

PERFORMANCE DATA











PERFORMANCE DATA
INTRODUCTION

PERFORMANCE YOU CAN COUNT ON FOR ALL THE SPRAY APPLICATIONS IN YOUR MILL

The performance data section of *Spray Technology for Steels Mills* is organized by product line, then by spray pattern type. Performance and dimensional data are presented in both English units, beginning on page G4, and metric units, beginning on page G70.

Our experienced steel industry experts are available to help you with product applications and system optimization. To locate your local sales engineer, [click here](#)

SPRAY TECHNOLOGY FOR STEEL MILLS

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PERFORMANCE DATA
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FLAT SPRAY NOZZLES

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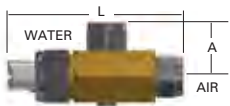
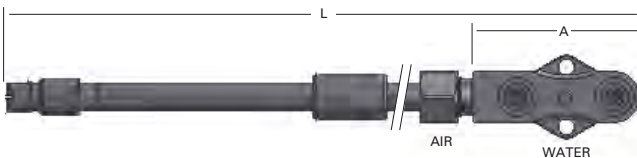


PERFORMANCE DATA

FLAT SPRAY: 50070, 50085, 56780 AND 64010 NCJ CASTERJET® NOZZLES

Capacity Code	Assembly No.				Water 100 psi (gpm)	Air 45 psi (scfm)	Spray Angle
	50070	50085	64010	56780			
2	•		•	•	2.0	4.9	60° to 135°
2.5	•		•	•	2.5	5.6	
3	•				3.0	6.0	
3.5	•				3.5	9.8	
3.7	•		•	•	3.7	8.5	
4	•		•	•	4.0	9.9	
5	•				5.0	10.2	
5.7	•				5.7	12.7	
6.3	•				6.3	14.8	
6.5	•		•	•	6.5	15.5	
7			•	•	7.0	16.3	
8		•			8.0	18.0	
9		•			9.0	26.2	
10		•			10.0	23.7	
10.5		•			10.5	22.5	
12		•			12.0	23.0	

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Inlet Conn. (in.)	Water Inlet Conn. (in.)	L (in.)	A (in.)
	50070	3/8 (F)	3/8 (F)	5.91 min.	1.36
	50085	1/2 (F)	1/2 (F)	8.69 min.	1.55
	64010	3/8 (F)	3/8 (F)	3.86	1.18
	56780	3/8 (F)	3/8 (F)	8.86	5.80

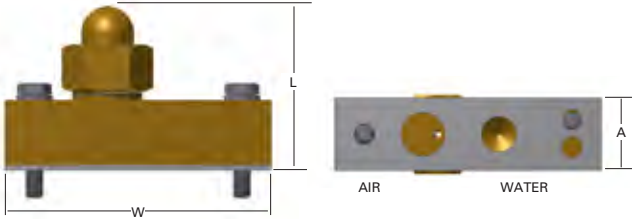
Length varies; other sizes are available. Available with NPT or BSPT threads unless otherwise noted.



PERFORMANCE DATA
FLAT SPRAY: D40208 CASTERJET® NOZZLES

Capacity Code	Assembly No.	Water 100 psi (gpm)	Air 45 psi (scfm)	Spray Angle
	D40208			
480	•	1.3	8.0	30° to 140°
490	•	1.3	5.2	
520	•	1.8	5.2	
530	•	2.2	4.1	
630	•	4.2	3.6	
640	•	3.7	3.9	
720	•	5.8	4.9	
770	•	7.3	7.1	
780	•	8.0	6.9	
850	•	10.3	7.2	

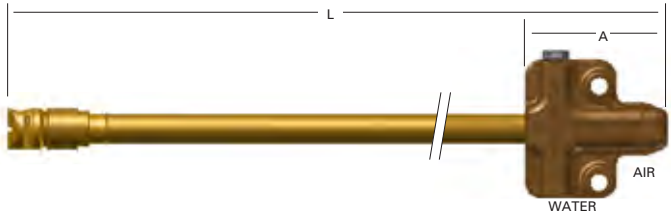
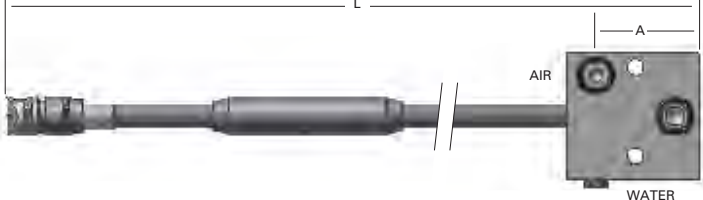
DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (in.)	Water Conn. (in.)	L (in.)	W (in.)	A (in.)
	D40208	.47	.59	2.11	3.58	.98

PERFORMANCE DATA
FLAT SPRAY: D41968 AND D41936 ANTI-PULSING CASTERJET® NOZZLES

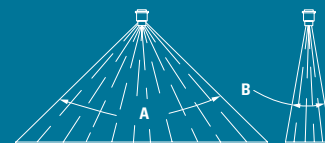
Capacity Code	Assembly No.		Water 100 psi (gpm)	Air 45 psi (scfm)	Spray Angle
	D41968	D41936			
0.7	•	•	.8	.8	40° to 120°
1.3	•		1.3	1.7	
1.7	•		1.7	1.1	
2	•	•	1.9	2.6	
2.5	•		2.3	4.1	
2.7	•		2.4	6.9	
3	•	•	3.1	3.2	
3.5	•		3.3	3.7	
4	•		3.7	5.0	
4.5	•		4.2	4.7	
5	•		4.9	5.9	
6	•		5.7	4.2	
7.5	•	•	6.9	3.9	
8	•		6.9	3.9	

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (in.)	Water Conn. (in.)	L (in.)	A (in.)
	D41968*	.31	.47	42.9 min.	3.27
	D41936*	.31	.47	54.53 min.	1.97

* Length varies.

PERFORMANCE DATA
FLAT SPRAY: 23530-XT AND 58090-XT VEEJET® NOZZLES



Nozzle Type	Capacity Size	Flow Rate Capacity (gallons per minute)							Spray Angle at 40 psi	
		10 psi	20 psi	40 psi	60 psi	80 psi	100 psi	200 psi	A	B
23530-XT	15	.8	1.1	1.5	1.8	2.1	2.4	3.4	105°	30°
	10	.5	.7	1.0	1.2	1.4	1.6	2.2	110°	30°
	20	1.0	1.4	2.0	2.4	2.8	3.2	4.5	110°	30°
58090-XT	20	1.0	1.4	2.0	2.4	2.8	3.2	4.5	45°	30°
	20	1.0	1.4	2.0	2.4	2.8	3.2	4.5	85°	30°
	26	1.3	1.8	2.6	3.2	3.7	4.1	5.8	85°	30°
	10	.5	.7	1.0	1.2	1.4	1.6	2.2	110°	30°
	15	.8	1.1	1.5	1.8	2.1	2.4	3.4	110°	30°
	20	1.0	1.4	2.0	2.4	2.8	3.2	4.5	110°	30°
	26	1.3	1.8	2.6	3.2	3.7	4.1	5.8	110°	30°
	40	2.0	2.8	4.0	4.9	5.7	6.3	8.9	110°	30°

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	D/flats (in.)
	58090-XT (M)	1/4	1.0	9/16	.63
		3/8	1.25	11/16	.75

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	D/flats (in.)
	23530-XT (M)	3/8	1.27	11/16	.5

Based on the largest/heaviest version of each type.

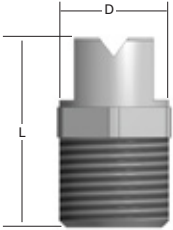


**PERFORMANCE DATA
FLAT SPRAY: 56862 NOZZLES**

Nozzle Type	Inlet Conn. (in.)	Flow Rate Capacity (gallons per minute)							Spray Angle at 40 psi
		10 psi	20 psi	40 psi	60 psi	80 psi	100 psi	200 psi	
56862	1/2	1.1	1.5	2.2	2.6	3.0	3.4	4.8	20°

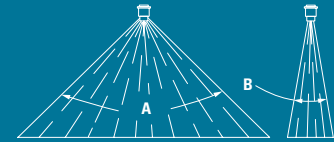
Dual heavy edge spray pattern enables each nozzle to cool two rolls.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	D/flats (in.)
	56862 (M)	1/2	1.5	7/8	.63

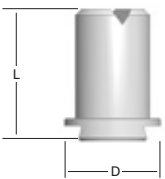
Based on the largest/heaviest version of each type.

**PERFORMANCE DATA
FLAT SPRAY: 49784-XT VEEJET® SPRAY TIPS**



Tip Type	Capacity Size	Flow Rate Capacity (gallons per minute)						Spray Angle at 40 psi	
		20 psi	40 psi	60 psi	80 psi	100 psi	150 psi	A	B
•	20	1.41	2.00	2.45	2.83	3.16	3.87	65°, 80°	30°
•	30	2.12	3.00	3.67	4.25	4.74	5.80		
•	40	2.83	4.00	4.89	5.65	6.32	7.74		
•	50	3.53	5.00	6.12	7.07	7.90	9.68		
•	120	8.60	12.00	14.4	16.4	18.0	21.9	80°	

DIMENSIONS AND WEIGHTS

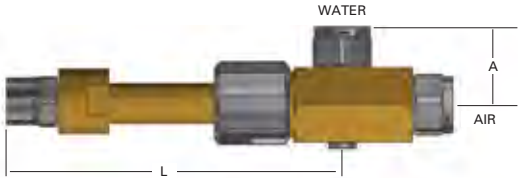
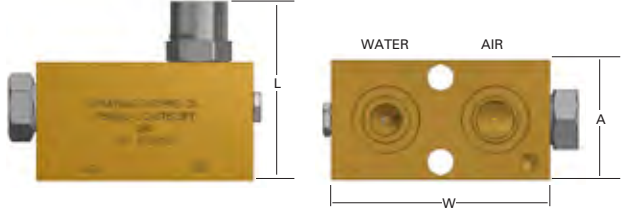
Spray Tip	Spray Tip Type	L (in.)	D (in.)
	49784-XT	1.50	.70

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
FULL CONE: 58050 AND 58160 CASTERJET® NOZZLES

Capacity Code	Assembly No.		Water 100 psi (gpm)	Air 45 psi (scfm)	Spray Angle
	58050	58160			
075	•	•	.7	4.7	45°, 60°, 90°
090	•	•	.9	4.7	
095	•	•	.95	4.8	
210	•	•	2.1	10.0	

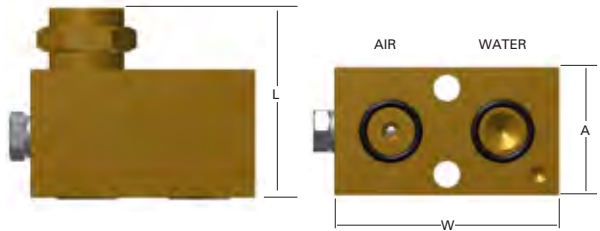
DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (in.)	Water Conn. (in.)	L (in.)	A (in.)	W (in.)
	58050	1/4 (F)	1/4 (F)	3.9 min.*	1.10	—
	58160	.39	.39	2.93	1.58	2.76

PERFORMANCE DATA
FULL CONE: D40206 CASTERJET® NOZZLES

Capacity Code	Assembly No.	Water 100 psi (gpm)	Air 45 psi (scfm)	Spray Angle
	D40206			
400	•	.6	8.4	60° to 90°
440	•	.7	8.7	
480	•	.9	8.1	
510	•	1.2	6.7	
520	•	1.7	3.7	
530	•	1.8	3.7	
560	•	2.3	4.9	
640	•	3.8	8.1	

DIMENSIONS AND WEIGHTS


Nozzle	Nozzle Type	Air Conn. (in.)	Water Conn. (in.)	L (in.)	W (in.)	A (in.)
	D40206*	.39	.47	2.32	2.76	1.58

* Other sizes are available.

PERFORMANCE DATA
FULL CONE: HHCC FULLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type	Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle at 40 psi
					10 psi	20 psi	30 psi	40 psi	50 psi	60 psi	70 psi	80 psi	90 psi	100 psi	
1/4	●	6.5	.085	.068	.65	.89	1.1	1.3	1.4	1.5	1.6	1.7	1.8	1.9	68°
	●	8	.088	.071	.80	1.1	1.3	1.5	1.7	1.8	2.0	2.1	2.2	2.3	
	●	10	.098	.072	1.0	1.4	1.7	1.9	2.2	2.4	2.5	2.7	2.8	3.0	74°
	●	12.5	.106	.075	1.25	1.7	2.1	2.4	2.7	2.9	3.1	3.3	3.5	3.7	
3/8	●	15	.128	.085	1.5	2.1	2.5	2.9	3.2	3.5	3.7	4.0	4.2	4.4	
1/2	●	20	.111	.101	2.0	2.8	3.4	3.8	4.3	4.6	5.0	5.3	5.6	5.8	74°
	●	25	.119	.115	2.5	3.5	4.2	4.8	5.3	5.8	6.2	6.6	7.0	7.3	
	●	32	.170	.120	3.2	4.5	5.4	6.1	6.8	7.4	7.9	8.4	8.9	9.4	

DIMENSIONS AND WEIGHTS


Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)
	HHCC (M)	1/4	.875	9/16
		3/8	.938	11/16
		1/2	1.16	7/8

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
FULL CONE: HHX FULLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type	Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)		
					5 psi	7 psi	10 psi	20 psi	30 psi	40 psi	60 psi	80 psi	100 psi	150 psi	7 psi	20 psi	80 psi
1/4	●	5	.078	.046	.36	.42	.50	.69	.82	.95	1.2	1.3	1.5	1.8	60	65	61
	●	6.5	.093	.062	.47	.55	.65	.89	1.1	1.3	1.5	1.7	1.9	2.3	45	50	46
	●	8	.109	.046	.58	.68	.80	1.1	1.3	1.5	1.8	2.1	2.3	2.8	68	80	76
	●	10	.109	.062	.73	.85	1.0	1.4	1.7	1.9	2.4	2.7	3.0	3.6	58	67	61
	●	12	.125	.062	.87	1.0	1.2	1.7	2.0	2.3	2.7	3.1	3.5	4.2	71	81	72
	●	14.5	.140	.062	1.05	1.2	1.45	2.0	2.4	2.7	3.3	3.8	4.2	5.0	78	89	75
3/8	●	15	.140	.093	1.1	1.3	1.5	2.1	2.5	2.9	3.5	4.0	4.4	5.3	64	67	61
	●	18	.156	.093	1.3	1.5	1.8	2.5	3.0	3.4	4.1	4.7	5.2	6.3	77	86	73
	●	20	.171	.109	1.5	1.7	2.0	2.8	3.4	3.8	4.6	5.3	5.9	7.0	76	80	73
	●	22	.187	.109	1.6	1.9	2.2	3.0	3.7	4.2	5.1	5.8	6.4	7.8	87	90	82

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)
	HHX (M)	1/4	.875	9/16
		3/8	.938	11/16

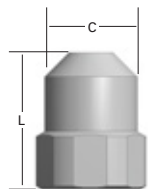
Based on the largest/heaviest version of each type.



PERFORMANCE DATA
FULL CONE: P45075 FULLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type P45075	Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)							Spray Angle at 20 psi
					10 psi	20 psi	30 psi	40 psi	60 psi	80 psi	100 psi	
1/4	•	4	.076	.047	.42	.57	.70	.81	.96	1.1	1.2	65°
	•	5.5	.084	.050	.56	.78	.96	1.1	1.3	1.5	1.6	
	•	7.5	.099	.050	.77	1.1	1.3	1.5	1.8	2.0	2.2	45°, 65°
3/8	•	3	.060	.040	.28	.39	.48	.55	.61	.71	.79	65°
	•	3.5	.065	.047	.35	.48	.58	.66	.80	.91	1.0	
	•	4	.072	.047	.42	.57	.70	.81	.96	1.1	1.2	
	•	5	.081	.063	.46	.65	.80	.93	1.1	1.3	1.5	
	•	5.5	.084	.050	.56	.78	.96	1.1	1.3	1.5	1.6	
	•	7	.094	.050	.70	.96	1.2	1.3	1.6	1.8	2.0	45°, 65°
	•	8.5	.103	.063	.85	1.2	1.5	1.7	2.0	2.2	2.5	65°
	•	10	.109	.063	.94	1.3	1.6	1.9	2.2	2.5	2.7	45°, 65°
	•	11	.112	.063	1.1	1.5	1.8	2.1	2.5	2.9	3.2	
	•	14	.136	.093	1.43	2.0	2.4	2.7	3.3	3.7	4.1	60°
	•	22	.166	.118	2.2	3.0	3.5	3.9	4.6	5.1	5.6	60°, 90°
	•	7W	.086	.050	.70	.90	1.0	1.1	1.3	1.5	1.6	120°

DIMENSIONS AND WEIGHTS

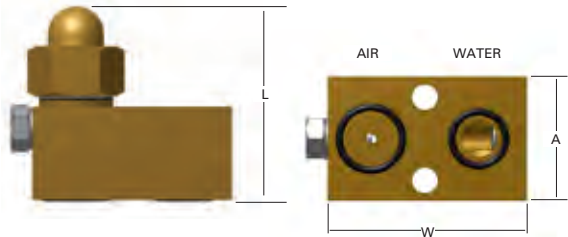
Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	C (in.)	Net Weight (oz.)
	P45075 (F)	1/4	1.09	13/16	.75	1.9
		3/8	1.05	7/8	.83	1.9

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
RECTANGULAR SPRAY: D41502 CASTERJET® NOZZLES

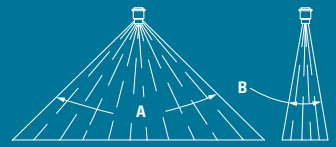
Capacity Code	Assembly No.	Water 100 psi (gpm)	Air 45 psi (scfm)	Spray Angle
	D41502			
450	•	.8	5.2	70° to 120°
510	•	1.2	7.9	
520	•	1.2	3.2	
540	•	2.0	5.2	
600	•	2.8	4.6	
610	•	3.2	4.0	

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (in.)	Water Conn. (in.)	L (in.)	W (in.)	A (in.)
	D41502*	.47	.59	2.09	2.52	1.58


* Other sizes are available.

PERFORMANCE DATA
RECTANGULAR SPRAY: 25381 AND D41828 SPRAY TIPS

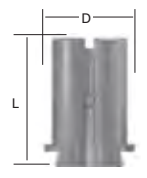


Nozzle Type		Capacity Size	Flow Rate Capacity (gallons per minute)					Spray Angle at 40 psi	
25381	D41828		20 psi	40 psi	70 psi	100 psi	200 psi	A	B
•	•	6	.44	.59	.75	.88	1.3	90° 70°	20°
•	•	8	.58	.78	.99	1.2	1.6	90° 70°	20°
•	•	9	.65	.89	1.2	1.6	1.75	90° 70°	20°
•	•	13	.90	1.3	1.7	1.85	2.4	90° 70° 70°	20° 30° 20°
•	•	14	1.1	1.5	1.8	2.1	2.9	90° 70° 70°	20° 30° 20°
•	•	19	1.4	1.8	2.5	2.8	3.9	90° 70°	20°
•	•	21	1.6	2.1	2.7	3.2	4.5	90° 70° 70°	20° 30° 20°
•	•	28	1.9	2.6	3.6	4.2	5.9	90° 70° 70°	20° 30° 20°
•	•	35	2.5	3.5	4.5	5.2	7.2	90° 70° 70°	20° 30° 20°
•	•	46	3.4	4.6	5.9	6.9	9.0	90° 70° 70°	20° 30° 20°
•	•	61	4.5	6.1	7.9	9.0	12.5	90° 70° 70°	20° 30° 20°
•	•	100	7.3	10.0	14.0	15.5	20.1	90° 70° 70°	20° 30° 20°

DIMENSIONS AND WEIGHTS

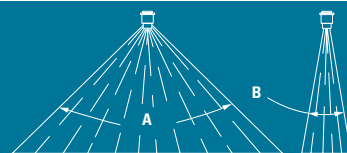
Nozzle	Nozzle Type	L (in.)	D (in.)	Net Weight (oz.)
	25381	1.378	.945	2.1

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	L (in.)	D (in.)	Net Weight (oz.)
	D41828	1.34	.79	3.0

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
RECTANGULAR SPRAY: D41539 SPRAY TIPS



Spray Tip Type	Capacity Size	Flow Rate Capacity (gallons per minute)						Spray Angle at 40 psi	
		20 psi	40 psi	60 psi	80 psi	100 psi	150 psi	A	B
D41539									
•	6	1.1	1.6	2.0	2.3	2.5	3.1	80°	24°
•	8	1.5	2.1	2.6	3.0	3.3	4.1		
•	12	2.3	3.2	3.9	4.5	5.1	6.2		
•	18	3.3	4.7	5.8	6.6	7.4	9.1		32°

DIMENSIONS AND WEIGHTS

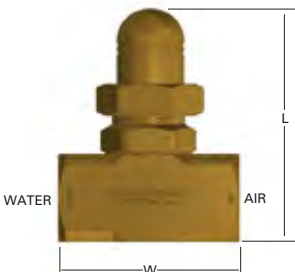
Nozzle	Spray Tip Type	L (in.)	D1 (in.)	D2 (in.)	D3 (in.)
<p>The technical drawing shows a cylindrical nozzle with a central spray tip. Dimension D1 is the diameter of the spray tip, D2 is the diameter of the nozzle body, D3 is the diameter of the nozzle base, and L is the length of the nozzle body.</p>	D41539	2.05	1.26	1.5	1.34

PERFORMANCE DATA
IMPINGEMENT COOLING: 26010-1/4J NOZZLES

Nozzle Type	Capacity Size*	Pressure (psi)		Flow Rate Capacity		Spray Angle
		Air	Liquid	Air (scfm)	Liquid (gpm)	
26010-1/4J						
•	0	40	37	3.0	.5	90°
•	1		33	9.7	1.0	
•	2		35	10.5	1.5	
•	3		60	6.2	2.8	
•	4		35	10.5	1.5	120°
•	5		60	5.5	2.8	

* Number of indicator rings on the air cap.

DIMENSIONS AND WEIGHTS

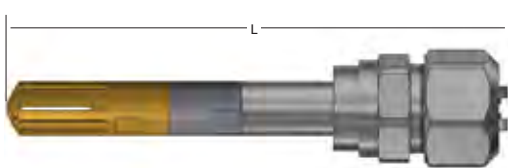
Nozzle	Nozzle Type	Air Conn. (in.)	Water Conn (in.)	L (in.)	W (in.)
	26010-1/4J	1/4	1/4	2.38	1.5



PERFORMANCE DATA
OVERVIEW

Nozzle Type								Capacity Code	Flow Rate Capacity (gallons per minute)								
AA214 Compact	DescaleJet® Pro	Mini DescaleJet Pro	26180/26190	AA218/AA219	HiScaleJet	HSJ	Mini HiScaleJet		1000 psi	1500 psi	2000 psi	2500 psi	3000 psi	3500 psi	4000 psi	4500 psi	5000 psi
•								-02	1.0	1.2	1.4	1.6	1.7	1.9	2.0	2.1	2.2
•								-03	1.5	1.8	2.1	2.4	2.6	2.8	3.0	3.2	3.4
•								-04	2.0	2.4	2.8	3.2	3.5	3.7	4.0	4.2	4.5
•		•						-05	2.5	3.1	3.5	4.0	4.3	4.7	5.0	5.3	5.6
•		•					•	-06	3.0	3.7	4.2	4.7	5.2	5.6	6.0	6.4	6.7
•		•					•	-07	3.5	4.3	4.9	5.5	6.1	6.5	7.0	7.4	7.8
•	•	•	•	•	•	•	•	-08	4.0	4.9	5.7	6.3	6.9	7.5	8.0	8.5	8.9
•	•	•	•	•	•	•	•	-09	4.5	5.5	6.4	7.1	7.8	8.4	9.0	9.5	10.1
•	•	•	•	•	•	•	•	-10	5.0	6.1	7.1	7.9	8.7	9.4	10.0	10.6	11.2
•	•	•	•	•	•	•	•	-12	6.0	7.3	8.5	9.5	10.4	11.2	12.0	12.7	13.4
•	•	•	•	•	•	•	•	-15	7.5	9.2	10.6	11.9	13.0	14.0	15.0	15.9	16.8
	•	•	•	•	•	•	•	-20	10.0	12.2	14.1	15.8	17.3	18.7	20	21	22
	•	•	•	•	•	•	•	-25	12.5	15.3	17.7	19.8	22	23	25	27	28
	•	•	•	•	•	•	•	-30	15.0	18.4	21	24	26	28	30	32	34
	•	•	•	•	•	•	•	-35	17.5	21	25	28	30	33	35	37	39
	•	•	•	•	•	•	•	-40	20	24	28	32	35	37	40	42	45
	•	•	•	•	•	•	•	-50	25	31	35	40	43	47	50	53	56
	•	•	•	•	•	•	•	-55	28	34	39	43	48	51	55	58	61
	•	•	•	•	•	•	•	-60	30	37	42	47	52	56	60	64	67
	•	•	•	•	•	•	•	-70	35	43	49	55	61	65	70	74	78

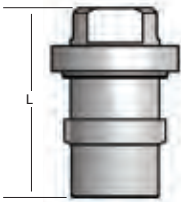
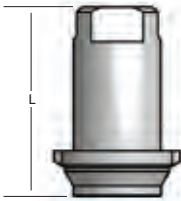
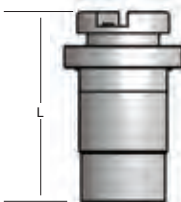
DIMENSIONS AND WEIGHTS

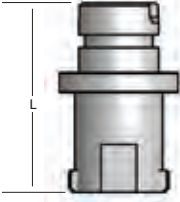
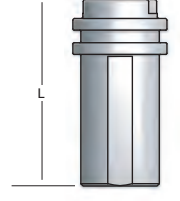
Nozzle	Nozzle Type	Inlet Conn.	L (in.)
	DescaleJet® Pro Nozzles	Available with weld or 1" (M) threaded connection adapters; some styles use a high impact strainer attachment, with or without body adapter for added length. Mini configuration also available. Projection into header varies by connection.	Minimum overall length: 5.59 Maximum length: 7.48 Mini DescaleJet Pro nozzle length: 6.12 Nozzles can be ordered in any length between the minimum and maximum. Longer lengths are available upon request.

Dimensions vary depending on the capacity, configuration and options selected. Contact your local sales engineer to request dimensional data for other descaling nozzle types.



DIMENSIONS AND WEIGHTS

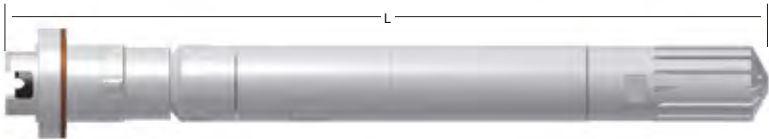
DescalJet® Pro Tip Body	Assembly No.	L (in.)	Diameter (in.)
	98016-1-SS	1.87	1.25
	98016-2-SS	1.87	1.12
	98016-3-SS	1.87	1.16

DescalJet Pro Tip Body	Assembly No.	L (in.)	Diameter (in.)
	98016-4-SS	1.87	1.18
	98016-5-SS	1.87	.94

For complete information, contact your local sales engineer.

ENGLISH UNITS

DIMENSIONS AND WEIGHTS

CVCN Check Valves	Nozzle Type	L (in.)
 <p>CVCN check valves in varying lengths to fit existing DescaleJet Pro nozzles.</p>	DescalJet Pro with CVCN	8.1 to 11.2

For complete information, contact your local sales engineer.

PERFORMANCE DATA

ENGLISH UNITS
FLAT SPRAY NOZZLES

ENGLISH UNITS

PERFORMANCE DATA
H-VV, H-VVL AND H-DT VEEJET® NOZZLES

Spray Angle at 40 psi	Nozzle Type/ Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	H-VV		H-VVL		H-DT				5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
	1/8	1/4	1/8	1/4	1/8	1/4																
110°	•	•	•	•			01	.026	.035	.05	.07	.10	.14	.16	.22	.27	.35	94	110	121	124	
	•	•	•	•			015	.032	.05	.08	.11	.15	.21	.24	.34	.41	.53	97	110	121	124	
	•	•	•	•		•	02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	98	110	120	123	
	•	•	•	•		•	03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	99	110	120	123	
	•	•	•	•		•	04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	100	110	119	122	
	•	•	•	•		•	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	100	110	118	122	
	•	•	•	•		•	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	101	110	117	122	
	•	•	•	•		•	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	102	110	117	121	
	•	•	•	•		•	10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	103	110	117	119	
	•	•	•	•		•	15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	104	110	117	118	
95°	•		•			•	0050	.018	–	–	.035	.050	.07	.08	.11	.14	.18	81	95	105	113	
	•	•	•	•			01	.026	.035	.05	.07	.10	.14	.16	.22	.27	.35	81	95	105	113	
	•		•	•			015	.032	.05	.08	.11	.15	.21	.24	.34	.41	.53	82	95	105	113	
	•	•	•	•		•	02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	82	95	105	113	
	•	•	•	•		•	03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	83	95	104	111	
	•	•	•	•		•	04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	84	95	103	108	
	•	•	•	•		•	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	84	95	102	107	
	•	•	•	•		•	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	86	95	101	106	
	•		•	•		•	065	.064	.23	.33	.46	.65	.92	1.0	1.5	1.8	2.3	86	95	101	106	
80°	•	•	•	•			0050	.018	–	–	.035	.050	.07	.08	.11	.14	.18	61	80	95	101	
	•	•	•	•			0067	.021	–	.033	.05	.067	.09	.11	.15	.18	.24	67	80	94	99	
	•	•	•	•		•	01	.026	–	.05	.07	.10	.14	.16	.22	.27	.35	68	80	89	92	
		•	•	•		•	015	.032	–	.08	.11	.15	.21	.24	.34	.41	.53	68	80	89	92	
	•	•	•	•		•	02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	69	80	88	91	
	•	•	•	•		•	03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	70	80	87	90	
	•	•	•	•		•	04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	71	80	86	89	
	•	•	•	•		•	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	71	80	86	89	
	•	•	•	•		•	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	72	80	85	88	
	•		•	•		•	07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	72	80	85	88	
	•	•	•	•		•	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	72	80	84	87	
		•		•		•	09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	73	80	84	87	

Highlighted column shows the rated pressure.



PERFORMANCE DATA
H-VV, H-VVL AND H-DT VEEJET® NOZZLES

Spray Angle at 40 psi	Nozzle Type/ Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	H-VV		H-VVL		H-DT				5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
	1/8	1/4	1/8	1/4	1/8	1/4																
73°	●	●	●	●	●		0077	.023	–	.039	.055	.077	.11	.12	.17	.21	.27	53	73	86	92	
	●	●	●	●			0154	.032	.054	.077	.11	.15	.22	.24	.34	.42	.54	55	73	84	88	
		●		●			0231	.038	.082	.12	.16	.23	.33	.37	.52	.63	.82	56	73	83	87	
	●	●	●	●			0308	.044	.11	.15	.22	.31	.44	.49	.69	.84	1.1	58	73	82	86	
		●		●			0462	.054	.16	.23	.33	.46	.65	.73	1.0	1.3	1.6	60	73	80	84	
	●		●				0770	.069	.27	.39	.54	.77	1.1	1.2	1.7	2.1	2.7	64	73	77	82	
65°	●		●				0017	.011	–	–	.012	.017	.024	.027	.038	.047	.06	44	65	77	86	
	●		●				0033	.015	–	–	.023	.033	.047	.052	.07	.09	.12	47	65	76	83	
	●	●	●	●	●		0067	.021	–	.033	.05	.067	.09	.11	.15	.18	.24	50	65	75	81	
	●	●	●	●	●	●	01	.026	–	.05	.07	.10	.14	.16	.22	.27	.35	51	65	74	80	
	●	●	●	●			015	.032	–	.08	.11	.15	.21	.24	.34	.41	.53	51	65	74	80	
	●	●	●	●	●	●	02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	52	65	73	79	
	●		●				025	.039	.09	.13	.18	.25	.35	.40	.56	.68	.88	52	65	73	79	
	●	●	●	●	●	●	03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	53	65	72	78	
	●	●	●	●	●	●	04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	53	65	72	76	
	●	●	●	●	●	●	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	53	65	72	76	
		●			●	●	055	.059	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9	53	65	72	76	
	●	●		●	●	●	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	54	65	72	75	
		●			●	●	07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	54	65	71	75	
	●	●	●	●	●	●	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	55	65	71	74	
●				●	●	09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	55	65	71	74		
50°	●	●	●	●			01	.026	–	.05	.07	.10	.14	.16	.22	.27	.35	37	50	59	65	
	●	●	●	●			02	.035	–	.10	.14	.20	.28	.32	.45	.55	.71	39	50	57	63	
	●	●	●	●		●	03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	40	50	56	62	
	●	●	●	●		●	04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	42	50	56	61	
	●	●	●	●		●	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	44	50	56	61	
	●				●		055	.059	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9	44	50	56	61	
	●	●	●	●		●	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	45	50	56	60	
	●	●			●		07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	45	50	56	60	
	●	●	●	●		●	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	45	50	55	60	
		●			●	●	09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	45	50	55	59	
40°	●	●	●	●	●		01	.026	–	–	.07	.10	.14	.16	.22	.27	.35	26	40	52	59	
	●	●	●	●	●		015	.032	–	–	.11	.15	.21	.24	.34	.41	.53	27	40	52	59	
	●	●	●	●	●	●	02	.035	–	.10	.14	.20	.28	.32	.45	.55	.71	29	40	51	58	
	●	●	●	●	●	●	03	.043	–	.15	.21	.30	.42	.47	.67	.82	1.1	30	40	50	57	
	●	●	●	●	●	●	04	.050	–	.20	.28	.40	.57	.63	.89	1.1	1.4	30	40	50	56	

Highlighted column shows the rated pressure.



PERFORMANCE DATA

**ENGLISH UNITS
FLAT SPRAY NOZZLES**

ENGLISH UNITS

**PERFORMANCE DATA
H-VV, H-VVL AND H-DT VEEJET® NOZZLES**

Spray Angle at 40 psi	Nozzle Type/ Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	H-VV		H-VVL		H-DT				5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
	1/8	1/4	1/8	1/4	1/8	1/4																
40°	•	•	•	•	•	•	05	.056	–	.25	.35	.50	.71	.79	1.1	1.4	1.8	31	40	49	55	
	•	•			•	•	055	.059	–	.28	.39	.55	.78	.87	1.2	1.5	1.9	31	40	49	55	
	•	•	•	•	•	•	06	.061	–	.30	.42	.60	.85	.95	1.3	1.6	2.1	31	40	49	55	
	•	•			•	•	065	.064	–	.33	.46	.65	.92	1.0	1.5	1.8	2.3	31	40	48	54	
	•	•			•	•	07	.066	–	.35	.49	.70	.99	1.1	1.6	1.9	2.5	31	40	48	54	
	•	•	•	•	•	•	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	31	40	47	53	
	•						085	.073	.30	.43	.60	.85	1.2	1.3	1.9	2.3	3.0	32	40	46	50	
	•	•			•	•	09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	32	40	46	50	
25°	•	•	•	•	•		01	.026	–	–	.07	.10	.14	.16	.22	.27	.35	14	25	34	42	
	•	•	•	•	•	•	02	.035	–	–	.14	.20	.28	.32	.45	.55	.71	15	25	33	40	
	•	•	•	•	•	•	03	.043	–	–	.21	.30	.42	.47	.67	.82	1.1	15	25	33	40	
	•	•	•	•	•	•	04	.050	–	.20	.28	.40	.57	.63	.89	1.1	1.4	1.6	16	25	32	39
				•	•	•	045	.053	–	.23	.32	.45	.64	.71	1.0	1.2	1.6	16	25	32	39	
	•	•	•	•	•	•	05	.056	–	.25	.35	.50	.71	.79	1.1	1.4	1.8	16	25	32	39	
	•	•			•	•	055	.059	–	.28	.39	.55	.78	.87	1.2	1.5	1.9	16	25	31	38	
	•	•	•	•	•	•	06	.061	–	.30	.42	.60	.85	.95	1.3	1.6	2.1	17	25	31	38	
	•	•			•	•	065	.064	–	.33	.46	.65	.92	1.0	1.5	1.8	2.3	17	25	31	38	
	•	•	•		•	•	07	.066	–	.35	.49	.70	.99	1.1	1.6	1.9	2.5	17	25	31	38	
	•	•					075	.068	–	.38	.53	.75	1.1	1.2	1.7	2.1	2.7	17	25	31	38	
	•	•	•	•	•	•	08	.071	–	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	17	25	31	38	
	•						085	.073	–	.43	.60	.85	1.2	1.3	1.9	2.3	3.0	18	25	31	37	
	•	•			•	•	09	.075	–	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	17	25	31	37	
				•		15	.094	–	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	18	25	31	37		
15°	•	•		•			01	.026	–	–	–	.10	.14	.16	.22	.27	.35	–	15	24	28	
	•		•		•	•	02	.035	–	–	.14	.20	.28	.32	.45	.55	.71	6	15	22	27	
	•	•	•	•	•	•	03	.043	–	–	.21	.30	.42	.47	.67	.82	1.1	6	15	22	27	
	•	•	•	•	•	•	04	.050	–	–	.28	.40	.57	.63	.89	1.1	1.4	7	15	21	26	
	•	•	•	•	•	•	05	.056	–	–	.35	.50	.71	.79	1.1	1.4	1.8	7	15	21	26	
	•	•			•	•	055	.059	–	.28	.39	.55	.78	.87	1.2	1.5	1.9	7	15	21	26	
	•	•	•	•	•	•	06	.061	–	.30	.42	.60	.85	.95	1.3	1.6	2.1	8	15	21	26	
	•	•			•	•	065	.064	–	.33	.46	.65	.92	1.0	1.5	1.8	2.3	8	15	20	25	
		•			•	•	07	.066	–	.35	.49	.70	.99	1.1	1.6	1.9	2.5	8	15	20	25	
	•	•	•	•	•	•	08	.071	–	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	9	15	20	25	
	•	•			•	•	085	.073	–	.43	.60	.85	1.2	1.3	1.9	2.3	3.0	9	15	19	24	
	•	•			•	•	09	.075	–	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	9	15	19	24	

Highlighted column shows the rated pressure.



PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES

Spray Angle at 40 psi	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	H-U					H-DU		U					5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2																
110°		•									20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	105	110	117	118	
95°	•	•		•		•	•				10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	89	95	100	105	
	•	•		•		•	•				15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	90	95	100	105	
	•	•	•				•					20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	90	95	100	105
	•	•		•		•	•					30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	91	95	101	105
		•	•	•			•					40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	92	95	100	105
		•		•			•					50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	93	95	99	103
		•		•			•					60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	93	95	99	103
		•	•	•				•				70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	93	95	99	103
				•								80	.217	2.8	4.0	5.7	8.0	11.3	12.6	17.9	22	28	93	95	99	102
				•								100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	93	95	99	102
			•								150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	93	95	99	102	
				•							400	.472	14.1	20	28	40	57	63	89	110	141	93	95	99	102	
80°	•	•	•	•		•	•				10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	73	80	84	87	
	•	•		•		•	•				15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	74	80	83	86	
	•	•	•	•		•	•				20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	74	80	83	86	
	•	•	•	•		•	•				30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	74	80	83	86	
	•	•	•	•		•	•				40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	74	80	83	86	
		•	•	•			•					50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	74	80	83	85
		•	•	•			•					60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	75	80	83	85
		•	•	•			•					70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	75	80	83	86
			•	•								100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	75	80	83	86
			•	•								150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	73	80	84	86
				•	•							200	.343	7.1	10.0	14.1	20	28	32	45	55	71	74	80	82	85
				•								400	.472	14.1	20	28	40	57	63	89	110	141	78	80	81	83
									•			500	.528	17.7	25	35	50	71	79	112	137	177	78	80	81	83
								•			580	.569	21	29	41	58	82	92	130	159	205	78	80	81	83	
65°	•	•	•			•	•				10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	56	65	71	74	
	•	•									12	.084	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2	56	65	71	73	
	•	•	•	•		•	•				15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	56	65	70	73	
	•	•		•		•	•				20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	57	65	70	73	
	•										25	.121	.88	1.3	1.8	2.5	3.5	4.0	5.6	6.8	8.8	57	65	69	73	
	•	•	•			•	•				30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	58	65	69	72	
	•	•	•			•	•				40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	59	65	68	72	
	•	•	•	•			•				50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	60	65	68	71	
		•	•	•			•				60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	60	65	68	71	

Highlighted column shows the rated pressure.



PERFORMANCE DATA

ENGLISH UNITS
FLAT SPRAY NOZZLES

ENGLISH UNITS

PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES

Spray Angle at 40 psi	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	H-U					H-DU		U					5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2																
65°		•	•	•		•	•				70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	60	65	68	71	
			•	•							100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	58	65	69	70	
			•	•							150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	59	65	68	70	
				•	•						200	.343	7.1	10.0	14.1	20	28	32	45	55	71	60	65	67	69	
					•						250	.373	8.8	12.5	17.7	25	35	40	56	68	88	60	65	67	69	
					•						300	.409	10.6	15.0	21	30	42	47	67	82	106	60	65	67	69	
					•						400	.472	14.1	20	28	40	57	63	89	110	141	60	65	67	69	
								•	•		500	.528	17.7	25	35	50	71	79	112	137	177	60	65	66	68	
							•			580	.569	21	29	41	58	82	92	130	159	205	61	65	66	68		
50°						•					02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	39	50	57	63	
						•					03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	40	50	56	62	
						•					04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	42	50	56	61	
						•					05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	44	50	56	61	
						•					055	.059	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9	44	50	56	61	
						•					06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	45	50	56	60	
						•					07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	45	50	56	60	
						•					08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	45	50	55	60	
		•	•	•			•	•				10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	45	50	55	59
			•	•	•		•	•				15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	45	50	55	59
		•	•	•	•			•				20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	45	50	55	59
		•	•	•	•			•				30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	45	50	55	59
		•	•	•			•	•				40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	46	50	54	59
		•	•	•				•				50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	46	50	54	59
			•	•				•				60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	46	50	54	59
			•	•	•			•				70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	46	50	54	59
			•	•								80	.217	2.8	4.0	5.7	8.0	11.3	12.6	17.9	22	28	45	50	53	58
				•								85	.224	3.0	4.3	6.0	8.5	12.0	13.4	19.0	23	30	45	50	53	57
				•								90	.230	3.2	4.5	6.4	9.0	12.7	14.2	20	25	32	45	50	53	56
				•	•							100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	44	50	52	54
			•								110	.255	3.9	5.5	7.8	11.0	15.6	17.4	25	30	39	45	50	53	54	
			•								120	.266	4.2	6.0	8.5	12.0	17.0	19.0	27	33	42	44	50	53	55	
			•								135	.282	4.8	6.8	9.5	13.5	19.1	21	30	37	48	45	50	52	55	
			•	•							150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	45	50	52	55	
				•							200	.343	7.1	10.0	14.1	20	28	32	45	55	71	46	50	52	55	
				•							250	.384	8.8	12.5	17.7	25	35	40	56	68	88	46	50	52	55	
					•						400	.472	14.1	20	28	40	57	63	89	110	141	46	50	52	55	

Highlighted column shows the rated pressure.



**PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES**

Spray Angle at 40 psi	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	H-U					H-DU		U					5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2																
50°								●	●		500	.528	17.7	25	35	50	71	79	112	137	177	49	50	51	54	
								●			580	.569	21	29	41	58	82	92	130	159	205	49	50	51	53	
									●			750	.647	27	38	53	75	106	119	168	205	265	49	50	51	53
										●		1000	.747	35	50	71	100	141	158	224	274	354	49	50	51	53
											●	1500	.915	53	75	106	150	212	237	335	411	530	49	50	51	52
											●	2000	1.056	71	100	141	200	283	316	447	548	707	49	50	51	52
40°	●	●	●				●	●			10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	32	40	45	48	
	●	●	●	●			●	●			15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	32	40	45	48	
	●	●	●	●			●	●			20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	32	40	45	48	
	●	●	●				●	●			30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	33	40	45	48	
	●	●	●				●	●			40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	34	40	45	48	
		●	●	●				●			50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	35	40	45	48	
		●	●	●	●			●			60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	35	40	45	48	
		●	●	●				●			70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	35	40	45	48	
		●									80	.217	2.8	4.0	5.7	8.0	11.3	12.6	17.9	22	28	35	40	44	47	
			●	●							100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	34	40	43	46	
			●	●							150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	35	40	43	44	
				●							200	.343	7.1	10.0	14.1	20	28	32	45	55	71	36	40	42	44	
25°								●			500	.528	17.7	25	35	50	71	79	112	137	177	38	40	41	45	
	●	●					●	●			10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	18	25	31	37	
	●	●	●				●	●			15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	18	25	31	37	
	●	●	●				●	●			20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	19	25	31	37	
	●	●	●				●	●			30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	20	25	30	36	
		●	●				●	●			40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	21	25	29	35	
		●	●					●			50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	21	25	29	35	
		●	●					●			60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	22	25	29	35	
		●	●	●				●			70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	22	25	29	35	
			●	●							100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	23	25	28	32	
			●	●							150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	24	25	28	30	
				●							200	.343	7.1	10.0	14.1	20	28	32	45	55	71	24	25	26	29	
15°								●	●		500	.528	17.7	25	35	50	71	79	112	137	177	24	25	26	29	
									●		750	.647	27	38	53	75	106	119	168	205	265	24	25	26	28	
										●		1000	.747	35	50	71	100	141	158	224	274	354	24	25	26	28
15°	●	●					●	●			10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	10	15	19	24	
	●	●	●				●	●			15	.094	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	10	15	19	24	
	●	●	●				●	●			20	.109	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	10	15	19	23	

Highlighted column shows the rated pressure.



PERFORMANCE DATA

ENGLISH UNITS
FLAT SPRAY NOZZLES

ENGLISH UNITS

PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES

Spray Angle at 40 psi	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	H-U					H-DU		U					5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2																
15°	•	•	•			•	•				30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	10	15	19	21	
	•	•	•			•	•				40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	10	15	18	21	
		•	•	•			•					50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	11	15	18	21
		•	•				•					60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	11	15	18	21
		•	•	•			•					70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	11	15	18	21
			•	•								100	.243	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35	13	15	17	18
			•									120	.266	4.2	6.0	8.5	12.0	17.0	19.0	27	33	42	13	15	17	18
				•								150	.297	5.3	7.5	10.6	15.0	21	24	34	41	53	14	15	17	18
				•							•	200	.343	7.1	10.0	14.1	20	28	32	45	55	71	14	15	17	18
									•		500	.528	17.7	25	35	50	71	79	112	137	177	14	15	16	17	
									•		1000	.747	35	50	71	100	141	158	224	274	354	14	15	16	17	
0°	•	•					•				03	.041	.11	.15	.21	.30	.42	.47	.67	.82	1.1	0 Solid Stream				
	•	•					•	•			04	.047	.14	.20	.28	.40	.57	.63	.89	1.1	1.4					
	•	•					•	•			05	.053	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8					
	•	•					•	•			055	.055	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9					
	•	•					•	•			06	.058	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1					
	•	•					•	•			065	.060	.23	.33	.46	.65	.92	1.0	1.5	1.8	2.3					
		•					•	•			07	.062	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5					
	•	•					•	•			08	.067	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8					
	•										085	.069	.30	.43	.60	.85	1.2	1.3	1.9	2.3	3.0					
	•	•					•	•			09	.071	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2					
	•	•					•	•			10	.075	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5					
		•						•			12	.082	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2					
	•	•					•	•			15	.091	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3					
	•	•	•				•	•			20	.106	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1					
	•	•					•	•			30	.129	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6					
	•	•					•	•			40	.149	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1					
		•						•			50	.167	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7					
		•							•		60	.183	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21					
		•	•					•			70	.198	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25					
		•	•								80	.211	2.8	4.0	5.7	8.0	11.3	12.6	17.9	22	28					
		•								100	.236	3.5	5.0	7.1	10.0	14.1	15.8	22	27	35						
		•								120	.259	4.2	6.0	8.5	12.0	17.0	19.0	27	33	42						
	•		•							150	.289	5.3	7.5	10.6	15.0	21	24	34	41	53						
			•							165	.303	5.8	8.3	11.7	16.5	23	26	37	45	58						
			•							200	.334	7.1	10.0	14.1	20	28	32	45	55	71						

Highlighted column shows the rated pressure.

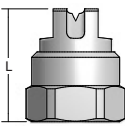
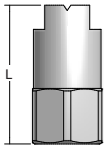
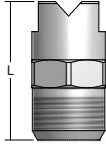
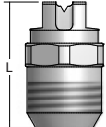


**PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES**

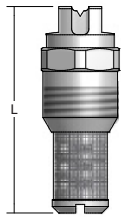
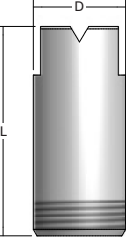
Spray Angle at 40 psi	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)									Spray Angle (°)			
	H-U					H-DU		U					5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2															
0°			•	•							250	.373	8.8	12.5	17.7	25	35	40	56	68	88	0 Solid Stream			
					•						350	.437	12.4	17.5	25	35	49	55	78	96	124				
								•	•		570	.558	20	29	40	57	81	90	127	156	202				
					•						700	.618	25	35	49	70	99	111	157	192	247				
								•			1000	.739	35	50	71	100	141	158	224	274	354				
								•			1100	.775	39	55	78	110	156	174	246	301	389				
									•		1400	.875	49	70	99	140	198	221	313	383	495				
										•	1800	.992	64	90	127	180	255	285	402	493	636				
										•	2000	1.045	71	100	141	200	283	316	447	548	707				
									•	3500	1.383	124	175	247	350	495	553	783	959	1237					

Highlighted column shows the rated pressure.


DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	D (Dia.) (in.)	Net Weight (oz.)
	H-DT (F)	1/8	.750	1/2	-	.5
		1/4	.780	5/8	-	.8
	H-DU (F)	1/8	1.125	1/2	-	.8
		1/4	1.250	5/8	-	1.3
	H-U (M)	1/8	1.000	9/16	-	.5
		1/4	1.000	9/16	-	.8
		3/8	1.250	11/16	-	1.5
		1/2	1.500	7/8	-	2.3
		3/4	2.000	1-1/16	-	5
	H-VV (M)	1/8	.875	1/2	-	.5
		1/4	.906	9/16	-	.8

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	D (Dia.) (in.)	Net Weight (oz.)
	H-VVL (M)	1/8	1.531	1/2	-	.8
		1/4	1.250	9/16	-	1
	U (M)	1	2.313	-	1.313	9
		1-1/4	3.750	-	1.688	20
		2	5.375	-	2.375	68

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)
	58600-H3/4U with strainer	3/4	3.84	1-1/16



PERFORMANCE DATA

ENGLISH UNITS
FLAT SPRAY NOZZLES

ENGLISH UNITS

PERFORMANCE DATA
MEG AND MEG-SSTC WASHJET® NOZZLES

Nozzle Type and Spray Angle																				Capacity Size	Flow Rate Capacity (gallons per minute)															
1/8 MEG					1/4 MEG					1/4 MEG-SSTC					40 psi	300 psi	500 psi	750 psi	1000 psi		1500 psi	2000 psi	2500 psi	3000 psi												
0°*	5°	15°	25°	40°	50°	65°	0°*	5°	15°	25°	40°	50°	65°	0°*	5°	15°	25°	40°	50°	65°																
									•					•		•			•			01	.10	.27	.35	.43	.50	.61	.71	.79	.87					
									•													015	.15	.41	.53	.65	.75	.92	1.1	1.2	1.3					
•	•	•	•	•			•	•	•	•	•			•	•	•		•	•			02	.20	.55	.71	.87	1.0	1.2	1.4	1.6	1.7					
														•								025	.25	.68	.88	1.1	1.3	1.5	1.8	2.0	2.2					
•		•	•	•	•		•	•	•	•	•	•	•	•	•		•			•	•	03	.30	.82	1.1	1.3	1.5	1.8	2.1	2.4	2.6					
							•		•	•	•											035	.35	.96	1.2	1.5	1.8	2.1	2.5	2.8	3.0					
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•		•	•	04	.40	1.1	1.4	1.7	2.0	2.4	2.8	3.2	3.5					
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•				045	.45	1.2	1.6	1.9	2.3	2.8	3.2	3.6	3.9					
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•		05	.50	1.4	1.8	2.2	2.5	3.1	3.5	4.0	4.3					
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•				055	.55	1.5	1.9	2.4	2.8	3.4	3.9	4.3	4.8					
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•			06	.60	1.6	2.1	2.6	3.0	3.7	4.2	4.7	5.2					
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•					065	.65	1.8	2.3	2.8	3.3	4.0	4.6	5.1	5.6					
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•		07	.70	1.9	2.5	3.0	3.5	4.3	4.9	5.5	6.1					
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•					075	.75	2.1	2.7	3.2	3.8	4.6	5.3	5.9	6.5					
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•		•	08	.80	2.2	2.8	3.5	4.0	4.9	5.7	6.3	6.9					
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•					085	.85	2.3	3.0	3.7	4.3	5.2	6.0	6.7	7.4					
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•		09	.90	2.5	3.2	3.9	4.5	5.5	6.4	7.1	7.8					
		•	•				•		•													095	.95	2.6	3.4	4.1	4.8	5.8	6.7	7.5	8.2					
•		•	•	•	•	•	•		•	•	•	•	•	•	•		•	•				10	1.0	2.7	3.5	4.3	5.0	6.1	7.1	7.9	8.7					
•			•				•		•	•	•											11	1.1	3.0	3.9	4.8	5.5	6.7	7.8	8.7	9.5					
•		•	•																			115	1.2	3.1	4.1	5.0	5.8	7.0	8.1	9.1	10.0					
•				•			•	•	•	•	•	•	•	•	•		•					12	1.2	3.3	4.2	5.2	6.0	7.3	8.5	9.5	10.4					
•							•		•	•	•	•										125	1.3	3.4	4.4	5.4	6.3	7.7	8.8	9.9	10.8					
•							•		•	•	•											13	1.3	3.6	4.6	5.6	6.5	8.0	9.2	10.3	11.3					
	•								•	•												14	1.4	3.8	4.9	6.1	7.0	8.6	9.9	11.1	12.1					
•		•	•				•	•	•	•	•	•	•	•	•		•		•	•		15	1.5	4.1	5.3	6.5	7.5	9.2	10.6	11.9	13.0					
		•					•		•													16	1.6	4.4	5.7	6.9	8.0	9.8	11.3	12.6	13.9					
							•		•	•	•									•		18	1.8	4.9	6.4	7.8	9.0	11.0	12.7	14.2	15.6					
•							•	•	•	•	•	•	•	•	•		•					20	2.0	5.5	7.1	8.7	10.0	12.2	14.1	15.8	17.3					
							•	•	•	•	•											25	2.5	6.8	8.8	10.8	12.5	15.3	17.7	19.8	22					
							•	•	•	•	•		•									30	3.0	8.2	10.6	13.0	15.0	18.4	21	24	26					
							•		•	•	•											35	3.5	9.6	12.4	15.2	17.5	21	25	28	30					
							•	•	•	•	•											40	4.0	11.0	14.1	17.3	20	24	28	32	35					
							•		•	•	•											50	5.0	13.7	17.7	22	25	31	35	40	43					
							•		•	•	•											60	6.0	16.4	21	26	30	37	42	47	52					
							•															70	7.0	19.2	25	30	35	43	49	55	61					
							•															80	8.0	22	28	35	40	49	57	63	69					
							•															90	9.0	25	32	39	45	55	64	71	78					

*0° = Solid Stream.

Highlighted column shows the rated pressure.



PERFORMANCE DATA
WEG WASHJET® NOZZLES

Nozzle Type and Spray Angle														Capacity Size	Flow Rate Capacity (gallons per minute)									
1/8 WEG							1/4 WEG								40 psi	300 psi	500 psi	750 psi	1000 psi	1500 psi	2000 psi	2500 psi	3000 psi	
0°*	5°	15°	25°	40°	50°	65°	0°*	5°	15°	25°	40°	50°	65°											
		•	•	•										03	.30	.82	1.1	1.3	1.5	1.8	2.1	2.4	2.6	
•		•	•	•	•	•	•		•	•	•		•	04	.40	1.1	1.4	1.7	2.0	2.4	2.8	3.2	3.5	
		•	•	•					•	•	•			045	.45	1.2	1.6	1.9	2.3	2.8	3.2	3.6	3.9	
•		•	•	•	•	•	•		•	•	•	•	•	05	.50	1.4	1.8	2.2	2.5	3.1	3.5	4.0	4.3	
•		•	•	•	•	•	•		•	•				055	.55	1.5	1.9	2.4	2.8	3.4	3.9	4.3	4.8	
•		•	•	•	•	•	•		•	•	•			06	.60	1.6	2.1	2.6	3.0	3.7	4.2	4.7	5.2	
				•					•					065	.65	1.8	2.3	2.8	3.3	4.0	4.6	5.1	5.6	
•		•	•	•	•	•	•		•	•	•		•	07	.70	1.9	2.5	3.0	3.5	4.3	4.9	5.5	6.1	
•		•	•	•	•	•	•		•	•	•			08	.80	2.2	2.8	3.5	4.0	4.9	5.7	6.3	6.9	
•		•	•	•										085	.85	2.3	3.0	3.7	4.3	5.2	6.0	6.7	7.4	
•		•	•	•	•	•	•		•	•	•			09	.90	2.5	3.2	3.9	4.5	5.5	6.4	7.1	7.8	
			•											095	.95	2.6	3.4	4.1	4.8	5.8	6.7	7.5	8.2	
•		•	•	•	•	•	•		•	•	•			10	1.0	2.7	3.5	4.3	5.0	6.1	7.1	7.9	8.7	
							•							15	1.5	4.1	5.3	6.5	7.5	9.2	10.6	11.9	13.0	
		•												16	1.6	4.4	5.7	6.9	8.0	9.8	11.3	12.6	13.9	
•														20	2.0	5.5	7.1	8.7	10.0	12.2	14.1	15.8	17.3	
							•							30	3.0	8.2	10.6	13.0	15.0	18.4	21	24	26	

*0° = Solid Stream.
Highlighted column shows the rated pressure.

PERFORMANCE DATA
IMEG® WASHJET® NOZZLES

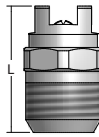
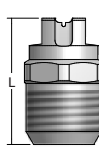
Inlet Conn. (in.)	Nozzle Type	Spray Angle at 40 psi										Capacity Size	Flow Rate Capacity (gallons per minute)											
		IMEG®	5°	10°	15°	25°	40°	50°	65°	80°	40 psi		300 psi	500 psi	750 psi	1000 psi	1500 psi	2000 psi	2500 psi	3000 psi	3500 psi	4000 psi		
1/8, 1/4	•	•	•	•	•	•	•	•	•	•	•	•	03	.30	.82	1.1	1.3	1.5	1.8	2.1	2.4	2.6	2.8	3.0
	•	•	•	•	•	•	•	•	•	•	•	•	035	.35	.96	1.2	1.5	1.8	2.1	2.5	2.8	3.0	3.3	3.5
	•	•	•	•	•	•	•	•	•	•	•	•	04	.40	1.1	1.4	1.7	2.0	2.4	2.8	3.2	3.5	3.7	4.0
	•	•	•	•	•	•	•	•	•	•	•	•	045	.45	1.2	1.6	1.9	2.3	2.8	3.2	3.6	3.9	4.2	4.5
	•	•	•	•	•	•	•	•	•	•	•	•	05	.50	1.4	1.8	2.2	2.5	3.1	3.5	4.0	4.3	4.7	5.0
	•	•	•	•	•	•	•	•	•	•	•	•	055	.55	1.5	1.9	2.4	2.8	3.4	3.9	4.3	4.8	5.1	5.5
	•	•	•	•	•	•	•	•	•	•	•	•	06	.60	1.6	2.1	2.6	3.0	3.7	4.2	4.7	5.2	5.6	6.0
	•	•	•	•	•	•	•	•	•	•	•	•	065	.65	1.8	2.3	2.8	3.3	4.0	4.6	5.1	5.6	6.1	6.5
	•	•	•	•	•	•	•	•	•	•	•	•	07	.70	1.9	2.5	3.0	3.5	4.3	4.9	5.5	6.1	6.5	7.0
	•	•	•	•	•	•	•	•	•	•	•	•	075	.75	2.1	2.7	3.2	3.8	4.6	5.3	5.9	6.5	7.0	7.5
•	•	•	•	•	•	•	•	•	•	•	•	08	.80	2.2	2.8	3.5	4.0	4.9	5.7	6.3	6.9	7.5	8.0	

Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Flats (in.)	Net Weight (oz.)
	MEG (M)	1/8	1.000	9/16	.313	.6
		1/4	1.000	9/16	.406	.8
	WEG (F)	1/8	1.125	1/2	.313	.9
		1/4	1.125	5/8	.313	.7

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Flats (in.)	Net Weight (oz.)
	MEG-SSTC (M)	1/4	.906	9/16	.406	.6
		1/8	.875	1/2	.313	.6
	IMEG® (M)	1/4	.906	9/16	.406	.8

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
K FLOODJET® NOZZLES

Nozzle Type K	Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)							Spray Angle (°)		
	1/8	1/4	3/8	1/2	3/4	1			3 psi	7 psi	10 psi	20 psi	30 psi	40 psi	60 psi	7 psi	20 psi	60 psi
•	•						.25	.017	–	–	–	.04	.04	.05	.06	–	83	117
•	•						.50	.023	–	–	–	.07	.09	.10	.12	–	89	122
•	•						.75	.029	–	–	.075	.11	.13	.15	.18	–	106	125
•	•						1	.033	–	–	.10	.14	.17	.20	.24	–	103	128
•	•						1.5	.040	–	.13	.15	.21	.26	.30	.37	73	103	125
•	•	•					2	.047	–	.17	.20	.28	.35	.40	.49	83	113	129
•	•	•					2.5	.052	–	.21	.25	.35	.43	.50	.61	98	122	133
•	•	•					3	.057	–	.25	.30	.42	.52	.60	.73	86	112	126
•	•						4	.066	–	.33	.40	.57	.69	.80	.98	97	123	132
•	•	•					5	.074	.27	.42	.50	.71	.87	1.0	1.2	114	128	142
•	•	•					7.5	.091	.41	.63	.75	1.1	1.3	1.5	1.8	101	119	134
•	•	•					10	.105	.55	.84	1.0	1.4	1.7	2.0	2.4	115	133	145
•	•	•					12	.115	.66	1.0	1.2	1.7	2.1	2.4	2.9	128	139	153
•	•	•					15	.128	.82	1.3	1.5	2.1	2.6	3.0	3.7	98	113	123
•	•	•					18	.140	.99	1.5	1.8	2.5	3.1	3.6	4.4	106	120	131
•	•	•					20	.148	1.1	1.7	2.0	2.8	3.5	4.0	4.9	110	122	133
•		•					22	.155	1.2	1.8	2.2	3.1	3.8	4.4	5.4	113	125	136
•		•					24	.162	1.3	2.0	2.4	3.4	4.2	4.8	5.9	115	131	144
•		•					27	.172	1.5	2.3	2.7	3.8	4.7	5.4	6.6	119	135	148
•			•				30	.181	1.6	2.5	3.0	4.2	5.2	6.0	7.3	100	110	121
•			•				35	.196	1.9	2.9	3.5	4.9	6.1	7.0	8.6	105	118	128
•			•	•			40	.209	2.2	3.3	4.0	5.7	6.9	8.0	9.8	111	126	136
•			•				45	.222	2.5	3.8	4.5	6.4	7.8	9.0	11.0	115	130	140
•				•			50	.234	2.7	4.2	5.0	7.1	8.7	10.0	12.2	117	131	140
•				•			60	.256	3.3	5.0	6.0	8.5	10.4	12.0	14.7	120	134	142
•				•			70	.277	3.8	5.9	7.0	9.9	12.1	14.0	17.1	123	137	146
•				•			80	.296	4.4	6.7	8.0	11.3	13.9	16.0	19.6	127	138	149
•					•		90	.317	4.9	7.5	9.0	12.7	15.6	18.0	22	120	133	140
•					•		100	.334	5.5	8.4	10.0	14.1	17.3	20	24	123	136	145
•					•		110	.350	6.0	9.2	11.0	15.6	19.1	22	27	125	138	148
•					•		120	.366	6.6	10.0	12.0	17.0	21	24	29	129	143	150
•					•		140	.395	7.7	11.7	14.0	19.8	24	28	34	118	127	135
•					•		160	.423	8.8	13.4	16.0	23	28	32	39	121	130	137
•					•		180	.448	9.9	15.1	18.0	25	31	36	44	124	133	139
•					•		210	.484	11.5	17.6	21	30	36	42	51	128	139	145
•						•	300	.579	16.4	25	30	42	52	60	73	110	128	135
•						•	450	.709	25	38	45	64	78	90	110	118	132	138

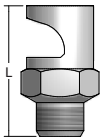
Highlighted column shows the rated pressure.



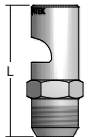
PERFORMANCE DATA
TEK FLOODJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)							Spray Angle (°)		
				3 psi	7 psi	10 psi	20 psi	30 psi	40 psi	60 psi	7 psi	20 psi	60 psi
1/8, 1/4	●	2	.047	–	.17	.20	.28	.35	.40	.49	85	125	134
	●	3	.057	–	.25	.30	.42	.52	.60	.73	85	125	136
	●	5	.074	.27	.42	.50	.71	.87	1.0	1.2	85	127	147
	●	10	.105	.55	.84	1.0	1.4	1.7	2.0	2.4	85	130	150
1/4	●	15	.128	.82	1.3	1.5	2.1	2.6	3.0	3.7	90	130	138
	●	20	.148	1.1	1.7	2.0	2.8	3.5	4.0	4.9	107	130	138

DIMENSIONS AND WEIGHTS

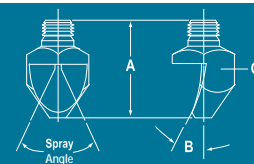
Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Net Weight (oz.)
	K (M)	1/8	1.281	7/16	.5
		1/4	1.343	9/16	1
		3/8	1.750	11/16	2
		1/2	2.000	7/8	4
		3/4	2.563	1-1/2	14
		1	3.625	1-7/8	32

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Net Weight (oz.)
	TEK (M)	1/8	1.125	7/16	.6
		1/4	1.520	9/16	1.5

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
P FLATJET® NOZZLES



ENGLISH UNITS

Spray Angle at 40 psi	Nozzle Type P	Inlet Conn. (in.)					Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)							Spray Angle (°)			Dimensions			
		1/8	1/4	3/8	1/2	3/4			15 psi	20 psi	40 psi	80 psi	100 psi	150 psi	15 psi	40 psi	100 psi	A Length (in.)	B Deflection Angle (°)	C Bar Size (in. sq.)	Net Weight (oz.)	
50°	●		●				05	.052	.31	.35	.50	.71	.79	.97	33	50	60	1-7/32	60	5/8	1	
	●		●				10	.074	.61	.71	1.0	1.4	1.6	1.9	34	50	60	1-7/32	60	5/8	1	
	●		●	●			25	.117	1.5	1.8	2.5	3.5	4.0	4.8	42	50	59	1-5/8	42	3/4	3	
	●		●	●			40	.148	2.4	2.8	4.0	5.7	6.3	7.7	39	50	60	1-27/32	45	3/4	3	
	●			●			60	.181	3.7	4.2	6.0	8.5	9.5	11.6	42	50	53	2-5/32	37	1	5	
	●			●			100	.234	6.1	7.1	10.0	14.1	15.8	19.4	43	50	55	2-27/32	40	1-1/4	11.5	
	●			●			125	.261	7.7	8.8	12.5	17.7	19.8	24	38	50	59	2-27/32	38	1-1/4	11	
	●			●			160	.296	9.8	11.3	16.0	23	25	31	44	50	55	2-27/32	37	1-1/4	11	
	●			●			200	.331	12.2	14.1	20	28	32	39	46	50	53	2-27/32	32	1-1/4	11	
40°	●			●			40	.148	2.4	2.8	4.0	5.7	6.3	7.7	31	40	50	2-3/8	35	7/8	5	
	●			●			50	.165	3.1	3.5	5.0	7.1	7.9	9.7	31	40	49	2-1/2	33	1	7	
	●			●			60	.181	3.7	4.2	6.0	8.5	9.5	11.6	32	40	49	2-27/32	33	1	8	
	●			●			70	.196	4.3	4.9	7.0	9.9	11.1	13.6	32	40	49	2-31/32	29	1	9	
	●			●			80	.209	4.9	5.7	8.0	11.3	12.6	15.5	32	40	48	3-1/32	26	1	9	
	●			●			90	.222	5.5	6.4	9.0	12.7	14.2	17.4	34	40	44	3-1/32	28	1	8	
	●			●			100	.234	6.1	7.1	10.0	14.1	15.8	19.4	35	40	44	3-13/32	28	1	9	
35°	●	●					04	.047	.24	.28	.40	.57	.63	.77	20	35	41	29/32	40	7/16	.5	
	●		●				10	.074	.61	.71	1.0	1.4	1.6	1.9	18	35	39	1-7/16	36	5/8	2	
	●		●	●			20	.105	1.2	1.4	2.0	2.8	3.2	3.9	24	35	40	1-21/32	30	3/4	2	
	●			●			25	.117	1.5	1.8	2.5	3.5	4.0	4.8	24	35	39	1-15/16	28	3/4	3	
	●			●			30	.128	1.8	2.1	3.0	4.2	4.7	5.8	26	35	41	2-1/16	28	3/4	3	
	●			●			40	.148	2.4	2.8	4.0	5.7	6.3	7.7	28	35	38	2-9/32	26	7/8	4	
	●			●			50	.165	3.1	3.5	5.0	7.1	7.9	9.7	31	35	38	2-1/2	23	7/8	5	
	●				●		60	.181	3.7	4.2	6.0	8.5	9.5	11.6	29	35	39	2-7/8	27	1	8	
	●				●		80	.209	4.9	5.7	8.0	11.3	12.6	15.5	26	35	40	3-3/16	24	1	9	
	●				●		100	.234	6.1	7.1	10.0	14.1	15.8	19.4	26	35	40	3-1/2	19	1	9	
	●					●	160	.296	9.8	11.3	16.0	23	25	31	26	35	40	4-1/2	23	1-1/4	20	
	●					●	200	.331	12.2	14.1	20	28	32	39	25	35	40	4-13/16	22	1-1/4	20	
25°	●		●				40	.148	2.4	2.8	4.0	5.7	6.3	7.7	15	25	34	2-9/16	25	3/4	4	
15°	●		●				10	.074	-	.71	1.0	1.4	1.6	1.9	-	15	23	1-7/8	22	5/8	2	
	●		●				20	.105	-	1.4	2.0	2.8	3.2	3.9	-	15	19	2-1/8	19	5/8	2	
	●			●			30	.128	1.8	2.1	3.0	4.2	4.7	5.8	6	15	24	2-27/32	25	3/4	4	
	●			●			40	.148	2.4	2.8	4.0	5.7	6.3	7.7	8	15	21	3-5/8	18	7/8	8	
	●			●			50	.165	3.1	3.5	5.0	7.1	7.9	9.7	9	15	20	3-9/16	15	7/8	6	
	●				●		60	.181	3.7	4.2	6.0	8.5	9.5	11.6	10	15	19	4-15/16	14	1	12	
	●				●		80	.209	4.9	5.7	8.0	11.3	12.6	15.5	11	15	18	5-1/8	14	1	12	
	●				●		100	.234	6.1	7.1	10.0	14.1	15.8	19.4	11	15	18	5-5/32	14	1	14	
	●					●	200	.331	12.2	14.1	20	28	32	39	12	15	18	6-1/2	14	1-1/4	26	

Highlighted column shows the rated pressure.



PERFORMANCE DATA
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 40 psi	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)										Spray Angle (°)			
	TPU, 13802			5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi	
110°	●	0033	.015	--	--	.023	.033	.047	.052	.07	.09	.12	91	110	116	121	
	●	0050	.018	--	--	.035	.050	.07	.08	.11	.14	.18	91	110	118	124	
	●	0067	.021	--	--	.05	.067	.09	.11	.15	.18	.24	92	110	118	124	
	●	01	.026	.035	.05	.07	.10	.14	.16	.22	.27	.35	94	110	121	124	
	●	015	.032	.05	.08	.11	.15	.21	.24	.34	.41	.53	97	110	121	124	
	●	02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	98	110	120	123	
	●	03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	99	110	120	123	
	●	04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	100	110	119	122	
	●	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	100	110	118	122	
	●	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	101	110	117	122	
	●	07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	102	110	117	121	
	●	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	102	110	117	121	
	●	10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	103	110	117	119	
	●	12	.087	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2	103	110	117	119	
	●	15	.097	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	104	110	117	118	
●	20	.112	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	105	110	117	118		
●	30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	105	110	117	118		
95°	●	01	.026	.035	.05	.07	.10	.14	.16	.22	.27	.35	81	95	105	113	
	●	015	.032	.05	.08	.11	.15	.21	.24	.34	.41	.53	82	95	105	113	
	●	02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	82	95	105	113	
	●	03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	83	95	104	111	
	●	04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	84	95	103	108	
	●	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	84	95	102	107	
	●	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	86	95	101	106	
	●	07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	86	95	101	106	
	●	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	87	95	100	105	
	●	09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	89	95	100	105	
	●	10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	89	95	100	105	
	●	11	.083	.39	.55	.78	1.1	1.6	1.7	2.5	3.0	3.9	89	95	100	105	
	●	12	.087	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2	89	95	100	105	
	●	13	.090	.46	.65	.92	1.3	1.8	2.1	2.9	3.6	4.6	89	95	100	105	
	●	14	.093	.49	.70	.99	1.4	2.0	2.2	3.1	3.8	4.9	89	95	100	105	
	●	15	.097	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	90	95	100	105	
	●	16	.100	.57	.80	1.1	1.6	2.3	2.5	3.6	4.4	5.7	90	95	100	105	
	●	18	.106	.64	.90	1.3	1.8	2.5	2.8	4.0	4.9	6.4	90	95	100	105	
	●	20	.112	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	90	95	100	105	
	●	30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	91	95	101	105	
●	40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	92	95	100	105		
●	50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	93	95	99	103		
●	60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	93	95	99	103		
●	70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	93	95	99	103		
80°	●	0050	.018	--	--	.035	.050	.07	.08	.11	.14	.18	61	80	95	101	
	●	0067	.021	--	.033	.05	.067	.09	.11	.15	.18	.24	67	80	94	99	
	●	01	.026	--	.05	.07	.10	.14	.16	.22	.27	.35	68	80	89	92	
	●	015	.032	--	.08	.11	.15	.21	.24	.34	.41	.53	68	80	89	92	
	●	02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	69	80	88	91	
	●	03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	70	80	87	90	
	●	04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	71	80	86	89	
	●	045	.053	.16	.23	.32	.45	.64	.71	1.0	1.2	1.6	71	80	86	89	
●	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	71	80	86	89		
●	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	72	80	85	88		

Other body types may be available. Contact your sales engineer for further information.



**PERFORMANCE DATA
TPU AND 13802 UNIJET® SPRAY TIPS**

Spray Angle at 40 psi	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)									Spray Angle (°)			
	TPU, 13802			5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi
80°	●	07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	72	80	85	88
	●	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	72	80	84	87
	●	09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	73	80	84	87
	●	10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	73	80	84	87
	●	11	.083	.39	.55	.78	1.1	1.6	1.7	2.5	3.0	3.9	73	80	83	86
	●	12	.087	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2	73	80	83	86
	●	13	.090	.46	.65	.92	1.3	1.8	2.1	2.9	3.6	4.6	73	80	83	86
	●	14	.093	.49	.70	.99	1.4	2.0	2.2	3.1	3.8	4.9	73	80	83	86
	●	15	.097	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	74	80	83	86
	●	16	.100	.57	.80	1.1	1.6	2.3	2.5	3.6	4.4	5.7	74	80	83	86
	●	17	.103	.60	.85	1.2	1.7	2.4	2.7	3.8	4.7	6.0	74	80	83	86
	●	20	.112	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	74	80	83	86
	●	25	.121	.88	1.3	1.8	2.5	3.5	4.0	5.6	6.8	8.8	74	80	83	86
	●	30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	74	80	83	86
	●	40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	74	80	83	86
	●	50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	74	80	83	85
	●	60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	75	80	83	85
●	70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	75	80	83	86	
73°	●	0023	.012	–	–	.016	.023	.032	.036	.051	.063	.081	50	73	89	97
	●	0039	.016	–	.020	.028	.039	.055	.062	.087	.11	.14	53	73	87	93
	●	0077	.023	–	.039	.055	.077	.11	.12	.17	.21	.27	53	73	86	92
	●	0116	.028	.041	.058	.082	.12	.16	.18	.26	.32	.41	54	73	85	90
	●	0154	.032	.054	.077	.11	.15	.22	.24	.34	.42	.54	55	73	84	88
	●	0231	.038	.082	.12	.16	.23	.33	.37	.52	.63	.82	56	73	83	87
	●	0308	.044	.11	.15	.22	.31	.44	.49	.69	.84	1.1	58	73	82	86
	●	0385	.049	.14	.19	.27	.39	.54	.61	.86	1.1	1.4	59	73	81	85
	●	0462	.054	.16	.23	.33	.46	.65	.73	1.0	1.3	1.6	60	73	80	84
	●	0616	.062	.22	.31	.44	.62	.87	.97	1.4	1.7	2.2	63	73	79	83
	●	0770	.069	.27	.39	.54	.77	1.1	1.2	1.7	2.1	2.7	64	73	77	82
	●	0924	.076	.33	.46	.65	.92	1.3	1.5	2.1	2.5	3.3	65	73	77	80
	65°	●	0017	.011	–	–	.012	.017	.024	.027	.038	.047	.06	44	65	77
●		0025	.013	–	–	.018	.025	.035	.040	.06	.07	.09	45	65	77	84
●		0033	.015	–	–	.023	.033	.047	.052	.07	.09	.12	47	65	76	83
●		0050	.018	–	–	.035	.050	.07	.08	.11	.14	.18	48	65	75	82
●		0067	.021	–	.033	.05	.067	.09	.11	.15	.18	.24	50	65	75	81
●		01	.026	–	.05	.07	.10	.14	.16	.22	.27	.35	51	65	74	80
●		015	.032	–	.08	.11	.15	.21	.24	.34	.41	.53	51	65	74	80
●		02	.035	.07	.10	.14	.20	.28	.32	.45	.55	.71	52	65	73	79
●		025	.039	.09	.13	.18	.25	.35	.40	.56	.68	.88	52	65	73	79
●		03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	53	65	72	78
●		035	.047	.12	.18	.25	.35	.49	.55	.78	.96	1.2	53	65	72	78
●		04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	53	65	72	76

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.



PERFORMANCE DATA

ENGLISH UNITS
FLAT SPRAY NOZZLES

ENGLISH UNITS

PERFORMANCE DATA
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 40 psi	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)									Spray Angle (°)			
	TPU, 13802			5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi
65°	●	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	53	65	72	76
	●	055	.059	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9	53	65	72	76
	●	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	54	65	72	75
	●	07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	54	65	72	75
	●	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	55	65	71	74
	●	09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	55	65	71	74
	●	10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	56	65	71	74
	●	11	.083	.39	.55	.78	1.1	1.6	1.7	2.5	3.0	3.9	56	65	71	74
	●	12	.087	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2	56	65	71	74
	●	13	.090	.46	.65	.92	1.3	1.8	2.1	2.9	3.6	4.6	56	65	71	74
	●	14	.093	.49	.70	.99	1.4	2.0	2.2	3.1	3.8	4.9	56	65	71	74
	●	15	.097	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	56	65	70	73
	●	20	.112	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	57	65	70	73
	●	30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	58	65	69	72
	●	40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	59	65	68	72
	●	50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	60	65	68	71
	●	60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	60	65	68	71
	●	70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	60	65	68	71
50°	●	0017	.011	–	–	.012	.017	.024	.027	.038	.047	.06	27	50	65	74
	●	0025	.013	–	–	.018	.025	.035	.040	.06	.07	.09	29	50	64	71
	●	0033	.015	–	–	.023	.033	.047	.052	.07	.09	.12	30	50	62	68
	●	0050	.018	–	–	.035	.050	.07	.08	.11	.14	.18	32	50	60	66
	●	0067	.021	–	–	.05	.067	.09	.11	.15	.18	.24	35	50	60	66
	●	01	.026	–	.05	.07	.10	.14	.16	.22	.27	.35	37	50	59	65
	●	015	.032	–	.08	.11	.15	.21	.24	.34	.41	.53	38	50	58	64
	●	02	.035	–	.10	.14	.20	.28	.32	.45	.55	.71	39	50	57	63
	●	025	.039	.09	.13	.18	.25	.35	.40	.56	.68	.88	40	50	57	63
	●	03	.043	.11	.15	.21	.30	.42	.47	.67	.82	1.1	40	50	56	62
	●	035	.047	.12	.18	.25	.35	.49	.55	.78	.96	1.2	40	50	56	61
	●	04	.050	.14	.20	.28	.40	.57	.63	.89	1.1	1.4	42	50	56	61
	●	05	.056	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8	44	50	56	61
	●	06	.061	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1	45	50	56	60
	●	07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	45	50	56	60
	●	075	.068	.27	.38	.53	.75	1.1	1.2	1.7	2.1	2.7	45	50	55	60
	●	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	45	50	55	60
	●	09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	45	50	55	59
	●	10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	45	50	55	59
	●	13	.090	.46	.65	.92	1.3	1.8	2.1	2.9	3.6	4.6	45	50	55	59
●	15	.097	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	45	50	55	59	
●	20	.112	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	45	50	55	59	
●	30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	45	50	55	59	
●	40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	46	50	54	59	

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.



PERFORMANCE DATA:
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 40 psi	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)									Spray Angle (°)			
	TPU, 13802			5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi
50°	●	50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	46	50	54	59
	●	60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	46	50	54	59
	●	70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	46	50	54	59
40°	●	0017	.011	–	–	.012	.017	.024	.027	.038	.047	.06	21	40	54	61
	●	0025	.013	–	–	.018	.025	.035	.040	.06	.07	.09	22	40	53	60
	●	0033	.015	–	–	.023	.033	.047	.052	.07	.09	.12	22	40	53	60
	●	0050	.018	–	–	.035	.050	.07	.08	.11	.14	.18	22	40	53	60
	●	0067	.021	–	–	.05	.067	.09	.11	.15	.18	.24	24	40	53	60
	●	01	.026	–	–	.07	.10	.14	.16	.22	.27	.35	26	40	52	59
	●	015	.032	–	–	.11	.15	.21	.24	.34	.41	.53	27	40	52	59
	●	02	.035	–	.10	.14	.20	.28	.32	.45	.55	.71	29	40	51	58
	●	025	.039	–	.13	.18	.25	.35	.40	.56	.68	.88	29	40	51	58
	●	03	.043	–	.15	.21	.30	.42	.47	.67	.82	1.1	30	40	50	57
	●	04	.050	–	.20	.28	.40	.57	.63	.89	1.1	1.4	30	40	50	56
	●	05	.056	–	.25	.35	.50	.71	.79	1.1	1.4	1.8	31	40	49	55
	●	055	.059	–	.28	.39	.55	.78	.87	1.2	1.5	1.9	31	40	49	55
	●	06	.061	–	.30	.42	.60	.85	.95	1.3	1.6	2.1	31	40	49	55
	●	07	.066	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5	31	40	49	55
	●	08	.071	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	31	40	47	53
	●	09	.075	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	32	40	45	48
	●	10	.079	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	32	40	45	48
	●	11	.083	.39	.55	.78	1.1	1.6	1.7	2.5	3.0	3.9	32	40	45	48
	●	12	.087	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2	32	40	45	48
	●	13	.090	.46	.65	.92	1.3	1.8	2.1	2.9	3.6	4.6	32	40	45	48
	●	15	.097	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	32	40	45	48
	●	20	.112	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	32	40	45	48
	●	25	.121	.88	1.3	1.8	2.5	3.5	4.0	5.6	6.8	8.8	32	40	45	48
	●	30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	33	40	45	48
	●	40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	34	40	45	48
	●	50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	35	40	45	48
●	60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	35	40	45	48	
●	70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	35	40	45	48	
25°	●	0017	.011	–	–	–	.017	.024	.027	.038	.047	.06	–	25	35	47
	●	0025	.013	–	–	–	.025	.035	.040	.06	.07	.09	–	25	35	45
	●	0033	.015	–	–	–	.033	.047	.052	.07	.09	.12	–	25	34	44
	●	0050	.018	–	–	–	.050	.07	.08	.11	.14	.18	–	25	34	43
	●	0067	.021	–	–	–	.067	.09	.11	.15	.18	.24	–	25	34	42
	●	01	.026	–	–	.07	.10	.14	.16	.22	.27	.35	14	25	34	42
	●	015	.032	–	–	.11	.15	.21	.24	.34	.41	.53	15	25	34	41
	●	02	.035	–	–	.14	.20	.28	.32	.45	.55	.71	15	25	33	40
●	03	.043	–	–	.21	.30	.42	.47	.67	.82	1.1	15	25	33	40	
●	04	.050	–	.20	.28	.40	.57	.63	.89	1.1	1.4	16	25	32	39	

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.



