BJ

## Low Flow



### DESIGN FEATURES

- Three-piece construction
- Interchangeable spray tips
- Integral strainer available (refer to page 118 for more information)
- Male and female connections

### SPRAY CHARACTERISTICS

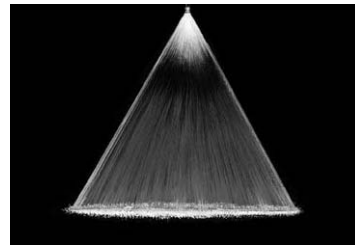
- Relatively coarse atomization
- Uniform distribution with tapered edges for use in overlapping sprays

**Spray pattern:** Flat Fan

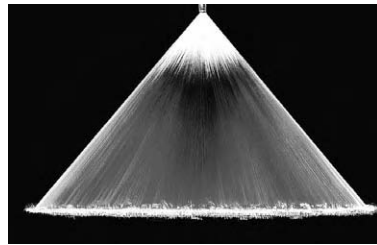
**Spray angles:** 0° to 110°

**Flow rate:** 0.003 to 24.7 gpm

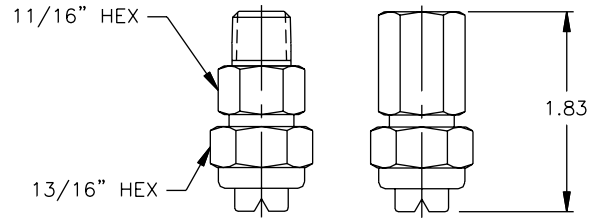
FAN



Fan 50°



Fan 80°



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

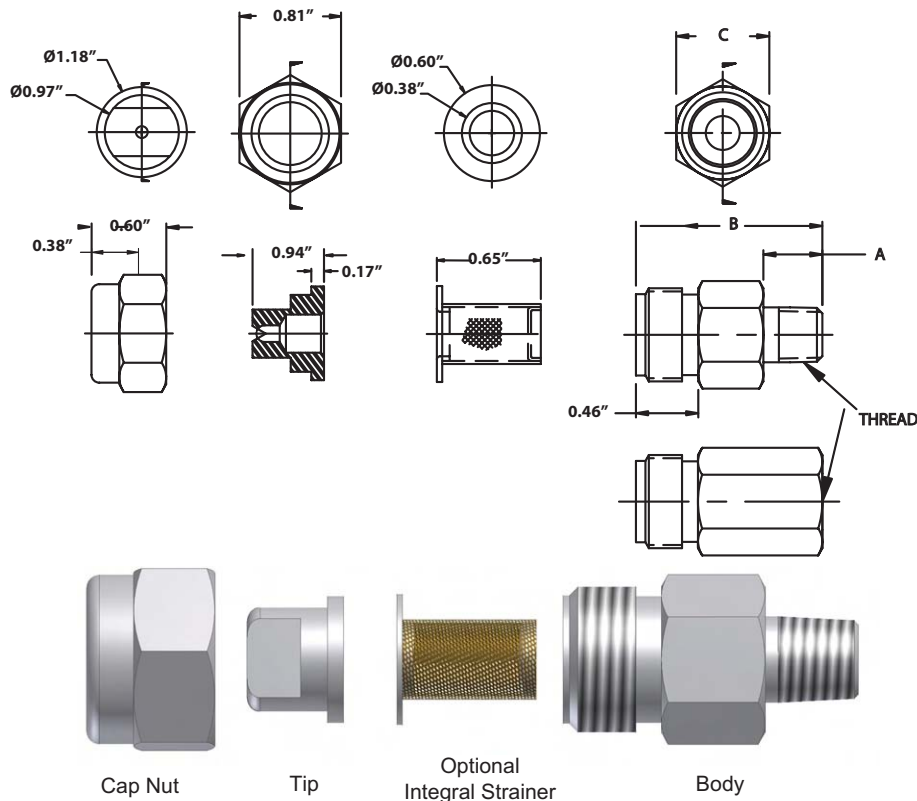
### BJ Spray Angles and Weights

Fan, 0° to 110° Spray Angles, 1/8", 1/4" and 3/8" Pipe Size, Male and Female

Pipe Size	Nozzle Number	Flow Rate @ 40 psi	Available Spray Angle									Optional Strainer Mesh Size	Wt. (Oz.)	
			0°	15°	25°	40°	50°	65°	73°	80°	95°			110°
1/8	BJ 0009	0.009	0°										200	2
	BJ 0012	0.012	0°											
	BJ 0017	0.017				40°	50°	65°						
	BJ 0019	0.019	0°											
	BJ 0021	0.021	0°											
	BJ 0023	0.023							73°					
	BJ 0025	0.025		15°	25°	40°	50°	65°						
	BJ 0033	0.033		15°	25°	40°	50°	65°						
BJ 0039	0.039							73°						
OR	BJ 005	0.050	0°	15°	25°	40°	50°	65°		80°			100	2
	BJ 0067	0.067	0°	15°	25°	40°	50°	65°						
	BJ 0077	0.077							73°					
	BJ 01	0.10	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 0116	0.12							73°					
1/4	BJ 015	0.15	0°	15°	25°	40°	50°	65°		80°	95°	110°	50	2
