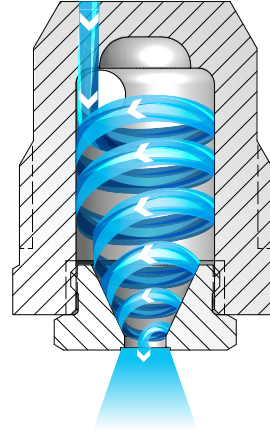


OVERVIEW: WHIRLJET IN-LINE, OFFSET AND DEFLECTED SPRAYS

- Hollow cone spray pattern
- In-line versions ideal for dust control in mining operations
 - BD versions have a lower profile projection for installation in a tee or pipe header
 - In-line BDM features recessed orifice area to protect from damage; self-locking cap to prevent loss due to vibration; fiberglass-reinforced nylon inlet body
- BA offset style ideal for installations with physical space limitations
- Spray angles: Standard – 43° to 94°, Wide – 102° to 125°
- Deflected spray versions available with 120°, 150° and 180° included angle of spray at 10 psi (0.7 bar)
- Uniform spray distribution from .11 to 38 gpm (.41 to 145 lpm)
- Operating pressures up to 500 psi (35 bar)



WhirlJet BD, BDM and BA Nozzles

Liquid passes through a hole on the inlet side of the nozzle. The liquid then enters a whirlchamber where it spins in a circle at high speed. The rotation forces the liquid away from the center toward the edges. This causes the liquid to exit the orifice in a hollow cone pattern.

WHIRLJET OPTIONS



BD
3/8" to 1-1/2" male conn.
In-line nozzle
Removable cap



BDM "Miner Nozzle"
3/8" male conn.
In-line nozzle
Removable cap/nylon body



BA
3/8" to 1/2" male conn.
Offset style nozzle
Removable cap



DeflectoJet® 8686
1/8" to 3/8" male conn.
Deflected nozzle
Removable deflector cap

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.



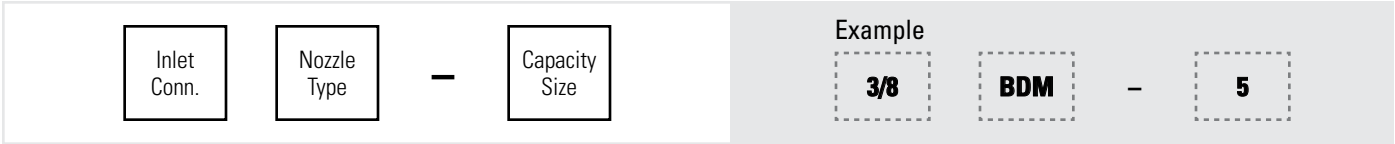
ORDERING INFORMATION

WHIRLJET BD



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

WHIRLJET BDM



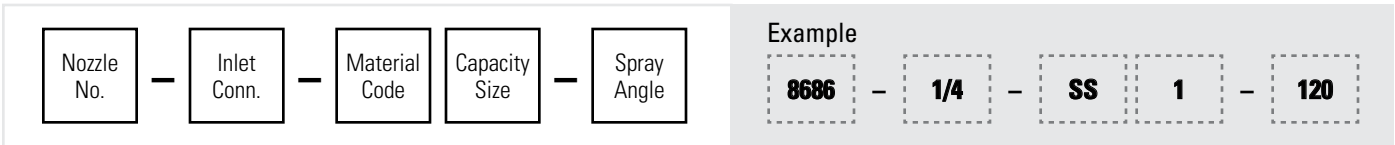
BSPT connections require the addition of a "B" prior to the inlet connection.

WHIRLJET BA



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

DEFLECTOJET 8686



BSPT connections require the addition of a "B" prior to the nozzle number.

