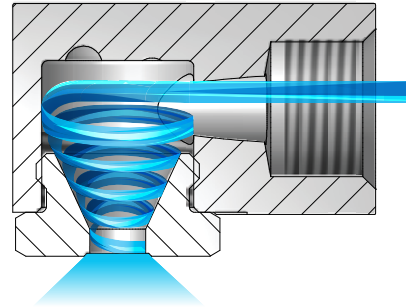


**OVERVIEW: WHIRLJET STANDARD, WIDE AND EXTRA WIDE ANGLE NOZZLES**

- Hollow cone spray pattern with a circular impact area
- Large, unobstructed flow passages minimize clogging
- Good atomization of liquids at lower pressures – ideal for fluid cooling applications
- Removable caps for easy inspection and cleaning on some models
- Slope-bottom design models reduce the drilling effect of the fluid vortex in the fluid chamber and premature wear
- AX and BX nozzles form smaller drops; ideal for use in air washers and dust suppression applications
- CX, CF, CRC and D nozzles feature higher flow rates; ideal for use in larger, evaporative cooling spray ponds
- AP, LAP and LBP nozzles are constructed of polypropylene and feature excellent corrosion resistance at temperatures up to 160°F (71°C); patented center post design provides extended wear life of the nozzle
- Standard, wide and extra wide spray angles

**WhirlJet Nozzles**

As liquid enters the nozzle, it passes into a whirlchamber and begins to spin in a circle at high speed. The rotation forces the liquid away from the center toward the edges of the whirlchamber. This causes the liquid to exit the orifice in a hollow cone pattern. Some WhirlJet nozzles have a slope bottom in the whirlchamber that helps extend wear life.



**WHIRLJET AX, BX, CX AND D NOZZLES**

- Spray angles: Standard – 43° to 91°, Wide – 112° to 120°
- Uniform spray distribution:
  - AX and BX nozzles – from .03 to 38 gpm (.19 to 145 lpm)
  - CX, CRC, CF and D nozzles – from 2.0 to 2362 gpm (7.3 to 9010 lpm)
- Operating pressures from 3.0 to 100 psi (0.2 to 7.0 bar)

Contact your local sales engineer for information about junction boxes.

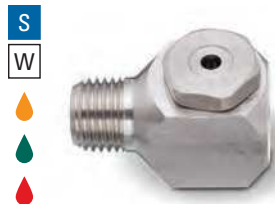


**AX**  
1/8" to 3/4" female conn.  
Slope-bottom design  
Removable cap



**CX**  
1" to 2-1/2" female conn.  
Slope-bottom design  
One-piece cast-type

**WHIRLJET OPTIONS**



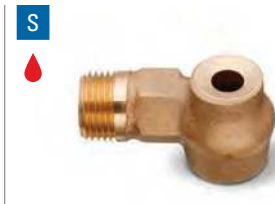
**BX** – 1/8" to 3/4" male conn.  
Slope-bottom design  
Removable cap



**CRC**  
1-1/4" to 4" female conn.  
Two-piece cast-type



**CF**  
4" to 6" flange conn.  
Two-piece cast-type



**D**  
1/2" to 3/4" male conn.  
One-piece cast-type

**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.

**WHIRLJET AP, LAP, LBP AND E NOZZLES**

- Spray angles: Standard – 43° to 91°, Wide – 112° to 120°, Extra wide – 144° to 165°
- Uniform spray distribution:
  - AP, LAP and LBP nozzles – from .14 to 18.9 gpm (.20 to 15.9 lpm)
  - E nozzles – from .11 to 16.8 gpm (.41 to 64 lpm)
- Operating pressures from 3.0 to 100 psi (0.2 to 7.0 bar)



**AP**  
1/4" to 3/8" female conn.



**E**  
One-piece bar stock  
1/4" to 3/8" female conn.

**WHIRLJET OPTIONS**

**LAP**  
3/8" to 1/2" female conn.

**LBP**  
3/8" male conn.

**E**  
One-piece cast-type  
3/8" to 1/2" female conn.

**ORDERING INFORMATION**

**WHIRLJET AX**

Inlet Conn.	Nozzle Type	–	Material Code	Capacity Size	<b>Example</b>
					1/4 AX – SS 10

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

**WHIRLJET AP-W (9360)**

Nozzle Series No.	Inlet Conn.	Nozzle Type	–	Material Code	Capacity Size	<b>Example</b>
						9360 – 3/8 AP – PP 3-5W

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

**WHIRLJET CF FLANGE CONNECTION**

Inlet Conn.	Nozzle Type	–	Material Code	Capacity Size	<b>Example</b>
					6 CF – SS 550-65

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

**WHIRLJET E**

Inlet Conn.	Nozzle Type	–	Material Code	Capacity Size	<b>Example</b>
					1/4 E – SS 10

