

XA

Low Flow Air Atomizing

The XA nozzle system uses the energy in compressed air to produce highly atomized sprays at low flow rates. There are many interchangeable components that can be assembled to achieve a variety of spraying objectives.

SPRAY SET-UPS

XA nozzles produce eight distinctly different types of sprays, depending on which interchangeable air and fluid caps are selected. The spray type and flow rate are determined by the "set-up"—a specific combination of one air cap and one fluid cap.

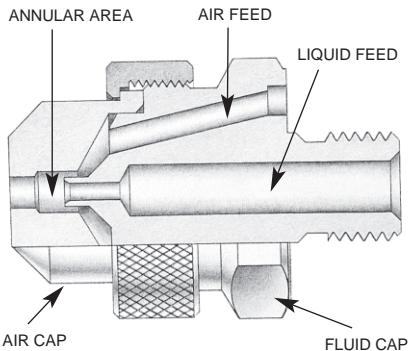
Internal Mix Set-ups

Liquid and air streams meet within the nozzle and are mixed together and expelled through the same orifice(s). This internal mixing means the streams are not independent; a change in air flow will affect the liquid flow. This makes precise metering of the liquid more difficult than with an External Mix Set-up. Internal Mix Set-ups are able to produce the finest atomization of any of the XA set-ups, but they are generally not suitable for use with liquids which have a viscosity that is above 200 centipoise.

E. Air Operated Shut-off



Bold letters (A, B, C, D, E, F) refer to hardware assemblies shown on p. 74.



Cutaway View: Internal Mix Set-up

External Mix Set-ups

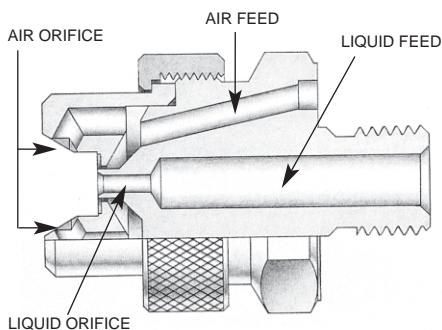
The air and liquid streams exit the nozzle independently and are combined and mixed outside of the nozzle. Because there is no connection between the air and liquid lines within the nozzle, the air and liquid flow rates can be controlled independently, allowing precise metering of the liquid. The atomization can be controlled by adjusting the air flow rate—more air produces finer atomization. In most cases these set-ups do not atomize as finely as Internal Mix Set-ups.

A. End Plug



D. Clean-out/Shut-off

External Mix Set-ups may be used with liquids having a viscosity above 200 centipoise and for abrasive suspensions. BETE Applications Engineering can provide guidance for spraying high viscosity liquids.



Cutaway View: External Mix Set-up

Siphon Set-ups

Internal and External Mix Set-ups require the liquid to be supplied to the nozzle under pressure from a municipal water supply, pump, or pressure vessel. Siphon Set-ups use the flow of compressed air within the nozzle to siphon liquid from a container. Siphon Set-ups are frequently used for spraying additives from a container without the use of a pump. They provide the



B. Shut-off

XA Components & Options

lowest flow rates available in the XA series (as low as 0.1 GPH). They are generally not suitable for use with liquids having a viscosity above 200 centipoise.

By supplying the liquid under pressure, SR Set-ups may be used with liquids having a viscosity above 200 centipoise. In this case, the liquid flow rate is regulated by the fluid cap, and can be determined by using the EF chart for the specific fluid cap.

BASIC OPERATION

The basic XA nozzle assembly consists of a body, a spray set-up, and a "hardware assembly" that can provide shut-off and clean-out capabilities.

Non-Automatic Operation

The **XA00 Square Body** is the basic component of a non-automatic XA nozzle. Air and liquid feeds are located at opposite ends, perpendicular to the spray.

The **XA03 Body** has air and liquid feeds on one side, perpendicular to the spray axis.

The **XA05 Body** has air and liquid inlets located in-line with the spray. *Hardware assemblies cannot be used with the XA05 body.*

**XA00 Body
with C Hardware**



Hardware Assemblies for Non-Automatic Operation

A. Plug. The minimum option hardware assembly required for XA operation. Provides neither clean-out nor shut-off.

B. Shut-off. Turning the knurled knob will stop the flow of liquid to the nozzle. Should not be used to meter the flow of liquid.

C. Clean-out. Pressing the spring-loaded plunger will force a small diameter rod through the liquid orifice, cleaning any obstruction. Useful for intermittent spraying of a liquid that may dry in the orifice when not in use.

D. Clean-out/Shut-off. Combines functions of hardware assemblies B and C in one unit.



PR Air Cap



Fluid Cap



FF Air Cap



SR Air Cap



ER Air Cap



EF Air Cap



XW Air Cap



XA05 Body



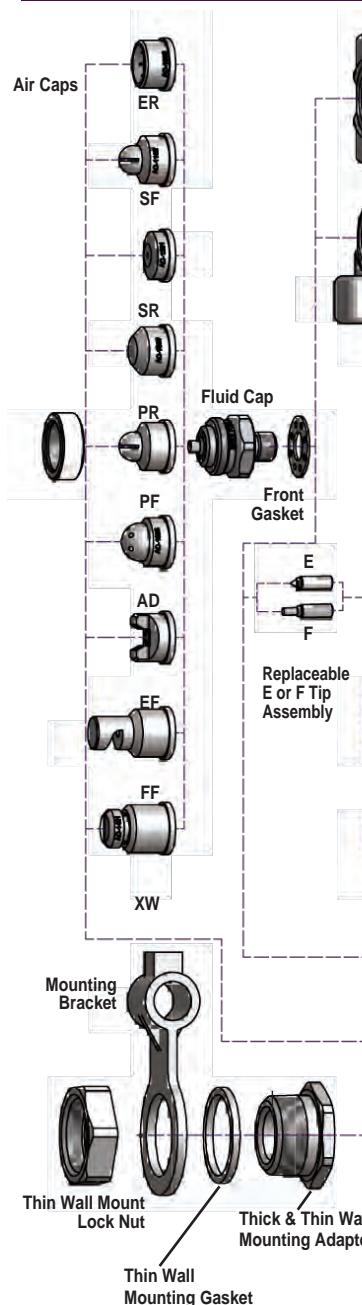
XA03 Body



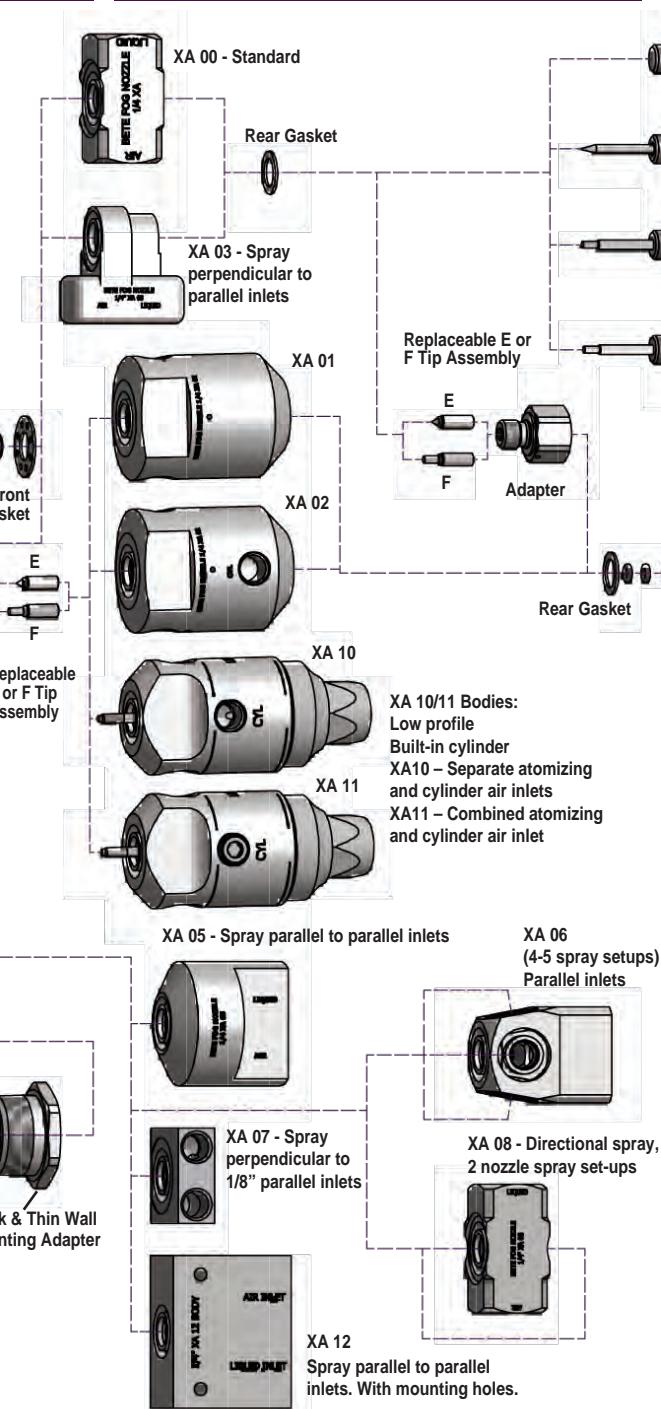
**XA 01/02 Body
with E or F
Hardware**

XA Components & Options

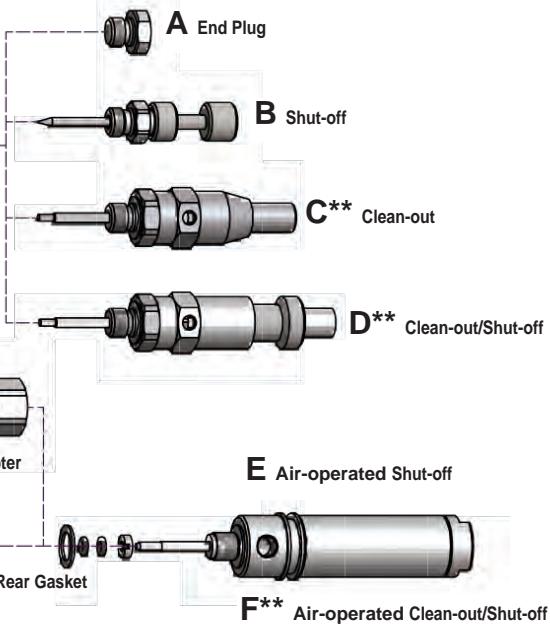
Spray Set-up



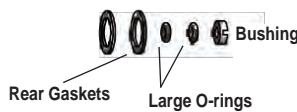
Body Styles and Seals



Hardware Assemblies



Seal Kit: 39572



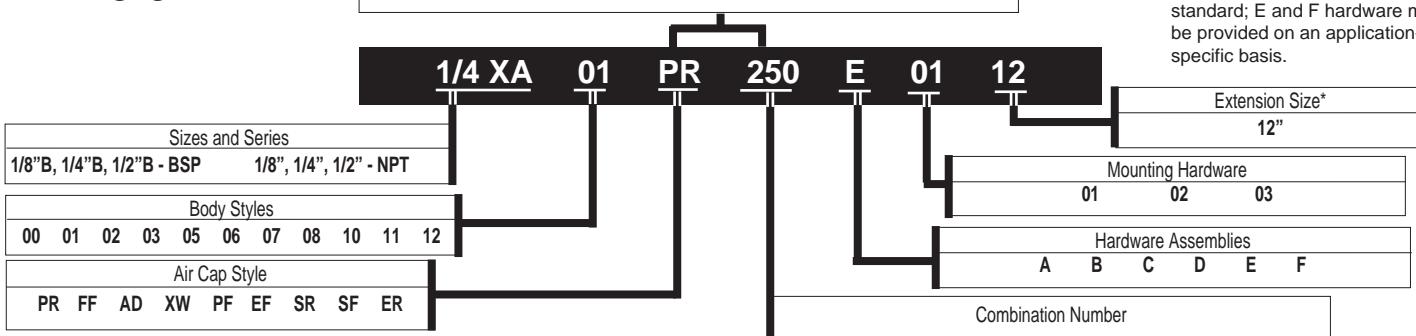
Replaceable Components and Gaskets

Seal Kit	Thick & Thin Wall Mount Adapter
Front Gasket	Thin Wall Lock Nut
Rear Gasket	Thin Wall Mounting Gasket
Body Seal	Mounting Bracket
Cap Nut	E - Replacement Tip
Adapter	F - Replacement Tip**

**Specify fluid cap

TO ORDER

Spray Set-up Number



XA Components & Options

AUTOMATIC OPERATION

For critical applications which require automatic, no-drip, or high-speed spray shut-off, the XA can be supplied with an air cylinder operated shut-off or clean-out/shut-off. These air cylinders provide virtually instantaneous liquid shut-off at rates of up to 180 cycles per minute. *The air cylinders require a minimum of 80 PSI to run that fast.*

Bodies for Automatic Operation

The XA01, XA02, XA10, and XA11 Round Bodies are rugged, highly reliable, and well suited to the rigors of high-cycle automatic operation. They have been designed to simplify the feed piping required for installing automatic nozzles by providing a constant location for the air inlet piping. With their neat, professional appearance, they are particularly recommended for OEM applications.

