

STEINEN

Since 1907

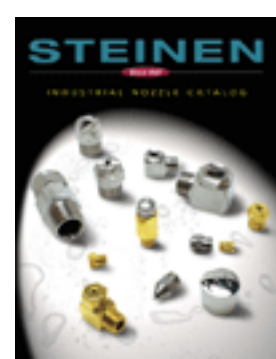
INDUSTRIAL NOZZLE CATALOG



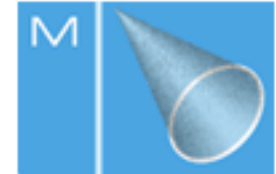
PDF Catalog

Home > Industrial Spray Nozzles > PDF Catalog

Click on graphic or text for PDF catalog



Full Catalog PDF (3.38MB)



MIST-JET® Misting / Fogging Nozzles (400KB)



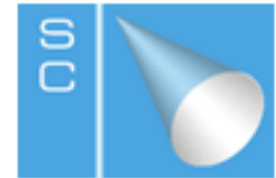
MIST-JET® Anti-Drip Misting / Fogging Nozzles (247KB)



FAN-JET® Flat-Spray Nozzles (621KB)



FLO-JET® Flat-Spray Wide Angle Nozzles (586KB)



SOLID-JET® & TAN-JET Solid Cone (638KB)



SOLID-JET® Solid Cone Wide Angle (409KB)



TAN-JET® Hollow Cone (322KB)



TAN-JET Hollow Cone Wide Angle (360KB)



SQUARE-JET™ Square Spray (369KB)



HAHN® Mining (122KB)



Mosquito Spray (117KB)



In-Line Strainers (174KB)



Ball Valves (121KB)

Company

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Wm. Steinen Mfg. Co. is located in a modern and well-equipped 43,000 square foot facility in Parsippany, New Jersey.



The company was founded in 1907 by William Steinen. Operations began in Newark, New Jersey as a tool and die shop. In response to customer requests, the company expanded its operations to include both screw machine and metal stamping capabilities.

Heating Products Division

In 1946 the company entered the fluid dispersal field with the introduction of the Steinen oil burner nozzle. The fluid dispersal activities have been expanded into the heating and industrial fields worldwide. As a result of the expanding product line and worldwide sales activities the company doubled the size of its facilities and relocated from Newark, New Jersey to Parsippany, New Jersey, where it continues to operate today.

Industrial Nozzle Product Division

Devoted exclusively to the development and manufacture of standard and special spray nozzles for all types of manufacturing and processing applications such as: air and gas washing, gas cooling, fire protection, dust control, high pressure washing, humidification, food processing, semiconductor and printed circuit board, chemical milling and processing, and pollution control scrubbers.

HAHN Mining Spray Nozzle Division

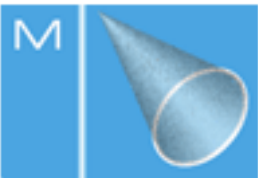
Offers a wide range of spray nozzles for the underground mining industry including Spraylets, Jet Sprays, Whirlplate, Type X-Trim Jet, Dome Shape, Hold Fast Clamps, Threaded Adapter, Type "J" and "PB" nozzles.

Corporate Offices

[Steinen Holdings, Inc.](#), located in Parsippany, NJ the corporate offices provide oversight, direction and administrative and financial services to each operating division.

Mist-Jet® Misting / Fogging Nozzles

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Nozzle Design Features and Benefits

Steinen is the leading designer and manufacturer of misting nozzles in the world. The quality and precision of our misting nozzles cannot be matched by any other nozzle manufacturer.

What sets Steinen apart is our ability to produce nozzles that can create a finely atomized spray with uniform droplet size, consistent spray angles, and at lower pressures than other manufacturer's nozzles. The result is a nozzle that offers the highest performance.

However, don't confuse highest quality and performance with the highest price. Due to our significant production volumes of these misting nozzles, Steinen's production efficiencies mean very competitive prices.

Steinen offers a wide variety of misting nozzles to satisfy almost any requirement. Nozzles are offered in five different configurations, three different spray angles, numerous flow rates from 0.37 gallons per ***hour*** (GPH) up to 124 GPH, at pressures from 40 PSI to 500 PSI, in various types of stainless steel.

Four types of nozzles are available:

- the single nozzle tip (**Type A**),
- the nozzle tip (Type A) in a female adapter of various pipe threads (**Type AF**),
- the nozzle tip (Type A) in a male adapter of various pipe threads (**Type AM**),
- the compact sized nozzle tip (**Type P**)

For complete technical specifications, see the tables at the bottom of the page. PDF's also accessible at the bottom of this page.

Type AF & AM

Full Size Nozzles



Spray Characteristics - The very best misting nozzle available! Uniform hollow cone spray pattern with a fine micro-atomized mist spray. Fog-like spray results with pressures over 150 P.S.I. Spray angles of 70, 80, and 90 degrees are available, with 70 degrees being standard, measured @ 150 P.S.I.

Construction - Type A consists of basic nozzle tip with 9/16"-24 UNF connection and 100 mesh strainer (for capacities of 0.37, 0.50 and 0.75 GPH, a 200 mesh strainer is furnished). Type AM consists of Type A nozzle tip/strainer and 1/8", 1/4" or 3/8" NPT male adapter. Type AF consists of Type A nozzle tip/strainer and 1/8" or 1/4" female adapter.

Materials - Nozzle tip (all types) are furnished in 416 or 303 stainless steel. Type "AM" (Male) and Type "AF" (Female) adapters are furnished in 303 stainless steel or brass.

Type P

Compact Nozzles

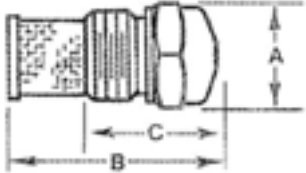


Spray Characteristics - Uniform mist spray pattern with a fine micro-atomized mist spray. Spray angles of 70, 80, and 90 degrees are available, with 70 degrees being standard, measured @ 150 P.S.I.

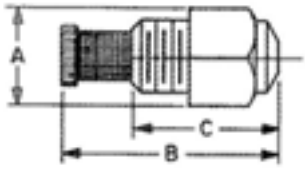
Construction - Type P consists of a compact nozzle body with 1/4" male NPT connection and 100 mesh strainer (for capacities of 0.37, 0.50 and 0.75 GPH, a 200 mesh strainer is furnished).

Materials - Nozzle is furnished in 416 or 303 stainless steel.

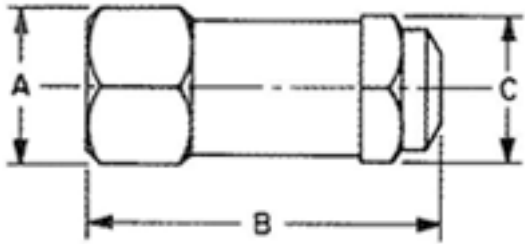
Type A (tip only)



Type P



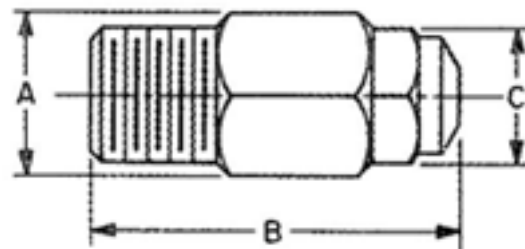
Type AF



Type AF exploded view



Type AM



Ordering Information: Specify

- Type A (tip & strainer only); Type AM (tip & strainer with a male adapter); Type AF (tip & strainer with female adapter), Type P
- Capacity in gallons/hour (GPH) – DO NOT CONFUSE WITH GALLONS PER MINUTE!
- Spray angle - 70°, 80° & 90° (Note: 70° spray angle will be furnished unless otherwise specified)
- Pipe thread size (eg. 1/8", 1/4" or 3/8")
- Material – Nozzle: 416 or 303 stainless steel Adapter: 303 stainless steel or brass for the AF or AM nozzles

Misting Spray Nozzles PDF Catalog - click below

Mist-Jet® Misting Spray Nozzles PDF

Nozzles Applications:

- greenhouse spray nozzle
- mist cooling
- humidification
- fogging systems
- coatings
- dust suppression
- chemical spraying
- other fine atomization spray applications

Technical drawing and table for Mist-Jet Hollow Cone Nozzles. The table lists capacity in gallons per hour (GPH) for various nozzle types (A, AF, AM, P) and spray angles (70°, 80°, 90°) at pressures from 40 to 500 PSI. The table is organized into sections for different nozzle types and spray angles. The bottom of the page includes a note about the table being a guide and not a guarantee, and a small diagram of the nozzle assembly.



TYPE AF
Female
1/8" & 1/4"



TYPE AM
Male
1/8", 1/4" & 3/8"



TYPE P
Male
1/4"

MIST-JET HOLLOW CONE NOZZLES

TYPES A, AF, AM, P
Spray Angles 70°, 80° & 90°

The table below contains flow rates for all nozzles.

Capacity G.P.H. @ 40 P.S.I.	Catalog No.	Approx. Orifice Diameter	CAPACITY IN GALLONS PER HOUR (At Various Pressures in Pounds Per Square Inch)									
			40	60	80	100	125	150	200	300	400	500
.37	A37*	.009	.37	.45	.55	.60	.70	.75	.85	1.05	1.2	1.35
.50	A50*	.010	.50	.60	.70	.80	.85	.95	1.1	1.4	1.6	1.8
.75	A75*	.012	.75	.89	1.1	1.2	1.4	1.5	1.7	2.1	2.4	2.7
1.00	A100	.014	1.0	1.2	1.4	1.6	1.7	1.9	2.2	2.7	3.1	3.5
1.50	A150	.020	1.5	1.8	2.1	2.4	2.7	2.9	3.4	4.1	4.8	5.3
2.00	A200	.024	2.0	2.5	2.8	3.2	3.5	3.9	4.5	5.5	6.4	7.1
2.50	A250	.028	2.5	3.1	3.5	3.9	4.4	4.8	5.5	6.8	7.8	8.8
3.00	A300	.028	3.0	3.7	4.2	4.7	5.2	5.8	6.7	8.2	9.5	10.6
3.50	A350	.031	3.5	4.3	4.9	5.6	6.2	6.8	7.9	9.6	11.1	12.4
4.00	A400	.036	4.0	4.9	5.6	6.3	7.2	7.8	9.0	11.0	12.7	14.2
4.50	A450	.040	4.5	5.4	6.3	7.1	7.9	8.7	10.1	12.4	14.3	16.0
5.00	A500	.040	5.0	6.1	7.1	7.9	8.8	9.7	11.2	13.7	15.8	17.7
5.50	A550	.040	5.5	6.7	7.7	8.6	9.6	10.6	12.2	14.9	17.3	19.3
6.00	A600	.043	6.0	7.3	8.5	9.4	10.5	11.6	13.4	16.3	18.9	21.1
6.50	A650	.046	6.5	8.0	9.3	10.3	11.3	12.6	14.6	17.8	20.6	23.0
7.00	A700	.046	7.0	8.6	9.9	11.1	12.4	13.6	15.7	19.2	22.2	24.8
7.50	A750	.046	7.5	9.3	10.5	11.9	13.2	14.6	16.9	20.6	23.8	26.6
8.00	A800	.052	8.0	9.8	11.3	12.6	14.2	15.5	17.9	21.9	25.3	28.3
8.50	A850	.052	8.5	10.3	12.0	13.4	15.0	16.5	19.1	23.3	26.9	30.1
9.00	A900	.052	9.0	11.0	12.6	14.1	15.8	17.4	20.3	24.8	28.6	32.0
10.0	A1000	.059	10.0	12.2	14.1	15.8	17.6	19.4	22.4	27.4	31.7	35.5
12.0	A1200	.063	12.0	14.7	17.0	19.0	21.0	23.2	26.8	32.7	37.8	42.3
13.0	A1300	.067	13.0	16.2	18.4	20.6	23.0	25.3	29.2	35.7	41.2	46.1
14.0	A1400	.067	14.0	17.1	19.8	22.2	24.8	27.2	31.4	38.3	44.3	49.6
15.0	A1500	.070	15.0	18.4	21.2	23.7	26.3	29.0	33.8	41.2	47.7	53.3
16.0	A1600	.073	16.0	19.6	22.6	25.3	28.2	31.0	35.8	43.7	50.6	56.6
18.0	A1800	.076	18.0	22.0	25.5	28.5	31.8	34.8	40.3	49.4	57.0	63.6
20.0	A2000	.076	20.0	24.5	28.2	31.6	35.2	38.8	44.8	54.7	63.3	71.0
22.0	A2200	.078	22.0	27.0	31.2	34.8	38.6	42.7	49.2	60.2	69.5	77.8
24.0	A2400	.082	24.0	29.4	34.0	38.0	42.3	46.4	53.6	65.4	75.6	84.6
26.0	A2600	.082	26.0	32.0	36.7	41.1	45.8	50.5	58.4	71.2	82.4	92.2
28.0	A2800	.086	28.0	34.2	39.6	44.4	49.4	54.4	62.8	76.6	88.6	99.2
30.0	A3000	.089	30.0	36.8	42.4	47.4	52.6	58.0	67.2	82.2	95.2	106.6
35.0	A3500	.096	35.0	42.7	49.7	55.3	61.6	67.9	78.5	95.7	110.8	124.2

*Furnished with 200 mesh screen

Mist-Jet® TYPE AF - Exploded View



**Adapter (available
in male or female)**

**Mesh
Strainer**

**Nozzle
TYPE A**

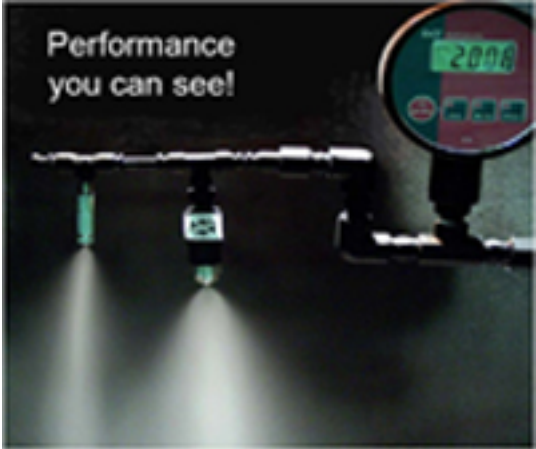
Drip-Free Misting / Fogging Nozzles

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Your Problem: Your application requires a uniform spray pattern in a fine atomizing spray nozzle with instantaneous shut-off at the orifice - no dripping - no leaking

The Solution: The competitively priced Steinen Drip-Free Fogging Nozzle

- The Steinen stainless steel Drip-Free Misting Nozzle has been refined over the years by our top engineers to reward you with a flawless performance, accurate flow and spray angle, and instant shut-off at the orifice in less than 250 ms.
 - We developed two different check valve spray nozzles for your system requirements:
 - Type WC400 - for the standard pressure shut off system (≈60 p.s.i. cracking pressure)
 - Type WCH400 - for the high pressure shut off system (≈80 p.s.i. cracking pressure)
 - High grade 303 stainless steel keeps nozzles looking good for the life of the installation.
 - The Check Valve located in the mister nozzle body instantaneously stops dripping and leaking which is necessary in such situations where any drips and leaks are unacceptable.
 - Significantly outperforms any slim line misting nozzle.
- Fine atomization, no drip, spray nozzles are suitable for almost all misting applications:
 - greenhouse spray nozzles
 - mist cooling spray nozzles
 - Pest control spray nozzles
 - humidification spray nozzles
 - poultry spray nozzles
 - fog systems spray nozzles
 - coating spray nozzles
 - dust suppression spray nozzles
 - chemical spray nozzles
 - livestock spray nozzles
 - mosquito spray nozzles
 - other fine spray nozzles applications



PSI	160	200	250
GPH	.75	.85	.95
OZ/M	1.6	1.8	2.00

Steinen Part Numbers	
416 stainless steel	WC400000070
303 stainless steel	WC400000021
416 stainless steel	WCH400000070
303 stainless steel	WCH400000021



We also offer accessories like brass nozzle adapters, nickel-plated and stainless steel nozzle adapters in 1/8" and 1/4" NPT, 1 3/8" long. For fast and easy installation and removal of nozzles try our nozzle tool.

[Download Drip-Free Misting/Fogging Nozzles Catalog Page PDF](#)

Drip-Free Misting/Fogging Nozzles

Your Problem: Your application requires a fine atomizing nozzle with instantaneous shut-off at the orifice – no dripping – no leaking

The Solution: The competitively priced Steinen Drip-Free Misting/Fogging Nozzle

- The Steinen Drip-Free Misting/Fogging Nozzle has been refined over the years by our top engineers to reward you with a flawless performance, accurate flow and spray angle, and instant shut-off at the orifice in 250 ms or quicker.
- We developed two different types for your system requirements:
 - Type WC400 – for the standard pressure shut off system
 - Type WCH400 – for the high pressure shut off system
- No need for additional expensive in-line shut-off valves (which do not shut-off at the orifice and therefore drip and leak).
- The Check Valve located in the Nozzle body instantaneously stops dripping and leaking which is necessary in such situations where drips and leaks are unacceptable.
- Finely atomized spraying or misting/fogging is suitable for almost all humidifying, light wetting and cooling applications, which are needed in insect control, greenhouses, industry and agriculture.
- In both Types of nozzles, Body and Valve are constructed from 416 stainless steel with a nozzle thread of 9/16-24 NEF. A Viton O-Ring and a stainless steel check valve spring assure the accurate shut-off at the orifice. A sintered bronze filter avoids clogging of the nozzle.
- **For the “Refined” user we also offer our Replacement Nozzles in 303 stainless steel.** The body is manufactured out of rust-free 303 stainless steel and the inner workings and the filter are the same as the 416 model. **These corrosion-resistant nozzles are sold at a very competitive price.**

PSI	160	200	250
GPH	.75	.85	.95
OZ/M	1.6	1.8	2.00

Steinen Part Numbers	
416 stainless steel	WC400000070
303 stainless steel	WC400000021
416 stainless steel	WCH400000070
303 stainless steel	WCH400000021



We also offer accessories like brass, nickel-plated and stainless steel adapters in 1/8” and 1/4” NPT, 1 3/8” long. For fast and easy installation and removal of nozzles try our nozzle tool.

FanJet® Flat Spray Nozzles

Home > Industrial Spray Nozzles > FanJet® Flat Spray Nozzles



Nozzle Design Features and Benefits

Steinen offers a wide variety of flat spray nozzles to satisfy almost any requirement. Nozzles are offered in 10 different spray angles from 0° to 110°, numerous flow rates from 0.20 gallons per minute (GPM) up to 50 GPM, at pressures from 5 PSI to 1,000 PSI, in various types of steel, stainless steel, brass and CPVC.

Three types of nozzle construction are available:

- the single piece nozzle (Type V),
- the four piece removable tip nozzle (Type FA),
- and the low capacity/high pressure nozzle (Type VHP).

For complete technical specifications, see the tables at the bottom of the page. PDF's also accessible at the bottom of this page.

Type V



Spray Characteristics - Flat spray nozzle with high impact, sharply defined spray pattern without heavy edges. This type of high velocity spray is very useful in cleaning and coating applications. Spray angles of 0, 15, 25, 40, 50, 65, 80 and 90 degrees are available.

Construction - One-piece design with no cores or internal members to clog. Nozzles available in 1/8", 1/4", 3/8", 1/2", 3/4", and 1" NPT male pipe thread.

Materials - These nozzles are available in 303 & 316 Stainless Steel, mild steel, brass and CPVC.

