

Solid-Jet® Solid Cone Wide Angle Spray Nozzles

Home > Industrial Spray Nozzles > Solid-Jet® Solid Cone Wide Angle Spray Nozzles



Nozzle Design Features and Benefits

The Solid-Jet® wide angle spray nozzle provides a solid (full) cone pattern over a broad surface area with uniform droplet distribution. This nozzle allows for a wide spray distribution where the nozzle needs to be closer the item being sprayed

The Solid-Jet® wide angle spray nozzle is available in female NPT (Type SFW) or male threads (Types SMW & SSMW). Numerous flow rates are available from 0.22 gallons per minute (GPM) up to 50 GPM, at pressures typically in the range of 3 PSI to 150 PSI, in various types of steel, stainless steel and brass.

Two types of nozzle construction are available:

- the three piece nozzle with a removable tip (Types SFW & SMW),
- and the wide angle two piece nozzle (Type SSMW).

For complete technical specifications, see the table at the bottom of the page. A PDF is also accessible at the bottom of this page.

Call for
Technical
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973-887-6400
ext. 101

Type SFW & SMW



Spray Characteristics - Uniform, solid cone spray pattern extended to a wide spray angle. The nozzle provides effective coverage of a wider area using fewer nozzles. Nozzles spray between 90 and 120 degrees. See product chart below for the angle you can expect at a certain flow rate and pressure.

Construction - Nozzle types SFW and SMW are of a three piece design. The nozzle tip and internal vane are removable without disturbing the male or female pipe connection. Nozzles available in 1/8", 1/4", 3/8", 1/2", 3/4" & 1" male or female NPT pipe size connections.

Materials - Stainless steel spray nozzles (303 stainless as well as 316 stainless), brass, steel and other materials available upon request

Type SSMW



Spray Characteristics - Spray characteristics are the same as the SFW & SMW types. See product chart below for the angle you can expect at a certain flow rate and pressure.

Construction - One-piece design, no cores or internal members to clog. Nozzles have 1/8" 1/4", 3/8", 1/2" and 3/4" male pipe size connections.

[Solid Cone Wide Angle Spray Nozzles PDF Catalog - click below](#) Nozzle

[Solid Cone Wide Angle Spray Nozzles PDF](#)



Nozzle Size	Capacity (GPM)	Capacity in Gallons per Minute										Spray Angle (°)	
		3	5	10	15	20	30	40	50	60	75		100
1/8"	0.22	1.5	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	37.5	50.0	90-120
1/4"	0.44	3.0	5.0	10.0	15.0	20.0	30.0	40.0	50.0	62.5	75.0	100.0	90-120
3/8"	0.66	4.5	7.5	15.0	22.5	30.0	45.0	60.0	75.0	93.75	112.5	150.0	90-120
1/2"	0.88	6.0	10.0	20.0	30.0	40.0	60.0	80.0	100.0	125.0	150.0	200.0	90-120
3/4"	1.32	9.0	15.0	30.0	45.0	60.0	90.0	120.0	150.0	187.5	225.0	300.0	90-120
1"	1.76	12.0	20.0	40.0	60.0	80.0	120.0	160.0	200.0	250.0	300.0	400.0	90-120

FEMALE CONNECTION		MALE CONNECTION	
Part No.	Part No.	Part No.	Part No.
1/8" SFW	1/8" SMW	1/8" SSMW	1/4" SSMW
1/4" SFW	1/4" SMW	1/4" SSMW	3/8" SSMW
3/8" SFW	3/8" SMW	3/8" SSMW	1/2" SSMW
1/2" SFW	1/2" SMW	1/2" SSMW	3/4" SSMW
3/4" SFW	3/4" SMW	3/4" SSMW	1" SSMW

FEMALE CONNECTION		MALE CONNECTION	
Part No.	Part No.	Part No.	Part No.
1/8" SFW	1/8" SMW	1/8" SSMW	1/4" SSMW
1/4" SFW	1/4" SMW	1/4" SSMW	3/8" SSMW
3/8" SFW	3/8" SMW	3/8" SSMW	1/2" SSMW
1/2" SFW	1/2" SMW	1/2" SSMW	3/4" SSMW
3/4" SFW	3/4" SMW	3/4" SSMW	1" SSMW

Applications:

- scale breaking nozzles
- descaling nozzles
- dust control nozzles
- mold cooling nozzles
- oil coating nozzles
- circuit board nozzles
- metal processing nozzles
- parts washing nozzles
- food processing nozzles
- rinse nozzles
- wash nozzles
- pulp and paper mill nozzles
- degreasing nozzles
- foam nozzles
- steel mill nozzle applications
- metal cleaning nozzles
- phosphate coating nozzles
- roll cooling nozzles



Type SFW
Female



Type SMW
Male



Type SSMW
Male

SOLID-JET **SOLID CONE** NOZZLES

WIDE ANGLE SPRAY
TYPES SFW, SMW, SSMW

Capacities: .80 to 26 G.P.M.

