
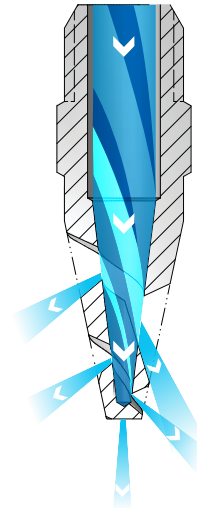


OVERVIEW: SPIRALJET

- 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



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.



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



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 0.7 bar					Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)				
		60°	90°	120°	150°	170°				0.7 bar	1.5 bar	3 bar	7 bar	25 bar
1/4	●	●	●	●			07	2.4	2.4	2.7	3.9	5.5	8.4	16.0
	●	●	●	●	●	●	13	3.2	3.2	5.0	7.3	10.3	15.7	30
	●	●	●	●	●	●	20	4.0	3.2	7.6	11.2	15.8	24	46
3/8	●	●					07	2.4	2.4	2.7	3.9	5.5	8.4	16.0
	●	●					13	3.2	3.2	5.0	7.3	10.3	15.7	30
	●	●					20	4.0	3.2	7.6	11.2	15.8	24	46
	●	●	●	●	●	●	30	4.8	3.2	11.4	16.8	24	36	68
	●	●	●	●	●	●	40	5.6	3.2	15.3	22	32	48	91
	●	●	●	●	●	●	53	6.4	3.2	20	30	42	64	121
	●	●	●	●	●	●	82	7.9	3.2	31	46	65	99	187
1/2	●	●	●	●	●	●	120	9.5	4.8	46	67	95	145	274
	●	●	●	●	●	●	164	11.1	4.8	63	92	129	198	374
	●					●	210	12.7	4.8	80	117	166	253	479
3/4	●	●	●	●	●	●	210	12.7	4.8	80	117	166	253	479
1	●	●	●	●	●	●	340	15.9	6.4	130	190	268	410	775
	●	●	●	●	●	●	470	19.1	6.4	179	262	371	567	1071
1-1/2	●	●	●	●	●	●	640	22.2	7.9	244	357	505	772	1459
	●	●	●	●	●	●	820	25.4	7.9	313	458	647	989	1869
	●	●	●	●	●	●	960	28.6	7.9	366	536	758	1158	2188
2	●	●	●	●	●	●	1400	34.9	11.1	534	782	1105	1689	3191
	●	●	●	●	●	●	1780	38.1	11.1	679	994	1406	2147	4057
3	●	●	●	●			2560	44.5	14.3	976	1429	2021	3088	5835
	●	●	●	●			3360	50.8	14.3	1282	1876	2653	4053	7659
4	●	●	●	●			5250	63.5	15.9	2002	2931	4145	6332	11967

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.



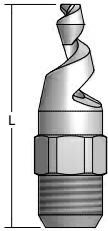
S PERFORMANCE DATA:
STANDARD ANGLE SPRAY

Inlet Conn. (in.)	Nozzle Type	Spray Angle at 0.7 bar		Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)				
		HHSJX	90°				120°	0.7 bar	1.5 bar	3 bar	7 bar
3/8	●	●	●	30	4.8	4.8	11.4	16.8	24	36	68
	●	●	●	40	5.6	5.6	15.3	22	32	48	91
	●	●	●	53	6.4	6.4	20	30	42	64	121
	●	●	●	82	7.9	7.9	31	46	65	99	187
1/2	●	●	●	120	9.5	9.5	46	67	95	145	274
	●	●	●	164	11.1	11.1	63	92	129	198	374
3/4	●	●	●	210	12.7	12.7	80	117	166	253	479
1	●	●	●	340	15.9	15.9	130	190	268	410	775
	●	●	●	470	19.1	19.1	179	262	371	567	1071
1-1/2	●	●	●	640	22.2	22.2	244	357	505	772	1459
	●	●	●	820	25.4	25.4	313	458	647	989	1869
	●	●	●	960	28.6	28.6	366	536	758	1158	2188
2	●	●	●	1400	34.9	34.9	534	782	1105	1689	3191
	●	●	●	1780	38.1	38.1	679	994	1406	2147	4057

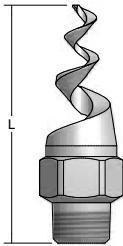
Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging.

Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	HHSJ (M)	1/4	54.0	9/16	0.03
		3/8	60.3	11/16	0.05
		1/2	79.4	7/8	0.10
		3/4	87.3	1-1/16	0.15
		1	115.9	1-3/8	0.28
		1-1/2	171.5	2	0.77
		2	174.6	2-1/2	0.99
		3	301.6	3-3/4	2.61
		4	336.6	4-1/2	4.65

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	HHSJX (M)	3/8	69.9	7/8	0.09
		1/2	85.7	1-1/16	0.13
		3/4	117.5	1-3/8	0.23
		1	130.2	1-3/4	0.51
		1-1/2	171.5	2	0.85
		2	279.4	3	2.49

Based on the largest/heaviest version of each type.