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

**QUICK REFERENCE GUIDE**

Model	Connection/ Type	Connection Size (in.)	Materials	Page Number		
				Performance Data	Dimensions and Weights	
<b>AX</b>	F	1/8 to 3/4	Brass, Mild steel (I), 303 stainless steel (SS), 316 stainless steel (316SS)	D6-D7	D15	
<b>BX</b>	M	1/8 to 3/4		D6-D7		
<b>AX-W</b>	F	1/8 to 1/2		D8		
<b>BX-W</b>	M	1/8 to 1/2		D8		
<b>CX</b>	F, Cast	1 to 2-1/2	Brass, 316 stainless steel (SS)	D9	D16	
<b>CF</b>	Flange, Cast	4 to 6		D10		
<b>CRC</b>	F, Cast	1-1/4 to 4		D10		
<b>D</b>	M, Cast	1/2 to 3/4	Brass	D11		
<b>AP (9360)</b>	F	1/4 to 3/8	Polypropylene (PP)	D11-D12		D17
<b>LAP (9360)</b>	F	3/8 to 1/2		D11-D12		
<b>LBP (9360)</b>	M	3/8		D11-D12		
<b>AP-W (9360)</b>	F	1/4 to 3/8		D13	D16	
<b>LAP-W (9360)</b>	F	3/8 to 1/2		D14	D17	
<b>LBP-W (9360)</b>	M	3/8		D14		
<b>E</b>	F	1/4 to 1/2	303 stainless steel (SS)	D14-D15	D17	
<b>E</b>	F, Cast	3/8 to 1/2	Brass, 316 stainless steel (SS)	D14-D15		

F = female thread; 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. (in.)	Orifice Dia. Nom. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)		
	AX	BX				3 psi	5 psi	10 psi	15 psi	20 psi	30 psi	40 psi	60 psi	80 psi	100 psi	10 psi	20 psi	80 psi
1/8	●	●	.5	.031	.047	–	–	.05	.06	.07	.09	.10	.12	.14	.16	39	58	69
	●	●	1	.063	.063	–	–	.10	.12	.14	.17	.20	.24	.28	.32	41	64	76
	●	●	2	.078	.078	–	.14	.20	.24	.28	.35	.40	.49	.57	.63	52	61	69
	●	●	3	.094	.094	–	.21	.30	.37	.42	.52	.60	.73	.85	.95	52	64	77
	●	●	5	.125	.125	.27	.35	.50	.61	.71	.87	1.0	1.2	1.4	1.6	56	67	76
	●	●	8	.156	.156	.44	.57	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	56	65	70
	●	●	10	.172	.172	.55	.71	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	55	65	72

Intermediate capacities: Caps are interchangeable for in-between capacities within each pipe size group. Request Data Sheets 3055, 3986 and 3987.

Spray dimension data: Request Data Sheets 15350 and 15362.

Highlighted column shows the rated pressure.



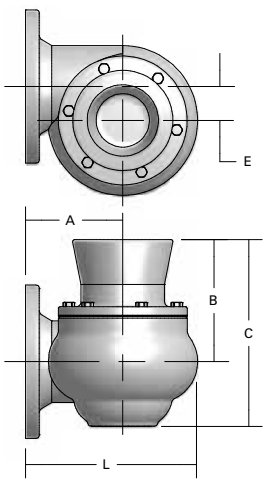
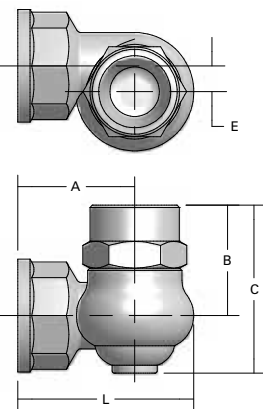
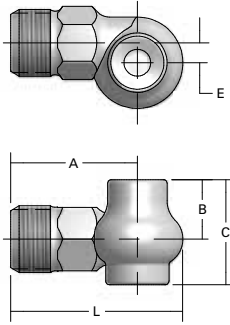
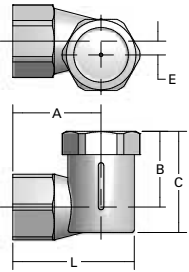
**W PERFORMANCE DATA: WIDE ANGLE SPRAY**

