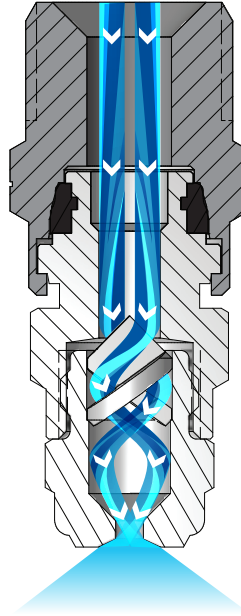


OVERVIEW: QUICK FULLJET AND PROMAX QUICK FULLJET












- Reduce maintenance time – bodies remain on pipe/header; quick quarter-turn removes/installs spray tips with automatic alignment
- Save on nozzle replacement costs – bodies can be reused, only spray tips are replaced
- Spray angles: Standard – 43° to 91°, Narrow – 15° or 30°, Wide – 102° to 120°
- Uniform spray distribution from .10 to 19.4 gpm (.38 to 72 lpm)
- Operating pressures up to 300 psi (20 bar)
- Choice of metal or ProMax materials. ProMax features:
 - ProMax material, a special grade of polypropylene, resists build-up and chemical attack; for use up to 150 psi (10 bar)
 - Internal O-ring provides a positive seal between the body and tip; seal remains attached to tip eliminating accidental loss
 - Optional external O-ring protects nozzle from contaminants
 - Tips are color-coded for easy flow rate identification



Quick FullJet and ProMax Quick FullJet 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.

QUICK FULLJET OPTIONS

<p>S W</p>  <p>QJLA Body 3/8" to 1/2" female conn.</p>	 <p>QJJA Body 1/8" to 1/2" male conn.</p>	 <p>QJJLA Body 3/8" to 1/2" male conn.</p>	
 <p>QGA Spray Tip + QJA Body 1/8" to 1/2" female conn. Removable cap and vane</p>	<p>S W</p>  <p>QLGA Spray Tip Removable cap and vane/ Large conn. Use with QJLA and QJJLA bodies</p>	<p>S W</p>  <p>QHA Spray Tip Non-removable vane Use with QJA and QJJA bodies</p>	<p>S W</p>  <p>QLHA Spray Tip Non-removable vane/ Large conn. Use with QJLA and QJJLA bodies</p>
<p>N</p>  <p>QGA-15 Spray Tip Removable cap and vane Use with QJA and QJJA bodies</p>	<p>N</p>  <p>QLGA-15 Spray Tip Removable cap and vane/ Large conn. Use with QJLA and QJJLA bodies</p>	<p>N</p>  <p>QGA-30 Spray Tip Removable cap and vane Use with QJA and QJJA bodies</p>	<p>N</p>  <p>QLGA-30 Spray Tip Removable cap and vane/ Large conn. Use with QJLA and QJJLA bodies</p>



PROMAX QUICK FULLJET OPTIONS

 <p>QPHA Spray Tip + QPPA Body 1/8" to 1/2" male conn. Optional external O-ring</p>	 <p>QPHA Spray Tip – Brown QPHA-1 .1 gpm (.38 lpm) Use with QPPA body</p>	 <p>QPHA Spray Tip – White QPHA-1.5 .15 gpm (.57 lpm) QPHA-2.8W .28 gpm (1.1 lpm) Use with QPPA body</p>	 <p>QPHA Spray Tip – Gray QPHA-2 .2 gpm (.76 lpm) Use with QPPA body</p>
	 <p>QPHA Spray Tip – Black QPHA-3 .3 gpm (1.1 lpm) QPHA-4.3W .43 gpm (1.6 lpm) Use with QPPA body</p>	 <p>QPHA Spray Tip – Orange QPHA-3.5 .35 gpm (1.3 lpm) QPHA-5.6W .56 gpm (2.1 lpm) Use with QPPA body</p>	 <p>QPHA Spray Tip – Green QPHA-5 .5 gpm (1.9 lpm) QPHA-8W .8 gpm (3.1 lpm) Use with QPPA body</p>
 <p>QPHA Spray Tip – Yellow QPHA-6.5 .65 gpm (2.5 lpm) QPHA-10W 1.0 gpm (3.8 lpm) Use with QPPA body</p>	 <p>QPHA Spray Tip – Beige QPHA-8 .8 gpm (3.1 lpm) Use with QPPA body</p>	 <p>QPHA Spray Tip – Blue QPHA-10 1.0 gpm (3.8 lpm) QPHA-12W 1.2 gpm (4.6 lpm) Use with QPPA body</p>	 <p>QPHA Spray Tip – Red QPHA-15 1.5 gpm (5.7 lpm) QPHA-14W 1.4 gpm (5.3 lpm) Use with QPPA body</p>

Capacities at 10 psi (0.7 bar).