Type FA



Spray Characteristics - Flat, high impact, sharply defined spray pattern without heavy edges. This type of high velocity spray is excellent for cleaning applications. Spray angles of 0, 15, 25, 40, 50, 65, 80, 95 and 110 degrees are available.

Construction - Nozzle is four parts: cap, orifice tip, strainer with 100 mesh screen, and the adapter. No cores or internal vanes to clog. Orifice tip adjustable directionally without disturbing the male or female pipe connection. Available in 1/8" and 1/4" NPT male & female thread.

Materials - These nozzles are available in 303 & brass.

Type VHP



Spray Characteristics - Steinen engineered the VHP nozzle specifically for high pressure spray cleaning and washing processes. A flat, evenly distributed fan pattern provides maximum impact throughout the complete spray pattern. Unexcelled accuracy of flow and spray angle rating have been attained through precision manufacturing technology. Spray angles of 0, 15, 25, 40, 50, 65, 80 and 90 degrees are available.

Construction - Two-piece design with brass body and locked-in stainless steel orifice insert. Nozzles available in 1/8" or 1/4" NPT male or female pipe thread.

Call for
Technical
Sales
973-887-6400
ext. 101

FanJet® Flat Spray Nozzles PDF Catalog -
click below

Fan-Jet® Flat Spray Nozzles PDF

		FAN-JET FLAT SPRAY NOZZLES		CAPACITY IN GALLONS PER MINUTE													
		TYPE V		1/8" Male Thread in Brass (For Spray Nozzle)													
Capacity GPM @ PSI	Pipe Size in	Working PSI	Material	15°	25°	30°	40°	50°	65°	80°	90°	110°	120°	130°	140°	150°	160°
200	3/4	50	303	107	160	170	210	240	280	320	350	380	410	440	470	500	530
200	3/4	50	316	107	160	170	210	240	280	320	350	380	410	440	470	500	530
200	3/4	50	brass	107	160	170	210	240	280	320	350	380	410	440	470	500	530
100	1/2	50	303	53	80	85	105	120	140	160	180	200	220	240	260	280	300
100	1/2	50	316	53	80	85	105	120	140	160	180	200	220	240	260	280	300
100	1/2	50	brass	53	80	85	105	120	140	160	180	200	220	240	260	280	300
50	1/4	50	303	26	40	42	52	60	70	80	90	100	110	120	130	140	150
50	1/4	50	316	26	40	42	52	60	70	80	90	100	110	120	130	140	150
50	1/4	50	brass	26	40	42	52	60	70	80	90	100	110	120	130	140	150
25	1/8	50	303	13	20	21	26	30	35	40	45	50	55	60	65	70	75
25	1/8	50	316	13	20	21	26	30	35	40	45	50	55	60	65	70	75
25	1/8	50	brass	13	20	21	26	30	35	40	45	50	55	60	65	70	75
10	1/16	50	303	5	8	8	10	11	13	15	17	19	21	23	25	27	29
10	1/16	50	316	5	8	8	10	11	13	15	17	19	21	23	25	27	29
10	1/16	50	brass	5	8	8	10	11	13	15	17	19	21	23	25	27	29
5	1/32	50	303	2	4	4	5	6	7	8	9	10	11	12	13	14	15
5	1/32	50	316	2	4	4	5	6	7	8	9	10	11	12	13	14	15
5	1/32	50	brass	2	4	4	5	6	7	8	9	10	11	12	13	14	15
2	1/64	50	303	1	2	2	2	3	3	4	4	5	5	6	6	7	7
2	1/64	50	316	1	2	2	2	3	3	4	4	5	5	6	6	7	7
2	1/64	50	brass	1	2	2	2	3	3	4	4	5	5	6	6	7	7
1	1/128	50	303	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1/128	50	316	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1/128	50	brass	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1
0.5	1/256	50	303	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.5	1/256	50	316	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.5	1/256	50	brass	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.2	1/512	50	303	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.2	1/512	50	316	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.2	1/512	50	brass	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.1	1/1024	50	303	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	1/1024	50	316	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	1/1024	50	brass	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

FanJet® Flat Spray Nozzles PDF Catalog -
click below

Fan-Jet® Flat Spray Nozzles PDF

		Adjustable FAN-JET FLAT SPRAY NOZZLES		CAPACITY IN GALLONS PER MINUTE													
		TYPE FA		1/8" Male Thread in Brass (For Spray Nozzle)													
Capacity GPM @ PSI	Pipe Size in	Working PSI	Material	15°	25°	30°	40°	50°	65°	80°	90°	110°	120°	130°	140°	150°	160°
200	3/4	50	303	107	160	170	210	240	280	320	350	380	410	440	470	500	530
200	3/4	50	316	107	160	170	210	240	280	320	350	380	410	440	470	500	530
200	3/4	50	brass	107	160	170	210	240	280	320	350	380	410	440	470	500	530
100	1/2	50	303	53	80	85	105	120	140	160	180	200	220	240	260	280	300
100	1/2	50	316	53	80	85	105	120	140	160	180	200	220	240	260	280	300
100	1/2	50	brass	53	80	85	105	120	140	160	180	200	220	240	260	280	300
50	1/4	50	303	26	40	42	52	60	70	80	90	100	110	120	130	140	150
50	1/4	50	316	26	40	42	52	60	70	80	90	100	110	120	130	140	150
50	1/4	50	brass	26	40	42	52	60	70	80	90	100	110	120	130	140	150
25	1/8	50	303	13	20	21	26	30	35	40	45	50	55	60	65	70	75
25	1/8	50	316	13	20	21	26	30	35	40	45	50	55	60	65	70	75
25	1/8	50	brass	13	20	21	26	30	35	40	45	50	55	60	65	70	75
10	1/16	50	303	5	8	8	10	11	13	15	17	19	21	23	25	27	29
10	1/16	50	316	5	8	8	10	11	13	15	17	19	21	23	25	27	29
10	1/16	50	brass	5	8	8	10	11	13	15	17	19	21	23	25	27	29
5	1/32	50	303	2	4	4	5	6	7	8	9	10	11	12	13	14	15
5	1/32	50	316	2	4	4	5	6	7	8	9	10	11	12	13	14	15
5	1/32	50	brass	2	4	4	5	6	7	8	9	10	11	12	13	14	15
2	1/64	50	303	1	2	2	2	3	3	4	4	5	5	6	6	7	7
2	1/64	50	316	1	2	2	2	3	3	4	4	5	5	6	6	7	7
2	1/64	50	brass	1	2	2	2	3	3	4	4	5	5	6	6	7	7
1	1/128	50	303	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1/128	50	316	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1/128	50	brass	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1
0.5	1/256	50	303	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.5	1/256	50	316	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.5	1/256	50	brass	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.2	1/512	50	303	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.2	1/512	50	316	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.2	1/512	50	brass	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.1	1/1024	50	303	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	1/1024	50	316	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	1/1024	50	brass	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

FanJet® Flat Spray Nozzles PDF Catalog -
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Fan-Jet® Flat Spray Nozzles PDF

VHP

FLAT EVEN SPRAY NOZZLES

LOW CAPACITY - HIGH PRESSURE

Spray Angles: 0°, 15°, 25°, 40°, 50°, 65°, 80° and 90°

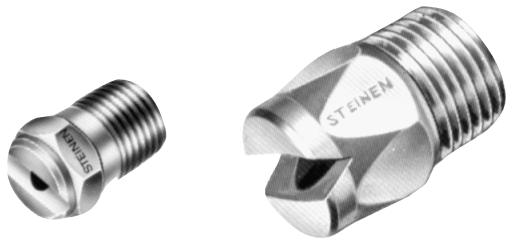
Male Connection
Type VHP

Female Connection
Type VHP

CAPACITY IN GALLONS PER MINUTE

1/8" Male Thread in Brass (For Spray Nozzle)

Capacity GPM @ PSI	Pipe Size in	Working PSI	0°	15°	25°	40°	50°	65°	80°	90°	0°	15°	25°	40°	50°	65°	80°	90°
20	1/8"	HPF01	106	18	23	24	28	30	38	53	53	67	75	75	84	84	84	84
20	1/8"	HPF02	102	21	26	29	37	40	57	65	75	87	100	110	110	126	136	146
20	1/8"	HPF03	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF04	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF05	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF06	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF07	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF08	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF09	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF10	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF11	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF12	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF13	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF14	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF15	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF16	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF17	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF18	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF19	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF20	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF21	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF22	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF23	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF24	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF25	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF26	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF27	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF28	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF29	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF30	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF31	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF32	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF33	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF34	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF35	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF36	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF37	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF38	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF39	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF40	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF41	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF42	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF43	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF44	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF45	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF46	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF47	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF48	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF49	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF50	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF51	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF52	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF53	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF54	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF55	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF56	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF57	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF58	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF59	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF60	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF61	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF62	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF63	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF64	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF65	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF66	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF67	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF68	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF69	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF70	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF71	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF72	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF73	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF74	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF75	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF76	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF77	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF78	102	23	28	30	40	45	67	78	87	105	120	130	130	150	165	175
20	1/8"	HPF79	102	23	28	30												



Type V
1/8" – 1/4"

Type V
3/8" – 1"

FAN-JET *FLAT SPRAY* NOZZLES

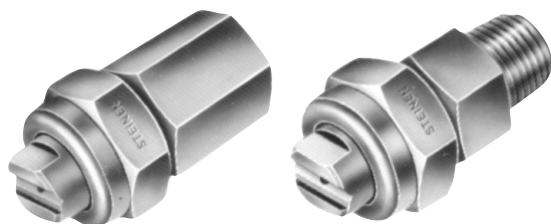
TYPE V

Capacities: .20 to 50 G.P.M.
Spray Angles: 0°, 15°, 25°, 40°, 50°, 65°,
80° and 90°

Capacity G.P.M. @ 40 P.S.I.	Pipe Size	Catalog No. V	Approx. Orifice Diameter	CAPACITY IN GALLONS PER MINUTE (At Various Pressures in Pounds Per Square Inch)											
				5	10	15	20	30	40	60	80	100	120	150	
.20	1⁄8, 1⁄4	V .2	.036	.07	.10	.12	.14	.17	.20	.25	.28	.32	.35	.39	
.25	1⁄8, 1⁄4	V .25	.039	.09	.13	.16	.18	.21	.25	.31	.35	.39	.43	.48	
.30	1⁄8, 1⁄4	V .3	.043	.11	.15	.18	.21	.26	.30	.37	.42	.47	.51	.58	
.35	1⁄8, 1⁄4	V .35	.047	.13	.18	.22	.25	.31	.35	.43	.49	.55	.61	.68	
.40	1⁄8, 1⁄4	V .4	.052	.14	.20	.25	.28	.35	.40	.49	.57	.63	.69	.78	
.45	1⁄8, 1⁄4	V .45	.055	.16	.22	.28	.32	.39	.45	.55	.63	.71	.77	.88	
.50	1⁄8, 1⁄4	V .5	.058	.17	.25	.31	.35	.43	.50	.61	.71	.79	.87	.97	
.55	1⁄8, 1⁄4	V .55	.060	.20	.28	.34	.39	.48	.55	.67	.77	.87	.96	1.07	
.60	1⁄8, 1⁄4	V .6	.062	.21	.30	.37	.42	.52	.60	.73	.85	.95	1.04	1.16	
.65	1⁄8, 1⁄4	V .65	.064	.23	.32	.40	.46	.56	.65	.80	.93	1.03	1.14	1.26	
.70	1⁄8, 1⁄4	V .7	.067	.25	.35	.43	.50	.60	.70	.86	.99	1.11	1.19	1.36	
.80	1⁄8, 1⁄4	V .8	.072	.28	.40	.49	.56	.69	.80	.98	1.12	1.26	1.36	1.55	
.90	1⁄8, 1⁄4	V .9	.076	.32	.46	.56	.64	.78	.90	1.10	1.28	1.42	1.56	1.74	
1.0	1⁄8, 1⁄4, 3⁄8	V 1.0	.078	.35	.50	.61	.70	.86	1.0	1.2	1.4	1.6	1.7	1.9	
1.5	1⁄8, 1⁄4, 3⁄8	V 1.5	.093	.53	.75	.92	1.1	1.3	1.5	1.8	2.1	2.4	2.5	2.9	
2.0	1⁄8, 1⁄4, 3⁄8	V 2.0	.109	.71	1.0	1.2	1.4	1.7	2.0	2.5	2.8	3.2	3.5	3.9	
3.0	1⁄8, 1⁄4, 3⁄8	V 3.0	.125	1.1	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	5.0	5.8	
4.0	1⁄8, 1⁄4, 3⁄8	V 4.0	.156	1.4	2.0	2.5	2.8	3.5	4.0	4.9	5.7	6.3	6.8	7.7	
5.0	1⁄4, 3⁄8, 1⁄2	V 5.0	.171	1.8	2.4	3.1	3.5	4.3	5.0	6.1	7.1	7.9	8.7	9.7	
6.0	1⁄4, 3⁄8, 1⁄2	V 6.0	.187	2.1	3.0	3.7	4.2	5.2	6.0	7.3	8.5	9.5	10.0	11.6	
7.0	1⁄4, 3⁄8, 1⁄2	V 7.0	.203	2.5	3.5	4.3	4.9	6.1	7.0	8.6	9.9	11.1	11.9	13.5	
8.0	1⁄4, 3⁄8, 1⁄2	V 8.0	.218	2.8	4.0	4.9	5.7	6.9	8.0	9.8	11.3	12.6	13.6	15.4	
9.0	1⁄4, 3⁄8, 1⁄2	V 9.0	.234	3.2	4.5	5.6	6.3	7.8	9.0	11.0	12.6	14.1	15.6	17.4	
10.0	3⁄8, 1⁄2	V 10.0	.250	3.5	4.9	6.1	7.1	8.6	10.0	12.2	14.1	15.8	17.3	19.4	
11.0	3⁄8, 1⁄2	V 11.0	.265	3.8	5.5	6.8	8.0	9.6	11.0	13.4	15.4	17.3	18.9	21.1	
12.0	3⁄8, 1⁄2	V 12.0	.265	4.2	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	20.0	23.2	
13.0	3⁄8, 1⁄2	V 13.0	.281	4.6	6.5	7.8	9.1	11.1	13.0	13.2	18.4	20.6	21.9	25.3	
14.0	3⁄8, 1⁄2	V 14.0	.281	5.0	7.0	8.5	9.9	12.1	14.0	17.1	19.8	22.1	24.0	27.0	
15.0	3⁄8, 1⁄2	V 15.0	.296	5.3	7.4	9.2	10.6	13.0	15.0	18.4	21.2	23.7	26.0	29.0	
20.0	1⁄2, 3⁄4	V 20.0	.344	7.1	13.0	12.2	14.1	17.3	20.0	24.5	28.3	31.6	34.4	38.7	
25.0	1⁄2, 3⁄4	V 25.0	.375	9.0	12.5	15.5	17.5	21.5	25.0	30.5	35.5	39.5	43.5	48.5	
30.0	3⁄4	V 30.0	.421	10.6	15.0	18.4	21.2	25.0	30.0	36.8	42.4	47.4	52.0	58.0	
35.0	3⁄4	V 35.0	.453	12.6	17.5	21.7	24.5	30.3	35.0	42.7	49.7	55.3	60.9	67.9	
40.0	3⁄4	V 40.0	.500	14.1	20.0	24.4	28.3	34.6	40.0	49.0	56.5	63.2	68.8	77.4	
50.0	1	V 50.0	.515	17.7	25.0	30.6	35.4	43.3	50.0	61.2	70.7	79.1	86.6	96.8	

Flow and angle data for higher pressures available
upon request.

Steinen 29 East Halsey Rd. Parsippany, NJ 07054
Phone: 973-887-6400 Fax: 973-887-4632 E-mail: info@steinen.com



Female Connection
Type FAF

Male Connection
Type FAM

Adjustable FAN-JET *FLAT SPRAY* NOZZLES

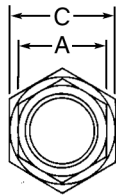
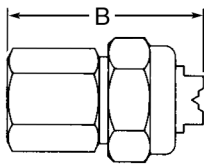
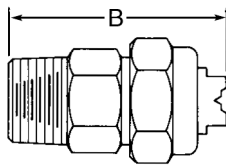
TYPE FA

Capacities: .20 to 7 G.P.M.
Spray Angles: 0°, 15°, 25°, 40°, 50°, 65°,
80°, 95° and 110°

Capacity G.P.M. @ 40 P.S.I.	Pipe Size Male & Female	Catalog No.	Strainer Mesh	CAPACITY IN GALLONS PER MINUTE (At Various Pressures in Pounds Per Square Inch)										
				5	7	10	15	20	30	40	60	80	100	150
.20	1/8, 1/4	FA0.20	100	.07	.08	.10	.12	.14	.17	.20	.25	.28	.32	.39
.25	1/8, 1/4	FA0.25	100	.09	.11	.13	.16	.18	.21	.25	.31	.35	.39	.48
.30	1/8, 1/4	FA0.3	100	.11	.13	.15	.18	.21	.26	.30	.37	.42	.47	.58
.35	1/8, 1/4	FA0.35	100	.13	.15	.18	.22	.25	.31	.35	.43	.49	.55	.68
.40	1/8, 1/4	FA0.4	100	.14	.17	.20	.25	.28	.35	.40	.49	.57	.63	.78
.50	1/8, 1/4	FA0.5	100	.17	.21	.25	.31	.35	.43	.50	.61	.71	.79	.97
.60	1/8, 1/4	FA0.6	100	.21	.25	.30	.37	.42	.52	.60	.73	.85	.95	1.16
.80	1/8, 1/4	FA0.8	100	.28	.33	.40	.49	.56	.69	.80	.98	1.13	1.26	1.55
1.0	1/8, 1/4	FA1.0	*	.35	.42	.50	.61	.71	.86	1.00	1.22	1.41	1.58	1.93
1.5	1/8, 1/4	FA1.5	*	.53	.63	.75	.92	1.06	1.30	1.50	1.83	2.12	2.37	2.90
2.0	1/8, 1/4	FA2.0	*	.71	.84	1.00	1.22	1.41	1.73	2.00	2.45	2.83	3.16	3.87

Capacities up to 7.0 G.P.M. available upon request.

*Strainer not normally supplied, advise if required.

