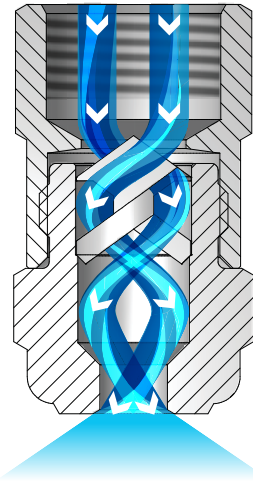


OVERVIEW: FULLJET G AND H

- Solid cone-shaped spray pattern with round impact area
- Unique vane design minimizes turbulence of the fluid to ensure uniform spray distribution and consistent spray coverage
- Large unobstructed flow passages minimize clogging and increase throughput
- Removable caps and vanes in most models make maintenance fast and easy
- Standard, wide and narrow spray angles



FullJet G and H Nozzles

The liquid enters the nozzle and proceeds through the vane. The vane causes the liquid to swirl. The design of the nozzle ensures the liquid continues to swirl as it enters the orifice. The liquid breaks up as it exits the nozzle orifice forming a well defined cone pattern. The drops are uniform in size and distributed equally throughout the spray pattern.

FULLJET G NOZZLES

- Spray angles: Standard – 43° to 94°, Narrow – 15° or 30°, Wide – 112° to 120°
- Uniform spray distribution from .07 to 25 gpm (.29 to 92 lpm)
- Operating pressures up to 300 psi (20 bar)
- Wall-mount versions for installation on room exterior, vessel or pipeline
- Right-angle mount versions for 90° angle mounting in areas with limited space



G
1/8" to 1/2" female conn.
Removable cap and vane



GG
1/8" to 1/2" male conn.
Removable cap and vane

FULLJET G OPTIONS

GD – 1/8" to 1/2" female conn.
Wall-mount
Removable cap and vane

GGD – 1/8" to 1/2" male conn.
Wall-mount
Removable cap and vane

GA – 1/8" to 1/2" female conn.
Angle-type
Removable cap and vane

GGA – 1/8" to 1/2" male conn.
Angle-type
Removable cap and vane


G-15
1/8" to 1/2" female conn.
Removable cap and vane

GG-15
1/8" to 1/2" male conn.
Removable cap and vane

G-30
1/8" to 3/4" female conn.
Removable cap and vane

GG-30
1/8" to 3/4" male conn.
Removable cap and vane

FULLJET H NOZZLES

- Spray angles: Standard – 43° to 94°, Narrow – 15° or 30°, Wide – 102° to 125°
- Uniform spray distribution from .07 to 5324 gpm (.29 to 19842 lpm)
- Operating pressures up to 300 psi (20 bar)
- Wall-mount versions for installation on room exterior, vessel or pipeline
- Certain nozzles available with UL listing 



FULLJET H OPTIONS

 <p>HH – 1/8" to 1" male conn. One-piece body</p>	 <p>D-HH – 1/2" to 3/4" male conn. One-piece body/plastic**</p>	 <p>HF – 4" to 10" flange conn. Removable vane/cast body</p>	
 <p>HD – 3/4" to 3" female conn. Wall-mount One-piece body</p>	 <p>H-15 – 3/4" to 3" female conn. One-piece body Removable vane</p>	 <p>H-15 – 4" to 5" female conn. Two-piece cast body Removable vane</p>	 <p>HH-30 – 1" to 2-1/2" male conn. One-piece body Removable vane</p>

*Max. temperature for polypropylene: 150°F (66°C). ** Max. temperature for Kynar®: 212°F (100°C).

ORDERING INFORMATION

FULLJET G, GD, GA, G-15, G-30, H, HF, HD, H-15 AND HH-30

Inlet Conn.	Nozzle Type	–	Material Code	Capacity Size	Example
					1/4 G – SS 10

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

FULLJET D-HH

Nozzle Prefix	Inlet Conn.	Nozzle Type	–	Material Code	Spray Angle	Capacity Size	Example
							D 1/2 HH – PP 70 24

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

**RELATIVE DROP SIZE
IN MICRONS**

 10 to 100	 100 to 500	 500 to 1000	 1000 to 5000
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Drop size will vary based on flow rate and pressure.



PERFORMANCE DATA:
STANDARD ANGLE SPRAY



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				Wall-Mount			Angle						0.4 bar	0.5 bar	0.7 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	0.5 bar	1.5 bar	6 bar		
	G	GG	H	HH	HF	GD	HD	GGD	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			
									•	•	50	6.7	4.0	14.7	16.3	19.1	27	37	51	55	65	91	94	86		
3/4			•	•		•				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			
			•	•		•				7.0	9.5	5.2	24	27	31	45	61	84	91	107	89	92	84			
1			•	•		•				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			
			•	•		•				12	11.9	6.4	42	46	54	77	105	145	155	183	89	92	84			
	1-1/4			•			•				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.

S PERFORMANCE DATA:
STANDARD ANGLE SPRAY

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					Wall-Mount			Angle					0.4 bar	0.5 bar	0.7 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	0.5 bar	1.5 bar	6 bar	
	G	GG	H	HH	HF	GD	HD	GGD	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	
3			•				•				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	
			•				•				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	
4			•		•						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	
			•		•						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	
5			•		•						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	
			•		•						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	
6			•		•						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	
			•		•						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	

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.



S PERFORMANCE DATA: STANDARD ANGLE SPRAY

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					Wall-Mount			Angle					0.4 bar	0.5 bar	0.7 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	0.5 bar	1.5 bar	6 bar		
	G	GG	H	HH	HF	GD	HD	GGD	GA	GGA																
8			●		●						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		
			●		●						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		
10					●						800	85.1	63.5	2778	3078	3593	5102	7018	9654	10363	12211	78	80	70		
					●						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.