The **XA01 Round Body** has one inlet for air and one for liquid. Because the air inlet supplies air for both cylinder movement and liquid atomization, spraying during start-up and shut-off is not as crisp and precise as with the XA02. *The XA01 body cannot be used with atomizing air pressure under 30 PSI.*

The **XA02 Round Body** has two inlets for air and one inlet for liquid. One of the air inlets supplies the cylinder and the other supplies atomizing air. The XA02 body

must be used when the air cylinder operates at a different pressure from the atomizing air or where the atomizing air is supplied below 30 PSI.

NOTE: The XA00 Square and XA03 Bodies used for non-automatic operation can also be used, with hardware assemblies E or F, for automatic operation. Special design features allow field upgrading to automatic operation.

The **XA10 and XA11 Bodies** have a built in air-operated cylinder. The integral cylinder provides a smaller profile for use where space is limited.

Hardware Assemblies for Automatic Operation

E. Air-Operated Shut-off. Removal of air pressure to the cylinder causes a spring-loaded poppet valve actuator to shut off liquid flow.

F. Air-Operated Clean-out/Shut-off. Operation similar to E, but includes a clean-out needle.

SOLENOID VALVES

Electrically operated solenoid valves can be used to control the operation of any XA nozzle. BETE can supply solenoid valves matched to your specific application.

Solenoids for Automatic XA Nozzles.

A 3-way, quick-exhaust solenoid valve is required to operate the E or F hardware assembly. The valve is

located in the line that supplies air to the cylinder, as close to the nozzle as possible. Independent control of the atomizing air of an XA02 or square body requires an additional 2-way solenoid valve.

Solenoids for Non-Automatic XA Nozzles.

Two-way solenoid valves can be used to stop and start the flow of air and liquid to any non-automatic XA nozzle.

FILTERS, REGULATORS AND STRAINERS

For optimum reliability, every pressure-fed XA nozzle should have a strainer and regulator in the liquid feed line and a filter and regulator in the air feed line. Every XA nozzle with a Siphon Feed Set-up should have a filter and regulator in the air line. The size and type of each of these components depends on the application, and can be determined by your BETE sales representative. BETE maintains an inventory of filters, strainers, and regulators that can be supplied with your XA nozzle to ensure reliable operation. These components can be purchased individually or in kit form.



Simple piping and robust design describe this multiple nozzle XA lance.



The XA06 manifold body can be fitted with up to five nozzle setups and is often used for humidification of large areas.

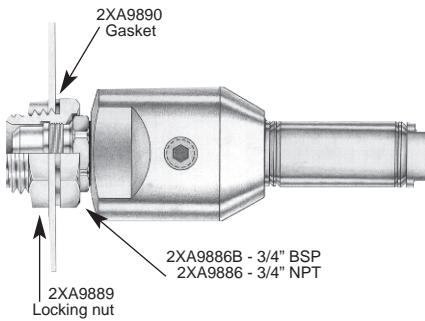


Corrosion-resistant XA in PVC

XA Components & Options

SPRAY EXTENSIONS

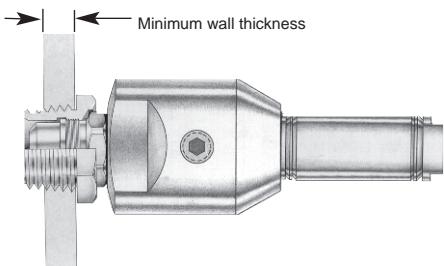
The spray set-up can be moved away from the nozzle body by using optional 6" or 12" extensions. These allow the spray to be moved closer to the target while keeping the nozzle body and associated piping at a distance.



XA02 with Thin Wall 02 Adapter

Thick Wall 01 Adapter

Similar in design and function to the Thin Wall Adapter, but intended for use with tanks or ducts with walls that are thick enough (3/8" or over) to be drilled and tapped for a 3/4" NPT thread.



XA02 with Thick Wall 01 Adapter

Mounting Bracket 03 Adapter

This bracket is used in combination with a Thin Wall Adapter to support an XA nozzle from a 1/2" -diameter metal rod. The bracket allows flexibility in aiming the spray.



MATERIALS

Bodies, Fluid Caps, Air Caps, Hardware Assemblies, Mounting Hardware

The standard materials for the XA series are nickel-plated brass and 303 and 316 stainless steels. Other metals and plastics can be supplied on request. See page 13 for a complete material list.

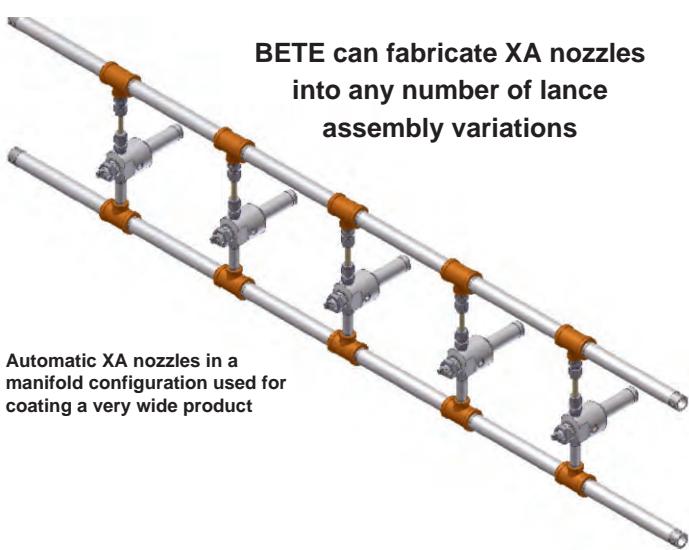
Air Cylinders

The air cylinders used for XA hardware assemblies E and F have rods and cylinders made of stainless steel and end caps made of anodized aluminum. All metal parts in contact with the spray liquid are 316 stainless steel.

Seals

The standard material for XA gaskets is compressed fiber with a neoprene binder. For installations requiring FDA approval, SBR gaskets are available. Other elastomeric and metallic gasket materials can be supplied on request.

The standard material for O-rings in XA automatics is Viton®. Other materials available on request.



BETE can fabricate XA nozzles into any number of lance assembly variations

Automatic XA nozzles in a manifold configuration used for coating a very wide product



Spray lance (see pages 18,19) with a right angle XA and quick-connect fittings

XA Components & Options

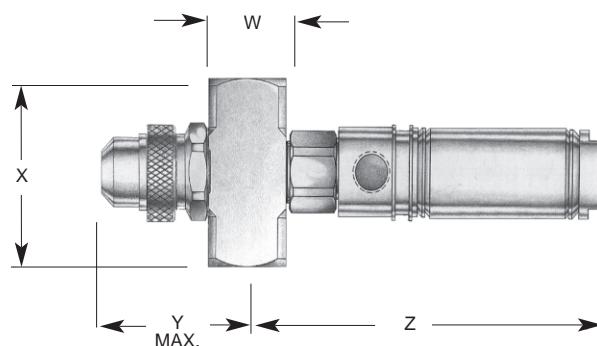
Dimensions are approximate. Check with BETE for critical dimension applications.

Spray Set-up Numbers

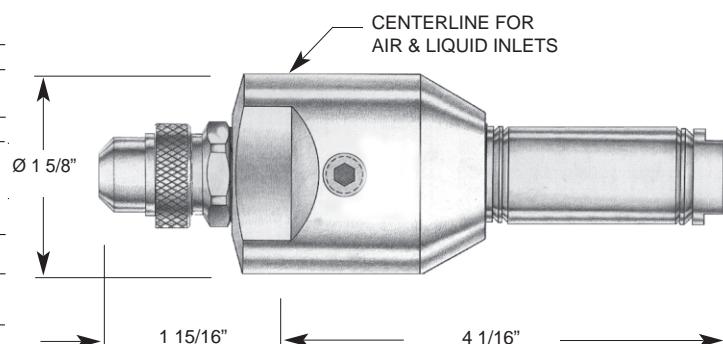
	SPRAY SET-UP	PIPE SIZE BSP or NPT	SET-UP NO.	FLUID CAP	AIR CAP
EF	FLAT FAN (EXTERNAL MIX)	1/8	EF 050	FC7	AC1001
			EF 100	FC4	AC1003
		OR	EF 150	FC4	AC1001
			EF 200	FC3	AC1003
		1/4	EF 250	FC3	AC1001
			EF 300	FC6	AC1004
		OR	EF 350	FC2	AC1002
			EF 400	FC6	AC1004
		1/4	EF 450	FC1	AC1002
			EF 500	FC2	AC1004
		1/2	EF 550	FC1	AC1002
			EF 600	FC8	AC1005
			EF 650	FC9	AC1005
			EF 700	FC5	AC1005
			EF 750	FC501	AC5001
SF	SIPHON FLAT FAN	1/8	SF 050	FC3	AC1101
		OR	SF 100	FC6	AC1102
		1/4	SF 150	FC2	AC1103
		1/4	SF 200	FC2	AC1104
SR	SIPHON ROUND	1/8	SR 050	FC7	AC1201
			SR 150	FC4	AC1201
		OR	SR 200	FC4	AC1202
			SR 250	FC3	AC1202
		1/4	SR 400	FC1	AC1204
			SR 450	FC5	AC1205
		1/2	SR 5050	FC501	AC5201
PF	PRESSURE FLAT FAN	1/8	PF 050	FC4	AC1301
			PF 100	FC3	AC1303
		OR	PF 150	FC3	AC1301
			PF 200	FC3	AC1302
		1/4	PF 250	FC2	AC1304
			PF 300	FC1	AC1304
			PF 350	FC1	AC1305
			PF 400	FC5	AC1306
XW	EXTRA WIDE-ANGLE ROUND	1/2	PF 5050	FC501	AC5301
		1/8 OR 1/4	PF 5100	FC502	AC5302
		1/2	XW 050	FC8	AC1401
PR	PRESSURE ROUND	1/8	PR 050	FC4	AC1501
			PR 100	FC4	AC1502
		OR	PR 150	FC3	AC1502
			PR 200	FC2	AC1503
		1/4	PR 250	FC1	AC1503
			PR 300	FC5	AC1504
		1/2	PR 5050	FC501	AC5501
		1/2	PR 5100	FC502	AC5502
AD	WIDE ANGLE ROUND	1/8	AD 050	FC4	AC1601
			AD 100	FC2	AC1603
		OR	AD 150	FC2	AC1602
			AD 200	FC1	AC1603
		1/4	AD 250	FC1	AC1604
			AD 300	FC5	AC1605
		1/2	AD 5050	FC501	AC5601
			AD 5100	FC501	AC5602
			AD 5150	FC501	AC5603
		1/2	AD 5200	FC502	AC5604
FF	DEFLECTED FLAT FAN	1/8 OR 1/4	FF 050	FC10	AC1701
ER	NARROW ANGLE ROUND	1/8	ER 050	FC7	AC1801
			ER 150	FC4	AC1801
		OR	ER 250	FC3	AC1802
			ER 350	FC6	AC1802
		1/4	ER 450	FC2	AC1802
			ER 550	FC1	AC1803
			ER 650	FC3	AC1803
			ER 750	FC9	AC1803
			ER 850	FC5	AC1803

