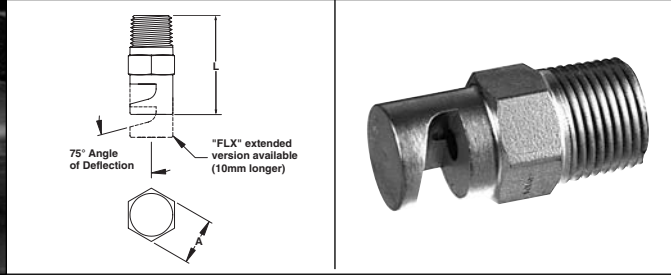


# FL SERIES

## Flooding nozzles



### SPRAY CHARACTERISTICS:

A wide, flat fan-shaped spray with low impact. The spray is deflected 75° away from the centerline of the pipe connection, as shown.

### CONSTRUCTION:

The models listed are machined from bar stock, and are one piece construction. Standard materials are brass, 303 stainless steel and 316 stainless steel. Some models

are also available in other materials, such as PVC, CPVC, Teflon® and polypropylene.



### TYPICAL APPLICATIONS:

Wherever a low impact, wide angle spray is required.

- Rinsing and Cooling
- Dishwashing
- Fertilizer Spraying
- Metal Wash

FLAT SPRAY

MODEL NUMBER	PIPE SIZE BSPT	ORIFICE DIA. (mm)	DIMENSIONS		CAPACITY (L/min) AT VARIOUS PRESSURES (bar)								SPRAY ANGLE @						
			A	L	.2 bar	.3 bar	.5 bar	.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	.2 bar	.3 bar	.5 bar	.7 bar	1.5 bar	4 bar
1/8FL.25	1/8	0.43	11 mm	15.8	--	--	--	0.10	0.11	0.14	0.16	0.20	0.23	--	--	--	90°	106°	120°
1/8FL.50	1/8	0.61	11 mm	15.8	--	--	0.16	0.19	0.23	0.28	0.32	0.39	0.46	--	--	65°	78°	99°	120°
1/8FL.75	1/8	0.74	11 mm	19.9	--	--	0.24	0.29	0.34	0.42	0.48	0.59	0.68	--	--	72°	85°	112°	140°
1/8FL1	1/8	0.84	11 mm	19.9	--	--	0.32	0.38	0.46	0.56	0.64	0.79	0.91	--	--	90°	97°	135°	148°
1/8FL1.3	1/8	0.97	11 mm	20.7	--	0.32	0.42	0.50	0.59	0.73	0.84	1.03	1.19	--	73°	80°	92°	115°	134°
1/8FL1.5	1/8	1.07	11 mm	20.7	0.31	0.37	0.48	0.57	0.68	0.84	0.97	1.18	1.37	57°	69°	75°	87°	104°	125°
1/8FL2	1/8	1.19	11 mm	20.7	0.41	0.50	0.64	0.76	0.91	1.12	1.29	1.58	1.82	60°	73°	82°	86°	104°	125°
1/8FL2.5	1/8	1.40	11 mm	20.7	0.52	0.63	0.82	0.97	1.16	1.42	1.64	2.01	2.32	749°	87°	92°	101°	112°	130°
1/8FL3	1/8	1.50	11 mm	20.7	0.61	0.75	0.97	1.14	1.37	1.67	1.93	2.37	2.73	84°	97°	106°	115°	130°	140°
1/8FL4	1/8	1.78	11 mm	23.8	0.82	1.00	1.29	1.53	1.82	2.23	2.58	3.2	3.6	74°	87°	89°	101°	116°	127°
1/8FL5	1/8	1.93	11 mm	23.8	1.02	1.25	1.61	1.91	2.28	2.79	3.2	3.9	4.6	78°	89°	97°	103°	113°	132°
1/8FL7.5	1/8	2.39	11 mm	23.8	1.53	1.87	2.42	2.86	3.4	4.2	4.8	5.9	6.8	98°	105°	112°	120°	132°	144°
1/8FL10	1/8	2.79	11 mm	23.8	2.04	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	116°	125°	135°	137°	144°	150°
1/8FL12	1/8	3.05	14 mm	23.8	2.45	3.00	3.9	4.6	5.5	6.7	7.7	9.5	10.9	98°	105°	109°	118°	134°	139°