Highlighted column shows the rated pressure.

S PERFORMANCE DATA: STANDARD ANGLE SPRAY

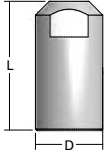
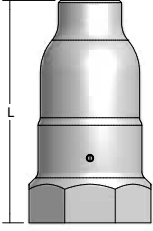
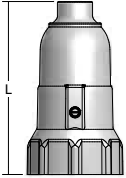
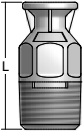
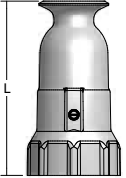
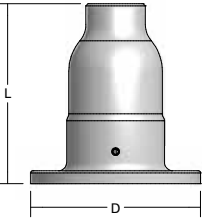
Inlet Conn. (in.)	Nozzle Type			Capacity Size	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)									
	D-HH					0.4 bar	0.5 bar	0.7 bar	1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	10 bar
	Spray Angle														
	70°	90°	120°												
1/2	●	●		24	4.0	6.4	7.6	9.1	12.5	15.1	17.4	20.8	23.8	26.1	31.4
		●		26	4.0	7.2	8.3	9.8	13.6	16.3	18.9	22.3	25.7	28.4	34.1
	●	●		27.5	4.1	7.6	8.7	10.4	14.4	17.4	20.1	23.8	27.3	29.9	36.3
	●	●	●	31	2.9	8.7	9.8	11.7	16.3	19.3	22.3	26.9	30.7	33.7	40.9
		●	●	40	3.5	11	12.9	15.1	20.8	25	29.1	34.4	39.4	43.5	52.6
		●	●	50	4.1	13.6	15.9	18.9	26.1	31.4	36.3	43.2	49.2	54.5	65.9
		●	●	58	5.0	15.9	18.5	22	30.3	36.3	42	50	57.2	63.2	76.5
3/4		●		3.4	5.0	11	12.9	15.1	20.8	25.4	29.1	34.4	39.4	43.5	52.6
		●		4.1	5.0	13.2	15.5	18.2	25	30.7	34.8	41.6	47.7	52.2	63.2
		●		4.8	5.0	15.5	18.2	21.2	29.1	35.6	40.5	48.8	55.6	61.3	73.8
		●	●	6	5.6	19.7	22.7	26.9	37.1	44.3	51.5	60.9	69.7	77.6	93.5
		●	●	7	5.6	22.7	26.5	31.4	43.2	51.9	60.2	71.2	81.4	90.5	109.4
		●	●	8.5	5.7	27.6	32.2	37.9	52.2	62.8	72.7	86.3	98.4	109.0	131.7
			●	10	5.7	32.6	37.9	44.7	61.3	73.8	84.4	101.8	116.2	128.7	155.2

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

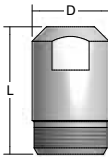
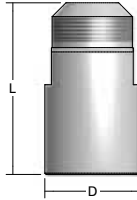
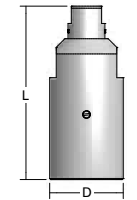
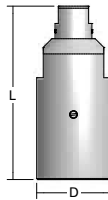
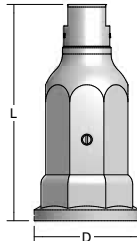
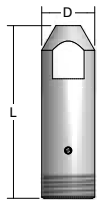
Highlighted column shows the rated pressure.



DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	D (Dia.) (mm)	Net Weight (kg)	
	H (F) H-W (F)	3/4	55.6	31.8	0.21	
		1	69.4	38.1	0.35	
	H (F) H-W (F) Cast	1-1/4	87.4	52.4 oct.	0.73	
		1-1/2	103.2	58.7 oct.	0.72	
		2	138.2	76.2 oct.	1.7	
		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	5	293.7	171.5 oct.	13.97
			6	365.1	203.2 oct.	22.23
	H (F) Polypropylene	1-1/2	104.1	59.5	0.06	
		2	131.8	76.2	0.11	
	D-HH (M) Polypropylene	1/2	43.2	19.1	0.01	
		3/4	53.1	25.4	0.03	
	H-W (F) Polypropylene	1-1/2	107.7	59.5	0.05	
		2	138.8	71.4	0.11	
	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	

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	D (Dia.) (mm)	Net Weight (kg)
	HH (M) HH-W (M)	1/8	22.2	12.7	0.01
		1/4	22.4	13.5	0.01
		3/8	23.9	16.7	0.03
		1/2	29.4	20.6	0.04
		3/4	38.9	27.0	0.10
		1	51.6	33.3	0.20
	HH-W (M) (Wide angle only) Standard angle not available for these sizes	1-1/4	69.9	42.9	0.61
		1-1/2	82.6	50.8	0.81
	HD (F)	3/4	54.0	31.8	0.17
		1	68.3	38.1	0.29
		1-1/4	85.7	47.6	0.73
		1-1/2	103.2	57.2	1.34
		2	128.6	69.9	1.88
		2-1/2	158.8	82.6	3.56
		3	185.7	101.6	5.74
			H-15 (F)	3/4	72.2
1	92.1			38.1	0.54
1-1/4	117.5			47.6	1.04
1-1/2	127.0			58.7	1.11
2	183.4			76.2	1.24
2-1/2	219.9			79.0	2.83
	H-15 (F) Cast	4	338.1	138.1	6.70
		5	428.6	171.5	17.70
	HH-30 (M)	1	92.1	33.3	0.45
		1-1/4	154.7	44.5	1.16
		1-1/2	157.2	47.6	1.33
		2	199.6	60.3	5.32
		2-1/2	263.5	73.0	5.44
		3	263.5	88.9	14.45

Based on the largest/heaviest version of each type.