

# B4S

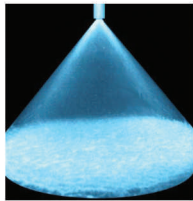
standard angle series



single type(BB)



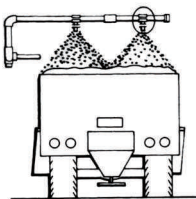
fission type(BBG)



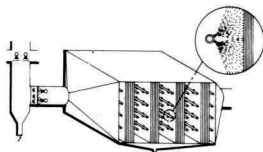
BB-single type external thread  
 B-single type internal thread  
 BBG-fission type external thread  
 BG-fission type internal thread

### common application

- exhaust gas scrubbing
- quenching and cooling
- fire prevention and fire protection
- dust extinguishing control
- defoaming
- spraying applications



dust control



air washer

## BB Series Full Cone Spray Nozzle

BB standard angle series spray nozzles feature a full cone spray pattern with a round impact area and spray angles between 43° and 106°.

They produce a uniform distribution of medium to large sized drops over a wide range of flow rates and pressures. Their uniform spray distribution result from a unique vane design, large and easy flow passages and superior spray control design.

Machined critically, BB series metal nozzles insure correct and dependable performance with exact sizes. They are ideal for applications requiring complete coverage to a certain area.

BBG series metal nozzles have removable cap and vane, can be suitably connected with pipe collection and multi-pipe. Under this design way, its working-end (cap and vane) can be removed from the nozzle body to be overhauled and cleaned, without knocking down the nozzle body off the pipe.

### standard angle performance data

\* in the specified pressure(bar)