ORDERING INFORMATION

METAL QUICK FULLJET

NOZZLE BODY			SPRAY TIP			
Inlet Conn.	Body Type	Material Code	+	Tip Type	Material Code	Capacity Size
Example				1/4 QJA – SS + QHA – SS 10		

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

PROMAX QUICK FULLJET

NOZZLE BODY		SPRAY TIP	
Inlet Conn.	Body Type	+	Tip Type – Capacity Size
Example		3/8 QPPA + QPHA – 3	

Optional external O-ring for ProMax Quick FullJet nozzle: CP7717-2/17-VI

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
---	--	---	--

Drop size will vary based on flow rate and pressure.

QUICK REFERENCE GUIDE

Model	Connection	Connection Size (in.)	Materials	Page Number	
				Performance Data	Dimensions and Weights
QJA and QJLA bodies	F	1/8 to 1/2	Brass, 303 stainless steel (SS)	-	B19
QJJA and QJJLA bodies	M	1/8 to 1/2		-	
QGA, QLGA, QHA and QLHA spray tips	NA	NA		B17	
OPPA body	M	1/4 to 3/8	ProMax	-	
OPHA spray tips	NA	NA		B17	
QGA-W, QLGA-W, QHA-W and QLHA-W spray tips	NA	NA	Brass, 303 stainless steel (SS)	B18	
OPHA-W spray tips	NA	NA	ProMax		
QGA-15, QLGA-15, QGA-30 and QLGA-30 spray tips	NA	NA	Brass, 303 stainless steel (SS)		

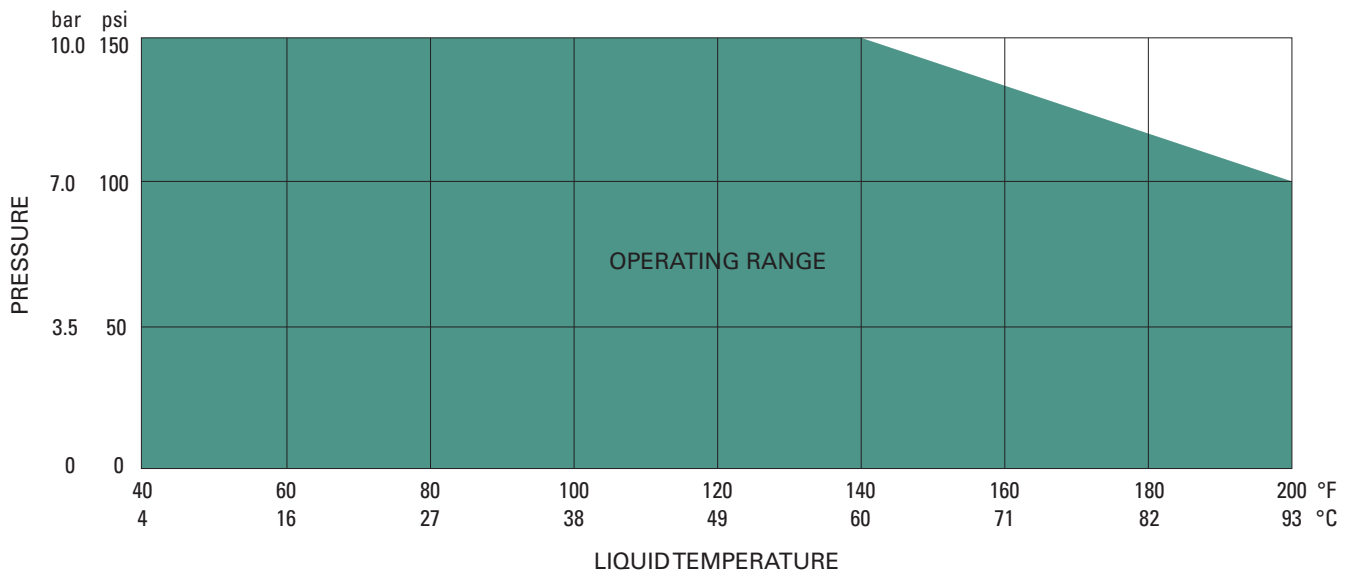
F = female thread; M = male thread. NA = not applicable. There is no material code for brass. Leave material code blank when ordering. For ProMax, the material code is built into part number. Other materials available upon request.

