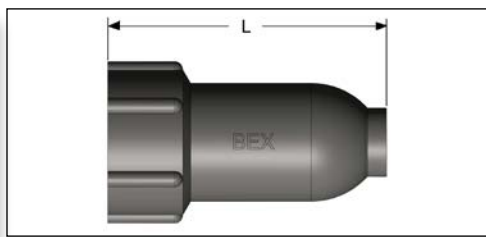
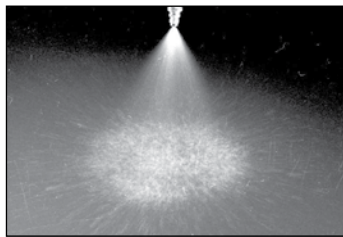




LARGE FS SERIES NOZZLE SPECIFICATIONS



NOZZLE SIZE	Dim. A	Dim. L
1 ¹ / ₄ FS	1 ⁷ / ₈	3 ¹ / ₂
1 ¹ / ₂ FS	2 ¹ / ₄	4 ¹ / ₄
2FS	2 ³ / ₄	5 ⁷ / ₁₆
2 ¹ / ₂ FS	3 ⁵ / ₈	7
3FS	4" Dia.	7 ³ / ₄
4FS	5" Dia.	9 ⁷ / ₈

SPRAY CHARACTERISTICS:

Full cone spray pattern, with uniform distribution throughout the cone.

CONSTRUCTION:

All models have a female NPT connection, and consist of a one piece body plus an internal insert. Standard materials are machined 316 stainless steel or cast 316 stainless steel.

TYPICAL APPLICATIONS:

- Chemical Processing
- Cooling Sprays
- Foam Breaking
- Heat Exchanger Cooling
- Coke Quenching
- Absorption Stack Spraying
- Gravel Washing

Model	Max. Free Passage (in)	CAPACITY AT VARIOUS PRESSURES (USGPM)												SPRAY ANGLE @ (degrees)		
		3 psi	5 psi	7 psi	10 psi	15 psi	20 psi	30 psi	40 psi	60 psi	80 psi	100 psi	150 psi	7 psi	20 psi	80 psi
1-1/4FS7.1	0.260	3.9	5.0	5.9	7.1	8.7	10.0	12.3	14.2	17.4	20.1	22.5	27.5	54	56	50
1-1/4FS12	0.260	6.6	8.5	10.0	12.0	14.7	17.0	20.8	24.0	29.4	34	38	46	72	76	70
1-1/4FS14.1	0.260	7.7	10.0	11.8	14.1	17.3	19.9	24.4	28.2	35	40	45	55	76	80	74
1-1/4FS16.5	0.305	9.0	11.7	13.8	16.5	20.2	23.3	28.6	33	40	47	52	64	85	90	83
1-1/4FS23.8	0.312	13.0	16.8	19.9	23.8	29.1	34	41	48	58	67	75	92	94	98	89
1-1/2FS12.5	0.315	6.8	8.8	10.5	12.5	15.3	17.7	21.7	25.0	30.6	35	40	48	50	51	59
1-1/2FS19	0.329	10.4	13.4	15.9	19.0	23.3	26.9	33	38	47	54	60	74	68	70	62
1-1/2FS24	0.329	13.1	17.0	20.1	24.0	29.4	34	42	48	59	68	76	93	82	88	70
1-1/2FS36	0.375	19.7	25.5	30.1	36	44	51	62	72	88	102	114	139	98	103	85
2FS20	0.438	11.0	14.1	16.7	20.0	24.5	28.3	35	40	49	57	63	77	50	64	60
2FS36	0.438	19.7	25.5	30.1	36	44	51	62	72	88	102	114	139	70	75	68
2FS42	0.438	23.0	29.7	35	42	51	59	73	84	103	119	133	163	74	78	70
2FS47	0.438	25.7	33	39	47	58	66	81	94	115	133	149	182	78	80	84
2FS59	0.438	32	42	49	59	72	83	102	118	145	167	187	229	82	86	78
2FS71	0.438	39	50	59	71	87	100	123	142	174	201	225	275	98	100	93
2-1/2FS30	0.438	16.4	21.2	25.1	30.0	37	42	52	60	73	85	95	116	55	59	55
2-1/2FS59	0.438	32	42	49	59	72	83	102	118	145	167	187	229	75	80	72
2-1/2FS71	0.531	39	50	59	71	87	100	123	142	174	201	225	275	80	85	77
2-1/2FS83	0.531	45	59	69	83	102	117	144	166	203	235	262	321	80	82	76
2-1/2FS95	0.531	52	67	79	95	116	134	165	190	233	269	300	368	86	90	82
2-1/2FS108	0.688	59	76	90	108	132	153	187	216	265	305	342	418	96	98	86
3FS50	0.688	27.4	35	42	50	61	71	87	100	122	141	158	194	49	50	46
3FS95	0.688	52	67	79	95	116	134	165	190	233	269	300	368	81	84	76
3FS108	0.688	59	76	90	108	132	153	187	216	265	305	342	418	86	89	81
3FS119	0.688	65	84	100	119	146	168	206	238	291	337	376	461	92	95	87
3FS142	0.688	78	100	119	142	174	201	246	284	348	402	449	550	102	105	93
4FS189	0.875	104	134	158	189	231	267	327	378	463	535	598	732	87	90	85
4FS212	0.875	116	150	177	212	260	300	367	424	519	600	670	821	92	95	87
4FS238	0.875	130	168	199	238	291	337	412	476	583	673	753	922	97	100	91
4FS250	0.875	137	177	209	250	306	354	433	500	612	707	791	968	102	105	95