Nozzle Type/ Inlet Conn. (in.)		Capacity Size	Inlet Dia. Nom. (in.)	Orifice Dia. Nom. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)		
					3 psi	5 psi	7 psi	10 psi	20 psi	30 psi	40 psi	60 psi	80 psi	100 psi	7 psi	20 psi	80 psi
AP-W																	
1/4	3/8																
●	●	2-5W	.078	.125	–	.20	.23	.28	.40	.48	.56	.69	.79	.89	126	135	131
●	●	2-8W	.078	.156	–	.22	.26	.31	.44	.54	.62	.76	.88	.98	121	133	130
●	●	2-10W	.078	.172	–	.24	.28	.34	.48	.59	.68	.83	.96	1.1	121	135	127
●	●	2-15W	.078	.219	–	.27	.32	.38	.54	.66	.76	.93	1.1	1.2	120	133	132
●	●	2-20W	.078	.234	–	.30	.35	.42	.60	.73	.84	1.0	1.2	1.3	111	132	135
●	●	3-5W	.094	.125	–	.25	.30	.36	.51	.62	.72	.88	1.0	1.1	133	131	109
●	●	3-8W	.094	.156	–	.30	.35	.42	.60	.73	.84	1.0	1.2	1.3	133	131	110
●	●	3-10W	.094	.172	–	.37	.44	.52	.74	.90	1.0	1.3	1.5	1.6	128	130	115
●	●	3-15W	.094	.219	–	.40	.47	.56	.79	.97	1.1	1.4	1.6	1.8	128	130	118
●	●	3-20W	.094	.234	–	.42	.49	.59	.83	1.0	1.2	1.5	1.7	1.9	119	134	136
●	●	5-5W	.141	.125	–	.35	.42	.50	.70	.86	1.0	1.2	1.4	1.6	125	112	98
●	●	5-8W	.141	.156	–	.42	.50	.60	.85	1.0	1.2	1.5	1.7	1.9	125	112	97
●	●	5-10W	.141	.172	–	.48	.56	.67	1.0	1.2	1.4	1.7	1.9	2.1	125	118	102
●	●	5-15W	.141	.219	–	.57	.67	.80	1.1	1.4	1.6	2.0	2.3	2.6	130	125	105
●	●	5-20W	.141	.234	–	.61	.72	.86	1.2	1.5	1.7	2.1	2.4	2.7	125	125	112
●	●	8-5W	.172	.125	–	.42	.50	.60	.85	1.0	1.2	1.5	1.7	1.9	119	102	99
●	●	8-8W	.172	.156	.44	.57	.67	.80	1.1	1.4	1.6	2.0	2.3	2.5	112	100	87
●	●	8-10W	.172	.172	.50	.64	.76	.91	1.3	1.6	1.8	2.2	2.6	2.9	115	102	90
●	●	8-15W	.172	.219	.59	.76	.90	1.1	1.5	1.9	2.2	2.6	3.1	3.4	121	110	98
●	●	8-20W	.172	.234	.65	.83	.99	1.2	1.7	2.0	2.4	2.9	3.3	3.7	121	113	106
●	●	10-5W	.188	.125	–	–	.54	.65	.92	1.1	1.3	1.6	1.8	2.0	115	98	85
●	●	10-8W	.188	.156	–	.61	.72	.86	1.2	1.5	1.7	2.1	2.4	2.7	110	95	84
●	●	10-10W	.188	.172	.55	.72	.84	1.0	1.4	1.7	2.0	2.4	2.8	3.1	111	97	89
●	●	10-15W	.188	.219	.67	.86	1.0	1.2	1.7	2.1	2.4	3.0	3.5	3.9	113	104	97
●	●	10-20W	.188	.234	.75	1.0	1.2	1.4	2.0	2.4	2.8	3.5	3.9	4.4	118	107	102
●	●	15-5W	.234	.125	–	–	–	.76	1.1	1.3	1.5	1.9	2.2	2.4	–	91	80
●	●	15-8W	.234	.156	–	–	.85	1.0	1.4	1.8	2.0	2.5	2.9	3.2	102	93	80
●	●	15-10W	.234	.172	–	.85	1.0	1.2	1.7	2.1	2.4	2.9	3.4	3.8	107	97	83
●	●	15-15W	.234	.219	.82	1.1	1.3	1.5	2.1	2.6	3.0	3.7	4.2	4.7	110	98	90
●	●	15-20W	.234	.234	.93	1.2	1.4	1.7	2.4	2.9	3.4	4.2	4.8	5.4	112	105	100

Highlighted column shows the rated pressure.



**DIMENSIONS AND WEIGHTS**

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	A (in.)	B (in.)	C (in.)	E (in.)	Net Weight (oz.)
	<b>CF (Flange)</b>	4	8.250	4.406	9.250	12.375	1.563	114
		6	12.250	6.875	8.688	13.313	2.438	126
	<b>CRC (F)</b>	1-1/4	3.406	2.125	2.094	3.063	0.406	36
		2	4.844	3.188	3.063	4.656	0.719	80
		3	6.938	4.438	5.938	8.406	1.125	19
		4	9.000	5.563	9.125	12.250	1.563	40
	<b>D (M)</b>	1/2	2.313	1.750	0.719	1.313	0.250	5
		3/4	2.719	2.000	0.938	1.656	0.313	7.5
	<b>AP (F) AP-W (F)</b>	1/4	1.438	1.000	0.866	1.157	0.156	0.4
		3/8	1.469	1.094	0.866	1.157	0.156	0.4

Based on the largest/heaviest version of each type.