Brass Quick FullJet nozzles have Buna-N seal. Stainless steel FullJet nozzles have a Viton® seal.

For more dimensions and sizes, contact your sales engineer.

PROMAX QUICKJET NOZZLE MAXIMUM PRESSURES AT VARIOUS TEMPERATURES

The recommended maximum operating pressure for ProMax QuickJet nozzles varies based on temperature. As temperature increases, the recommended operating pressure decreases. Do not use outside of operating range.



S PERFORMANCE DATA:
STANDARD ANGLE SPRAY

Inlet Conn. (in.)	Quick FullJet Tip Type					Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)		
	QGA	QLGA	QHA	QLHA	QPHA				0.5 bar	0.7 bar	1.5 bar	3 bar	5 bar	6 bar	7 bar	10 bar	0.5 bar	1.5 bar	6 bar		
1/8, 1/4, 3/8, 1/2	●				●	1	.89	.64	–	.38	.54	.74	.94	1.0	1.1	1.3	–	58	53		
	●				●	1.5	1.2	.64	.49	.57	.80	1.1	1.4	1.5	1.6	1.9	52	65	59		
	●				●	2	1.2	1.0	.65	.76	1.1	1.5	1.9	2.0	2.2	2.6	43	50	46		
	●				●	2.5	1.35	1.0	.82	.95	1.4	1.9	2.4	2.6	2.7	3.2	43	50	46		
	●				●	3	1.5	1.0	.98	1.1	1.6	2.2	2.8	3.1	3.3	3.9	52	65	59		
	●		●		●	3.5	1.6	1.3	1.1	1.3	1.9	2.6	3.3	3.6	3.8	4.5	43	50	46		
	●				●	4	1.7	1.3	1.3	1.5	2.2	3.0	3.8	4.1	4.4	5.2	48	55	50		
	●				●	5	2.0	1.3	1.6	1.9	2.7	3.7	4.7	5.1	5.5	6.5	52	65	59		
1/4, 3/8, 1/2	●		●		●	6.5	2.4	1.6	2.1	2.5	3.5	4.8	6.1	6.7	7.1	8.4	45	50	46		
					●	8	2.4	1.6	2.6	3.0	4.3	6.0	7.5	8.2	8.8	10.4	54	65	61		
	●		●		●	10	3.2	1.6	3.3	3.8	5.4	7.5	9.4	10.3	11.0	13.0	58	67	61		
					●	15	3.6	1.6	4.9	5.7	8.1	11.2	14.1	15.4	16.5	19.4	80	85	80		
3/8, 1/2	●					9.5	2.6	2.4	3.1	3.6	5.1	7.1	8.9	9.7	10.4	12.3	45	50	46		
	●			●		15	3.6	2.4	4.9	5.7	8.1	11.2	14.1	15.4	16.5	19.4	64	67	61		
	●					20	4.0	2.8	6.6	7.6	10.7	14.5	18.8	19.6	22	26	76	80	73		
	●			●		22	4.5	2.8	7.2	8.4	11.9	16.4	21	23	24	28	87	90	82		
1/2		●				16	3.5	3.2	5.2	6.1	8.7	11.9	15.1	16.4	17.6	21	48	50	46		
		●				20	4.1	3.2	6.6	7.6	10.7	14.5	18.8	19.6	22	26	62	65	59		
		●		●		25	4.6	3.2	8.2	9.5	13.5	18.6	24	26	27	32	64	67	61		
		●				30	4.8	3.6	9.9	11.4	16.0	22	28	29	33	39	69	72	66		
		●				32	5.2	3.6	10.4	12.2	17.3	24	30	33	35	41	72	75	68		
		●				40	6.2	3.6	13.1	15.2	21	29	38	39	44	52	88	91	83		
		●				50	6.8	4.0	16.3	19.1	27	37	47	51	55	65	91	94	86		

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.