PERFORMANCE DATA

ENGLISH UNITS
FLAT SPRAY NOZZLES

ENGLISH UNITS

PERFORMANCE DATA:
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 40 psi	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)									Spray Angle (°)			
	TPU, 13802			5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi
25°	●	05	.056	–	.25	.35	.50	.71	.79	1.1	1.4	1.8	16	25	32	39
	●	055	.059	–	.28	.39	.55	.78	.87	1.2	1.5	1.9	16	25	32	39
	●	06	.061	–	.30	.42	.60	.85	.95	1.3	1.6	2.1	17	25	31	38
	●	07	.066	–	.35	.49	.70	.99	1.1	1.6	1.9	2.5	17	25	31	38
	●	08	.071	–	.40	.57	.80	1.1	1.3	1.8	2.2	2.8	17	25	31	38
	●	09	.075	–	.45	.64	.90	1.3	1.4	2.0	2.5	3.2	17	25	31	38
	●	10	.079	–	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5	18	25	31	37
	●	13	.090	–	.65	.92	1.3	1.8	2.1	2.9	3.6	4.6	18	25	31	37
	●	15	.097	–	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	18	25	31	37
	●	20	.112	–	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	19	25	31	37
	●	30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	20	25	30	36
	●	40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	21	25	29	35
	●	50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	21	25	29	35
	●	60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	22	25	29	35
15°	●	0017	.011	–	–	–	.017	.024	.027	.038	.047	.06	–	15	30	37
	●	0025	.013	–	–	–	.025	.035	.040	.06	.07	.09	–	15	28	34
	●	0033	.015	–	–	–	.033	.047	.052	.07	.09	.12	–	15	27	32
	●	0050	.018	–	–	–	.050	.07	.08	.11	.14	.18	–	15	26	30
	●	0067	.021	–	–	–	.067	.09	.11	.15	.18	.24	–	15	25	29
	●	01	.026	–	–	–	.10	.14	.16	.22	.27	.35	–	15	24	28
	●	015	.032	–	–	–	.15	.21	.24	.34	.41	.53	–	15	23	27
	●	02	.035	–	–	.14	.20	.28	.32	.45	.55	.71	6	15	22	27
	●	03	.043	–	–	.21	.30	.42	.47	.67	.82	1.1	6	15	22	27
	●	04	.050	–	–	.28	.40	.57	.63	.89	1.1	1.4	7	15	21	26
	●	05	.056	–	–	.35	.50	.71	.79	1.1	1.4	1.8	7	15	21	26
	●	055	.059	–	–	.39	.55	.78	.87	1.2	1.5	1.9	7	15	21	26
	●	06	.061	–	–	.42	.60	.85	.95	1.3	1.6	2.1	8	15	21	26
	●	07	.066	–	–	.49	.70	.99	1.1	1.6	1.9	2.5	8	15	21	26
	●	08	.071	–	–	.57	.80	1.1	1.3	1.8	2.2	2.8	9	15	20	25
	●	09	.075	–	–	.64	.90	1.3	1.4	2.0	2.5	3.2	9	15	20	25
	●	10	.079	–	–	.71	1.0	1.4	1.6	2.2	2.7	3.5	10	15	19	24
	●	11	.083	–	.55	.78	1.1	1.6	1.7	2.5	3.0	3.9	10	15	19	24
	●	12	.087	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2	10	15	19	24
	●	15	.097	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3	10	15	19	24
	●	20	.112	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1	10	15	19	23
	●	30	.133	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6	10	15	19	21
	●	40	.153	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1	10	15	18	21
	●	50	.172	1.8	2.5	3.5	5.0	7.1	7.9	11.2	13.7	17.7	11	15	18	21
	●	60	.188	2.1	3.0	4.2	6.0	8.5	9.5	13.4	16.4	21	11	15	18	21
	●	70	.203	2.5	3.5	4.9	7.0	9.9	11.1	15.7	19.2	25	11	15	18	21

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.



PERFORMANCE DATA:
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 40 psi	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)									Spray Angle (°)			
	TPU, 13802			5 psi	10 psi	20 psi	40 psi	80 psi	100 psi	200 psi	300 psi	500 psi	20 psi	40 psi	80 psi	200 psi
0°	●	0009	.008	.003	.003	.005	.009	.013	.014	.020	.025	.032	0 Solid Stream			
	●	0012	.010	.004	.006	.008	.012	.017	.019	.027	.033	.042				
	●	0019	.012	.007	.009	.013	.019	.027	.030	.043	.052	.067				
	●	0021	.013	.007	.010	.011	.023	.033	.040	.047	.052	.074				
	●	0033	.016	.01	.02	.023	.033	.047	.052	.07	.09	.12				
	●	0050	.019	.018	.025	.035	.050	.07	.08	.11	.14	.18				
	●	0067	.023	.024	.033	.05	.067	.09	.11	.15	.18	.24				
	●	01	.028	.035	.05	.07	.10	.14	.16	.22	.27	.35				
	●	015	.034	.05	.08	.11	.15	.21	.24	.34	.41	.53				
	●	02	.039	.07	.10	.14	.20	.28	.32	.45	.55	.71				
	●	03	.041	.11	.15	.21	.30	.42	.47	.67	.82	1.1				
	●	04	.047	.14	.20	.28	.40	.57	.63	.89	1.1	1.4				
	●	045	.052	.16	.23	.32	.45	.64	.71	1.0	1.2	1.6				
	●	05	.053	.18	.25	.35	.50	.71	.79	1.1	1.4	1.8				
	●	055	.055	.19	.28	.39	.55	.78	.87	1.2	1.5	1.9				
	●	06	.058	.21	.30	.42	.60	.85	.95	1.3	1.6	2.1				
	●	065	.060	.23	.33	.46	.65	.92	1.0	1.5	1.8	2.3				
	●	07	.062	.25	.35	.49	.70	.99	1.1	1.6	1.9	2.5				
	●	08	.067	.28	.40	.57	.80	1.1	1.3	1.8	2.2	2.8				
	●	09	.071	.32	.45	.64	.90	1.3	1.4	2.0	2.5	3.2				
●	10	.075	.35	.50	.71	1.0	1.4	1.6	2.2	2.7	3.5					
●	11	.079	.39	.55	.78	1.1	1.6	1.7	2.5	3.0	3.9					
●	12	.082	.42	.60	.85	1.2	1.7	1.9	2.7	3.3	4.2					
●	15	.091	.53	.75	1.1	1.5	2.1	2.4	3.4	4.1	5.3					
●	20	.106	.71	1.0	1.4	2.0	2.8	3.2	4.5	5.5	7.1					
●	30	.129	1.1	1.5	2.1	3.0	4.2	4.7	6.7	8.2	10.6					
●	40	.149	1.4	2.0	2.8	4.0	5.7	6.3	8.9	11.0	14.1					

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.

ENGLISH UNITS

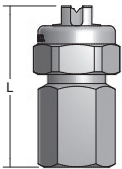
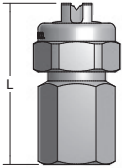


PERFORMANCE DATA:
14784 UNIJET® SPRAY TIPS

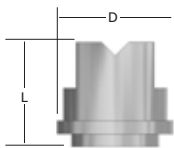
Spray Angle at 40 psi	Tip Type	Capacity Size	Flow Rate Capacity (gallons per minute)						
	14784		10 psi	20 psi	40 psi	60 psi	80 psi	100 psi	200 psi
80°	●	40	2.0	2.8	4.0	4.9	5.7	6.3	8.9
	●	50	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	3.0	4.2	6.0	7.3	8.5	9.5	13.4
	●	70	3.5	4.9	7.0	8.6	9.9	11.1	15.7
	●	100	5.0	7.1	10.0	12.2	14.1	15.8	22.4
	●	128	6.4	9.1	12.8	15.7	18.1	20.2	28.6
65°	●	40	2.0	2.8	4.0	4.9	5.7	6.3	8.9
	●	50	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	3.0	4.2	6.0	7.3	8.5	9.5	13.4
	●	70	3.5	4.9	7.0	8.6	9.9	11.1	15.7
	●	100	5.0	7.1	10.0	12.2	14.1	15.8	22.4
50°	●	20	1.0	1.4	2.0	2.4	2.8	3.2	4.5
	●	40	2.0	2.8	4.0	4.9	5.7	6.3	8.9
	●	50	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	3.0	4.2	6.0	7.3	8.5	9.5	13.4
	●	70	3.5	4.9	7.0	8.6	9.9	11.1	15.7
	●	100	5.0	7.1	10.0	12.2	14.1	15.8	22.4
40°	●	20	1.0	1.4	2.0	2.4	2.8	3.2	4.5
	●	50	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	100	5.0	7.1	10.0	12.2	14.1	15.8	22.4
25°	●	50	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	100	5.0	7.1	10.0	12.2	14.1	15.8	22.4
	●	120	6.0	8.5	12.0	14.7	17.0	19.0	26.8
	●	125	6.3	8.8	12.5	15.3	17.7	19.8	28.0
15°	●	100	5.0	7.1	10.0	12.2	14.1	15.8	22.4

Other body types may be available. Contact your sales engineer for further information.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Net Weight (oz.)
	T (F) + TPU TT (M) + TPU	1/4	1.610	13/16	2.3
	T (F) + 13802 TT (M) + 13802	1/4	1.891	13/16	2.3

Based on the largest/heaviest version of each type.

Nozzle	Spray Tip Type	L (in.)	D (in.)	Flats (in.)
	14784	1.00	1.00	.75

**PERFORMANCE DATA
18897 VEEJET® SPRAY TIPS**

Spray Angle at 40 psi	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)						
	18897			10 psi	20 psi	40 psi	60 psi	80 psi	100 psi	200 psi
110°	●	20	.109	1.0	1.4	2.0	2.5	2.8	3.2	4.5
	●	25	.125	1.3	1.8	2.5	3.1	3.5	4.0	5.6
	●	30	.140	1.5	2.1	3.0	3.7	4.2	4.7	6.7
	●	40	.156	2.0	2.8	4.0	4.9	5.7	6.3	9.0
	●	50	.171	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	.187	3.0	4.2	6.0	7.3	8.5	9.5	13.4
	●	80	.218	4.0	5.6	8.0	9.8	11.3	12.6	17.9
	●	120	.265	6.0	8.5	12.0	14.7	17.0	19.0	27
	●	200	.343	10.0	14.1	20	25	28	32	44
80°	●	20	.109	1.0	1.4	2.0	2.5	2.8	3.2	4.5
	●	25	.125	1.3	1.8	2.5	3.1	3.5	4.0	5.6
	●	30	.140	1.5	2.1	3.0	3.7	4.2	4.7	6.7
	●	40	.156	2.0	2.8	4.0	4.9	5.7	6.3	9.0
	●	50	.171	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	.187	3.0	4.2	6.0	7.3	8.5	9.5	13.4
	●	80	.218	4.0	5.6	8.0	9.8	11.3	12.6	17.9
	●	120	.265	6.0	8.5	12.0	14.7	17.0	19.0	27
	●	200	.343	10.0	14.1	20	25	28	32	44
65°	●	20	.109	1.0	1.4	2.0	2.5	2.8	3.2	4.5
	●	25	.125	1.3	1.8	2.5	3.1	3.5	4.0	5.6
	●	30	.140	1.5	2.1	3.0	3.7	4.2	4.7	6.7
	●	40	.156	2.0	2.8	4.0	4.9	5.7	6.3	9.0
	●	50	.171	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	.187	3.0	4.2	6.0	7.3	8.5	9.5	13.4
	●	80	.218	4.0	5.6	8.0	9.8	11.3	12.6	17.9
	●	100	.250	5.0	7.1	10.0	12.2	14.1	15.8	22
	●	120	.265	6.0	8.5	12.0	14.7	17.0	19.0	27
	●	200	.343	10.0	14.1	20	25	28	32	44
50°	●	20	.109	1.0	1.4	2.0	2.5	2.8	3.2	4.5
	●	25	.125	1.3	1.8	2.5	3.1	3.5	4.0	5.6
	●	30	.140	1.5	2.1	3.0	3.7	4.2	4.7	6.7
	●	40	.156	2.0	2.8	4.0	4.9	5.7	6.3	9.0
	●	50	.171	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	.187	3.0	4.2	6.0	7.3	8.5	9.5	13.4



PERFORMANCE DATA

ENGLISH UNITS
FLAT SPRAY NOZZLES

ENGLISH UNITS

PERFORMANCE DATA
18897 VEEJET® SPRAY TIPS

Spray Angle at 40 psi	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)						
	18897			10 psi	20 psi	40 psi	60 psi	80 psi	100 psi	200 psi
50°	●	80	.218	4.0	5.6	8.0	9.8	11.3	12.6	17.9
	●	120	.265	6.0	8.5	12.0	14.7	17.0	19.0	27
	●	200	.343	10.0	14.1	20	25	28	32	44
40°	●	20	.109	1.0	1.4	2.0	2.5	2.8	3.2	4.5
	●	25	.125	1.3	1.8	2.5	3.1	3.5	4.0	5.6
	●	30	.140	1.5	2.1	3.0	3.7	4.2	4.7	6.7
	●	40	.156	2.0	2.8	4.0	4.9	5.7	6.3	9.0
	●	50	.171	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	.187	3.0	4.2	6.0	7.3	8.5	9.5	13.4
	●	80	.218	4.0	5.6	8.0	9.8	11.3	12.6	17.9
	●	90	.234	4.5	6.4	9.0	11.0	12.7	14.2	20
	●	100	.250	5.0	7.1	10.0	12.2	14.1	15.8	22
	●	120	.265	6.0	8.5	12.0	14.7	17.0	19.0	27
	●	200	.343	10.0	14.1	20	25	28	32	44
25°	●	20	.109	1.0	1.4	2.0	2.5	2.8	3.2	4.5
	●	25	.125	1.3	1.8	2.5	3.1	3.5	4.0	5.6
	●	30	.140	1.5	2.1	3.0	3.7	4.2	4.7	6.7
	●	40	.156	2.0	2.8	4.0	4.9	5.7	6.3	9.0
	●	50	.171	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	.187	3.0	4.2	6.0	7.3	8.5	9.5	13.4
	●	80	.218	4.0	5.6	8.0	9.8	11.3	12.6	17.9
	●	100	.250	5.0	7.1	10.0	12.2	14.1	15.8	22
	●	120	.265	6.0	8.5	12.0	14.7	17.0	19.0	27
	●	200	.343	10.0	14.1	20	25	28	32	44
	15°	●	20	.109	1.0	1.4	2.0	2.5	2.8	3.2
●		25	.125	1.3	1.8	2.5	3.1	3.5	4.0	5.6
●		30	.140	1.5	2.1	3.0	3.7	4.2	4.7	6.7
●		40	.156	2.0	2.8	4.0	4.9	5.7	6.3	9.0
●		50	.171	2.5	3.5	5.0	6.1	7.1	7.9	11.2
●		60	.187	3.0	4.2	6.0	7.3	8.5	9.5	13.4
●		80	.218	4.0	5.6	8.0	9.8	11.3	12.6	17.9
●		120	.265	6.0	8.5	12.0	14.7	17.0	19.0	27



PERFORMANCE DATA
49803 AND 49807 VEEJET® SPRAY TIPS

Spray Angle at 40 psi	Tip Type		Capacity Size	Flow Rate Capacity (gallons per minute)					
	49803	49807		20 psi	40 psi	60 psi	80 psi	100 psi	150 psi
110°		●	0067	.05	.067	.08	.09	.11	.13
		●	02	.14	.20	.25	.28	.32	.39
		●	04	.28	.40	.49	.57	.63	.78
		●	06	.42	.60	.73	.85	.95	1.16
		●	08	.56	.80	.98	1.13	1.26	1.55
	●		40	2.83	4.00	4.89	5.65	6.32	7.74
	●		50	3.53	5.00	6.12	7.07	7.90	9.68
95°		●	02	.14	.20	.25	.28	.32	.39
		●	04	.28	.40	.49	.57	.63	.78
		●	06	.42	.60	.73	.85	.95	1.16
		●	08	.56	.80	.98	1.13	1.26	1.55
	●		10	.71	1.00	1.22	1.41	1.58	1.94
	●		15	1.06	1.50	1.84	2.12	2.37	2.90
	●		20	1.41	2.00	2.45	2.83	3.16	3.87
	●		30	2.12	3.00	3.67	4.25	4.74	5.80
	●		40	2.83	4.00	4.89	5.65	6.32	7.74
	●		50	3.53	5.00	6.12	7.07	7.90	9.68
80°		●	01	.07	.10	.12	.14	.16	.19
		●	02	.14	.20	.25	.28	.32	.39
		●	04	.28	.40	.49	.57	.63	.78
		●	06	.42	.60	.73	.85	.95	1.16
		●	08	.56	.80	.98	1.13	1.26	1.55
	●		10	.71	1.00	1.22	1.41	1.58	1.94
	●		15	1.06	1.50	1.84	2.12	2.37	2.90
	●		20	1.41	2.00	2.45	2.83	3.16	3.87
	●		30	2.12	3.00	3.67	4.25	4.74	5.80
	●		40	2.83	4.00	4.89	5.65	6.32	7.74
	●		50	3.53	5.00	6.12	7.07	7.90	9.68



PERFORMANCE DATA
49803 AND 49807 VEEJET® SPRAY TIPS

Spray Angle at 40 psi	Tip Type		Capacity Size	Flow Rate Capacity (gallons per minute)					
	49803	49807		20 psi	40 psi	60 psi	80 psi	100 psi	150 psi
75°	●		50	3.53	5.00	6.12	7.07	7.90	9.68
65°		●	015	.11	.15	.18	.21	.24	.29
		●	02	.14	.20	.25	.28	.32	.39
		●	04	.28	.40	.49	.57	.63	.78
		●	06	.42	.60	.73	.85	.95	1.16
		●	08	.56	.80	.98	1.13	1.26	1.55
		●	10	.71	1.00	1.22	1.41	1.58	1.94
		●	15	1.06	1.50	1.84	2.12	2.37	2.90
		●	20	1.41	2.00	2.45	2.83	3.16	3.87
		●	30	2.12	3.00	3.67	4.25	4.74	5.80
		●	40	2.83	4.00	4.89	5.65	6.32	7.74
		●	50	3.53	5.00	6.12	7.07	7.90	9.68
60°	●		50	3.53	5.00	6.12	7.07	7.90	9.68
50°	●		30	2.12	3.00	3.67	4.25	4.74	5.80
	●		50	3.53	5.00	6.12	7.07	7.90	9.68
	●		70	4.95	7.00	8.57	9.90	11.07	13.56
45°	●		50	3.53	5.00	6.12	7.07	7.90	9.68
25°		●	0067	.05	.067	.08	.09	.11	.13
		●	015	.11	.15	.18	.21	.24	.29
15°		●	01	.07	.10	.12	.14	.16	.19
5°		●	01	.07	.10	.12	.14	.16	.19



**PERFORMANCE DATA
58606 VEEJET® SPRAY TIPS**

Spray Angle at 40 psi	Tip Type	Capacity Size	Flow Rate Capacity (gallons per minute)						
	45478		10 psi	20 psi	40 psi	60 psi	80 psi	100 psi	200 psi
110°	●	150	7.5	10.6	15.0	18.4	21.2	23.7	33.5
	●	200	10.0	14.1	20.0	25.0	28.0	32.0	44.0
80°	●	150	7.5	10.6	15.0	18.4	21.2	23.7	33.5
	●	200	10.0	14.1	20.0	25.0	28.0	32.0	44.0
65°	●	150	7.5	10.6	15.0	18.4	21.2	23.7	33.5
	●	200	10.0	14.1	20.0	25.0	28.0	32.0	44.0
	●	250	12.5	17.7	25.0	30.6	35.4	39.5	55.9
50°	●	150	7.5	10.6	15.0	18.4	21.2	23.7	33.5
	●	180	9.0	12.7	18.0	22.0	25.5	28.5	40.2
	●	200	10.0	14.1	20.0	25.0	28.0	32.0	44.0
	●	250	12.5	17.7	25.0	30.6	35.4	39.5	55.9
40°	●	150	7.5	10.6	15.0	18.4	21.2	23.7	33.5
	●	200	10.0	14.1	20.0	25.0	28.0	32.0	44.0
25°	●	130	6.5	9.2	13.0	15.9	18.4	20.6	29.1
	●	140	7.0	9.9	14.0	17.1	19.8	22.1	31.3
	●	150	7.5	10.6	15.0	18.4	21.2	23.7	33.5
	●	200	10.0	14.1	20.0	25.0	28.0	32.0	44.0
15°	●	180	9.0	12.7	18.0	22.0	25.5	28.5	40.2
	●	200	10.0	14.1	20.0	25.0	28.0	32.0	44.0

**PERFORMANCE DATA
20799 VEEJET® SPRAY TIPS**

Spray Angle at 40 psi	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)						
	20799			10 psi	20 psi	40 psi	60 psi	80 psi	100 psi	200 psi
120°	●	12.5	.087	.63	.88	1.25	1.5	1.8	2.0	2.8
	●	15	.093	.75	1.1	1.5	1.8	2.1	2.4	3.4
	●	20	.109	1.0	1.4	2.0	2.4	2.8	3.2	4.5
	●	25	.125	1.3	1.8	2.5	3.1	3.5	4.0	5.6
	●	30	.140	1.5	2.1	3.0	3.7	4.2	4.7	6.7
	●	40	.156	2.0	2.8	4.0	4.9	5.7	6.3	8.9
	●	50	.171	2.5	3.5	5.0	6.1	7.1	7.9	11.2
	●	60	.187	3.0	4.2	6.0	7.3	8.5	9.5	13.4
	●	80	.218	4.0	5.7	8.0	9.8	11.3	12.6	17.9
	●	100	.250	5.0	7.1	10.0	12.2	14.1	15.8	22
	●	125	.265	6.3	8.8	12.5	15.3	17.7	19.8	28
	●	200	.343	10.0	14.1	20	24	28	32	45



PERFORMANCE DATA

**ENGLISH UNITS
FLAT SPRAY NOZZLES**

ENGLISH UNITS

**PERFORMANCE DATA
FSUN-S VEEJET® SPRAY TIPS**

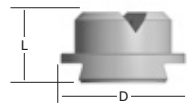
Spray Angle	Tip Retainer Size (in.)	Tip Type	Capacity Size	Equiv. Orifice Dia. (in.)	Flow Rate Capacity (gallons per minute)						
		FSUN-S			10 psi	20 psi	40 psi	60 psi	80 psi	100 psi	200 psi
20°, 30°, 45°, 60°, 75°, 90°, 120°	3/8	•	.6	.031	.06	.08	.12	.14	.17	.19	.26
		•	1	.039	.10	.14	.20	.24	.28	.31	.44
		•	1.5	.047	.15	.21	.29	.36	.42	.47	.66
		•	2	.055	.20	.28	.39	.48	.55	.62	.88
		•	2.5	.059	.25	.35	.49	.60	.69	.78	1.1
		•	3	.067	.29	.42	.59	.72	.83	.93	1.3
		•	4	.079	.39	.55	.78	1.0	1.1	1.2	1.8
		•	5	.087	.49	.69	1.0	1.2	1.4	1.6	2.2
		•	6	.098	.59	.83	1.2	1.4	1.7	1.9	2.6
		•	7.5	.106	.74	1.0	1.5	1.8	2.1	2.3	3.3
		•	10	.118	1.0	1.4	2.0	2.4	2.8	3.1	4.4
		•	13	.138	1.3	1.8	2.6	3.1	3.6	4.0	5.7
		•	16	.157	1.6	2.2	3.1	3.8	4.4	5.0	7.0
		•	20	.177	2.0	2.8	3.9	4.8	5.5	6.2	8.8
		•	25	.197	2.5	3.5	4.9	6.0	6.9	7.8	11.0
		•	32	.217	3.1	4.4	6.3	7.7	8.9	9.9	14.0
		•	40	.236	3.9	5.5	7.8	9.6	11.1	12.4	17.5
20°, 30°, 45°, 60°, 75°, 90°, 120°	3/4	•	10	.118	1.0	1.4	2.0	2.4	2.8	3.1	4.4
		•	13	.138	1.3	1.8	2.6	3.1	3.6	4.0	5.7
		•	16	.157	1.6	2.2	3.1	3.8	4.4	5.0	7.0
		•	20	.177	2.0	2.8	3.9	4.8	5.5	6.2	8.8
		•	25	.197	2.5	3.5	4.9	6.0	6.9	7.8	11.0
		•	32	.217	3.1	4.4	6.3	7.7	8.9	9.9	14.0
		•	40	.236	3.9	5.5	7.8	9.6	11.1	12.4	17.5
		•	50	.276	4.9	6.9	9.8	12.0	13.9	15.5	21.9
		•	63	.315	6.2	8.7	12.4	15.1	17.5	19.5	27.6
		•	80	.354	7.8	11.1	15.7	19.2	22.2	24.8	35.1
		•	100	.394	9.8	13.9	19.6	24.0	27.7	31.0	43.9
		•	130	.433	12.8	18.0	25.5	31.2	36.1	40.3	57.0
20°, 30°, 45°, 60°, 75°, 90°, 120°	1-1/4	•	160	.472	15.7	22.2	31.4	38.4	44.4	49.6	70.2
		•	63	.315	6.2	8.7	12.4	15.1	17.5	19.5	27.6
		•	80	.354	7.8	11.1	15.7	19.2	22.2	24.8	35.1
		•	100	.394	9.8	13.9	19.6	24.0	27.7	31.0	43.9
		•	130	.433	12.8	18.0	25.5	31.2	36.1	40.3	57.0
		•	160	.472	15.7	22.2	31.4	38.4	44.4	49.6	70.2
		•	200	.512	19.6	27.7	39.2	48.1	55.5	62.0	87.7
•	250	.591	24.5	34.7	49.0	60.1	69.4	77.6	109.7		



DIMENSIONS AND WEIGHTS

Spray Tip	Spray Tip Type	L (in.)	D (in.)
	18897	.563	.937
	20799	.828	.937
	58606	3.7	1.0
	49803, 49807	.464	.578

Based on the largest/heaviest version of each type.

Spray Tip	Spray Tip Type	Tip Retainer Size (in.)	L (in.)	D (in.)
	FSUN-S	3/8	.47	.58
		3/4	.55	.94
		1-1/4	.87	1.52

Based on the largest/heaviest version of each type.



Dovetail spray tips can be used on a variety of body types. Please contact your sales engineer for body options and dimensions.

PERFORMANCE DATA
G, GG, H, HH, HF, GA AND GGA FULLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type							Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)							Spray Angle (°)			
	Standard				Angle						5 psi	7 psi	10 psi	20 psi	40 psi	80 psi	100 psi	150 psi	7 psi	20 psi	80 psi
	G	GG	H	HH	HF	GA	GGA														
1/8	•	•		•				1	.031	.025	-	-	.10	.14	.19	.26	.29	.35	-	58	53
	•	•		•				1.5	.044	.025	.11	.13	.15	.21	.28	.39	.43	.52	52	65	59
	•	•		•		•	•	2	.048	.040	.15	.17	.20	.28	.38	.52	.58	.70	43	50	46
	•	•		•		•	•	3	.063	.040	.22	.25	.30	.41	.57	.78	.87	1.0	52	65	59
	•	•		•		•	•	3.5	.063	.050	.25	.30	.35	.48	.66	.91	1.0	1.2	43	50	46
						•	•	3.9	.078	.040	.28	.33	.39	.54	.74	1.0	1.1	1.4	77	84	79
	•	•		•		•	•	5	.078	.050	.36	.42	.50	.69	.95	1.3	1.4	1.7	52	65	59
1/4						•	•	6.1	.094	.050	.44	.52	.61	.84	1.2	1.6	1.8	2.1	69	74	68
	•	•		•		•	•	6.5	.094	.063	.47	.55	.65	.89	1.2	1.7	1.9	2.3	45	50	46
	•	•		•		•	•	10	.109	.063	.73	.85	1.0	1.4	1.9	2.6	2.9	3.5	58	67	61
3/8				•		•	•	12.5	.125	.063	.91	1.1	1.3	1.7	2.4	3.3	3.6	4.3	69	74	68
	•	•		•		•	•	9.5	.109	.094	.69	.81	.95	1.3	1.8	2.5	2.7	3.3	45	50	46
	•	•		•		•	•	15	.141	.094	1.1	1.3	1.5	2.1	2.8	3.9	4.3	5.2	64	67	61
1/2						•	•	20	.156	.109	1.5	1.7	2.0	2.8	3.8	5.2	5.8	7.0	76	80	73
	•	•		•		•	•	22	.188	.109	1.6	1.9	2.2	3.0	4.2	5.7	6.3	7.6	87	90	82
	•	•				•	•	16	.141	.125	1.2	1.4	1.6	2.2	3.0	4.2	4.6	5.6	48	50	46
	•	•		•		•	•	25	.188	.125	1.8	2.1	2.5	3.4	4.7	6.5	7.2	8.7	64	67	61
	•	•		•		•	•	32	.203	.141	2.3	2.7	3.2	4.4	6.1	8.3	9.2	11.1	72	75	68
3/4						•	•	40	.250	.141	2.9	3.4	4.0	5.5	7.6	10.4	11.5	13.9	88	91	83
						•	•	50	.266	.156	3.6	4.2	5.0	6.9	9.5	13.0	14.4	17.4	91	94	86
			•	•				2.5	.188	.172	2.1	2.5	2.9	4.1	5.6	7.7	8.5	10.2	48	50	46
1			•	•				4.0	.250	.172	3.4	4.0	4.7	6.5	8.9	12.3	13.6	16.4	67	70	63
			•	•				7.0	.328	.203	6.0	7.0	8.2	11.3	15.6	21	24	29	89	92	84
			•	•				4.2	.234	.219	3.6	4.2	4.9	6.8	9.4	12.9	14.3	17.2	48	50	46
			•	•				7.0	.328	.219	6.0	7.0	8.2	11.3	15.6	21	24	29	67	68	62
			•	•				8.0	.375	.219	6.9	8.0	9.4	13.0	17.8	25	27	33	72	81	82
1-1/4			•	•				10	.469	.219	8.6	10.0	11.8	16.2	22	31	34	41	78	90	94
			•	•				12	.469	.250	10.3	12.0	14.1	19.4	27	37	41	49	89	92	84
			•					6	.297	.250	5.1	6.0	7.1	9.7	13.4	18.4	20	25	48	50	44
			•					10	.375	.250	8.6	10.0	11.8	16.2	22	31	34	41	64	67	58
			•					12	.422	.250	10.3	12.0	14.1	19.4	27	37	41	49	66	70	60
			•					14	.484	.250	12.0	14.0	16.5	23	31	43	48	57	77	80	70
1-1/4			•					16	.500	.313	13.7	16.0	18.9	26	36	49	54	66	73	76	66
			•					20	.594	.313	17.1	20	24	32	45	61	68	82	90	93	81

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.



**PERFORMANCE DATA
G, GG, H, HH, HF, GA AND GGA FULLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type						Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)								Spray Angle (°)			
	Standard				Angle					5 psi	7 psi	10 psi	20 psi	40 psi	80 psi	100 psi	150 psi	7 psi	20 psi	80 psi	
	G	GG	H	HH	HF	GA				GGA											
1-1/2			•					10	.375	.344	8.6	10.0	11.8	16.2	22	31	34	41	48	50	44
			•					16	.500	.344	13.7	16.0	18.9	26	36	49	54	66	72	74	64
			•					20	.563	.344	17.1	20	24	32	45	61	68	82	74	76	66
			•					30*	.719	.406	26	30	35	49	67	92	102	123	91	94	82
2			•					17	.500	.438	14.6	17.0	20	28	38	52	58	70	49	50	44
			•					30	.688	.438	26	30	35	49	67	92	102	123	72	74	64
			•					35	.750	.438	30	35	41	57	78	107	119	143	75	77	68
			•					40	.828	.438	34	40	47	65	89	123	136	164	78	80	70
			•					50*	.938	.563	43	50	59	81	111	153	170	205	83	85	75
			•					60*	1.125	.563	51	60	71	97	134	184	204	246	98	100	86
2-1/2			•					25	.594	.563	21	25	29	41	56	77	85	102	49	50	44
			•					50	.875	.563	43	50	59	81	111	153	170	205	72	74	64
			•					60	.969	.563	51	60	71	97	134	184	204	246	76	78	68
			•					70	1.125	.563	60	70	82	113	156	215	238	287	79	82	72
			•					80	1.125	.688	69	80	94	130	178	245	272	328	86	88	77
			•					90	1.250	.688	77	90	106	146	201	276	306	369	95	97	84
3			•					42	.750	.688	36	42	49	68	94	129	143	172	49	50	44
			•					80	1.094	.688	69	80	94	130	178	245	272	328	81	84	73
			•					90	1.188	.688	77	90	106	146	201	276	306	369	86	89	77
			•					100	1.281	.688	86	100	118	162	223	307	340	410	92	95	83
			•					110	1.938	.813	93	110	131	186	263	372	416	509	86	89	77
			•					120	1.375	.813	101	120	143	203	287	406	454	555	102	105	89
4			•		•			160	1.688	.750	137	160	189	259	357	491	544	655	87	90	70
			•		•			180	1.859	.875	154	180	212	292	401	552	612	737	92	95	83
			•		•			200	2.0	1.0	171	200	236	324	446	613	680	819	97	100	87
			•		•			210	2.156	1.0	180	210	247	340	468	644	714	860	102	105	91
5			•		•			250	1.875	1.125	214	250	295	405	557	767	850	1024	89	91	80
			•		•			280	2.078	1.125	240	280	330	454	624	859	952	1147	93	96	84
			•		•			320	2.688	1.375	274	320	377	519	713	981	1087	1310	97	100	87
			•		•			330	2.844	1.375	283	330	389	535	736	1012	1121	1351	102	105	91
6			•		•			350	2.406	1.625	300	350	412	567	780	1073	1189	1433	87	90	78
			•		•			400	2.719	1.625	343	400	471	648	892	1227	1359	1638	92	95	83
			•		•			450	3.031	1.750	385	450	530	729	1003	1380	1529	1843	97	100	87
			•		•			480	3.219	1.750	411	480	566	778	1070	1472	1631	1966	102	105	91
8			•		•			500	2.750	1.875	428	500	589	810	1115	1533	1699	2048	78	80	70
			•		•			600	3.156	1.875	514	600	707	972	1338	1840	2039	2457	86	88	77
			•		•			700	3.594	1.875	600	700	825	1135	1561	2147	2379	2867	92	95	83
			•		•			800	4.031	2.250	685	800	943	1297	1784	2453	2719	3276	102	105	91
10					•			800	3.344	2.500	685	800	943	1297	1784	2453	2719	3276	78	80	70
					•			1000	3.969	2.500	857	1000	1178	1621	2229	3067	3398	4095	86	89	77
					•			1200	4.797	2.625	1028	1200	1414	1945	2675	3680	4078	4914	97	100	87
					•			1300	5.313	2.625	1114	1300	1532	2107	2898	3987	4418	5324	103	106	92

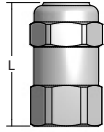
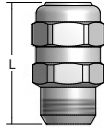
Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging.
*These capacity sizes are not available for H in polypropylene.

Highlighted column shows the rated pressure.

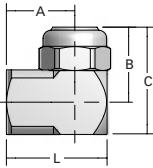
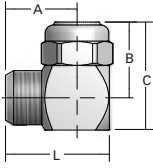
ENGLISH UNITS



DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Net Weight (oz.)
	G (F)	1/8	1.219	9/16	1
		1/4	1.469	11/16	1.5
		3/8	1.812	13/16	2.5
		1/2	2.250	1	6
	GG (M)	1/8	1.281	9/16	.8
		1/4	1.563	11/16	1.5
		3/8	1.844	13/16	2.5
		1/2	2.219	1	6

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	A (in.)	B (in.)	C (in.)	Net Weight (oz.)
	GA (F)	1/8	.910	.630	.563	.844	1.5
		1/4	1.130	.790	.781	1.125	2
		3/8	1.281	.875	1.188	1.594	3.3
		1/2	1.563	1.063	1.359	1.859	6.3
	GGA (M)	1/8	.940	.660	.563	.844	1.5
		1/4	1.160	.820	.781	1.125	2
		3/8	1.313	.906	1.188	1.594	3.3
		1/2	1.609	1.109	1.359	1.859	6.3

Based on the largest/heaviest version of each type.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	D (Dia.) (in.)	Net Weight (oz.)
	H (F)	3/4	2.188	1.250	7.3
		1	2.734	1.500	12.4
	H (F) Cast	1-1/4	3.440	2.063 oct.	25.7
		1-1/2	4.063	2.313 oct.	25.4
		2	5.440	3.000 oct.	39
		2-1/2	6.313	3.438 oct.	76
		3	7.375	4.063 oct.	95.3
		4	9.563	5.438 oct.	12 lbs.
	H (F) Cast (Standard angle only) Wide angle not available in Cast for these sizes	5	11.563	6.750 oct.	30.8 lbs.
		6	14.375	8.000 oct.	49 lbs.
	HF (Flange)	4	8.125	8.750	28.8 lbs.
		5	10.560	10.000	34.3 lbs.
		6	12.625	11.000	49 lbs.
		8	16.625	13.500	120 lbs.
		10	20.750	16.000	193 lbs.
	HH (M)	1/8	.875	.500	.5
		1/4	.880	.531	.5
		3/8	.940	.656	1
		1/2	1.156	.813	1.5
		3/4	1.531	1.063	3.5
		1	2.031	1.313	7

Based on the largest/heaviest version of each type.



PERFORMANCE DATA

**ENGLISH UNITS
FULL CONE NOZZLES**

ENGLISH UNITS

**PERFORMANCE DATA
HMFP AND HHMFP MAXIMUM FREE PASSAGE FULLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type		Capacity Size	Approx. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)				Spray Angle (°)					
					60° Series		90° Series		115° Series					
	HMFP	HHMFP			10 psi	20 psi	40 psi	80 psi	10 psi	40 psi	10 psi	40 psi	10 psi	40 psi
3/8	●	●	14	.125	1.4	1.8	2.4	3.2	60	62	90	84	115	100
	●	●	22	.156	2.2	2.9	3.8	5.1	60	62	90	84	115	100
	●	●	32	.188	3.2	4.2	5.6	7.4	60	62	90	84	115	100
1/2	●	●	32	.188	3.2	4.2	5.6	7.4	60	62	90	84	115	100
	●	●	51	.219	5.1	6.7	8.9	11.7	60	62	90	84	115	100
	●	●	57	.250	5.7	7.5	9.9	13.1	60	62	90	84	115	100
3/4	●	●	70	.281	7.0	9.2	12.2	16.1	60	62	90	84	115	100
	●	●	84	.313	8.4	11.1	14.6	19.3	60	62	90	84	115	100
	●	●	100	.344	10.0	13.2	17.4	23	60	62	90	84	115	100
	●	●	120	.375	12.0	15.8	21	28	60	62	90	84	115	100
1	●	●	120	.375	12.0	15.8	21	28	60	62	90	84	115	100
	●	●	150	.406	15.0	19.5	25	33	60	62	90	88	115	105
	●	●	170	.437	17.0	22	29	37	60	62	90	88	115	105
1-1/4	●	●	170	.437	17.0	22	29	37	60	62	90	88	115	105
	●	●	200	.469	20	26	34	44	60	62	90	88	115	105
	●	●	220	.500	22	29	37	48	60	62	90	88	115	105
	●	●	240	.531	24	31	41	53	60	62	90	88	115	105
	●	●	260	.562	26	34	44	57	60	62	90	88	115	105
	●	●	240	.54	24	32	43	58	60	59	89	89	108	104
1-1/2	●	●	260	.558	26	35	47	63	62	61	90	92	113	103
	●	●	280	.571	28	38	50	68	62	62	89	91	113	107
	●	●	300	.59	30	42	58	80	63	62	93	92	114	108
	●	●	350	.63	35	48	67	93	63	63	91	93	117	113
	●	●	400	.66	40	55	77	106	64	64	92	93	120	115
	●	●	450	.7	45	62	86	119	65	63	92	91	117	116
	●	●	500	.76	50	70	97	135	59	58	90	86	103	98
2	●	●	600	.82	60	84	116	162	61	58	89	86	108	102
	●	●	700	.86	70	98	136	189	62	57	92	91	114	106
	●	●	800	.97	80	111	155	216	60	57	93	89	113	111
	●	●	1000	1	100	137	188	258	61	58	92	90	112	112
2-1/2	●	●	1200	1.21	120	165	226	309	63	59	94	91	110	108
	●	●	1400	1.36	140	192	263	361	62	60	93	92	113	111
	●	●	1700	1.41	170	233	320	438	62	60	89	88	112	110
3	●	●	1800	1.55	180	242	325	436	61	59	90	92	112	108
	●	●	2000	1.73	200	269	361	485	63	61	93	91	112	109
	●	●	2400	2.2	240	322	433	582	62	60	95	93	114	111

Approximate Free Passage Diameter is the approximate 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.)	Spray Angle	Capacity Size	L (in.)	Hex. (in.)	Net Weight (oz.)
	HMFP (F)	3/8	60°, 90°, 115°	14, 22	1.460	13/16	2.4
			60°, 90°, 115°	32	1.701	13/16	2.5
		1/2	60°, 90°, 115°	32	1.770	1	4.5
			60°, 90°, 115°	51, 57	2.120	1	4.6
		3/4	60°, 90°, 115°	70	2.400	1-1/4	8.9
			60°, 90°, 115°	84	2.637	1-3/8	12.6
			60°, 90°, 115°	100	2.894	1-3/8	13.3
		1	60°, 90°, 115°	120	3.070	1-3/8	12.9
		1	60°, 90°, 115°	120, 150, 170	3.250	1-3/4	22.5
		1-1/4	60°, 90°, 115°	170, 200, 220, 240, 260	3.750	2	30.5
1-1/2	60°, 90°, 115°	240, 260, 280, 300, 350, 400, 450	4.380	2-3/16	35.3		
	HMFP (F)	2	60°, 90°, 115°	500, 600, 700, 800	6.528	2-3/4 dia.	52.9
		2-1/2	60°, 90°, 115°	1000, 1200, 1400, 1700	8.000	3-13/16 dia.	93.5
		3	60°, 90°, 115°	1800, 2000, 2400	9.440	4-3/16 dia.	114.6
	HHMFP (M)	3/8	60°, 90°, 115°	14, 22	1.000	11/16	1.4
			60°, 90°, 115°	32	1.701	3/4	2
		1/2	60°, 90°, 115°	32	1.225	7/8	2.4
			60°, 90°, 115°	51, 57	2.198	1	4.9
		3/4	60°, 90°, 115°	70	1.810	1-1/8	5
			60°, 90°, 115°	84	2.713	1-3/8	11.5
			60°, 90°, 115°	100	2.980	1-3/8	12.1
		1	60°, 90°, 115°	120	3.100	1-3/8	11.5
		1	60°, 90°, 115°	120, 150, 170	3.250	1-3/4	22.5
		1-1/4	60°, 90°, 115°	170, 200, 220, 240, 260	3.750	2	32
1-1/2	60°, 90°, 115°	240, 260, 280, 300, 350, 400, 450	4.380	2-3/16	36.7		
	HHMFP (M)	2	60°, 90°, 115°	500, 600, 700, 800	6.528	2-3/4 dia.	52.9
		2-1/2	60°, 90°, 115°	1000, 1200, 1400, 1700	8.000	3-13/16 dia.	93.5
		3	60°, 90°, 115°	1800, 2000, 2400	9.440	4-3/16 dia.	114.6

Based on the largest/heaviest version of each type.