<div> <div>Adjustable FAN-JET DIMENSIONS AND WEIGHTS</div> <div>    </div> <div> Type FAF Female Type FAM Male </div> </div>					
Type	Pipe Size	Net Weight	A	B	C
1/8 FAF Female	1/8	2 oz.	1 1/16	1 13/32	1 3/16
1/8 FAM Male	1/8	1 3/4 oz.	1 1/16	1 1/2	1 3/16
1/4 FAF Female	1/4	2 oz.	1 1/16	1 17/32	1 3/16
1/4 FAM Male	1/4	1 3/4 oz.	1 1/16	1 5/8	1 3/16

VHP FLAT EVEN SPRAY NOZZLES

LOW CAPACITY – HIGH PRESSURE

Spray Angles: 0°, 15°, 25°, 40°, 50°, 65°,
80° and 90°



Male Connection
Type VHPM



Female Connection
Type VHPF

Capacity G.P.M. @ 40 PSI	Male and Female Pipe Size	Catalog No. VHP	Approx. Orifice Diameter	CAPACITY IN GALLONS PER MINUTE (At Various Pressures in Pounds Per Square Inch)															
				20	30	40	60	80	100	150	200	300	400	500	600	700	800	900	1000
.20	1/8-1/4	VHP.20	.036	.14	.17	.20	.24	.28	.31	.38	.44	.53	.60	.67	.74	.79	.84	.89	.94
.30	1/8-1/4	VHP.30	.043	.21	.26	.30	.37	.42	.47	.57	.65	.79	.91	1.00	1.10	1.18	1.26	1.34	1.40
.40	1/8-1/4	VHP.40	.052	.28	.35	.40	.49	.56	.62	.75	.87	1.05	1.20	1.35	1.46	1.57	1.67	1.77	1.86
.45	1/8-1/4	VHP.45	.055	.32	.39	.45	.55	.62	.70	.85	.97	1.18	1.35	1.50	1.65	1.77	1.89	2.00	2.10
.50	1/8-1/4	VHP.50	.058	.35	.43	.50	.61	.70	.77	.94	1.08	1.31	1.50	1.67	1.82	1.97	2.10	2.22	2.30
.55	1/8-1/4	VHP.55	.060	.39	.48	.55	.66	.76	.85	1.04	1.18	1.45	1.65	1.85	2.00	2.15	2.30	2.45	2.55
.60	1/8-1/4	VHP.60	.062	.42	.52	.60	.73	.84	.93	1.13	1.30	1.58	1.80	2.02	2.20	2.37	2.53	2.67	2.80
.65	1/8-1/4	VHP.65	.064	.46	.56	.65	.78	.91	1.00	1.23	1.41	1.71	1.96	2.18	2.37	2.56	2.75	2.90	3.08
.70	1/8-1/4	VHP.70	.067	.49	.61	.70	.85	.98	1.08	1.32	1.52	1.85	2.12	2.35	2.57	2.77	2.96	3.14	3.30
.80	1/8-1/4	VHP.80	.072	.56	.69	.80	.97	1.12	1.24	1.52	1.74	2.11	2.43	2.70	2.94	3.17	3.39	3.58	3.78
.90	1/8-1/4	VHP.90	.076	.64	.78	.90	1.09	1.25	1.40	1.70	1.95	2.37	2.72	3.02	3.30	3.55	3.79	4.00	4.21
1.00	1/8-1/4	VHP1.0	.078	.70	.86	1.00	1.21	1.40	1.56	1.89	2.18	2.64	3.02	3.38	3.70	3.97	4.23	4.48	4.72

Construction: Two-piece design, brass body with permanently locked-in stainless or hardened steel orifice insert. Available in 1/8" or 1/4" male and female pipe connections. Additional data available upon request.

Ordering Information: Specify pipe size, VHPM (male) or VHPF (female) catalog number, spray angle and insert material. **Example:** 1/8" male, VHPM or .60-25° H.S.S. insert.

SPRAY CHARACTERISTICS

Steinen engineering has developed the VHP nozzle specifically for high pressure spray cleaning and washing processes. Flat, evenly distributed fan pattern provides maximum impact throughout the complete spray pattern.

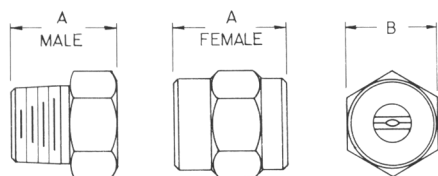
Unexcelled accuracy of flow and spray angle rating have been attained through precision manufacturing techniques.

Spray angles 0°, 15°, 25°, 40°, 50°, 65°, 80° and 90° are standard.

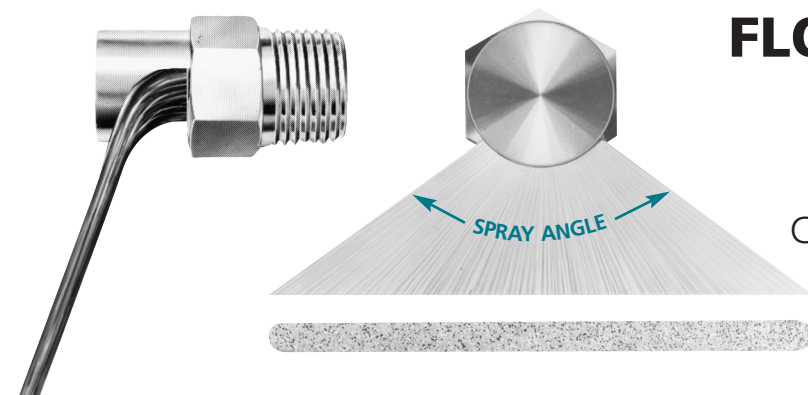
CONSTRUCTION

Two-piece design, brass body with permanently locked-in stainless or hardened stainless steel orifice insert. Available in 1/8" or 1/4" male and female pipe connections.

FAN-JET TYPE VHP DIMENSIONS AND WEIGHTS



Pipe Size	Net Weight	A	B
1/8M	1/4 oz.	5/8	1/2
1/8F	1/3 oz.	5/8	1/2
1/4M	2/3 oz.	3/4	9/16
1/4F	2/3 oz.	23/32	5/8



FLO-JET *FLAT SPRAY* NOZZLES

TYPE F

Capacities: .20 to 48 G.P.M.

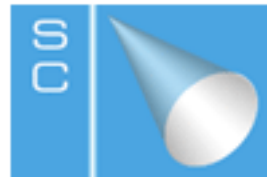
Capacity G.P.M. @ 40 P.S.I.	Pipe Size	Catalog No.	Approx. Orifice Diameter	CAPACITY IN GALLONS PER MINUTE (At Various Pressures in Pounds Per Square Inch)										SPRAY ANGLES (At Various PSI)			
				3	5	7	10	15	20	30	40	50	60	7	20	40	60
.20	1/8	F201	.35	—	—	—	.10	.12	.14	.17	.20	.22	.24	—	125°	125°	135°
.30	1/8	F301	.040	—	—	.12	.15	.18	.21	.26	.30	.34	.37	95°	123°	127°	135°
.40	1/8	F401	.046	—	—	.17	.20	.24	.28	.35	.40	.44	.49	88°	122°	127°	132°
.50	1/8	F501	.055	—	—	.21	.25	.30	.35	.43	.50	.55	.60	105°	120°	130°	135°
.60	1/8	F601	.059	.17	.21	.25	.30	.37	.42	.52	.60	.66	.73	110°	125°	135°	140°
.80	1/8	F801	.073	.22	.28	.33	.40	.49	.57	.71	.80	.88	.96	125°	140°	145°	155°
1.0	1/8	F1001	.082	.27	.35	.42	.50	.61	.71	.87	1.0	1.1	1.2	115°	130°	140°	145°
1.5	1/8	F1501	.096	.41	.53	.63	.75	.92	1.1	1.3	1.5	1.7	1.8	130°	150°	155°	160°
2.0	1/8	F2001	.111	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.2	2.5	135°	150°	160°	165°
2.5	1/8	F2501	.125	.70	.91	1.1	1.2	1.5	1.8	2.2	2.5	2.8	3.1	135°	150°	160°	165°
3.0	1/8	F3001	.136	.82	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.4	3.7	110°	120°	138°	132°
3.5	1/8	F3501	.144	1.0	1.3	1.5	1.7	2.1	2.4	3.0	3.5	3.9	4.3	120°	138°	148°	152°
4.0	1/8	F4001	.154	1.1	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.4	4.9	120°	138°	148°	152°
4.0	1/4	F4002	.154	1.1	1.4	1.7	2.0	3.7	2.8	3.5	4.0	4.4	4.9	130°	140°	145°	155°
4.5	1/4	F4502	.166	1.2	1.6	1.9	2.2	4.3	3.2	3.9	4.5	5.0	5.4	130°	140°	145°	150°
5.0	1/4	F5002	.173	1.4	1.8	2.1	2.4	1.4	3.5	4.3	5.0	5.5	6.1	130°	140°	145°	150°
5.5	1/4	F5502	.182	1.5	1.9	2.3	2.7	2.1	3.8	4.7	5.5	6.1	6.7	125°	138°	145°	150°
6.0	3/8	F6003	.187	1.6	2.1	2.5	3.0	2.8	4.2	5.1	6.0	6.8	7.3	122°	133°	140°	147°
7.0	3/8	F7003	.201	1.9	2.5	2.9	3.5	3.5	4.9	6.1	7.0	7.8	8.6	128°	135°	140°	150°
8.0	3/8	F8003	.218	2.2	2.8	3.3	4.0	4.2	5.7	6.9	8.0	8.8	9.8	128°	135°	145°	150°
9.0	3/8	F9003	.234	2.4	3.2	3.8	4.5	4.9	6.3	7.8	9.0	10.0	11.0	128°	135°	145°	150°
10.0	1/2	F10004	.242	2.7	3.5	4.2	4.9	5.7	7.1	8.5	10.0	11.0	12.3	128°	135°	140°	150°
12.0	1/2	F12004	.265	3.3	4.2	5.0	6.0	6.3	8.5	10.4	12.0	13.4	14.7	128°	140°	140°	150°
14.0	1/2	F14004	.287	3.8	5.0	5.8	7.0	7.1	9.9	12.1	14.0	15.7	17.1	133°	140°	145°	155°
16.0	1/2	F16004	.312	4.4	5.6	6.7	8.0	8.0	11.3	13.8	16.0	17.6	19.6	128°	140°	145°	150°
18.0	3/4	F18006	.328	4.9	6.4	7.5	9.0	8.5	12.7	15.6	18.0	20.0	22.0	130°	140°	140°	145°
20.0	3/4	F20006	.343	5.5	7.1	8.4	10.0	9.1	14.1	17.3	20.0	22.3	24.5	130°	130°	140°	140°
22.0	3/4	F22006	.359	6.0	7.8	9.2	11.0	9.9	15.5	19.0	22.0	24.5	26.9	130°	130°	140°	140°
24.0	3/4	F24006	.375	6.6	8.5	10.0	12.0	10.6	17.0	20.8	24.0	26.8	29.4	120°	125°	135°	140°
*36.0	3/4	F36006	.453	9.9	12.6	15.0	18.0	14.1	25.5	31.2	36.0	40.2	44.1	140°	150°	150°	150°
*48.0	3/4	F48006	.515	11.5	14.8	17.5	21.0	14.1	29.6	36.3	48.0	53.6	57.4	140°	150°	150°	150°

*Available in certain materials only.

FLO-JET DIMENSIONS AND WEIGHTS

Type		Pipe Size	Net Weight	A	B	C
F201 to F2501		1/8	1/2 oz.	15/16	19/32	7/16
F3001 to F4001		1/8	3/4 oz.	1 1/16	23/32	9/16
F4002 to F5502		1/4	1 oz.	1 3/16	23/32	9/16
F6003 to F9003		1/8	2 oz.	1 1/2	1	1 1/16
F10004 to F16004		1/2	4 oz.	1 13/16	1 3/8	7/8
F18006 to F24006		1/4	7 oz.	1 15/16	1 1/4	1 1/8
F36006 to F48006		1/4	12 oz.	2 5/16	1 21/32	1 1/2

Steinen 29 East Halsey Rd. Parsippany, NJ 07054
 Phone: 973-887-6400 Fax: 973-887-4632 E-mail: info@steinen.com



Steinen offers several types of solid (full) cone spray nozzles. Nozzles are offered in five different body styles, numerous flow rates from 0.12 gallons per minute (GPM) up to 50 GPM, at pressures from 3 PSI to 150 PSI, in various types of steel, stainless steel, brass and CPVC.

- the three piece removable tip & internal vane nozzle (Types SF & SM),
- the two piece removable vane nozzle (Type SSM),
- and the 90° solid cone spray nozzle (Types TSF & TSM).

Type SF & SM



Construction - Three-piece design with removable nozzle tip and internal vane possible without disturbing the pipe connection. Nozzles available in 1/8", 1/4", 3/8", 1/2", 3/4" & 1" male and female NPT pipe thread.

Materials - These nozzles are available in 303 & 316 Stainless Steel, steel, brass and CPVC.

Type SSM



Construction - Two-piece design with removable internal vane. Nozzles available in 1/8", 1/4", 3/8", 1/2", 3/4" & 1" male NPT pipe thread.

Materials - These nozzles are available in 303 & 316 Stainless Steel, steel, brass and CPVC.

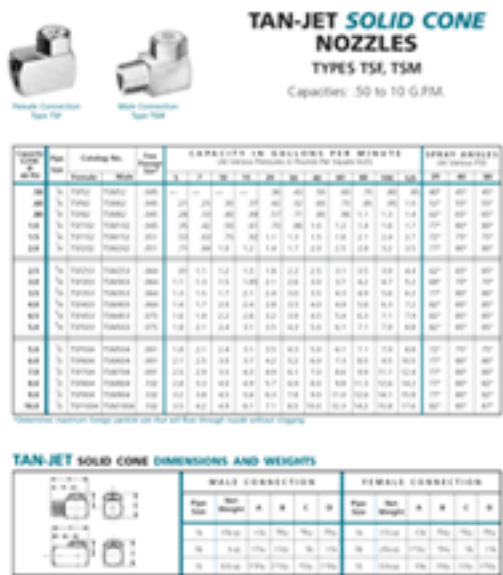
Type TSF & TSM



Construction - Three-piece design with removable nozzle tip and internal vane. Nozzles available in 1/4", 3/8" & 1/2" male and female NPT pipe thread.

Materials - – These nozzles are available in 303 & 316 Stainless Steel, steel and brass.

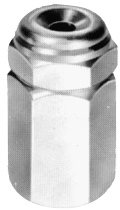
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- rinse nozzles
- wash nozzles
- pulp and paper mill nozzles
- degreasing nozzles
- foam nozzles
- steel mill nozzle applications
- metal cleaning nozzles
- phosphate coating nozzles
- roll cooling nozzles

- 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



Type SF
Female



Type SM
Male



Type SSM
Male

SOLID-JET **SOLID CONE** NOZZLES

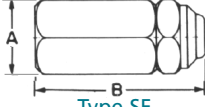
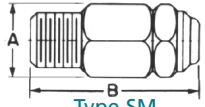
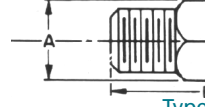
STANDARD SPRAY ANGLE
TYPES SF, SM, SSM

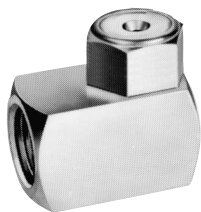
Capacities: .20 to 26 G.P.M.

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	
.20	1/8	SF21	SM21	SSM21	.036	—	—	—	—	.12	.14	.17	.20	.24	.28	.32	.39	35°	35°	40°	45°	
.40	1/8	SF41	SM41	SSM41	.044	—	.14	.17	.20	.25	.28	.35	.40	.49	.57	.63	.78	40°	50°	50°	55°	
.60	1/8	SF61	SM61	SSM61	.044	.16	.21	.25	.30	.37	.42	.52	.60	.74	.85	.95	1.2	60°	70°	70°	70°	
.80	1/8	SF81	SM81	SSM81	.062	.22	.28	.33	.40	.49	.57	.71	.80	.96	1.1	1.3	1.6	55°	60°	60°	60°	
1.0	1/8	SF101	SM101	SSM101	.062	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	1.9	60°	70°	70°	70°	
1.0	1/4	SF102	SM102	SSM102	.078	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	1.9	45°	50°	50°	55°	
1.5	1/4	SF152	SM152	SSM152	.086	.41	.53	.63	.75	.92	1.1	1.3	1.5	1.8	2.1	2.4	2.9	55°	65°	65°	65°	
2.0	1/4	SF202	SM202	SSM202	.086	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	3.9	65°	75°	75°	75°	
2.5	1/4	SF252	SM252	SSM252	.086	.70	.91	1.1	1.2	1.5	1.8	2.2	2.5	3.1	3.5	3.9	4.8	75°	75°	75°	75°	
2.0	3/8	SF203	SM203	SSM203	.086	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	3.9	45°	50°	50°	50°	
2.5	3/8	SF253	SM253	SSM253	.098	.70	.91	1.1	1.2	1.5	1.8	2.2	2.5	3.1	3.5	3.9	4.8	55°	60°	60°	60°	
3.0	3/8	SF303	SM303	SSM303	.098	.82	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	5.8	60°	65°	65°	65°	
3.5	3/8	SF353	SM353	SSM353	.098	1.0	1.3	1.5	1.1	2.1	2.4	3.0	3.5	4.3	4.9	5.6	6.8	70°	72°	72°	72°	
4.0	3/8	SF403	SM403	SSM403	.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	83°	83°	83°	83°	
4.5	3/8	SF453	SM453	SSM453	.098	1.2	1.6	1.9	2.2	2.8	3.2	3.9	4.5	5.4	6.3	7.1	8.7	85°	90°	90°	90°	
3.5	1/2	SF354	SM354	SSM354	.140	1.0	1.3	1.5	1.7	2.1	2.4	3.0	3.5	4.3	4.9	5.6	6.8	50°	55°	55°	55°	
4.0	1/2	SF404	SM404	SSM404	.142	1.1	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.9	5.6	6.3	7.8	53°	58°	58°	58°	
4.5	1/2	SF454	SM454	SSM454	.142	1.2	1.6	1.9	2.2	2.8	3.2	3.9	4.5	5.4	6.3	7.1	8.7	65°	70°	70°	70°	
5.0	1/2	SF504	SM504	SSM504	.142	1.4	1.8	2.1	2.4	3.0	3.5	4.3	5.0	6.1	7.1	7.9	9.7	70°	70°	70°	70°	
5.5	1/2	SF554	SM554	SSM554	.142	1.5	1.9	2.3	2.7	3.4	3.8	4.7	5.5	6.7	7.7	8.6	10.6	70°	75°	75°	75°	
6.0	1/2	SF604	SM604	SSM604	.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	75°	80°	80°	80°	
7.0	1/2	SF704	SM704	SSM704	.142	1.9	2.5	2.9	3.5	4.3	4.9	6.1	7.0	8.6	9.9	11.1	13.6	80°	80°	80°	75°	
8.0	1/2	SF804	SM804	SSM804	.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	85°	90°	90°	85°	
6.0	3/4	SF606	SM606	SSM606	.187	1.6	2.1	2.5	3.0	3.7	4.2	5.2	6.0	7.3	8.4	9.4	11.6	50°	55°	55°	55°	
7.0	3/4	SF706	SM706	SSM706	.190	1.9	2.5	2.9	3.5	4.3	4.9	6.1	7.0	8.6	9.9	11.1	13.6	55°	60°	60°	60°	
8.0	3/4	SF806	SM806	SSM806	.190	2.2	2.8	3.3	4.0	4.9	5.7	6.9	8.0	9.8	11.2	12.7	15.5	60°	65°	65°	65°	
9.0	3/4	SF906	SM906	SSM906	.190	2.4	3.2	3.8	4.5	5.6	6.3	7.8	9.0	11.0	12.6	14.1	17.4	65°	70°	70°	70°	
10.0	3/4	SF1006	SM1006	SSM1006	.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	70°	75°	75°	70°	
12.0	3/4	SF1206	SM1206	SSM1206	.190	3.3	4.3	5.0	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	23.2	75°	80°	80°	75°	
14.0	3/4	SF1406	SM1406	SSM1406	.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	85°	90°	90°	85°	
16.0	3/4	SF1606	SM1606	SSM1606	.190	4.4	5.7	6.7	8.0	9.8	11.3	13.6	16.0	19.6	22.6	25.3	31.0	90°	95°	95°	90°	
10.0	1	SF1008	SM1008	SSM1008	.234	2.7	3.6	4.2	5.0	6.1	7.1	8.7	10.0	12.3	14.2	15.8	19.4	45°	50°	55°	55°	
12.0	1	SF1208	SM1208	SSM1208	.244	3.3	4.3	5.0	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	23.2	53°	60°	60°	55°	
14.0	1	SF1408	SM1408	SSM1408	.244	3.8	5.0	5.8	7.0	8.5	9.9	12.1	14.0	17.1	19.8	22.1	27.0	65°	65°	65°	65°	
16.0	1	SF1608	SM1608	SSM1608	.244	4.4	5.7	6.7	8.0	9.8	11.3	13.8	16.0	19.6	22.6	25.3	31.0	70°	70°	70°	70°	
18.0	1	SF1808	SM1808	SSM1808	.244	4.9	6.4	7.5	9.0	11.0	12.7	15.6	18.0	22.0	25.4	28.4	34.8	70°	75°	75°	75°	
20.0	1	SF2008	SM2008	SSM2008	.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	75°	80°	80°	80°	
24.0	1	SF2408	SM2408	SSM2408	.244	6.6	8.5	10.1	12.0	14.7	17.0	20.8	24.0	29.4	34.0	38.0	46.4	90°	95°	95°	95°	
26.0	1	SF2608	SM2608	SSM2608	.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	90°	95°	95°	95°	

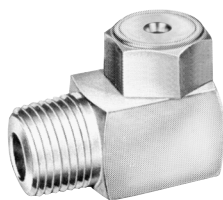
*Determines maximum foreign particle size that will flow through nozzle without clogging.

