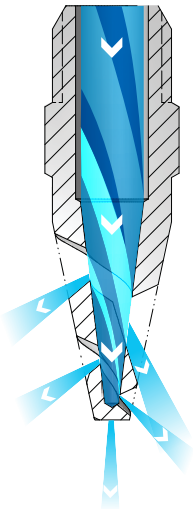
OVERVIEW: SPIRALJET

- Solid cone-shaped spray pattern
- Open passages ideal for use with fluids with particulates
- Maximum liquid throughput for a given pipe size
- Spray angles from 60° to 170°
- Uniform spray distribution from .7 to 3320 gpm (2.7 to 11967 lpm)
- Operating pressures up to 400 psi (25 bar)
- Compact size enables easy installation or retrofit on most pipe systems
- Certain nozzles available with UL listing for fire protection applications

For other certifications, contact your sales engineer.



SpiralJet HHSJ and HHSJX Nozzles

The liquid enters the nozzle and passes through the orifice. The liquid exits the nozzle through the voids in the spiral. As it deflects off the spiral surface, a full cone pattern is formed.

SPIRALJET OPTIONS

S

HHSJ
1/4" to 2" male conn.
Hex. body style/316 stainless steel

Other body styles, connection sizes and materials available. See Quick Reference Guide.

S

HHSJX
3/8" to 2" male conn.
Extra large free passage design
Hex. body style/brass

Other body styles, connection sizes and materials available. See Quick Reference Guide.

ORDERING INFORMATION

SPIRALJET

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

Example

1/4	HHSJ	–	SS	120	07

BSPT connections require the addition of a "B" prior to the inlet connection.

RELATIVE DROP SIZE IN MICRONS

10 to 100	100 to 500	500 to 1000	1000 to 5000

Drop size will vary based on flow rate and pressure.

QUICK REFERENCE GUIDE

Model	Connection/ Type	Connection Size (in.)	Materials	Page Number	
				Performance Data	Dimensions and Weights
HHSJ	M, Hex.	1/4 to 2	Brass, 316 stainless steel (316SS)	B25	B26
	M, Flats, Cast	1/4 to 4	316 stainless steel (SS)		
	M, Round	1/4 to 4	Polyvinyl chloride (PVC), PTFE (TEF)		
HHSJX	M, Hex.	3/8 to 2	Brass	B26	
	M, Flats, Cast	3/8 to 2	316 stainless steel (SS)		
	M, Round	3/8 to 2	Polypropylene (PP), Polyvinyl chloride (PVC)		

M = male thread. There is no material code for brass. Leave material code blank when ordering. Other materials available upon request.

For more dimensions and sizes, contact your sales engineer.

S PERFORMANCE DATA: STANDARD ANGLE SPRAY

Inlet Conn. (in.)	Nozzle Type	Spray Angle at 10 psi					Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)				
	HHSJ	60°	90°	120°	150°	170°				10 psi	20 psi	40 psi	100 psi	400 psi
1/4	●	●	●	●			07	.094	.094	.70	.99	1.4	2.2	4.4
	●	●	●	●	●	●	13	.125	.125	1.3	1.8	2.6	4.1	8.2
	●	●	●	●	●	●	20	.156	.125	2.0	2.8	4.0	6.3	12.6
3/8	●	●					07	.094	.094	.70	.99	1.4	2.2	4.4
	●	●					13	.125	.125	1.3	1.8	2.6	4.1	8.2
	●	●					20	.156	.125	2.0	2.8	4.0	6.3	12.6
	●	●	●	●	●	●	30	.188	.125	3.0	4.2	6.0	9.5	19.0
	●	●	●	●	●	●	40	.219	.125	4.0	5.7	8.0	12.6	25
	●	●	●	●	●	●	53	.250	.125	5.3	7.5	10.6	16.8	34
	●	●	●	●	●	●	82	.313	.125	8.2	11.6	16.4	26	52
1/2	●	●	●	●	●	●	120	.375	.188	12.0	17.0	24	38	76
	●	●	●	●	●	●	164	.438	.188	16.4	23	33	52	104
	●					●	210	.500	.188	21	30	42	66	133
3/4	●	●	●	●	●	●	210	.500	.188	21	30	42	66	133
1	●	●	●	●	●	●	340	.625	.250	34	48	68	108	215
	●	●	●	●	●	●	470	.750	.250	47	66	94	149	297
1-1/2	●	●	●	●	●	●	640	.875	.313	64	91	128	202	405
	●	●	●	●	●	●	820	1.000	.313	82	116	164	259	519
	●	●	●	●	●	●	960	1.125	.313	96	136	192	304	607
2	●	●	●	●	●	●	1400	1.375	.438	140	198	280	443	885
	●	●	●	●	●	●	1780	1.500	.438	178	252	356	563	1126
3	●	●	●	●			2560	1.750	.563	256	362	512	810	1619
	●	●	●	●			3360	2.000	.563	336	475	672	1063	2125
4	●	●	●	●			5250	2.500	.625	525	742	1050	1660	3320

Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging.

Highlighted column shows the rated pressure.

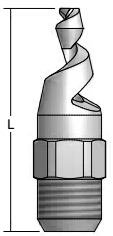
S PERFORMANCE DATA: STANDARD ANGLE SPRAY

Inlet Conn. (in.)	Nozzle Type	Spray Angle at 10 psi		Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)				
	HHSJX	90°	120°				10 psi	20 psi	40 psi	100 psi	400 psi
3/8	●	●	●	30	.188	.188	3.0	4.2	6.0	9.5	19.0
	●	●	●	40	.219	.219	4.0	5.7	8.0	12.6	25
	●	●	●	53	.250	.250	5.3	7.5	10.6	16.8	34
	●	●	●	82	.313	.313	8.2	11.6	16.4	26	52
1/2	●	●	●	120	.375	.375	12.0	17.0	24	38	76
	●	●	●	164	.438	.438	16.4	23	33	52	104
3/4	●	●	●	210	.500	.500	21	30	42	66	133
1	●	●	●	340	.625	.625	34	48	68	108	215
	●	●	●	470	.750	.750	47	66	94	149	297
1-1/2	●	●	●	640	.875	.875	64	91	128	202	405
	●	●	●	820	1.000	1.000	82	116	164	259	519
	●	●	●	960	1.125	1.125	96	136	192	304	607
2	●	●	●	1400	1.375	1.375	140	198	280	443	885
	●	●	●	1780	1.500	1.500	178	252	356	563	1126

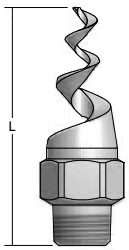
Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging.

Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Net Weight (oz.)
	HHSJ (M)	1/4	2.125	9/16	1
		3/8	2.375	11/16	1.8
		1/2	3.125	7/8	3.5
		3/4	3.438	1-1/16	5.4
		1	4.563	1-3/8	10
		1-1/2	6.750	2	27
		2	6.875	2-1/2	35
		3	11.875	3-3/4	92
		4	13.250	4-1/2	10.3 lbs.

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Net Weight (oz.)
	HHSJX (M)	3/8	2.750	7/8	3
		1/2	3.375	1-1/16	4.5
		3/4	4.625	1-3/8	8
		1	5.125	1-3/4	18
		1-1/2	6.750	2	30
		2	11.000	3	88

Based on the largest/heaviest version of each type.