ENGLISH UNITS



PERFORMANCE DATA

**ENGLISH UNITS
FULL CONE NOZZLES**

ENGLISH UNITS

**PERFORMANCE DATA
HHSJ SPIRALJET® NOZZLES**

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
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.

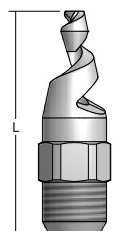


PERFORMANCE DATA
HHSJX SPIRALJET® NOZZLES

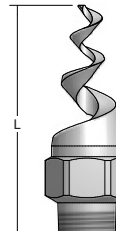
Inlet Conn. (in.)	Nozzle Type	Spray Angle at 10 psi		Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)				
		90°	120°				10 psi	20 psi	40 psi	100 psi	400 psi
3/8	•	•	•	30	.188	.188	3.0	4.2	6.0	9.5	19.0
	•	•	•	40	.219	.219	4.0	5.7	8.0	12.6	25
	•	•	•	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	9.000	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.

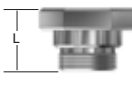


PERFORMANCE DATA
VK FULLJET® NOZZLES

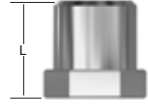
Inlet Conn. (in.)	Nozzle Type	Capacity Size	Flow Rate Capacity (gallons per minute)							Max. Free Passage (in.) at Spray Angle (°)			
			10 psi	20 psi	40 psi	60 psi	80 psi	100 psi	200 psi	45	60	90	120
3/8 F	VK	1.5	.16	.22	.30	.36	.41	.46	.63	.028	.043	.031	.030
	•	2	.21	.29	.40	.48	.55	.61	.84	.031	.047	.031	.031
	•	2.5	.27	.37	.50	.61	.69	.77	1.1	.047	.045	.039	.035
	•	3.5	.37	.51	.70	.85	1.0	1.1	1.5	.049	.047	.043	.039
	•	4	.42	.58	.80	.97	1.1	1.2	1.7	.055	.049	.045	.043
	•	4.5	.48	.66	.90	1.1	1.2	1.4	1.9	.055	.051	.045	.043
	•	5	.53	.73	1.0	1.2	1.4	1.5	2.1	.061	.059	.047	.047
	•	6	.64	.88	1.2	1.5	1.7	1.8	2.5	.063	.063	.055	.051
	•	7	.74	1.0	1.4	1.7	1.9	2.1	2.9	.071	.065	.061	.055
	•	8	.85	1.2	1.6	1.9	2.2	2.5	3.4	.077	.067	.067	.061
	•	9	1.0	1.3	1.8	2.2	2.5	2.8	3.8	.077	.073	.067	.061
	•	10	1.1	1.5	2.0	2.4	2.8	3.1	4.2	.079	.073	.069	.063
	•	11	1.2	1.6	2.2	2.7	3.0	3.4	4.6	.079	.073	.069	.063
	•	12	1.3	1.8	2.4	2.9	3.3	3.7	5.1	.081	.075	.071	.065
	•	13	1.4	1.9	2.6	3.1	3.6	4.0	5.5	.083	.075	.071	.067
	•	14	1.5	2.0	2.8	3.4	3.9	4.3	5.9	.083	.077	.073	.067
	•	15	1.6	2.2	3.0	3.6	4.1	4.6	6.3	.085	.079	.073	.069
	•	16	1.7	2.3	3.2	3.9	4.4	4.9	6.7	.087	.083	.075	.071
	•	17	1.8	2.5	3.4	4.1	4.7	5.2	7.2	.087	.083	.075	.071
	•	18	1.9	2.6	3.6	4.4	5.0	5.5	7.6	.089	.085	.077	.073
•	19	2.0	2.8	3.8	4.6	5.3	5.8	8.0	.089	.085	.077	.073	
•	20	2.1	2.9	4.0	4.8	5.5	6.1	8.4	.091	.087	.079	.075	
3/8 M	•	5	.53	.73	1.0	1.2	1.4	1.5	2.1	.061	.059	.047	.047
	•	6	.64	.88	1.2	1.5	1.7	1.8	2.5	.063	.063	.055	.051
	•	8	.85	1.20	1.60	1.90	2.20	2.50	3.40	.077	.067	.067	.061
	•	10	1.10	1.50	2.00	2.40	2.80	3.10	4.20	.079	.073	.069	.063
	•	13	1.40	1.90	2.60	3.10	3.60	4.00	5.50	.083	.075	.071	.067
	•	16	1.70	2.30	3.20	3.90	4.40	4.90	6.70	.087	.083	.075	.071
1/2 M	•	20	2.10	2.90	4.00	4.80	5.50	6.10	8.40	.091	.087	.079	.075
	•	20	2.12	2.92	4.00	4.80	5.50	6.10	8.40	.091	.087	.079	.075
	•	25	2.65	3.65	5.00	6.10	6.90	7.70	10.50	.099	.098	.083	.079
	•	32	3.40	4.67	6.40	7.70	8.80	9.80	13.50	.110	.102	.098	.091
3/4 M	•	40	4.25	5.84	8.00	9.70	11.10	12.30	16.90	.118	.110	.106	.098
	•	40	4.25	5.84	8.00	9.70	11.10	12.30	16.90	.118	.110	.106	.098
	•	50	5.30	7.30	10.00	12.10	13.80	15.30	21.10	.126	.114	.110	.106
•	63	6.70	9.20	12.70	15.30	17.40	19.30	26.50	.134	.122	.118	.114	

F = female threads (type IG), M = male threads (type AG)

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	D (in.)	Hex. (in.)
	VK-AG (M)	3/8	.787	—	3/4
		1/2	1.02	—	1
		3/4	1.10	—	1-1/4

F = female thread; M = male thread. BSPP threads.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	D (in.)	Hex. (in.)
	VK-IG (F)	3/8	1.04	.83	7/8

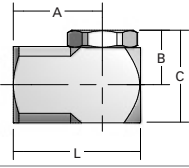
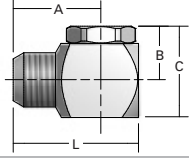
F = female thread; M = male thread. BSPP threads.

**PERFORMANCE DATA
GANV AND GGANV FULLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type		Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)								Spray Angle (°)		
	GANV	GGANV				5 psi	7 psi	10 psi	15 psi	20 psi	40 psi	80 psi	100 psi	7 psi	20 psi	80 psi
1/4	●	●	5	.109	.078	.35	.42	.50	.61	.71	1.0	1.4	1.6	68	75	82
	●	●	7	.125	.094	.49	.59	.70	.86	.99	1.4	2.0	2.2	68	75	82
	●	●	8	.156	.109	.57	.67	.80	.98	1.1	1.6	2.3	2.5	75	80	85
	●	●	10	.156	.125	.71	.84	1.0	1.2	1.4	2.0	2.8	3.2	75	80	85
	●	●	11	.156	.141	.78	.92	1.1	1.3	1.6	2.2	3.1	3.5	75	80	85
3/8	●	●	11	.172	.125	.78	.92	1.1	1.3	1.6	2.2	3.1	3.5	75	85	83
	●	●	13	.172	.141	.92	1.1	1.3	1.6	1.8	2.6	3.7	4.1	75	85	83
	●	●	16	.172	.156	1.1	1.3	1.6	2.0	2.3	3.2	4.5	5.1	75	85	83
	●	●	20	.219	.172	1.4	1.7	2.0	2.4	2.8	4.0	5.7	6.3	75	85	83
	●	●	23	.219	.188	1.6	1.9	2.3	2.8	3.3	4.6	6.5	7.3	75	85	83
	●	●	26	.234	.203	1.8	2.2	2.6	3.2	3.7	5.2	7.4	8.2	75	85	83
	●	●	29	.234	.219	2.1	2.4	2.9	3.6	4.1	5.8	8.2	9.2	75	85	83
	●	●	33	.297	.234	2.3	2.8	3.3	4.0	4.7	6.6	9.3	10.4	75	85	83
1/2	●	●	32	.313	.203	2.3	2.7	3.2	3.9	4.5	6.4	9.1	10.1	85	90	95
	●	●	40	.313	.234	2.8	3.3	4.0	4.9	5.7	8.0	11.3	12.6	85	90	95
	●	●	48	.313	.281	3.4	4.0	4.8	5.9	6.8	9.6	13.6	15.2	85	90	95
	●	●	56	.391	.297	4.0	4.7	5.6	6.9	7.9	11.2	15.8	17.7	85	90	95
	●	●	64	.391	.328	4.5	5.4	6.4	7.8	9.1	12.8	18.1	20	85	90	95
	●	●	72	.391	.359	5.1	6.0	7.2	8.8	10.2	14.4	20	23	85	90	95

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.)	A (in.)	B (in.)	C (in.)	Net Weight (oz.)
	GANV (F)	1/4	1.156	.781	.875	1.219	2
		3/8	1.281	.875	1.000	1.438	3.3
		1/2	1.563	1.063	1.531	2.031	6.3
	GGANV (M)	1/4	1.156	.813	.875	1.250	2
		3/8	1.313	.906	1.000	1.438	3.3
		1/2	1.625	1.125	1.531	2.031	6.3

Based on the largest/heaviest version of each type.

PERFORMANCE DATA

ENGLISH UNITS
FULL CONE NOZZLES

ENGLISH UNITS

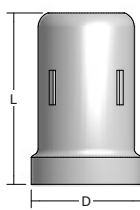
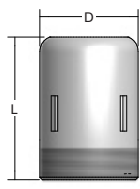
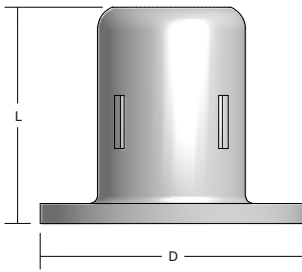
PERFORMANCE DATA
R, RR AND RF DISTRIBOJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type												Capacity Size	Flow Rate Capacity (gallons per minute)							
	R				RR				RF					1 psi	3 psi	5 psi	7 psi	10 psi	20 psi	40 psi	60 psi
	Spray Angle																				
	50°	65°	80°	95°	50°	65°	80°	95°	50°	65°	80°	95°									
2	•	•		•	•	•		•					45	27	45	57	66	78	108	148	179
		•		•		•		•					60	36	60	76	89	104	144	198	238
2-1/2	•	•		•	•	•		•					70	42	70	89	103	122	168	230	278
		•		•		•		•					90	54	90	114	133	157	215	296	357
3	•	•		•	•	•		•					110	66	110	139	162	191	263	362	436
		•		•		•		•					140	84	140	177	207	244	335	461	555
4	•	•	•		•	•	•		•	•	•		160	97	160	202	236	278	383	527	635
	•	•		•	•	•		•	•	•		•	190	115	190	240	281	331	455	625	754
		•		•		•		•		•		•	250	151	250	316	369	435	598	823	992
5	•	•	•		•	•	•		•	•	•		250	151	250	316	369	435	598	823	992
	•	•		•	•	•		•	•	•		•	280	169	280	354	413	487	670	922	1111
		•		•		•		•		•		•	380	229	380	481	561	661	909	1251	1508
6	•	•	•		•	•	•		•	•	•		360	217	360	455	532	626	862	1185	1428
	•	•		•	•	•		•	•	•		•	400	241	400	506	591	696	957	1317	1587
		•		•		•		•		•		•	560	338	560	708	827	974	1340	1844	2222
8	•	•	•		•	•	•		•	•	•		650	392	650	822	960	1131	1556	2140	2579
	•	•		•	•	•		•	•	•		•	750	452	750	949	1107	1305	1795	2469	2975
		•		•		•		•		•		•	850	513	850	1075	1255	1479	2034	2798	3372
				•				•				•	1000	603	1000	1265	1477	1740	2393	3292	3967
12											•		1400	845	1400	1771	2067	2436	3351	4609	5554
												•	1600	965	1600	2024	2363	2784	3829	5267	6347
												•	1700	1026	1700	2150	2510	2958	4069	5597	6744
												•	1800	1086	1800	2277	2658	3132	4308	5926	7141
												•	2000	1207	2000	2530	2953	3480	4787	6584	7934
												•	2200	1327	2200	2783	3249	3828	5265	7243	8728

For orifice information, contact your sales engineer.
Highlighted column shows the rated pressure.



DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	D (Dia.) (in.)	Net Weight (oz.)
	R (F)	2	4.438	2.938	48
		2-1/2	5.469	3.469	88
		3	6.500	4.125	7.5 lbs.
		4	8.125	5.000	13.5 lbs.
		5	10.031	6.375	33 lbs.
		6	11.813	7.625	38.5 lbs.
		8	15.313	9.500	75 lbs.
	RR (M)	2	3.250	2.375	32
		2-1/2	4.000	2.875	84
		3	4.875	3.500	92
		4	6.500	4.500	10 lbs.
		5	8.313	5.563	25 lbs.
		6	9.750	6.625	29 lbs.
		8	13.000	8.625	56 lbs.
	RF (Flange)	4	6.563	8.875	23 lbs.
		5	8.813	9.875	39 lbs.
		6	9.813	10.875	45 lbs.
		8	13.000	13.375	85 lbs.
		12	19.500	19.000	201 lbs.

Based on the largest/heaviest version of each type.

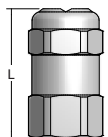
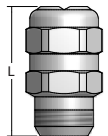
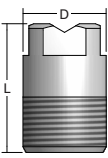


**PERFORMANCE DATA
G-SQ, GG-SQ AND HH-SQ FULLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type			Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)									Spray Angle (°)		
	G-SQ	GG-SQ	HH-SQ				5 psi	7 psi	10 psi	20 psi	40 psi	80 psi	100 psi	150 psi	7 psi	20 psi	80 psi	
1/8	●	●	●	3.6SQ	.063	.050	.26	.31	.36	.50	.68	.94	1.0	1.3	40	52	47	
	●	●	●	4.8SQ	.078	.050	.35	.41	.48	.66	.91	1.2	1.4	1.7	48	63	57	
	●	●	●	6SQ	.094	.050	.44	.51	.60	.83	1.1	1.6	1.7	2.1	60	66	60	
1/4	●	●	●	10SQ	.109	.063	.73	.85	1.0	1.4	1.9	2.6	2.9	3.5	62	67	61	
	●	●	●	12SQ	.125	.063	.87	1.0	1.2	1.7	2.3	3.1	3.5	4.2	70	75	68	
			●	14.5SQ	.154	.063	1.1	1.2	1.5	2.0	2.7	3.8	4.2	5.0	78	82	75	
3/8	●	●	●	18SQ	.156	.094	1.3	1.5	1.8	2.5	3.4	4.7	5.2	6.3	71	75	68	
1/2	●	●	●	29SQ	.219	.125	2.1	2.5	2.9	4.0	5.5	7.5	8.4	10.1	71	75	68	
			●	36SQ	.250	.125	2.6	3.1	3.6	5.0	6.8	9.4	10.4	12.5	78	82	75	
3/4			●	50SQ	.266	.172	3.6	4.2	5.0	6.9	9.5	13.0	14.4	17.4	71	75	68	
1			●	106SQ	.391	.219	7.7	9.0	10.6	14.6	20	28	31	37	78	80	73	

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.)	D (Dia.) (in.)	Net Weight (oz.)
	G-SQ (F)	1/8	1.124	9/16	—	.9
		1/4	1.342	11/16	—	1.6
	GG-SQ (M)	1/8	1.187	9/16	—	.1
		1/4	1.436	11/16	—	.1
	HH-SQ (M)	1/8	.875	—	.500	.5
		1/4	.875	—	.531	.5
		3/8	.938	—	.656	.8
		1/2	1.131	—	.813	1.7
		3/4	1.531	—	1.063	3.6
		1	2.031	—	1.313	1.4

Based on the largest/heaviest version of each type.



PERFORMANCE DATA
TG UNIJET® SPRAY TIPS

Body Inlet Conn. (in.)	Tip Type	Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)								Spray Angle (°)		
	TG				5 psi	7 psi	10 psi	20 psi	40 psi	80 psi	100 psi	150 psi	7 psi	20 psi	80 psi
1/4	●	.3	.020	.016	–	–	–	.041	.057	.078	.087	.10	–	50	61
	●	.4	.022	.018	–	–	–	.055	.076	.10	.12	.14	–	56	63
	●	.5	.024	.020	–	–	–	.069	.095	.13	.14	.17	–	56	63
	●	.6	.027	.020	–	–	–	.083	.11	.16	.17	.21	–	54	62
	●	.7	.030	.020	–	–	–	.096	.13	.18	.20	.24	–	54	63
	●	1	.036	.025	–	–	.10	.14	.19	.26	.29	.35	–	58	53
	●	2	.047	.040	.15	.17	.20	.28	.38	.52	.58	.70	43	50	46
	●	3	.062	.040	.22	.25	.30	.41	.57	.78	.87	1.0	52	65	59
	●	3.5	.067	.050	.25	.30	.35	.48	.66	.91	1.0	1.2	43	50	46
	●	5	.082	.050	.36	.42	.50	.69	.95	1.3	1.4	1.7	52	65	59
	●	6.5	.094	.063	.47	.55	.65	.89	1.2	1.7	1.9	2.3	45	50	46
●	10	.109	.063	.73	.85	1.0	1.4	1.9	2.6	2.9	3.5	58	67	61	

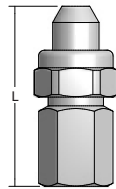
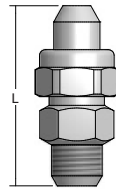
Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging. Other body sizes may be available. Contact your sales engineer for further information. Highlighted column shows the rated pressure.

PERFORMANCE DATA:
TG-SQ UNIJET SPRAY TIPS

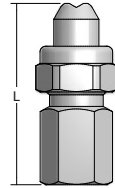
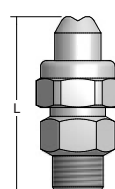
Body Inlet Conn. (in.)	Tip Type	Capacity Size	Orifice Dia. Nom. (in.)	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)								Spray Angle (°)		
	TG-SQ				5 psi	7 psi	10 psi	20 psi	40 psi	80 psi	100 psi	150 psi	7 psi	20 psi	80 psi
1/4	●	6SQ	.094	.050	.44	.51	.60	.83	1.1	1.6	1.7	2.1	60	66	60
	●	8SQ	.099	.050	.58	.68	.80	1.1	1.5	2.1	2.3	2.8	70	75	68
	●	10SQ	.109	.063	.73	.85	1.0	1.4	1.9	2.6	2.9	3.5	62	66	60
	●	12SQ	.125	.063	.87	1.0	1.2	1.7	2.3	3.1	3.5	4.2	70	75	68
3/8	●	18SQ	.156	.094	1.3	1.5	1.8	2.5	3.4	4.7	5.2	6.3	71	75	68

Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging. Other body sizes may be available. Contact your sales engineer for further information. Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Net Weight (oz.)
	T (F) + TG	1/4	1.844	13/16	2.3
	TT (M) + TG	1/4	1.844	13/16	2.1

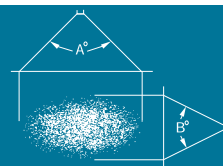
Based on the largest/heaviest version of each type. Additional sizes are available.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	Net Weight (oz.)
	T (F) + TG-SQ TT (M) + TG-SQ	1/4	2.281	13/16	1.7
		3/8	2.288	13/16	2.1

Based on the largest/heaviest version of each type. Additional sizes are available.



PERFORMANCE DATA
G-VL, GG-VL AND HH-VL FULLJET® NOZZLES



Inlet Conn. (in.)	Nozzle Type			Capacity Size	Max. Free Passage Dia. (in.)	Flow Rate Capacity (gallons per minute)							Spray Angle (°)							
						15 psi	30 psi	40 psi	60 psi	80 psi	100 psi	150 psi	15 psi		40 psi		100 psi		150 psi	
	A	B	A										B	A	B	A	B			
3/8	●	●	●	4.9VL	.040	.59	.81	.93	1.1	1.3	1.4	1.7	104	66	90	60	86	52	83	47
	●	●	●	6.5VL	.050	.78	1.1	1.2	1.5	1.7	1.9	2.3	106	64	95	60	85	50	81	45
	●	●	●	8.1VL	.050	.98	1.3	1.5	1.8	2.1	2.3	2.8	102	64	100	65	84	50	80	45
	●	●	●	9.2VL	.050	1.1	1.5	1.7	2.1	2.4	2.7	3.2	103	65	100	65	86	51	81	46

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

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	D (Dia.) (in.)	Net Weight (oz.)
	G-VL (F)	3/8	1.500	13/16	2.250	2.3
	GG-VL (M)	3/8	1.500	13/16	2.250	1.9
	HH-VL (M)	1/2	1.77	7/8	-	2.7

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
AX AND BX WHIRLJET® NOZZLES

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
1/4	●	●	1	.063	.063	–	–	.10	.12	.14	.17	.20	.24	.28	.32	47	53	67
	●	●	2	.078	.078	–	–	.20	.24	.28	.35	.40	.49	.57	.63	56	62	71
	●	●	3	.094	.094	–	.21	.30	.37	.42	.52	.60	.73	.85	.95	51	65	78
	●	●	5	.141	.141	.27	.35	.50	.61	.71	.87	1.0	1.2	1.4	1.6	63	73	79
	●	●	8	.156	.156	.44	.57	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	61	69	73
	●	●	10	.188	.172	.55	.71	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	63	70	74
	●	●	15	.234	.203	.82	1.1	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	63	71	72
3/8	●	●	5	.140	.125	.27	.35	.50	.61	.71	.87	1.0	1.2	1.4	1.6	64	73	79
	●	●	8	.172	.156	.44	.57	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	62	70	74
	●	●	10	.203	.172	.55	.71	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	64	72	75
	●	●	15	.234	.219	.82	1.1	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	64	72	74
	●	●	20	.281	.250	1.1	1.4	2.0	2.4	2.8	3.5	4.0	4.9	5.7	6.3	63	70	74
	●	●	25	.297	.297	1.4	1.8	2.5	3.1	3.5	4.3	5.0	6.1	7.1	7.9	63	70	74
	●	●	30	.328	.313	1.6	2.1	3.0	3.7	4.2	5.2	6.0	7.3	8.5	9.5	63	70	74
1/2	●	●	25	.375	.250	1.4	1.8	2.5	3.1	3.5	4.3	5.0	6.1	7.1	7.9	63	66	71
	●	●	30	.375	.297	1.6	2.1	3.0	3.7	4.2	5.2	6.0	7.3	8.5	9.5	67	71	75
	●	●	40	.375	.359	2.2	2.8	4.0	4.9	5.7	6.9	8.0	9.8	11.3	12.6	72	76	78
	●	●	50	.375	.438	2.7	3.5	5.0	6.1	7.1	8.7	10.0	12.2	14.1	15.8	74	79	82
	●	●	60	.375	.516	3.3	4.2	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	77	82	86
3/4	●	●	40	.500	.297	2.2	2.8	4.0	4.9	5.7	6.9	8.0	9.8	11.3	12.6	70	73	74
	●	●	50	.500	.344	2.7	3.5	5.0	6.1	7.1	8.7	10.0	12.2	14.1	15.8	72	75	77
	●	●	60	.500	.406	3.3	4.2	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	74	76	79
	●	●	70	.500	.469	3.8	4.9	7.0	8.6	9.9	12.1	14.0	17.1	19.8	22	76	79	83
	●	●	80	.500	.531	4.4	5.7	8.0	9.8	11.3	13.9	16.0	19.6	23	25	78	82	84
	●	●	90	.500	.578	4.9	6.4	9.0	11.0	12.7	15.6	18.0	22	25	28	81	84	84
	●	●	100	.500	.625	5.5	7.1	10.0	12.2	14.1	17.3	20	24	28	32	83	86	86
	●	●	110	.500	.672	6.0	7.8	11.0	13.5	15.6	19.1	22	27	31	35	85	88	88
	●	●	120	.500	.719	6.6	8.5	12.0	14.7	17.0	21	24	29	34	38	87	90	90

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.



PERFORMANCE DATA

ENGLISH UNITS
HOLLOW CONE NOZZLES

ENGLISH UNITS

PERFORMANCE DATA
CX WHIRLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type CX	Capacity Size	Inlet Dia. Nom. (in.)	Orifice Dia. Nom. (in.)	Flow Rate Capacity (gallons per minute)												Spray Angle (°)		
					3 psi	4 psi	5 psi	7 psi	10 psi	15 psi	20 psi	30 psi	40 psi	60 psi	80 psi	100 psi	7 psi	20 psi	60 psi
1	●	7	.688	.453	4.6	5.3	5.9	7.0	8.4	10.2	11.8	14.5	16.7	20	24	26	64	65	66
	●	8	.688	.500	5.2	6.0	6.8	8.0	9.6	11.7	13.5	16.6	19.1	23	27	30	65	66	67
	●	9	.688	.563	5.9	6.8	7.6	9.0	10.8	13.2	15.2	18.6	22	26	30	34	66	67	69
	●	10	.688	.609	6.5	7.6	8.5	10.0	12.0	14.6	16.9	21	24	29	34	38	67	69	71
	●	12	.688	.672	7.9	9.1	10.1	12.0	14.3	17.6	20	25	29	35	41	45	70	73	75
	●	15	.688	.813	9.8	11.3	12.7	15.0	17.9	22	25	31	36	44	51	57	76	79	81
1-1/4	●	10	.844	.563	6.5	7.6	8.5	10.0	12.0	14.6	16.9	21	24	29	34	38	65	67	67
	●	12	.844	.641	7.9	9.1	10.1	12.0	14.3	17.6	20	25	29	35	41	45	68	70	71
	●	14	.844	.719	9.2	10.6	11.8	14.0	16.7	20	24	29	33	41	47	53	71	73	75
	●	16	.844	.797	10.5	12.1	13.5	16.0	19.1	23	27	33	38	47	54	60	74	75	77
	●	20	.844	.953	13.1	15.1	16.9	20	24	29	34	41	48	59	68	76	76	77	79
1-1/2	●	16	1.094	.688	10.5	12.1	13.5	16.0	19.1	23	27	33	38	47	54	60	64	67	69
	●	20	1.094	.859	13.1	15.1	16.9	20	24	29	34	41	48	59	68	76	69	72	74
	●	25	1.094	1.016	16.4	18.9	21	25	30	37	42	52	60	73	85	94	72	74	76
	●	30	1.094	1.125	19.6	23	25	30	36	44	51	62	72	88	101	113	74	76	78
2	●	30	1.438	.938	19.6	23	25	30	36	44	51	62	72	88	101	113	66	67	70
	●	35	1.438	1.063	23	26	30	35	42	51	59	72	84	102	118	132	68	70	73
	●	40	1.438	1.188	26	30	34	40	48	59	68	83	96	117	135	151	70	72	75
	●	45	1.438	1.297	29	34	38	45	54	66	76	93	108	132	152	170	72	74	78
	●	50	1.438	1.422	33	38	42	50	60	73	85	104	120	146	169	189	74	77	82
	●	60	1.438	1.563	39	45	51	60	72	88	101	124	143	176	203	227	77	79	84
2-1/2	●	60	1.875	1.422	39	45	51	60	72	88	101	124	143	176	203	227	67	68	71
	●	70	1.875	1.594	46	53	59	70	84	102	118	145	167	205	237	265	69	71	74
	●	80	1.875	1.734	52	60	68	80	96	117	135	166	191	234	270	302	71	73	77
	●	90	1.875	1.875	59	68	76	90	108	132	152	186	215	263	304	340	73	75	80
	●	100	1.875	2.000	65	76	85	100	120	146	169	207	239	293	338	378	77	79	83

Highlighted column shows the rated pressure.



**PERFORMANCE DATA
CF WHIRLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type	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	60 psi
4	●	150	3.125	2.000	98	127	150	179	254	311	359	439	507	567	66	67	70
	●	175	3.125	2.328	115	148	175	209	296	362	418	512	592	661	68	70	71
	●	200	3.125	2.688	131	169	200	239	338	414	478	586	676	756	70	72	74
	●	225	3.125	2.938	147	190	225	269	380	466	538	659	761	850	72	74	77
	●	250	3.125	3.250	164	211	250	299	423	518	598	732	845	945	74	76	81
	●	275	3.125	3.625	180	232	275	329	465	569	657	805	930	1039	78	80	83
	●	150-45	3.125	2.000	98	127	150	179	254	311	359	439	507	567	45	49	52
	●	175-45	3.125	2.328	115	148	175	209	296	362	418	512	592	661	45	49	51
	●	200-45	3.125	2.688	131	169	200	239	338	414	478	586	676	756	45	48	51
	●	225-45	3.125	2.938	147	190	225	269	380	466	538	659	761	850	45	48	50
	●	250-45	3.125	3.250	164	211	250	299	423	518	598	732	845	945	45	47	49
6	●	250	4.875	2.453	164	211	250	299	423	518	598	732	845	945	65	67	69
	●	300	4.875	2.750	196	254	300	359	507	621	717	878	1014	1134	66	68	70
	●	350	4.875	3.000	229	296	350	418	592	725	837	1025	1183	1323	68	70	72
	●	400	4.875	3.250	262	338	400	478	676	828	956	1171	1352	1512	70	73	75
	●	450	4.875	3.469	295	380	450	538	761	932	1076	1317	1521	1701	72	75	77
	●	500	4.875	3.828	327	423	500	598	845	1035	1195	1464	1690	1890	74	76	79
	●	550	4.875	4.266	360	465	550	657	930	1139	1315	1610	1859	2079	76	79	83
	●	625	4.875	5.125	409	528	625	747	1056	1294	1494	1830	2113	2362	78	81	86
	●	440-65	4.875	3.469	288	372	440	526	744	911	1052	1288	1487	1663	60	61	62
	●	550-65	4.875	4.266	360	465	550	657	930	1139	1315	1610	1859	2079	64	65	66
	●	625-65	4.875	5.125	409	528	625	747	1056	1294	1494	1830	2113	2362	65	66	67

Highlighted column shows the rated pressure.

**PERFORMANCE DATA
E WHIRLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type	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	15 psi	20 psi	30 psi	40 psi	60 psi	80 psi	100 psi	7 psi	20 psi	80 psi
1/4	●	2	.063	.250	—	—	—	.20	.24	.28	.35	.40	.49	.63	—	165	158	
	●	5	.094	.250	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	164	154	147
	●	5.8	.109	.250	.32	.41	.49	.58	.71	.82	1.0	1.2	1.4	1.6	1.8	164	154	147
	●	8	.125	.313	.44	.57	.67	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	164	160	151
	●	10	.141	.313	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	164	154	147
3/8	●	8	.109	.484	.44	.57	.67	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	164	160	157
	●	10	.125	.484	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	164	160	157
	●	15	.172	.484	.82	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	165	163	155
	●	20	.203	.484	1.1	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.9	5.7	6.3	162	152	147
	●	25	.234	.484	1.4	1.8	2.1	2.5	3.1	3.5	4.3	5.0	6.1	7.1	7.9	162	158	154
	●	33	.266	.641	1.8	2.3	2.8	3.3	4.0	4.7	5.7	6.6	8.1	9.3	10.4	162	154	148
1/2	●	53	.375	.641	2.9	3.7	4.4	5.3	6.5	7.5	9.2	10.6	13.0	15.0	16.8	159	152	149
	●	25	.219	.641	1.4	1.8	2.1	2.5	3.1	3.5	4.3	5.0	6.1	7.1	7.9	162	158	154
	●	30	.250	.641	1.6	2.1	2.5	3.0	3.7	4.2	5.2	6.0	7.3	8.5	9.5	163	155	148
	●	40	.297	.641	2.2	2.8	3.3	4.0	4.9	5.7	6.9	8.0	9.8	11.3	12.6	160	152	144
●	53	.375	.641	2.9	3.7	4.4	5.3	6.5	7.5	9.2	10.6	13.0	15.0	16.8	159	152	149	

Highlighted column shows the rated pressure.

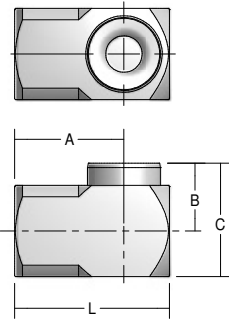
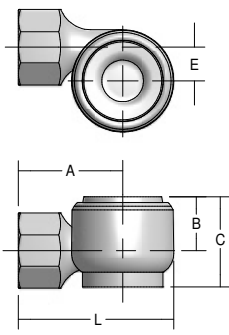


DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	A (in.)	B (in.)	C (in.)	E (in.)	Net Weight (oz.)
	AX (F)	1/8	1.000	.688	.469	.781	–	1.5
		1/4	1.250	.875	.531	.906	–	2.8
		3/8	1.469	1.031	.688	1.125	–	4.3
		1/2	1.938	1.375	.844	1.565	–	8.8
		3/4	2.188	1.375	1.563	1.250	–	11
	BX (M)	1/8	1.188	.875	.652	1.375	–	1.5
		1/4	1.375	1.000	.531	1.563	–	2.5
		3/8	1.563	1.125	.688	1.563	–	4
		1/2	1.938	1.375	.844	1.938	–	7
		3/4	2.250	1.625	1.563	1.250	–	10.8
	CX (F)	1	2.625	1.750	1.250	1.844	.348	11
		1-1/4	3.063	2.063	1.313	1.188	.438	20
		1-1/2	3.688	2.438	1.500	2.875	.563	28
		2	4.531	3.688	2.109	3.688	.719	48
		2-1/2	5.531	3.500	2.688	4.500	.469	68
	CF (Flange)	4	8.250	4.406	9.250	12.375	1.563	114 lbs.
		6	12.250	6.875	8.688	13.313	2.438	126 lbs.

Based on the largest/heaviest version of each type.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	A (in.)	B (in.)	C (in.)	E (in.)	Net Weight (oz.)
	E (F)	1/4	1.250	.875	.500	.750	–	2.3
		3/8	2.000	1.375	.625	1.250	–	10.7
		1/2	2.375	1.625	.766	1.625	–	17.3
	E (F) Cast	3/8	1.406	1.219	.594	1.063	.375	4.3
		1/2	2.188	1.438	.688	1.250	.500	6

Based on the largest/heaviest version of each type.

ENGLISH UNITS

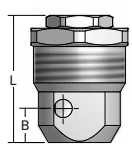


PERFORMANCE DATA
BD WHIRLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type BD	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	15 psi	20 psi	30 psi	40 psi	60 psi	80 psi	100 psi	7 psi	20 psi	80 psi
3/8	●	2	.094	.078	.11	.14	.17	.20	.24	.28	.35	.40	.49	.57	.63	51	60	70
	●	3	.094	.094	.16	.21	.25	.30	.37	.42	.52	.60	.73	.85	.95	52	64	77
	●	5	.109	.125	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	56	67	76
	●	8	.156	.156	.44	.57	.67	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	56	65	70
	●	10	.156	.172	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	55	65	72
	●	20-10	.156*	.172	–	4.0	1.1	1.4	1.7	1.9	2.4	2.7	3.3	3.8	4.3	61	65	67
1/2	●	5	.125	.141	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	63	73	79
	●	8	.156	.156	.44	.57	.67	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	61	69	73
	●	10	.172	.172	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	63	70	74
	●	15	.172*	.203	.82	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	60	67	70
	●	20	.188*	.234	1.1	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.9	5.7	6.3	63	65	69
	●	25	.203*	.281	1.4	1.8	2.1	2.5	3.1	3.5	4.3	5.0	6.1	7.1	7.9	59	63	68
3/4	●	5	.141	.125	.27	.35	.42	.50	.61	.71	.87	1.0	1.2	1.4	1.6	64	73	79
	●	8	.172	.156	.44	.57	.67	.80	.98	1.1	1.4	1.6	2.0	2.3	2.5	62	70	74
	●	10	.203	.172	.55	.71	.84	1.0	1.2	1.4	1.7	2.0	2.4	2.8	3.2	64	72	75
	●	15	.250	.219	.82	1.1	1.3	1.5	1.8	2.1	2.6	3.0	3.7	4.2	4.7	64	72	74
	●	20	.281	.250	1.1	1.4	1.7	2.0	2.4	2.8	3.5	4.0	4.9	5.7	6.3	63	70	74
	●	25	.281	.297	1.4	1.8	2.1	2.5	3.1	3.5	4.3	5.0	6.1	7.1	7.9	63	70	74
	●	50-50.3	.281*	.375	2.7	3.5	4.2	5.0	6.0	7.0	8.5	10.0	12.2	14.1	15.8	70	72	73
1-1/2	●	40	.375*	.313	2.2	2.8	3.3	4.0	4.9	5.7	6.9	8.0	9.8	11.3	12.6	70	73	74
	●	50	.375*	.375	2.7	3.5	4.2	5.0	6.1	7.1	8.7	10.0	12.2	14.1	15.8	72	75	77
	●	60	.375*	.438	3.3	4.2	5.0	6.0	7.3	8.5	10.4	12.0	14.7	17.0	19.0	74	76	79
	●	70	.375*	.500	3.8	4.9	5.9	7.0	8.6	9.9	12.1	14.0	17.1	19.8	22	76	79	83
	●	80	.375*	.563	4.4	5.7	6.7	8.0	9.8	11.3	13.9	16.0	19.6	23	25	78	82	84
	●	90	.375*	.578	4.9	6.4	7.5	9.0	11.0	12.7	15.6	18.0	22	25	28	81	84	84
	●	100	.375*	.625	5.5	7.1	8.4	10.0	12.2	14.1	17.3	20	24	28	32	83	86	86
	●	110	.375*	.672	6.0	7.8	9.2	11.0	13.5	15.6	19.1	22	27	31	35	85	88	88
	●	120	.375*	.719	6.6	8.5	10.0	12.0	14.7	17.0	21	24	29	34	38	87	90	90

*Dual inlets, each in diameter specified.
Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. (in.)	B (in.)	Net Weight (oz.)
	BD (M)	3/8	1.250	11/16	.266	1
		1/2	1.469	7/8	.311	2
		3/4	1.750	1-1/16	.375	4
		1-1/2	2.625	2	.311	21

Based on the largest/heaviest version of each type.

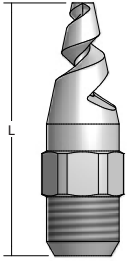


**PERFORMANCE DATA
BSJ SPIRALJET® NOZZLES**

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)					
		BSJ	50°	60°	90°	120°				180°	5 psi	10 psi	20 psi	40 psi	100 psi
1/4	●	●	●	●	●	●	07	.094	.094	.49	.70	.99	1.4	2.2	4.4
	●	●	●	●	●	●	13	.125	.125	.92	1.3	1.8	2.6	4.1	8.2
	●	●	●	●	●	●	20	.156	.125	1.4	2.0	2.8	4.0	6.3	12.6
3/8	●	●	●	●	●	●	30	.188	.125	2.1	3.0	4.2	6.0	9.5	19.0
	●	●	●	●	●	●	40	.219	.125	2.8	4.0	5.7	8.0	12.6	25
	●	●	●	●	●	●	53	.250	.125	3.7	5.3	7.5	10.6	16.8	34
	●	●	●	●	●	●	82	.313	.125	5.8	8.2	11.6	16.4	26	52
1/2	●	●	●	●	●	●	120	.375	.188	8.5	12.0	17.0	24	38	76
	●	●	●	●	●	●	164	.438	.188	11.6	16.4	23	33	52	104
3/4	●	●	●	●	●	●	210	.500	.188	14.8	21	30	42	66	133
1	●	●	●	●	●	●	340	.625	.250	24	34	48	68	108	215
	●	●	●	●	●	●	470	.750	.250	33	47	66	94	149	297
1-1/2	●	●	●	●	●	●	640	.875	.313	45	64	91	128	202	405
	●	●	●	●	●	●	820	1.000	.313	58	82	116	164	259	519
	●	●	●	●	●	●	960	1.125	.313	68	96	136	192	304	607
2	●	●	●	●	●	●	1400	1.375	.438	99	140	198	280	443	885
	●	●	●	●	●	●	1780	1.500	.438	126	178	252	356	563	1126
3	●	●	●	●	●	●	2560	1.750	.563	181	256	362	512	810	1619
	●	●	●	●	●	●	3360	2.000	.563	238	336	475	672	1063	2125
4	●	●	●	●	●	●	5250	2.500	.625	371	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. For all 1/4" and 3/8" connections, optimum spray angle is achieved at 40 psi (2.8 bar).
 *Maximum operating pressure depends on material, size and application. Contact your local sales engineer for specific recommendations.
 Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Hex. / flats (in.)	Net Weight (oz.)
	BSJ (M)	1/4	1.875	9/16	1
		3/8	1.875	11/16	1.8
		1/2	2.500	7/8	3
		3/4	2.750	1-1/16	5
		1	3.625	1-3/8	11
		1-1/2	4.375	2	27
		2	6.875	2-1/2	48
		3	8.000	3-3/4	8 lbs.
		4	9.000	4-1/2	12.5 lbs.