SOLID-JET TYPES SF, SM, SSM DIMENSIONS AND WEIGHTS

 Type SF				 Type SM				 Type SSM			
FEMALE CONNECTION				MALE CONNECTION				MALE CONNECTION			
Pipe Size	Net Weight	A	B	Pipe Size	Net Weight	A	B	Pipe Size	Net Weight	A	B
1/8	3/4 oz.	9/16	1 1/16	1/8	3/4 oz.	9/16	1 1/8	1/8	1/2 oz.	1/2	5/8
1/4	1 1/4 oz.	1 1/16	1 3/8	1/4	1 1/2 oz.	1 1/16	1 7/16	1/4	3/4 oz.	5/8	1 5/16
3/8	2 1/4 oz.	1 3/16	1 9/16	3/8	2 1/2 oz.	1 3/16	1 9/16	3/8	1 1/2 oz.	3/4	3 1/32
1/2	3 1/2 oz.	1	1 27/32	1/2	4 oz.	1	1 27/32	1/2	3 1/4 oz.	7/8	1 13/32
3/4	8 oz.	1 3/16	2 7/32	3/4	8 1/2 oz.	1 1/8	2 7/32	3/4	5 1/4 oz.	1 1/8	1 1/2
1	15 oz.	1 1/2	2 31/32	1	15 3/4 oz.	1 3/8	2 31/32	1	12 oz.	1 3/8	2 3/8



Female Connection
Type TSF



Male Connection
Type TSM

TAN-JET **SOLID CONE** NOZZLES

TYPES TSF, TSM

Capacities: .50 to 10 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		5	7	10	15	20	30	40	60	80	100	125	20	40	80
.50	¼	TSF52	TSM52	.045	—	—	—	—	.36	.43	.50	.60	.70	.80	.85	40°	45°	45°
.60	¼	TSF62	TSM62	.045	.21	.25	.30	.37	.42	.52	.60	.73	.85	.95	1.0	52°	55°	55°
.80	¼	TSF82	TSM82	.045	.28	.33	.40	.49	.57	.71	.80	.96	1.1	1.3	1.4	62°	65°	65°
1.0	¼	TSF102	TSM102	.045	.35	.42	.50	.61	.70	.86	1.0	1.2	1.4	1.6	1.7	77°	80°	80°
1.5	¼	TSF152	TSM152	.051	.53	.63	.75	.92	1.1	1.3	1.5	1.8	2.1	2.4	2.7	72°	75°	75°
2.0	¼	TSF202	TSM202	.051	.71	.84	1.0	1.2	1.4	1.7	2.0	2.5	2.8	3.2	3.5	77°	80°	80°
2.5	⅜	TSF253	TSM253	.064	.91	1.1	1.2	1.5	1.8	2.2	2.5	3.1	3.5	3.9	4.4	62°	65°	65°
3.0	⅜	TSF303	TSM303	.064	1.1	1.3	1.5	1.85	2.1	2.6	3.0	3.7	4.2	4.7	5.2	68°	70°	70°
3.5	⅜	TSF353	TSM353	.064	1.3	1.5	1.7	2.1	2.4	3.0	3.5	4.3	4.9	5.6	6.2	77°	80°	80°
4.0	⅜	TSF403	TSM403	.064	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.9	5.6	6.3	7.2	82°	85°	85°
4.5	⅜	TSF453	TSM453	.075	1.6	1.9	2.2	2.8	3.2	3.9	4.5	5.4	6.3	7.1	7.9	82°	85°	85°
5.0	⅜	TSF503	TSM503	.075	1.8	2.1	2.4	3.1	3.5	4.3	5.0	6.1	7.1	7.9	8.8	82°	85°	85°
5.0	½	TSF504	TSM504	.091	1.8	2.1	2.4	3.1	3.5	4.3	5.0	6.1	7.1	7.9	8.8	72°	75°	75°
6.0	½	TSF604	TSM604	.091	2.1	2.5	3.0	3.7	4.2	5.2	6.0	7.3	8.5	9.5	10.5	77°	80°	80°
7.0	½	TSF704	TSM704	.091	2.5	2.9	3.5	4.3	4.9	6.1	7.0	8.6	9.9	11.1	12.4	77°	80°	80°
8.0	½	TSF804	TSM804	.102	2.8	3.3	4.0	4.9	5.7	6.9	8.0	9.8	11.3	12.6	14.2	77°	80°	82°
9.0	½	TSF904	TSM904	.102	3.2	3.8	4.5	5.6	6.3	7.8	9.0	11.0	12.6	14.1	15.8	77°	80°	82°
10.0	½	TSF1004	TSM1004	.102	3.5	4.2	4.9	6.1	7.1	8.5	10.0	12.3	14.2	15.8	17.6	82°	85°	87°

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

TAN-JET **SOLID CONE** DIMENSIONS AND WEIGHTS

		MALE CONNECTION						FEMALE CONNECTION					
		Pipe Size	Net Weight	A	B	C	D	Pipe Size	Net Weight	A	B	C	D
		1/4	1 3/4 oz.	1 1/4	29/32	19/32	29/32	1/4	1 1/2 oz.	1 1/8	25/32	19/32	29/32
		3/8	3 oz.	1 7/16	1 1/32	7/8	1 1/4	3/8	2 3/4 oz.	1 11/32	15/16	7/8	1 1/4
		1/2	5 1/2 oz.	1 13/16	1 11/32	31/32	1 13/32	1/2	5 1/4 oz.	1 5/8	1 5/32	1 1/32	1 15/32

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.

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.

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.

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

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

SOLID-JET SOLID CONE NOZZLES
WIDE ANGLE SPRAY
TYPES SFW, SMW, SSMW
Capacities: 80 to 26 G.P.M.

Nozzle Size (inches)	Flow Rate (GPM)	Capacity in Gallons per Minute (at various pressures in Pounds per Square Inch)												Spray Angles (at various PSI)	
		3	5	7	10	15	20	30	40	60	80	100	150	90°	120°
1/8"	0.22	25	25	25	25	25	25	25	25	25	25	25	25	120	120
1/4"	0.45	45	45	45	45	45	45	45	45	45	45	45	45	120	120
3/8"	0.68	68	68	68	68	68	68	68	68	68	68	68	68	120	120
1/2"	0.91	91	91	91	91	91	91	91	91	91	91	91	91	120	120
3/4"	1.36	136	136	136	136	136	136	136	136	136	136	136	136	120	120
1"	1.82	182	182	182	182	182	182	182	182	182	182	182	182	120	120

SOLID-JET TYPES SFW, SMW DIMENSIONS AND WEIGHTS

Type	Female Connection			Male Connection		
	Part	Part	Part	Part	Part	Part
Type SFW	1/8"	1.10 in.	0.50 in.	1/8"	1.10 in.	0.50 in.
	1/4"	1.10 in.	0.50 in.	1/4"	1.10 in.	0.50 in.
	3/8"	1.10 in.	0.50 in.	3/8"	1.10 in.	0.50 in.
	1/2"	1.10 in.	0.50 in.	1/2"	1.10 in.	0.50 in.

SOLID-JET TYPE SSMW DIMENSIONS AND WEIGHTS

Type	Part		
	Part	Part	Part
Type SSMW	1/8"	1.10 in.	0.50 in.
	1/4"	1.10 in.	0.50 in.
	3/8"	1.10 in.	0.50 in.
	1/2"	1.10 in.	0.50 in.

Steinen: 29 East Valley Rd. Parsippany, NJ 07054
Phone: 973-887-6400 Fax: 973-887-4622 E-mail: info@steinen.com

Nozzle 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

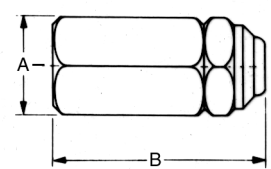
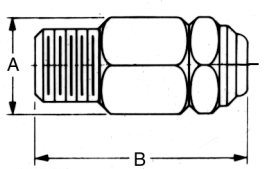
WIDE ANGLE SPRAY
TYPES SFW, SMW, SSMW

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

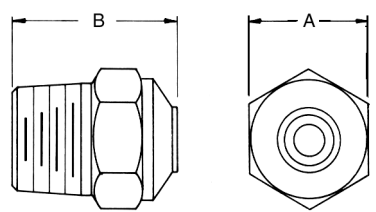
Capacity G.P.M. @ 40 PSI	Pipe Size	Catalog No.			Free Passage Size*	CAPACITY IN GALLONS PER MINUTE (At Various Pressures in Pounds Per Square Inch)												SPRAY ANGLES (At Various PSI)			
						Female	Male	Male	3	5	7	10	15	20	30	40	60	80	100	150	7
		.80	1/8	SFW81		SMW81	SSMW81	.062	.22	.28	.33	.40	.49	.57	.71	.80	.96	1.1	1.3	1.6	105°
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

 Type SFW	FEMALE CONNECTION				MALE CONNECTION				 Type SMW
	Pipe Size	Net Weight	A	B	Pipe Size	Net Weight	A	B	
	1/8	3/4 oz.	9/16	1 3/16	1/8	3/4 oz.	9/16	1 1/4	
	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

 Type SSMW	Pipe Size	Net Weight	A	B
	1/8	1/2 oz.	1/2	3/4
	1/4	3/4 oz.	5/8	1 5/16
	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



Female Connection
Type TF



Male Connection
Type TM

TAN-JET *HOLLOW CONE* NOZZLES

TYPES TF, TM

Capacities: .20 to 24 G.P.M.

Spray Angles: 70° or 90°

Capacity G.P.M. @ 40 P.S.I.	Pipe Size	Catalog No.		Approx. Orifice Diameter **	CAPACITY IN GALLONS PER MINUTE (At Various Pressures in Pounds Per Square Inch)											
		FEMALE	MALE		3	5	7	10	15	20	30	40	60	80	100	125
.20 .40 .60	1/8	TF21 TF41 TF61	TM21 TM41 TM61	.059 .082 .093	— — —	— .14 .21	.08 .16 .25	.10 .20 .30	.12 .25 .37	.14 .28 .42	.17 .35 .52	.20 .40 .60	.24 .48 .73	.28 .56 .85	.31 .63 .95	.34 .67 1.0
.80 1.0 1.2 1.5 2.0 2.5	1/8	TF81 TF101 TF121 TF151 TF201 TF251	TM81 TM101 TM121 TM151 TM201 TM251	.120 .125 .140 .156 .171 .203	.22 .27 .34 .41 .55 .70	.28 .35 .42 .53 .71 .91	.33 .42 .50 .63 .84 1.1	.40 .50 .60 .75 1.0 1.2	.49 .61 .74 .92 1.2 1.5	.57 .70 .84 1.1 1.4 1.8	.71 .86 1.0 1.3 1.7 2.2	.80 1.0 1.2 1.5 2.0 2.5	.96 1.2 1.4 1.6 2.5 3.1	1.1 1.4 1.6 2.1 2.8 3.5	1.3 1.6 1.8 2.4 3.2 3.9	1.4 1.7 2.0 2.7 3.5 4.4
.40 .60 .80 1.0	1/4	TF42 TF62 TF82 TF102	TM42 TM62 TM82 TM102	.078 .098 .098 .125	— — .22 .27	.14 .21 .28 .35	.16 .25 .33 .42	.20 .30 .40 .50	.25 .37 .49 .61	.28 .42 .57 .70	.35 .52 .71 .86	.40 .60 .80 1.0	.48 .73 .96 1.2	.56 .85 1.1 1.4	.63 .95 1.3 1.6	.67 1.0 1.4 1.7
1.2 1.5 2.0 2.5 3.0	1/4	TF122 TF152 TF202 TF252 TF302	TM122 TM152 TM202 TM252 TM302	.140 .156 .187 .203 .203	.34 .41 .55 .70 .82	.42 .53 .71 .91 1.1	.50 .63 .84 1.0 1.3	.60 .75 1.0 1.2 1.5	.74 .92 1.2 1.5 1.8	.84 1.1 1.4 1.7 2.1	1.0 1.3 1.7 2.2 2.6	1.2 1.5 2.0 2.5 3.0	1.4 1.8 2.5 3.1 3.7	1.6 2.1 2.8 3.5 4.2	1.8 2.4 3.2 3.9 4.7	2.0 2.7 3.5 4.4 5.2
.80 1.0 1.2 1.5 2.0	3/8	TF83 TF103 TF123 TF153 TF203	TM83 TM103 TM123 TM153 TM203	.098 .120 .128 .149 .171	.22 .27 .34 .41 .55	.28 .35 .42 .53 .71	.33 .42 .50 .63 .84	.40 .50 .60 .75 1.0	.49 .61 .74 .92 1.2	.57 .70 .84 1.1 1.4	.71 .86 1.0 1.3 1.7	.80 1.0 1.2 1.5 2.0	.96 1.2 1.4 1.6 2.5	1.1 1.4 1.6 2.1 2.8	1.3 1.6 1.8 2.4 3.2	1.4 1.7 2.0 2.7 3.5
2.5 3.0 3.5 4.0 4.5 5.0	3/8	TF253 TF303 TF353 TF403 TF453 TF503	TM253 TM303 TM353 TM403 TM453 TM503	.191 .218 .221 .228 .250 .250	.70 .82 1.0 1.1 1.2 1.4	.91 1.1 1.3 1.5 1.6 1.8	1.1 1.3 1.5 1.7 1.9 2.1	1.2 1.5 1.7 2.0 2.2 2.4	1.5 1.8 2.1 2.4 2.8 3.1	1.8 2.1 2.4 2.8 3.2 3.5	2.2 2.6 3.0 3.5 3.9 4.3	2.5 3.0 3.5 4.0 4.5 5.0	3.1 3.7 4.3 4.9 5.4 6.1	3.5 4.2 4.9 5.6 6.3 7.1	3.9 4.7 5.6 6.3 7.1 7.9	4.4 5.2 6.2 7.2 7.9 8.8
4.0 4.5 5.0 6.0 7.0	1/2	TF404 TF454 TF504 TF604 TF704	TM404 TM454 TM504 TM604 TM704	.234 .234 .256 .265 .287	1.1 1.2 1.4 1.6 1.9	1.4 1.6 1.8 2.1 2.5	1.7 1.9 2.1 2.5 2.9	2.0 2.2 2.4 3.0 3.5	2.4 2.8 3.1 3.7 4.3	2.8 3.2 3.5 4.2 4.9	3.5 3.9 4.3 5.2 6.1	4.0 4.5 5.0 6.0 7.0	4.9 5.4 6.1 7.3 8.6	5.6 6.3 7.1 8.5 9.9	6.3 7.1 7.9 9.5 11.1	7.2 7.9 8.8 10.5 12.4
8.0 9.0 10.0 12.0	1/2	TF804 TF904 TF1004 TF1204	TM804 TM904 TM1004 TM1204	.296 .312 .339 .375	2.2 2.4 2.7 3.3	2.8 3.2 3.5 4.3	3.3 3.8 4.2 5.0	4.0 4.5 4.9 6.0	4.9 5.6 6.1 7.3	5.7 6.3 7.1 8.5	6.9 7.8 8.5 10.0	8.0 9.0 10.0 12.0	9.8 11.0 12.3 14.7	11.3 12.6 14.2 17.0	12.6 14.1 15.8 19.0	14.2 15.8 17.6 21.0
7.0 8.0 9.0 10.0 12.0	3/4	TF706 TF806 TF906 TF1006 TF1206	TM706 TM806 TM906 TM1006 TM1206	.312 .328 .348 .375 .404	1.9 2.2 2.4 2.7 3.3	2.5 2.8 3.2 3.5 4.3	2.9 3.3 3.8 4.2 5.0	3.5 4.0 4.5 4.9 6.0	4.3 4.9 5.6 6.1 7.3	4.5 5.7 6.3 7.1 8.5	6.1 6.9 7.8 8.5 10.0	7.0 8.0 9.0 10.0 12.0	8.6 9.8 11.0 12.3 14.7	9.9 11.3 12.6 14.2 17.0	11.1 12.6 14.1 15.8 19.0	12.4 14.2 15.8 17.6 21.0
13.0 14.0 16.0 18.0 19.0	3/4	TF1306 TF1406 TF1606 TF1806 TF1906	TM1306 TM1406 TM1606 TM1806 TM1906	.421 .437 .453 .468 .484	3.5 3.8 4.4 4.9 5.1	4.6 5.0 5.7 6.4 6.8	5.4 5.8 6.7 7.5 8.0	6.5 7.0 8.0 9.0 9.6	7.8 8.5 9.8 11.0 11.7	9.1 9.9 11.3 12.7 13.4	11.1 12.1 13.8 15.6 16.4	13.0 14.0 16.0 18.0 19.0	16.2 17.1 19.6 22.0 23.2	18.4 19.8 22.6 25.4 26.8	20.6 22.1 25.3 28.4 30.0	23.0 24.8 28.2 31.8 33.0
20.0 21.0 22.0 24.0	3/4	TF2006 TF2106 TF2206 TF2406	TM2006 TM2106 TM2206 TM2406	.500 .500 .515 .546	5.5 5.7 6.0 6.6	7.1 7.4 7.8 8.5	8.4 8.8 9.2 10.1	10.0 10.5 11.0 12.0	12.2 12.8 13.5 14.7	14.1 14.8 15.5 17.0	17.3 18.2 19.0 20.8	20.0 21.0 22.0 24.0	24.5 25.7 26.9 29.4	28.2 29.6 31.1 34.0	31.6 33.1 34.7 38.0	35.2 36.6 38.6 42.3

70 and 90 spray angle determined @ 40 PSI. For spray angles at other pressures consult factory. **Determines maximum foreign particle size that will flow through nozzle without clogging. For Dimensions and Weights refer to Table on Page 19.



SPRAYLET™ *HOLLOW CONE* NOZZLES

TYPE SH

Spraylet nozzles produce a uniform hollow cone spray and are generally used in mining and other applications for dust suppression.