Nozzle inlet connect (in.)	Nozzle type				Capacity Size	Rated Orifice Dia.(mm)	Max. Hole Dia.(mm)	Capacity(l/min)*															Spray Angle(°)*		
	Standard type							0.4	0.5	0.7	1.5	2	3	4	6	7	10	0.5	1.5	6					
	BG	BBG	B	BB																					
1/8	●	●		●	1	.79	.64	.29	.33	.38	.54	.62	.74	.85	1.0	1.1	1.3	1.5	1.6	1.9	2.6	4.3	5.0	5.9	
	●	●		●	1.5	1.2	.64	.44	.49	.57	.81	.93	1.1	1.3	1.5	1.6	1.9	2.2	2.6	3.3	3.9	5.2	6.5	7.9	
	●	●		●	2	1.2	1.0	.59	.65	.76	1.1	1.2	1.5	1.7	2.0	2.2	2.6	3.1	3.3	3.9	5.2	6.5	7.9	9.5	
	●	●		●	3	1.5	1.0	.88	.98	1.1	1.6	1.9	2.2	2.5	3.1	3.3	3.9	4.5	5.1	5.5	6.5	7.9	9.5	11.5	
	●	●		●	3.5	1.6	1.3	1.0	1.1	1.3	1.9	2.2	2.6	3.0	3.6	3.8	4.5	5.1	5.5	6.5	7.9	9.5	11.5	13.5	
	●	●		●	3.9	2.0	1.0	1.1	1.3	1.5	2.1	2.4	2.9	3.3	4.0	4.3	5.1	5.5	6.5	7.9	9.5	11.5	13.5	15.5	
	●	●		●	5	2.0	1.3	1.5	1.6	1.9	2.7	3.1	3.7	4.2	5.1	5.5	6.5	7.9	9.5	11.5	13.5	15.5	17.5	19.5	
	●	●		●	6.1	2.3	1.3	1.8	2.0	2.3	3.3	3.8	4.5	5.2	6.2	6.7	7.9	9.5	11.5	13.5	15.5	17.5	19.5	21.5	
1/4	●	●		●	6.5	2.4	1.6	1.9	2.1	2.5	3.5	4.0	4.8	5.5	6.7	7.1	8.4	9.5	10.4	12.3	14.3	16.3	18.3	20.3	
	●	●		●	10	3.2	1.6	2.9	3.3	3.8	5.4	6.2	7.4	8.5	10.2	11.0	13.0	15.0	17.0	19.0	21.0	23.0	25.0	27.0	
	●	●		●	12.5	3.2	1.6	3.7	4.1	4.8	6.8	7.7	9.3	10.6	12.8	13.7	16.2	18.2	20.2	22.2	24.2	26.2	28.2	30.2	
3/8	●	●		●	9.5	2.6	2.4	2.8	3.1	3.6	5.1	5.9	7.1	8.1	9.7	10.4	12.3	14.3	16.3	18.3	20.3	22.3	24.3	26.3	
	●	●		●	15	3.6	2.4	4.4	4.9	5.7	8.1	9.3	11.2	12.7	15.4	16.5	19.4	22.4	25.4	28.4	31.4	34.4	37.4	40.4	
	●	●		●	20	4.0	2.8	5.9	6.5	7.6	10.8	12.4	14.9	17.0	20	22	26	29	33	37	41	45	49	53	
1/2	●	●		●	16	3.5	3.2	4.7	5.2	6.1	8.7	9.9	11.9	13.6	16.4	17.6	21	24	28	32	36	40	44	48	
	●	●		●	25	4.6	3.2	7.4	8.2	9.5	13.5	15.4	18.6	21	26	27	32	36	41	46	51	56	61	66	
	●	●		●	32	5.2	3.6	9.4	10.4	12.2	17.3	19.8	24	27	33	35	41	46	51	56	61	66	71	76	
	●	●		●	40	6.2	3.6	11.8	13.1	15.2	22	25	30	34	41	44	52	58	64	70	76	82	88	94	
	●	●		●	50	6.7	4.0	14.7	16.3	19.1	27	31	37	42	51	55	65	71	78	84	91	98	105	112	
3/4			●	●	2.5	4.9	4.4	8.7	9.6	11.2	15.9	18.2	22	25	30	32	38	43	48	53	59	64	70	76	
			●	●	4.0	6.4	4.4	13.9	15.4	18.0	26	29	35	40	48	52	61	67	74	81	88	95	102	109	
			●	●	7.0	9.5	5.2	24	27	31	45	51	61	70	84	91	107	117	133	144	161	172	189	200	
1			●	●	4.2	6.0	5.6	14.6	16.2	18.9	27	31	37	42	51	54	64	70	78	86	94	102	110	118	
			●	●	7.0	8.3	5.6	24	27	31	45	51	61	70	84	91	107	117	133	144	161	172	189	200	
			●	●	8.0	9.5	5.6	28	31	36	51	58	70	80	97	104	122	132	150	161	178	194	210	226	
			●	●	10	11.9	5.6	35	38	45	64	73	88	100	121	130	153	163	183	194	210	226	242	258	
			●	●	12	11.9	6.4	42	46	54	77	87	105	120	145	155	183	194	210	226	242	258	274	290	
1-1/4			●	●	6	7.4	6.4	21	23	27	38	44	53	60	72	78	92	98	112	124	136	150	164	178	
			●	●	10	9.6	6.4	35	38	45	64	73	88	100	121	130	153	163	183	194	210	226	242	258	
			●	●	12	10.7	6.4	42	46	54	77	87	105	120	145	155	183	194	210	226	242	258	274	290	
			●	●	14	12.3	6.4	49	54	63	89	102	123	140	169	181	214	217	244	258	274	290	306	322	
			●	●	16	12.7	7.9	56	62	72	102	116	140	160	193	207	244	258	274	290	306	322	338	354	
1-1/2			●	●	20	15.1	7.9	69	77	90	128	146	175	200	241	259	305	305	322	338	354	370	386	402	
			●	●	10	9.5	8.7	35	38	45	64	73	88	100	121	130	153	163	183	194	210	226	242	258	
			●	●	16	12.7	8.7	56	62	72	102	116	140	160	193	207	244	258	274	290	306	322	338	354	
			●	●	20	14.3	8.7	69	77	90	128	146	175	200	241	259	305	305	322	338	354	370	386	402	
			●	●	30	18.3	10.3	104	115	135	191	218	263	300	362	389	458	458	474	490	506	522	538	554	
2			●	●	17	12.7	11.1	59	65	76	108	124	149	170	205	220	259	259	274	290	306	322	338	354	
			●	●	30	17.3	11.1	104	115	135	191	218	263	300	362	389	458	458	474	490	506	522	538	554	
			●	●	35	19.2	11.1	122	135	157	223	255	307	350	422	453	534	534	550	566	582	598	614	630	
			●	●	40	21.0	11.1	139	154	180	255	291	351	401	483	518	611	611	627	643	659	675	691	707	
			●	●	50	23.8	14.3	174	192	225	319	364	439	501	603	648	763	763	779	795	811	827	843	859	
			●	●	60	28.6	14.3	208	231	269	383	437	526	601	724	777	916	916	932	948	964	980	996	1012	

The Max. Hole Diameter indicated above is the maximum diameter of the particles that can pass through the channel and do not block.