

FULL CONE NOZZLES

BE/BG

X-VANE/ROUND SPRAY/TWO PIECES

These full cone nozzles have a two-piece design and produce a full cone round spray, with angles ranging between 70° and 120° and capacities between 4.8 and 1040 litres per minute. Higher capacities, up to 11,300 lpm can be obtained with the larger sizes shown in the following table.

The X-vane design assures a satisfactory compromise as far as even coverage of the spray and nozzle resistance to clogging are considered, and is therefore a widely popular choice. The table on this page shows female threaded nozzles up to 3" size, larger capacity nozzles both with female threads and flange connections are shown on the next page. Please note BE nozzles have a female BSP thread, BG have a male BSPT thread. Dimensions for standard and wide spray angle nozzles are shown on the table at the bottom of this page.

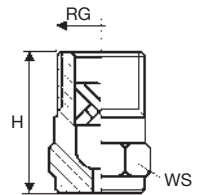
- Materials** **B1** AISI 303 Stainless steel
 B31 AISI 316L Stainless steel
 T1 Brass, only sizes 1" and smaller



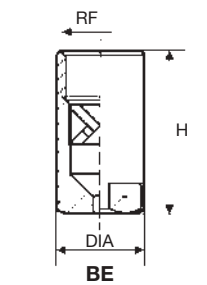
BE



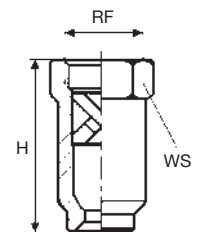
BG



BG



BE



BE

Standard spray angles

BES	BGQ	Code	RF RG inch	D mm	D1 mm	Capacity at different pressure values							Spray angle (degrees) at pressure (bar)		
						0.5	1.0	2.0	3.0	5.0	7.0	10	0.7	3.0	5.0
	•	1480 xx	1/4	2.3	1.6	1.96	2.77	3.92	4.80	6.20	7.33	8.76	55	60	55
	•	1740 xx		2.9	1.6	3.02	4.27	6.04	7.40	9.55	11.3	13.5	65	62	62
	•	1700 xx	3/8	2.6	2.4	2.86	4.04	5.72	7.00	9.04	10.7	12.8	66	60	55
	•	2111 xx		3.6	2.4	4.53	6.41	9.06	11.0	14.3	17.0	20.3	65	67	60
	•	2163 xx		4.5	2.8	6.65	9.41	13.3	16.3	21.0	24.9	29.8	59	62	60
	•	2185 xx	1/2	4.6	3.2	7.55	10.7	15.1	18.5	23.9	28.3	33.8	64	65	60
	•	2300 xx		6.3	3.6	12.2	17.3	24.5	30.0	38.7	45.8	54.8	58	60	58
•	•	2220 xx	3/4	4.9	4.4	9.00	12.7	18.0	22.0	28.4	33.6	40.2	54	60	56
•	•	2350 xx		6.4	4.4	14.3	20.2	28.6	35.0	45.2	53.5	63.9	56	63	60
•	•	2610 xx		9.5	5.2	24.9	35.2	49.8	61.0	78.8	93.2	111	58	65	60
•	•	2370 xx	1	6.0	5.6	15.1	21.4	30.2	37.0	47.8	56.5	67.6	58	60	56
•	•	2611 xx		8.3	5.6	24.9	35.2	49.8	61.0	78.8	93.2	111	60	61	58
•	•	2870 xx		11.9	5.6	35.5	50.2	71.0	87.0	112	133		60	63	60
•	•	3104 xx		11.9	6.4	42.5	60.0	84.9	104	134	159		62	65	61
•	•	2520 xx		1+1/4	7.4	6.4	21.2	30.0	42.5	52.0	67.1	79.4		72	75
•	•	2871 xx	9.6		6.4	35.5	50.2	71.0	87.0	112	133		72	75	68
•	•	3105 xx	10.7		6.4	42.9	60.6	85.7	105	136	160		72	75	70
•	•	3122 xx	12.3		6.4	49.8	70.4	99.6	122	158	186		72	75	71
•	•	3174 xx	15.1		7.9	71.0	100	142	174	225	266		74	75	71
•	•	2872 xx	1+1/2	9.5	8.7	35.5	50.2	71.0	87.0	112	133		68	72	65
•	•	3139 xx		12.7	8.7	56.7	80.3	113	139	179	212		68	72	70
•	•	3175 xx		14.3	8.7	71.4	101	143	175	226	267		72	75	70
•	•	3260 xx		18.3	10.3	106	150	212	260	336	397		74	78	73
•	•	3148 xx	2	12.7	11.1	60.4	85.4	121	148	191	226		68	70	68
•	•	3261 xx		17.3	11.1	106	150	212	260	336	397		70	73	68
•	•	3305 xx		19.2	11.1	125	176	249	305	394	466		72	75	70
•	•	3350 xx		21.0	11.1	143	202	286	350	452	535		72	75	70
•	•	3435 xx		23.8	14.3	178	251	355	435	562	664		71	75	72
•	•	3520 xx		28.6	14.3	212	300	425	520	671	794		74	77	72
•	•	3215 xx	2+1/2	15.1	14.3	87.8	124	176	215	278	328		70	73	70
•	•	3436 xx		22.2	14.3	178	251	355	435	562	664		72	75	70
•	•	3521 xx		24.6	14.3	212	300	425	520	671	794		72	75	70
•	•	3610 xx		28.6	14.3	249	352	498	610	788	932		73	75	70
•	•	3700 xx		28.6	17.5	286	404	572	700	904	1069		73	77	72
•	•	3780 xx		31.8	17.5	318	450	637	780	1007	1191		75	78	75
•	•	3365 xx	3	19.1	17.5	149	211	298	365	471	558		70	73	68
•	•	3701 xx		27.8	17.5	286	404	572	700	904	1069		70	73	70
•	•	3781 xx		30.2	17.5	318	450	637	780	1007	1191		72	75	70
•	•	3870 xx		32.5	17.5	355	502	710	870	1123	1329		72	75	70
•	•	4104 xx		34.9	20.6	425	600	849	1040	1343	1589		75	78	73