Dimensions with Hardware Options for XA00 Body, BSP or NPT

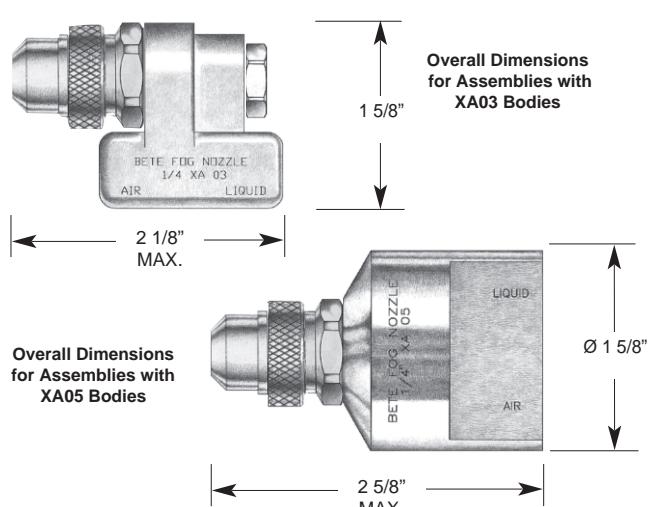
Pipe Size	Hardware Option	Dimensions in inches			
		W	X	Y	Max. "Z"
1/8	A				9/16
1/8	B				1 5/8
OR	C	7/8	1 11/16	1 15/16	2 5/8
1/4	D				3 3/16
1/4	E				4 1/16
1/4	F				4 1/16
1/2	A	1 1/4	2 1/2	2 11/16	1



Overall Dimensions of XA Assemblies with XA00 Body (Shown with E or F Hardware)



Overall Dimensions for Assemblies with XA01 or XA02 Bodies



Overall Dimensions for Assemblies with XA03 Bodies

XA Components & Options

SYSTEM SET-UPS AND ACCESSORIES

BETE carries a complete line of controls and accessories required for setting up a system using the XA Series nozzles.

Contact your BETE representative for details.

Pressure System Set-up

In a pressure-fed system, the liquid is supplied under pressure to either internal or external mix BETE XA Series nozzles.

Air and liquid regulators control the fluid delivery pressure, while the air filter and liquid strainer ensure that the supplied fluids are free of particulate.

Operational control is maintained by manual or solenoid valves used in conjunction with the various hardware assemblies.

Siphon System Set-up

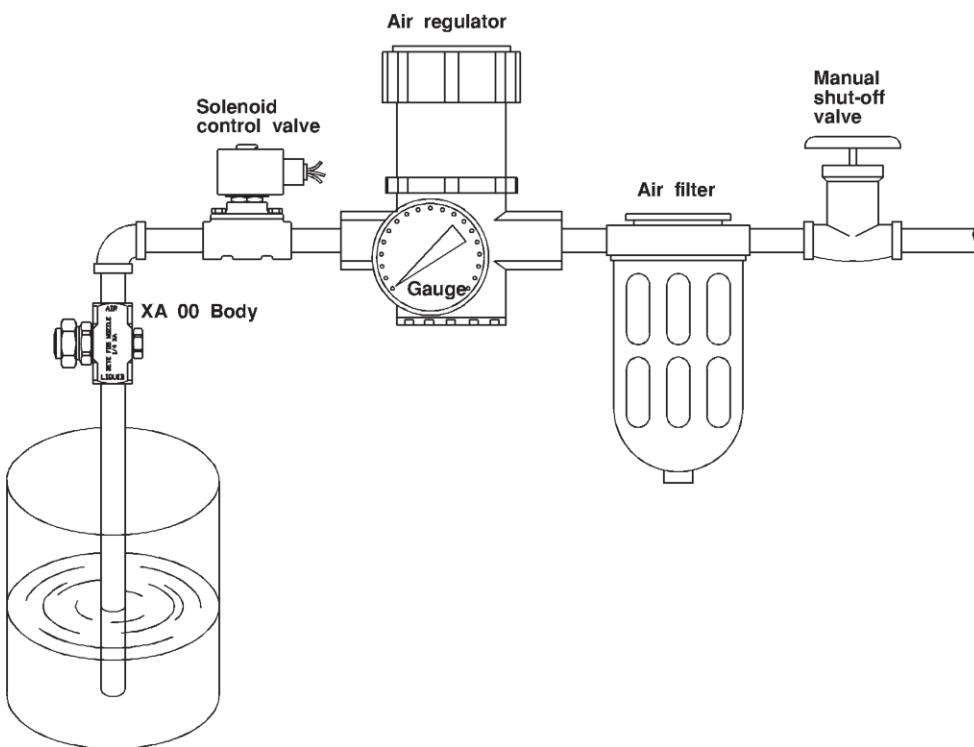
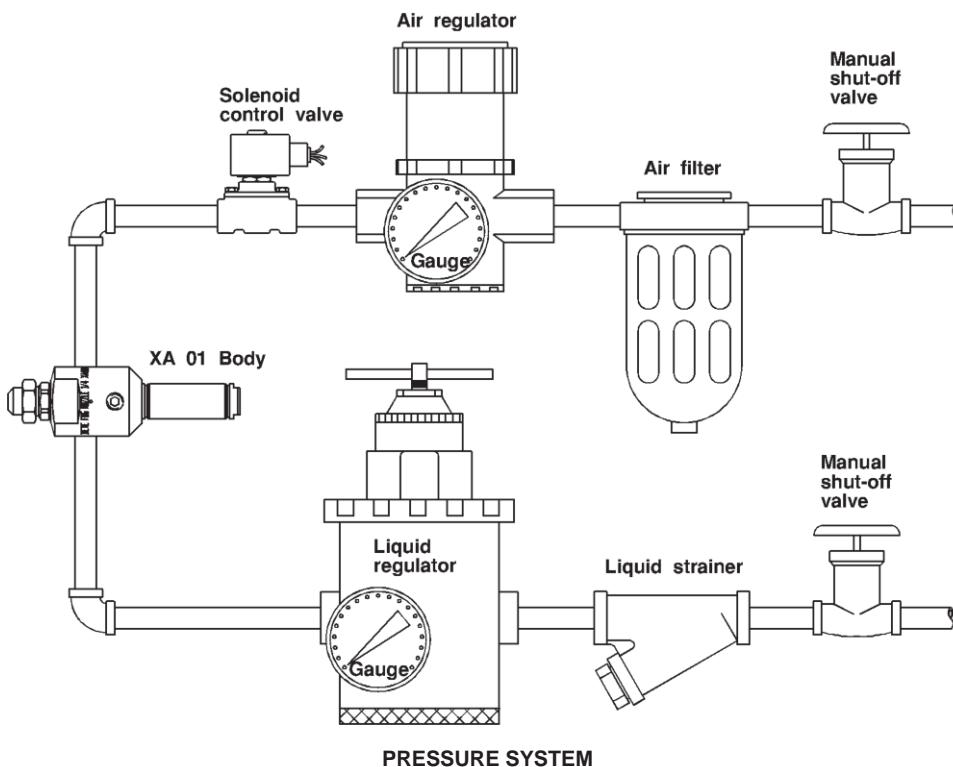
In a siphon-fed system, the liquid is supplied by either a siphon or gravity feed.

An air regulator controls the air delivery pressure, while the air filter ensures that the compressed air is of high quality.

Operational control is maintained by manual or solenoid valves used in conjunction with the various hardware assemblies.

When used as a gravity feed set-up, a positive liquid shutoff capability should be provided.

Filters, regulators, and strainers matched to your XA application are available from stock.

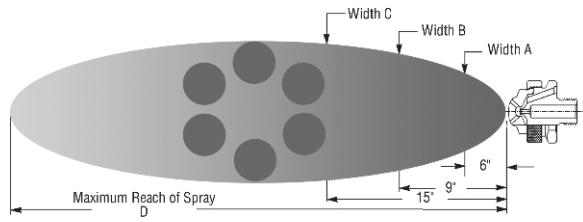


XAAD

Pressure-fed/Int. Mix/Wide Angle Round

DESIGN/SPRAY CHARACTERISTICS

- Internal mix
- Finest atomization
- 70° Hollow Cone spray pattern
- Moderate forward spray projection



Dimensions are approximate. Check with BETE for critical dimension applications.