STEINEN /HAHN	SPRAYING SYSTEMS	JOY MINING	Capacity (Gallons per Minute (GPM))				Spray Angle	
			10 PSI	20 PSI	40 PSI	100 PSI	20 PSI	80 PSI
SH 2	BD 2		0.2	0.28	0.4	0.63	60°	70°
SH 3-1	BD 3-1	01566237-0007	-	0.18	0.26	0.4	49°	60° *
SH 3-2	BD 3-2	01566237-0051	0.22	0.31	0.44	0.69	57°	68° *
SH 3	BD 3	01566237-0006	0.3	0.42	0.6	0.95	64°	77°
SH 3-5	BD 3-5		0.34	0.48	0.68	1.1	80°	86° *
SH 5-3	BD 5-3		-	0.52	0.74	1.2	59°	66° *
SH 5	BD 5	01566237-0047	0.5	0.71	1.0	1.6	67°	76°
SH 8	BD 8		0.8	1.1	1.6	2.5	65°	70°

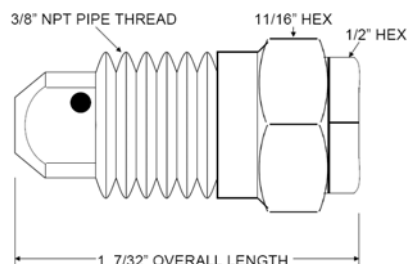
* Angle at 100 PSI

Steinen/Hahn also offer a 1 1/4" adapter (1 1/4" x 3/8") for these Spraylet nozzles, Steinen Part # 363-00000 (Joy Mining Part #01069230-0161).

The Spraylet nozzle is manufactured by the HAHN Industries, a Division of Steinen. These nozzles are direct replacements for equivalent Spraying Systems BD WhirlJet® nozzles. The Steinen/Hahn Spraylet nozzles have a more deeply recessed spray orifice to protect the nozzle from accidental damage.

Steinen/Hahn offers several additional Spraylet nozzles not referenced above. If you do not see the flow or angle nozzle you are looking for, please call us.

SPRAYLET™ *HOLLOW CONE* DIMENSIONS



Spraylets have an inlet connection of 3/8" NPT pipe thread and are constructed of solid brass.

WhirlJet® is a registered trademark of the Spraying Systems Co.

Steinen 29 East Halsey Rd. Parsippany, NJ 07054
Phone: 973-887-6400 Fax: 973-887-4632 E-mail: info@steinen.com

Tan-Jet® Hollow Cone Wide Angle Spray Nozzles

Home > Industrial Spray Nozzles > Tan-Jet® Hollow Cone Wide Angle Spray Nozzles



Nozzle Design Features and Benefits

Steinen has design a superior truly wide angle hollow cone spray nozzle, the Tan-Jet® wide angle hollow cone nozzle. The advantage of this nozzle is the vortex created as a result of incoming liquid introduced at 90°. As the liquid leaves the nozzle, the liquid is uniformly atomized and a very wide and distinct hollow cone pattern is achieved.

The Tan-Jet® wide angle hollow cone nozzle is available in female NPT (Type TWF) or male threads (Type TWM). Numerous flow rates are available from 0.10 gallons per minute (GPM) up to 31 GPM, at pressures typically in the range of 5 PSI to 100PSI, in various types of steel, stainless steel and brass.

Call for
Technical
Sales
973-887-6400
ext. 101

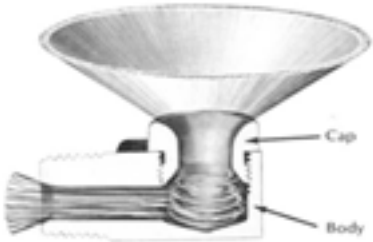
For complete technical specifications, see the table at the bottom of the page. A PDF is also accessible at the bottom of this page.

Type TWF & TWM



Spray Characteristics - Uniform hollow cone, wide angle spray pattern with fine atomization at all pressures. Nozzles typically spray between 105 and 120 degree spray angles. See product chart below for the angle you can expect at a certain flow rate and pressure.

Construction - These nozzles are non-clogging because they do not contain any cores or internal vanes. Nozzles are a two piece design with removable caps. Nozzles available in 1/8" 1/4", 3/8", 1/2" and 3/4" 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.

Tan-Jet® Hollow Cone Wide Angle
Spray Nozzles PDF Catalog - click below

- Nozzle 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

		TAN-JET HOLLOW CONE NOZZLES		WIDE ANGLE SPRAY TYPES TWF, TWM		Capacities: 20 to 20 G.P.M.	
Size	Material	Part No.	Flow Rate (GPM)	Pressure (PSI)	Spray Angle (Degrees)	Flow Rate (GPM)	Pressure (PSI)
1/8"	303 SS	TJ1/8-05	0.10	5	105-120	0.10	5
1/8"	303 SS	TJ1/8-10	0.15	10	105-120	0.15	10
1/8"	303 SS	TJ1/8-20	0.25	20	105-120	0.25	20
1/8"	303 SS	TJ1/8-30	0.35	30	105-120	0.35	30
1/8"	303 SS	TJ1/8-40	0.45	40	105-120	0.45	40
1/8"	303 SS	TJ1/8-50	0.55	50	105-120	0.55	50
1/8"	303 SS	TJ1/8-60	0.65	60	105-120	0.65	60
1/8"	303 SS	TJ1/8-70	0.75	70	105-120	0.75	70
1/8"	303 SS	TJ1/8-80	0.85	80	105-120	0.85	80
1/8"	303 SS	TJ1/8-90	0.95	90	105-120	0.95	90
1/8"	303 SS	TJ1/8-100	1.05	100	105-120	1.05	100
1/4"	303 SS	TJ1/4-05	0.20	5	105-120	0.20	5
1/4"	303 SS	TJ1/4-10	0.30	10	105-120	0.30	10
1/4"	303 SS	TJ1/4-20	0.50	20	105-120	0.50	20
1/4"	303 SS	TJ1/4-30	0.70	30	105-120	0.70	30
1/4"	303 SS	TJ1/4-40	0.90	40	105-120	0.90	40
1/4"	303 SS	TJ1/4-50	1.10	50	105-120	1.10	50
1/4"	303 SS	TJ1/4-60	1.30	60	105-120	1.30	60
1/4"	303 SS	TJ1/4-70	1.50	70	105-120	1.50	70
1/4"	303 SS	TJ1/4-80	1.70	80	105-120	1.70	80
1/4"	303 SS	TJ1/4-90	1.90	90	105-120	1.90	90
1/4"	303 SS	TJ1/4-100	2.10	100	105-120	2.10	100
3/8"	303 SS	TJ3/8-05	0.30	5	105-120	0.30	5
3/8"	303 SS	TJ3/8-10	0.45	10	105-120	0.45	10
3/8"	303 SS	TJ3/8-20	0.75	20	105-120	0.75	20
3/8"	303 SS	TJ3/8-30	1.05	30	105-120	1.05	30
3/8"	303 SS	TJ3/8-40	1.35	40	105-120	1.35	40
3/8"	303 SS	TJ3/8-50	1.65	50	105-120	1.65	50
3/8"	303 SS	TJ3/8-60	1.95	60	105-120	1.95	60
3/8"	303 SS	TJ3/8-70	2.25	70	105-120	2.25	70
3/8"	303 SS	TJ3/8-80	2.55	80	105-120	2.55	80
3/8"	303 SS	TJ3/8-90	2.85	90	105-120	2.85	90
3/8"	303 SS	TJ3/8-100	3.15	100	105-120	3.15	100
1/2"	303 SS	TJ1/2-05	0.60	5	105-120	0.60	5
1/2"	303 SS	TJ1/2-10	0.90	10	105-120	0.90	10
1/2"	303 SS	TJ1/2-20	1.50	20	105-120	1.50	20
1/2"	303 SS	TJ1/2-30	2.10	30	105-120	2.10	30
1/2"	303 SS	TJ1/2-40	2.70	40	105-120	2.70	40
1/2"	303 SS	TJ1/2-50	3.30	50	105-120	3.30	50
1/2"	303 SS	TJ1/2-60	3.90	60	105-120	3.90	60
1/2"	303 SS	TJ1/2-70	4.50	70	105-120	4.50	70
1/2"	303 SS	TJ1/2-80	5.10	80	105-120	5.10	80
1/2"	303 SS	TJ1/2-90	5.70	90	105-120	5.70	90
1/2"	303 SS	TJ1/2-100	6.30	100	105-120	6.30	100
3/4"	303 SS	TJ3/4-05	1.20	5	105-120	1.20	5
3/4"	303 SS	TJ3/4-10	1.80	10	105-120	1.80	10
3/4"	303 SS	TJ3/4-20	3.00	20	105-120	3.00	20
3/4"	303 SS	TJ3/4-30	4.20	30	105-120	4.20	30
3/4"	303 SS	TJ3/4-40	5.40	40	105-120	5.40	40
3/4"	303 SS	TJ3/4-50	6.60	50	105-120	6.60	50
3/4"	303 SS	TJ3/4-60	7.80	60	105-120	7.80	60
3/4"	303 SS	TJ3/4-70	9.00	70	105-120	9.00	70
3/4"	303 SS	TJ3/4-80	10.20	80	105-120	10.20	80
3/4"	303 SS	TJ3/4-90	11.40	90	105-120	11.40	90
3/4"	303 SS	TJ3/4-100	12.60	100	105-120	12.60	100

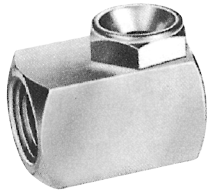
TAN-JET HOLLOW CONE DIMENSIONS AND WEIGHTS		MALE CONNECTION				FEMALE CONNECTION			
Size	Material	Part No.	Flow Rate (GPM)	Pressure (PSI)	Spray Angle (Degrees)	Flow Rate (GPM)	Pressure (PSI)	Spray Angle (Degrees)	Flow Rate (GPM)
1/8"	303 SS	TJ1/8-05	0.10	5	105-120	0.10	5	105-120	0.10
1/8"	303 SS	TJ1/8-10	0.15	10	105-120	0.15	10	105-120	0.15
1/8"	303 SS	TJ1/8-20	0.25	20	105-120	0.25	20	105-120	0.25
1/8"	303 SS	TJ1/8-30	0.35	30	105-120	0.35	30	105-120	0.35
1/8"	303 SS	TJ1/8-40	0.45	40	105-120	0.45	40	105-120	0.45
1/8"	303 SS	TJ1/8-50	0.55	50	105-120	0.55	50	105-120	0.55
1/8"	303 SS	TJ1/8-60	0.65	60	105-120	0.65	60	105-120	0.65
1/8"	303 SS	TJ1/8-70	0.75	70	105-120	0.75	70	105-120	0.75
1/8"	303 SS	TJ1/8-80	0.85	80	105-120	0.85	80	105-120	0.85
1/8"	303 SS	TJ1/8-90	0.95	90	105-120	0.95	90	105-120	0.95
1/8"	303 SS	TJ1/8-100	1.05	100	105-120	1.05	100	105-120	1.05
1/4"	303 SS	TJ1/4-05	0.20	5	105-120	0.20	5	105-120	0.20
1/4"	303 SS	TJ1/4-10	0.30	10	105-120	0.30	10	105-120	0.30
1/4"	303 SS	TJ1/4-20	0.50	20	105-120	0.50	20	105-120	0.50
1/4"	303 SS	TJ1/4-30	0.70	30	105-120	0.70	30	105-120	0.70
1/4"	303 SS	TJ1/4-40	0.90	40	105-120	0.90	40	105-120	0.90
1/4"	303 SS	TJ1/4-50	1.10	50	105-120	1.10	50	105-120	1.10
1/4"	303 SS	TJ1/4-60	1.30	60	105-120	1.30	60	105-120	1.30
1/4"	303 SS	TJ1/4-70	1.50	70	105-120	1.50	70	105-120	1.50
1/4"	303 SS	TJ1/4-80	1.70	80	105-120	1.70	80	105-120	1.70
1/4"	303 SS	TJ1/4-90	1.90	90	105-120	1.90	90	105-120	1.90
1/4"	303 SS	TJ1/4-100	2.10	100	105-120	2.10	100	105-120	2.10
3/8"	303 SS	TJ3/8-05	0.30	5	105-120	0.30	5	105-120	0.30
3/8"	303 SS	TJ3/8-10	0.45	10	105-120	0.45	10	105-120	0.45
3/8"	303 SS	TJ3/8-20	0.75	20	105-120	0.75	20	105-120	0.75
3/8"	303 SS	TJ3/8-30	1.05	30	105-120	1.05	30	105-120	1.05
3/8"	303 SS	TJ3/8-40	1.35	40	105-120	1.35	40	105-120	1.35
3/8"	303 SS	TJ3/8-50	1.65	50	105-120	1.65	50	105-120	1.65
3/8"	303 SS	TJ3/8-60	1.95	60	105-120	1.95	60	105-120	1.95
3/8"	303 SS	TJ3/8-70	2.25	70	105-120	2.25	70	105-120	2.25
3/8"	303 SS	TJ3/8-80	2.55	80	105-120	2.55	80	105-120	2.55
3/8"	303 SS	TJ3/8-90	2.85	90	105-120	2.85	90	105-120	2.85
3/8"	303 SS	TJ3/8-100	3.15	100	105-120	3.15	100	105-120	3.15
1/2"	303 SS	TJ1/2-05	0.60	5	105-120	0.60	5	105-120	0.60
1/2"	303 SS	TJ1/2-10	0.90	10	105-120	0.90	10	105-120	0.90
1/2"	303 SS	TJ1/2-20	1.50	20	105-120	1.50	20	105-120	1.50
1/2"	303 SS	TJ1/2-30	2.10	30	105-120	2.10	30	105-120	2.10
1/2"	303 SS	TJ1/2-40	2.70	40	105-120	2.70	40	105-120	2.70
1/2"	303 SS	TJ1/2-50	3.30	50	105-120	3.30	50	105-120	3.30
1/2"	303 SS	TJ1/2-60	3.90	60	105-120	3.90	60	105-120	3.90
1/2"	303 SS	TJ1/2-70	4.50	70	105-120	4.50	70	105-120	4.50
1/2"	303 SS	TJ1/2-80	5.10	80	105-120	5.10	80	105-120	5.10
1/2"	303 SS	TJ1/2-90	5.70	90	105-120	5.70	90	105-120	5.70
1/2"	303 SS	TJ1/2-100	6.30	100	105-120	6.30	100	105-120	6.30
3/4"	303 SS	TJ3/4-05	1.20	5	105-120	1.20	5	105-120	1.20
3/4"	303 SS	TJ3/4-10	1.80	10	105-120	1.80	10	105-120	1.80
3/4"	303 SS	TJ3/4-20	3.00	20	105-120	3.00	20	105-120	3.00
3/4"	303 SS	TJ3/4-30	4.20	30	105-120	4.20	30	105-120	4.20
3/4"	303 SS	TJ3/4-40	5.40	40	105-120	5.40	40	105-120	5.40
3/4"	303 SS	TJ3/4-50	6.60	50	105-120	6.60	50	105-120	6.60
3/4"	303 SS	TJ3/4-60	7.80	60	105-120	7.80	60	105-120	7.80
3/4"	303 SS	TJ3/4-70	9.00	70	105-120	9.00	70	105-120	9.00
3/4"	303 SS	TJ3/4-80	10.20	80	105-120	10.20	80	105-120	10.20
3/4"	303 SS	TJ3/4-90	11.40	90	105-120	11.40	90	105-120	11.40
3/4"	303 SS	TJ3/4-100	12.60	100	105-120	12.60	100	105-120	12.60

Steinen 20 East Highway Rd. Pompano Beach, FL 33062
Phone: 973-887-6400 Fax: 973-887-6402 E-mail: info@steinen.com

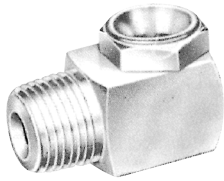
TAN-JET **HOLLOW CONE** NOZZLES

WIDE ANGLE SPRAY TYPES TWF, TWM

Capacities: .20 to 20 G.P.M.



Female Connection
Type TWF



Male Connection
Type TWM

Capacity G.P.M. @ 40 PSI	Pipe Size	Catalog No.		Approx. Orifice Diameter*	CAPACITY IN GALLONS PER MINUTE (At Various Pressures in Pounds Per Square Inch)										SPRAY ANGLES (At Various PSI)		
		Female	Male		5	7	10	15	20	30	40	60	80	100	20	40	80
.20	1/8	TWF21	TWM21	.062	—	—	.10	.12	.14	.17	.20	.24	.28	.31	120°	115°	110°
.40	1/8	TWF41	TWM41	.089	—	.16	.20	.25	.28	.35	.40	.48	.56	.63	120°	115°	110°
.60	1/8	TWF61	TWM61	.109	—	.25	.30	.37	.42	.52	.60	.73	.85	.95	120°	115°	110°
.80	1/8	TWF81	TWM81	.113	—	.33	.40	.49	.57	.71	.80	.96	1.1	1.3	130°	125°	120°
1.0	1/8	TWF101	TWM101	.125	—	.42	.50	.61	.70	.86	1.0	1.2	1.4	1.6	125°	120°	110°
1.5	1/8	TWF151	TWM151	.144	.53	.63	.75	.92	1.1	1.3	1.5	1.8	2.1	2.4	125°	120°	110°
2.0	1/8	TWF201	TWM201	.171	.71	.84	1.0	1.2	1.4	1.7	2.0	2.5	2.8	3.2	118°	115°	105°
.40	1/4	TWF42	TWM42	.086	—	.16	.20	.25	.28	.35	.40	.48	.56	.63	120°	115°	107°
.60	1/4	TWF62	TWM62	.096	—	.25	.30	.37	.42	.52	.60	.73	.85	.95	120°	115°	110°
1.0	1/4	TWF102	TWM102	.120	—	.42	.50	.61	.70	.86	1.0	1.2	1.4	1.6	120°	115°	110°
1.5	1/4	TWF152	TWM152	.140	.55	.63	.75	.92	1.1	1.3	1.5	1.8	2.1	2.4	120°	115°	110°
2.0	1/4	TWF202	TWM202	.187	.71	.84	1.0	1.2	1.4	1.7	2.0	2.5	2.8	3.2	120°	115°	110°
2.5	1/4	TWF252	TWM252	.187	.91	1.1	1.2	1.5	1.8	2.2	2.5	3.1	3.5	3.9	120°	115°	110°
3.0	1/4	TWF302	TWM302	.205	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	120°	115°	110°
1.0	3/8	TWF103	TWM103	.128	—	.42	.50	.61	.70	.86	1.0	1.2	1.4	1.6	120°	118°	115°
1.5	3/8	TWF153	TWM153	.140	.55	.63	.75	.92	1.1	1.3	1.5	1.8	2.1	2.4	120°	118°	118°
2.0	3/8	TWF203	TWM203	.177	.71	.84	1.0	1.2	1.4	1.7	2.0	2.5	2.8	3.2	120°	115°	113°
2.5	3/8	TWF253	TWM253	.205	.91	1.1	1.2	1.5	1.8	2.2	2.5	3.1	3.5	3.9	120°	113°	108°
3.0	3/8	TWF303	TWM303	.221	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	108°	105°	100°
4.0	3/8	TWF403	TWM403	.250	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.9	5.6	6.3	105°	100°	100°
5.0	3/8	TWF503	TWM503	.272	1.8	2.1	2.4	3.1	3.5	4.3	5.0	6.1	7.1	7.9	103°	97°	95°
2.5	1/2	TWF254	TWM254	.221	.91	1.1	1.2	1.5	1.8	2.2	2.5	3.1	3.5	3.9	120°	115°	113°
3.0	1/2	TWF304	TWM304	.242	1.1	1.3	1.5	1.08	2.1	2.6	3.0	3.7	4.2	4.7	118°	115°	113°
4.0	1/2	TWF404	TWM404	.272	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.9	5.6	6.3	118°	110°	105°
5.0	1/2	TWF504	TWM504	.281	1.8	2.1	2.4	3.1	3.5	4.3	5.0	6.1	7.1	7.9	113°	110°	105°
8.0	1/2	TWF804	TWM804	.312	2.8	3.3	4.0	4.9	5.7	6.9	8.0	9.8	11.3	12.6	110°	105°	103°
10.0	1/2	TWF1004	TWM1004	.343	3.5	4.2	4.9	6.1	7.1	8.5	10.0	12.3	14.2	15.8	108°	105°	102°
12.0	3/4	TWF1206	TWM1206	.375	4.3	5.0	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	108°	105°	103°
14.0	3/4	TWF1406	TWM1406	.437	5.0	5.8	7.0	8.5	9.9	12.1	14.0	17.1	19.8	22.1	108°	105°	103°
16.0	3/4	TWF1606	TWM1606	.453	5.7	6.7	8.0	9.8	11.3	13.8	16.0	19.6	22.6	25.3	108°	105°	103°
20.0	3/4	TWF2006	TWM2006	.500	7.1	8.4	10.0	12.2	14.1	17.3	20.0	24.5	28.2	31.6	108°	105°	103°

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

TAN-JET HOLLOW CONE DIMENSIONS AND WEIGHTS

MALE CONNECTION						FEMALE CONNECTION					
Pipe Size	Net Weight	A	B	C	D	Pipe Size	Net Weight	A	B	C	D
1/8	1 oz.	15/16	21/32	3/8	5/8	1/8	3/4 oz.	7/8	19/32	3/8	5/8
1/4	1 3/4 oz.	1 1/4	29/32	1/2	13/16	1/4	1 1/2 oz.	1 1/8	25/32	1/2	13/16
3/8	3 oz.	1 7/8	1 1/32	5/8	1	3/8	2 3/4 oz.	1 11/32	15/16	5/8	1
1/2	5 1/2 oz.	1 13/16	1 11/32	23/32	1 5/32	1/2	5 1/4 oz.	1 5/8	1 5/32	3/4	1 7/32
3/4	11 3/4 oz.	2 1/8	1 15/32	3 1/32	1 19/32	3/4	11 oz.	2 1/16	1 13/32	3 1/32	1 19/32

Square-Jet® Square Spray Nozzles

[Home](#) > [Industrial Spray Nozzles](#) > Square-Jet® Square Spray Nozzles



Nozzle Design Features and Benefits

The unique Square-Jet™ square spray nozzle can spray a nearly square spray pattern with uniform droplet distribution.