Dimensions

BG	Size inch	1/8	1/4	3/8	1/2	3/4	1	1+1/4	1+1/2	2	2+1/2	3
H mm	H mm	19.5	22.0	25.0	33.0	40.0	51.5					
	WS mm	12.0	14.0	17.0	22.0	22.0	27.0					
BE	H mm					55.5	68.0	90.0	105	140	180	192
	DIA mm					32.0	38.0					
	WS mm					27.0	32.0	48.0	52.0	67.0	85.0	100

FULL CONE NOZZLES

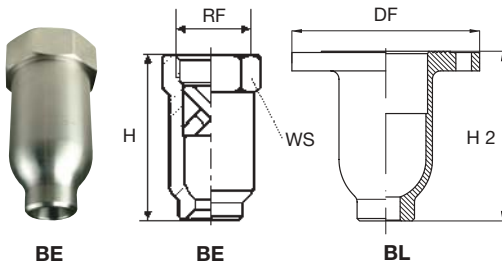
BE/BG

X-VANE/ROUND SPRAY/TWO PIECES

Wide spray angles

BEW	BGW	Code	RF RG	D	D1	Capacity at different pressure values							Spray angle (degrees)			Dimension mm		
						(lpm)							(bar)			at pressure (bar)		
						0.5	1.0	2.0	3.0	5.0	7.0	10	0.7	3.0	5.0			
	•	2100 xx	1/4	3.3	1.6	4.08	5.77	8.16	10.0	12.9	15.3	18.3	115	120	106	23	14	
	•	2122 xx	3/8	3.6	2.4	4.98	7.04	9.96	12.2	15.7	18.6	22.3	115	120	105	30	17	
	•	2144 xx		4.0	2.4	5.88	8.31	11.8	14.4	18.6	22.0	26.3	115	120	105			
	•	2172 xx		5.1	2.4	7.02	9.93	14.0	17.2	22.2	26.3	31.4	115	120	105			
	•	2194 xx		5.2	2.8	7.92	11.2	15.8	19.4	25.0	29.6	35.4	115	120	105			
	•	2220 xx	1/2	5.0	3.0	8.98	12.7	18.0	22.0	28.4	33.6	40.2	115	120	105	39	22	
	•	2250 xx		5.4	3.0	10.2	14.4	20.4	25.0	32.3	38.2	45.6	115	120	105			
	•	2290 xx		6.4	3.0	11.8	16.7	23.7	29.0	37.4	44.3	52.9	115	120	105			
	•	2320 xx		6.9	3.0	13.1	18.5	26.1	32.0	41.3	48.9	58.4	115	120	105			
	•	2360 xx		7.6	3.0	14.7	20.8	29.4	36.0	46.5	55.0	65.7	115	120	110			
•	•	2500 xx	3/4	8.7	4.5	20.4	28.9	40.8	50.0	64.5	76.4	91.3	105	110	105	40	27	
•	•	2920 xx	1	11.5	5.6	37.6	53.1	75.1	92.0	119.	141		105	110	105	54	34	
•	•	3134 xx	1+1/4	14.0	6.0	54.7	77.4	109	134	173	205		110	115	110	88	48	
•	•	3200 xx	1+1/2	16.5	9.0	81.6	115	163	200	258	306		110	115	110	102	52	
•		3395 xx	2	24.0	11.1	161	228	323	395	510	603		110	115	110	138	67	
•		3590 xx	2+1/2	26.0	14.3	241	341	482	590	762	901		110	115	110	162	85	
•		3800 xx	3	32.0	17.5	327	462	653	800	1033	1222		110	115	110	187	100	