XA AD Set-up Flow Rates and Dimensions

Pressure Fed, Internal Mix, Wide Angle Round Spray Pattern, 1/8" and 1/4" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	10 PSI Liquid			20 PSI Liquid			30 PSI Liquid			40 PSI Liquid			60 PSI Liquid			Spray Dimensions									
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI liquid	"A" in.	"B" in.	"C" in.	"D" feet					
1/8 or 1/4	AD 050	Fluid Cap FC4 & Air Cap AC1601	8	1.4	0.4	14	2.1	0.4	22	2.4	0.6	30	2.5	0.7	44	3.0	0.8	10	10	6	7	9	5'0				
			10	1.1	0.4	16	1.9	0.5	26	2.0	0.7	34	2.2	0.8	48	2.7	0.9	20	20	6	8	10	6'0				
			12	0.8	0.5	18	1.7	0.6	30	1.6	0.8	38	1.9	0.9	55	2.3	1.2	34	30	7	8	10	7'0				
			14	0.5	0.6	20	1.4	0.6	34	1.2	1.0	42	1.5	1.1	60	1.9	1.4	42	40	7	8	11	9'0				
			22	1.2	0.7	36	0.9	1.1	46	1.1	1.3	65	1.5	1.6	70	1.1	1.8	60	58	8	9	12	12'0				
	AD 100	Fluid Cap FC2 & Air Cap AC1603	24	0.9	0.8	38	0.7	1.2	48	0.9	1.4	75	0.7	1.5	75	0.7	2.1	12	10	7	10	13	6'0				
			26	0.6	0.9	40	0.4	1.3	50	0.7	1.5	75	0.7	2.1	75	0.7	2.1	24	20	8	10	13	8'0				
	AD 150	Fluid Cap FC2 & Air Cap AC1602	12	1.9	1.8	22	3.3	2.3	30	5.1	2.5	38	6.4	2.8	54	8.8	3.4	56	8.1	3.7	10	10	13	10'0			
			14	0.6	2.2	24	2.2	2.8	32	4.3	2.9	42	4.7	3.4	58	7.4	4.0	60	6.8	4.3	34	30	8	11	14	13'0	
			16	3.2	1.4	32	4.6	2.0	42	5.3	2.7	60	5.7	3.3	80	7.1	4.5	85	5.8	4.9	22	20	7	8	9	9'0	
			18	2.6	1.6	36	3.4	2.3	46	4.0	3.0	65	3.2	2.9	90	4.7	5.3	90	4.7	5.3	46	40	8	11	15	15'0	
			20	2.1	1.8	36	2.5	2.6	48	3.5	3.1	70	2.3	4.4	95	3.8	5.7	50	3.0	7	8	10	18'0				
	AD 200	Fluid Cap FC1 & Air Cap AC1603	22	1.6	1.9	40	1.8	2.9	50	3.0	3.3	75	1.7	4.8	100	3.0	6.0	70	4.0	7	9	10	22'0				
			24	1.3	2.1	42	1.5	3.0	55	2.1	3.6	80	1.3	5.2	85	1.1	5.6	90	60	8	10	11	26'0				
			26	1.0	2.2	44	1.2	3.1	60	1.5	4.0	95	1.5	5.4	100	2.2	4.9	100	1.1	5.6	12	20	8	11	15	7'0	
			28	0.8	2.4	46	1.0	3.3	65	1.0	4.4	100	1.1	5.6	100	2.2	4.9	100	1.1	5.6	12	20	8	11	15	10'0	
			10	6.3	1.1	20	9.0	1.6	30	11.2	2.0	40	12.4	2.5	56	16.2	2.8	58	14.8	3.1	12	10	8	10	14	12'0	
	AD 250	Fluid Cap FC1 & Air Cap AC1604	12	3.6	1.5	22	6.9	2.0	32	9.3	2.4	44	10.6	2.9	60	13.8	3.5	65	9.8	4.4	34	30	8	11	15	15'0	
			14	2.0	2.0	24	5.1	2.4	34	7.4	2.8	46	7.1	3.7	65	9.8	4.4	70	6.5	5.4	46	40	8	11	15	19'0	
			18	9.4	3.0	30	13.4	4.2	44	15.3	5.5	60	15.6	7.1	80	21.4	8.6	85	19.5	9.2	28	20	8	10	13	18'0	
			22	7.7	3.6	34	11.9	4.7	48	13.8	5.9	70	12.5	8.3	90	17.9	9.8	90	17.9	9.8	42	40	8	11	14	21'0	
			26	6.0	4.1	38	10.3	5.1	55	11.3	6.8	80	9.3	9.5	95	16.5	10.4	95	16.5	10.4	65	60	9	11	15	22'0	
	AD 300	Fluid Cap FC5 & Air Cap AC1605	28	5.2	4.4	42	8.9	5.6	65	7.8	8.0	85	7.8	10.1	100	15.1	11.0	85	15.1	11.0	90	60	10	13	16	24'0	
			30	4.4	4.7	46	7.3	6.1	70	6.1	8.6	90	6.2	10.7	100	15.1	11.0	90	15.1	11.0	90	60	10	13	16	28'0	
			32	3.7	5.0	50	5.8	6.7	75	4.5	9.3	95	4.8	11.3	100	3.7	11.9	100	3.7	11.9	75	40	12	15	21	26'0	
			34	3.0	5.3	60	2.4	8.0	80	3.3	9.9	100	3.7	11.9	100	2.5	16.6	100	2.5	16.6	90	60	13	17	23	28'0	
			24	6.7	5.5	38	10.7	7.4	48	16.5	8.8	60	18.6	10.4	85	29.2	13.7	90	24.6	14.7	28	10	10	13	18	18'0	
	AD 300	Fluid Cap FC5 & Air Cap AC1605	26	5.2	5.9	42	7.6	8.3	52	12.5	9.6	70	13.7	11.4	95	20.7	15.8	95	17.5	16.9	100	17.5	16.9	20	18	19	20'0
			28	4.0	6.3	44	6.2	8.7	56	9.2	10.4	70	10.0	12.4	95	20.7	15.8	100	17.5	16.9	90	60	30	11	15	24'0	
			30	3.0	6.8	46	5.0	9.1	60	6.6	11.3	75	7.4	13.5	100	17.5	16.9	100	17.5	16.9	60	30	11	15	20	26'0	
			32	2.0	7.2	48	4.0	9.5	62	5.6	11.7	85	8.0	15.5	100	4.0	15.5	100	4.0	15.5	75	40	12	15	21	28'0	
			52	2.4	10.3	70	2.6	13.3	90	2.5	16.6	100	2.5	16.6	100	2.5	16.6	100	2.5	16.6	90	60	13	17	23	28'0	

Standard Materials: Nickel Plated Brass, 303 Stainless Steel and 316 Stainless Steel.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

CALL 413-772-0846
Call for the name of your nearest BETE representative.

AIR ATOMIZING

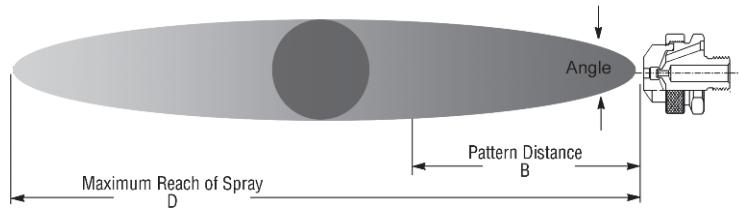
83

XAPR

Pressure-fed/Int. Mix/Narrow Angle Round

DESIGN/SPRAY CHARACTERISTICS

- Internal mix
- Finest atomization
- Narrow spray angle (12°- 22°)
- Full cone pattern
- Large forward projection (up to 28 feet)



1/4" XA 02 PR050 E
XA 02 Body; E Hardware

Dimensions are approximate. Check with BETE for critical dimension applications.

XA PR Set-up Flow Rates and Dimensions

Pressure-fed, Internal Mix, Round Spray Pattern, 1/8" and 1/4" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	10 PSI Liquid			20 PSI Liquid			30 PSI Liquid			40 PSI Liquid			60 PSI Liquid			Spray Dimensions				
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air liquid	Angle deg.	"B" in.	"D" feet										
1/8	PR 050	Fluid Cap FC4 & Air Cap AC1501	10	0.7	0.6	14	1.5	0.4	24	1.7	0.6	32	1.9	0.7	50	2.3	1.0	12	10	13	9'0	
			12	0.5	0.7	18	1.2	0.5	28	1.4	0.6	36	1.6	0.8	54	2.1	1.1	24	20	13	13'0	
			14	0.4	0.8	22	1.0	0.6	32	1.1	0.8	40	1.3	0.9	58	1.8	1.2	36	30	13	14'0	
						24	0.9	0.7	36	0.8	1.0	44	1.1	1.1	62	1.6	1.4	44	40	14	16'0	
						26	0.7	0.8	38	0.7	1.0	48	0.9	1.2	66	1.3	1.5	62	60	15	18'0	
	PR 100	Fluid Cap FC4 & Air Cap AC1502	28	0.6	0.8	40	0.7	1.1	50	0.7	1.3	68	1.2	1.6	70	1.1	1.7					
			30	0.5	0.9	42	0.5	1.2	52	0.7	1.4	70	1.1	1.7								
	PR 150	Fluid Cap FC3 & Air Cap AC1502	10	0.7	0.7	18	1.4	0.9	24	2.0	1.0	30	2.4	1.1	40	3.3	1.4	12	10	12	12'0	
			12	0.5	0.8	20	1.3	1.0	28	1.7	1.2	34	2.2	1.3	46	2.9	1.5	20	20	13	13'0	
			14	0.4	0.9	22	1.2	1.1	32	1.4	1.4	38	1.9	1.5	52	2.6	1.8	34	30	13	14'0	
						24	1.1	1.2	34	1.3	1.5	42	1.6	1.7	58	2.3	2.1	42	40	13	15'0	
	PR 200	Fluid Cap FC2 & Air Cap AC1503	26	0.9	1.3	36	1.2	1.6	44	1.5	1.8	62	2.1	2.3	66	1.9	2.5	58	60	15	22'0	
			28	0.8	1.4	38	1.1	1.9	46	1.5	2.0	52	2.5	2.0	64	4.1	2.1	48	40	14	22'0	
			30	0.8	1.4	40	1.0	2.0	50	1.2	2.3	56	2.2	2.2	68	3.7	2.3	60	60	15	24'0	
			32	0.8	1.6	42	1.2	2.4	60	1.8	2.4	70	1.7	2.7								
1/4	PR 250	Fluid Cap FC1 & Air Cap AC1503	16	3.4	2.7	28	5.0	3.7	40	6.1	4.7	48	7.8	5.3	65	10.7	6.7	24	10	18	26'0	
			20	2.4	3.2	32	3.7	4.2	44	5.0	5.2	55	6.0	6.1	75	8.7	7.7	40	20	20	30'0	
			22	1.9	3.5	36	2.6	4.7	48	4.0	5.7	65	3.6	7.3	80	7.7	8.3	40	30	20	32'0	
	PR 300	Fluid Cap FC5 & Air Cap AC1504	24	1.5	3.7	40	1.9	5.1	55	2.3	6.5	75	2.0	8.5	85	6.7	8.8	55	30	20	36'0	
			26	1.2	4.0	44	1.3	5.6	60	1.6	7.1	80	1.4	9.1	90	5.6	9.4	75	40	21	38'0	
			28	1.0	4.2	48	0.9	6.1	65	1.1	7.8	85	1.0	9.7	95	4.6	10.0	85	60	21	38'0	

Standard Materials: Nickel Plated Brass, 303 Stainless Steel and 316 Stainless Steel.

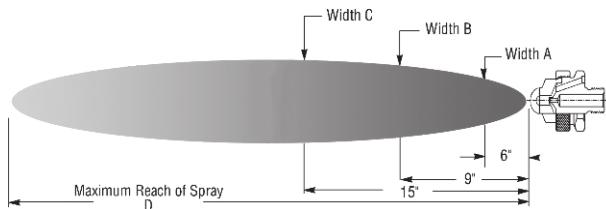
Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

XAPF

Pressure-fed/Internal Mix/Flat Fan

DESIGN/SPRAY CHARACTERISTICS

- Internal mix
- Finest atomization
- Flat fan, wide angle spray patterns (between 80° and 90°)



Dimensions are approximate. Check with BETE for critical dimension applications.

XA PF Set-up Flow Rates and Dimensions

Pressure-fed, Internal Mix, Flat Spray Pattern, 1/8" and 1/4" Pipe Sizes, BSP or NPT

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	10 PSI Liquid			20 PSI Liquid			30 PSI Liquid			40 PSI Liquid			60 PSI Liquid			Spray Dimensions			
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	A (in.)	B (in.)	C (in.)	D (feet)
1/8 OR 1/4	PF 050	Fluid Cap FC4 & Air Cap AC1301	10	1.4	0.8	18	2.2	1.5	28	2.5	1.5	38	2.8	1.8	55	3.4	2.4	16	10	10	8
			12	1.3	1.0	22	1.8	1.6	32	2.2	1.6	42	2.5	2.0	65	2.8	2.9	20	14	20	9
			14	1.1	1.1	26	1.5	1.8	36	1.9	1.8	46	2.2	2.2	75	2.3	3.3	30	14	20	10
	PF 100	Fluid Cap FC3 & Air Cap AC1303	16	0.9	1.2	30	1.2	2.0	40	1.6	2.0	50	1.9	2.4	85	1.7	3.7	40	30	40	11
			18	0.8	1.3	34	0.9	2.2	44	1.3	2.2	60	1.3	2.8	90	1.4	3.9	50	18	24	34
			20	0.7	1.4	38	0.7	2.4	48	1.0	2.4	65	0.9	3.0	95	1.1	4.1	85	22	28	36
	PF 150	Fluid Cap FC3 & Air Cap AC1301	22	0.5	1.6	40	0.6	2.7	55	0.7	2.7	70	0.7	3.3	100	0.9	4.3	60	60	60	13
			20	0.8	1.2	34	1.1	1.6	44	1.8	1.9	60	1.6	2.4	80	2.7	2.9	22	10	10	6
			22	0.6	1.3	36	0.9	1.7	46	1.6	1.9	65	1.2	2.6	85	2.2	3.1	38	20	14	18
	PF 200	Fluid Cap FC3 & Air Cap AC1302	24	0.5	1.4	38	0.7	1.8	48	1.4	2.0	70	0.8	2.9	90	1.8	3.4	46	30	23	36
			26	0.4	1.5	40	0.6	1.9	50	1.1	2.1	80	1.1	2.8	100	2.5	3.4	60	40	24	37
			28	0.3	1.6	42	0.5	2.0	55	0.7	2.4	90	1.1	3.0	100	2.0	3.6	80	30	38	8
	PF 250	Fluid Cap FC2 & Air Cap AC1304	12	2.2	0.7	20	3.4	1.0	30	4.0	1.3	38	4.7	1.5	65	4.8	2.4	16	10	14	7
			14	1.8	0.8	24	2.7	1.1	34	3.4	1.5	42	4.1	1.7	70	4.2	2.6	20	14	18	8
			16	1.5	1.0	28	2.1	1.3	38	2.9	1.6	46	3.6	1.9	75	3.6	2.9	30	20	24	32
	PF 300	Fluid Cap FC1 & Air Cap AC1304	18	1.1	1.1	30	1.8	1.5	42	2.3	1.9	50	3.1	2.1	80	3.1	3.1	42	30	20	8
			20	0.8	1.2	32	1.4	1.6	46	1.7	2.1	60	1.8	2.6	85	2.5	3.4	50	40	22	38
			22	0.5	1.8	42	0.7	2.4	60	0.6	3.2	70	1.1	3.5	90	2.3	4.1	75	60	60	10
	PF 350	Fluid Cap FC1 & Air Cap AC1305	16	4.5	0.8	24	7.5	1.2	34	9.5	1.7	44	11.1	2.2	56	19.8	2.6	20	10	14	9
			18	2.9	1.0	26	6.0	1.4	36	7.8	2.0	46	9.7	2.5	60	16.7	3.0	16	10	14	8
			20	2.0	1.2	28	4.5	1.7	38	6.5	2.2	48	8.4	2.7	65	13.5	3.5	30	20	24	10
	PF 400	Fluid Cap FC5 & Air Cap AC1306	32	2.4	2.1	42	4.1	2.7	56	5.9	3.8	80	4.8	5.7	52	40	6	10	13	15	12
			34	1.3	2.3	46	2.6	3.3	60	2.4	4.4	90	1.8	4.4	100	4.5	6.8	70	60	60	13
			36	0.8	2.6	50	1.1	3.7	65	5.0	5.0	95	5.5	6.3	85	6.8	8.4	13	12	16	14