1/8FL15	1/8	3.28	14 mm	26.7	3.06	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	100°	110°	115°	124°	131°	139°
1/8FL18	1/8	3.73	14 mm	26.7	3.7	4.5	5.8	6.9	8.2	10.0	11.6	14.2	16.4	100°	112°	116°	124°	135°	137°
1/8FL20	1/8	3.91	14 mm	26.7	4.1	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	115°	125°	128°	134°	142°	147°
1/4FL1.3	1/4	0.97	14 mm	23.8	0.26	0.32	0.42	0.50	0.59	0.73	0.84	1.03	1.19	52°	62°	71°	81°	97°	116°
1/4FL1.5	1/4	1.07	14 mm	23.8	0.31	0.37	0.48	0.57	0.68	0.84	0.97	1.18	1.37	57°	70°	77°	85°	103°	122°
1/4FL2	1/4	1.19	14 mm	25.4	0.41	0.50	0.64	0.76	0.91	1.12	1.29	1.58	1.82	62°	76°	84°	96°	110°	134°
1/4FL2.5	1/4	1.40	14 mm	23.8	0.51	0.62	0.81	0.95	1.14	1.40	1.61	1.97	2.28	88°	110°	114°	126°	145°	152°
1/4FL3	1/4	1.50	14 mm	23.8	0.61	0.75	0.97	1.14	1.37	1.67	1.93	2.37	2.73	77°	91°	99°	104°	128°	149°
1/4FL4	1/4	1.78	14 mm	25.4	0.82	1.00	1.29	1.53	1.82	2.23	2.58	3.2	3.6	65°	73°	82°	87°	96°	104°
1/4FL5	1/4	1.93	14 mm	25.4	1.02	1.25	1.61	1.91	2.28	2.79	3.2	3.9	4.6	69°	84°	89°	97°	107°	124°
1/4FL7.5	1/4	2.39	14 mm	25.4	1.53	1.87	2.42	2.86	3.4	4.2	4.8	5.9	6.8	90°	104°	122°	133°	145°	150°
1/4FL10	1/4	2.79	14 mm	25.4	2.04	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	125°	130°	134°	137°	148°	156°
1/4FL12	1/4	3.05	14 mm	25.4	2.45	3.00	3.9	4.6	5.5	6.7	7.7	9.5	10.9	110°	115°	122°	130°	141°	150°
1/4FL15	1/4	3.28	14 mm	33.4	3.06	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	90°	98°	109°	125°	136°	144°
1/4FL18	1/4	3.73	14 mm	33.4	3.7	4.5	5.8	6.9	8.2	10.0	11.6	14.2	16.4	104°	113°	118°	124°	134°	138°
1/4FL20	1/4	3.91	14 mm	33.4	4.1	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	110°	119°	127°	131°	136°	144°
1/4FL22	1/4	4.09	14 mm	33.4	4.5	5.5	7.1	8.4	10.0	12.3	14.2	17.4	20.1	97°	108°	114°	120°	128°	132°
1/4FL24	1/4	4.29	14 mm	33.4	4.9	6.0	7.7	9.2	10.9	13.4	15.5	18.9	21.9	106°	118°	121°	127°	136°	154°
1/4FL27	1/4	4.50	14 mm	33.4	5.5	6.7	8.7	10.3	12.3	15.1	17.4	21.3	24.6	110°	120°	124°	129°	139°	146°
3/8FL30	3/8	4.78	17 mm	33.4	6.1	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	104°	116°	121°	127°	135°	138°
3/8FL35	3/8	4.98	17 mm	33.4	7.1	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	104°	114°	118°	126°	130°	137°
3/8FL40	3/8	5.31	17 mm	33.4	8.2	10.0	12.9	15.3	18.2	22.3	25.8	32	36	109°	115°	123°	126°	135°	136°
3/8FL45	3/8	5.79	17 mm	33.4	9.2	11.2	14.5	17.2	20.5	25.1	29.0	36	41	117°	126°	134°	139°	142°	144°