The Square-Jet™ square spray nozzle is available in female NPT (Type SFQ) or male threads (Types SMQ, SSMQ & SSMQW). Numerous flow rates are available from 0.22 gallons per minute (GPM) up to 38 GPM, at pressures typically in the range of 3 PSI to 150PSI, in various types of steel, stainless steel and brass.

Three types of nozzle construction are available:

- the three piece nozzle with a removable cap (**Types SFQ & SMQ**),
- the two piece removable internal member (**Type SSMQ**),
- and the wide angle two piece nozzle (**Type SSMQW**).

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

Type SFQ & SMQ



Spray Characteristics - Square shaped spray with uniform distribution and atomization throughout the entire spray pattern. Atomization is finest at higher pressures. Nozzles spray between 55 and 80 degree spray angles. See product chart below for the angle you can expect at a certain flow rate and pressure.

Construction - Nozzle types SFQ and SMQ are of a three piece design. The nozzle cap and internal member are removable without disturbing the male or female pipe connection. Nozzles available in 1/8", 1/4", 3/8" & 1/2" 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 SSMQ



Spray Characteristics - Similar in spray to the SFQ & SMQ types. Square shaped spray between 55 and 90 degree spray angles. See product chart below for the angle you can expect at a certain flow rate and pressure.

Construction - Nozzle type SSMQ is a two piece design with a removable internal member. Nozzles available in 1/8", 1/4", 3/8", 1/2", 3/4" & 1" male 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 SSMQW



Spray Characteristics - Wide angle square shaped spray with uniform distribution and atomization throughout the entire spray pattern. Nozzles spray is 105 degrees at 40 PSI. Call for quote on various flow rates.

Construction - Nozzle type SSMQW is a two piece design with a removable internal member. Nozzles available in 1/4" male NPT pipe size connection.


Materials - Stainless steel spray nozzles (303 stainless) and brass. Other materials available upon request.

[Square-Jet® Square Spray Nozzles](#)
[PDF Catalog - click below](#)



**SQUARE-JET
SQUARE SPRAY
NOZZLES**
TYPES SFQ, SMQ, SSMQ
Capacities: .80 to 20 G.P.M.

Type	Size	Part Catalog No.	Part	CAPACITY IN GALLONS PER MINUTE (at 100 PSI pressure for water only)										SPRAY ANGLES (at 100 PSI)	
				1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"		
SFQ	1/8"	100000	100000	0.22	0.44	0.66	0.88	1.10	1.32	1.54	1.76	1.98	2.20	55°	80°
	1/4"	100001	100001	0.44	0.88	1.32	1.76	2.20	2.64	3.08	3.52	3.96	4.40	55°	80°
	3/8"	100002	100002	0.66	1.32	1.98	2.64	3.30	3.96	4.62	5.28	5.94	6.60	55°	80°
	1/2"	100003	100003	0.88	1.76	2.64	3.52	4.40	5.28	6.16	7.04	7.92	8.80	55°	80°
SMQ	1/8"	100004	100004	0.22	0.44	0.66	0.88	1.10	1.32	1.54	1.76	1.98	2.20	55°	80°
	1/4"	100005	100005	0.44	0.88	1.32	1.76	2.20	2.64	3.08	3.52	3.96	4.40	55°	80°
	3/8"	100006	100006	0.66	1.32	1.98	2.64	3.30	3.96	4.62	5.28	5.94	6.60	55°	80°
	1/2"	100007	100007	0.88	1.76	2.64	3.52	4.40	5.28	6.16	7.04	7.92	8.80	55°	80°
SSMQ	1/8"	100008	100008	0.22	0.44	0.66	0.88	1.10	1.32	1.54	1.76	1.98	2.20	55°	90°
	1/4"	100009	100009	0.44	0.88	1.32	1.76	2.20	2.64	3.08	3.52	3.96	4.40	55°	90°
	3/8"	100010	100010	0.66	1.32	1.98	2.64	3.30	3.96	4.62	5.28	5.94	6.60	55°	90°
	1/2"	100011	100011	0.88	1.76	2.64	3.52	4.40	5.28	6.16	7.04	7.92	8.80	55°	90°
SSMQW	1/4"	100012	100012	0.44	0.88	1.32	1.76	2.20	2.64	3.08	3.52	3.96	4.40	105°	105°
	3/8"	100013	100013	0.66	1.32	1.98	2.64	3.30	3.96	4.62	5.28	5.94	6.60	105°	105°
	1/2"	100014	100014	0.88	1.76	2.64	3.52	4.40	5.28	6.16	7.04	7.92	8.80	105°	105°
	3/4"	100015	100015	1.10	2.20	3.30	4.40	5.50	6.60	7.70	8.80	9.90	11.00	105°	105°

SQUARE SPRAY DIMENSIONS AND WEIGHTS									
									
Part No.	Weight (lb)	Part No.	Weight (lb)	Part No.	Weight (lb)				
100000	0.10	100004	0.10	100008	0.10				
100001	0.15	100005	0.15	100009	0.15				
100002	0.20	100006	0.20	100010	0.20				
100003	0.25	100007	0.25	100011	0.25				
100004	0.30	100008	0.30	100012	0.30				
100005	0.35	100009	0.35	100013	0.35				
100006	0.40	100010	0.40	100014	0.40				
100007	0.45	100011	0.45	100015	0.45				
100008	0.50	100012	0.50	100016	0.50				
100009	0.55	100013	0.55	100017	0.55				
100010	0.60	100014	0.60	100018	0.60				
100011	0.65	100015	0.65	100019	0.65				
100012	0.70	100016	0.70	100020	0.70				
100013	0.75	100017	0.75	100021	0.75				
100014	0.80	100018	0.80	100022	0.80				
100015	0.85	100019	0.85	100023	0.85				
100016	0.90	100020	0.90	100024	0.90				
100017	0.95	100021	0.95	100025	0.95				
100018	1.00	100022	1.00	100026	1.00				
100019	1.05	100023	1.05	100027	1.05				
100020	1.10	100024	1.10	100028	1.10				
100021	1.15	100025	1.15	100029	1.15				
100022	1.20	100026	1.20	100030	1.20				
100023	1.25	100027	1.25	100031	1.25				
100024	1.30	100028	1.30	100032	1.30				
100025	1.35	100029	1.35	100033	1.35				
100026	1.40	100030	1.40	100034	1.40				
100027	1.45	100031	1.45	100035	1.45				
100028	1.50	100032	1.50	100036	1.50				
100029	1.55	100033	1.55	100037	1.55				
100030	1.60	100034	1.60	100038	1.60				
100031	1.65	100035	1.65	100039	1.65				
100032	1.70	100036	1.70	100040	1.70				
100033	1.75	100037	1.75	100041	1.75				
100034	1.80	100038	1.80	100042	1.80				
100035	1.85	100039	1.85	100043	1.85				
100036	1.90	100040	1.90	100044	1.90				
100037	1.95	100041	1.95	100045	1.95				
100038	2.00	100042	2.00	100046	2.00				
100039	2.05	100043	2.05	100047	2.05				
100040	2.10	100044	2.10	100048	2.10				
100041	2.15	100045	2.15	100049	2.15				
100042	2.20	100046	2.20	100050	2.20				
100043	2.25	100047	2.25	100051	2.25				
100044	2.30	100048	2.30	100052	2.30				
100045	2.35	100049	2.35	100053	2.35				
100046	2.40	100050	2.40	100054	2.40				
100047	2.45	100051	2.45	100055	2.45				
100048	2.50	100052	2.50	100056	2.50				
100049	2.55	100053	2.55	100057	2.55				
100050	2.60	100054	2.60	100058	2.60				
100051	2.65	100055	2.65	100059	2.65				
100052	2.70	100056	2.70	100060	2.70				
100053	2.75	100057	2.75	100061	2.75				
100054	2.80	100058	2.80	100062	2.80				
100055	2.85	100059	2.85	100063	2.85				
100056	2.90	100060	2.90	100064	2.90				
100057	2.95	100061	2.95	100065	2.95				
100058	3.00	100062	3.00	100066	3.00				
100059	3.05	100063	3.05	100067	3.05				
100060	3.10	100064	3.10	100068	3.10				
100061	3.15	100065	3.15	100069	3.15				
100062	3.20	100066	3.20	100070	3.20				
100063	3.25	100067	3.25	100071	3.25				
100064	3.30	100068	3.30	100072	3.30				
100065	3.35	100069	3.35	100073	3.35				
100066	3.40	100070	3.40	100074	3.40				
100067	3.45	100071	3.45	100075	3.45				
100068	3.50	100072	3.50	100076	3.50				
100069	3.55	100073	3.55	100077	3.55				
100070	3.60	100074	3.60	100078	3.60				
100071	3.65	100075	3.65	100079	3.65				
100072	3.70	100076	3.70	100080	3.70				
100073	3.75	100077	3.75	100081	3.75				
100074	3.80	100078	3.80	100082	3.80				
100075	3.85	100079	3.85	100083	3.85				
100076	3.90	100080	3.90	100084	3.90				
100077	3.95	100081	3.95	100085	3.95				
100078	4.00	100082	4.00	100086	4.00				
100079	4.05	100083	4.05	100087	4.05				
100080	4.10	100084	4.10	100088	4.10				
100081	4.15	100085	4.15	100089	4.15				
100082	4.20	100086	4.20	100090	4.20				
100083	4.25	100087	4.25	100091	4.25				
100084	4.30	100088	4.30	100092	4.30				
100085	4.35	100089	4.35	100093	4.35				
100086	4.40	100090	4.40	100094	4.40				
100087	4.45	100091	4.45	100095	4.45				
100088	4.50	100092	4.50	100096	4.50				
100089	4.55	100093	4.55	100097	4.55				
100090	4.60	100094	4.60	100098	4.60				
100091	4.65	100095	4.65	100099	4.65				
100092	4.70	100096	4.70	100100	4.70				
100093	4.75	100097	4.75						
100094	4.80	100098	4.80						
100095	4.85	100099	4.85						
100096	4.90	100100	4.90						
100097	4.95								
100098	5.00								
100099	5.05								
100100	5.10								

Website: www.3M.com Email: 3M@3M.com Phone: 1-800-368-3686

Part No. 100000 to 100100 Weight (lb) 0.10 to 5.10



SQUARE-JET SQUARE SPRAY NOZZLES

TYPES SFQ, SMQ, SSMQ

Capacities: .80 to 20 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		3	5	7	10	15	20	30	40	60	80	100	150	7	20	40	80
.80	1/8	SFQ 81	SMQ 81	.062	.22	.28	.33	.40	.49	.57	.71	.80	.96	1.1	1.3	1.6	55°	60°	60°	60°
1.0	1/8	SFQ101	SMQ101	.062	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	1.9	60°	70°	70°	70°
1.2	1/8	SFQ121	SMQ121	.062	.34	.42	.50	.60	.74	.84	1.0	1.2	1.4	1.6	1.8	2.3	65°	75°	75°	75°
1.6	1/4	SFQ162	SMQ162	.086	.44	.57	.67	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	3.1	55°	60°	60°	60°
2.0	1/4	SFQ202	SMQ202	.086	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	3.9	65°	70°	70°	70°
2.4	1/4	SFQ242	SMQ242	.086	.68	.85	1.0	1.2	1.5	1.7	2.1	2.4	2.8	3.3	3.7	4.6	70°	75°	75°	75°
3.0	3/8	SFQ303	SMQ303	.098	.82	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	5.8	75°	80°	80°	80°
3.6	3/8	SFQ363	SMQ393	.098	.99	1.3	1.5	1.8	2.2	2.5	3.1	3.6	4.3	5.0	5.6	6.9	75°	80°	80°	80°
4.0	3/8	SFQ403	SMQ403	.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	75°	80°	80°	80°
5.0	1/2	SFQ504	SMQ504	.142	1.4	1.8	2.1	2.4	3.0	3.5	4.3	5.0	6.1	7.1	7.9	9.7	65°	70°	70°	70°
5.8	1/2	SFQ584	SMQ584	.142	1.5	2.0	2.4	2.9	3.6	4.1	5.0	5.8	7.1	8.2	9.2	11.2	70°	75°	75°	75°
6.0	1/2	SFQ604	SMQ604	.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	70°	75°	75°	75°
7.0	1/2	SFQ704	SMQ704	.142	1.9	2.5	2.9	3.5	4.3	4.9	6.1	7.0	8.6	9.9	11.1	13.6	75°	80°	80°	80°
7.2	1/2	SFQ724	SMQ724	.142	2.0	2.6	3.0	3.6	4.4	5.1	6.2	7.2	8.7	10.1	11.3	13.9	80°	80°	80°	80°

.80	1/8	—	SSMQ 81	.062	.22	.28	.33	.40	.49	.57	.71	.80	.96	1.1	1.3	1.6	55°	60°	60°	60°
1.0	1/8	—	SSMQ101	.062	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	1.9	60°	70°	70°	70°
1.2	1/8	—	SSMQ121	.062	.34	.42	.50	.60	.74	.84	1.0	1.2	1.4	1.6	1.8	2.3	65°	75°	75°	75°
1.6	1/4	—	SSMQ162	.086	.44	.57	.67	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	3.1	55°	60°	60°	60°
2.0	1/4	—	SSMQ202	.086	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	3.9	65°	70°	70°	70°
2.4	1/4	—	SSMQ242	.086	.68	.85	1.0	1.2	1.5	1.7	2.1	2.4	2.8	3.3	3.7	4.6	70°	75°	75°	75°
3.0	3/8	—	SSMQ303	.098	.82	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	5.8	75°	80°	80°	80°
3.6	3/8	—	SSMQ363	.098	.99	1.3	1.5	1.8	2.2	2.5	3.1	3.6	4.3	5.0	5.6	6.9	75°	80°	80°	80°
4.0	3/8	—	SSMQ403	.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	75°	80°	80°	80°
5.0	1/2	—	SSMQ504	.142	1.4	1.8	2.1	2.4	3.0	3.5	4.3	5.0	6.1	7.1	7.9	9.7	65°	70°	70°	70°
5.8	1/2	—	SSMQ584	.142	1.5	2.0	2.4	2.9	3.6	4.1	5.0	5.8	7.1	8.2	9.2	11.2	70°	75°	75°	75°
6.0	1/2	—	SSMQ604	.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	70°	75°	75°	75°
7.0	1/2	—	SSMQ704	.142	1.9	2.5	2.9	3.5	4.3	4.9	6.1	7.0	8.6	9.9	11.1	13.6	75°	80°	80°	80°
7.2	1/2	—	SSMQ724	.142	2.0	2.6	3.0	3.6	4.4	5.1	6.2	7.2	8.7	10.1	11.3	13.9	80°	80°	80°	80°
8.0	1/2	—	SSMQ804	.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	80°	80°	80°	75°
10.0	3/4	—	SSMQ1006	.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	70°	75°	75°	75°
12.0	3/4	—	SSMQ1206	.190	3.3	4.3	5.0	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	23.2	75°	80°	80°	80°
16.0	3/4	—	SSMQ1606	.190	4.4	5.7	6.7	8.0	9.8	11.3	13.8	16.0	19.6	22.6	25.3	31.0	85°	90°	90°	90°
20.0	1	—	SSMQ2008	.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	75°	80°	80°	80°

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

SQUARE SPRAY DIMENSIONS AND WEIGHTS

 Type SFQ				 Type SMQ				 Type SSMQ			
Pipe Size	Net Weight	A	B	Pipe Size	Net Weight	A	B	Pipe Size	Net Weight	A	B
1/8	3/4 oz.	9/16	1 1/16	1/8	3/4 oz.	9/16	1 1/8	1/8	1/2 oz.	1/2	5/8
1/4	1 1/4 oz.	1 1/16	1 3/8	1/4	1 1/2 oz.	1 1/16	1 7/16	1/4	3/4 oz.	5/8	15/16
3/8	2 1/4 oz.	1 3/16	1 9/16	3/8	2 1/2 oz.	1 3/16	1 9/16	3/8	1 1/2 oz.	3/4	3 1/32
1/2	3 1/2 oz.	1	1 27/32	1/2	4 oz.	1	1 27/32	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

Steinen 29 East Halsey Rd. Parsippany, NJ 07054
Phone: 973-887-6400 Fax: 973-887-4632 E-mail: info@steinen.com



Nozzle Design Features and Benefits

Steinen has designed a superior dust suppression nozzle, the Steinen Spraylet™ hollow cone nozzle. The Spraylet™, available in a 3/8" male NPT thread, is a popular choice for longwall dust suppression applications. Numerous flow rates are available from 0.2 gallons per minute (GPM) up to 2.5 GPM, at pressures from 10 PSI to 100 PSI, in brass.