QUICK REFERENCE GUIDE

Model	Connection	Connection Size (in.)	Materials	Page Number	
				Performance Data	Dimensions and Weights
BD	M	3/8 to 1-1/2	Brass, 303 stainless steel (SS)	D29	D32
BD-W	M	3/8 to 3/4	Brass, 303 stainless steel (SS)	D30	
BDM	M	3/8	Nylon/Brass cap	D30	
BA	M	3/8 to 1/2	Brass, 303 stainless steel (SS), 309 stainless steel (309SS)	D31	
8686	M	1/8 to 3/8	Brass, 303 stainless steel (SS)	D31	

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	Capacity Size	Inlet Dia. Nom. (mm)	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per minute)						Spray Angle (°)		
	BA				0.4 bar	0.7 bar	1.5 bar	3 bar	4 bar	7 bar	0.5 bar	1.5 bar	6 bar
3/8	●	3	2.4	2.4	.86	1.1	1.7	2.4	2.7	3.6	52	64	77
	●	5	3.6	3.2	1.4	1.9	2.8	3.9	4.6	6.0	64	73	79
	●	8	4.8	4.0	2.3	3.1	4.5	6.3	7.3	9.6	62	70	74
	●	10	5.2	4.4	2.9	3.8	5.6	7.9	9.1	12.1	64	72	75
	●	15	6.4	5.6	4.3	5.7	8.4	11.8	13.7	18.1	64	72	74
	●	20	7.1	6.4	5.8	7.6	11.2	15.8	18.2	24	63	70	74
	●	25	7.5	7.5	7.2	9.5	14.0	19.7	23	30	63	70	74
1/2	●	25	9.5	6.4	7.2	9.5	14.0	19.7	23	30	63	66	71
	●	30	9.5	7.5	8.6	11.4	16.8	24	27	36	67	71	75
	●	40	9.5	9.1	11.5	15.3	22	32	36	48	72	76	78
	●	50	9.5	11.1	14.4	19.1	28	39	46	60	74	79	82
	●	60	9.5	13.1	17.3	23	34	47	55	72	77	82	86

Highlighted column shows the rated pressure.

W PERFORMANCE DATA:
WIDE ANGLE SPRAY

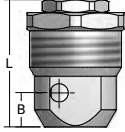
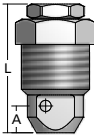
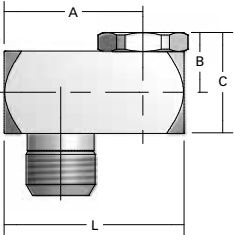
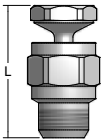


Inlet Conn. (in.)	Nozzle Type	Capacity Size	Flow Rate Capacity (liters per minute)						
	DeflectoJet® 8686		0.4 bar	0.7 bar	1.5 bar	3 bar	4 bar	6 bar	7 bar
1/8	●	.37	1.1	1.4	2.1	3.0	3.4	4.2	4.5
	●	.5	1.4	1.9	2.8	4.0	4.6	5.6	6.0
	●	.75	2.2	2.9	4.2	5.9	6.8	8.4	9.0
1/4	●	1	2.9	3.8	5.6	7.9	9.1	11.2	12.1
	●	1.5	4.3	5.7	8.3	11.8	13.7	16.8	18.1
	●	2	5.8	7.7	11.2	15.8	18.2	22	24
	●	2.5	7.2	9.5	13.9	19.7	23	28	30
3/8	●	3	8.8	11.6	17.0	24	27	34	36
	●	3.5	10.4	13.7	20	28	32	39	42
	●	4	11.9	15.7	23	32	36	45	48
	●	4.5	12.9	17.1	25	36	41	50	54
	●	5	14.4	19.1	28	39	46	56	60

Highlighted column shows the rated pressure.



DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	A (mm)	B (mm)	C (mm)	Net Weight (kg)
	BD (M)	3/8	31.8	11/16	–	6.7	–	0.03
		1/2	37.3	7/8	–	8.0	–	0.06
		3/4	44.5	1-1/16	–	9.5	–	0.11
		1-1/2	66.7	2	–	8.0	–	0.60
	BD-W (M)	3/8	31.8	11/16	–	6.7	–	0.03
		1/2	37.3	7/8	–	7.9	–	0.06
		3/4	44.4	1-1/16	–	9.5	–	0.11
	BDM (M)	3/8	32.5	11/16	6.7	–	–	0.01
	BA (M)	3/8	38.1	–	26.6	14.7	24.2	0.11
		1/2	55.6	–	42.9	14.7	27.4	0.27
	8686 (M)	1/8	30.2	1/2	–	–	–	0.02
		1/4	33.3	5/8	–	–	–	0.03
		3/8	44.5	7/8	–	–	–	0.08

Based on the largest/heaviest version of each type.