MODEL NUMBER	PIPE SIZE BSPT	ORIFICE DIA. (mm)	DIMENSIONS		CAPACITY (L/min) AT VARIOUS PRESSURES (bar)										SPRAY ANGLE @					
			A	L	.2 bar	.3 bar	.5 bar	.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	.2 bar	.3 bar	.5 bar	.7 bar	1.5 bar	4 bar	
1/2FL40	1/2	5.31	22mm	42.9	8.2	10.0	12.9	15.3	18.2	22.3	25.8	32	36	106°	111°	119°	124°	129°	133°	
1/2FL50	1/2	6.15	22mm	42.9	10.2	12.5	16.1	19.1	22.8	27.9	32	39	46	106°	122°	130°	133°	139°	141°	
1/2FL60	1/2	6.76	22mm	42.9	12.2	15.0	19.3	22.9	27.3	33	39	47	55	110°	120°	124°	128°	133°	138°	
1/2FL70	1/2	7.37	22mm	50.8	14.3	17.5	22.6	26.7	32	39	45	55	64	105°	118°	119°	121°	124°	130°	
1/2FL80	1/2	7.92	22mm	50.8	16.3	20.0	25.8	30.5	36	45	52	63	73	114°	116°	124°	126°	130°	135°	
3/4FL90	3/4	8.03	31.8mm	60.3	18.3	22.5	29.0	34	41	50	58	71	82	104°	115°	120°	121°	125°	128°	
3/4FL100	3/4	8.74	31.8mm	60.3	20.4	25.0	32	38	46	56	64	79	91	105°	113°	115°	118°	121°	125°	
3/4FL110	3/4	8.84	31.8mm	60.3	22.4	27.5	35	42	50	61	71	87	100	106°	110°	116°	119°	120°	121°	
3/4FL120	3/4	9.53	31.8mm	60.3	24.5	30.0	39	46	55	67	77	95	109	119°	125°	129°	131°	133°	135°	
3/4FL140	3/4	10.21	31.8mm	65.1	28.5	35	45	53	64	78	90	111	128	115°	120°	128°	133°	137°	139°	
3/4FL160	3/4	11.92	38.1mm	65.1	33	40	52	61	73	89	103	126	146	117°	122°	130°	135°	139°	140°	
3/4FL180	3/4	11.68	38.1mm	66.7	37	45	58	69	82	100	116	142	164	117°	128°	131°	133°	136°	136°	
3/4FL210	3/4	12.70	38.1mm	66.7	43	52	68	80	96	117	135	166	191	122°	127°	132°	135°	136°	136°	
1FL140	1	10.21	38.1mm	73.0	29	35	45	53	64	78	90	111	128	117°	122°	126°	130°	133°	133°	
1FL160	1	10.92	38.1mm	71.3	33	40	52	61	73	89	103	126	146	117°	127°	131°	135°	136°	136°	
1FL180	1	11.68	38.1mm	73.0	37	45	58	69	82	100	116	142	164	115°	125°	128°	132°	135°	135°	
1FL210	1	12.70	38.1mm	73.0	43	52	68	80	96	117	135	166	191	117°	122°	127°	130°	133°	134°	
1FL300	1	14.68	44.5mm	92.1	61	75	97	114	137	167	193	237	273	114°	118°	120°	123°	124°	124°	
1FL450	1	17.88	44.5mm	92.1	92	112	145	172	205	251	290	355	410	128°	135°	139°	142°	144°	144°	

FLAT SPRAY

Flooding nozzles for air and steam applications

**FL SERIES**

**SPRAY CHARACTERISTICS:**

The FL series spray nozzles may also be used with air or steam, resulting in a deflected curtain of gas extending no more than a few centimetres away from the nozzle. For most applications, the maximum practical target distance from the nozzle is 25 cm.