Standard Materials: Nickel Plated Brass, 303 Stainless Steel and 316 Stainless Steel.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

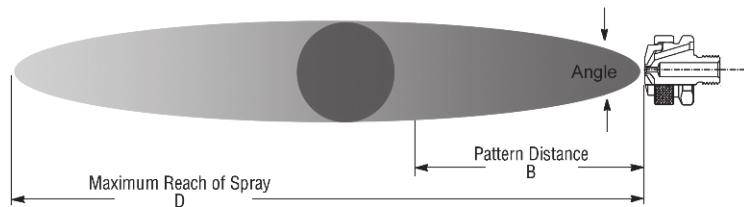
CALL 413-772-0846
Call for the name of your nearest BETE representative.

XA SR

Siphon-fed Round

DESIGN FEATURES

- Lowest flow available
- Very fine atomization
- Narrow spray angle (12°- 22°)
- Full cone pattern
- Short to moderate forward spray projection



Dimensions are approximate. Check with BETE for critical dimension applications.

X A SR Set-up Flow Rates and Dimensions

Siphon-fed, External Mix, Round Spray Pattern, 1/8" and 1/4" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	ATOMIZING AIR		Liquid Capacity in GPH (Gallons Per Hour)								Spray Dimensions at 8" Siphon Height			
			Air PSI	Air Capacity SCFM'	18"	12"	6"	4"	8"	12"	24"	36"	PSI air	Angle deg.	B in.	D feet
1/8 or 1/4	SR 050	Fluid Cap FC7 & Air Cap AC1201	10 20 40 60	0.4 0.6 1.0 1.3	0.4 0.5 0.5 0.6	0.4 0.4 0.5 0.5	0.3 0.4 0.5 0.5	0.2 0.3 0.4 0.4	0.2 0.3 0.4 0.4	0.1 0.3 0.4 0.4	0.1 0.3 0.3 0.3	0.2 0.2	10 20 40 60	18 18 18 18	11 11 12 14	6 6 7 8
	SR 150	Fluid Cap FC4 & Air Cap AC1201	10 20 40 60	0.5 0.7 1.1 1.5	0.6 0.7 0.9 1.0	0.6 0.7 0.8 0.9	0.5 0.6 0.8 0.9	0.4 0.5 0.7 0.8	0.3 0.5 0.7 0.8	0.2 0.4 0.6 0.7	0.2 0.4 0.4 0.6	0.1 0.3 0.3 0.4	10 20 40 60	18 18 18 19	12 13 15 17	7 8 9 10
	SR 200	Fluid Cap FC4 & Air Cap AC1202	10 20 40 60	0.8 1.2 1.9 2.7	0.7 0.8 0.9 1.0	0.6 0.7 0.9 1.0	0.5 0.6 0.8 0.9	0.4 0.6 0.8 0.9	0.4 0.5 0.7 0.8	0.3 0.4 0.7 0.8	0.2 0.5 0.7 0.7	0.3 0.6	10 20 40 60	18 18 19 20	12 13 15 17	8 9 11 12
	SR 250	Fluid Cap FC3 & Air Cap AC1202	10 20 40 60	0.7 1.0 1.7 2.4	1.2 1.4 1.6 1.5	1.1 1.3 1.5 1.4	0.9 1.1 1.3 1.3	0.6 0.9 1.2 1.1	0.5 0.8 1.1 1.0	0.4 0.7 0.9 0.9	0.5 0.6 0.7 0.7	0.3 0.3 0.5 0.5	10 20 40 60	21 21 21 22	15 16 18 20	10 11 12 14
	SR 400	Fluid Cap FC1 & Air Cap AC1204	20 40 60 80	1.9 3.0 4.1 5.2	5.8 6.5 6.8 6.8	5.2 6.0 6.4 6.4	4.2 5.1 5.6 5.8	3.1 4.3 4.9 5.2	2.7 3.7 4.2 4.5	1.9 3.0 3.5 3.9	0.6 1.7 2.2 2.6	0.7 1.3 1.6 1.6	20 40 60 80	17 18 18 19	18 20 21 23	12 13 15 16
	SR 450	Fluid Cap FC5 & Air Cap AC1205	30 40 60 80	5.3 6.5 8.8 11.1		11.4	10.6	8.3	7.2 7.8 8.3 7.5	6.0 6.8 7.4 7.5	4.6 5.3 6.2 6.4	3.2 3.6 3.6 2.2	30 40 60 80	20 20 21 22	20 21 23 25	22 23 25 27

Standard Materials: Nickel Plated Brass, 303 Stainless Steel and 316 Stainless Steel.

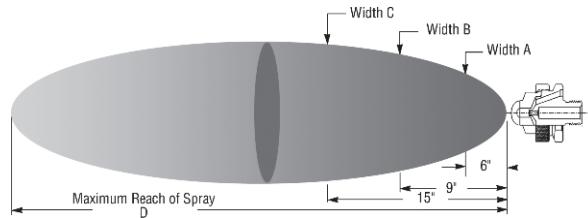
Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

XASF

Siphon-fed Flat Fan

DESIGN/SPRAY CHARACTERISTICS

- Lowest flow available
- Very fine atomization
- Flat fan spray pattern
- Moderate spray angle (60° - 85°)
- Moderate forward projection
- Siphon-fed



1/4" XA02 SF 050 F
XA 02 Body; F Hardware

Dimensions are approximate. Check with BETE for critical dimension applications.

XA SF Set-up Flow Rates and Dimensions

Siphon-fed, Internal Mix, Flat Fan Spray Pattern, 1/8" and 1/4" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	ATOMIZING AIR		Liquid Capacity in GPH (Gallons Per Hour)									Spray Dimensions at 8" Siphon Height			
			Air PSI	Air Capacity SCFM	Gravity Head			Siphon Height						PSI air	"A" in.	"B" in.	"C" in.
1/8 or 1/4	SF 050	Fluid Cap FC3 & Air Cap AC1101	10 20 30	1.0 1.4 1.8	0.4 0.3 0.2	0.3 0.3 0.2	0.3 0.3 0.2	0.3 0.3 0.1	0.3 0.3 0.1	0.2 0.2	0.2 0.2	0.1 0.2	10 20 30	8 9 9	11 12 12	15 15 15	7'0 7'0 6'0
	SF 100	Fluid Cap FC6 & Air Cap AC1102	20 30 40 60	1.9 2.4 3.0 4.1	1.0 0.9 0.8 0.4	1.0 0.8 0.7 0.4	0.9 0.8 0.7 0.4	0.8 0.8 0.7 0.3	0.7 0.7 0.6 0.3	0.7 0.7 0.6 0.3	0.6 0.6 0.5 0.4	0.6 0.6 0.5 0.4	20 30 40 60	9 10 11 11	13 14 15 16	15 17 18 19	8'0 9'0 10'0 9'0
	SF 150	Fluid Cap FC2 & Air Cap AC1103	20 30 40 50	2.3 2.9 3.5 4.1	1.4 1.3 1.0 0.6	1.3 1.2 0.9 0.5	1.2 1.1 0.9 0.4	1.0 0.9 0.7 0.6	1.0 0.9 0.8 0.5	0.9 0.8 0.7 0.4	0.8 0.7 0.6 0.4	0.6 0.6 0.5 0.4	20 30 40	8 8 9	9 10 11	11 11 12	10'0 11'0 10'0
	SF 200	Fluid Cap FC2 & Air Cap AC1104	20 30 40 50	2.1 2.7 3.3 3.9	2.0 2.0 1.8 1.1	1.9 1.9 1.7 1.0	1.7 1.8 1.6 0.9	1.5 1.6 1.4 0.7	1.4 1.5 1.3 1.0	1.3 1.5 1.2	1.2 1.3 1.0	0.9 1.0	20 30 40	7 7 8	9 9 11	11 12 13	10'0 11'0 11'0

Standard Materials: Nickel Plated Brass, 303 Stainless Steel and 316 Stainless Steel.

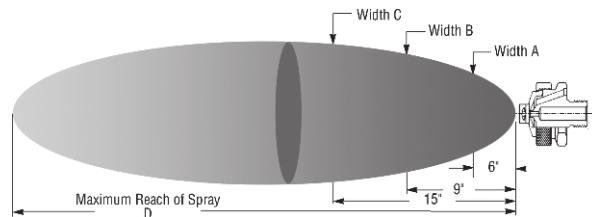
Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

XA EF

Pressure-fed/External Mix/Flat Fan

DESIGN FEATURES

- External mix: allows spraying of viscous materials
- Moderate spray angle (60°- 90°)
- Precise metering of the liquid flow rate
- Variable atomization



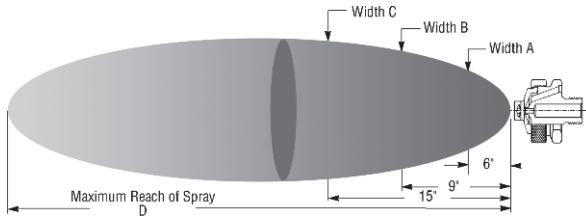
Dimensions are approximate. Check with BETE for critical dimension applications.