BE/BL



X-VANE/LARGE CAPACITIES

The large capacity nozzles feature a full cone spray pattern with uniform distribution over a round impact area, for applications where a very large capacity is required (values up to 11.300 litres per minute). They are manufactured with large spray angles, while still assuring high water density per square meter. The bodies are machined from a casting, and can be finished either with a female thread connection (BE type) or with an integral ANSI flange (BL type).

Materials B31 AISI 316L Stainless steel
G1 Cast iron

Large capacity

90°	BEU	BLU	Code	RF DF	D	D1	Capacity at different pressure values							Dimension mm			
							(lpm)							(bar)			H
								0.7	1.0	2.0	3.0	5.0	7.0	10			
90°	•	•	4139 xx	4	43	19	671	803	1135	1390	1794	2123	2538	251	207	130	
	•	•	4157 xx		47	22	758	906	1282	1570	2027	2398	2866				
	•	•	4174 xx		51	25	840	1005	1421	1740	2246	2658	3177				
	•	•	4183 xx		54	25	884	1057	1494	1830	2363	2795	3341				
	•	•	4218 xx	5	48	29	1053	1259	1780	2180	2814	3330	3980	311	269	170	
	•	•	4244 xx		53	29	1179	1409	1992	2440	3150	3727	4455				
	•	•	4279 xx		68	35	1348	1611	2278	2790	3602	4262	5094				
	•	•	4287 xx		73	35	1386	1657	2343	2870	3705	4384	5240				
	•	•	4305 xx	6	61	41	1473	1761	2490	3050	3938	4659	5569	366	321	200	
	•	•	4348 xx		70	41	1681	2009	2841	3480	4493	5316	6354				
	•	•	4392 xx		77	44	1894	2263	3201	3920	5061	5988	7157				
	•	•	4418 xx		82	44	2019	2413	3413	4180	5396	6385	7632				
	•	•	4435 xx	8	70	48	2101	2511	3552	4350	5616	6645	7942	470	423	240	
	•	•	4520 xx		80	47	2512	3002	4246	5200	6713	7943	9494				
	•	•	4610 xx		91	47	2947	3522	4981	6100	7875	9318	11137				
	•	•	4694 xx		102	57	3352	4007	5666	6940	8960	10601	12671				
	•	•	4785 xx		124	57	3792	4532	6409	7850	10134	11991	14332				
	•	•	4695 xx	10	102	57	3357	4013	5675	6950	8972	10616	12689		527		
	•	•	4870 xx		102	64	4202	5023	7104	8700	11232	13289	15884				
	•	•	5104 xx		122	67	5024	6004	8492	10400	13426	15886	18988				
	•	•	5113 xx		135	67	5458	6524	9226	11300	14588	17261	20631				

120°	BEW	Code	RF DF	D	D1	Capacity (lpm) at pressure (bar)							Dimension mm			
						0.7	1.0	2.0	3.0	5.0	7.0	10	H	H2	WS	
120°	•	4158 xx	4	47	22	758	906	1282	1570	2027	2398	2538	251	207	130	