	BJ 0154	0.15							73°					
	BJ 02	0.20	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 0231	0.23							73°					
	BJ 03	0.30	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 0308	0.31							73°					
	BJ 0385	0.39							73°					
	BJ 04	0.40	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 0462	0.46							73°					
	BJ 05	0.50	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 06	0.60	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 0616	0.62							73°					
OR	BJ 077	0.77							73°					
	BJ 08	0.80	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 0924	0.92							73°					
	BJ 10	1.0	0°	15°	25°	40°	50°	65°		80°	95°	110°		
1/2"	BJ 15	1.5	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 20	2.0	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 30	3.0	0°	15°	25°	40°	50°	65°		80°	95°	110°		
	BJ 40	4.0	0°	15°	25°	40°	50°	65°		80°	95°	110°		
3/8	BJ 50	5.0							80°	95°	110°	50	2	
	BJ 60	6.0							80°	95°	110°			
OR	BJ 70	7.0							80°	95°	110°			
	BJ 70	7.0							80°	95°	110°			

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.



THREAD	A	B	C
1/8" MALE	0.44"	1.38"	11/16"
1/8" FEM	N/A	1.38"	11/16"
1/4" MALE	0.56"	1.38"	11/16"
1/4" FEM	N/A	1.38"	11/16"
3/8" MALE	0.56"	1.38"	11/16"
3/8" FEM	N/A	1.38"	13/16"
1/2" MALE	0.62"	1.38"	7/8"
1/2" FEM	N/A	1.38"	1 1/8"

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

### BJ Flow Rates

Fan, 0°, 15°, 25°, 40°, 50°, 65°, 73°, 80°, 95°, 110° Spray Angles, 1/8", 1/4" and 3/8" Pipe Size, Male and Female