X A EF Set-up Flow Rates and Dimensions

Pressure-fed, External Mix, Flat Fan Spray Pattern, 1/8" and 1/4" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	3 PSI Liquid			5 PSI Liquid			10 PSI Liquid			20 PSI Liquid			40 PSI Liquid			Spray Dimensions					
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	"A" in.	"B" in.	"C" in.	"D" feet		
1/8	EF 050	Fluid Cap FC7 & Air Cap AC1001	5 6	0.8	0.8 0.9	5 6	1.0	0.8 0.9	6 8	1.0	0.9 1.0	8 10	1.0	1.2	10 15	1.2	1.6 2.8	6 8 15 20	5 10 20 30	8 9 11 12	11 12 14 15	13 16 18 20	4'0 6'0 8'0 9'0 7'0
		Fluid Cap FC7 & Air Cap AC1003	7 8	1.0	1.0	8 10	1.2	1.0 1.2	10 12	1.4	1.2 1.4	15 20	1.6 2.0	1.9 2.0	25 35	2.2 2.8	15 20 30 40	8 10 11 12	9 11 12 14	12 13 14 15	13 16 17 19	6'0 8'0 10'0 12'0	
	EF 100	Fluid Cap FC7 & Air Cap AC1001	3 5 10 15	0.8	0.9 0.9 1.1	5 10 15	1.0	0.9 1.1 1.4	10 15 20	1.4	1.1 1.4 1.6	20 25 30	1.6 2.0	1.9 2.1	40 50 60 70	2.6 3.0 3.6 4.2 2.8	3 3 5 20 20	3 4 4 5 5	4 6 7	6 9 10	3'0 4'0 5'0 5'0		
		Fluid Cap FC7 & Air Cap AC1003	20 25 30	0.8	1.4 1.6 1.9	20 25 30	1.0	1.6 1.9 2.1	25 30 40	1.4	1.9 2.1 2.4	40 50 60	2.6 3.0 3.6	1.9 2.1 2.4	75 90	4.5 4.9 5.6	20 40	5 5 6	7 7	11 10	6'0 8'0		
	EF 150	Fluid Cap FC4 & Air Cap AC1001	5 8 10 15	1.2	0.8 1.0 1.2	5 10	1.6	0.8 1.2	8 10	2.2	1.0 1.2	10 20	1.2 2.9	1.2 2.9	15 20	4.4	1.6 1.9 2.0 2.8	10 15 20 25	5 10 12 15	11 12 15 17	13 16 18 22	5'0 6'0 7'0 8'0	
		Fluid Cap FC4 & Air Cap AC1003	10 15	1.2	1.2 1.6	15 20	1.6	1.6 1.9	20 30	2.2	1.9 2.5	30 35	2.5 2.8	2.5 2.8	30 35	4.4	2.5 2.8 2.8 2.5	20 20 30 40	13 15 18 20	16 18 19 23	19 20 23 26	10'0 12'0 15'0 10'0	
	EF 200	Fluid Cap FC4 & Air Cap AC1001	5 10 15 20 25 30 40	1.2	0.9 1.1 1.4 1.6 1.9 2.1 2.6	10 15 20 25 30 40	1.6	1.1 1.4 1.6 1.9 2.1 2.4	15 20 25 30 40	2.2	1.4 1.6 1.9 2.1 2.4	25 30 40 50 60 70	1.9 2.1 2.6 3.0 3.6	1.9 2.1 2.6 3.0 3.6	45 50 60 70 75 90 95	2.9 3.0 3.6 4.2 4.4	5 3 5 7 8 5 6	3 4 4 7 8 5	6 9 7 10 8 9	9 10 9 12 10 12	4'0 5'0 6'0 7'0 6'0 8'0 10'0		
		Fluid Cap FC3 & Air Cap AC1003	6 7 8 10	2.3	0.9 1.0 1.0 1.2	6 8	3.0	0.9 1.0 1.1 1.2	6 8 10 12	4.2	0.9 1.2 1.5 1.4	10 12 20 20	1.2 1.4 1.6 1.9	1.2 1.4 1.6 1.9	20 25 30 35	8.4	1.9 2.2 2.5 2.8	8 10 15 20	5 10 15 20	14 19 15 17	19 25 19 26	5'0 6'0 7'0 9'0	
	EF 300	Fluid Cap FC3 & Air Cap AC1003	10 15 20 25 30 40 50	2.3	1.1 1.4 1.6 1.9 2.1 2.6 3.0	15 20 25 30 40	3.0	1.4 1.6 1.9 2.1 2.4	20 25 30 40	4.2	1.6 2.6 3.6 5.9	35 40 70 100	2.4 2.6 3.0 5.6	2.4 2.6 3.0 5.6	50 60 70 100	3.0 3.6 4.2 4.5 8.4	10 25 30 40	3 5 5 6	7 7 8 8	10 10 13 12	4'0 5'0 6'0 8'0 7'0 10'0 12'0		
		Fluid Cap FC3 & Air Cap AC1001	10 15 20 25 30 40 50	2.3	1.1 1.4 1.6 1.9 2.1 2.6 3.0	15 20 25 30 40	3.0	1.4 1.6 1.9 2.1 2.4	20 25 30 40	4.2	1.6 2.6 3.6 5.9	35 40 70 100	2.4 2.6 3.0 5.6	2.4 2.6 3.0 5.6	50 60 70 100	3.0 3.6 4.2 4.5 8.4	10 25 30 40	3 5 5 6	7 7 8 8	10 10 13 12	4'0 5'0 6'0 8'0 7'0 10'0 12'0		

Standard Materials: Nickel Plated Brass, 303 Stainless Steel and 316 Stainless Steel.



Dimensions are approximate. Check with BETE for critical dimension applications.

X A EF Set-up Flow Rates and Dimensions

Pressure-fed, External Mix, Flat Fan Spray Pattern, 1/8" and 1/4" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	3 PSI Liquid			5 PSI Liquid			10 PSI Liquid			20 PSI Liquid			40 PSI Liquid			Spray Dimensions				
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI liquid	"A" in.	"B" in.	"C" in.	"D" feet
1/8 or 1/4	EF 350	Fluid Cap FC6 & Air Cap AC1002	8 10 15 20	3.2 3.6 4.6 5.5	3.2 3.6 4.6 5.5	10 15 25 30	3.6 4.7 6.5 7.4	3.6 4.6 5.5 7.4	20 30 35 40	5.5 7.4 8.3 9.1	30 40 50 60	7 9 11 13	45 60 75 80	10 13 15 16	13.2 13.2 13.2 13.2	20 30 45 60 60 55 60 60	5 10 20 30 30 30 20 40	13 13 14 15 15 16 19 20	15 16 18 19 19 20 25 27	19 22 23 26 26 25 25 28	10'0 12'0 13'0 14'0 15'0 15'0 15'0 16'0	
		Fluid Cap FC6 & Air Cap AC1004	10 15 20 25 30 40 50	3.0 3.6 4.1 4.9 5.5 6.9 8.0	3.0 3.6 4.1 4.9 5.5 6.9 8.0	15 20 25 30 35 40 60	3.6 4.1 4.9 5.5 6.3 6.9 8.0	3.6 4.1 4.9 5.5 6.3 6.9 8.0	20 25 30 35 40 50 60	4.1 4.9 5.5 6.3 6.9 7.0 8.0	35 40 50 60 70 80 90	6 7 8 9 11 13 15	45 50 55 60 70 80 90	8 8 9 10 11 13 15	10 25 30 35 35 20 40	3 5 6 5 6 7 9	8 8 8 11 11 11 13	10 10 11 11 14 14 15 13	6'0 8'0 10'0 11'0 11'0 12'0 12'0 15'0			
	EF 450	Fluid Cap FC2 & Air Cap AC1002	8 15 20 25	3.2 4.6 5.5 6.5	3.2 4.6 5.5 6.5	10 20 25 30	3.6 6.2 6.5 7.4	3.6 6.2 6.5 7.4	15 25 25 40	4.6 6.5 6.5 45	35 45 45 45	8 10 12.3 13	50 65 85 95	11 14 17.4 19	15 25 35 45 60 70 70	3 10 14 20 20 13	13 19 15 17 12 17 17	15 25 25 25 23 23 24	20 10'0 12'0 12'0 14'0 14'0 14'0			
		Fluid Cap FC2 & Air Cap AC1004	10 15 20 25 30 40 50	3.0 3.6 4.1 4.9 5.5 6.9 8.0	3.0 3.6 4.1 4.9 5.5 6.9 8.0	20 25 30 35 40 50 60	4.1 4.9 5.5 6.3 6.3 6.9 7.4	4.1 4.9 5.5 6.3 6.3 6.9 8.0	25 30 35 40 40 50 70	4.9 5.5 6.3 6.9 6.9 8.0 10.0	40 50 60 70 75 90 80	7 8 8 9 9 11 15	50 60 75 80 95 95 95	8 10 11 12.3 13 15 15	10 25 35 40 40 20 40	3 6 6 6 7 7 7	8 8 9 9 10 10 9	11 11 13 14 15 15 14	7'0 10'0 11'0 12'0 12'0 13'0 17'0			
	EF 500	Fluid Cap FC1 & Air Cap AC1002	10 15 20 25 30 40 50	3.0 3.6 4.1 4.9 5.5 6.9 8.0	3.0 3.6 4.1 4.9 5.5 6.9 8.0	20 25 30 35 40 50 60	4.8 6.1 6.1	4.1 6.3 6.3 6.9 6.9 6.9 7.4	25 35 35 40 40 50 70	4.9 5.5 6.3 6.9 6.9 8.0 10.0	40 45 50 60 60 70 90	7 8 8 9 9 11 15	50 60 75 80 80 90 95	8 10 11 12.3 13 15 15	10 25 35 40 40 20 40	3 6 6 6 7 7 7	8 8 9 9 10 10 9	11 11 13 14 15 15 14	7'0 10'0 11'0 12'0 12'0 13'0 17'0			
		Fluid Cap FC1 & Air Cap AC1004	10 15 20 25	3.6 4.6 5.5 6.5	3.6 4.6 5.5 6.5	15 20 30 35	12.7 12.7	4.6 7.4 8.3 8.3	25 30 40 45	6.5 7.4 9.1 10.0	45 50 70 80	10 11 12.3 14	75 85 100 95	15 17 36.0 19	30 40 45 55 65 80 90	5 10 17 19 20 30 40	16 18 19 21 20 15 22	22 23 23 21 20 26 33	30 11'0 13'0 14'0 16'0 16'0 19'0 31'0			
	EF 550	Fluid Cap FC1 & Air Cap AC1002	10 15 20 25	3.6 4.6 5.5 6.5	3.6 4.6 5.5 6.5	15 20 30 35	9.9 12.7	4.6 7.4 8.3 8.3	25 30 40 45	6.5 7.4 9.1 10.0	45 50 70 80	10 11 12.3 14	75 85 100 100	15 17 36.0 19	30 40 45 55 65 80 90	5 10 17 19 20 30 40	16 18 19 17 15 20 22	22 32 31 30 26 33 31	30 11'0 13'0 14'0 16'0 16'0 19'0 18'0			
		Fluid Cap FC1 & Air Cap AC1004	15 20 25 30 35 40 50	3.6 4.1 4.9 5.5 6.3 6.9 8.0	3.6 4.1 4.9 5.5 6.3 6.9 8.0	25 30 35 40 45 50 60	9.9 12.7	4.9 6.3 6.9 7.5 8.0 8.0 9.4	35 40 45 50 60 70 80	6 7 8 9 11 13 13	45 55 55 65 80 90 90	8 8 9 9 11 13 15	55 60 70 80 90 100 100	9 10 11 11 13 15 16	15 30 40 45 50 60 80	3 6 6 7 8 8 7	8 9 10 11 11 16 10	10 12 14 16 15 16 15	8'0 10'0 11'0 12'0 12'0 13'0 18'0			
	EF 600	Fluid Cap FC1 & Air Cap AC1004	15 20 25 30 35 40 50	3.6 4.1 4.9 5.5 6.3 6.9 8.0	3.6 4.1 4.9 5.5 6.3 6.9 8.0	25 30 35 40 45 50 60	9.9 12.7	4.9 6.3 6.9 7.5 8.0 8.0 9.4	35 40 45 50 60 70 80	6 7 8 9 11 13 13	45 55 55 65 80 90 90	8 8 9 9 11 13 15	55 60 70 80 90 100 100	9 10 11 11 13 15 16	15 30 40 45 50 60 80	3 6 6 7 8 8 7	8 9 10 11 11 16 10	10 12 14 16 15 16 15	8'0 10'0 11'0 12'0 12'0 13'0 18'0			
		Fluid Cap FC8 & Air Cap AC1005	25 30 35 40 45 50 60	8 9 11 12 13 13 16	8 9 11 12 13 13 16	25 30 35 40 45 50 60	10.0 12.9	8 11 13 13 13 16 18	35 40 45 50 55 60 70	11 12 13 13 15 16 18	55 60 65 70 75 80 90	15 16 17 18 20 21 24	75 85 100 100 120 130 140	15 17 18 20 21 22 24	30 40 45 50 55 60 70	3 6 6 7 8 8 7	6 8 8 9 9 9 8	12 12 13 13 14 13 14	10'0 11'0 12'0 13'0 14'0 15'0 18'0			
	EF 700	Fluid Cap FC9 & Air Cap AC1005	30 35 40 45 50 60 70	9 11 12 13 13 16 18	9 11 12 13 13 16 18	40 45 50 55 60 70 80	17.4 22.5	12 13 13 15 16 17 21	55 60 65 70 75 80 90	15 16 17 18 20 21 24	70 75 80 85 90 95 100	18 20 21 23 24 23 24	44.7 31.5 31.5 31.5 31.5 31.5 31.5	18 20 21 23 24 24 24	30 45 55 70 70 75 80	3 3 5 5 7 7 8	7 7 7 8 10 7 8	10 14 14 14 14 15 15	11'0 13'0 14'0 14'0 14'0 17'0 19'0			
		Fluid Cap FC5 & Air Cap AC1005	40 45 50 55 60 65 70	12 13 13 15 16 17 18	12 13 13 15 16 17 18	50 55 60 65 70 75 80	27.9 36.0	13 15 16 17 18 19 21	65 70 75 80 85 90 90	17 18 20 21 23 23 24	80 85 90 90 95 95 95	21 23 24 24 24 24 24	72.0 44.7 31.5 31.5 31.5 31.5 31.5	21 23 24 24 24 24 24	40 55 65 75 70 80 85	3 3 5 5 7 7 8	8 8 8 9 10 9 9	10 15 15 15 15 16 16	14 15 15 15 15 16 19'0			