Multiple sizes are available (see the chart below and call for additional sizes) and are an excellent replacement for **BD** type nozzles.

For complete technical specifications, see the table to the right. A PDF is also accessible on the right side of this page.

SCROLL DOWN TO SEE ADDITIONAL MINING NOZZLES

Spraylet™ Nozzle



Spray Characteristics - Hollow cone spray pattern with fine atomization at all pressures. Nozzles available in various spray angles.

Construction - Nozzle is a two piece design with a removable cap. Nozzles available in 3/8" male NPT pipe size connection. 1/2" male NPT pipe size connection nozzles also available.

Materials - Spraylet nozzles are available in brass.

[Click here for full-screen information about these nozzles](#)



**SPRAYLET™ HOLLOW CONE
DUST SUPPRESSION NOZZLES**

TYPE SH

Sprayjet nozzles produce a uniform hollow cone spray and are generally used in mining and longwall equipment.

[illegible]

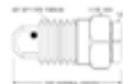
Examinations are offered at 1½ hours (1¼ to 1¾) for those licensed residents. Contact Part B information concerning Part A administration.



The Spraglet nozzle is manufactured by the HAW Industries, a Division of Walston. These nozzles are direct replacements for equivalent Spraying Systems (SS) Min-Lath® nozzles. The Walston/Haw Spraglet nozzles have a more deeply recessed spray orifice to protect the nozzle from accidental damage.

Thermofab offers several additional Spragrol nozzles not referenced above. If you do not see the size or angle nozzle you are looking for, please call us.

SPRAYLET™ HOLLOW CONE DIMENSIONS



Sprayers have an inlet connection of 3/8" NPT pipe thread and are constructed of mild steel.

WhisperJet is a registered trademark of the Spraying Systems Co.

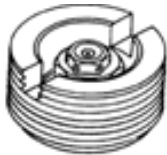


Station: 28 East Valley Rd., Parsippany, NJ 07054
Phone: 973-467-6400 Fax: 973-467-4132 E-mail: info@tatamart.com

Spraylet™ Adapters (available in brass)

1 1/4" Adapter Head - Adapts equipment to our popular 3/8" Spraylet nozzles.

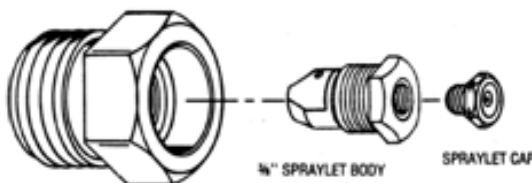
Steinen Part #363-00000 (Joy Mining Part #01069230-0161).



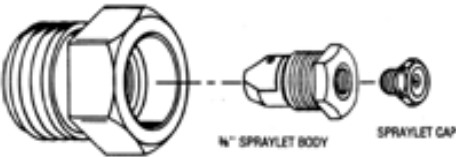
**Spraylet assembled
into adapter**

1 1/16" Adapter Head - Adapts equipment to our popular 3/8" Spraylet nozzles.

Steinen Part #368-00000



3/4" Adapter Head - Adapts equipment to our popular 3/8" Spraylet nozzles.
Steinen Part #367-00000



Popular Mining Nozzles

Type V - Flat Spray



Spray Characteristics - Flat spray nozzle with high impact, sharply defined spray pattern without heavy edges. This type of high velocity spray is very useful in cleaning and coating applications. Spray angles of 0, 15, 25, 40, 50, 65, 80 and 90 degrees are available.

Construction - One-piece design with no cores or internal members to clog. Nozzles available in 1/8", 1/4", 3/8", 1/2", 3/4", and 1" NPT male pipe thread.

Materials - These nozzles are available in 303 & 316 Stainless Steel, mild steel, brass and CPVC.

Type SSM - Solid Cone Spray



Spray Characteristics - Solid-Jet® solid cone type spray with uniform distribution and atomization throughout the entire spray pattern. Atomization finest at higher pressures.

Construction - Two-piece design with removable internal vane. Nozzles available in 1/8", 1/4", 3/8", 1/2", 3/4" & 1" male NPT pipe thread.

Materials - These nozzles are available in 303 & 316 Stainless Steel, steel, brass and CPVC.

[Click here for full-screen information about these nozzles](#)



FAN-JET FLAT SPRAY NOZZLES
TYPE V
Capacities: .20 to 50 G.P.M.
Spray Angles: 0°, 15°, 25°, 40°, 50°, 65°, 80° and 90°

Capacity G.P.M. at 40 P.S.I.		Pipe Size	Working P.S.I.	Spray Angle Degrees	CAPACITY IN GALLONS PER MINUTE (at Various Pressures in Pounds Per Square Inch)										
					1	5	10	15	20	25	30	40	50	60	70
.25	1/8"	1/8"	100	0°	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	15°	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	25°	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	40°	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	50°	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	65°	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	80°	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	90°	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	0°	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	15°	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	25°	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	40°	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	50°	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	65°	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	80°	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	90°	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	0°	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	15°	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	25°	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	40°	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	50°	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	65°	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	80°	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	90°	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	0°	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	15°	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	25°	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	40°	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	50°	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	65°	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	80°	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	90°	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	0°	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	15°	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	25°	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	40°	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	50°	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	65°	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	80°	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	90°	10	10	10	10	10	10	10	10	10	10	10
.25	1"	1"	100	0°	10	10	10	10	10	10	10	10	10	10	10
.25	1"	1"	100	15°	10	10	10	10	10	10	10	10	10	10	10
.25	1"	1"	100	25°	10	10	10	10	10	10	10	10	10	10	10
.25	1"	1"	100	40°	10	10	10	10	10	10	10	10	10	10	10
.25	1"	1"	100	50°	10	10	10	10	10	10	10	10	10	10	10
.25	1"	1"	100	65°	10	10	10	10	10	10	10	10	10	10	10
.25	1"	1"	100	80°	10	10	10	10	10	10	10	10	10	10	10
.25	1"	1"	100	90°	10	10	10	10	10	10	10	10	10	10	10

Steinen 20 East Highway 66, Portland, ME 04106
Phone: 877-887-6600 Fax: 877-887-6602 E-mail: info@steinen.com

[Click here for full-screen information about these nozzles](#)

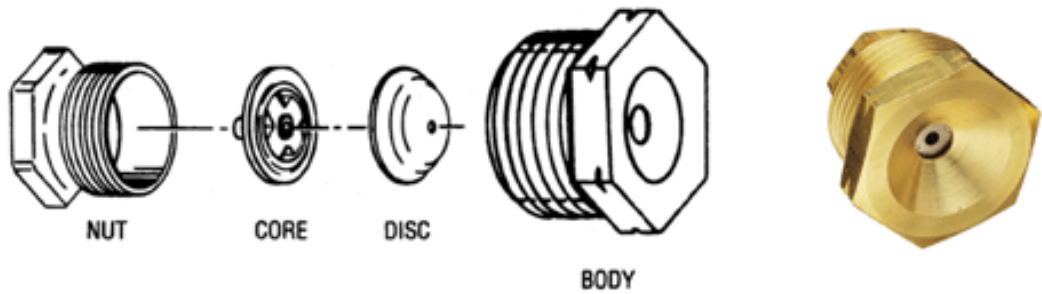


SOLID-JET SOLID CONE NOZZLES
STANDARD SPRAY ANGLE
Capacities: .20 to 26 G.P.M.

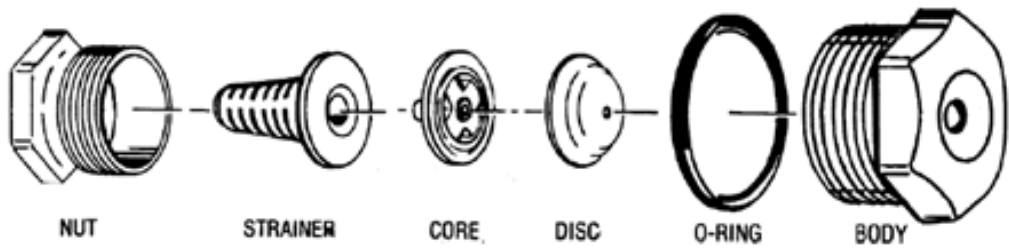
Capacity G.P.M. at 40 P.S.I.		Pipe Size	Working P.S.I.	Spray Angle Degrees	CAPACITY IN GALLONS PER MINUTE (at Various Pressures in Pounds Per Square Inch)											
					1	5	10	15	20	25	30	40	50	60	70	
.25	1/8"	1/8"	100	0°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	15°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	25°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	40°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	50°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	65°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	80°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/8"	1/8"	100	90°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	0°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	15°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	25°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	40°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	50°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	65°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	80°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/4"	1/4"	100	90°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	0°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	15°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	25°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	40°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	50°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	65°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	80°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/8"	3/8"	100	90°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	0°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	15°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	25°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	40°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	50°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	65°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	80°	10	10	10	10	10	10	10	10	10	10	10	10
.25	1/2"	1/2"	100	90°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	0°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	15°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	25°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	40°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	50°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	65°	10	10	10	10	10	10	10	10	10	10	10	10
.25	3/4"	3/4"	100	80°	10	10	10	10	10	10	10	10	10	10	10	10

Other Mining Nozzles (Brass)

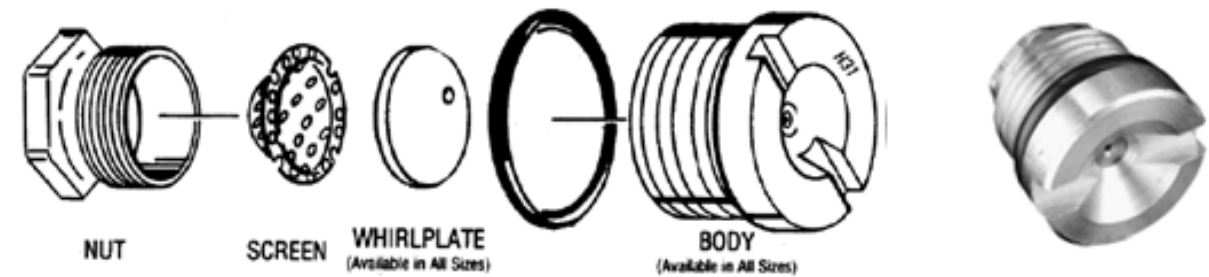
Jet-Spray Nozzle – 3/4"-14 NPT outside thread (1 1/16"-16 NPT interior thread) with removable disc and core for easy cleaning and replacement. For a #3 disc, order Steinen Part #331-00321. For a #5 disc, order Steinen Part #331-00521. For a #6 disc, order Steinen Part #331-00621.



Nozlet Spray Nozzle – 1 1/16" NPT outside thread precision spray nozzle with removable disc, core and strainer for easy cleaning and replacement. For a #3 disc, order Steinen Part #332-00321. For a #5 disc, order Steinen Part #332-00521.



Whirlplate Spray Nozzle – 1 1/16" NPT outside thread precision spray nozzle with removable whirlplate and screen for easy cleaning and replacement. For an H-31 solid cone, order Steinen Part #333-005311. For an H-51 solid cone, order Steinen Part #333-005511. For an H-53 solid cone, order Steinen Part #333-005513.



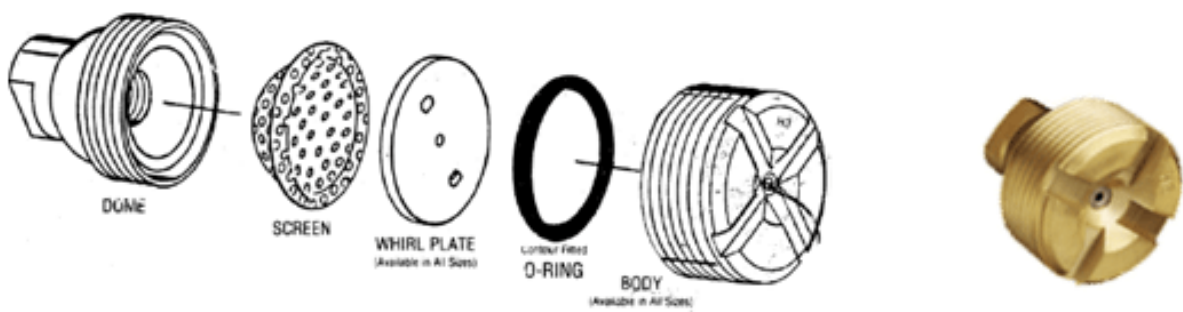
Trim-Jet Spray Nozzle – Type X nozzle, available in 3/8" (.90 GPM @ 40° spray angle) or 1/4" (.75 GPM @ 40° spray angle) male NPT. For highwall and longwall machines.

For a 3/8" Type X Trim-Jet, order Steinen Part #270-20050. For a 1/4" Type X Trim-Jet, order Steinen Part #170-10050.

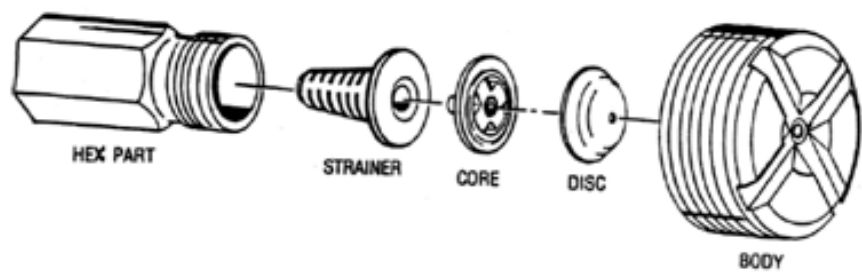


Dome Shaped Spray Nozzle – 1 1/4" NPT outside thread spray nozzle with removable whirlplate and screen for easy cleaning and replacement.

- For a 3-1 nozzle, order Steinen Part #334-05301.
- For a 3-3 nozzle, order Steinen Part #334-05303.
- For a 3-7 nozzle, order Steinen Part #334-05307.
- For a 4-1 nozzle, order Steinen Part #334-05401.
- For a 4-7 nozzle, order Steinen Part #334-05407.
- For a 5-1 nozzle, order Steinen Part #334-05501.
- For a 5-7 nozzle, order Steinen Part #334-05507.
- For a 6-1 nozzle, order Steinen Part #334-05601.
- For a 6-7 nozzle, order Steinen Part #334-05607.



LW Spray Nozzle – 1 1/4" NPT outside thread precision spray nozzle with removable disc, core and strainer for easy cleaning and replacement. For a #3 disc, order Steinen Part #335-00321. For a #4 disc, order Steinen Part #335-00421. For a #5 disc, order Steinen Part #335-00521. For a #6 disc, order Steinen Part #335-00621.





SPRAYLET™ *HOLLOW CONE* DUST SUPPRESSION NOZZLES

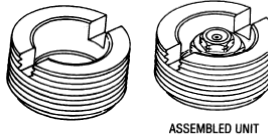
TYPE SH

Spraylet nozzles produce a uniform hollow cone spray and are generally used in mining and longwall equipment.

STEINEN /HAHN	SPRAYING SYSTEMS	JOY MINING	Capacity (Gallons per Minute (GPM))				Spray Angle	
			10 PSI	20 PSI	40 PSI	100 PSI	20 PSI	80 PSI
SH 2	BD 2		0.2	0.28	0.4	0.63	60°	70°
SH 3-1	BD 3-1	01566237-0007	-	0.18	0.26	0.4	49°	60° *
SH 3-2	BD 3-2	01566237-0051	0.22	0.31	0.44	0.69	57°	68° *
SH 3	BD 3	01566237-0006	0.3	0.42	0.6	0.95	64°	77°
SH 3-5	BD 3-5		0.34	0.48	0.68	1.1	80°	86° *
SH 5-3	BD 5-3		-	0.52	0.74	1.2	59°	66° *
SH 5	BD 5	01566237-0047	0.5	0.71	1.0	1.6	67°	76°
SH 8	BD 8		0.8	1.1	1.6	2.5	65°	70°

* Angle at 100 PSI

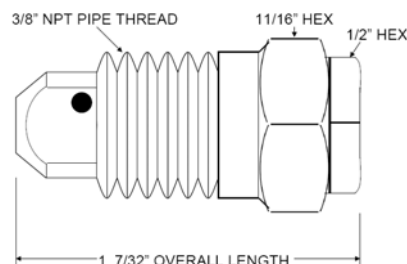
Steinen/Hahn also offer a 1 1/4" adapter (1 1/4" x 3/8") for these Spraylet nozzles, Steinen Part # 363-00000 (Joy Mining Part #01069230-0161).



The Spraylet nozzle is manufactured by the HAHN Industries, a Division of Steinen. These nozzles are direct replacements for equivalent Spraying Systems BD WhirlJet® nozzles. The Steinen/Hahn Spraylet nozzles have a more deeply recessed spray orifice to protect the nozzle from accidental damage.

Steinen/Hahn offers several additional Spraylet nozzles not referenced above. If you do not see the flow or angle nozzle you are looking for, please call us.

SPRAYLET™ *HOLLOW CONE* DIMENSIONS

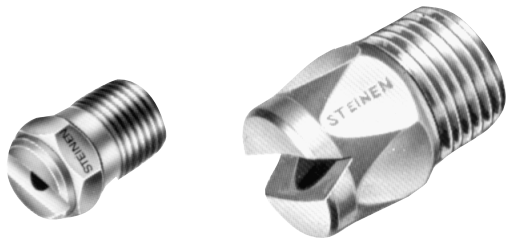


Spraylets have an inlet connection of 3/8" NPT pipe thread and are constructed of solid brass.

WhirlJet® is a registered trademark of the Spraying Systems Co.



