FullJet® Maximum Free Passage Spray Nozzles
Standard Spray
Medium Capacity



HMFP



3/4"–1-1/4" NPT or BSPT (F)

HHMFP



3/4"–1-1/4" NPT or BSPT (M)

DESIGN FEATURES

The Maximum Free Passage (MFP) FullJet nozzle's patent-pending vane design provides the largest free passage of any spray nozzle of its type. As a result, the possibility of clogging is minimized to allow maximum liquid throughput in applications where there is debris in the water or where recirculated liquid is being used.

Unlike other maximum free passage nozzles where the vane is cast as part of the nozzle, the MFP FullJet nozzle features a separate internal vane. Because of this patented vane design, actual maximum free passage is consistently achieved. This means that a ball bearing of the size noted on the performance data chart will freely pass through the nozzle.

- Backwall in the vane provides a controlled environment for the fluid before it enters the whirlchamber, thereby reducing "fluttering", or ragged and inconsistent spray pattern edges.
- Produces a uniform full cone spray across the entire spray coverage area – no thick edges and light centers.
- Available in 3/4", 1", and 1-1/4" NPT and BSPT male and female inlet connections.
- Standard materials: brass and 316 stainless steel.

COMMON APPLICATIONS

- Aerating waste water treatment
- Cooling
- Dust control
- Fire protection
- Flue gas scrubbing
- Washing coal, sand, and gravel

ACCESSORIES

- Split-eyelet Connector
- Adjustable Ball Fittings
- Strainers
- Pressure Gauges
- Pressure Regulators
- Pressure Relief Valves
- Control Valves
- Solenoid Valves
- Check Valves

See Section L for more info.

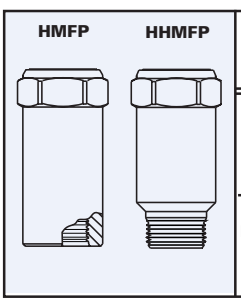
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PERFORMANCE DATA

Nozzle Inlet Conn. NPT or BSPT	Nozzle Type Conn. F HMFP	Nozzle Type Conn. M HHMFP	Capacity Size	Max. Free Passage Dia.*	Capacity (gallons per minute) 10 psi	20 psi	30 psi	40 psi	60 psi	80 psi	Spray Angle 60° Series 20 psi	60° Series 40 psi	90° Series 20 psi	90° Series 40 psi	115° Series 20 psi	115° Series 40 psi
3/4	●	●	70	.281"	7.0	9.2	10.9	12.2	14.3	16.0	64°	62°	90°	84°	112°	100°
	●	●	84	.313"	8.4	11.0	13.0	15.0	17.2	19.3	64°	62°	90°	84°	112°	100°
	●	●	100	.344"	10.0	13.6	16.0	17.9	21	24	64°	62°	90°	84°	112°	100°
	●	●	120	.375"	12.0	16.0	19.0	22	26	29	64°	62°	90°	84°	112°	100°
1	●	●	120	.375"	12.0	16.0	19.0	21.5	25.5	28.7	64°	62°	90°	84°	112°	100°
	●	●	150	.406"	15.0	19.6	23.0	25.7	30.1	33.6	64°	62°	90°	88°	115°	105°
	●	●	170	.437"	17.0	22.1	25.7	28.7	33.4	37.3	64°	62°	90°	88°	115°	105°
1-1/4	●	●	170	.437"	17.0	22.1	25.7	28.7	33.4	37.3	64°	62°	90°	88°	115°	105°
	●	●	200	.469"	20.0	26.1	30.5	34.1	39.8	44.5	64°	62°	90°	88°	115°	105°
	●	●	220	.500"	22.0	28.6	33.4	37.3	43.5	48.6	64°	62°	90°	88°	115°	105°
	●	●	240	.531"	24.0	31.3	36.6	40.9	47.8	53.4	64°	62°	90°	88°	115°	105°
	●	●	260	.562"	26.0	34.0	39.8	44.5	52.1	58.2	64°	62°	90°	88°	115°	105°

* Foreign matter with maximum diameter as listed can pass through nozzle without clogging. Other sizes available. Contact your local sales engineer.

DIMENSIONS & WEIGHTS



Nozzle Type (Conn.)	Nozzle Inlet Conn. NPT or BSPT	Body Style	Length	Hex.	Net Weight
HMFP (F)	3/4	A	2-13/16"	1-1/4"	8.8 oz.
		B	2-5/8"	1-3/8"	12.6 oz.
		B	2-7/8"	1-3/8"	13.2 oz.
		B	3-1/32"	1-3/8"	12.8 oz.
HHMFP (M)	3/4	A	1-7/32"	1-1/8"	4.9 oz.
		B	2-45/64"	1-3/8"	11.4 oz.
		B	2-31/32"	1-3/8"	12.1 oz.
		B	3-1/16"	1-3/8"	11.5 oz.

Based on largest/heaviest version of each type.

ORDERING INFO

STANDARD SPRAY NOZZLE

3/4 HHMFP – SS 90 70

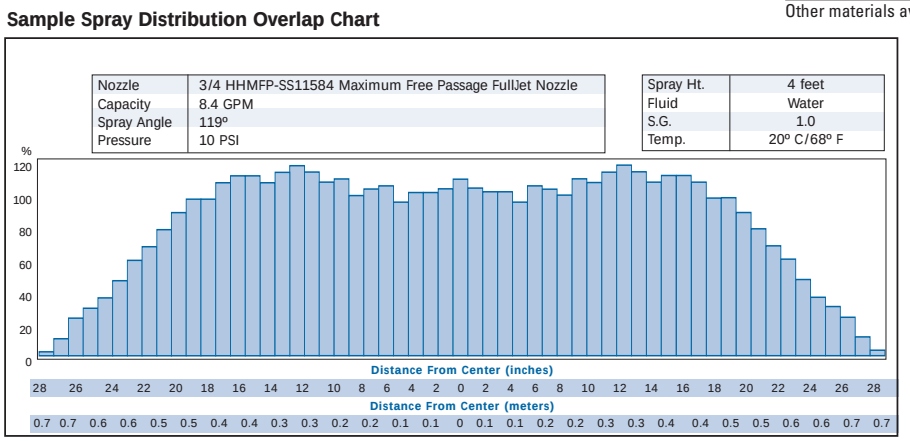
Inlet Conn. | Nozzle Type | Material Code | Spray Angle | Capacity Size

MATERIALS

Material	Material Code	Nozzle Type HMFP	Nozzle Type HHMFP
Brass	(none)	●	●
316 Stainless Steel	SS	●	●

Other materials available upon request.

Sample Spray Distribution Overlap Chart



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