



## HP FOGJET® & HP MULTIPOINT FOGJET® NOZZLES



*Spraying Systems Co.*  
Experts in Spray Technology



# THE NEW STANDARD IN FINE SPRAY NOZZLES: HP FOGJET® & HP MULTIPOINT FOGJET® VERY FINE DROPS & SUPERIOR MISTING PERFORMANCE – NO COMPRESSED AIR REQUIRED

Our new hydraulic HP FogJet and HP MultiPoint FogJet nozzles produce streak-free, uniform sprays using high pressure for atomization. Spray pattern integrity is just one of the advantages of using HP FogJet nozzles:

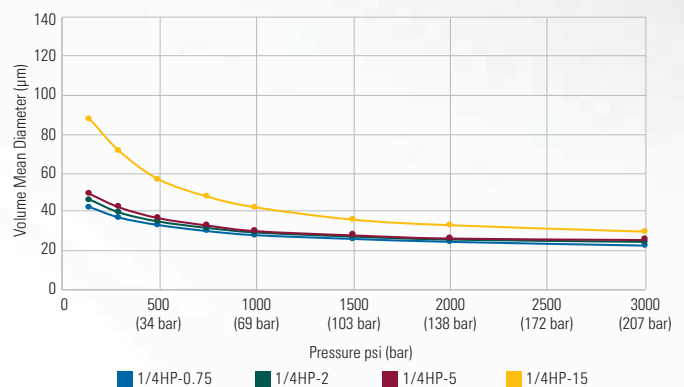
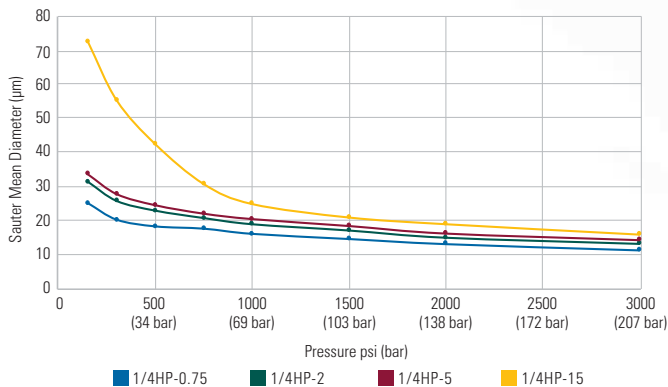
- **Better performance at lower operating pressures (100 to 3000 psi/7 to 207 bar)** than conventional pressure-swirl and impact-style nozzles
- **Longer nozzle life** – lower operating pressure and the use of filters minimize erosion and extend service life between maintenance intervals
- **Reduced clogging** – larger flow passages than impact-style hydraulic nozzles minimize clogging and maintenance downtime
- **Increased versatility** – smaller than conventional hydraulic nozzles, HP FogJet nozzles are easily integrated in applications where space is limited. For high capacity applications, HP MultiPoint FogJet nozzles simplify installation and lower costs by having 12, 10 or 8 spray tips on a single body



HP FogJet nozzles are available in a wide range of sizes, connections, capacities and configurations. HP FogJet nozzles produce a single hollow cone spray while MultiPoint versions produce 12 individual hollow cone sprays to create a single large plume of fine droplets.

## HP FogJet Nozzle Drop Size

The drop size remains extremely consistent across different capacities and operating pressures. D32 drop size shown left and Dv0.5 drop size shown right.




## IDEAL FOR:

- Turbine inlet air cooling
- Humidification
- Gas cooling/conditioning, evaporative cooling, NOx control
- Sanitation
- Moisturizing
- Livestock cooling
- Fire suppression
- Desuperheating
- Food and pharmaceutical processing
- Pest control




## HP FOGJET® NOZZLE LINE OVERVIEW

### STANDARD HP FOGJET NOZZLE

Flow rate range: 0.75 gph (2.84 lph) to 20 gph (75.7 lph) @ 1000 psi (69 bar)	
Max. operating pressure: 3000 psi (207 bar)	
Spray angle: standard 80° nominal @ 1000 psi (69 bar); wider angles available upon request	
Connections: 1/8", 1/4" (M) NPT/BSPT; 3/8-24 UNF (M) with VITON® O-ring. Straight thread versions designed to SAE-J926 hydraulic pipe fitting specification	
Material: 316L stainless steel with silver soldered joint	
Filters: 40 micron integrated filter and a HDPE 85 micron replaceable filter	
Options: <ul style="list-style-type: none"> <li>• Check valve version with Buna-N seal. Cracking pressure 215 psi (14.8 bar)</li> <li>• Safety wire hole</li> </ul>	

### HP MULTIPOINT FOGJET® NOZZLES

Flow rate range (all 12 legs): 9 gph (34 lph) to 240 gph (908.5 lph) @ 1000 psi (69 bar)	
Max. operating pressure: 3000 psi (207 bar)	
Spray angle: plume equivalent to 120° @ 1000 psi (69 bar)	
Connections: 1/2-20 UNF (M) that can be threaded into 1/4", 3/8" or 1/2" (M) NPT/BSPT bodies. Straight thread versions designed to SAE-J926 hydraulic pipe fitting specification	
Material: 316L stainless steel with silver soldered joint	
Filters: 200 mesh screen replaceable filter with VITON O-ring for capacities greater than 2.5, 325 mesh screen for capacities 2.5 and lower	

## SPECIFICATIONS

Flow rate shown per HP FogJet nozzle and per leg in MultiPoint versions.