Steinen 29 East Halsey Rd. Parsippany, NJ 07054
Phone: 973-887-6400 Fax: 973-887-4632 E-mail: info@steinen.com



Type V
1/8" – 1/4"

Type V
3/8" – 1"

FAN-JET *FLAT SPRAY* NOZZLES

TYPE V

Capacities: .20 to 50 G.P.M.
Spray Angles: 0°, 15°, 25°, 40°, 50°, 65°,
80° and 90°

Capacity G.P.M. @ 40 P.S.I.	Pipe Size	Catalog No. V	Approx. Orifice Diameter	CAPACITY IN GALLONS PER MINUTE (At Various Pressures in Pounds Per Square Inch)											
				5	10	15	20	30	40	60	80	100	120	150	
.20	1⁄8, 1⁄4	V .2	.036	.07	.10	.12	.14	.17	.20	.25	.28	.32	.35	.39	
.25	1⁄8, 1⁄4	V .25	.039	.09	.13	.16	.18	.21	.25	.31	.35	.39	.43	.48	
.30	1⁄8, 1⁄4	V .3	.043	.11	.15	.18	.21	.26	.30	.37	.42	.47	.51	.58	
.35	1⁄8, 1⁄4	V .35	.047	.13	.18	.22	.25	.31	.35	.43	.49	.55	.61	.68	
.40	1⁄8, 1⁄4	V .4	.052	.14	.20	.25	.28	.35	.40	.49	.57	.63	.69	.78	
.45	1⁄8, 1⁄4	V .45	.055	.16	.22	.28	.32	.39	.45	.55	.63	.71	.77	.88	
.50	1⁄8, 1⁄4	V .5	.058	.17	.25	.31	.35	.43	.50	.61	.71	.79	.87	.97	
.55	1⁄8, 1⁄4	V .55	.060	.20	.28	.34	.39	.48	.55	.67	.77	.87	.96	1.07	
.60	1⁄8, 1⁄4	V .6	.062	.21	.30	.37	.42	.52	.60	.73	.85	.95	1.04	1.16	
.65	1⁄8, 1⁄4	V .65	.064	.23	.32	.40	.46	.56	.65	.80	.93	1.03	1.14	1.26	
.70	1⁄8, 1⁄4	V .7	.067	.25	.35	.43	.50	.60	.70	.86	.99	1.11	1.19	1.36	
.80	1⁄8, 1⁄4	V .8	.072	.28	.40	.49	.56	.69	.80	.98	1.12	1.26	1.36	1.55	
.90	1⁄8, 1⁄4	V .9	.076	.32	.46	.56	.64	.78	.90	1.10	1.28	1.42	1.56	1.74	
1.0	1⁄8, 1⁄4, 3⁄8	V 1.0	.078	.35	.50	.61	.70	.86	1.0	1.2	1.4	1.6	1.7	1.9	
1.5	1⁄8, 1⁄4, 3⁄8	V 1.5	.093	.53	.75	.92	1.1	1.3	1.5	1.8	2.1	2.4	2.5	2.9	
2.0	1⁄8, 1⁄4, 3⁄8	V 2.0	.109	.71	1.0	1.2	1.4	1.7	2.0	2.5	2.8	3.2	3.5	3.9	
3.0	1⁄8, 1⁄4, 3⁄8	V 3.0	.125	1.1	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	5.0	5.8	
4.0	1⁄8, 1⁄4, 3⁄8	V 4.0	.156	1.4	2.0	2.5	2.8	3.5	4.0	4.9	5.7	6.3	6.8	7.7	
5.0	1⁄4, 3⁄8, 1⁄2	V 5.0	.171	1.8	2.4	3.1	3.5	4.3	5.0	6.1	7.1	7.9	8.7	9.7	
6.0	1⁄4, 3⁄8, 1⁄2	V 6.0	.187	2.1	3.0	3.7	4.2	5.2	6.0	7.3	8.5	9.5	10.0	11.6	
7.0	1⁄4, 3⁄8, 1⁄2	V 7.0	.203	2.5	3.5	4.3	4.9	6.1	7.0	8.6	9.9	11.1	11.9	13.5	
8.0	1⁄4, 3⁄8, 1⁄2	V 8.0	.218	2.8	4.0	4.9	5.7	6.9	8.0	9.8	11.3	12.6	13.6	15.4	
9.0	1⁄4, 3⁄8, 1⁄2	V 9.0	.234	3.2	4.5	5.6	6.3	7.8	9.0	11.0	12.6	14.1	15.6	17.4	
10.0	3⁄8, 1⁄2	V 10.0	.250	3.5	4.9	6.1	7.1	8.6	10.0	12.2	14.1	15.8	17.3	19.4	
11.0	3⁄8, 1⁄2	V 11.0	.265	3.8	5.5	6.8	8.0	9.6	11.0	13.4	15.4	17.3	18.9	21.1	
12.0	3⁄8, 1⁄2	V 12.0	.265	4.2	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	20.0	23.2	
13.0	3⁄8, 1⁄2	V 13.0	.281	4.6	6.5	7.8	9.1	11.1	13.0	13.2	18.4	20.6	21.9	25.3	
14.0	3⁄8, 1⁄2	V 14.0	.281	5.0	7.0	8.5	9.9	12.1	14.0	17.1	19.8	22.1	24.0	27.0	
15.0	3⁄8, 1⁄2	V 15.0	.296	5.3	7.4	9.2	10.6	13.0	15.0	18.4	21.2	23.7	26.0	29.0	
20.0	1⁄2, 3⁄4	V 20.0	.344	7.1	13.0	12.2	14.1	17.3	20.0	24.5	28.3	31.6	34.4	38.7	
25.0	1⁄2, 3⁄4	V 25.0	.375	9.0	12.5	15.5	17.5	21.5	25.0	30.5	35.5	39.5	43.5	48.5	
30.0	3⁄4	V 30.0	.421	10.6	15.0	18.4	21.2	25.0	30.0	36.8	42.4	47.4	52.0	58.0	
35.0	3⁄4	V 35.0	.453	12.6	17.5	21.7	24.5	30.3	35.0	42.7	49.7	55.3	60.9	67.9	
40.0	3⁄4	V 40.0	.500	14.1	20.0	24.4	28.3	34.6	40.0	49.0	56.5	63.2	68.8	77.4	
50.0	1	V 50.0	.515	17.7	25.0	30.6	35.4	43.3	50.0	61.2	70.7	79.1	86.6	96.8	

Flow and angle data for higher pressures available
upon request.

Steinen 29 East Halsey Rd. Parsippany, NJ 07054
Phone: 973-887-6400 Fax: 973-887-4632 E-mail: info@steinen.com



Type SSM
Male

SOLID-JET *SOLID CONE* NOZZLES

STANDARD SPRAY ANGLE

Capacities: .20 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
.20	1/8	SF21	SM21	SSM21	.036	—	—	—	—	.12	.14	.17	.20	.24	.28	.32	.39	35°	35°	40°	45°
.40	1/8	SF41	SM41	SSM41	.044	—	.14	.17	.20	.25	.28	.35	.40	.49	.57	.63	.78	40°	50°	50°	55°
.60	1/8	SF61	SM61	SSM61	.044	.16	.21	.25	.30	.37	.42	.52	.60	.74	.85	.95	1.2	60°	70°	70°	70°
.80	1/8	SF81	SM81	SSM81	.062	.22	.28	.33	.40	.49	.57	.71	.80	.96	1.1	1.3	1.6	55°	60°	60°	60°
1.0	1/8	SF101	SM101	SSM101	.062	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	1.9	60°	70°	70°	70°
1.0	1/4	SF102	SM102	SSM102	.078	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	1.9	45°	50°	50°	55°
1.5	1/4	SF152	SM152	SSM152	.086	.41	.53	.63	.75	.92	1.1	1.3	1.5	1.8	2.1	2.4	2.9	55°	65°	65°	65°
2.0	1/4	SF202	SM202	SSM202	.086	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	3.9	65°	75°	75°	75°
2.5	1/4	SF252	SM252	SSM252	.086	.70	.91	1.1	1.2	1.5	1.8	2.2	2.5	3.1	3.5	3.9	4.8	75°	75°	75°	75°
2.0	3/8	SF203	SM203	SSM203	.086	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	3.9	45°	50°	50°	50°
2.5	3/8	SF253	SM253	SSM253	.098	.70	.91	1.1	1.2	1.5	1.8	2.2	2.5	3.1	3.5	3.9	4.8	55°	60°	60°	60°
3.0	3/8	SF303	SM303	SSM303	.098	.82	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	5.8	60°	65°	65°	65°
3.5	3/8	SF353	SM353	SSM353	.098	1.0	1.3	1.5	1.1	2.1	2.4	3.0	3.5	4.3	4.9	5.6	6.8	70°	72°	72°	72°
4.0	3/8	SF403	SM403	SSM403	.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	83°	83°	83°	83°
4.5	3/8	SF453	SM453	SSM453	.098	1.2	1.6	1.9	2.2	2.8	3.2	3.9	4.5	5.4	6.3	7.1	8.7	85°	90°	90°	90°
3.5	1/2	SF354	SM354	SSM354	.140	1.0	1.3	1.5	1.7	2.1	2.4	3.0	3.5	4.3	4.9	5.6	6.8	50°	55°	55°	55°
4.0	1/2	SF404	SM404	SSM404	.142	1.1	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.9	5.6	6.3	7.8	53°	58°	58°	58°
4.5	1/2	SF454	SM454	SSM454	.142	1.2	1.6	1.9	2.2	2.8	3.2	3.9	4.5	5.4	6.3	7.1	8.7	65°	70°	70°	70°
5.0	1/2	SF504	SM504	SSM504	.142	1.4	1.8	2.1	2.4	3.0	3.5	4.3	5.0	6.1	7.1	7.9	9.7	70°	70°	70°	70°
5.5	1/2	SF554	SM554	SSM554	.142	1.5	1.9	2.3	2.7	3.4	3.8	4.7	5.5	6.7	7.7	8.6	10.6	70°	75°	75°	75°
6.0	1/2	SF604	SM604	SSM604	.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	75°	80°	80°	80°
7.0	1/2	SF704	SM704	SSM704	.142	1.9	2.5	2.9	3.5	4.3	4.9	6.1	7.0	8.6	9.9	11.1	13.6	80°	80°	80°	75°
8.0	1/2	SF804	SM804	SSM804	.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	85°	90°	90°	85°
6.0	3/4	SF606	SM606	SSM606	.187	1.6	2.1	2.5	3.0	3.7	4.2	5.2	6.0	7.3	8.4	9.4	11.6	50°	55°	55°	55°
7.0	3/4	SF706	SM706	SSM706	.190	1.9	2.5	2.9	3.5	4.3	4.9	6.1	7.0	8.6	9.9	11.1	13.6	55°	60°	60°	60°
8.0	3/4	SF806	SM806	SSM806	.190	2.2	2.8	3.3	4.0	4.9	5.7	6.9	8.0	9.8	11.2	12.7	15.5	60°	65°	65°	65°
9.0	3/4	SF906	SM906	SSM906	.190	2.4	3.2	3.8	4.5	5.6	6.3	7.8	9.0	11.0	12.6	14.1	17.4	65°	70°	70°	70°
10.0	3/4	SF1006	SM1006	SSM1006	.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	70°	75°	75°	70°
12.0	3/4	SF1206	SM1206	SSM1206	.190	3.3	4.3	5.0	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	23.2	75°	80°	80°	75°
14.0	3/4	SF1406	SM1406	SSM1406	.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	85°	90°	90°	85°
16.0	3/4	SF1606	SM1606	SSM1606	.190	4.4	5.7	6.7	8.0	9.8	11.3	13.6	16.0	19.6	22.6	25.3	31.0	90°	95°	95°	90°
10.0	1	SF1008	SM1008	SSM1008	.234	2.7	3.6	4.2	5.0	6.1	7.1	8.7	10.0	12.3	14.2	15.8	19.4	45°	50°	55°	55°
12.0	1	SF1208	SM1208	SSM1208	.244	3.3	4.3	5.0	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	23.2	53°	60°	60°	55°
14.0	1	SF1408	SM1408	SSM1408	.244	3.8	5.0	5.8	7.0	8.5	9.9	12.1	14.0	17.1	19.8	22.1	27.0	65°	65°	65°	65°
16.0	1	SF1608	SM1608	SSM1608	.244	4.4	5.7	6.7	8.0	9.8	11.3	13.8	16.0	19.6	22.6	25.3	31.0	70°	70°	70°	70°
18.0	1	SF1808	SM1808	SSM1808	.244	4.9	6.4	7.5	9.0	11.0	12.7	15.6	18.0	22.0	25.4	28.4	34.8	70°	75°	75°	75°
20.0	1	SF2008	SM2008	SSM2008	.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	75°	80°	80°	80°
24.0	1	SF2408	SM2408	SSM2408	.244	6.6	8.5	10.1	12.0	14.7	17.0	20.8	24.0	29.4	34.0	38.0	46.4	90°	95°	95°	95°
26.0	1	SF2608	SM2608	SSM2608	.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	90°	95°	95°	95°

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

DIMENSIONS AND WEIGHTS

<p>Type SSM</p>			
MALE CONNECTION			
Pipe Size	Net Weight	A	B
1/8	1/2 oz.	1/2	5/8
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

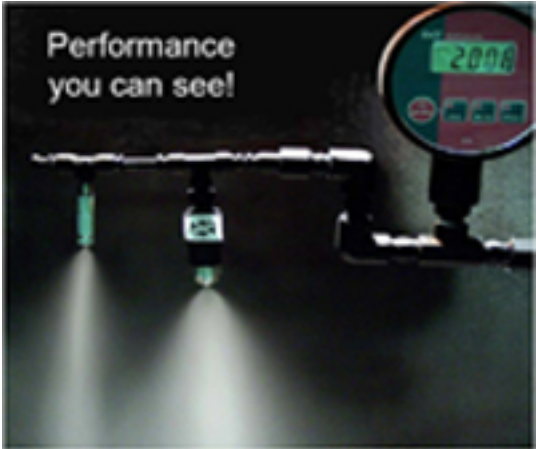
Mosquito Spray Nozzles

[Home](#) > [Industrial Spray Nozzles](#) > Mosquito Spray Nozzles

Your Problem: Your application requires a uniform spray pattern in a fine atomizing spray nozzle with instantaneous shut-off at the orifice - no dripping - no leaking

The Solution: The competitively priced Steinen Drip-Free Fogging Nozzle

- The Steinen stainless steel Drip-Free Misting Nozzle has been refined over the years by our top engineers to reward you with a flawless performance, accurate flow and spray angle, and instant shut-off at the orifice in less than 250 ms.
- We developed two different check valve spray nozzles for your system requirements:
 - Type WC400 - for the standard pressure shut off system (≈60 p.s.i. cracking pressure)
 - Type WCH400 - for the high pressure shut off system (≈80 p.s.i. cracking pressure)
- High grade 303 stainless steel keeps nozzles looking good for the life of the installation.
- The Check Valve located in the mister nozzle body instantaneously stops dripping and leaking which is necessary in such situations where any drips and leaks are unacceptable.
- Significantly outperforms any slim line misting nozzle.
- Fine atomization, no drip, spray nozzles are suitable for almost all misting applications:
 - greenhouse spray nozzles
 - mist cooling spray nozzles
 - Pest control spray nozzles
 - humidification spray nozzles
 - poultry spray nozzles
 - fog systems spray nozzles
 - coating spray nozzles
 - dust suppression spray nozzles
 - chemical spray nozzles
 - livestock spray nozzles
 - mosquito spray nozzles
 - other fine spray nozzles applications



PSI	160	200	250
GPH	.75	.85	.95
OZ/M	1.6	1.8	2.00

Steinen Part Numbers	
416 stainless steel	WC400000070
303 stainless steel	WC400000021
416 stainless steel	WCH400000070
303 stainless steel	WCH400000021



We also offer accessories like brass nozzle adapters, nickel-plated and stainless steel nozzle adapters in 1/8" and 1/4" NPT, 1 3/8" long. For fast and easy installation and removal of nozzles try our nozzle tool.

[Download Mosquito Spray Nozzles Catalog Page PDF](#)

Line Strainers

[Home](#) > [Industrial Spray Nozzles](#) > Line Strainers

Line Strainers - Features and Benefits

Furnished from a machined block of solid brass, these line strainers can be equipped with a 100 mesh (150 micron) or a 200 mesh (75 micron) Monel screen. Screens are easily removable for cleaning or replacement. Each screen provides a large area allowing for unrestricted flow and less frequent cleaning. Strainer is adaptable for many types of applications and has a maximum flow capacity of ten gallons per minute (10 gpm). Inlet and outlet connectors are available in 1/8" or 1/4" female NPT pipe thread.



Complete Assembly



Exploded View

Construction - The strainer body is machined, not forged, from a solid brass block. Our 1/8" and 1/4" female NPT units have very large replaceable Monel screens. Monel's high nickel content and corrosion resistance makes it ideal for applications such as piping systems and strainer baskets. Complete strainer assembly weighs 4 ounces.

Features:

- Compact design - easy installation in minimum space
- Maximum operating pressure 500 psi
- Cleanable and replaceable Monel screen
- Maximum operating temperature 180°F
- Machined from a solid brass block - very rugged
- Stamped with directional flow arrow
- Competitively priced
- Made in the USA

Line Strainers Part #	Pipe Thread	Length	Hex	Weight	Screen
MS100000129	1/8"	2-5/8"	3/4"	4 oz.	100 Mesh
MS200000129					200 Mesh
MS100000229	1/4"	2-5/8"	3/4"	4 oz.	100 Mesh
MS200000229					200 Mesh

Replacement Screen Part #	Screen
MSSCR100000029	100 Mesh
MSSCR200000029	200 Mesh

Ball Valves

[Home](#) > [Industrial Spray Nozzles](#) > Miniature Ball Valves

Miniature Ball Valves - Features and Benefits

High quality brass ball valves in a compact design. Patented valve design makes for easy lever operation, allowing for very short levers. These general purpose valves are for a single directional flow and will handle liquids and gases compatible with brass.

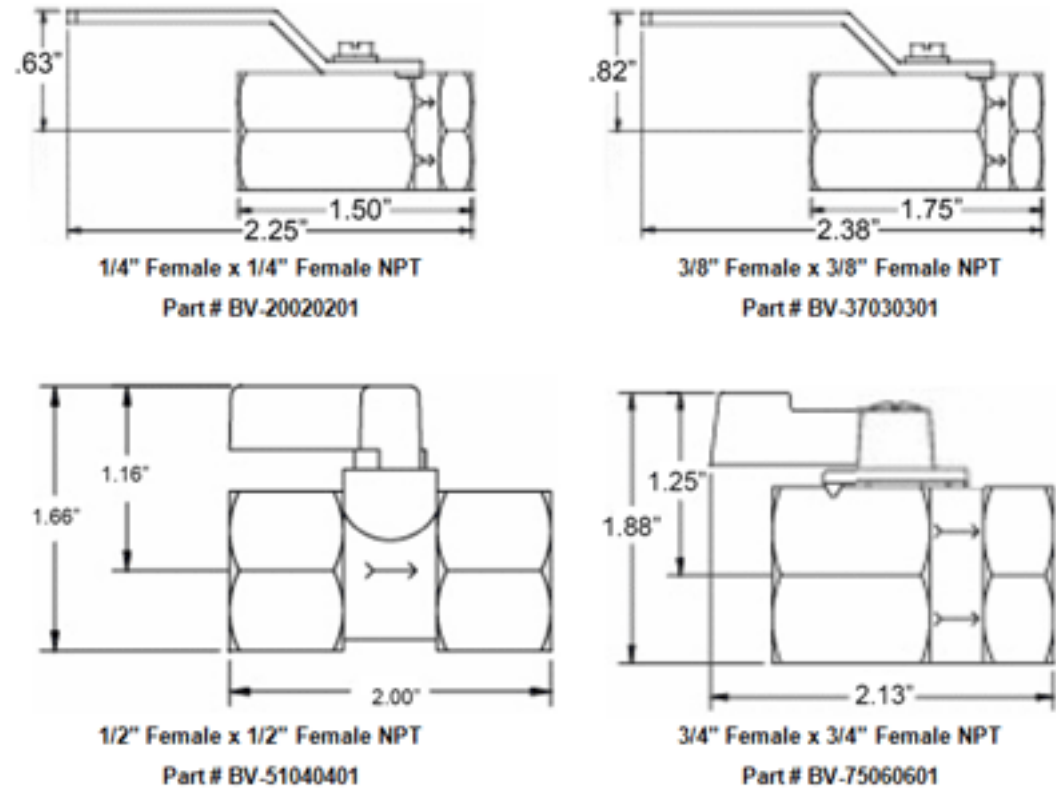


Construction – The valve body is machined, not forged, from a solid brass block. Our 1/4", 3/8" and 1/2" units have nickel plated ball valves for long life and Teflon® seats with Buna-N seals for a sure shut-off. Our 3/4" units utilize Teflon® valves and seats with Buna-N seals. Steinen miniature ball valves are simply the best available!

Features:

- Compact design – easy installation in minimum space
- Patented pressure seat & seal significantly reduces frictional resistance for easy lever "on-off" operation
- Quarter turn action – positive stops
- Maximum operating pressure 500 psi (150 psi for the 3/4" valve).
- Maximum operating temperature 180°F.
- Stamped with directional flow arrows
- Competitively priced
- Made in the USA

Drawings and Dimensions



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