PAWIN Engineering Co., Ltd.
168 อาคาร Axiom 1 ม. 7 ถ. กิ่งแก้ว ต. บางพลีใหญ่
อ. บางพลี จ.สมุทรปราการ 10540



W PERFORMANCE DATA:
WIDE ANGLE SPRAY

Inlet Conn. (in.)	Quick FullJet Tip Type					Capacity Size	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (liters per minute)						Spray Angle (°)		
	QGA-W	QLGA-W	QHA-W	QLHA-W	QPHA-W				0.5 bar	0.7 bar	1 bar	3 bar	5 bar	6 bar	0.4 bar	0.7 bar	6 bar
1/8, 1/4, 3/8, 1/2	●		●		●	2.8W	1.6	1.0	-	1.1	1.2	2.0	2.5	2.7	-	120	102
	●				●	4.3W	2.0	1.0	-	1.6	1.9	3.1	3.9	4.2	-	120	102
	●		●		●	5.6W	2.4	1.0	1.8	2.1	2.5	4.0	5.1	5.5	-	120	102
	●		●		●	8W	2.4	1.3	2.6	3.0	3.6	5.8	7.2	7.8	-	120	103
1/4, 3/8, 1/2	●		●		●	10W	2.8	1.3	3.3	3.8	4.5	7.2	9.1	9.8	112	120	103
	●		●		●	12W	3.2	1.3	3.9	4.6	5.3	8.7	10.9	11.8	114	120	103
	●		●		●	14W	3.6	1.6	4.6	5.3	6.2	10.1	12.7	13.7	114	120	103
3/8, 1/2	●					17W	4.0	1.6	5.6	6.5	7.6	12.3	15.4	16.7	114	120	103
	●			●		20W	4.4	2.4	6.6	7.6	8.9	14.5	18.1	19.6	114	120	104
	●					24W	4.8	2.4	7.9	9.1	10.7	17.4	22	24	114	120	104
	●					27W	5.2	2.8	8.9	10.3	12.0	19.5	24	26	114	120	106
1/2		●				30W	5.6	2.8	9.9	11.4	13.4	22	27	29	114	120	108
		●				35W	6.0	3.2	11.5	13.3	15.6	25	32	34	114	120	108
		●				40W	6.4	3.2	13.1	15.2	17.8	29	36	39	114	120	108
		●				45W	6.4	3.6	14.8	17.1	20	33	41	44	114	120	110
		●		●		50W	6.7	4.0	16.4	19.1	22	36	45	49	114	120	112

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.

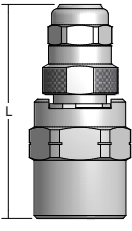
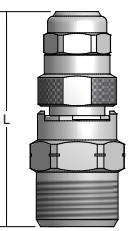
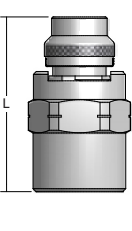
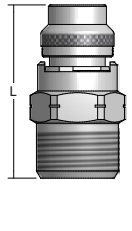
N PERFORMANCE DATA:
NARROW ANGLE SPRAY

