



FS series

SHORT FLAT FAN Nozzles

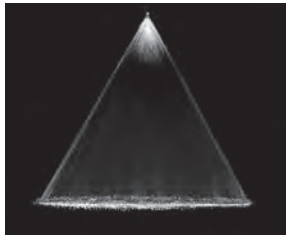
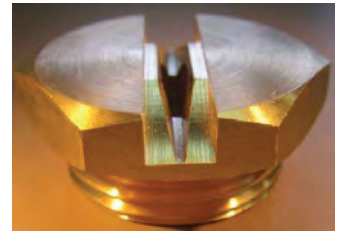
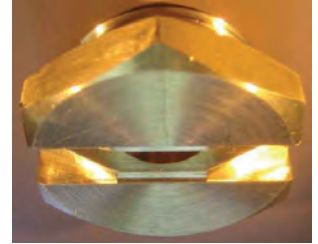
DESIGN FEATURES

- Short length
- Flat Fan.
- Direct connection to pipe

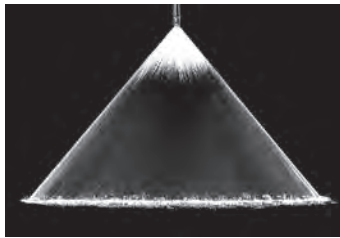
Flow rates: 0.20 to 951 l/min

SPRAY CHARACTERISTICS

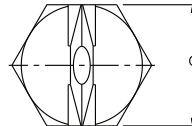
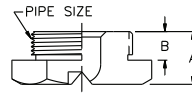
Spray pattern: FAN shape
 Spray angles: 20°, 30°, 45°, 60°, 90°, and 120° Fan



Fan 45°



Fan 120°



Metal

FS Flow Rates and Dimensions

Flat Fan, 20°, 30°, 45°, 60°, 90° & 120° Spray Angles, 1/4" to 2" Pipe Sizes

Male Pipe Size	Nozzle Number	K Factor	LITERS PER MINUTE @ BAR							Equiv. Orifice Dia. (mm)
			0.5 bar	1 bar	2 bar	3 bar	5 bar	7 bar	10 bar	
1/4	FS 012	0.28	0.20	0.28	0.40	0.49	0.63	0.75	0.89	0.800
	FS 019	0.44	0.31	0.44	0.63	0.77	0.99	1.18	1.41	1.00
	FS 031	0.71	0.50	0.71	1.00	1.23	1.59	1.88	2.25	1.20
	FS 039	0.88	0.62	0.88	1.25	1.53	1.98	2.34	2.79	1.35
	FS 050	1.13	0.80	1.13	1.60	1.96	2.53	2.99	3.58	1.50
	FS 059	1.35	0.95	1.35	1.90	2.33	3.01	3.56	4.25	1.65
	FS 077	1.77	1.25	1.77	2.50	3.06	3.95	4.67	5.59	2.00
	FS 098	2.23	1.58	2.23	3.15	3.86	4.98	5.90	7.05	2.20
	FS 12	2.83	2.00	2.83	4.00	4.90	6.33	7.48	8.95	2.50
	FS 15	3.36	2.38	3.36	4.75	5.82	7.51	8.89	10.6	2.70
1/4 or 3/4"	FS 25	5.66	4.00	5.66	8.00	9.80	12.7	15.0	17.9	3.50
	FS 31	7.10	5.02	7.10	10.0	12.3	15.9	18.8	22.5	4.00
	FS 39	8.83	6.25	8.83	12.5	15.3	19.8	23.4	27.9	4.50
	FS 50	11.3	8.00	11.3	16.0	19.6	25.3	29.9	35.8	5.00
	FS 62	14.1	10.0	14.1	20.0	24.5	31.6	37.4	44.7	5.50
	FS 77	17.7	12.5	17.7	25.0	30.6	39.5	46.7	55.9	6.00
3/4 or 1-1/4	FS 93	21.2	15.0	21.2	30.0	36.7	47.4	56.1	67.0	6.90
	FS 124	28.3	20.0	28.3	40.0	49.0	63.3	74.8	89.5	8.00
	FS 155	35.3	25.0	35.3	50.0	61.2	79.0	93.5	112	9.00
	FS 185	42.1	29.8	42.1	59.6	73.0	94.2	112	133	9.50
	FS 195	44.6	31.5	44.6	63.0	77.2	100	118	141	10.0
1-1/4	FS 309	70.4	49.8	70.4	100	122	158	186	223	12.0
	FS 496	113	80.0	113	160	196	253	299	358	15.0
2	FS 557	127	89.8	127	180	220	284	336	402	16.0
	FS 620	141	100	141	200	245	316	374	447	17.0
	FS 775	177	125	177	250	306	395	467	559	19.0
	FS 977	223	158	223	315	386	498	590	705	21.0
	FS 1130	258	182	258	365	447	577	683	816	22.5
	FS 1320	301	213	301	425	521	673	796	951	24.5

FS Dimensions and Spray Angles

Pipe Size	Nozzle Number	Spray Angles Available	Dimensions (mm)			
			A	B	C	D
1/4	FS 012 To FS 39	20° 30° 45° 60° 90° 120°	11.9			
	FS 50 To FS 62	20° 30° 45° 60° 90°		7.11		
	FS 62 To FS 77	45° 60° 90°			17.5	
	FS 77	45°				19.1
	FS 25 To FS 77	20° 30° 45° 60° 90° 120°	15.0			
3/4	FS 93	120°		7.87		
	FS 124 To FS 155	20° 30° 45° 60° 90° 120°			31.8	
	FS 185	120°				
	FS 195	20° 30° 45° 60° 90° 120°				35.1
	FS 309	20° 30° 45° 60° 90° 120°				
1 1/4	FS 124* To FS 496	20° 30° 45° 60° 90° 120°	22.1	11.9		
	FS 557 To FS 1320	20° 30° 45° 60° 90° 120°			31.8	20.1
						69.9
						76.2

Standard Materials: Brass, 316 Stainless Steel, 303 Stainless Steel