Standard Materials: Nickel Plated Brass, 303 Stainless Steel and 316 Stainless Steel.

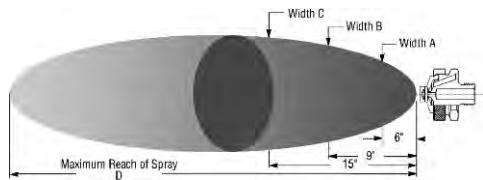
Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

XAER

Pressure-fed/Ext. Mix/Narrow Angle Round

DESIGN/SPRAY CHARACTERISTICS

- External mix: allows spraying of viscous liquids
- Variable atomization
- Narrow spray angle (10° - 30°)
- Precise metering of liquid flow rate



Dimensions are approximate. Check with BETE for critical dimension applications.



1/4" XAER850A
XA 00 Body; A Hardware

XA ER Set-up Flow Rates and Spray Dimensions

Pressure-fed, External Mix, Narrow Round Spray Pattern, 1/8" and 1/4" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	3 PSI Liquid			5 PSI Liquid			10 PSI Liquid			20 PSI Liquid			40 PSI Liquid			Spray Dimensions					
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	Liquid	Air	A in	B in	C in	D ft
AIR ATOMIZING	ER 050	Fluid Cap FC7 & Air Cap AC1801	5 10 20 30	0.7 1.2 1.8 2.3	0.8 1.0 1.8 2.0	5 10 20 30 40	0.8 1.2 1.8 2.3 2.9	0.8 1.2 1.8 2.3 3.0	5 10 20 30 40	1.2 1.2 1.8 2.3 3.5	10 20 30 40 50	1.2 1.8 2.3 2.9 3.5	1.2 1.8 2.3 2.9 3.5	20 30 40 50 60	1.8 2.3 2.9 3.5 4.0	1.8 2.3 2.9 3.5 4.7	3 5 10 20 40	10 20 30 40 60	2 3 4 5 6	3 3 4 5 6	3 3 4 5 6	8 10 12 16 18	
		Fluid Cap FC4 & Air Cap AC1801	5 10 20 30 40	1.0 1.2 1.8 2.3 2.9	0.8 1.2 1.8 2.3 2.9	5 10 20 30 50	0.8 1.2 1.8 2.3 3.5	0.8 1.2 1.8 2.3 3.5	10 20 30 40 60	1.2 1.8 2.3 2.9 4.0	20 30 40 50 70	1.8 2.3 2.9 3.5 4.7	1.8 2.3 2.9 3.5 5.9	20 30 40 50 70	1.8 2.3 2.9 3.5 5.9	1.8 2.3 2.9 3.5 5.9	3 5 10 20 40	10 20 30 40 60	2 3 3 4 6	3 3 4 5 6	3 3 4 5 6	10 12 16 18 20	
		Fluid Cap FC3 & Air Cap AC1801	6 10 20 30 40 50	2.0 1.2 1.8 2.3 2.9 3.5	0.9 1.2 1.8 2.3 2.9 3.5	10 20 30 40 50	1.2 1.8 2.3 2.9 3.5	1.2 1.8 2.3 2.9 3.5	10 20 30 40 60	1.2 1.8 2.3 2.9 4.0	20 30 40 50 70	1.8 2.3 2.9 3.5 4.7	1.8 2.3 2.9 3.5 5.9	20 30 40 50 70	2.9 4.0 6.0 8.0 11.9	2.9 4.0 6.0 8.0 11.9	3 5 10 20 40	10 20 30 40 60	3 3 4 5 6	4 5 6 7 8	4 5 6 7 8	10 14 17 18 19	
	ER 350	Fluid Cap FC6 & Air Cap AC1801	10 15 20 30 40 50	3.3 4.5 5.5 7.2 8.9 10.6	3.4 4.5 5.5 7.2 8.9 10.6	10 20 30 40 50	3.4 4.5 5.5 7.2 8.9	3.4 4.5 5.5 7.2 8.9	20 30 50 60 60	5.7 7.2 8.3	30 40 50 60 80	7.2 8.9 10.6 12.2 12.2	7.2 8.9 10.6 12.2 15.6	40 50 60 80 90	8.9 10.6 12.2 13.9 16.7	8.9 10.6 12.2 13.9 16.7	3 5 10 20 40	10 20 30 40 60	3 3 4 5 6	4 5 6 7 8	4 5 6 7 8	9 11 16 17 18	
		Fluid Cap FC2 & Air Cap AC1802	10 15 20 30 40 50	5.0 4.5 5.5 7.2 8.9 10.6	3.4 4.5 5.5 7.2 8.9 10.6	10 15 20 30 40 50	3.4 4.5 5.5 7.2 8.9 10.6	3.4 4.5 5.5 7.2 8.9	15 20 30 40 60	8.8 13	30 40 50 60 80	7.2 8.9 10.6 12.2 15.6	7.2 8.9 10.6 12.2 15.6	40 50 60 80 80	8.9 10.6 12.2 13.9 15.6	8.9 10.6 12.2 13.9 15.6	3 5 10 20 40	10 20 30 40 60	4 4 5 5 6	6 6 7 7 8	6 6 7 7 8	14 18 21 22 22	
		Fluid Cap FC1 & Air Cap AC1802	15 20 30 40 50	10	4.5 5.5 7.2 8.9 10.6	20 30 40 50	5.5 7.2 8.9 10.6	5.5 7.2 8.9 10.6	30 40 50 60 80	18	7.2 8.9 10.6 12.2 15.6	30 40 50 60 80	7.2 8.9 10.6 12.2 15.6	50 60 80	10.6 12.2 13.9 15.6	10.6 12.2 13.9 15.6	3 5 10 20 40	20 30 40 50 80	6 6 7 7 8	6 6 7 7 8	6 6 7 7 8	16 15 21 22 22	
	ER 650	Fluid Cap FC8 & Air Cap AC1803	15 20 25 30 40 50 60	10	7.2 8.8 10.3 11.7 14.5 17.2	20 25 30 40 50 55 60	8.8 10.3 11.7 14.5 17.2 19.8	8.8 10.3 11.7 14.5 17.2 19.8	30 40 50 60 60 70	11.7 14.5 17.2 18.5 21.1 22.5	50 55 60 65 70 80	11.7 14.5 17.2 18.5 21.1 22.5	11.7 14.5 17.2 18.5 21.1 22.5	50 60 80	17.2 18.5 19.8 21.1 22.5	17.2 18.5 19.8 21.1 22.5	3 5 10 20 40	20 30 40 50 70	5 6 6 5 4	6 6 7 7 8	5 6 6 7 8	17 22 22 18 18	
		Fluid Cap FC9 & Air Cap AC1803	20 30 40 50 55 60 70	17	8.8 11.7 14.5 17.2 18.5 19.8 22.5	30 40 50 60 65 70 80	11.7 14.5 17.2 19.8 21.1 22.5 25.2	11.7 14.5 17.2 19.8 21.1 22.5 25.2	40 50 60 65 70 80 90	14.5 17.2 19.8 21.1 22.5 25.2 27.9	50 55 60 65 70 80 90	14.5 17.2 19.8 21.1 22.5 25.2 27.9	50 60 80 90	17.2 18.5 19.8 21.1 22.5 25.2 27.9	17.2 18.5 19.8 21.1 22.5 25.2 27.9	3 5 10 20 40	20 30 40 50 70	6 6 7 7 8	6 6 7 7 8	6 6 7 7 8	19 21 22 22 20		
		Fluid Cap FC5 & Air Cap AC1803	40 50 55 60 65	25	14.5 17.2 18.5 19.8 21.1	55 60 65 70 80	17.2 19.8 21.1 22.5 25.2	17.2 19.8 21.1 22.5 25.2	30 40 50 60 80	21.1 22.5 25.2 27.9	40 50 60 80 90	21.1 22.5 25.2 27.9	40 50 60 80 90	21.1 22.5 25.2 27.9	3 5 10 20 40	20 30 40 50 90	6 6 7 7 8	6 6 7 7 8	6 6 7 7 8	22 20 18 18 19			

Standard Materials: Nickel Plated Brass, 303 Stainless Steel, and 316 Stainless Steel.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

XAFF

Pressure-fed/Int. Mix/Deflected Flat Fan

DESIGN/SPRAY CHARACTERISTICS

- Internal mix
- Deflected flat fan spray pattern



XA FF Set-up Flow Rates

Pressure-fed, Internal Mix, Deflected Flat Fan Spray Pattern, 1/8" and 1/4" Pipe Sizes

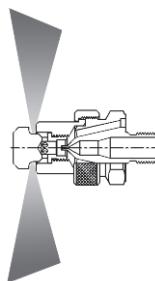
Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	10 PSI Liquid			20 PSI Liquid			30 PSI Liquid			40 PSI Liquid			60 PSI Liquid		
			PSI air	GPH	SCFM												
1/8 or 1/4	FF 050	Fluid Cap FC10 & Air Cap AC1701	6	2.9	1.6	14	3.9	2.6	22	4.7	3.3	26	5.8	3.6	38	7.4	4.6
			8	2.5	1.9	16	3.5	2.8	24	4.3	3.6	32	4.8	4.4	46	6.4	5.5
			10	2.0	2.3	18	3.1	3.1	26	4.0	3.8	38	3.8	5.3	54	5.3	6.6
			12	1.5	2.7	20	2.8	3.5	30	3.3	4.5	44	2.8	6.2	62	4.2	7.8
					22		2.3		34		5.2		46		70	2.8	9.4

XAxW

Pressure-fed/Int. Mix/Extra-wide Angle

DESIGN/SPRAY CHARACTERISTICS

- Internal mix
- 180° Extra-wide hollow cone



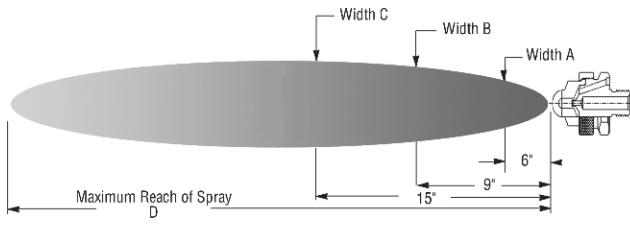
XA XW Set-up Flow Rates

Pressure-fed, Internal Mix, Extra-Wide Spray pattern, 1/8" and 1/4" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	10 PSI Liquid			20 PSI Liquid			30 PSI Liquid			40 PSI Liquid			60 PSI Liquid		
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM
1/8 or 1/4	XW 050	Fluid Cap FC8 & Air Cap AC1401	20	4.0	2.5	34	6.6	4.1	50	7.1	6.4	60	11.0	7.6	85	14.4	11.8
			22	2.8	2.7	38	4.4	4.8	52	6.2	6.8	65	8.3	8.6	90	12.0	13.0
			24	2.0	3.0	42	2.8	5.5	56	4.4	7.6	70	6.1	9.8	95	9.8	14.1
			26	1.5	3.3	46	1.7	6.3	60	3.2	8.4	80	3.1	12.4	100	7.8	15.4
			28	1.1	3.6	48	1.3	6.9	70	1.3	11.8	90	1.4	15.4			

Standard Materials: Nickel Plated Brass, 303 Stainless Steel and 316 Stainless Steel.