Capacity G.P.M. @ 40 PSI	Pipe Size	Catalog No.			Free Passage Size*	CAPACITY IN GALLONS PER MINUTE (At Various Pressures in Pounds Per Square Inch)											SPRAY ANGLES (At Various PSI)				
		Female	Male	Male		3	5	7	10	15	20	30	40	60	80	100	150	7	20	40	80
.80	1/8	SFW81	SMW81	SSMW81	.062	.22	.28	.33	.40	.49	.57	.71	.80	.96	1.1	1.3	1.6	105°	110°	105°	90°
1.0	1/8	SFW101	SMW101	SSMW101	.062	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.4	1.6	110	110	110	100
1.5	1/8	SFW151	SMW151	SSMW151	.062	.41	.53	.63	.75	.92	1.1	1.3	1.5	1.8	2.1	2.4	2.9	120°	120°	120°	105°
2.0	1/4	SFW202	SMW202	SSMW202	.086	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	3.9	115°	115°	110°	100°
2.5	1/4	SFW252	SMW252	SSMW252	.086	.70	.91	1.1	1.2	1.5	1.8	2.2	2.5	3.1	3.5	3.9	4.8	115°	120°	120°	105°
3.0	3/8	SFW303	SMW303	SSMW303	.098	.82	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	5.8	115°	115°	112°	100°
3.5	3/8	SFW353	SMW353	SSMW353	.098	1.0	1.3	1.5	1.7	2.1	2.4	3.0	3.5	4.3	4.9	5.6	6.8	120°	120°	120°	110°
4.0	3/8	SFW403	SMW403	SSMW403	.098	1.1	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.9	5.6	6.3	7.8	120°	120°	120°	110°
6.0	1/2	SFW604	SMW604	SSMW604	.142	1.6	2.1	2.5	3.0	3.7	4.2	5.2	6.0	7.3	8.4	9.4	11.6	120°	120°	120°	108°
8.0	1/2	SFW804	SMW804	SSMW804	.142	2.2	2.8	3.3	4.0	4.9	5.7	6.9	8.0	9.8	11.2	12.7	15.5	125°	125°	120°	115°
10.0	3/4	SFW1006	SMW1006	SSMW1006	.190	2.7	3.6	4.2	4.9	6.1	7.1	8.7	10.0	12.3	14.2	15.8	19.4	120°	120°	115°	95°
14.0	3/4	SFW1406	SMW1406	SSMW1406	.190	3.8	5.0	5.8	7.0	8.5	9.9	12.1	14.0	17.1	19.8	22.1	27.0	120°	120°	120°	110°
20.0	1	SFW2008	SMW2008	SSMW2008	.244	5.5	7.1	8.4	10.0	12.2	14.1	17.3	20.0	24.5	28.2	31.6	38.8	120°	120°	120°	110°
26.0	1	SFW2608	SMW2608	SSMW2608	.244	7.0	9.3	11.0	13.0	15.8	18.4	22.4	26.0	32.0	36.7	41.1	50.5	125°	125°	125°	120°

*Determines maximum foreign particle size that will flow through nozzle without clogging.

SOLID-JET TYPES SFW, SMW DIMENSIONS AND WEIGHTS

Diagram	FEMALE CONNECTION				MALE CONNECTION				Diagram
	Pipe Size	Net Weight	A	B	Pipe Size	Net Weight	A	B	
<p>Type SFW</p>	1/8	3/4 oz.	9/16	1 ³ / ₁₆	1/8	3/4 oz.	9/16	1 ¹ / ₄	<p>Type SMW</p>
	1/4	1 ¹ / ₄ oz.	1 ¹ / ₁₆	1 ³ / ₈	1/4	1 ¹ / ₂ oz.	1 ¹ / ₁₆	1 ⁷ / ₁₆	
	3/8	2 ¹ / ₄ oz.	1 ³ / ₁₆	1 ⁹ / ₁₆	3/8	2 ¹ / ₂ oz.	1 ³ / ₁₆	1 ⁹ / ₁₆	
	1/2	3 ¹ / ₄ oz.	1	1 ²⁷ / ₃₂	1/2	4 oz.	1	1 ²⁷ / ₃₂	
	3/4	8 oz.	1 ³ / ₁₆	2 ⁷ / ₃₂	3/4	8 ¹ / ₂ oz.	1 ¹ / ₈	2 ⁷ / ₃₂	
	1	15 oz.	1 ¹ / ₂	2 ³¹ / ₃₂	1	15 ³ / ₄ oz.	1 ³ / ₈	2 ³¹ / ₃₂	

SOLID-JET TYPE SSMW, DIMENSIONS AND WEIGHTS

Diagram	Pipe Size	Net Weight	A	B
<p>Type SSMW</p>	1/8	1/2 oz.	1/2	3/4
	1/4	3/4 oz.	5/8	15/16
	3/8	1 ¹ / ₂ oz.	3/4	3 ¹ / ₃₂
	1/2	3 ¹ / ₄ oz.	7/8	1 ¹³ / ₃₂
	3/4	5 ¹ / ₄ oz.	1 ¹ / ₈	1 ¹ / ₂
	1	12 oz.	1 ³ / ₈	2 ³ / ₈