Pipe Size	Nozzle Number	Equiv. Orifice Dia. (in.)	K Factor	GALLONS PER MINUTE @ PSI									
				5 PSI	10 PSI	20 PSI	40 PSI	60 PSI	80 PSI	100 PSI	200 PSI	300 PSI	500 PSI
1/8	BJ 0009	0.008	0.0014	0.003	0.005	0.006	0.009	0.011	0.013	0.014	0.02	0.025	0.032
	BJ 0012	0.010	0.0019	0.004	0.006	0.008	0.012	0.015	0.017	0.019	0.027	0.033	0.042
	BJ 0017	0.011	0.0027	0.006	0.009	0.012	0.017	0.021	0.024	0.027	0.038	0.047	0.06
	BJ 0019	0.012	0.0030	0.007	0.010	0.013	0.019	0.023	0.027	0.03	0.042	0.052	0.067
	BJ 0021	0.013	0.0033	0.007	0.011	0.015	0.021	0.026	0.03	0.033	0.047	0.058	0.074
	BJ 0023	0.013	0.0036	0.008	0.012	0.016	0.023	0.028	0.033	0.036	0.051	0.063	0.081
	BJ 0025	0.013	0.0040	0.009	0.013	0.018	0.025	0.031	0.035	0.04	0.056	0.068	0.088
BJ 0033	0.015	0.0052	0.012	0.017	0.023	0.033	0.040	0.047	0.052	0.074	0.090	0.12	
OR	BJ 0039	0.016	0.0062	0.014	0.020	0.028	0.039	0.048	0.055	0.062	0.087	0.11	0.14
	BJ 005	0.020	0.0079	0.018	0.025	0.035	0.050	0.061	0.071	0.079	0.11	0.14	0.18
	BJ 0067	0.023	0.0106	0.024	0.034	0.047	0.067	0.082	0.095	0.11	0.15	0.18	0.24
1/4	BJ 0077	0.023	0.0122	0.027	0.039	0.054	0.077	0.094	0.11	0.12	0.17	0.21	0.27
	BJ 01	0.028	0.0158	0.035	0.050	0.071	0.10	0.12	0.14	0.16	0.22	0.27	0.35
	BJ 0116	0.028	0.0183	0.041	0.058	0.082	0.12	0.14	0.16	0.18	0.26	0.32	0.41
	BJ 015	0.033	0.0237	0.053	0.075	0.11	0.15	0.18	0.21	0.24	0.34	0.41	0.53
	BJ 0154	0.033	0.0243	0.054	0.077	0.11	0.15	0.19	0.22	0.24	0.34	0.42	0.54
	BJ 02	0.039	0.0316	0.071	0.10	0.14	0.20	0.24	0.28	0.32	0.45	0.55	0.71
	BJ 0231	0.040	0.0365	0.082	0.12	0.16	0.23	0.28	0.33	0.37	0.52	0.63	0.82
OR	BJ 03	0.047	0.0474	0.11	0.15	0.21	0.30	0.37	0.42	0.47	0.67	0.82	1.1
	BJ 0308	0.047	0.0487	0.11	0.15	0.22	0.31	0.38	0.44	0.49	0.69	0.84	1.1
	BJ 0385	0.051	0.0609	0.14	0.19	0.27	0.39	0.47	0.54	0.61	0.86	1.1	1.4
3/8	BJ 04	0.055	0.0632	0.14	0.20	0.28	0.40	0.49	0.57	0.63	0.89	1.1	1.4
	BJ 0462	0.056	0.0730	0.16	0.23	0.33	0.46	0.57	0.65	0.73	1.0	1.3	1.6
	BJ 05	0.061	0.0791	0.18	0.25	0.35	0.50	0.61	0.71	0.79	1.1	1.4	1.8
OR	BJ 06	0.067	0.0949	0.21	0.30	0.42	0.60	0.73	0.85	0.95	1.3	1.6	2.1
	BJ 0616	0.067	0.0974	0.22	0.31	0.44	0.62	0.75	0.87	0.97	1.4	1.7	2.2
	BJ 077	0.072	0.1217	0.27	0.39	0.54	0.77	0.94	1.09	1.2	1.7	2.1	2.7
1/2"	BJ 08	0.074	0.1265	0.28	0.40	0.57	0.80	0.98	1.1	1.3	1.8	2.2	2.8
	BJ 0924	0.076	0.1481	0.33	0.46	0.65	0.92	1.1	1.3	1.5	2.1	2.5	3.3
	BJ 10	0.086	0.1581	0.35	0.5	0.71	1.0	1.2	1.4	1.6	2.2	2.7	3.5
3/8	BJ 15	0.107	0.2372	0.53	0.75	1.1	1.5	1.8	2.1	2.4	3.4	4.1	5.3
	BJ 20	0.125	0.3162	0.71	1.0	1.4	2.0	2.4	2.8	3.2	4.5	5.5	7.1
	BJ 30	0.141	0.4743	1.1	1.5	2.1	3.0	3.7	4.2	4.7	6.7	8.2	10.6
OR	BJ 40	0.156	0.6325	1.4	2.0	2.8	4.0	4.9	5.7	6.3	8.9	11.0	14.1
	BJ 50	0.172	0.7906	1.8	2.5	3.5	5.0	6.1	7.1	7.9	11.2	13.7	17.7
	BJ 60	0.188	0.9487	2.1	3.0	4.2	6.0	7.3	8.5	9.5	13.4	16.4	21.2
1/2"	BJ 70	0.203	1.1068	2.5	3.5	4.9	7.0	8.6	9.9	11.1	15.7	19.2	24.7

$$\text{Flow Rate (GPM)} = K\sqrt{\text{PSI}}$$

Standard Materials: Brass, 303 Stainless Steel and 316 Stainless Steel (for nozzle number BJ01 and higher).

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