Based on the largest/heaviest version of each type.


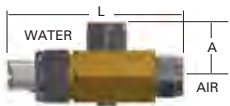
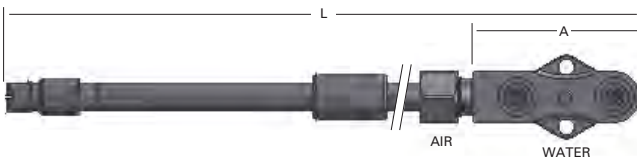


PERFORMANCE DATA

FLAT SPRAY: 50070, 50085, 56780 AND 64010 NCJ CASTERJET® NOZZLES

Capacity Code	Assembly No.				Water 7 bar (lpm)	Air 3 bar (Nm³/h)	Spray Angle
	50070	50085	64010	56780			
2	•		•	•	7.6	7.9	60° to 135°
2.5	•		•	•	9.5	9.0	
3	•				11.4	9.6	
3.5	•				13.2	15.7	
3.7	•		•	•	14.0	13.6	
4	•		•	•	15.1	15.9	
5	•				18.9	16.4	
5.7	•				21.6	20.4	
6.3	•				23.8	23.8	
6.5	•		•	•	24.6	24.9	
7			•	•	26.5	26.2	
8		•			30.3	28.9	
9		•			34.1	42.1	
10		•			37.9	38.0	
10.5		•			39.7	36.1	
12		•			45.4	36.9	

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Inlet Conn. (in.)	Water Inlet Conn. (in.)	L (mm)	A (mm)
	50070	3/8 (F)	3/8 (F)	150 min.	34.6
	50085	1/2 (F)	1/2 (F)	170 min.	39.4
	64010	3/8 (F)	3/8 (F)	98	29.9
	56780	3/8 (F)	3/8 (F)	225 min.	147.3

Length varies; other sizes are available. Available with NPT or BSPT threads unless otherwise noted.

PERFORMANCE DATA
FLAT SPRAY: D40208 CASTERJET® NOZZLES

Capacity Code	Assembly No.	Water 7 bar (lpm)	Air 3 bar (Nm³/h)	Spray Angle
	D40208			
480	•	4.9	12.8	30° to 140°
490	•	5.1	8.4	
520	•	7.0	8.4	
530	•	8.4	6.6	
630	•	16.0	6.2	
640	•	14.1	6.3	
720	•	21.8	7.8	
770	•	27.5	12.0	
780	•	30.4	11.0	
850	•	39.0	11.6	

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (mm)	Water Conn. (mm)	L (mm)	W (mm)	A (mm)
	D40208	12	15	53.5	91	25

PERFORMANCE DATA
FLAT SPRAY: D41968 AND D41936 ANTI-PULSING CASTERJET® NOZZLES

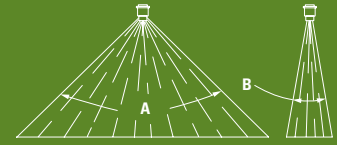
Capacity Code	Assembly No.		Water 7 bar (lpm)	Air 3 bar (Nm ³ /h)	Spray Angle
	D41968	D41936			
.7	•	•	3.0	1.3	40° to 120°
1.3	•		4.9	2.8	
1.7	•		6.4	1.8	
2	•	•	7.2	4.2	
2.5	•		8.8	6.5	
2.7	•		8.9	11.1	
3	•	•	11.7	5.2	
3.5	•		12.5	5.9	
4	•		14.0	8.0	
4.5	•		16.0	7.5	
5	•		18.7	9.5	
6	•		21.4	6.7	
7.5	•	•	26.0	6.2	
8	•		26.1	6.3	

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (mm)	Water Conn. (mm)	L (mm)	A (mm)
	D41968*	8	12	1089 min.	83
	D41936*	8	12	1385	50

* Length varies.

PERFORMANCE DATA
FLAT SPRAY: 23530-XT AND 58090-XT VEEJET® NOZZLES



Nozzle Type	Capacity Size	Flow Rate Capacity (liters per minute)							Spray Angle at 2.8 bar	
		1 bar	2 bar	2.8 bar	4 bar	6 bar	8 bar	10 bar	A	B
23530-XT	15	3.5	4.9	5.8	6.9	8.5	9.8	11.0	105°	30°
	10	2.3	3.3	3.9	4.7	5.7	6.6	7.4	110°	30°
	20	4.7	6.6	7.8	9.3	11.4	13.2	14.7	110°	30°
58090-XT	20	4.7	6.6	7.8	9.3	11.4	13.2	14.7	45°	30°
	20	4.7	6.6	7.8	9.3	11.4	13.2	14.7	85°	30°
	26	6.0	8.5	10.1	12.1	14.8	17.1	19.1	85°	30°
	10	8.3	11.7	13.9	16.6	20.3	23.5	26.3	110°	30°
	15	3.5	4.9	5.8	6.9	8.5	9.8	11.0	110°	30°
	20	4.7	6.6	7.8	9.3	11.4	13.2	14.7	110°	30°
	26	6.0	8.5	10.1	12.1	14.8	17.1	19.1	110°	30°
	40	9.3	13.1	15.5	18.5	22.7	26.2	29.3	110°	30°

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	D/flats (mm)
	58090-XT (M)	1/4	25.4	9/16	15.9
		3/8	31.7	11/16	19.1

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	D/flats (mm)
	23530-XT (M)	3/8	32.1	11/16	19.1

Based on the largest/heaviest version of each type.

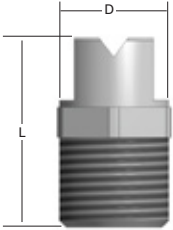


PERFORMANCE DATA
FLAT SPRAY: 56862 NOZZLES

Nozzle Type	Inlet Conn. (in.)	Flow Rate Capacity (gallons per minute)							Spray Angle at 2.8 bar
		1 bar	2 bar	2.8 bar	4 bar	6 bar	8 bar	10 bar	
56862	1/2	4.7	6.6	7.8	9.3	11.4	13.2	14.8	20°

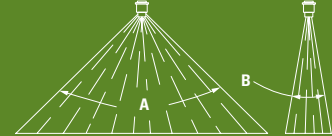
Dual heavy edge spray pattern enables each nozzle to cool two rolls.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	D/flats (mm)
	56862 (M)	1/2	38.1	7/8	15.9

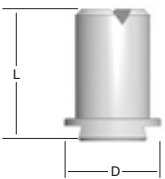
Based on the largest/heaviest version of each type.

PERFORMANCE DATA
FLAT SPRAY: 49784-XT VEEJET® SPRAY TIPS



Tip Type	Capacity Size	Flow Rate Capacity (liters per minute)						Spray Angle at 2.8 bar	
		2 bar	3 bar	4 bar	5.5 bar	7 bar	10 bar	A	B
•	20	6.44	7.89	9.11	11.16	12.05	14.41	65°, 80°	30°
•	30	9.66	11.83	13.66	16.73	18.07	21.60		
•	40	12.88	15.78	18.22	22.31	24.10	28.80		
•	50	16.11	19.73	22.78	27.90	30.13	36.02		
•	120	38.61	47.66	53.68	62.12	68.97	81.01	80°	

DIMENSIONS AND WEIGHTS

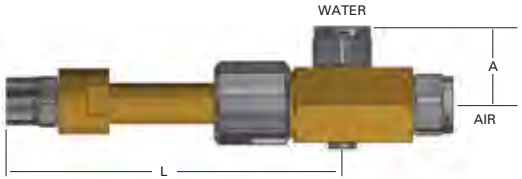
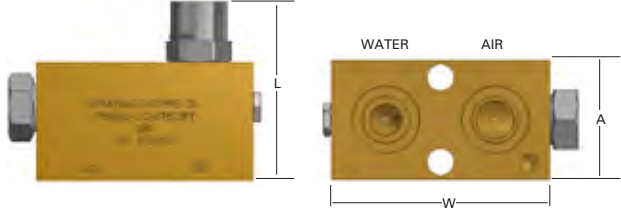
Spray Tip	Spray Tip Type	L (mm)	D (mm)
	49784-XT	38.10	17.78

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
FULL CONE: 58050 AND 58160 CASTERJET® NOZZLES

Capacity Code	Assembly No.		Water 7 bar (lpm)	Air 3 bar (Nm ³ /h)	Spray Angle
	58050	58160			
075	•	•	2.6	7.5	45°, 60°, 90°
090	•	•	3.4	7.5	
095	•	•	3.6	7.7	
210	•	•	7.9	16.1	

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (in.)	Water Conn. (in.)	L (mm)	A (mm)	W (mm)
	58050	1/4 (F)	1/4 (F)	100 min.	28.0	–
	58160	.39	.39	74.5	40	70

PERFORMANCE DATA

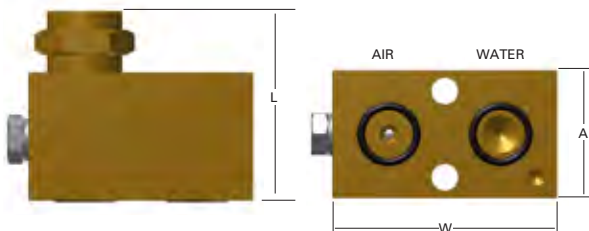
METRIC UNITS
CONTINUOUS CASTING NOZZLES

METRIC UNITS

PERFORMANCE DATA
FULL CONE: D40206 CASTERJET® NOZZLES

Capacity Code	Assembly No.	Water 7 bar (lpm)	Air 3 bar (Nm³/h)	Spray Angle
	D40206			
400	•	2.3	13.5	60° to 90°
440	•	2.6	14.0	
480	•	3.4	13.0	
510	•	4.5	10.8	
520	•	6.4	5.9	
530	•	7.0	6.0	
560	•	8.6	7.8	
640	•	14.4	13.0	

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (mm)	Water Conn. (mm)	L (mm)	W (mm)	A (mm)
	D40206*	10	12	59	70	40


* Other sizes are available.



PERFORMANCE DATA
FULL CONE: HHCC FULLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type	Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle at 3 bar
					.7 bar	1.5 bar	2 bar	3 bar	3.5 bar	4 bar	5 bar	5.5 bar	6 bar	7 bar	
1/4	●	6.5	2.1	1.7	2.5	3.4	4.2	4.9	5.3	5.7	6.1	6.4	6.8	7.2	68°
	●	8	2.2	1.8	3.0	4.2	4.9	5.7	6.4	6.8	7.6	7.9	8.3	8.7	
	●	10	2.5	1.9	3.8	5.3	6.4	7.2	8.3	9.1	9.5	10.2	6.6	11.4	74°
	●	12.5	2.7	2.2	4.7	6.4	7.9	9.1	10.2	11	11.7	12.5	13.2	14	
3/8	●	15	3.3	2.6	5.7	7.9	9.5	11	12.1	13.2	14	15.1	15.9	16.7	
1/2	●	20	2.8	2.9	7.6	10.6	12.9	14.4	16.3	17.4	18.9	20.1	21.2	22	74°
	●	25	3.0	3.0	9.5	13.2	15.9	18.2	20.1	22	23.5	25	26.5	27.6	
	●	32	4.3	2.8	12.1	17	20.4	23.1	25.7	28	29.9	31.8	33.7	35.6	

DIMENSIONS AND WEIGHTS


Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)
	HHCC (M)	1/4	22.2	9/16
		3/8	23.8	11/16
		1/2	29.4	7/8

NPT or BSPT threads.
Based on the largest/heaviest version of each type.

PERFORMANCE DATA
FULL CONE: HHX FULLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type	Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)		
					.5 bar	.7 bar	1.5 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	10 bar	.5 bar	1.5 bar	6 bar
1/4	●	5	1.95	1.3	1.6	1.9	2.7	3.1	3.7	4.2	4.7	5.1	5.5	6.5	60	65	61
	●	6.5	2.4	1.6	2.1	2.5	3.5	4.0	4.8	5.5	6.1	6.7	7.1	8.4	45	50	46
	●	8	2.8	1.2	2.6	3.0	4.3	4.9	6.0	6.8	7.5	8.2	8.8	10.4	68	80	76
	●	10	2.8	1.6	3.3	3.8	5.4	6.2	7.4	8.5	9.4	10.2	11.0	13.0	58	67	61
	●	12	3.2	1.6	3.9	4.6	6.5	7.4	8.9	10.2	11.3	12.3	13.2	15.5	71	81	72
	●	14.5	3.6	1.6	4.7	5.5	7.8	9.0	10.8	12.3	13.7	14.8	15.9	18.8	78	89	75
3/8	●	15	3.6	2.4	4.9	5.7	8.1	9.3	11.2	12.7	14.1	15.4	16.5	19.4	64	67	61
	●	18	4.0	2.4	5.9	6.9	9.7	11.1	13.4	15.3	16.9	18.4	19.8	23	77	86	73
	●	20	4.4	2.8	6.5	7.6	10.8	12.4	14.9	17.0	18.8	20	22	26	76	80	73
	●	22	4.8	2.8	7.2	8.4	11.9	13.6	16.4	18.7	21	23	24	28	87	90	82

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)
	HHX (M)	1/4	22.23	9/16
		3/8	23.83	11/16

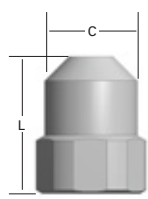
Based on the largest/heaviest version of each type.



PERFORMANCE DATA
FULL CONE: P45075 FULLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type P45075	Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)							Spray Angle at 1.4 bar
					.7 bar	1.4 bar	2 bar	2.8 bar	4 bar	5.5 bar	7 bar	
1/4	●	4	1.9	1.2	1.6	2.2	2.6	3.1	3.6	4.2	4.5	65°
	●	5.5	2.1	1.3	2.1	3.0	3.6	4.2	4.9	5.5	6.0	
	●	7.5	2.5	1.3	2.9	4.1	5.0	5.7	6.8	7.7	8.4	45°, 65°
3/8	●	3	1.5	1.0	1.0	1.5	1.8	2.1	2.3	2.7	3.0	65°
	●	3.5	1.7	1.2	1.3	1.8	2.2	2.5	3.0	3.5	3.8	
	●	4	1.8	1.2	1.6	2.2	2.6	3.1	3.6	4.2	4.5	
	●	5	2.1	1.6	1.7	2.5	3.0	3.5	4.3	4.9	5.5	
	●	5.5	2.1	1.3	2.1	3.0	3.6	4.2	4.9	5.5	6.0	
	●	7	2.4	1.3	2.7	3.6	4.6	4.9	6.1	6.8	7.6	45° or 65°
	●	8.5	2.6	1.6	3.2	4.6	5.6	6.4	7.5	8.5	9.3	65°
	●	10	2.8	1.6	3.6	5.1	6.1	7.0	8.7	9.4	10.3	45°, 65°
	●	11	2.85	1.6	4.2	5.8	6.8	7.9	9.4	10.8	12.1	
	●	14	3.5	2.4	5.4	7.6	9.1	10.2	12.5	14.0	15.5	60°
	●	22	4.2	3.0	8.2	11.4	13.2	14.9	17.4	19.5	22	60°, 90°
	●	7W	2.2	1.3	2.7	3.4	3.9	4.3	5.0	5.6	6.2	120°

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	C (mm)	Net Weight (kg)
	P45075 (F)	1/4	28	13/16	19	.05
		3/8	26.5	7/8	21	.05

Based on the largest/heaviest version of each type.

PERFORMANCE DATA

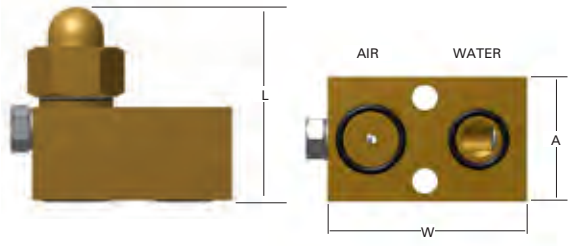
METRIC UNITS
CONTINUOUS CASTING NOZZLES

METRIC UNITS

PERFORMANCE DATA
RECTANGULAR SPRAY: D41502 CASTERJET® NOZZLES

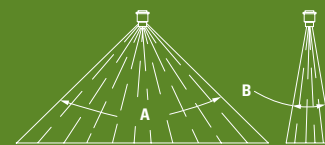
Capacity Code	Assembly No.	Water 7 bar (lpm)	Air 3 bar (Nm³/h)	Spray Angle
	D41502			
450	•	3.0	8.3	70° to 120°
510	•	4.6	13.5	
520	•	4.7	5.2	
540	•	7.4	8.3	
600	•	10.7	7.4	
610	•	12.1	6.4	

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (mm)	Water Conn. (mm)	L (mm)	W (mm)	A (mm)
	D41502*	12	15	53	64	40

* Other sizes are available.

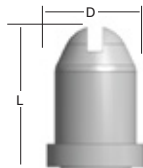
PERFORMANCE DATA
RECTANGULAR SPRAY: 25381 AND D41828 SPRAY TIPS



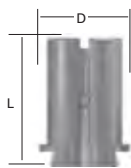
METRIC UNITS

Nozzle Type		Capacity Size	Flow Rate Capacity (liters per minute)					Spray Angle at 3 bar	
25381	D41828		2 bar	3 bar	5 bar	7 bar	14 bar	A	B
•	•	6	1.7	2.3	2.8	3.3	4.9	90° 70°	20°
•	•	8	2.2	3.0	3.7	4.5	6.1	90° 70°	20°
•	•	9	2.5	3.4	4.5	6.1	6.6	90° 70°	20°
•	•	13	3.5	4.9	6.4	7.0	9.1	90° 70° 70°	20° 30° 20°
•	•	14	4.2	5.7	6.8	7.9	11.0	90° 70° 70°	20° 30° 20°
•	•	19	5.3	6.8	9.5	10.6	14.8	90° 70°	20°
•	•	21	6.1	7.9	10.2	12.11	17.0	90° 70° 70°	20° 30° 20°
•	•	28	7.2	9.8	13.6	15.9	22.3	90° 70° 70°	20° 30° 20°
•	•	35	9.5	13.2	17.0	19.7	27.3	90° 70° 70°	20° 30° 20°
•	•	46	12.9	17.4	22.3	26.1	34.1	90° 70° 70°	20° 30° 20°
•	•	61	17.0	23.1	29.9	34.1	47.3	90° 70° 70°	20° 30° 20°
•	•	100	27.6	37.9	53.0	58.7	76.1	90° 70° 70°	20° 30° 20°

DIMENSIONS AND WEIGHTS

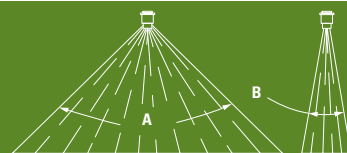
Nozzle	Nozzle Type	L (mm)	D (mm)	Net Weight (kg)
	25381	35	24	.059

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	L (mm)	D (mm)	Net Weight (kg)
	D41828	34	20	.090

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
RECTANGULAR SPRAY: D41539 SPRAY TIPS



Spray Tip Type	Capacity Size	Flow Rate Capacity (liters per minute)						Spray Angle at 2.8 bar	
		1 bar	2 bar	2.8 bar	4 bar	8 bar	10 bar	A	B
D41539									
•	6	3.6	5.1	6.0	7.2	10.1	11.3	80°	24°
•	8	4.8	6.8	8.0	9.6	13.5	15.1		
•	12	7.2	10.1	12.0	14.3	20.3	22.7		
•	18	10.8	15.2	18.0	21.5	30.4	34.0		32°

DIMENSIONS AND WEIGHTS

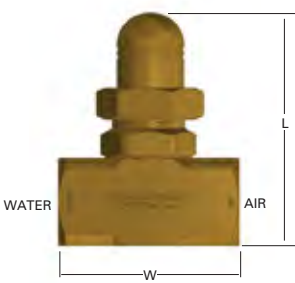
Nozzle	Spray Tip Type	L (mm)	D1 (mm)	D2 (mm)	D3 (mm)
<p>The technical drawing shows a cylindrical nozzle with a central spray tip. Dimension D1 is the diameter of the spray tip, D2 is the diameter of the nozzle body, D3 is the diameter of the nozzle body at the top, and L is the length of the nozzle body.</p>	D41539	52	32	38	34

PERFORMANCE DATA
IMPINGEMENT COOLING: 26010-1/4J NOZZLES

Nozzle Type	Capacity Size*	Pressure (bar)		Flow rate capacity		Spray Angle
		Air	Liquid	Air (Nm ³ /h)	Liquid (lpm)	
●	0	2.8	2.6	5.1	2.6	90°
●	1		2.3	16.5	2.3	
●	2		2.4	17.8	2.4	
●	3		4.1	10.6	4.1	
●	4		2.4	17.8	2.4	120°
●	5		4.1	9.4	10.6	

* Number of indicator rings on the air cap.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Air Conn. (in.)	Water Conn (in.)	L (mm)	W (mm)
	26010-1/4J	1/4	1/4	60.5	38



PERFORMANCE DATA

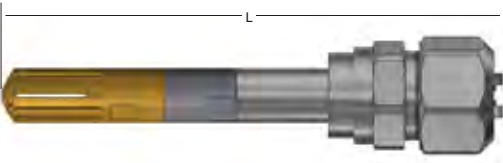
METRIC UNITS
DESCALING NOZZLES

METRIC UNITS

PERFORMANCE DATA
OVERVIEW

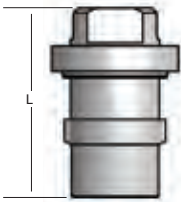
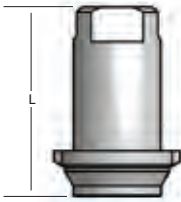
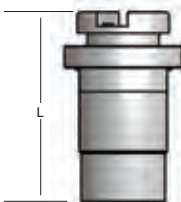
Nozzle Type								Capacity Code	Flow Rate Capacity (liters per minute)							
AA214 Compact	DescalJet® Pro	Mini DescalJet Pro	26180/26190	AA218/AA219	HiScaleJet	HSJ	Mini HiScaleJet		70 bar	100 bar	150 bar	200 bar	250 bar	300 bar	350 bar	400 bar
•								-02	3.8	4.6	5.6	6.4	7.2	7.9	8.5	9.1
•								-03	5.7	6.8	8.4	9.7	10.8	11.8	12.8	13.7
•								-04	7.6	9.1	11.2	13.0	14.5	15.9	17.2	18.4
•		•						-05	9.5	11.4	14.0	16.2	18.1	19.9	21	23
•		•					•	-06	11.4	13.7	16.8	19.5	22	24	26	28
•		•					•	-07	13.3	16.0	19.5	23	25	28	30	32
•	•	•	•	•	•	•	•	-08	15.2	18.2	22.5	26	29	32	34	37
•	•	•	•	•	•	•	•	-09	17	20.6	25.3	29	33	36	39	41
•	•	•	•	•	•	•	•	-10	18.8	23	28	32	36	40	43	46
•	•	•	•	•	•	•	•	-12	23	27	33	40.5	45	50	54	58
•	•	•	•	•	•	•	•	-15	29	34	42	49	54	60	64	69
	•	•	•	•	•	•	•	-20	38	46	56	64	72	79	85	91
	•	•	•	•	•	•	•	-25	48	57	70	81	90	99	107	114
	•	•	•	•	•	•	•	-30	57	68	84	97	108	118	128	137
	•	•	•	•	•	•	•	-35	67	80	98	113	126	138	149	160
	•	•	•	•	•	•	•	-40	77	91	112	129	144	158	171	182
	•	•	•	•	•	•	•	-50	95	114	140	161	180	197	213	228
	•	•	•	•	•	•	•	-55	105	125	154	177	198	217	235	251
	•	•	•	•	•	•	•	-60	114	137	167	193	216	237	256	274
	•	•	•	•	•	•	•	-70	134	160	195	226	252	276	299	319

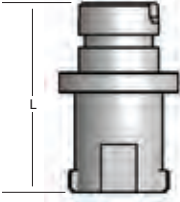
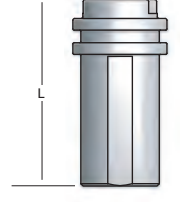
DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn.	L (mm)
	DescalJet® Pro Nozzles	Available with weld or 1" NPT (M) threaded connection adapters; some styles use a high impact strainer attachment, with or without body adapter for added length. Mini configuration also available. Projection into header varies by connection.	Minimum overall length: 142 Maximum length: 190 Mini DescalJet Pro nozzle length: 155 Nozzles can be ordered in any length between the minimum and maximum. Longer lengths are available upon request.

Dimensions vary depending on the capacity, configuration and options selected. Contact your local sales engineer to request dimensional data for other descaling nozzle types.

DIMENSIONS AND WEIGHTS

DescalJet® Pro Tip Body	Assembly No.	L (mm)	Diameter (mm)
	98016-1-_-SS	47.5	31.75
	98016-2-_-SS	47.5	28.6
	98016-3-_-SS	47.5	29.5

DescalJet® Pro Tip Body	Assembly No.	L (mm)	Diameter (mm)
	98016-4-_-SS	47.5	30.0
	98016-5-_-SS	47.5	24.0

For complete information, contact your local sales engineer.

METRIC UNITS

DIMENSIONS AND WEIGHTS

CVCN Check Valves	Nozzle Type	L (mm)
 CVCN check valves in varying lengths to fit existing DescalJet Pro nozzles.	DescalJet Pro with CVCN	205 to 285

For complete information, contact your local sales engineer.

PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA
H-VV, H-VVL AND H-DT VEEJET® NOZZLES

Spray Angle at 3 bar	Nozzle Type/ Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	H-VV		H-VVL		H-DT				.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar	
	1/8	1/4	1/8	1/4	1/8	1/4																
110°	•	•	•	•			01	.66	.14	.19	.28	.39	.56	.60	.88	1.0	1.3	94	110	121	124	
	•	•	•	•			015	.81	.22	.29	.42	.59	.84	.90	1.3	1.5	2.0	97	110	121	124	
	•	•	•	•		•	02	.89	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	98	110	120	123	
	•	•	•	•		•	03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	99	110	120	123	
	•	•	•	•		•	04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	100	110	119	122	
	•	•	•	•		•	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	100	110	118	122	
	•	•	•	•		•	06	1.5	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	101	110	117	122	
	•	•	•	•		•	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	102	110	117	121	
	•	•	•	•		•	10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	103	110	117	119	
	•	•	•	•		•	15	2.4	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	104	110	117	118	
95°	•		•		•		0050	.46	–	–	.14	.20	.28	.30	.44	.51	.67	81	95	105	113	
	•	•	•	•			01	.66	.14	.19	.28	.39	.56	.60	.88	1.0	1.3	81	95	105	113	
	•		•	•			015	.81	.22	.29	.42	.59	.84	.90	1.3	1.5	2.0	82	95	105	113	
	•	•	•	•		•	02	.89	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	82	95	105	113	
	•	•	•	•		•	03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	83	95	104	111	
	•	•	•	•		•	04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	84	95	103	108	
	•	•	•	•		•	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	84	95	102	107	
	•	•	•	•		•	06	1.5	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	86	95	101	106	
	•		•		•		065	1.6	.94	1.2	1.8	2.6	3.6	3.9	5.7	6.6	8.8	86	95	101	106	
80°	•	•	•	•			0050	.46	–	–	.14	.20	.28	.30	.44	.51	.67	61	80	95	101	
	•	•	•	•			0067	.53	–	.13	.19	.26	.37	.40	.59	.68	.90	67	80	94	99	
	•	•	•	•		•	01	.66	–	.19	.28	.39	.56	.60	.88	1.0	1.3	68	80	89	92	
		•	•	•		•	015	.81	–	.29	.42	.59	.84	.90	1.3	1.5	2.0	68	80	89	92	
	•	•	•	•		•	02	.89	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	69	80	88	91	
	•	•	•	•		•	03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	70	80	87	90	
	•	•	•	•		•	04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	71	80	86	89	
	•	•	•	•		•	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	71	80	86	89	
	•	•	•	•		•	06	1.5	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	72	80	85	88	
	•		•		•	•	07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	72	80	85	88	
	•	•	•	•		•	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	72	80	84	87	
		•		•	•	•	09	1.9	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	73	80	84	87	

Highlighted column shows the rated pressure.



**PERFORMANCE DATA
H-VV, H-VVL AND H-DT VEEJET® NOZZLES**

Spray Angle at 3 bar	Nozzle Type/ Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)									Spray Angle (°)			
	H-VV		H-VVL		H-DT				.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar
	1/8	1/4	1/8	1/4	1/8	1/4															
73°	•	•	•	•	•		0077	.58	–	.15	.21	.30	.43	.46	.68	.78	1.0	53	73	86	92
	•	•	•	•			0154	.81	.22	.29	.43	.61	.86	.93	1.4	1.6	2.1	55	73	84	88
		•		•			0231	.97	.33	.44	.64	.91	1.3	1.4	2.0	2.4	3.1	56	73	83	87
	•	•	•	•			0308	1.2	.44	.59	.86	1.2	1.7	1.9	2.7	3.1	4.2	58	73	82	86
		•		•			0462	1.4	.67	.88	1.3	1.8	2.6	2.8	4.1	4.7	6.2	60	73	80	84
	•		•				0770	1.8	1.1	1.5	2.1	3.0	4.3	4.6	6.8	7.8	10.4	64	73	77	82
65°	•		•				0017	.28	–	–	.047	.067	.095	.10	.15	.17	.23	44	65	77	86
	•		•				0033	.38	–	–	.092	.13	.18	.20	.29	.34	.45	47	65	76	83
	•	•	•	•	•		0067	.53	–	.13	.19	.26	.37	.40	.59	.68	.90	50	65	75	81
	•	•	•	•	•	•	01	.66	–	.19	.28	.39	.56	.60	.88	1.0	1.3	51	65	74	80
	•	•	•	•			015	.81	–	.29	.42	.59	.84	.90	1.3	1.5	2.0	51	65	74	80
	•	•	•	•	•	•	02	.89	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	52	65	73	79
	•		•				025	.99	.36	.48	.70	.99	1.4	1.5	2.2	2.5	3.4	52	65	73	79
	•	•	•	•	•	•	03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	53	65	72	78
	•	•	•	•	•	•	04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	53	65	72	76
	•	•	•	•	•	•	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	53	65	72	76
		•			•	•	055	1.5	.79	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4	53	65	72	76
	•	•		•	•	•	06	1.5	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	54	65	72	75
		•			•	•	07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	54	65	71	75
	•	•	•	•	•	•	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	55	65	71	74
•				•	•	09	1.9	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	55	65	71	74	
50°	•	•	•	•			01	.66	–	.19	.28	.39	.56	.60	.88	1.0	1.3	37	50	59	65
	•	•	•	•			02	.89	–	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	39	50	57	63
	•	•	•	•		•	03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	40	50	56	62
	•	•	•	•		•	04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	42	50	56	61
	•	•	•	•		•	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	44	50	56	61
	•				•		055	1.5	.79	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4	44	50	56	61
	•	•	•	•		•	06	1.5	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	45	50	56	60
	•	•			•		07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	45	50	56	60
	•	•	•	•		•	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	45	50	55	60
		•			•	•	09	1.9	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	45	50	55	59
40°	•	•	•	•	•		01	.66	–	–	.28	.39	.56	.60	.88	1.0	1.3	26	40	52	59
	•	•	•	•	•		015	.81	–	–	.42	.59	.84	.90	1.3	1.5	2.0	27	40	52	59
	•	•	•	•	•	•	02	.89	–	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	29	40	51	58
	•	•	•	•	•	•	03	1.1	–	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	30	40	50	57
	•	•	•	•	•	•	04	1.3	–	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	30	40	50	56

Highlighted column shows the rated pressure.



PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA
H-VV, H-VVL AND H-DT VEEJET® NOZZLES

Spray Angle at 3 bar	Nozzle Type/ Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	H-VV		H-VVL		H-DT				.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar	
	1/8	1/4	1/8	1/4	1/8	1/4																
40°	•	•	•	•	•	•	05	1.4	–	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	31	40	49	55	
	•	•			•	•	055	1.5	–	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4	31	40	49	55	
	•	•	•	•	•	•	06	1.5	–	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	31	40	49	55	
	•	•			•	•	065	1.6	–	1.2	1.8	2.6	3.6	3.9	5.7	6.6	8.8	31	40	48	54	
	•	•			•	•	07	1.7	–	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	31	40	48	54	
	•	•	•	•	•	•	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	31	40	47	53	
	•						085	1.8	1.2	1.6	2.4	3.4	4.7	5.1	7.5	8.7	11.5	32	40	46	50	
	•	•			•	•	09	1.9	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	32	40	46	50	
25°	•	•	•	•	•		01	.66	–	–	.28	.39	.56	.60	.88	1.0	1.3	14	25	34	42	
	•	•	•	•	•	•	02	.89	–	–	.56	.79	1.1	1.2	1.8	2.0	2.7	15	25	33	40	
	•	•	•	•	•	•	03	1.1	–	–	.84	1.2	1.7	1.8	2.6	3.1	4.0	15	25	33	40	
	•	•	•	•	•	•	04	1.3	–	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	16	25	32	39	
				•	•	•	045	1.3	–	.86	1.3	1.8	2.5	2.7	4.0	4.6	6.1	16	25	32	39	
	•	•	•	•	•	•	05	1.4	–	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	16	25	32	39	
	•	•			•	•	055	1.5	–	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4	16	25	31	38	
	•	•	•	•	•	•	06	1.5	–	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	17	25	31	38	
	•	•			•	•	065	1.6	–	1.2	1.8	2.6	3.6	3.9	5.7	6.6	8.8	17	25	31	38	
	•	•	•		•	•	07	1.7	–	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	17	25	31	38	
	•	•					075	1.7	–	1.4	2.1	3.0	4.2	4.5	6.6	7.6	10.1	17	25	31	38	
	•	•	•	•	•	•	08	1.8	–	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	17	25	31	38	
	•						085	1.8	–	1.6	2.4	3.4	4.7	5.1	7.5	8.7	11.5	18	25	31	37	
	•	•			•	•	09	1.9	–	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	17	25	31	37	
					•		15	2.4	–	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	18	25	31	37	
15°	•	•		•			01	.66	–	–	–	.39	.56	.60	.88	1.0	1.3	–	15	24	28	
	•		•		•	•	02	.89	–	–	.56	.79	1.1	1.2	1.8	2.0	2.7	6	15	22	27	
	•	•	•	•	•	•	03	1.1	–	–	.84	1.2	1.7	1.8	2.6	3.1	4.0	6	15	22	27	
	•	•	•	•	•	•	04	1.3	–	–	1.1	1.6	2.2	2.4	3.5	4.1	5.4	7	15	21	26	
	•	•	•	•	•	•	05	1.4	–	–	1.4	2.0	2.8	3.0	4.4	5.1	6.7	7	15	21	26	
	•	•			•	•	055	1.5	–	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4	7	15	21	26	
	•	•	•	•	•	•	06	1.5	–	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	8	15	21	26	
	•	•			•	•	065	1.6	–	1.2	1.8	2.6	3.6	3.9	5.7	6.6	8.8	8	15	20	25	
		•			•	•	07	1.7	–	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	8	15	20	25	
	•	•	•	•	•	•	08	1.8	–	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	9	15	20	25	
	•	•			•	•	085	1.8	–	1.6	2.4	3.4	4.7	5.1	7.5	8.7	11.5	9	15	19	24	
	•	•			•	•	09	1.9	–	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	9	15	19	24	

Highlighted column shows the rated pressure.



**PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES**

Spray Angle at 3 bar	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	H-U					H-DU		U					.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar	
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2																
110°		•									20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	105	110	117	118	
95°	•	•		•		•	•				10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	89	95	100	105	
	•	•		•		•	•				15	2.4	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	90	95	100	105	
	•	•	•				•				20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	90	95	100	105	
	•	•		•		•	•				30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	91	95	101	105	
		•	•	•			•				40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	92	95	100	105	
		•		•			•				50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	93	95	99	103	
		•		•			•				60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	93	95	99	103	
		•	•	•	•			•			70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	93	95	99	103	
				•							80	5.5	11.5	15.3	22	32	45	48	71	82	108	93	95	99	102	
				•							100	6.2	14.4	19.1	28	39	56	60	88	102	135	93	95	99	102	
			•							150	7.5	22	29	42	59	84	90	132	153	202	93	95	99	102		
				•						400	12.0	58	76	112	158	223	241	353	408	539	93	95	99	102		
80°	•	•	•	•		•	•				10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	73	80	84	87	
	•	•		•		•	•				15	2.4	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	74	80	83	86	
	•	•	•	•		•	•				20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	74	80	83	86	
	•	•	•	•		•	•				30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	74	80	83	86	
	•	•	•	•		•	•				40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	74	80	83	86	
		•	•	•			•				50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	74	80	83	85	
		•	•	•			•				60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	75	80	83	85	
		•	•	•			•				70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	75	80	83	86	
			•	•							100	6.2	14.4	19.1	28	39	56	60	88	102	135	75	80	83	86	
			•	•							150	7.5	22	29	42	59	84	90	132	153	202	73	80	84	86	
				•	•						200	8.7	29	38	56	79	112	121	177	204	270	74	80	82	85	
				•							400	12.0	58	76	112	158	223	241	353	408	539	78	80	81	83	
									•		500	13.4	72	95	140	197	279	302	441	510	674	78	80	81	83	
								•		580	14.5	84	111	162	229	324	350	512	591	782	78	80	81	83		
65°	•	•	•			•	•				10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	56	65	71	74	
	•	•									12	2.1	1.7	2.3	3.4	4.7	6.7	7.2	10.6	12.2	16.2	56	65	71	73	
	•	•	•	•		•	•				15	2.4	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	56	65	70	73	
	•	•		•		•	•				20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	57	65	70	73	
	•					•	•				25	3.1	3.6	4.8	7.0	9.9	14.0	15.1	22	25	34	57	65	69	73	
	•	•	•			•	•				30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	58	65	69	72	
	•	•	•			•	•				40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	59	65	68	72	
	•	•	•	•			•				50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	60	65	68	71	
		•	•	•			•				60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	60	65	68	71	

Highlighted column shows the rated pressure.

METRIC UNITS



PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES

Spray Angle at 3 bar	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	H-U					H-DU		U					.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar	
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2																
65°		•	•	•		•	•				70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	60	65	68	71	
			•	•							100	6.2	14.4	19.1	28	39	56	60	88	102	135	58	65	69	70	
			•	•							150	7.5	22	29	42	59	84	90	132	153	202	59	65	68	70	
				•	•						200	8.7	29	38	56	79	112	121	177	204	270	60	65	67	69	
					•						250	9.5	36	48	70	99	140	151	221	255	337	60	65	67	69	
					•						300	10.4	43	57	84	118	168	181	265	306	405	60	65	67	69	
					•						400	12.0	58	76	112	158	223	241	353	408	539	60	65	67	69	
								•	•		500	13.4	72	95	140	197	279	302	441	510	674	60	65	66	68	
50°							•				02	.89	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	39	50	57	63	
							•				03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	40	50	56	62	
							•				04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	42	50	56	61	
							•				05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	44	50	56	61	
							•				055	1.5	.79	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4	44	50	56	61	
							•				06	1.5	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	45	50	56	60	
							•				07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	45	50	56	60	
							•				08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	45	50	55	60	
		•	•	•			•	•				10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	45	50	55	59
			•	•	•		•	•				15	2.4	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	45	50	55	59
		•	•	•	•			•				20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	45	50	55	59
		•	•	•	•			•				30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	45	50	55	59
		•	•	•			•	•				40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	46	50	54	59
		•	•	•				•				50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	46	50	54	59
			•	•				•				60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	46	50	54	59
			•	•	•			•				70	5.1	10.1	13.3	19.5	28	39	42	62	71	94	46	50	54	59
			•	•								80	5.5	11.5	15.3	22	32	45	48	71	82	108	45	50	53	58
				•								85	5.7	12.3	16.2	24	34	47	51	75	87	115	45	50	53	57
				•								90	5.8	13.0	17.2	25	36	50	54	79	92	121	45	50	53	56
				•	•							100	6.2	14.4	19.1	28	39	56	60	88	102	135	44	50	52	54
			•								110	6.5	15.9	21	31	43	61	66	97	112	148	45	50	53	54	
			•								120	6.7	17.3	23	34	47	67	72	106	122	162	44	50	53	55	
			•								135	7.2	19.5	26	38	53	75	81	119	138	182	45	50	52	55	
			•	•							150	7.5	22	29	42	59	84	90	132	153	202	45	50	52	55	
				•							200	8.7	29	38	56	79	112	121	177	204	270	46	50	52	55	
				•							250	9.7	36	48	70	99	140	151	221	255	337	46	50	52	55	
					•						400	12.0	58	76	112	158	223	241	353	408	539	46	50	52	55	

Highlighted column shows the rated pressure.



PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES

Spray Angle at 3 bar	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	H-U					H-DU		U					.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar	
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2																
50°									•	•		500	13.4	72	95	140	197	279	302	441	510	674	49	50	51	54
									•			580	14.5	84	111	162	229	324	350	512	591	782	49	50	51	53
										•		750	16.4	108	143	209	296	419	452	662	765	1011	49	50	51	53
											•	1000	19.0	144	191	279	395	558	603	883	1019	1349	49	50	51	53
											•	1500	23.2	216	286	419	592	838	905	1324	1529	2023	49	50	51	52
											•	2000	26.8	288	381	558	790	1117	1206	1766	2039	2697	49	50	51	52
40°	•	•	•				•	•				10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	32	40	45	48
	•	•	•	•			•	•				15	2.4	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	32	40	45	48
	•	•	•	•			•	•				20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	32	40	45	48
	•	•	•				•	•				30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	33	40	45	48
	•	•	•				•	•				40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	34	40	45	48
		•	•	•				•				50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	35	40	45	48
		•	•	•				•				60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	35	40	45	48
		•	•	•				•				70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	35	40	45	48
		•										80	5.5	11.5	15.3	22	32	45	48	71	82	108	35	40	44	47
			•	•								100	6.2	14.4	19.1	28	39	56	60	88	102	135	34	40	43	46
			•	•								150	7.5	22	29	42	59	84	90	132	153	202	35	40	43	44
				•								200	8.7	29	38	56	79	112	121	177	204	270	36	40	42	44
25°										•		500	13.4	72	95	140	197	279	302	441	510	674	38	40	41	45
	•	•					•	•				10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	18	25	31	37
	•	•	•				•	•				15	2.4	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	18	25	31	37
	•	•	•				•	•				20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	19	25	31	37
	•	•	•				•	•				30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	20	25	30	36
		•	•				•	•				40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	21	25	29	35
		•	•					•				50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	21	25	29	35
		•	•					•				60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	22	25	29	35
		•	•	•				•				70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	22	25	29	35
			•	•								100	6.2	14.4	19.1	28	39	56	60	88	102	135	23	25	28	32
			•	•								150	7.5	22	29	42	59	84	90	132	153	202	24	25	28	30
				•								200	8.7	29	38	56	79	112	121	177	204	270	24	25	26	29
15°										•		500	13.4	72	95	140	197	279	302	441	510	674	24	25	26	29
										•		750	16.4	108	143	209	296	419	452	662	765	1011	24	25	26	28
										•		1000	19.0	144	191	279	395	558	603	883	1019	1349	24	25	26	28
	•	•	•				•	•				10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	10	15	19	24
•	•	•				•	•				15	2.4	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	10	15	19	24	
•	•	•				•	•				20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	10	15	19	23	

Highlighted column shows the rated pressure.