Capacity size	Flow Rate Capacity gallons per hour (liters per hour)				Flow exponent
	100 psi (7 bar)	500 psi (34 bar)	1000 psi (69 bar)	3000 psi (207 bar)	
0.75	—*	0.57 (2.16)	0.75 (2.84)	1.2 (4.5)	0.40
1.5	0.53 (2.0)	1.1 (4.2)	1.5 (5.7)	2.5 (9.5)	0.45
1.8	0.64 (2.4)	1.3 (4.9)	1.8 (6.8)	3.0 (11.4)	0.45
2	0.66 (2.5)	1.4 (5.3)	2.0 (7.6)	3.4 (12.9)	0.48
2.5	0.83 (3.1)	1.8 (6.8)	2.5 (9.5)	4.2 (15.9)	0.48
3	0.95 (3.6)	2.1 (7.9)	3.0 (11.4)	5.2 (19.7)	0.50
5	1.6 (6.1)	3.5 (13.2)	5.0 (18.9)	8.7 (32)	0.50
7.5	2.4 (9.1)	5.3 (20)	7.5 (28)	13.0 (49)	0.50
10	3.2 (12.1)	7.1 (26)	10.0 (37)	17.3 (65)	0.50
15	4.7 (17.8)	10.6 (40)	15.0 (56)	26 (98)	0.50
20	6.3 (23)	14.1 (53)	20 (75)	34.6 (131)	0.50

\*Min. operating pressure for 0.75 is 150 psi (10.3 bar)

For more information on calculating unknown flow or pressure, see page A5 in Industrial Spray Products Catalog 75.

### LIQUID DELIVERY MODULE OPTION: AUTOJET™ LDM17HP SYSTEM

- Complete, compact pump system for reliable high-pressure operation with HP FogJet nozzles
- System includes a Variable Frequency Drive (VFD) pulse-free diaphragm metering pump
- Flow rate range: Up to 17.4 gph at 2300 psi (65.9 lph at 158 bar). Flow rates up to 70 gph (265 lph) possible with different pump and motor combinations
- Operating pressure: 500 to 2300 psi (35 to 158 bar)



## ORDERING INFORMATION

### HP FOGJET® NOZZLE

Conn. size	Nozzle Type	Material Code	Capacity Size
Example			
1/4	HP	316SS	15

Add -CV after capacity for check valve version. Add -S after capacity for safety wire version. For straight thread connection, omit "Conn. Size" and use ST-HP as "Nozzle Type". Example: ST-HP-316SS15.

### HP MULTIPOINT FOGJET® NOZZLE WITH STRAIGHT CONN.

Nozzle Type	Material Code	Capacity Size
Example		
ST1-12-HP	316SS	0.75

Safety wire hole comes standard.

### HP MULTIPOINT FOGJET NOZZLE BODY WITH THREADED CONN.

HP FogJet MultiPoint with Straight Conn.	+	Component Part	-	Conn. Size	Material Code
Example					
ST1-12-HP-316SS0.75	+	CP116430	-	1/4	316SS

For BSPT connections, add B: 1/4 BHP-xxx-xx, CPB116430-xx-xxx. Safety wire hole comes standard..

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## DIMENSIONS AND WEIGHTS

### HP FOGJET NOZZLE

	Thread Size	A in. (mm)	Hex in.	Net Weight oz. (g)
	1/8" NPT	.75 (19)	7/16	.32 (9)
	1/4" NPT	.84 (21.3)	9/16	.64 (18)
	3/8-24 UNF	.73 (18.5)	1/2	.34 (9.6)

### HP MULTIPOINT FOGJET NOZZLE

MULTIPOINT NOZZLE STRAIGHT CONN.			
A in. (mm)	B in. (mm)	Net Weight oz. (g)	
1.34 (34.04)	2.33 (59.18)	1.8 (51)	
MULTIPOINT NOZZLE WITH THREADED CONN. 1/4", 3/8" AND 1/2"			
A in. (mm)	B in. (mm)	Net Weight oz. (g)	
2.43 (61.72)	2.33 (59.18)	5.2 (147.4)	
MESH FILTER			
116455-200-316SVI			
Model	A in. (mm)	B in. (mm)	Net Weight oz. (g)
Mesh	.76 (19.3)	.4 (10.16)	.33 (9.4)

Based on largest/heaviest version of each type.