**CONSTRUCTION:**

The models listed are machined from bar stock, and are one piece construction. Standard materials are brass, 303 stainless steel and 316 stainless steel. Some models are also available in other materials, such as PVC, CPVC, Teflon® and polypropylene.

**TYPICAL APPLICATIONS:**

For dispensing air or steam. Stainless steel construction recommended for steam applications.

- Cleaning
- Cooling
- Blow-off of surfaces

MODEL NUMBER			ORIFICE DIA. (mm)	AIR CAPACITY (L/min)					STEAM CAPACITY (kg/Hr)					COVERAGE AT 15 cm DISTANCE FROM THE NOZZLE	
1/8 Pipe Size	1/4 Pipe Size	3/8 Pipe size		.7 bar	1.5 bar	3 bar	4 bar	5 bar	.7 bar	1.5 bar	3 bar	4 bar	5 bar	0.7 bar	1 bar
1/8FL.25			0.43	1.7	4.0	6.6	8.3	10.0	0.12	0.17	0.29	0.36	0.43	5	11
1/8FL.50			0.61	3.1	7.6	12.8	16.0	19.2	0.25	0.36	0.60	0.75	0.9	5	13
1/8FL.75			0.74	4.8	11.0	18.5	23.2	27.8	0.38	0.53	0.89	1.1	1.3	6	15
1/8FL1			0.84	6.2	14.4	24.2	30.3	36.3	0.49	0.69	1.2	1.4	1.7	8	15
1/8FL1.3	1/4FL1.3		0.97	8.2	19.3	32.3	40	48	1	0.9	1.5	1.9	2.3	8	17
1/8FL1.5	1/4FL1.5		1.07	9.9	23.5	39	49	59	1	1.1	1.9	2.4	2.9	9	17
1/8FL2	1/4FL2		1.19	12.5	29.2	49	61	73	1	1.5	2.4	3.0	3.7	9	19
1/8FL2.5	1/4FL2.5		1.40	17.0	40	67	84	101	1	2.0	3.4	4.2	5.0	10	19
1/8FL3	1/4FL3		1.50	19.5	46	77	97	116	2	2.3	3.8	4.8	5.7	13	20
1/8FL4	1/4FL4		1.78	27.7	65	109	137	164	2	3.3	5.5	6.9	8.2	13	23
1/8FL5	1/4FL5		1.93	33	76	128	160	192	3	3.9	6.5	8.1	10	15	25
1/8FL7.5	1/4FL7.5		2.39	50	119	199	249	299	4	5.9	10	12	15	17	25
1/8FL10	1/4FL10		2.79	68	161	271	338	406	6	8.1	14	17	20	18	28
1/8FL12	1/4FL12		3.05	82	193	323	404	484	7	10	16	20	24	18	29
1/8FL15	1/4FL15		3.28	99	238	399	499	598	9	12	20	25	30	18	30
1/8FL18	1/4FL18		3.73	122	292	489	611	734	10	15	24	30	37	20	33
1/8FL20	1/4FL20		3.91	133	320	537	671	805	11	16	27	33	40	22	37
	1/4FL22		4.09	147	348	584	730	876	13	39	30	37	45	22	37
	1/4FL24		4.29	161	385	646	807	969	14	20	33	41	49	22	38
	1/4FL27		4.50	178	422	708	885	1061	15	21	36	45	54	22	38
	3/8FL30		4.78	201	476	798	997	1197	17	24	40	50	61	22	39