1/2 XA



Air Atomizing

Dimensions are approximate. Check with BETE for critical dimension applications.

AD		1/2" XA AD Set-up Flow Rates and Dimensions																					
		Pressure-fed, Internal Mix, Narrow Angle Round Spray Pattern, 1/2" Pipe Sizes																					
Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	5 PSI Liquid			15 PSI Liquid			25 PSI Liquid			35 PSI Liquid			55 PSI Liquid			Spray Dimensions					
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	(in.)	B (in.)	C (in.)	D (feet)	
1/2	AD 5050	Fluid Cap FC 501 & Air Cap AC 5601							28 30	33.0 19.8	8.40 10.8	40 42	28.8 15.6	11.3 13.9	58 60 62	66.0 42.0 25.5	12.2 15.0 18.2	30 40 60	25 35 55	13.5 13.5 14.0	19.0 19.0 19.5	26.5 26.5 27.0	22 24 28
	AD 5100	Fluid Cap FC 501 & Air Cap AC 5602	8 10 12	27.0 15.0 8.4	6.50 8.20 9.80	18 20 22 24	42.0 29.4 20.2 14.4	7.00 8.80 10.5 12.2	32 34 36 38 40	47.0 36.0 25.2 18.6 13.8	11.0 12.8 14.7 16.6 18.6	46 48 50 52 54	42.6 32.4 25.8 19.8 15.6	18.1 20.2 22.2 24.0 25.8	70 75 80	81.0 45.0 22.2	30.0 35.0 39.6	10 20 36 50 75	5.0 15 25 35 55	13.0 13.5 13.0 13.5 14.0	18.5 19.0 18.5 19.0 19.0	25.5 25.5 26.5 26.5 27.0	20 26 21 24 27
	AD 5150	Fluid Cap FC 501 & Air Cap AC 5603	10 12 14	34.2 21.6 12.0	11.4 13.0 14.7	26 28 30 32 34	46.2 37.2 28.4 21.6 16.2	20.2 22.0 23.7 25.3 27.0	40 42 44 46 50	62.6 52.8 42.0 33.6 18.0	27.5 29.6 31.6 33.6 37.5	54 56 58 60 65	75.6 57.0 46.8 39.0 25.8	32.6 34.3 35.8 37.3 41.2	75 80 85	127 108 98	39.0 42.0 46.0	12 30 46 60 80	5.0 15 25 35 55	14.0 13.5 13.0 14.0 14.0	19.5 19.0 18.5 19.5 28.0	27.0 24 23 28 30	
	AD 5200	Fluid Cap FC 502 & Air Cap AC 5604	10 12	35.4 26.4	11.1 13.4	18 20 22 24	103 81.6 63.6 49.3	15.4 17.6 19.8 22.6	26 28 30 32 38 40	155 135 115 100 84.0 69.5	17.7 20.0 22.5 25.1 27.5 30.0	36 38 40 42 44 46	180 162 147 131 116 101	23.0 25.4 27.8 30.2 32.6 35.1	54 56 58 60 62 64	222 204 192 180 166 154	29.1 31.2 34.0 36.3 38.9 41.6	10 20 32 44 64 55	5.0 15 25 35 55 11.0	13.0 11.0 11.0 21.0 22.0 31.0	25.0 26.0 32.0 29.0 22.0 25		

PR		1/2" XA PR Set-up Flow Rates and Dimensions																				
		Pressure-fed, Internal Mix, Narrow Angle Round Spray Pattern, 1/2" Pipe Sizes																				
Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	5 PSI Liquid			15 PSI Liquid			25 PSI Liquid			35 PSI Liquid			55 PSI Liquid			Spray Dimensions				
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	(in.)	B (in.)	C (in.)	D (feet)									
1/2	PR 5050	Fluid Cap FC 501 & Air Cap AC 5501	18 20 22 24	9.00 6.70 5.40 4.10	12.4 13.7 14.7 15.7	28 32 38 44	31.7 22.5 15.9 13.2	14.9 17.0 19.3 20.4	38 50 54 58	58.0 37.7 24.7 19.5	17.3 20.8 24.8 27.5	48 54 60 66	80.0 55.2 40.0 30.0	19.3 23.6 27.5 32.1				20 36 50 60	5.0 15 25 35			22 24 27 30
	PR 5100	Fluid Cap FC 502 & Air Cap AC 5502	10 12	35.4 26.4	11.1 13.4	18 20 22 24	103 81.6 63.6 49.3	15.4 17.6 19.8 22.6	26 28 30 32	155 135 115 100	17.7 20.0 22.5 25.1	36 38 40 42	180 162 147 131	23.0 25.4 27.8 30.2	54 56 58 60	222 205 190 180	29.1 31.2 34.0 36.3	10 20 32 44	5.0 15 25 35	4.0 6.0 8.0 10	7.0 10 13 21	

TO ORDER: specify pipe size, body style, spray set-up #, hardware and mounting assemblies, and material. See page 74.

Standard Materials: Nickel Plated Brass, 303 Stainless Steel, and 316 Stainless Steel.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

Dimensions are approximate. Check with BETE for critical dimension applications.

EF

1/2" XA EF Set-up Flow Rates and Dimensions

Pressure-fed, External Mix, Flat Fan Spray Pattern, 1/2" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	3 PSI Liquid			5 PSI Liquid			7 PSI Liquid			10 PSI Liquid			15 PSI Liquid			Spray Dimensions					
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	A (in.)	B (in.)	C (in.)	D (feet)		
1/2	EF 5050	Fluid Cap FC501 & Air Cap AC5001	30		31.0	40		38.0	45		41.5	55		48.0	80		65	35	3	8.5	14.5	20.5	19
			35		34.0	45		41.5	50		45.0	60		51.5	85		69	50	5	9.0	16.5	21.5	22
			40	138	38.0	50	180	45.0	55	210	48.0	60	252	58.0	90	306	72	55	7	9.5	17.5	23.0	23
			45		41.5	55		48.0	60		51.5	75		62.0	95		75	70	10	9.5	18.5	24.0	25

PF

1/2" XA PF Set-up Flow Rates and Dimensions

Pressure-fed, Internal Mix, Flat Fan Spray Pattern, 1/2" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	5 PSI Liquid			15 PSI Liquid			25 PSI Liquid			35 PSI Liquid			55 PSI Liquid			Spray Dimensions											
			PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	PSI air	GPH	SCFM	A (in.)	B (in.)	C (in.)	D (feet)								
1/2	PF5050	Fluid Cap FC501 & Air Cap AC5301				28	39.0	22.4	44	44.1	31.5	58	53.0	40.0				20	10	17	28	35	18						
						30	31.8	24.0	46	37.2	33.5	60	45.6	42.0				30	15	18	29	36	19						
						32	24.6	25.9	48	31.2	35.1	62	38.0	44.0				40	20	19	30	37	21						
						34	19.8	27.5	50	26.0	36.9	65	31.0	47.0				50	25	20	31	38	23						
1/2	PF 5100	Fluid Cap FC502 & Air Cap AC5302				36	15.0	29.1	60	20.6	38.7	70	21.0	52.5				60	35	24	36	43	27						
						10	35.4	11.1	18	103	15.4	26	155	17.7	36	180	23.0	54	222	29.1									
						12	26.4	13.4	20	81.6	17.6	28	135	20.1	36	162	25.4	56	205	31.2	10	5.0	20	34	13				
									22	63.6	19.8	30	115	22.5	40	147	27.8	58	190	34.0	20	15	34	62	83	15			
									24	49.3	22.6				32	100	25.1	42	131	30.2	60	178	36.3	32	25	34	62	82	17
												34	84.0	27.5	44	116	32.6	62	166	38.9	44	35	36	66	85	19	21		
										36	69.5	30.0	46	101	35.1	64	154	41.6	64	130	46.6				55	36	67	89	21
										38	56.4	32.6	48	85.0	37.6	50	73.0	40.2	68	142	44.1					76	87.5		
										40	45.7	35.3	50	62.4	42.7	52			70	119	49.3								

SR

1/2" XA SR Set-up Flow Rates and Dimensions

Siphon-fed, External Mix, Narrow Angle Round Spray Pattern, 1/2" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	ATOMIZING AIR						Liquid Capacity in GPH (Gallons Per Hour)						Spray Dimensions at 8" Siphon Ht.			
			PSI air	Air Capacity SCFM	18"	12"	6"	4"	8"	12"	24"	PSI air	B (in.)	D (feet)				
1/2	SR 5050	Fluid Cap FC501 & Air Cap AC5201	10		12.7					10.7					20			20
			20		18.5					22.8					30			22
			30		24.0					32.4					40			24
			43		29.2			67.6		38.8		31.2			50			26
			50		34.8	79.8	70.5		62.8	43.0		35.2			60			29
			60		40.1	81.9	72.1		63.5	45.4		38.3			70			32
			70		46.1	83.2	74.5		66.0	48.0		41.4			80			35
			80		51.0	84.6	76.2		67.6	49.8		43.2			90			

XW

1/2" XA XW Set-up Flow Rates and Dimensions

Pressure-fed, Internal Mix, 180° Extra-Wide Angle, Hollow Cone Spray Pattern, 1/2" Pipe Sizes

Pipe Size	Spray Set-up Number	Fluid and Air Cap Numbers	10 PSI Liquid			20 PSI Liquid			30 PSI Liquid			40 PSI Liquid			40 PSI Liquid			
			PSI air	GPH	SCFM													
1/2	XW 5050	Fluid Cap FC502 & Air Cap AC5401	14	56.4	12.2	24	104	16.0	36	116	22.4	48	122	27.8	72	128	40.2	
			16	38.4	14.8	26	85.8	18.6	38	98.4	24.8	50	110	29.8	74	116	42.3	
			18	25.8	16.8	28	70.0	20.3	40	85.2	26.5	52	98.4	31.5	76	108	44.3	
			20	15.6	19.0	30	54.6	22.7	42	73.2	28.9	54	85.8	33.8	78	96.6	46.3	
						32	42.0	24.8	44	61.0	30.9	56	74.4	36.0	80	85.8	48.3	
						34	30.6	26.8	46	49.8	35.0	58	66.0	38.3	82	78.6	50.5	
						36	20.0	29.3	48	38.4	35.0	60	55.2	40.1	84	67.8	52.5	
						38	7.20	31.8	50	30.0	37.8	62	44.4	42.0	86	60.0	54.8	
												64	37.2	44.5	45.8	90	48.0	59.0

Standard Materials: Nickel Plated Brass, 303 Stainless Steel and 316 Stainless Steel.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.