METRIC UNITS



PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES

Spray Angle at 3 bar	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)					
	H-U					H-DU		U					Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2					4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar	
15°	•	•	•			•	•				30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	10	15	19	21			
	•	•	•			•	•				40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	10	15	18	21			
		•	•	•				•				50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	11	15	18	21		
		•	•					•				60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	11	15	18	21		
		•	•	•				•				70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	11	15	18	21		
			•	•								100	6.2	14.4	19.1	28	39	56	60	88	102	135	13	15	17	18		
			•									120	6.7	17.3	23	34	47	67	72	106	122	162	13	15	17	18		
				•								150	7.5	22	29	42	59	84	90	132	153	202	14	15	17	18		
				•								200	8.7	29	38	56	79	112	121	177	204	270	14	15	17	18		
									•		500	13.4	72	95	140	197	279	302	441	510	674	14	15	16	17			
									•		1000	19.0	144	191	279	395	558	603	883	1019	1349	14	15	16	17			
0°	•	•					•				03	1.0	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	0° Solid Stream						
	•	•				•	•				04	1.2	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4							
	•	•				•	•				05	1.3	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7							
	•	•				•	•				055	1.4	.79	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4							
	•	•				•	•				06	1.5	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1							
	•	•				•	•				065	1.5	.94	1.2	1.8	2.6	3.6	3.9	5.7	6.6	8.8							
		•				•	•				07	1.6	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4							
	•	•				•	•				08	1.7	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8							
	•										085	1.8	1.2	1.6	2.4	3.4	4.7	5.1	7.5	8.7	11.5							
	•	•				•	•				09	1.8	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1							
	•	•				•	•				10	1.9	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5							
		•					•				12	2.1	1.7	2.3	3.4	4.7	6.7	7.2	10.6	12.2	16.2							
	•	•				•	•				15	2.3	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20							
	•	•	•			•	•				20	2.7	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27							
	•	•				•	•				30	3.3	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40							
	•	•				•	•				40	3.8	5.8	7.6	11.2	15.8	22	24	35	41	54							
		•					•				50	4.2	7.2	9.5	14.0	19.7	28	30	44	51	67							
		•						•			60	4.6	8.6	11.4	16.8	24	34	36	53	61	81							
		•	•					•			70	5.0	10.1	13.3	19.5	28	39	42	62	71	94							
		•	•								80	5.3	11.5	15.3	22	32	45	48	71	82	108							
		•								100	6.0	14.4	19.1	28	39	56	60	88	102	135								
		•								120	6.8	17.3	23	34	47	67	72	106	122	162								
	•		•							150	7.3	22	29	42	59	84	90	132	153	202								
			•							165	7.7	24	31	46	65	92	100	146	168	223								
			•							200	8.5	29	38	56	79	112	121	177	204	270								

Highlighted column shows the rated pressure.

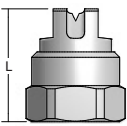
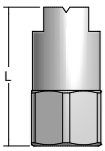
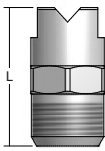
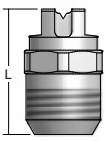


PERFORMANCE DATA
H-U, H-DU AND U VEEJET® NOZZLES

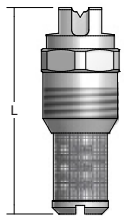
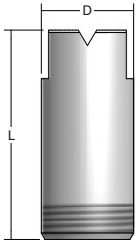
Spray Angle at 3 bar	Nozzle Type/ Inlet Conn. (in.)										Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)									Spray Angle (°)			
	H-U					H-DU		U					.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar
	1/8	1/4	3/8	1/2	3/4	1/8	1/4	1	1-1/4	2															
0°			•	•							250	9.5	36	48	70	99	140	151	221	255	337	0 Solid Stream			
					•						350	11.1	50	67	98	138	195	211	309	357	472				
								•	•		570	14.2	82	109	159	225	318	344	503	581	769				
					•						700	15.7	101	133	195	276	391	422	618	714	944				
								•			1000	18.8	144	191	279	395	558	603	883	1019	1349				
								•			1100	19.7	159	210	307	434	614	663	971	1121	1483				
									•		1400	22.2	202	267	391	553	782	844	1236	1427	1888				
									•		1800	25.2	259	343	503	711	1005	1086	1589	1835	2427				
									•		2000	26.5	288	381	558	790	1117	1206	1766	2039	2697				
								•		3500	35.1	505	667	977	1382	1954	2111	3090	3568	4720					

Highlighted column shows the rated pressure.


DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	D (Dia.) (mm)	Net Weight (kg)
	H-DT (F)	1/8	19.1	1/2	-	.01
		1/4	19.8	5/8	-	.02
	H-DU (F)	1/8	28.6	1/2	-	.02
		1/4	28.6	5/8	-	.04
	H-U (M)	1/8	25.4	9/16	-	.01
		1/4	25.4	9/16	-	.02
		3/8	31.8	11/16	-	.04
		1/2	38.1	7/8	-	.06
		3/4	50.8	1-1/16	-	.14
	H-VV (M)	1/8	22.2	1/2	-	.01
		1/4	23.0	9/16	-	.02

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	D (Dia.) (mm)	Net Weight (kg)
	H-VVL (M)	1/8	38.9	1/2	-	.02
		1/4	31.8	9/16	-	.03
	U (M)	1	58.8	-	33.3	.26
		1-1/4	95.3	-	42.9	.57
		2	136.5	-	60.3	1.93

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)
	58600-H3/4U with strainer	3/4	97.6	1-1/16



PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA
MEG AND MEG-SSTC WASHJET® NOZZLES

Nozzle Type and Spray Angle																				Capacity Size	Flow Rate Capacity (liters per minute)											
1/8 MEG					1/4 MEG					1/4 MEG-SSTC					3 bar	20 bar	35 bar	50 bar	80 bar		100 bar	140 bar	170 bar	200 bar								
0°*	5°	15°	25°	40°	50°	65°	0°*	5°	15°	25°	40°	50°	65°	0°*	5°	15°	25°	40°	50°	65°												
									•					•		•			•			01	.39	1.0	1.3	1.6	2.0	2.3	2.7	3.0	3.2	
									•													015	.59	1.5	2.0	2.4	3.1	3.4	4.0	4.5	4.8	
•	•	•	•	•			•	•	•	•	•			•	•	•		•	•			02	.79	2.0	2.7	3.2	4.1	4.6	5.4	5.9	6.4	
														•								025	.99	2.5	3.4	4.0	5.1	5.7	6.7	7.4	8.1	
•		•	•	•	•		•	•	•	•	•	•	•	•	•	•		•			•	03	1.2	3.1	4.0	4.8	6.1	6.8	8.1	8.9	9.7	
									•	•	•	•										035	1.4	3.6	4.7	5.6	7.1	8.0	9.4	10.4	11.3	
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•		•	•	04	1.6	4.1	5.4	6.4	8.2	9.1	10.8	11.9	12.9	
•		•	•	•	•	•	•	•	•	•	•	•	•	•		•	•					045	1.8	4.6	6.1	7.3	9.2	10.3	12.1	13.4	14.5	
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•		05	2.0	5.1	6.7	8.1	10.2	11.4	13.5	14.9	16.1	
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•				055	2.2	5.6	7.4	8.9	11.2	12.5	14.8	16.3	17.7	
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•			06	2.4	6.1	8.1	9.7	12.2	13.7	16.2	17.8	19.3	
•		•	•	•			•		•	•	•			•								065	2.6	6.6	8.8	10.5	13.3	14.8	17.5	19.3	21	
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•		07	2.8	7.1	9.4	11.3	14.3	16.0	18.9	21	23	
•		•	•	•			•		•	•	•											075	3.0	7.6	10.1	12.1	15.3	17.1	20	22	24	
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•		•	08	3.2	8.2	10.8	12.9	16.3	18.2	22	24	26	
•		•	•	•			•		•	•	•											085	3.4	8.7	11.5	13.7	17.3	19.4	23	25	27	
•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•		09	3.6	9.2	12.1	14.5	18.3	21	24	27	29	
		•	•				•		•		•											095	3.8	9.7	12.8	15.3	19.4	22	26	28	31	
•		•	•	•	•	•	•		•	•	•	•	•	•	•		•	•				10	3.9	10.2	13.5	16.1	20	23	27	30	32	
•			•				•		•	•	•											11	4.3	11.2	14.8	17.7	22	25	30	33	35	
•		•	•																			115	4.5	11.7	15.5	18.5	23	26	31	34	37	
•				•			•	•	•	•	•	•	•	•		•						12	4.7	12.2	16.2	19.3	24	27	32	36	39	
•							•		•	•	•											125	4.9	12.7	16.9	20	25	28	34	37	40	
•							•		•	•	•											13	5.1	13.3	17.5	21	27	30	35	39	42	
	•								•	•												14	5.5	14.3	18.9	23	29	32	38	42	45	
•		•	•				•	•	•	•	•	•	•	•	•		•		•	•		15	5.9	15.3	20	24	31	34	40	45	48	
		•					•		•													16	6.3	16.3	22	26	33	36	43	48	52	
							•		•	•	•			•								18	7.1	18.3	24	29	37	41	49	53	58	
•							•	•	•	•	•	•	•	•	•							20	7.9	20	27	32	41	46	54	59	64	
							•	•	•	•	•											25	9.9	25	34	40	51	57	67	74	81	
							•	•	•	•	•		•									30	11.8	31	40	48	61	68	81	89	97	
							•		•	•	•											35	13.8	36	47	56	71	80	94	104	113	
							•	•	•	•	•											40	15.8	41	54	64	82	91	108	119	129	
							•		•	•	•											50	19.7	51	67	81	102	114	135	149	161	
							•		•	•	•											60	24	61	81	97	122	137	162	178	193	
							•															70	28	71	94	113	143	160	189	208	226	
							•															80	32	82	108	129	163	182	216	238	258	
							•															90	36	92	121	145	183	205	243	267	290	

*0° = Solid Stream.

Highlighted column shows the rated pressure.



PERFORMANCE DATA
WEG WASHJET® NOZZLES

Nozzle Type and Spray Angle														Capacity Size	Flow Rate Capacity (liters per minute)								
1/8 WEG							1/4 WEG								3 bar	20 bar	35 bar	50 bar	80 bar	100 bar	140 bar	170 bar	200 bar
0°*	5°	15°	25°	40°	50°	65°	0°*	5°	15°	25°	40°	50°	65°										
		•	•	•										03	1.2	3.1	4.0	4.8	6.1	6.8	8.1	8.9	9.7
•		•	•	•	•	•	•		•	•	•		•	04	1.6	4.1	5.4	6.4	8.2	9.1	10.8	11.9	12.9
		•	•	•					•	•	•			045	1.8	4.6	6.1	7.3	9.2	10.3	12.1	13.4	14.5
•		•	•	•	•	•	•		•	•	•	•	•	05	2.0	5.1	6.7	8.1	10.2	11.4	13.5	14.9	16.1
•		•	•	•	•	•	•		•	•				055	2.2	5.6	7.4	8.9	11.2	12.5	14.8	16.3	17.7
•		•	•	•	•	•	•		•	•	•			06	2.4	6.1	8.1	9.7	12.2	13.7	16.2	17.8	19.3
				•					•					065	2.6	6.6	8.8	10.5	13.3	14.8	17.5	19.3	21
•		•	•	•	•	•	•		•	•	•		•	07	2.8	7.1	9.4	11.3	14.3	16.0	18.9	21	23
•		•	•	•	•	•	•		•	•	•			08	3.2	8.2	10.8	12.9	16.3	18.2	22	24	26
•		•	•	•										085	3.4	8.7	11.5	13.7	17.3	19.4	23	25	27
•		•	•	•	•	•	•		•	•	•			09	3.6	9.2	12.1	14.5	18.3	21	24	27	29
			•											095	3.8	9.7	12.8	15.3	19.4	22	26	28	31
•		•	•	•	•	•	•		•	•	•			10	3.9	10.2	13.5	16.1	20	23	27	30	32
								•						15	5.9	15.3	20	24	31	34	40	45	48
		•												16	6.3	16.3	22	26	33	36	43	48	52
•														20	7.9	20	27	32	41	46	54	59	64
								•						30	11.8	31	40	48	61	68	81	89	97

*0° = Solid Stream.

Highlighted column shows the rated pressure.

PERFORMANCE DATA
IMEG® WASHJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type	Spray Angle at 3 bar								Capacity Size	Flow Rate Capacity (liters per minute)										
		IMEG®	5°	10°	15°	25°	40°	50°	65°		80°	3 bar	20 bar	35 bar	50 bar	80 bar	100 bar	140 bar	170 bar	200 bar	250 bar
1/8, 1/4	•	•	•	•	•	•	•	•	•	03	1.2	3.1	4.0	4.8	6.1	6.8	8.1	8.9	9.7	10.8	11.3
	•	•	•	•	•	•	•	•	•	035	1.4	3.6	4.7	5.6	7.1	8.0	9.4	10.4	11.3	12.6	13.2
	•	•	•	•	•	•	•	•	•	04	1.6	4.1	5.4	6.4	8.2	9.1	10.8	11.9	12.9	14.4	15.1
	•	•	•	•	•	•	•	•	•	045	1.8	4.6	6.1	7.3	9.2	10.3	12.1	13.4	14.5	16.2	17.0
	•	•	•	•	•	•	•	•	•	05	2.0	5.1	6.7	8.1	10.2	11.4	13.5	14.9	16.1	18.0	18.9
	•	•	•	•	•	•	•	•	•	055	2.2	5.6	7.4	8.9	11.2	12.5	14.8	16.3	17.7	19.8	21
	•	•	•	•	•	•	•	•	•	06	2.4	6.1	8.1	9.7	12.2	13.7	16.2	17.8	19.3	22	23
	•	•	•	•	•	•	•	•	•	065	2.6	6.6	8.8	10.5	13.3	14.8	17.5	19.3	21	23	25
	•	•	•	•	•	•	•	•	•	07	2.8	7.1	9.4	11.3	14.3	16.0	18.9	21	23	25	26
	•	•	•	•	•	•	•	•	•	075	3.0	7.6	10.1	12.1	15.3	17.1	20	22	24	27	28
•	•	•	•	•	•	•	•	•	08	3.2	8.2	10.8	12.9	16.3	18.2	22	24	26	29	30	

Highlighted column shows the rated pressure.

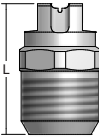
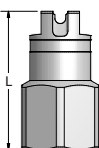


PERFORMANCE DATA

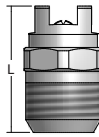
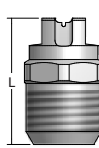
METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Flats (mm)	Net Weight (kg)
	MEG (M)	1/8	25.4	9/16	7.9	.02
		1/4	25.4	9/16	10.3	.02
	WEG (F)	1/8	28.6	1/2	7.9	.03
		1/4	28.6	5/8	7.9	.02

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Flats (mm)	Net Weight (kg)
	MEG-SSTC (M)	1/4	23.0	9/16	10.3	.02
		1/8	22.2	1/2	7.9	.02
	IMEG® (M)	1/8	22.2	1/2	7.9	.02
		1/4	23.0	9/16	10.3	.02

Based on the largest/heaviest version of each type.



PERFORMANCE DATA
K FLOODJET® NOZZLES

Nozzle Type K	Inlet Conn. (in.)						Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)								Spray Angle (°)		
	1/8	1/4	3/8	1/2	3/4	1			.2 bar	.5 bar	.7 bar	1.5 bar	2 bar	3 bar	4 bar	.5 bar	1.5 bar	4 bar	
•	•						.25	.43	–	–	–	.14	.16	.20	.23	–	83	117	
•	•						.50	.58	–	–	–	.28	.32	.39	.46	–	89	122	
•	•						.75	.74	–	–	.29	.42	.48	.59	.68	–	106	125	
•	•						1	.84	–	–	.38	.56	.64	.79	.91	–	103	128	
•	•						1.5	1.0	–	.48	.57	.84	.97	1.2	1.4	73	103	125	
•	•	•					2	1.2	–	.64	.76	1.1	1.3	1.6	1.8	83	113	129	
•	•	•					2.5	1.3	–	.81	.95	1.4	1.6	2.0	2.3	98	122	133	
•	•	•					3	1.4	–	.97	1.1	1.7	1.9	2.4	2.7	86	112	126	
•	•						4	1.7	–	1.3	1.5	2.2	2.6	3.2	3.6	97	123	132	
•	•	•					5	1.9	1.0	1.6	1.9	2.8	3.2	3.9	4.6	114	128	142	
•	•	•					7.5	2.3	1.5	2.4	2.9	4.2	4.8	5.9	6.8	101	119	134	
•	•	•					10	2.7	2.0	3.2	3.8	5.6	6.4	7.9	9.1	115	133	145	
•	•	•					12	2.9	2.4	3.9	4.6	6.7	7.7	9.5	10.9	128	139	153	
•	•	•					15	3.3	3.1	4.8	5.7	8.4	9.7	11.8	13.7	98	113	123	
•	•	•					18	3.6	3.7	5.8	6.9	10.1	11.6	14.2	16.4	106	120	131	
•	•	•					20	3.8	4.1	6.4	7.6	11.2	12.9	15.8	18.2	110	122	133	
•		•					22	3.9	4.5	7.1	8.4	12.3	14.2	17.4	20	113	125	136	
•		•					24	4.1	4.9	7.7	9.2	13.4	15.5	19.0	22	115	131	144	
•		•					27	4.4	5.5	8.7	10.3	15.1	17.4	21	25	119	135	148	
•			•				30	4.6	6.1	9.7	11.4	16.8	19.3	24	27	100	110	121	
•			•				35	5.0	7.1	11.3	13.3	19.5	23	28	32	105	118	128	
•			•	•			40	5.3	8.2	12.9	15.3	22	26	32	36	111	126	136	
•			•				45	5.6	9.2	14.5	17.2	25	29	36	41	115	130	140	
•				•			50	5.9	10.2	16.1	19.1	28	32	39	46	117	131	140	
•				•			60	6.5	12.2	19.3	23	34	39	47	55	120	134	142	
•				•			70	7.0	14.3	23	27	39	45	55	64	123	137	146	
•				•			80	7.5	16.3	26	31	45	52	63	73	127	138	149	
•					•		90	8.1	18.3	29	34	50	58	71	82	120	133	140	
•					•		100	8.5	20	32	38	56	64	79	91	123	136	145	
•					•		110	8.9	22	35	42	61	71	87	100	125	138	148	
•					•		120	9.3	24	39	46	67	77	95	109	129	143	150	
•					•		140	10.0	29	45	53	78	90	111	128	118	127	135	
•					•		160	10.7	33	52	61	89	103	126	146	121	130	137	
•					•		180	11.4	37	58	69	101	116	142	164	124	133	139	
•					•		210	12.3	43	68	80	117	135	166	191	128	139	145	
•						•	300	14.8	61	97	114	168	193	237	274	110	128	135	
•						•	450	18.0	92	145	172	251	290	355	410	118	132	138	

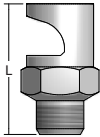
Highlighted column shows the rated pressure.



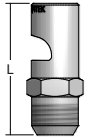
PERFORMANCE DATA
TEK FLOODJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)							Spray Angle (°)		
				.2 bar	.5 bar	.7 bar	1.5 bar	2 bar	3 bar	4 bar	.5 bar	1.5 bar	4 bar
1/8, 1/4	●	2	1.2	–	.64	.76	1.1	1.3	1.6	1.8	85	125	134
	●	3	1.5	–	.97	1.1	1.7	1.9	2.4	2.7	85	125	136
	●	5	1.9	1.0	1.6	1.9	2.8	3.2	3.9	4.6	85	127	147
	●	10	2.7	2.0	3.2	3.8	5.6	6.4	7.9	9.1	85	130	150
1/4	●	15	3.3	3.1	4.8	5.7	8.4	9.7	11.8	13.7	90	130	138
	●	20	3.8	4.1	6.4	7.6	11.2	12.9	15.8	18.2	107	130	138

DIMENSIONS AND WEIGHTS

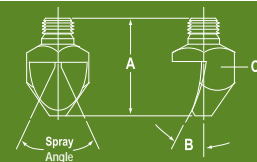
Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	K (M)	1/8	32.5	7/16	.01
		1/4	34.1	9/16	.03
		3/8	44.5	11/16	.06
		1/2	50.8	7/8	.11
		3/4	65.1	1-1/2	.40
		1	92.1	1-7/8	.91

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	TEK (M)	1/8	28.6	7/16	.02
		1/4	38.6	9/16	.04

Based on the largest/heaviest version of each type.

PERFORMANCE DATA
P FLATJET® NOZZLES



METRIC UNITS

Spray Angle at 3 bar	Nozzle Type P	Inlet Conn. (in.)					Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)						Spray Angle (°)			Dimensions			
		1/8	1/4	3/8	1/2	3/4			1 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	1 bar	3 bar	7 bar	A Length (mm)	B Deflection Angle (°)	C Bar Size (mm sq.)	Net Weight (kg)
50°	●		●				05	1.3	1.1	1.4	2.0	2.8	3.0	3.6	33	50	60	31	60	15.9	.03
	●		●				10	1.9	2.3	2.8	3.9	5.6	6.0	7.2	34	50	60	31	60	15.9	.03
	●		●	●			25	3.0	5.7	7.0	9.9	14.0	15.1	18.0	42	50	59	41.5	42	19.1	.09
	●		●	●			40	3.8	9.1	11.2	15.8	22	24	29	39	50	60	47	45	19.1	.09
	●			●			60	4.6	13.7	16.8	24	34	36	43	42	50	53	55	37	25.4	.14
	●			●			100	5.9	23	28	39	56	60	72	43	50	55	72	40	31.8	.33
	●			●			125	6.6	28	35	49	70	75	90	38	50	59	72	38	31.8	.31
	●			●			160	7.5	36	45	63	89	96	115	44	50	55	72	37	31.8	.31
	●			●			200	8.4	46	56	79	112	121	144	46	50	53	72	32	31.8	.31
40°	●			●			40	3.8	9.1	11.2	15.8	22	24	29	31	40	50	60.5	35	22.2	.14
	●			●			50	4.2	11.4	14.0	19.7	28	30	36	31	40	49	63.5	33	25.4	.20
	●			●			60	4.6	13.7	16.8	24	34	36	43	32	40	49	72	33	25.4	.23
	●			●			70	5.0	16.0	19.5	28	39	42	50	32	40	49	75.5	29	25.4	.26
	●			●			80	5.3	18.2	22	32	45	48	58	32	40	48	77	26	25.4	.26
	●			●			90	5.6	21	25	36	50	54	65	34	40	44	77	28	25.4	.23
	●			●			100	5.9	23	28	39	56	60	72	35	40	44	86.5	28	25.4	.26
35°	●	●					04	1.2	.91	1.1	1.6	2.2	2.4	2.9	20	35	41	23	40	11.1	.01
	●		●				10	1.9	2.3	2.8	3.9	5.6	6.0	7.2	18	35	39	36.5	36	15.9	.06
	●		●	●			20	2.7	4.6	5.6	7.9	11.2	12.1	14.4	24	35	40	42	30	19.1	.06
	●			●			25	3.0	5.7	7.0	9.9	14.0	15.1	18.0	24	35	39	49	28	19.1	.09
	●			●			30	3.3	6.8	8.4	11.8	16.8	18.1	22	26	35	41	52.5	28	19.1	.09
	●			●			40	3.8	9.1	11.2	15.8	22	24	29	28	35	38	58	26	22.2	.11
	●			●			50	4.2	11.4	14.0	19.7	28	30	36	31	35	38	63.5	23	22.2	.14
	●				●		60	4.6	13.7	16.8	24	34	36	43	29	35	39	73	27	25.4	.23
	●				●		80	5.3	18.2	22	32	45	48	58	26	35	40	81	24	25.4	.26
	●				●		100	5.9	23	28	39	56	60	72	26	35	40	89	19	25.4	.26
	●					●	160	7.5	36	45	63	89	96	115	26	35	40	114	23	31.8	.57
	●					●	200	8.4	46	56	79	112	121	144	25	35	40	122	22	31.8	.57
25°	●		●				40	3.8	9.1	11.2	15.8	22	24	29	15	25	34	65	25	19.1	.11
15°	●		●				10	1.9	–	2.8	3.9	5.6	6.0	7.2	–	15	23	47.5	22	15.9	.06
	●		●				20	2.7	–	5.6	7.9	11.2	12.1	14.4	–	15	19	54	19	15.9	.06
	●			●			30	3.3	6.8	8.4	11.8	16.8	18.1	22	6	15	24	72	25	19.1	.11
	●			●			40	3.8	9.1	11.2	15.8	22	24	29	8	15	21	92	18	22.2	.23
	●			●			50	4.2	11.4	14.0	19.7	28	30	36	9	15	20	90.5	15	22.2	.17
	●				●		60	4.6	13.7	16.8	24	34	36	43	10	15	19	125	14	25.4	.34
	●				●		80	5.3	18.2	22	32	45	48	58	11	15	18	130	14	25.4	.34
	●				●		100	5.9	23	28	39	56	60	72	11	15	18	131	14	25.4	.40
	●					●	200	8.4	46	56	79	112	121	144	12	15	18	165	14	31.8	.73

Highlighted column shows the rated pressure.



PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 3 bar	Tip Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	TPU, 13802			.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar	
110°	●	0033	.38	–	–	.092	.13	.18	.20	.29	.34	.45	91	110	116	121	
	●	0050	.46	–	–	.14	.20	.28	.30	.44	.51	.67	91	110	118	124	
	●	0067	.53	–	–	.19	.26	.37	.40	.59	.68	.90	92	110	118	124	
	●	01	.66	.14	.19	.28	.39	.56	.60	.88	1.0	1.3	94	110	121	124	
	●	015	.81	.22	.29	.42	.59	.84	.90	1.3	1.5	2.0	97	110	121	124	
	●	02	.89	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	98	110	120	123	
	●	03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	99	110	120	123	
	●	04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	100	110	119	122	
	●	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	100	110	118	122	
	●	06	1.6	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	101	110	117	122	
	●	07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	102	110	117	121	
	●	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	102	110	117	121	
	●	10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	103	110	117	119	
	●	12	2.2	1.7	2.3	3.4	4.7	6.7	7.2	10.6	12.2	16.2	103	110	117	119	
	●	15	2.5	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	104	110	117	118	
●	20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	105	110	117	118		
●	30	2.9	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	105	110	117	118		
95°	●	01	.66	.14	.19	.28	.39	.56	.60	.88	1.0	1.3	81	95	105	113	
	●	015	.81	.22	.29	.42	.59	.84	.90	1.3	1.5	2.0	82	95	105	113	
	●	02	.89	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	82	95	105	113	
	●	03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	83	95	104	111	
	●	04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	84	95	103	108	
	●	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	84	95	102	107	
	●	06	1.5	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	86	95	101	106	
	●	07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	86	95	101	106	
	●	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	87	95	100	105	
	●	09	1.9	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	89	95	100	105	
	●	10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	89	95	100	105	
	●	11	2.1	1.6	2.1	3.1	4.3	6.1	6.6	9.7	11.2	14.8	89	95	100	105	
	●	12	2.2	1.7	2.3	3.4	4.7	6.7	7.2	10.6	12.2	16.2	89	95	100	105	
	●	13	2.3	1.9	2.5	3.6	5.1	7.3	7.8	11.5	13.3	17.5	89	95	100	105	
	●	14	2.4	2.0	2.7	3.9	5.5	7.8	8.4	12.4	14.3	18.9	89	95	100	105	
	●	15	2.5	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	90	95	100	105	
	●	16	2.5	2.3	3.1	4.5	6.3	8.9	9.6	14.1	16.3	22	90	95	100	105	
	●	18	2.7	2.6	3.4	5.0	7.1	10.1	10.9	15.9	18.3	24	90	95	100	105	
	●	20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	90	95	100	105	
	●	30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	91	95	101	105	
●	40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	92	95	100	105		
●	50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	93	95	99	103		
●	60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	93	95	99	103		
●	70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	93	95	99	103		
80°	●	0050	.46	–	–	.14	.20	.28	.30	.44	.51	.67	61	80	95	101	
	●	0067	.53	–	.13	.19	.26	.37	.40	.59	.68	.90	67	80	94	99	
	●	01	.66	–	.19	.28	.39	.56	.60	.88	1.0	1.3	68	80	89	92	
	●	015	.81	–	.29	.42	.59	.84	.90	1.3	1.5	2.0	68	80	89	92	
	●	02	.89	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	69	80	88	91	
	●	03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	70	80	87	90	
	●	04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	71	80	86	89	
	●	045	1.4	.65	.86	1.3	1.8	2.5	2.7	4.0	4.6	6.1	71	80	86	89	
	●	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	71	80	86	89	
●	06	1.6	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	72	80	85	88		

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.



**PERFORMANCE DATA
TPU AND 13802 UNIJET® SPRAY TIPS**

Spray Angle at 3 bar	Tip Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)									Spray Angle (°)			
	TPU, 13802			.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar
80°	●	07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	72	80	85	88
	●	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	72	80	84	87
	●	09	1.9	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	73	80	84	87
	●	10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	73	80	84	87
	●	11	2.1	1.6	2.1	3.1	4.3	6.1	6.6	9.7	11.2	14.8	73	80	83	86
	●	12	2.2	1.7	2.3	3.4	4.7	6.7	7.2	10.6	12.2	16.2	73	80	83	86
	●	13	2.3	1.9	2.5	3.6	5.1	7.3	7.8	11.5	13.3	17.5	73	80	83	86
	●	14	2.4	2.0	2.7	3.9	5.5	7.8	8.4	12.4	14.3	18.9	73	80	83	86
	●	15	2.5	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	74	80	83	86
	●	16	2.5	2.3	3.1	4.5	6.3	8.9	9.6	14.1	16.3	22	74	80	83	86
	●	17	2.6	2.5	3.2	4.7	6.7	9.5	10.3	15.0	17.3	23	74	80	83	86
	●	20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	74	80	83	86
	●	25	3.1	3.6	4.8	7.0	9.9	14.0	15.1	22	25	34	74	80	83	86
	●	30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	74	80	83	86
	●	40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	74	80	83	86
	●	50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	74	80	83	85
	●	60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	75	80	83	85
●	70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	75	80	83	86	
73°	●	0023	.30	–	–	.064	.091	.13	.14	.20	.23	.31	50	73	89	97
	●	0039	.41	–	.074	.11	.15	.22	.24	.34	.40	.53	53	73	87	93
	●	0077	.58	–	.15	.21	.30	.43	.46	.68	.78	1.0	53	73	86	92
	●	0116	.71	.17	.22	.32	.46	.65	.70	1.0	1.2	1.6	54	73	85	90
	●	0154	.81	.22	.29	.43	.61	.86	.93	1.4	1.6	2.1	55	73	84	88
	●	0231	.96	.33	.44	.64	.91	1.3	1.4	2.0	2.4	3.1	56	73	83	87
	●	0308	1.1	.44	.59	.86	1.2	1.7	1.9	2.7	3.1	4.2	58	73	82	86
	●	0385	1.2	.56	.73	1.1	1.5	2.1	2.3	3.4	3.9	5.2	59	73	81	85
	●	0462	1.4	.67	.88	1.3	1.8	2.6	2.8	4.1	4.7	6.2	60	73	80	84
	●	0616	1.6	.89	1.2	1.7	2.4	3.4	3.7	5.4	6.3	8.3	63	73	79	83
	●	0770	1.8	1.1	1.5	2.1	3.0	4.3	4.6	6.8	7.8	10.4	64	73	77	82
	●	0924	1.9	1.3	1.8	2.6	3.6	5.2	5.6	8.2	9.4	12.5	65	73	77	80
	65°	●	0017	.28	–	–	.047	.067	.095	.10	.15	.17	.23	44	65	77
●		0025	.33	–	–	.070	.099	.14	.15	.22	.25	.34	45	65	77	84
●		0033	.38	–	–	.092	.13	.18	.20	.29	.34	.45	47	65	76	83
●		0050	.46	–	–	.14	.20	.28	.30	.44	.51	.67	48	65	75	82
●		0067	.53	–	.13	.19	.26	.37	.40	.59	.68	.90	50	65	75	81
●		01	.66	–	.19	.28	.39	.56	.60	.88	1.0	1.3	51	65	74	80
●		015	.81	–	.29	.42	.59	.84	.90	1.3	1.5	2.0	51	65	74	80
●		02	.89	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	52	65	73	79
●		025	.99	.36	.48	.70	.99	1.4	1.5	2.2	2.5	3.4	52	65	73	79
●		03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	53	65	72	78
●		035	1.2	.50	.67	.98	1.4	2.0	2.1	3.1	3.6	4.7	53	65	72	78
●		04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	53	65	72	76

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.

METRIC UNITS



PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 3 bar	Tip Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	TPU, 13802			.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar	
65°	●	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	53	65	72	76	
	●	055	1.5	.79	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4	53	65	72	76	
	●	06	1.6	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	54	65	72	75	
	●	07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	54	65	72	75	
	●	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	55	65	71	74	
	●	09	1.9	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	55	65	71	74	
	●	10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	56	65	71	74	
	●	11	2.1	1.6	2.1	3.1	4.3	6.1	6.6	9.7	11.2	14.8	56	65	71	74	
	●	12	2.2	1.7	2.3	3.4	4.7	6.7	7.2	10.6	12.2	16.2	56	65	71	74	
	●	13	2.3	1.9	2.5	3.6	5.1	7.3	7.8	11.5	13.3	17.5	56	65	71	74	
	●	14	2.4	2.0	2.7	3.9	5.5	7.8	8.4	12.4	14.3	18.9	56	65	71	74	
	●	15	2.5	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	56	65	70	73	
	●	20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	57	65	70	73	
	●	30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	58	65	69	72	
	●	40	3.8	5.8	7.6	11.2	15.8	22	24	35	41	54	59	65	68	72	
	●	50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	60	65	68	71	
	●	60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	60	65	68	71	
	●	70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	60	65	68	71	
50°	●	0017	.28	–	–	.047	.067	.095	.10	.15	.17	.23	27	50	65	74	
	●	0025	.33	–	–	.070	.099	.14	.15	.22	.25	.34	29	50	64	71	
	●	0033	.38	–	–	.092	.13	.18	.20	.29	.34	.45	30	50	62	68	
	●	0050	.46	–	–	.14	.20	.28	.30	.44	.51	.67	32	50	60	66	
	●	0067	.53	–	–	.19	.26	.37	.40	.59	.68	.90	35	50	60	66	
	●	01	.66	–	.19	.28	.39	.56	.60	.88	1.0	1.3	37	50	59	65	
	●	015	.81	–	.29	.42	.59	.84	.90	1.3	1.5	2.0	38	50	58	64	
	●	02	.89	–	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	39	50	57	63	
	●	025	.99	.36	.48	.70	.99	1.4	1.5	2.2	2.5	3.4	40	50	57	63	
	●	03	1.1	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	40	50	56	62	
	●	035	1.2	.50	.67	.98	1.4	2.0	2.1	3.1	3.6	4.7	40	50	56	61	
	●	04	1.3	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	42	50	56	61	
	●	05	1.4	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	44	50	56	61	
	●	06	1.5	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	45	50	56	60	
	●	07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	45	50	56	60	
	●	075	1.7	1.1	1.4	2.1	3.0	4.2	4.5	6.6	7.6	10.1	45	50	55	60	
	●	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	45	50	55	60	
	●	09	1.9	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	45	50	55	59	
	●	10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	45	50	55	59	
	●	13	2.3	1.9	2.5	3.6	5.1	7.3	7.8	11.5	13.3	17.5	45	50	55	59	
●	15	2.5	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	45	50	55	59		
●	20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	45	50	55	59		
●	30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	45	50	55	59		
●	40	3.8	5.8	7.6	11.2	15.8	22	24	35	41	54	46	50	54	59		

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.



PERFORMANCE DATA
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 3 bar	Tip Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)									Spray Angle (°)			
	TPU, 13802			.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar
50°	●	50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	46	50	54	59
	●	60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	46	50	54	59
	●	70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	46	50	54	59
40°	●	0017	.28	–	–	.047	.067	.095	.10	.15	.17	.23	21	40	54	61
	●	0025	.33	–	–	.070	.099	.14	.15	.22	.25	.34	22	40	53	60
	●	0033	.38	–	–	.092	.13	.18	.20	.29	.34	.45	22	40	53	60
	●	0050	.46	–	–	.14	.20	.28	.30	.44	.51	.67	22	40	53	60
	●	0067	.53	–	–	.19	.26	.37	.40	.59	.68	.90	24	40	53	60
	●	01	.66	–	–	.28	.39	.56	.60	.88	1.0	1.3	26	40	52	59
	●	015	.81	–	–	.42	.59	.84	.90	1.3	1.5	2.0	27	40	52	59
	●	02	.89	–	.38	.56	.79	1.1	1.2	1.8	2.0	2.7	29	40	51	58
	●	025	.99	–	.48	.70	.99	1.4	1.5	2.2	2.5	3.4	29	40	51	58
	●	03	1.1	–	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0	30	40	50	57
	●	04	1.3	–	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	30	40	50	56
	●	05	1.4	–	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	31	40	49	55
	●	055	1.5	–	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4	31	40	49	55
	●	06	1.6	–	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	31	40	49	55
	●	07	1.7	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	31	40	49	55
	●	08	1.8	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	31	40	47	53
	●	09	1.9	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	32	40	45	48
	●	10	2.0	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	32	40	45	48
	●	11	2.1	1.6	2.1	3.1	4.3	6.1	6.6	9.7	11.2	14.8	32	40	45	48
	●	12	2.2	1.7	2.3	3.4	4.7	6.7	7.2	10.6	12.2	16.2	32	40	45	48
	●	13	2.3	1.9	2.5	3.6	5.1	7.3	7.8	11.5	13.3	17.5	32	40	45	48
	●	15	2.5	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	32	40	45	48
	●	20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	32	40	45	48
	●	25	3.1	3.6	4.8	7.0	9.9	14.0	15.1	22	25	34	32	40	45	48
	●	30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	33	40	45	48
	●	40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	34	40	45	48
	●	50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	35	40	45	48
●	60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	35	40	45	48	
●	70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	35	40	45	48	
25°	●	0017	.28	–	–	–	.067	.095	.10	.15	.17	.23	–	25	35	47
	●	0025	.33	–	–	–	.099	.14	.15	.22	.25	.34	–	25	35	45
	●	0033	.38	–	–	–	.13	.18	.20	.29	.34	.45	–	25	34	44
	●	0050	.46	–	–	–	.20	.28	.30	.44	.51	.67	–	25	34	43
	●	0067	.53	–	–	–	.26	.37	.40	.59	.68	.90	–	25	34	42
	●	01	.66	–	–	.28	.39	.56	.60	.88	1.0	1.3	14	25	34	42
	●	015	.81	–	–	.42	.59	.84	.90	1.3	1.5	2.0	15	25	34	41
	●	02	.89	–	–	.56	.79	1.1	1.2	1.8	2.0	2.7	15	25	33	40
●	03	1.1	–	–	.84	1.2	1.7	1.8	2.6	3.1	4.0	15	25	33	40	
●	04	1.3	–	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4	16	25	32	39	

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.



PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA:
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 3 bar	Tip Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)									Spray Angle (°)			
	TPU, 13802			.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar
25°	●	05	1.4	–	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7	16	25	32	39
	●	055	1.5	–	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4	16	25	32	39
	●	06	1.6	–	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1	17	25	31	38
	●	07	1.7	–	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4	17	25	31	38
	●	08	1.8	–	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8	17	25	31	38
	●	09	1.9	–	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1	17	25	31	38
	●	10	2.0	–	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5	18	25	31	37
	●	13	2.3	–	2.5	3.6	5.1	7.3	7.8	11.5	13.3	17.5	18	25	31	37
	●	15	2.5	–	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	18	25	31	37
	●	20	2.8	–	3.8	5.6	7.9	11.2	12.1	17.7	20	27	19	25	31	37
	●	30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	20	25	30	36
	●	40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	21	25	29	35
	●	50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	21	25	29	35
	●	60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	22	25	29	35
15°	●	0017	.28	–	–	–	.067	.095	.10	.15	.17	.23	–	15	30	37
	●	0025	.33	–	–	–	.099	.14	.15	.22	.25	.34	–	15	28	34
	●	0033	.38	–	–	–	.13	.18	.20	.29	.34	.45	–	15	27	32
	●	0050	.46	–	–	–	.20	.28	.30	.44	.51	.67	–	15	26	30
	●	0067	.53	–	–	–	.26	.37	.40	.59	.68	.90	–	15	25	29
	●	01	.66	–	–	–	.39	.56	.60	.88	1.0	1.3	–	15	24	28
	●	015	.81	–	–	–	.59	.84	.90	1.3	1.5	2.0	–	15	23	27
	●	02	.89	–	–	.56	.79	1.1	1.2	1.8	2.0	2.7	6	15	22	27
	●	03	1.1	–	–	.84	1.2	1.7	1.8	2.6	3.1	4.0	6	15	22	27
	●	04	1.3	–	–	1.1	1.6	2.2	2.4	3.5	4.1	5.4	7	15	21	26
	●	05	1.4	–	–	1.4	2.0	2.8	3.0	4.4	5.1	6.7	7	15	21	26
	●	055	1.5	–	–	1.5	2.2	3.1	3.3	4.9	5.6	7.4	7	15	21	26
	●	06	1.6	–	–	1.7	2.4	3.4	3.6	5.3	6.1	8.1	8	15	21	26
	●	07	1.7	–	–	2.0	2.8	3.9	4.2	6.2	7.1	9.4	8	15	21	26
	●	08	1.8	–	–	2.2	3.2	4.5	4.8	7.1	8.2	10.8	9	15	20	25
	●	09	1.9	–	–	2.5	3.6	5.0	5.4	7.9	9.2	12.1	9	15	20	25
	●	10	2.0	–	–	2.8	3.9	5.6	6.0	8.8	10.2	13.5	10	15	19	24
	●	11	2.1	–	2.1	3.1	4.3	6.1	6.6	9.7	11.2	14.8	10	15	19	24
	●	12	2.2	1.7	2.3	3.4	4.7	6.7	7.2	10.6	12.2	16.2	10	15	19	24
	●	15	2.5	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20	10	15	19	24
	●	20	2.8	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27	10	15	19	23
	●	30	3.4	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40	10	15	19	21
	●	40	3.9	5.8	7.6	11.2	15.8	22	24	35	41	54	10	15	18	21
	●	50	4.4	7.2	9.5	14.0	19.7	28	30	44	51	67	11	15	18	21
●	60	4.8	8.6	11.4	16.8	24	34	36	53	61	81	11	15	18	21	
●	70	5.2	10.1	13.3	19.5	28	39	42	62	71	94	11	15	18	21	

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.