Body Inlet Conn. (in.)	Quick FullJet Tip Type				Capacity Size	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)			
	QGA-15	QGA-30	QLGA-15	QLGA-30			0.7 bar	1 bar	1.5 bar	3 bar	6 bar	7 bar	10 bar	15 bar	20 bar	0.7 bar	1 bar	3 bar	7 bar	
1/8, 1/4, 3/8, 1/2	●				1507	1.6	1.3	1.6	2.0	2.8	3.9	4.2	5.0	6.2	7.1	13	14	15	15	
	●				1514	2.4	2.7	3.2	3.9	5.5	7.8	8.4	10.1	12.4	14.3	13	14	15	15	
1/4, 3/8, 1/2	●				1530	3.2	5.7	6.8	8.4	11.8	16.8	18.1	22	26	31	13	14	15	15	
3/8, 1/2	●				1550	4.4	9.5	11.4	14.0	19.7	28	30	36	44	51	13	14	15	15	
1/2			●		1590	5.6	17.2	21	25	36	50	54	65	79	92	13	14	15	15	
1/8, 1/4, 3/8, 1/2		●			3001.4	.79	.27	.32	.39	.55	.78	.84	1.0	1.2	1.4	11	17	30	31	
		●			3002.5	.79	.48	.57	.70	.99	1.4	1.5	1.8	2.2	2.5	12	17	30	32	
		●			3004	1.2	.76	.91	1.1	1.6	2.2	2.4	2.9	3.5	4.1	20	26	30	32	
		●			3007	1.6	1.3	1.6	2.0	2.8	3.9	4.2	5.0	6.2	7.1	20	23	30	30	
1/4, 3/8, 1/2		●			3009	2.0	1.7	2.1	2.5	3.6	5.0	5.4	6.5	7.9	9.2	20	23	30	30	
3/8, 1/2			●		3014	2.4	2.7	3.2	3.9	5.5	7.8	8.4	10.1	12.4	14.3	20	25	30	30	

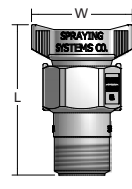
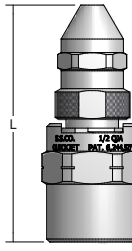
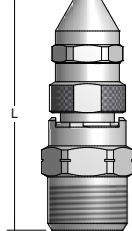
Highlighted column shows the rated pressure.



DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	W (Width) (mm)	Net Weight (kg)
	QJA (F) + QGA	1/8, 1/4, 3/8, 1/2	59.7	1	-	0.12
	QJA (F) + QGA-W	1/8, 1/4, 3/8, 1/2	67.6	1	-	0.12
	QJLA (F) + QLGA	3/8, 1/2	78.2	1-1/8	-	0.25
	QJLA (F) + QLGA-W	3/8, 1/2	82.9	1-1/8	-	0.26
	QJJA (M) + QGA	1/8, 1/4, 3/8, 1/2	57.2	7/8	-	0.11
	QJJA (M) + QGA-W	1/8, 1/4, 3/8, 1/2	65.2	7/8	-	0.12
	QJJLA (M) + QLGA	3/8, 1/2	79.1	1-1/8	-	0.23
	QJJLA (M) + QLGA-W	3/8, 1/2	83.6	1-1/8	-	0.25
	QJA (F) + QHA	1/8, 1/4, 3/8, 1/2	50.3	1	-	0.11
	QJA (F) + QHA-W	1/8, 1/4, 3/8, 1/2	48.1	1	-	0.10
	QJLA (F) + QLHA	3/8, 1/2	60.1	1-1/8	-	0.17
	QJLA (F) + QLHA-W	3/8, 1/2	54.4	1-1/8	-	0.14
	QJJA (M) + QHA	1/8, 1/4, 3/8, 1/2	45.0	7/8	-	0.09
	QJJA (M) + QHA-W	1/8, 1/4, 3/8, 1/2	45.8	7/8	-	0.10
	QJJLA (M) + QLHA	3/8, 1/2	60.3	1-1/8	-	0.15
	QJJLA (M) + QLHA-W	3/8, 1/2	55.1	1-1/8	-	0.14

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	W (Width) (mm)	Net Weight (kg)
	QPPA (M) + QPHA or QPHA-W	1/8, 1/4, 3/8, 1/2	48.2	7/8	31.8	0.01
	QJA (F) + QGA-15 or QGA-30	1/8, 1/4, 3/8, 1/2	69.5	1	-	0.16
	QJLA (F) + QLGA-15 or QLGA-30	3/8, 1/2	87.0	1-1/8	-	0.27
	QJJA (M) + QGA-15 or QGA-30	1/8, 1/4, 3/8, 1/2	66.9	7/8	-	0.13
	QJJLA (M) + QLGA-15 or QLGA-30	3/8, 1/2	88.0	1-1/8	-	0.26

Based on the largest/heaviest version of each type.

BODY TYPES

Inlet Conn. (in.)	QuickJet and ProMax QuickJet Bodies				
	Conn. F		Conn. M		
	QJA	QJLA	QJJA	QJJLA	QPPA
1/8	•		•		•
1/4	•		•		•
3/8	•	•	•	•	•
1/2	•	•	•	•	•