PERFORMANCE DATA:
TPU AND 13802 UNIJET® SPRAY TIPS

Spray Angle at 3 bar	Tip Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)									Spray Angle (°)			
	TPU, 13802			.4 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	15 bar	20 bar	35 bar	1.5 bar	3 bar	6 bar	15 bar
0°	●	0009	.20	.013	.017	.025	.036	.050	.054	.079	.092	.12	0 Solid Stream			
	●	0012	.25	.017	.023	.034	.047	.067	.072	.11	.12	.16				
	●	0019	.30	.027	.036	.053	.075	.11	.11	.17	.19	.26				
	●	0021	.33	.030	.040	.059	.083	.12	.13	.19	.21	.28				
	●	0033	.41	.048	.063	.092	.13	.18	.20	.29	.34	.45				
	●	0050	.48	.072	.095	.14	.20	.28	.30	.44	.51	.67				
	●	0067	.58	.097	.13	.19	.26	.37	.40	.59	.68	.90				
	●	01	.71	.14	.19	.28	.39	.56	.60	.88	1.0	1.3				
	●	015	.86	.22	.29	.42	.59	.84	.90	1.3	1.5	2.0				
	●	02	.99	.29	.38	.56	.79	1.1	1.2	1.8	2.0	2.7				
	●	03	1.2	.43	.57	.84	1.2	1.7	1.8	2.6	3.1	4.0				
	●	04	1.4	.58	.76	1.1	1.6	2.2	2.4	3.5	4.1	5.4				
	●	045	1.5	.65	.86	1.3	1.8	2.5	2.7	4.0	4.6	6.1				
	●	05	1.6	.72	.95	1.4	2.0	2.8	3.0	4.4	5.1	6.7				
	●	055	1.7	.79	1.0	1.5	2.2	3.1	3.3	4.9	5.6	7.4				
	●	06	1.7	.86	1.1	1.7	2.4	3.4	3.6	5.3	6.1	8.1				
	●	065	1.8	.94	1.2	1.8	2.6	3.6	3.9	5.7	6.6	8.8				
	●	07	1.9	1.0	1.3	2.0	2.8	3.9	4.2	6.2	7.1	9.4				
	●	08	2.0	1.2	1.5	2.2	3.2	4.5	4.8	7.1	8.2	10.8				
	●	09	2.1	1.3	1.7	2.5	3.6	5.0	5.4	7.9	9.2	12.1				
●	10	2.2	1.4	1.9	2.8	3.9	5.6	6.0	8.8	10.2	13.5					
●	11	2.3	1.6	2.1	3.1	4.3	6.1	6.6	9.7	11.2	14.8					
●	12	2.4	1.7	2.3	3.4	4.7	6.7	7.2	10.6	12.2	16.2					
●	15	2.7	2.2	2.9	4.2	5.9	8.4	9.0	13.2	15.3	20					
●	20	3.1	2.9	3.8	5.6	7.9	11.2	12.1	17.7	20	27					
●	30	3.6	4.3	5.7	8.4	11.8	16.8	18.1	26	31	40					
●	40	4.1	5.8	7.6	11.2	15.8	22	24	35	41	54					

Other body types may be available. Contact your sales engineer for further information.
Highlighted column shows the rated pressure.

METRIC UNITS

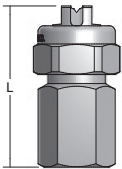
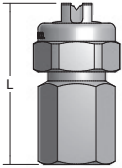


PERFORMANCE DATA:
14784 UNIJET® SPRAY TIPS

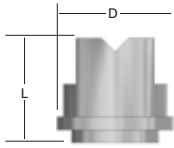
Spray Angle at 3 bar	Tip Type	Capacity Size	Flow Rate Capacity (liters per minute)						
	14784		1 bar	2 bar	3 bar	4 bar	6 bar	8 bar	10 bar
80°	●	40	9.1	12.9	15.8	18.2	22.3	25.8	28.8
	●	50	11.4	16.1	19.7	22.8	27.9	32.2	36.0
	●	60	13.7	19.3	23.7	27.4	33.5	38.7	43.2
	●	70	16.0	22.6	27.6	31.9	39.1	45.1	50.5
	●	100	22.8	32.2	39.5	45.6	55.8	64.5	72.1
	●	128	29.2	41.3	50.5	58.4	71.5	82.5	92.3
65°	●	40	9.1	12.9	15.8	18.2	22.3	25.8	28.8
	●	50	11.4	16.1	19.7	22.8	27.9	32.2	36.0
	●	60	13.7	19.3	23.7	27.4	33.5	38.7	43.2
	●	70	16.0	22.6	27.6	31.9	39.1	45.1	50.5
	●	100	22.8	32.2	39.5	45.6	55.8	64.5	72.1
50°	●	20	4.6	6.4	7.9	9.1	11.2	12.9	14.4
	●	40	9.1	12.9	15.8	18.2	22.3	25.8	28.8
	●	50	11.4	16.1	19.7	22.8	27.9	32.2	36.0
	●	60	13.7	19.3	23.7	27.4	33.5	38.7	43.2
	●	70	16.0	22.6	27.6	31.9	39.1	45.1	50.5
	●	100	22.8	32.2	39.5	45.6	55.8	64.5	72.1
40°	●	20	4.6	6.4	7.9	9.1	11.2	12.9	14.4
	●	50	11.4	16.1	19.7	22.8	27.9	32.2	36.0
	●	100	22.8	32.2	39.5	45.6	55.8	64.5	72.1
25°	●	50	11.4	16.1	19.7	22.8	27.9	32.2	36.0
	●	100	22.8	32.2	39.5	45.6	55.8	64.5	72.1
	●	120	27.4	38.7	47.4	54.7	67.0	77.4	86.5
	●	125	28.5	40.3	49.4	57.0	69.8	80.6	90.1
15°	●	100	22.8	32.2	39.5	45.6	55.8	64.5	72.1

Other body types may be available. Contact your sales engineer for further information.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	T (F) + TPU TT (M) + TPU	1/4	40.9	13/16	.06
	T (F) + 13802 TT (M) + 13802	1/4	48.0	13/16	.06

Based on the largest/heaviest version of each type.

Nozzle	Spray Tip Type	L (mm)	D (mm)	Flats (mm)
	14784	25.4	25.4	19.1

**PERFORMANCE DATA
18897 VEEJET® SPRAY TIPS**

Spray Angle at 3 bar	Tip Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)						
	18897			.5 bar	1 bar	2 bar	4 bar	6 bar	8 bar	10 bar
110°	●	20	2.8	3.2	4.6	6.4	9.1	11.2	12.9	14.4
	●	25	3.2	4.0	5.7	8.1	11.4	14.0	16.1	18.0
	●	30	3.6	4.8	6.8	9.7	13.7	16.7	19.3	22
	●	40	4.0	6.4	9.1	12.9	18.2	22	26	29
	●	50	4.4	8.1	11.4	16.1	23	28	32	36
	●	60	4.8	9.7	13.7	19.3	27	33	39	43
	●	80	5.6	12.9	18.2	26	36	45	52	58
	●	120	6.8	19.3	27	39	55	67	77	86
	●	200	8.7	32	46	64	91	112	129	144
80°	●	20	2.8	3.2	4.6	6.4	9.1	11.2	12.9	14.4
	●	25	3.2	4.0	5.7	8.1	11.4	14.0	16.1	18.0
	●	30	3.6	4.8	6.8	9.7	13.7	16.7	19.3	22
	●	40	4.0	6.4	9.1	12.9	18.2	22	26	29
	●	50	4.4	8.1	11.4	16.1	23	28	32	36
	●	60	4.8	9.7	13.7	19.3	27	33	39	43
	●	80	5.6	12.9	18.2	26	36	45	52	58
	●	120	6.8	19.3	27	39	55	67	77	86
	●	200	8.7	32	46	64	91	112	129	144
65°	●	20	2.8	3.2	4.6	6.4	9.1	11.2	12.9	14.4
	●	25	3.2	4.0	5.7	8.1	11.4	14.0	16.1	18.0
	●	30	3.6	4.8	6.8	9.7	13.7	16.7	19.3	22
	●	40	4.0	6.4	9.1	12.9	18.2	22	26	29
	●	50	4.4	8.1	11.4	16.1	23	28	32	36
	●	60	4.8	9.7	13.7	19.3	27	33	39	43
	●	80	5.6	12.9	18.2	26	36	45	52	58
	●	100	6.4	16.2	23	32	46	56	64	72
	●	120	6.8	19.3	27	39	55	67	77	86
	●	200	8.7	32	46	64	91	112	129	144
50°	●	20	2.8	3.2	4.6	6.4	9.1	11.2	12.9	14.4
	●	25	3.2	4.0	5.7	8.1	11.4	14.0	16.1	18.0
	●	30	3.6	4.8	6.8	9.7	13.7	16.7	19.3	22
	●	40	4.0	6.4	9.1	12.9	18.2	22	26	29
	●	50	4.4	8.1	11.4	16.1	23	28	32	36



PERFORMANCE DATA

**METRIC UNITS
FLAT SPRAY NOZZLES**

METRIC UNITS

**PERFORMANCE DATA
18897 VEEJET® SPRAY TIPS**

Spray Angle at 3 bar	Tip Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)						
	18897			.5 bar	1 bar	2 bar	4 bar	6 bar	8 bar	10 bar
50°	●	60	4.8	9.7	13.7	19.3	27	33	39	43
	●	80	5.6	12.9	18.2	26	36	45	52	58
	●	120	6.8	19.3	27	39	55	67	77	86
	●	200	8.7	32	46	64	91	112	129	144
40°	●	20	2.8	3.2	4.6	6.4	9.1	11.2	12.9	14.4
	●	25	3.2	4.0	5.7	8.1	11.4	14.0	16.1	18.0
	●	30	3.6	4.8	6.8	9.7	13.7	16.7	19.3	22
	●	40	4.0	6.4	9.1	12.9	18.2	22	26	29
	●	50	4.4	8.1	11.4	16.1	23	28	32	36
	●	60	4.8	9.7	13.7	19.3	27	33	39	43
	●	80	5.6	12.9	18.2	26	36	45	52	58
	●	90	6.0	14.6	21	29	41	50	58	65
	●	100	6.4	16.2	23	32	46	56	64	72
	●	120	6.8	19.3	27	39	55	67	77	86
25°	●	200	8.7	32	46	64	91	112	129	144
	●	20	2.8	3.2	4.6	6.4	9.1	11.2	12.9	14.4
	●	25	3.2	4.0	5.7	8.1	11.4	14.0	16.1	18.0
	●	30	3.6	4.8	6.8	9.7	13.7	16.7	19.3	22
	●	40	4.0	6.4	9.1	12.9	18.2	22	26	29
	●	50	4.4	8.1	11.4	16.1	23	28	32	36
	●	60	4.8	9.7	13.7	19.3	27	33	39	43
	●	80	5.6	12.9	18.2	26	36	45	52	58
	●	100	6.4	16.2	23	32	46	56	64	72
	●	120	6.8	19.3	27	39	55	67	77	86
15°	●	200	8.7	32	46	64	91	112	129	144
	●	20	2.8	3.2	4.6	6.4	9.1	11.2	12.9	14.4
	●	25	3.2	4.0	5.7	8.1	11.4	14.0	16.1	18.0
	●	30	3.6	4.8	6.8	9.7	13.7	16.7	19.3	22
	●	40	4.0	6.4	9.1	12.9	18.2	22	26	29
	●	50	4.4	8.1	11.4	16.1	23	28	32	36
	●	60	4.8	9.7	13.7	19.3	27	33	39	43
	●	80	5.6	12.9	18.2	26	36	45	52	58
●	120	6.8	19.3	27	39	55	67	77	86	



PERFORMANCE DATA
49803 AND 49807 VEEJET® SPRAY TIPS

Spray Angle at 2.8 bar	Tip Type		Capacity Size	Flow Rate Capacity (liters per minute)					
	49803	49807		2 bar	3 bar	4 bar	5.5 bar	7 bar	10 bar
110°		●	0067	.22	.260	.31	.36	.40	.48
		●	02	.64	.79	.91	1.06	1.20	1.40
		●	04	1.30	1.60	1.80	2.16	2.40	2.90
		●	06	1.90	2.40	2.70	3.22	3.60	4.30
		●	08	2.60	3.20	3.60	4.28	4.80	5.80
	●		40	12.88	15.78	18.22	22.31	24.10	28.80
	●		50	16.11	19.73	22.78	27.90	3.13	36.02
95°		●	02	.64	.79	.91	1.06	1.20	1.40
		●	04	.97	1.18	1.37	1.60	1.81	2.16
		●	06	1.90	2.40	2.70	3.22	3.60	4.30
		●	08	2.60	3.20	3.60	4.28	4.80	5.80
	●		10	3.22	3.95	4.56	5.35	6.03	7.21
	●		15	4.82	5.92	6.84	8.02	9.08	10.81
	●		20	6.44	7.89	9.11	11.16	12.05	14.41
	●		30	9.66	11.83	13.66	16.73	18.07	21.60
	●		40	12.88	15.78	18.22	22.31	24.10	28.80
	●		50	16.11	19.73	22.78	27.90	3.13	36.02
	80°		●	01	.32	.39	.45	.53	.61
		●	02	.64	.79	.91	1.06	1.20	1.40
		●	04	1.30	1.60	1.80	2.16	2.40	2.90
		●	06	1.90	2.40	2.70	3.22	3.60	4.30
		●	08	2.60	3.20	3.60	4.28	4.80	5.80
●			10	3.22	3.95	4.56	5.35	6.03	7.21
●			15	4.82	5.92	6.84	8.02	9.08	10.81
●			20	6.44	7.89	9.11	11.16	12.05	14.41
●			30	9.66	11.83	13.66	16.73	18.07	21.60
●			40	12.88	15.78	18.22	22.31	24.10	28.80
●			50	16.11	19.73	22.78	27.90	3.13	36.02



PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA
49803 AND 49807 VEEJET® SPRAY TIPS

Spray Angle at 2.8 bar	Tip Type		Capacity Size	Flow Rate Capacity (liters per minute)					
	49803	49807		2 bar	3 bar	4 bar	5.5 bar	7 bar	10 bar
75°	●		50	16.11	19.73	22.78	27.90	3.13	36.02
65°		●	015	.49	.60	.67	.79	.91	1.07
		●	02	.64	.79	.91	1.06	1.20	1.40
		●	04	1.30	1.60	1.80	2.16	2.40	2.90
		●	06	1.90	2.40	2.70	3.22	3.60	4.30
		●	08	2.60	3.20	3.60	4.28	4.80	5.80
		●	10	3.22	3.95	4.56	5.35	6.03	7.21
		●	15	4.82	5.92	6.84	8.02	9.08	10.81
		●	20	6.44	7.89	9.11	11.16	12.05	14.41
		●	30	9.66	11.83	13.66	16.73	18.07	21.60
		●	40	12.88	15.78	18.22	22.31	24.10	28.80
		●	50	16.11	19.73	22.78	27.90	3.13	36.02
60°	●		50	16.11	19.73	22.78	27.90	3.13	36.02
50°	●		30	9.66	11.83	13.66	16.73	18.07	21.60
	●		50	16.11	19.73	22.78	27.90	3.13	36.02
	●		70	22.56	27.63	31.91	37.42	42.22	5.46
45°	●		50	16.11	19.73	22.78	27.90	3.13	36.02
25°		●	0067	.220	.26	.31	.36	.40	.48
		●	015	.49	.60	.67	.79	.91	1.07
15°		●	01	.32	.39	.45	.53	.61	.72
5°		●	01	.32	.39	.45	.53	.61	.72



**PERFORMANCE DATA
58606 VEEJET® SPRAY TIPS**

Spray Angle at 3 bar	Tip Type	Capacity Size	Flow Rate Capacity (liters per minute)						
	45478		1 bar	2 bar	3 bar	4 bar	6 bar	8 bar	10 bar
110°	●	150	34.2	48.4	59.2	68.4	83.7	96.7	108.1
	●	200	45.6	64.5	79.0	91.2	111.7	128.9	144.2
80°	●	150	34.2	48.4	59.2	68.4	83.7	96.7	108.1
	●	200	45.6	64.5	79.0	91.2	111.7	128.9	144.2
65°	●	150	34.2	48.4	59.2	68.4	83.7	96.7	108.1
	●	200	45.6	64.5	79.0	91.2	111.7	128.9	144.2
	●	250	57.0	80.6	98.7	114.0	139.6	161.2	180.2
50°	●	150	34.2	48.4	59.2	68.4	83.7	96.7	108.1
	●	180	41.0	58.0	71.1	82.1	100.5	116.0	129.7
	●	200	45.6	64.5	79.0	91.2	111.7	128.9	144.2
	●	250	57.0	80.6	98.7	114.0	139.6	161.2	180.2
40°	●	150	34.2	48.4	59.2	68.4	83.7	96.7	108.1
	●	200	45.6	64.5	79.0	91.2	111.7	128.9	144.2
25°	●	130	29.6	41.9	51.3	59.3	72.6	83.8	93.7
	●	140	31.9	45.1	55.3	63.8	78.2	90.3	100.9
	●	150	34.2	48.4	59.2	68.4	83.7	96.7	108.1
	●	200	45.6	64.5	79.0	91.2	111.7	128.9	144.2
15°	●	180	41.0	58.0	71.1	82.1	100.5	116.0	129.7
	●	200	45.6	64.5	79.0	91.2	111.7	128.9	144.2

**PERFORMANCE DATA
20799 VEEJET® SPRAY TIPS**

Spray Angle at 2.8 bar	Tip Type	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)						
	20799			.5 bar	1 bar	2 bar	4 bar	6 bar	8 bar	10 bar
120°	●	12.5	2.2	2.0	2.8	4.0	5.7	7.0	8.1	9.0
	●	15	2.4	2.4	3.4	4.8	6.8	8.4	9.7	10.8
	●	20	2.8	3.2	4.6	6.4	9.1	11.2	12.9	14.4
	●	25	3.2	4.0	5.7	8.1	11.4	14.0	16.1	18.0
	●	30	3.6	4.8	6.8	9.7	13.7	16.7	19.3	22
	●	40	4.0	6.4	9.1	12.9	18.2	22	26	29
	●	50	4.4	8.1	11.4	16.1	23	28	32	36
	●	60	4.8	9.7	13.7	19.3	27	33	39	43
	●	80	5.6	12.9	18.2	26	36	45	52	58
	●	100	6.4	16.1	23	32	46	56	64	72
	●	125	6.8	20	28	40	57	70	81	90
	●	200	8.7	32	46	64	91	112	129	144



PERFORMANCE DATA

METRIC UNITS
FLAT SPRAY NOZZLES

METRIC UNITS

PERFORMANCE DATA
FSUN-S VEEJET® SPRAY TIPS

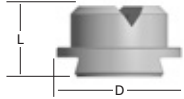
Spray Angle	Tip Retainer Size (in.)	Tip Type FSUN-S	Capacity Size	Equiv. Orifice Dia. (mm)	Flow Rate Capacity (liters per minute)					
					.5 bar	1 bar	2 bar	3 bar	5 bar	10 bar
20°, 30°, 45°, 60°, 75°, 90°, 120°	3/8	•	.6	.8	.2	.3	.4	.5	.6	.9
		•	1	1.0	.3	.5	.6	.8	1.0	1.4
		•	1.5	1.2	.5	.7	1.0	1.2	1.5	2.1
		•	2	1.4	.6	.9	1.3	1.6	2.0	2.8
		•	2.5	1.5	.8	1.1	1.6	1.9	2.5	3.5
		•	3	1.7	1.0	1.3	1.9	2.3	3.0	4.2
		•	4	2.0	1.3	1.8	2.5	3.1	4.0	5.6
		•	5	2.2	1.5	2.2	3.2	3.9	5.0	7.1
		•	6	2.5	1.9	2.7	3.8	4.6	6.0	8.5
		•	7.5	2.7	2.4	3.4	4.7	5.8	7.5	10.6
		•	10	3.0	3.2	4.5	6.3	7.8	10.0	14.1
		•	13	3.5	4.1	5.8	8.2	10.1	13.0	18.4
		•	16	4.0	5.1	7.2	10.1	12.4	16.0	22.6
		•	20	4.5	6.3	8.9	12.7	15.5	20.0	28.3
		•	25	5.0	7.9	11.2	15.8	19.4	25.0	35.4
		20°, 30°, 45°, 60°, 75°, 90°, 120°	3/4	•	32	5.5	10.1	14.3	20.2	24.8
•	40			6.0	12.7	17.9	25.3	31.0	40.0	56.6
•	10			3.0	3.2	4.5	6.3	7.8	10.0	14.1
•	13			3.5	4.1	5.8	8.2	10.1	13.0	18.4
•	16			4.0	5.1	7.2	10.1	12.4	16.0	22.6
•	20			4.5	6.3	8.9	12.7	15.5	20.0	28.3
•	25			5.0	7.9	11.2	15.8	19.4	25.0	35.4
•	32			5.5	10.1	14.3	20.2	24.8	32.0	45.3
•	40			6.0	12.7	17.9	25.3	31.0	40.0	56.6
•	50			7.0	15.8	22.4	31.6	38.7	50.0	70.7
•	63			8.0	19.9	28.2	39.8	48.8	63.0	89.1
20°, 30°, 45°, 60°, 75°, 90°, 120°	1-1/4			•	80	9.0	25.3	35.8	50.6	62.0
		•	100	10.0	31.6	44.7	63.2	77.5	100.0	141.4
		•	130	11.0	41.4	58.1	82.2	100.7	130.0	183.8
		•	160	12.0	50.6	71.6	101.2	123.9	160.0	226.3
		•	200	13.0	63.2	89.4	126.5	154.9	200.0	282.8
		•	250	15.0	79.1	111.8	158.1	193.7	250.0	353.6
		•	63	8.0	19.9	28.2	39.8	48.8	63.0	89.1



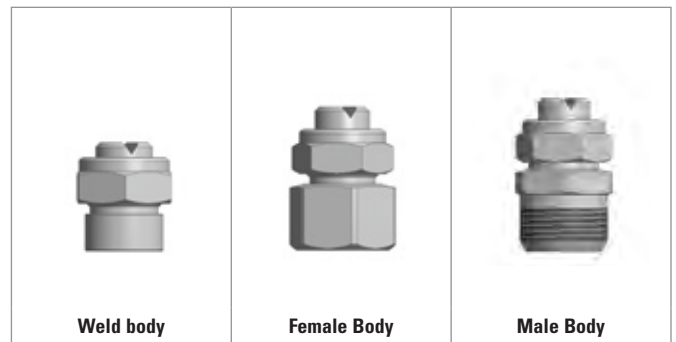
DIMENSIONS AND WEIGHTS

Spray Tip	Spray Tip Type	L (mm)	D (mm)
	18897	14.3	23.8
	20799	21.03	23.8
	58606	93.5	25.4
	49803, 49807	11.79	14.68

Based on the largest/heaviest version of each type.

Spray Tip	Spray Tip Type	Tip Retainer Size (in.)	L (mm)	D (mm)
	FSUN-S	3/8	12	14.8
		3/4	14	24
		1-1/4	22	38.5

Based on the largest/heaviest version of each type.



Dovetail spray tips can be used on a variety of body types. Please contact your sales engineer for body options and dimensions.

METRIC UNITS

PERFORMANCE DATA

METRIC UNITS
FULL CONE NOZZLES

METRIC UNITS

PERFORMANCE DATA
G, GG, H, HH, HF, GA AND GGA FULLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type							Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)								Spray Angle (°)		
	Standard				Angle						.4 bar	.5 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	.5 bar	1.5 bar	6 bar
	G	GG	H	HH	HF	GA	GGA														
1/8	•	•		•				1	.79	.64	-	-	.38	.54	.74	1.0	1.1	1.3	-	58	53
	•	•		•				1.5	1.2	.64	.44	.49	.57	.80	1.1	1.5	1.6	1.9	52	65	59
	•	•		•		•	•	2	1.2	1.0	.59	.65	.76	1.1	1.5	2.0	2.2	2.6	43	50	46
	•	•		•		•	•	3	1.5	1.0	.88	.98	1.1	1.6	2.2	3.1	3.3	3.9	52	65	59
	•	•		•		•	•	3.5	1.6	1.3	1.0	1.1	1.3	1.9	2.6	3.6	3.8	4.5	43	50	46
						•	•	3.9	2.0	1.0	1.1	1.3	1.5	2.1	2.9	4.0	4.3	5.1	77	84	79
	•	•		•		•	•	5	2.0	1.3	1.5	1.6	1.9	2.7	3.7	5.1	5.5	6.5	52	65	59
1/4						•	•	6.1	2.3	1.3	1.8	2.0	2.3	3.3	4.5	6.2	6.7	7.9	69	74	68
	•	•		•		•	•	6.5	2.4	1.6	1.9	2.1	2.5	3.5	4.8	6.7	7.1	8.4	45	50	46
	•	•		•		•	•	10	3.2	1.6	3.0	3.3	3.8	5.4	7.5	10.3	11.0	13.0	58	67	61
3/8				•		•	•	12.5	3.2	1.6	3.7	4.1	4.8	6.8	9.3	12.8	13.7	16.2	69	74	68
	•	•		•		•	•	9.5	2.6	2.4	2.8	3.1	3.6	5.1	7.1	9.7	10.4	12.3	45	50	46
	•	•		•		•	•	15	3.6	2.4	4.4	4.9	5.7	8.1	11.2	15.4	16.5	19.4	64	67	61
						•	•	20	4.0	2.8	6.0	6.6	7.6	10.7	14.5	19.6	22	26	76	80	73
1/2	•	•		•		•	•	22	4.5	2.8	6.5	7.2	8.4	11.9	16.4	23	24	28	87	90	82
	•	•				•	•	16	3.5	3.2	4.7	5.2	6.1	8.7	11.9	16.4	17.6	21	48	50	46
	•	•		•		•	•	25	4.6	3.2	7.4	8.2	9.5	13.5	18.6	26	27	32	64	67	61
	•	•		•		•	•	32	5.2	3.6	9.4	10.4	12.2	17.3	24	33	35	41	72	75	68
	•	•		•		•	•	40	6.2	3.6	11.9	13.1	15.2	21	29	39	44	52	88	91	83
3/4						•	•	50	6.7	4.0	14.7	16.3	19.1	27	37	51	55	65	91	94	86
			•	•				2.5	4.9	4.4	8.7	9.6	11.2	15.9	22	30	32	38	48	50	46
			•	•				4.0	6.4	4.4	13.9	15.4	18.0	26	35	48	52	61	67	70	63
1			•	•				7.0	9.5	5.2	24	27	31	45	61	84	91	107	89	92	84
			•	•				4.2	6.0	5.6	14.6	16.2	18.9	27	37	51	54	64	48	50	46
			•	•				7.0	8.3	5.6	24	27	31	45	61	84	91	107	67	68	62
			•	•				8.0	9.5	5.6	28	31	36	51	70	97	104	122	72	81	82
			•	•				10	11.9	5.6	35	38	45	64	88	121	130	153	78	90	94
1-1/4			•	•				12	11.9	6.4	42	46	54	77	105	145	155	183	89	92	84
			•					6	7.4	6.4	21	23	27	38	53	72	78	92	48	50	44
			•					10	9.6	6.4	35	38	45	64	88	121	130	153	64	67	58
			•					12	10.7	6.4	42	46	54	77	105	145	155	183	66	70	60
			•					14	12.3	6.4	49	54	63	89	123	169	181	214	77	80	70
			•					16	12.7	7.9	56	62	72	102	140	193	207	244	73	76	66
		•					20	15.1	7.9	69	77	90	128	175	241	259	305	90	93	81	

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.



**PERFORMANCE DATA
G, GG, H, HH, HF, GA AND GGA FULLJET® NOZZLES**

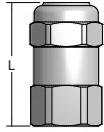
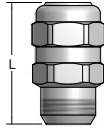
Inlet Conn. (in.)	Nozzle Type						Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)								Spray Angle (°)		
	Standard			Angle						.4 bar	.5 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	.5 bar	1.5 bar	6 bar
	G	GG	H	HH	HF	GA				GGA										
1-1/2			●				10	9.5	8.7	35	38	45	64	88	121	130	153	48	50	44
			●				16	12.7	8.7	56	62	72	102	140	193	207	244	72	74	64
			●				20	14.3	8.7	69	77	90	128	175	241	259	305	74	76	66
			●				30*	18.3	10.3	104	115	135	191	263	362	389	458	91	94	82
2			●				17	12.7	11.1	59	65	76	108	149	205	220	259	49	50	44
			●				30	17.3	11.1	104	115	135	191	263	362	389	458	72	74	64
			●				35	19.2	11.1	122	135	157	223	307	422	453	534	75	77	68
			●				40	21.0	11.1	139	154	180	255	351	483	518	611	78	80	70
			●				50*	23.8	14.3	174	192	225	319	439	603	648	763	83	85	75
			●				60*	28.6	14.3	208	231	269	383	526	724	777	916	98	100	86
2-1/2			●				25	15.1	14.3	87	96	112	159	219	302	324	382	49	50	44
			●				50	22.2	14.3	174	192	225	319	439	603	648	763	72	74	64
			●				60	24.6	14.3	208	231	269	383	526	724	777	916	76	78	68
			●				70	28.6	14.3	243	269	314	446	614	845	907	1068	79	82	72
			●				80	28.6	17.5	278	308	359	510	702	965	1036	1221	86	88	77
			●				90	30.2	17.5	312	346	404	574	790	1086	1166	1374	95	97	84
			●				42	19.1	17.5	146	162	189	268	368	507	544	641	49	50	44
			●				80	27.8	17.5	278	308	359	510	702	965	1036	1221	81	84	73
3			●				90	30.2	17.5	312	346	404	574	790	1086	1166	1374	86	89	77
			●				100	32.5	17.5	347	385	449	638	877	1207	1295	1526	92	95	83
			●				110	33.3	18.2	382	423	494	702	965	1327	1425	1679	86	89	77
			●				120	34.9	20.6	417	462	539	765	1053	1448	1554	1832	102	105	89
			●	●			160	42.9	19.1	556	616	719	1020	1404	1931	2073	2442	87	90	70
			●	●			180	47.2	22.2	625	693	808	1148	1579	2172	2332	2747	92	95	83
4			●	●			200	50.8	25.4	694	769	898	1276	1755	2413	2591	3053	97	100	87
			●	●			210	54.8	25.4	729	808	943	1339	1842	2534	2720	3205	102	105	91
			●	●			250	47.6	28.6	868	962	1123	1594	2193	3017	3238	3816	89	91	80
			●	●			280	52.8	28.6	972	1077	1258	1786	2456	3379	3627	4274	93	96	84
5			●	●			320	68.3	34.9	1111	1231	1437	2041	2807	3861	4145	4884	97	100	87
			●	●			330	72.2	34.9	1146	1270	1482	2105	2895	3982	4275	5037	102	105	91
			●	●			350	61.1	41.3	1215	1347	1572	2232	3070	4223	4534	5342	87	90	78
			●	●			400	69.1	41.3	1389	1539	1797	2551	3509	4827	5181	6105	92	95	83
6			●	●			450	77	44.5	1562	1731	2021	2870	3948	5430	5829	6868	97	100	87
			●	●			480	81.8	44.5	1667	1847	2156	3061	4211	5792	6218	7326	102	105	91
			●	●			500	69.9	47.6	1736	1924	2246	3189	4386	6033	6477	7632	78	80	70
			●	●			600	80.2	47.6	2083	2308	2695	3827	5264	7240	7772	9158	86	88	77
8			●	●			700	91.3	47.6	2430	2693	3144	4464	6141	8447	9068	10684	92	95	83
			●	●			800	102	57.2	2778	3078	3593	5102	7018	9654	10363	12211	102	105	91
			●	●			900	124	57.2	3125	3463	4042	5740	7895	10860	11658	13737	106	110	96
			●	●			800	85.1	63.5	2778	3078	3593	5102	7018	9654	10363	12211	78	80	70
10			●	●			1000	101	63.5	3472	3847	4492	6378	8773	12067	12954	15263	86	89	77
			●	●			1200	122	66.7	4167	4617	5390	7653	10527	14480	15544	18316	97	100	87
			●	●			1300	135	66.7	4514	5002	5839	8291	11404	15687	16840	19842	103	106	92

Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging.
 *These capacity sizes are not available for H in polypropylene.
 Highlighted column shows the rated pressure.

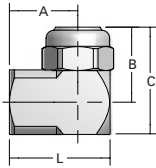
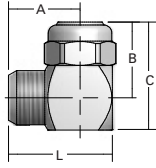
METRIC UNITS



DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	G (F)	1/8	55.6	9/16	.03
		1/4	37.3	11/16	.04
		3/8	46.0	13/16	.07
		1/2	57.2	1	.17
	GG (M)	1/8	32.5	9/16	.02
		1/4	39.7	11/16	.04
		3/8	46.8	13/16	.07
		1/2	56.4	1	.17

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	A (mm)	B (mm)	C (mm)	Net Weight (kg)
	GA (F)	1/8	23.1	16.0	14.3	21.4	.04
		1/4	28.7	20.1	19.8	28.6	.06
		3/8	32.5	22.2	30.2	40.5	.09
		1/2	39.7	27.0	34.5	47.2	.18
	GGA (M)	1/8	23.9	16.8	14.3	21.4	.04
		1/4	29.5	20.8	19.8	28.6	.06
		3/8	33.3	23.0	30.2	40.5	.09
		1/2	40.9	28.2	34.5	47.2	.18

Based on the largest/heaviest version of each type.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	D (Dia.) (mm)	Net Weight (kg)
	H (F)	3/4	55.6	31.8	.21
		1	69.4	38.1	.35
	H (F) Cast	1-1/4	87.4	52.4 oct.	.73
		1-1/2	103.2	58.7 oct.	.72
		2	138.2	76.2 oct.	1.11
		2-1/2	160.3	87.3 oct.	2.15
		3	187.3	103.2 oct.	2.70
		4	242.9	138.1 oct.	5.44
	H (F) Cast (Standard angle only) Wide angle not available in Cast for these sizes	5	293.7	171.5 oct.	13.97
		6	365.1	203.2 oct.	22.23
	HF (Flange)	4	206.4	222.3	13.06
		5	268.2	254.0	15.56
		6	320.7	279.4	22.23
		8	422.3	342.9	54.43
		10	527.1	406.4	87.54
	HH (M)	1/8	22.2	12.7	.01
		1/4	22.4	13.5	.01
		3/8	23.9	16.7	.03
		1/2	29.4	20.6	.04
		3/4	38.9	27.0	.10
		1	51.6	33.3	.20

Based on the largest/heaviest version of each type.

METRIC UNITS



PERFORMANCE DATA

**METRIC UNITS
FULL CONE NOZZLES**

METRIC UNITS

**PERFORMANCE DATA
HMFP AND HHMFP MAXIMUM FREE PASSAGE FULLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type		Capacity Size	Approx. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)				Spray Angle (°)					
									60° Series		90° Series		115° Series	
	HMFP	HHMFP			.7 bar	1.5 bar	3 bar	6 bar	.7 bar	3 bar	.07 bar	3 bar	.7 bar	3 bar
3/8	●	●	14	3.2	5.3	7.2	9.5	12.6	60	62	90	84	115	100
	●	●	22	4.0	8.4	11.4	15.0	19.8	60	62	90	84	115	100
	●	●	32	4.8	12.2	16.5	22	29	60	62	90	84	115	100
1/2	●	●	32	4.8	12.2	16.5	22	29	60	62	90	84	115	100
	●	●	51	5.5	19.4	26	35	46	60	62	90	84	115	100
	●	●	57	6.4	22	29	39	51	60	62	90	84	115	100
3/4	●	●	70	7.1	27	36	48	63	60	62	90	84	115	100
	●	●	84	7.9	32	43	57	76	60	62	90	84	115	100
	●	●	100	8.7	38	52	68	90	60	62	90	84	115	100
	●	●	120	9.5	46	62	82	108	60	62	90	84	115	100
1	●	●	120	9.5	46	62	82	108	60	62	90	84	115	100
	●	●	150	10.3	57	76	99	129	60	62	90	88	115	105
	●	●	170	11.1	65	86	113	146	60	62	90	88	115	105
1-1/4	●	●	170	11.1	65	86	113	146	60	62	90	88	115	105
	●	●	200	11.9	76	102	132	172	60	62	90	88	115	105
	●	●	220	12.7	84	112	146	189	60	62	90	88	115	105
	●	●	240	13.5	91	122	159	207	60	62	90	88	115	105
	●	●	260	14.3	99	132	172	224	60	62	90	88	115	105
	●	●	240	13.7	91	126	170	227	60	59	89	89	108	104
1-1/2	●	●	260	14.2	99	137	184	246	62	61	90	92	113	103
	●	●	280	14.5	107	147	198	265	62	62	89	91	113	107
	●	●	300	15.0	114	164	226	313	63	62	93	92	114	108
	●	●	350	16.0	133	191	264	365	63	63	91	93	117	113
	●	●	400	16.8	153	218	302	418	64	64	92	93	120	115
	●	●	450	17.8	172	245	339	470	65	63	92	91	117	116
	●	●	500	19.3	191	274	382	533	59	58	90	86	103	98
2	●	●	600	20.8	229	329	459	639	61	58	89	86	108	102
	●	●	700	21.8	267	384	535	746	62	57	92	91	114	106
	●	●	800	24.6	305	439	612	852	60	57	93	89	113	111
	●	●	1000	25.4	381	539	739	1013	61	58	92	90	112	112
2-1/2	●	●	1200	30.7	457	647	887	1216	63	59	94	91	110	108
	●	●	1400	34.5	534	755	1035	1419	62	60	93	92	113	111
	●	●	1700	35.8	648	917	1257	1723	62	60	89	88	112	110
	●	●	1800	25.4	686	949	1274	1712	61	59	90	92	112	108
3	●	●	2000	43.9	762	1054	1416	1902	63	61	93	91	112	109
	●	●	2400	55.9	914	1265	1699	2282	62	60	95	93	114	111

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



DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	Spray Angle	Capacity Size	L (mm)	Hex. (in.)	Net Weight (kg)
	HMFP (F)	3/8	60°, 90°, 115°	14, 22	37.3	13/16	.07
			60°, 90°, 115°	32	43.2	13/16	.07
		1/2	60°, 90°, 115°	32	45.0	1	.13
			60°, 90°, 115°	51, 57	53.9	1	.13
		3/4	60°, 90°, 115°	70	61.0	1-1/4	.25
			60°, 90°, 115°	84	67.0	1-3/8	.36
			60°, 90°, 115°	100	73.5	1-3/8	.38
		60°, 90°, 115°	120	78.0	1-3/8	.37	
		1	60°, 90°, 115°	120, 150, 170	82.6	1-3/4	.64
		1-1/4	60°, 90°, 115°	170, 200, 220, 240, 260	95.3	2	.86
1-1/2	60°, 90°, 115°	240, 260, 280, 300, 350, 400, 450	111.3	2-3/16	1		
	HMFP (F) Cast	2	60°, 90°, 115°	500, 600, 700, 800	165.8	2-3/4 dia.	1.5
		2-1/2	60°, 90°, 115°	1000, 1200, 1400, 1700	203.2	3-3/16 dia.	2.65
		3	60°, 90°, 115°	1800, 2000, 2400	239.8	4-3/16 dia.	3.25
	HHMFP (M)	3/8	60°, 90°, 115°	14, 22	25.4	11/16	.04
			60°, 90°, 115°	32	43.2	3/4	.06
		1/2	60°, 90°, 115°	32	31.1	7/8	.07
			60°, 90°, 115°	51, 57	55.8	1	.14
		3/4	60°, 90°, 115°	70	46.0	1-1/8	.14
			60°, 90°, 115°	84	68.9	1-3/8	.33
			60°, 90°, 115°	100	75.7	1-3/8	.34
		60°, 90°, 115°	120	78.7	1-3/8	.33	
		1	60°, 90°, 115°	120, 150, 170	82.6	1-3/4	.64
		1-1/4	60°, 90°, 115°	170, 200, 220, 240, 260	95.3	2	.91
1-1/2	60°, 90°, 115°	240, 260, 280, 300, 350, 400, 450	111.3	2-3/16	1.04		
	HHMFP (M) Cast	2	60°, 90°, 115°	500, 600, 700, 800	165.8	2-3/4 dia.	1.5
		2-1/2	60°, 90°, 115°	1000, 1200, 1400, 1700	203.2	3-3/16 dia.	2.65
		3	60°, 90°, 115°	1800, 2000, 2400	239.8	4-3/16 dia.	3.25

Based on the largest/heaviest version of each type.

METRIC UNITS



PERFORMANCE DATA

METRIC UNITS
FULL CONE NOZZLES

METRIC UNITS

PERFORMANCE DATA
HHSJ SPIRALJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type	Spray Angle at .7 bar					Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)				
		HHSJ	60°	90°	120°	150°				170°	.7 bar	1.5 bar	3 bar	7 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.

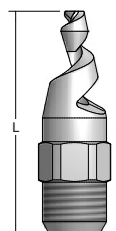


**PERFORMANCE DATA
HHSJX SPIRALJET® NOZZLES**

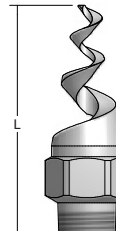
Inlet Conn. (in.)	Nozzle Type	Spray Angle at 7 bar		Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)				
		90°	120°				.7 bar	1.5 bar	3 bar	7 bar	25 bar
3/8	•	•	•	30	4.8	4.8	11.4	16.8	24	36	68
	•	•	•	40	5.6	5.6	15.3	22	32	48	91
	•	•	•	53	6.4	6.4	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	.03
		3/8	60.3	11/16	.05
		1/2	79.4	7/8	.10
		3/4	87.3	1-1/16	.15
		1	115.9	1-3/8	.28
		1-1/2	171.5	2	.77
		2	174.6	2-1/2	.99
		3	301.6	3-3/4	2.61
		4	228.6	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	.09
		1/2	85.7	1-1/16	.13
		3/4	117.5	1-3/8	.23
		1	130.2	1-3/4	.51
		1-1/2	171.5	2	.85
		2	279.4	3	2.49

Based on the largest/heaviest version of each type.



PERFORMANCE DATA

METRIC UNITS
FULL CONE NOZZLES

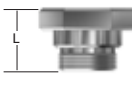
METRIC UNITS

PERFORMANCE DATA
VK FULLJET® NOZZLES

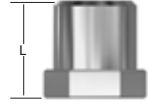
Inlet Conn. (in.)	Nozzle Type	Capacity Size	Flow Rate Capacity (liters per minute)						Max. Free Passage (mm) at Spray Angle (°)			
			.5 bar	1 bar	2 bar	3 bar	5 bar	10 bar	45	60	90	120
3/8 F	VK	1.5	.5	.7	1.0	1.2	1.5	2.1	.70	1.10	.80	.75
	•	2	.6	.9	1.3	1.6	2.0	2.8	.80	1.2	.80	.80
	•	2.5	.8	1.1	1.6	1.9	2.5	3.5	1.20	1.15	1.00	.90
	•	3.5	1.1	1.6	2.2	2.7	3.5	4.9	1.25	1.20	1.10	1.00
	•	4	1.3	1.8	2.5	3.1	4.0	5.7	1.40	1.25	1.15	1.10
	•	4.5	1.4	2.0	2.8	3.5	4.5	6.4	1.40	1.30	1.15	1.10
	•	5	1.6	2.2	3.2	3.8	5.0	7.1	1.55	1.50	1.20	1.20
	•	6	1.7	2.7	3.8	4.7	6.0	8.5	1.60	1.60	1.40	1.30
	•	7	2.2	3.1	4.4	5.4	7.0	9.9	1.80	1.65	1.55	1.40
	•	8	2.5	3.6	5.0	6.2	8.0	11.4	1.95	1.70	1.70	1.55
	•	9	2.8	4.0	5.7	7.0	9.0	12.7	1.95	1.85	1.70	1.55
	•	10	3.2	4.5	6.4	7.8	10.0	14.2	2.00	1.85	1.75	1.60
	•	11	3.5	4.9	7.0	8.5	11.0	15.6	2.00	1.85	1.75	1.60
	•	12	3.8	5.4	7.6	9.3	12.0	17.0	2.05	1.90	1.80	1.65
	•	13	4.1	5.8	8.2	10.1	13.0	18.4	2.10	1.90	1.80	1.70
	•	14	4.4	6.3	8.9	10.8	14.0	19.8	2.10	1.95	1.85	1.70
	•	15	4.7	6.7	9.5	11.6	15.0	21.2	2.15	2.00	1.85	1.75
	•	16	5.1	7.2	10.1	12.4	16.0	22.7	2.20	2.10	1.90	1.80
	•	17	5.4	7.6	10.8	13.2	17.0	24.0	2.20	2.10	1.90	1.80
	•	18	5.7	8.0	11.4	13.9	18.0	25.5	2.25	2.15	1.95	1.85
•	19	6.0	8.5	12.0	14.7	19.0	26.9	2.25	2.15	1.95	1.85	
•	20	6.3	9.0	12.7	15.5	20.0	28.4	2.30	2.20	2.00	1.90	
3/8 M	•	5	1.6	2.2	3.2	3.8	5.0	7.1	1.55	1.50	1.20	1.20
	•	6	1.7	2.7	3.8	4.7	6.0	8.5	1.60	1.60	1.40	1.30
	•	8	2.5	3.6	5.0	6.2	8.0	11.4	1.95	1.70	1.70	1.55
	•	10	3.2	4.5	6.4	7.8	10.0	14.2	2.00	1.85	1.75	1.60
	•	13	4.1	5.8	8.2	10.1	13.0	18.4	2.10	1.90	1.80	1.70
	•	16	5.1	7.2	10.1	12.4	16.0	22.7	2.20	2.10	1.90	1.80
	•	20	6.3	9.0	12.7	15.5	20.0	28.4	2.30	2.20	2.00	1.90
1/2 M	•	20	6.3	9.0	12.7	15.5	20.0	28.4	2.30	2.20	2.00	1.90
	•	25	7.9	11.2	15.8	19.4	25.0	35.4	2.00	2.50	2.10	2.00
	•	32	10.1	14.3	20.2	24.8	32.0	45.3	2.80	2.60	2.50	2.30
	•	40	12.7	17.9	25.3	30.9	40.0	56.6	3.00	2.80	2.70	2.50
3/4 M	•	40	12.7	17.9	25.3	30.9	40.0	56.6	3.00	2.80	2.70	2.50
	•	50	15.8	22.4	31.6	38.7	50.0	70.7	3.20	2.90	2.80	2.70
	•	63	19.9	28.2	39.8	48.8	63.0	89.1	3.40	3.10	3.00	2.90

F = female threads (type IG), M = male threads (type AG)

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	D (mm)	Hex. (in.)
	VK-AG (M)	3/8	20	—	3/4
		1/2	26	—	1
		3/4	28	—	1-1/4

F = female thread; M = male thread. BSPP threads.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	D (mm)	Hex. (in.)
	VK-IG (F)	3/8	26.5	21	7/8

F = female thread; M = male thread. BSPP threads.

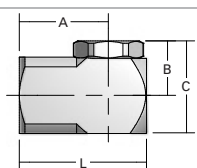
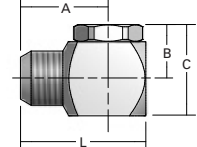


PERFORMANCE DATA
GANV AND GGANV FULLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type		Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)								Spray Angle (°)		
	GANV	GGANV				.4 bar	.5 bar	.7 bar	1 bar	1.5 bar	3 bar	6 bar	7 bar	.5 bar	1.5 bar	6 bar
1/4	●	●	5	2.8	2.0	1.4	1.6	1.9	2.3	2.8	3.9	5.6	6.0	68	75	82
	●	●	7	3.2	2.4	2.0	2.3	2.7	3.2	3.9	5.5	7.8	8.4	68	75	82
	●	●	8	4.0	2.8	2.3	2.6	3.1	3.6	4.5	6.3	8.9	9.6	75	80	85
	●	●	10	4.0	3.2	2.9	3.2	3.8	4.6	5.6	7.9	11.2	12.1	75	80	85
	●	●	11	4.0	3.6	3.2	3.5	4.2	5.0	6.1	8.7	12.3	13.3	75	80	85
3/8	●	●	11	4.4	3.2	3.2	3.5	4.2	5.0	6.1	8.7	12.3	13.3	75	85	83
	●	●	13	4.4	3.6	3.7	4.2	5.0	5.9	7.3	10.3	14.5	15.7	75	85	83
	●	●	16	4.4	4.0	4.6	5.2	6.1	7.3	8.9	12.6	17.9	19.3	75	85	83
	●	●	20	5.6	4.4	5.8	6.4	7.6	9.1	11.2	15.8	22	24	75	85	83
	●	●	23	5.6	4.8	6.6	7.4	8.8	10.5	12.8	18.2	26	28	75	85	83
	●	●	26	6.0	5.2	7.5	8.4	9.9	11.9	14.5	21	29	31	75	85	83
	●	●	29	6.0	5.6	8.4	9.3	11.1	13.2	16.2	23	32	35	75	85	83
	●	●	33	7.5	6.0	9.5	10.6	12.6	15.0	18.4	26	37	40	75	85	83
1/2	●	●	32	7.9	5.2	9.2	10.3	12.2	14.6	17.9	25	36	39	85	90	95
	●	●	40	7.9	6.0	11.5	12.9	15.3	18.2	22	32	45	48	85	90	95
	●	●	48	7.9	7.1	13.8	15.5	18.3	22	27	38	54	58	85	90	95
	●	●	56	9.9	7.5	16.1	18.1	21	26	31	44	63	68	85	90	95
	●	●	64	9.9	8.3	18.5	21	24	29	36	51	71	77	85	90	95
	●	●	72	9.9	9.1	21	23	27	33	40	57	80	87	85	90	95

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)	A (mm)	B (mm)	C (mm)	Net Weight (kg)
	GANV (F)	1/4	29.4	19.8	22.2	31.0	.06
		3/8	32.5	22.2	25.4	36.5	.09
		1/2	39.7	27.0	38.9	51.6	.18
	GGANV (M)	1/4	29.4	20.6	22.2	31.8	.06
		3/8	33.3	23.0	25.4	36.5	.09
		1/2	41.3	28.6	38.9	51.6	.18

Based on the largest/heaviest version of each type.



PERFORMANCE DATA

METRIC UNITS
FULL CONE NOZZLES

METRIC UNITS

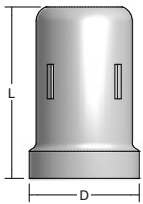
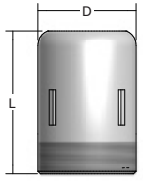
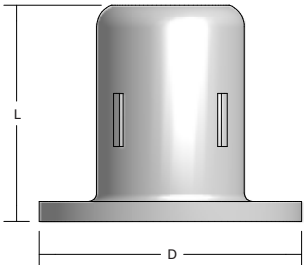
PERFORMANCE DATA
R, RR AND RF DISTRIBOJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type												Capacity Size	Flow Rate Capacity (liters per minute)							
	R				RR				RF					.1 bar	.2 bar	.4 bar	.5 bar	.7 bar	1.5 bar	3 bar	4 bar
	Spray Angle																				
	50°	65°	80°	95°	50°	65°	80°	95°	50°	65°	80°	95°									
2	•	•		•	•	•		•					45	122	168	231	256	298	424	583	665
		•		•		•		•					60	163	224	308	341	398	565	777	887
2-1/2	•	•		•	•	•		•					70	190	261	359	398	464	659	907	1035
		•		•		•		•					90	244	335	461	511	597	848	1166	1331
3	•	•		•	•	•		•					110	298	410	564	625	730	1036	1425	1627
		•		•		•		•					140	379	522	718	795	929	1318	1814	2070
4	•	•	•		•	•	•		•	•	•		160	434	596	820	909	1061	1507	2073	2366
	•	•		•	•	•		•	•	•		•	190	515	708	974	1079	1260	1789	2461	2809
		•		•		•		•		•		•	250	677	932	1282	1420	1658	2354	3238	3697
5	•	•	•		•	•	•		•	•	•		250	677	932	1282	1420	1658	2354	3238	3697
	•	•		•	•	•		•	•	•		•	280	759	1044	1436	1591	1857	2637	3627	4140
		•		•		•		•		•		•	380	1030	1416	1948	2159	2520	3579	4922	5619
6	•	•	•		•	•	•		•	•	•		360	975	1342	1846	2045	2388	3390	4663	5323
	•	•		•	•	•		•	•	•		•	400	1084	1491	2051	2273	2653	3767	5181	5915
		•		•		•		•		•		•	560	1517	2087	2871	3182	3714	5274	7254	8280
8	•	•	•		•	•	•		•	•	•		650	1761	2423	3333	3693	4311	6121	8420	9611
	•	•		•	•	•		•	•	•		•	750	2032	2795	3845	4261	4974	7063	9715	11090
		•		•		•		•		•		•	850	2303	3168	4358	4829	5637	8005	11011	12569
				•				•				•	1000	2710	3727	5127	5681	6632	9417	12954	14787
12												•	1400	3794	5218	7178	7954	9285	13184	18135	20701
												•	1600	4335	5964	8203	9090	10612	15067	20726	23658
												•	1700	4606	6336	8716	9658	11275	16009	22021	25137
												•	1800	4877	6709	9229	10226	11938	16951	23317	26616
												•	2000	5419	7455	10254	11363	13265	18834	25907	29573
												•	2200	5961	8200	11279	12499	14591	20718	28498	32530

For orifice information, contact your sales engineer.
Highlighted column shows the rated pressure.



DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	D (Dia.) (mm)	Net Weight (kg)
	R (F)	2	112.7	74.6	1.36
		2-1/2	138.9	88.1	2.49
		3	165.1	104.8	3.40
		4	206.4	127.0	6.12
		5	254.8	161.9	14.97
		6	300.0	193.7	17.46
		8	388.9	241.3	34.02
	RR (M)	2	82.6	60.3	.91
		2-1/2	101.6	73.0	2.38
		3	123.8	88.9	2.61
		4	165.1	114.3	4.54
		5	211.1	141.3	11.34
		6	247.7	168.3	13.15
		8	330.2	219.1	25.40
	RF (Flange)	4	166.7	225.4	10.43
		5	223.8	250.8	17.69
		6	249.2	276.2	20.41
		8	330.2	339.7	38.56
		12	495.3	482.6	91.17

Based on the largest/heaviest version of each type.

METRIC UNITS

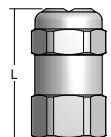
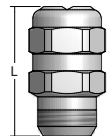
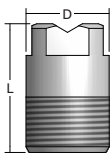


**PERFORMANCE DATA
G-SQ, GG-SQ AND HH-SQ FULLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type			Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)		
	G-SQ	GG-SQ	HH-SQ				.4 bar	.5 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	.5 bar	1.5 bar	6 bar		
1/8	●	●	●	3.6SQ	1.6	1.3	1.1	1.2	1.4	1.9	2.7	3.7	4.0	4.7	40	52	47		
	●	●	●	4.8SQ	1.9	1.3	1.4	1.6	1.8	2.6	3.6	4.9	5.3	6.2	48	63	57		
	●	●	●	6SQ	2.4	1.3	1.8	2.0	2.3	3.2	4.5	6.1	6.6	7.8	60	66	60		
1/4	●	●	●	10SQ	2.8	1.6	2.9	3.3	3.8	5.4	7.4	10.2	11.0	13.0	62	67	61		
	●	●	●	12SQ	3.2	1.6	3.5	3.9	4.6	6.5	8.9	12.3	13.2	15.5	70	75	68		
			●	14.5SQ	3.9	1.6	4.3	4.7	5.5	7.8	10.8	14.8	15.9	18.8	78	82	75		
3/8	●	●	●	18SQ	4.0	2.4	5.3	5.9	6.9	9.7	13.4	18.4	19.8	23	71	75	68		
1/2	●	●	●	29SQ	5.6	3.2	8.5	9.5	11.1	15.7	22	30	32	38	71	75	68		
			●	36SQ	6.4	3.2	10.6	11.8	13.7	19.5	27	37	40	47	78	82	75		
3/4			●	50SQ	6.7	4.4	14.7	16.3	19.1	27	37	51	55	65	71	75	68		
1			●	106SQ	9.9	5.6	31	35	40	57	79	109	117	137	78	80	73		

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.)	D (Dia.) (mm)	Net Weight (kg)
	G-SQ (F)	1/8	28.5	9/16	—	.03
		1/4	34.1	11/16	—	.04
	GG-SQ (M)	1/8	30.1	9/16	—	.01
		1/4	36.5	11/16	—	.01
	HH-SQ (M)	1/8	22.2	—	12.7	.01
		1/4	22.2	—	13.5	.02
		3/8	23.8	—	16.7	.05
		1/2	28.7	—	20.6	.10
		3/4	38.9	—	27.0	.04
		1	51.6	—	33.3	.37

Based on the largest/heaviest version of each type.



**PERFORMANCE DATA
TG UNIJET® SPRAY TIPS**

Body Inlet Conn. (in.)	UniJet Tip Type	Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)								Spray Angle (°)		
	TG				.4 bar	.5 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	.5 bar	1.5 bar	6 bar
1/4	●	.3	.51	.41	–	–	–	.16	.22	.31	.33	.39	–	50	61
	●	.4	.56	.46	–	–	–	.22	.30	.41	.44	.52	–	56	63
	●	.5	.61	.51	–	–	–	.27	.37	.51	.55	.65	–	56	63
	●	.6	.69	.51	–	–	–	.32	.45	.61	.66	.78	–	54	62
	●	.7	.76	.51	–	–	–	.38	.52	.72	.77	.91	–	54	63
	●	1	.94	.64	–	–	.38	.54	.74	1.0	1.1	1.3	–	58	53
	●	2	1.19	1.0	.59	.65	.76	1.1	1.5	2.0	2.2	2.6	43	50	46
	●	3	1.57	1.0	.88	.98	1.1	1.6	2.2	3.1	3.3	3.9	52	65	59
	●	3.5	1.70	1.3	1.0	1.1	1.3	1.9	2.6	3.6	3.8	4.5	43	50	46
	●	5	2.08	1.3	1.5	1.6	1.9	2.7	3.7	5.1	5.5	6.5	52	65	59
	●	6.5	2.38	1.6	1.9	2.1	2.5	3.5	4.8	6.7	7.1	8.4	45	50	46
●	10	3.18	1.6	3.0	3.3	3.8	5.4	7.5	10.3	11.0	13.0	58	67	61	

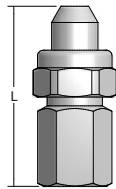
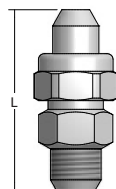
Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging. Other body sizes may be available. Contact your sales engineer for further information. Highlighted column shows the rated pressure.

**PERFORMANCE DATA
TG-SQ UNIJET® SPRAY TIPS**

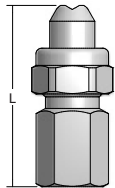
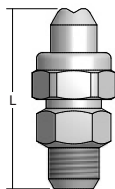
Body Inlet Conn. (in.)	UniJet Tip Type	Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)								Spray Angle (°)		
	TG-SQ				.4 bar	.5 bar	.7 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	.5 bar	1.5 bar	6 bar
1/4	●	6SQ	2.4	1.3	1.8	2.0	2.3	3.2	4.5	6.1	6.6	7.8	60	66	60
	●	8SQ	2.5	1.3	2.4	2.6	3.0	4.3	6.0	8.2	8.8	10.4	70	75	68
	●	10SQ	2.8	1.6	2.9	3.3	3.8	5.4	7.4	10.2	11.0	13.0	62	66	60
	●	12SQ	3.2	1.6	3.5	3.9	4.6	6.5	8.9	12.3	13.2	15.5	70	75	68
3/8	●	18SQ	4.0	2.4	5.3	5.9	6.9	9.7	13.4	18.4	19.8	23	71	75	68

Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging. Other body sizes may be available. Contact your sales engineer for further information. Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	T (F) + TG	1/4	46.8	13/16	.06
	TT (M) + TG	1/4	46.8	13/16	.06

Based on the largest/heaviest version of each type. Additional sizes are available.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	T (F) + TG-SQ TT (M) + TG-SQ	1/4	57.9	13/16	.05
		3/8	58.1	13/16	.06

Based on the largest/heaviest version of each type. Additional sizes are available.

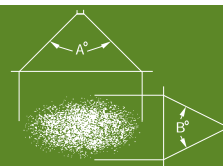


PERFORMANCE DATA

METRIC UNITS
FULL CONE NOZZLES: OVAL SPRAY

METRIC UNITS

PERFORMANCE DATA
G-VL, GG-VL AND HH-VL FULLJET® NOZZLES



Inlet Conn. (in.)	Nozzle Type			Capacity Size	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)							Spray Angle (°)							
						1 bar							3 bar		7 bar		10 bar			
	G-VL	GG-VL	HH-VL			1 bar	2 bar	3 bar	4 bar	6 bar	7 bar	10 bar	A	B	A	B	A	B	A	B
3/8	●	●	●	4.9VL	1.0	2.2	3.0	3.6	4.2	5.0	5.4	6.3	104	66	90	60	86	52	83	47
	●	●	●	6.5VL	1.3	2.9	4.0	4.8	5.5	6.7	7.1	8.4	106	64	95	60	85	50	81	45
	●	●	●	8.1VL	1.3	3.6	5.0	6.0	6.9	8.3	8.9	10.5	102	64	100	65	84	50	80	45
	●	●	●	9.2VL	1.3	4.1	5.7	6.8	7.8	9.4	10.1	11.9	103	65	100	65	86	51	81	46

Maximum Free Passage Diameter is the maximum diameter as listed of foreign matter that can pass through the nozzle without clogging.
Calibration pressure = 10 psi (.7 bar).

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	D (Dia.) (mm)	Net Weight (kg)
	G-VL (F)	3/8	38.1	13/16	57.1	.06
	GG-VL (M)	3/8	38.1	13/16	57.1	.05
	HH-VL (M)	1/2	45	7/8	-	.08

Based on the largest/heaviest version of each type.



**PERFORMANCE DATA
AX AND BX WHIRLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type		Capacity Size	Inlet Dia. Nom. (mm)	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per minute)											Spray Angle (°)		
	AX	BX				.2 bar	.4 bar	.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	.7 bar	1.5 bar	6 bar	
1/8	●	●	5	.79	1.2	–	–	.19	.23	.28	.32	.39	.46	.56	.60	39	58	69	
	●	●	1	1.6	1.6	–	–	.38	.46	.56	.64	.79	.91	1.1	1.2	41	64	76	
	●	●	2	2.0	2.0	–	.58	.76	.91	1.1	1.3	1.6	1.8	2.2	2.4	52	61	69	
	●	●	3	2.4	2.4	–	.86	1.1	1.4	1.7	1.9	2.4	2.7	3.4	3.6	52	64	77	
	●	●	5	3.2	3.2	1.0	1.4	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	56	67	76	
	●	●	8	4.0	4.0	1.6	2.3	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	56	65	70	
	●	●	10	4.4	4.4	2.0	2.9	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	55	65	72	
1/4	●	●	1	1.6	1.6	–	–	.38	.46	.56	.64	.79	.91	1.1	1.2	47	53	67	
	●	●	2	2.0	2.0	–	–	.76	.91	1.1	1.3	1.6	1.8	2.2	2.4	56	62	71	
	●	●	3	2.4	2.4	–	.86	1.1	1.4	1.7	1.9	2.4	2.7	3.4	3.6	51	65	78	
	●	●	5	3.6	3.6	1.0	1.4	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	63	73	79	
	●	●	8	4.0	4.0	1.6	2.3	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	61	69	73	
	●	●	10	4.8	4.4	2.0	2.9	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	63	70	74	
	●	●	15	5.9	5.2	3.1	4.3	5.7	6.8	8.4	9.7	11.8	13.7	16.8	18.1	63	71	72	
3/8	●	●	5	3.6	3.2	1.0	1.4	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	64	73	79	
	●	●	8	4.4	4.0	1.6	2.3	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	62	70	74	
	●	●	10	5.2	4.4	2.0	2.9	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	64	72	75	
	●	●	15	5.9	5.6	3.1	4.3	5.7	6.8	8.4	9.7	11.8	13.7	16.8	18.1	64	72	74	
	●	●	20	7.1	6.4	4.1	5.8	7.6	9.1	11.2	12.9	15.8	18.2	22	24	63	70	74	
	●	●	25	7.5	7.5	5.1	7.2	9.5	11.4	14.0	16.1	19.7	23	28	30	63	70	74	
	●	●	30	8.3	7.9	6.1	8.6	11.4	13.7	16.8	19.3	24	27	34	36	63	70	74	
1/2	●	●	25	9.5	6.4	5.1	7.2	9.5	11.4	14.0	16.1	19.7	23	28	30	63	66	71	
	●	●	30	9.5	7.5	6.1	8.6	11.4	13.7	16.8	19.3	24	27	34	36	67	71	75	
	●	●	40	9.5	9.1	8.2	11.5	15.3	18.2	22	26	32	36	45	48	72	76	78	
	●	●	50	9.5	11.1	10.2	14.4	19.1	23	28	32	39	46	56	60	74	79	82	
	●	●	60	9.5	13.1	12.2	17.3	23	27	34	39	47	55	67	72	77	82	86	
3/4	●	●	40	12.7	7.9	8.2	11.5	15.3	18.2	22	26	32	36	45	48	70	73	74	
	●	●	50	12.7	9.5	10.2	14.4	19.1	23	28	32	39	46	56	60	72	75	77	
	●	●	60	12.7	11.1	12.2	17.3	23	27	34	39	47	55	67	72	74	76	79	
	●	●	70	12.7	12.7	14.3	20	27	32	39	45	55	64	78	84	76	79	83	
	●	●	80	12.7	14.3	16.3	23	31	36	45	52	63	73	89	96	78	82	84	
	●	●	90	12.7	14.7	18.3	26	34	41	50	58	71	82	101	109	81	84	84	
	●	●	100	12.7	15.9	20	29	38	46	56	64	79	91	112	121	83	86	86	
	●	●	110	12.7	17.1	22	32	42	50	61	71	87	100	123	133	85	88	88	
	●	●	120	12.7	18.3	24	35	46	55	67	77	95	109	134	145	87	90	90	

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.

METRIC UNITS



PERFORMANCE DATA

METRIC UNITS
HOLLOW CONE NOZZLES

METRIC UNITS

PERFORMANCE DATA
CX WHIRLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type CX	Capacity Size	Inlet Dia. Nom. (mm)	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per minute)												Spray Angle (°)		
					.2 bar	.3 bar	.4 bar	.5 bar	.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	.5 bar	1.5 bar	4 bar
1	●	7	17.5	11.5	17.1	21	24	27	32	38	47	54	66	76	93	101	64	65	66
	●	8	17.5	12.7	19.5	24	28	31	36	44	53	62	76	87	107	115	65	66	67
	●	9	17.5	14.3	22	27	31	35	41	49	60	69	85	98	120	130	66	67	69
	●	10	17.5	15.5	24	30	34	39	46	54	67	77	94	109	133	144	67	69	71
	●	12	17.5	17.1	29	36	41	46	55	65	80	92	113	131	160	173	70	73	75
	●	15	17.5	20.6	37	45	52	58	68	82	100	116	142	163	200	216	76	79	81
1-1/4	●	10	21.4	14.3	24	30	34	39	46	54	67	77	94	109	133	144	65	67	67
	●	12	21.4	16.3	29	36	41	46	55	65	80	92	113	131	160	173	68	70	71
	●	14	21.4	18.3	34	42	48	54	64	76	93	108	132	153	187	202	71	73	75
	●	16	21.4	20.2	39	48	55	62	73	87	107	123	151	174	214	231	74	75	77
	●	20	21.4	24.2	49	60	69	77	91	109	133	154	189	218	267	288	76	77	79
1-1/2	●	16	27.8	17.5	39	48	55	62	73	87	107	123	151	174	214	231	64	67	69
	●	20	27.8	21.8	49	60	69	77	91	109	133	154	189	218	267	288	69	72	74
	●	25	27.8	25.8	61	75	86	96	114	136	167	193	236	272	334	360	72	74	76
	●	30	27.8	28.6	73	90	103	116	137	163	200	231	283	327	400	432	74	76	78
2	●	30	36.5	23.8	73	90	103	116	137	163	200	231	283	327	400	432	66	67	70
	●	35	36.5	27.0	85	104	121	135	160	191	234	270	330	381	467	505	68	70	73
	●	40	36.5	30.2	97	119	138	154	182	218	267	308	378	436	534	577	70	72	75
	●	45	36.5	32.9	110	134	155	173	205	245	300	347	425	490	601	649	72	74	78
	●	50	36.5	36.1	122	149	172	193	228	272	334	385	472	545	667	721	74	77	82
	●	60	36.5	39.7	146	179	207	231	274	327	400	462	566	654	801	865	77	79	84
2-1/2	●	60	47.6	36.1	146	179	207	231	274	327	400	462	566	654	801	865	67	68	71
	●	70	47.6	40.5	171	209	241	270	319	381	467	539	661	763	934	1009	69	71	74
	●	80	47.6	44.1	195	239	276	308	365	436	534	616	755	872	1068	1153	71	73	77
	●	90	47.6	47.6	219	269	310	347	410	490	601	694	849	981	1201	1297	73	75	80
	●	100	47.6	50.8	244	298	345	385	456	545	667	771	944	1090	1335	1442	77	79	83

Highlighted column shows the rated pressure.



**PERFORMANCE DATA
CF WHIRLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type	Capacity Size	Inlet Dia. Nom. (mm)	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)		
	CF				.2 bar	.4 bar	.5 bar	.7 bar	1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	.5 bar	1.5 bar	4 bar
4	●	150	79.4	50.8	366	517	578	684	1001	1156	1416	1635	2002	2162	66	67	70
	●	175	79.4	59.1	426	603	674	798	1168	1349	1652	1907	2336	2523	68	70	71
	●	200	79.4	68.3	487	689	771	912	1335	1541	1888	2180	2669	2883	70	72	74
	●	225	79.4	74.6	548	775	867	1026	1502	1734	2123	2452	3003	3244	72	74	77
	●	250	79.4	82.6	609	862	963	1140	1668	1926	2359	2724	3337	3604	74	76	81
	●	275	79.4	92.1	670	948	1060	1254	1835	2119	2595	2997	3670	3964	78	80	83
	●	150-45	79.4	50.8	366	517	578	684	1001	1156	1416	1635	2002	2162	45	49	52
	●	175-45	79.4	59.1	426	603	674	798	1168	1349	1652	1907	2336	2523	45	49	51
	●	200-45	79.4	68.3	487	689	771	912	1335	1541	1888	2180	2669	2883	45	48	51
	●	225-45	79.4	74.6	548	775	867	1026	1502	1734	2123	2452	3003	3244	45	48	50
	●	250-45	79.4	82.6	609	862	963	1140	1668	1926	2359	2724	3337	3604	45	47	49
6	●	250	124	62.3	609	862	963	1140	1668	1926	2359	2724	3337	3604	65	67	69
	●	300	124	69.9	731	1034	1156	1368	2002	2312	2831	3269	4004	4325	66	68	70
	●	350	124	76.2	853	1206	1349	1596	2336	2697	3303	3814	4671	5046	68	70	72
	●	400	124	82.6	975	1378	1541	1824	2669	3082	3775	4359	5339	5767	70	73	75
	●	450	124	88.1	1097	1551	1734	2051	3003	3468	4247	4904	6006	6487	72	75	77
	●	500	124	97.2	1218	1723	1926	2279	3337	3853	4719	5449	6673	7208	74	76	79
	●	550	124	108	1340	1895	2119	2507	3670	4238	5191	5994	7341	7929	76	79	83
	●	625	124	130	1523	2154	2408	2849	4171	4816	5899	6811	8342	9010	78	81	86
	●	440-65	124	88.1	1072	1516	1695	2006	2936	3391	4153	4795	5873	6343	60	61	62
	●	550-65	124	108	1340	1895	2119	2507	3670	4238	5191	5994	7341	7929	64	65	66
	●	625-65	124	130	1523	2154	2408	2849	4171	4816	5899	6811	8342	9010	65	66	67

Highlighted column shows the rated pressure.

**PERFORMANCE DATA
E WHIRLJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type	Capacity Size	Inlet Dia. Nom. (mm)	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	E				.2 bar	.4 bar	.5 bar	.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	.5 bar	1.5 bar	6 bar
1/4	●	2	1.6	6.4	—	—	—	.76	.91	1.1	1.3	1.6	1.8	2.2	2.4	—	165	158
	●	5	2.4	6.4	1.0	1.4	1.6	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	164	154	147
	●	5.8	2.8	6.4	1.2	1.7	1.9	2.2	2.6	3.2	3.7	4.6	5.3	6.5	7.0	164	154	147
	●	8	3.2	7.9	1.6	2.3	2.6	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	164	160	151
	●	10	3.6	7.9	2.0	2.9	3.2	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	164	154	147
3/8	●	8	2.8	12.3	1.6	2.3	2.6	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	164	160	157
	●	10	3.2	12.3	2.0	2.9	3.2	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	164	160	157
	●	15	4.4	12.3	3.1	4.3	4.8	5.7	6.8	8.4	9.7	11.8	13.7	16.8	18.1	165	163	155
	●	20	5.2	12.3	4.1	5.8	6.4	7.6	9.1	11.2	12.9	15.8	18.2	22	24	162	152	147
	●	25	5.9	12.3	5.1	7.2	8.1	9.5	11.4	14.0	16.1	19.7	23	28	30	162	158	154
	●	33	6.7	16.3	6.7	9.5	10.6	12.6	15.0	18.4	21	26	30	37	40	162	154	148
1/2	●	53	9.5	16.3	10.8	15.3	17.1	20	24	30	34	42	48	59	64	159	152	149
	●	25	5.6	16.3	5.1	7.2	8.1	9.5	11.4	14.0	16.1	19.7	23	28	30	162	158	154
	●	30	6.4	16.3	6.1	8.6	9.7	11.4	13.7	16.8	19.3	24	27	34	36	163	155	148
	●	40	7.5	16.3	8.2	11.5	12.9	15.3	18.2	22	26	32	36	45	48	160	152	144
●	53	9.5	16.3	10.8	15.3	17.1	20	24	30	34	42	48	59	64	159	152	149	

Highlighted column shows the rated pressure.

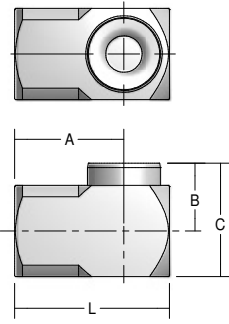
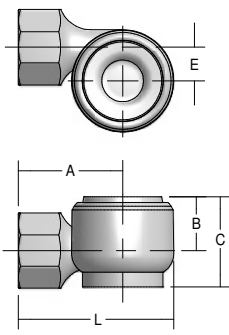


DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	A (mm)	B (mm)	C (mm)	E (mm)	Net Weight (kg)
	AX (F)	1/8	25.4	17.5	11.9	19.8	–	.04
		1/4	31.8	22.2	13.5	23.0	–	.08
		3/8	37.3	26.2	17.5	28.6	–	.12
		1/2	49.2	34.9	21.4	39.8	–	.25
		3/4	55.6	34.9	39.7	31.8	–	.31
	BX (M)	1/8	30.2	22.2	16.6	34.9	–	.04
		1/4	34.9	25.4	13.5	39.7	–	.07
		3/8	39.7	28.6	17.5	39.7	–	.11
		1/2	49.2	34.9	21.4	49.2	–	.20
		3/4	57.2	41.3	39.7	31.8	–	.30
	CX (F)	1	66.7	44.5	31.8	46.8	8.7	.31
		1-1/4	77.8	52.4	33.3	55.6	11.1	.57
		1-1/2	93.7	61.9	38.1	73.0	14.3	.79
		2	115.1	93.7	53.6	93.7	18.3	1.36
		2-1/2	140.5	88.9	68.0	114.3	11.9	1.93
	CF (Flange)	4	209.6	111.9	235.0	314.3	39.7	51.71
		6	311.2	174.6	220.7	338.1	61.9	57.15

Based on the largest/heaviest version of each type.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	A (mm)	B (mm)	C (mm)	E (mm)	Net Weight (kg)
	E (F)	1/4	31.8	22.2	12.7	19.1	–	.06
		3/8	50.8	34.9	15.9	31.8	–	.30
		1/2	60.3	41.3	19.4	41.3	–	.49
	E (F) Cast	3/8	35.7	31.0	15.1	27.0	9.5	.12
		1/2	55.6	36.5	17.5	31.8	12.7	.17

Based on the largest/heaviest version of each type.

METRIC UNITS

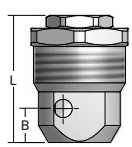


PERFORMANCE DATA
BD WHIRLJET® NOZZLES

Inlet Conn. (in.)	Nozzle Type BD	Capacity Size	Inlet Dia. Nom. (mm)	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per minute)												Spray Angle (°)		
					.2 bar	.4 bar	.5 bar	.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	.5 bar	1.5 bar	6 bar	
3/8	●	2	2.4	2.0	.41	.58	.64	.76	.91	1.1	1.3	1.6	1.8	2.2	2.4	51	60	70	
	●	3	2.4	2.4	.61	.86	.97	1.1	1.4	1.7	1.9	2.4	2.7	3.4	3.6	52	64	77	
	●	5	2.8	3.2	1.0	1.4	1.6	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	56	67	76	
	●	8	4.0	4.0	1.6	2.3	2.6	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	56	65	70	
	●	10	4.0	4.4	2.0	2.9	3.2	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	55	65	72	
	●	20-10	4.0*	4.4	—	4.0	4.5	5.3	6.4	7.8	9.0	11.1	12.8	15.6	16.9	61	65	67	
1/2	●	5	3.2	3.6	1.0	1.4	1.6	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	63	73	79	
	●	8	4.0	4.0	1.6	2.3	2.6	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	61	69	73	
	●	10	4.4	4.4	2.0	2.9	3.2	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	63	70	74	
	●	15	4.4*	5.2	3.1	4.3	4.8	5.7	6.8	8.4	9.7	11.8	13.7	16.8	18.1	60	67	70	
	●	20	4.8*	6.0	4.1	5.8	6.4	7.6	9.1	11.2	12.9	15.8	18.2	22	24	63	65	69	
	●	25	5.2*	7.1	5.1	7.2	8.1	9.5	11.4	14.0	16.1	19.7	23	28	30	59	63	68	
3/4	●	5	3.6	3.2	1.0	1.4	1.6	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	64	73	79	
	●	8	4.4	4.0	1.6	2.3	2.6	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	62	70	74	
	●	10	5.2	4.4	2.0	2.9	3.2	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	64	72	75	
	●	15	6.4	5.6	3.1	4.3	4.8	5.7	6.8	8.4	9.7	11.8	13.7	16.8	18.1	64	72	74	
	●	20	7.1	6.4	4.1	5.8	6.4	7.6	9.1	11.2	12.9	15.8	18.2	22	24	63	70	74	
	●	25	7.1	7.5	5.1	7.2	8.1	9.5	11.4	14.0	16.1	19.7	23	28	30	63	70	74	
	●	50-50.3	7.1*	9.5	10.2	13.3	16.1	19.1	23	28	32	39	46	56	60	70	72	73	
1-1/2	●	40	9.5*	7.9	8.2	11.5	12.9	15.3	18.2	22	26	32	36	45	48	70	73	74	
	●	50	9.5*	9.5	10.2	13.3	16.1	19.1	23	28	32	39	46	56	60	72	75	77	
	●	60	9.5*	11.1	12.2	17.3	19.3	23	27	34	39	47	55	67	72	74	76	79	
	●	70	9.5*	12.7	14.3	20	23	27	32	39	45	55	64	78	84	76	79	83	
	●	80	9.5*	14.3	16.3	23	26	31	36	45	52	63	73	89	96	78	82	84	
	●	90	9.5*	14.7	18.3	26	29	34	41	50	58	71	82	101	109	81	84	84	
	●	100	9.5*	15.9	20	29	32	38	46	56	64	79	91	112	121	83	86	86	
	●	110	9.5*	17.1	22	32	35	42	50	61	71	87	100	123	133	85	88	88	
	●	120	9.5*	18.3	24	35	39	46	55	67	77	95	109	134	145	87	90	90	

*Dual inlets, each in diameter specified.
Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	B (mm)	Net Weight (kg)
	BD (M)	3/8	31.8	11/16	6.7	.03
		1/2	37.3	7/8	8.0	.06
		3/4	44.5	1-1/16	9.5	.11
		1-1/2	66.7	2	8.0	.60

Based on the largest/heaviest version of each type.

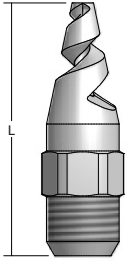


**PERFORMANCE DATA
BSJ SPIRALJET® NOZZLES**

Inlet Conn. (in.)	Nozzle Type	Spray Angle at .7 bar					Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)					
		BSJ	50°	60°	90°	120°				180°	.4 bar	.7 bar	1.5 bar	3 bar	7 bar
1/4	●	●	●	●	●	●	07	2.4	2.4	2.0	2.7	3.9	5.5	8.4	16.0
	●	●	●	●	●	●	13	3.2	3.2	3.7	5.0	7.3	10.3	15.7	30
	●	●	●	●	●	●	20	4.0	3.2	5.8	7.6	11.2	15.8	24	46
3/8	●	●	●	●	●	●	30	4.8	3.2	8.6	11.4	16.8	24	36	68
	●	●	●	●	●	●	40	5.6	3.2	11.5	15.3	22	32	48	91
	●	●	●	●	●	●	53	6.4	3.2	15.3	20	30	42	64	121
	●	●	●	●	●	●	82	7.9	3.2	24	31	46	65	99	187
1/2	●	●	●	●	●	●	120	9.5	4.8	35	46	67	95	145	274
	●	●	●	●	●	●	164	11.1	4.8	47	63	92	129	198	374
3/4	●	●	●	●	●	●	210	12.7	4.8	61	80	117	166	253	479
1	●		●	●	●	●	340	15.9	6.4	98	130	190	268	410	775
	●		●	●	●	●	470	19.1	6.4	136	179	262	371	567	1071
1-1/2	●		●	●	●	●	640	22.2	7.9	185	244	357	505	772	1459
	●		●	●	●	●	820	25.4	7.9	236	313	458	647	989	1869
	●		●	●	●	●	960	28.6	7.9	277	366	536	758	1158	2188
2	●		●	●	●	●	1400	34.9	11.1	404	534	782	1105	1689	3191
	●		●	●	●	●	1780	38.1	11.1	513	679	994	1406	2147	4057
3	●		●	●	●		2560	44.5	14.3	738	976	1429	2021	3088	5835
	●		●	●	●		3360	50.8	14.3	969	1282	1876	2653	4053	7659
4	●		●	●	●		5250	63.5	15.9	1514	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. For all 1/4" and 3/8" connections, optimum spray angle is achieved at 40 psi (2.8 bar).
 *Maximum operating pressure depends on material, size and application. Contact your local sales engineer for specific recommendations.
 Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. / flats (in.)	Net Weight (kg)
	BSJ (M)	1/4	49.2	9/16	.03
		3/8	47.6	11/16	.05
		1/2	63.5	7/8	.09
		3/4	69.9	1-1/16	.14
		1	92.1	1-3/8	.31
		1-1/2	111.1	2	.77
		2	174.6	2-1/2	1.36
		3	203.2	3-3/4	3.63
4	228.6	4-1/2	5.67		

Based on the largest/heaviest version of each type.

