

**DIMENSIONS**

PIPE SIZE	Dim. A	Dim. B
1"	45 mm	73 mm
1 1/4"	51 mm	77 mm
1 1/2"	54 mm	80 mm
2"	61 mm	89 mm

**SPRAY CHARACTERISTICS:**

These nozzles simply clip over a pre-drilled pipe (15mm dia. hole) and are available with a variety of spray balls, in various spray patterns, flow rates and spray angles.

**CONSTRUCTION:**

Made of corrosion-resistant plastic and stainless steel. Heavy-duty spring clip good to 6 bar at 80°C. A 316SS clip is also available, if required.

**TYPICAL APPLICATIONS:**

- Parts Cleaning
- Pretreatment
- Spray Washing & Rinsing

Double clip model also available.

**THE BEX "FINGER" SYSTEM**

The BEX spring clamp is the heaviest and most durable used in the industry. It provides long service at pressures up to 7 bar. Also available with a second clip.

Standard O-Ring seal is EPDM. Buna-N, Viton®, and special "retrofit" seals are available.

Square fitting glass filled polypropylene bodies are available in four pipe sizes and are good up to 80°C.

Hundreds of standard nozzle balls and spray options are available when using our threaded ball, below, or the Zip-Tip® nozzle adapter (see page 54).

BEX unique "Finger" system holds the ball securely in alignment to prevent movement when the cap is tightened. The "Finger" system is optional on all BEX B-Ball® adjustable nozzles.

The K-Ball® cap has strong buttress threads and is made from glass filled polypropylene or PVDF.

**HOW TO ORDER COMPLETE K-BALL ASSEMBLIES**

Use the correct body part number (from the parts listed in BOLD at the right), followed by the model number for the nozzle ball (see pages 59 and 60).

**Example:**

BF5070 nozzle balls are needed to fit onto a 1-1/4" pipe. Accurate alignment of the nozzles is critical, so the 1-1/4" body with "fingers" will be used. The correct PART number for this K-Ball nozzle assembly is 1.2KFBF5070.

**K-BALL BODY COLORS AND PART NUMBERS**

Pipe Sizes	1"	1-1/4"	1-1/2"	2"
Standard Body	<b>1K</b> (white)	<b>1.2K</b> (grey)	<b>1.5K</b> (black)	<b>2K</b> (tan)
Body with Fingers	<b>1KF</b> (green)	<b>1.2KF</b> (yellow)	<b>1.5KF</b> (red)	<b>2KF</b> (blue)
Spring Clip	1KCL	1.2KCL	1.5KCL	2KCL
O-ring	KOR	KOR	KOR	KOR
K-Ball Cap	KCAP	KCAP	KCAP	KCAP

SPRAY BALL: CHOOSE FROM THE TABLES ON PAGES 59 AND 60.

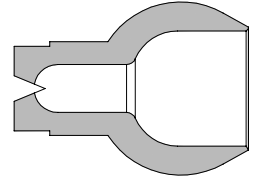
QUICK DISCONNECT

**BF FLAT-V SPRAY NOZZLE BALLS** (for 1", 1-1/4", 1-1/2" and 2" pipe)**SPRAY CHARACTERISTICS:**

Spray is fan-shaped with spray angles of 15° to 110°. Spray density tapers off toward the outside to permit overlapping of the spray patterns while maintaining uniform spray density.

**COLOR CODING:**

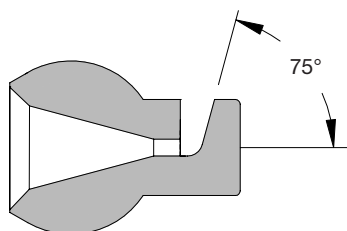
The more popular models of the flat-V spray nozzle balls are color coded by flowrate for easier identification.



SPRAY ANGLE @ 3 bar	MODEL NUMBER	SPRAY BALL COLOUR	EQUIV. ORIFICE DIAMETER (mm)	CAPACITY (L/min) AT VARIOUS PRESSURES(bar)										SPRAY ANGLE @	
				0.3 bar	0.5 bar	0.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	5 bar	1.5 bar	3 bar	
110°	BF11060	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	107°	110°	
95°	BF9530	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	63°	95°	
	BF9540	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	63°	95°	
	BF9550	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	63°	95°	
	BF9560	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	63°	95°	
80°	BF8010	White	1.91	1.25	1.61	1.91	0.61	2.79	3.2	3.9	4.6	5.1	75°	80°	
	BF8020	Light Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	63°	80°	
	BF8030	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	63°	80°	
	BF8040	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	76°	80°	
	BF8050	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	77°	80°	
	BF8060	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	77°	80°	
	BF8070	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	78°	80°	
	BF80100	Brown	5.99	12.5	16.1	19.1	22.8	27.9	32	39	46	51	75°	80°	
65°	BF6520	Light Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	63°	65°	
	BF6530	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	63°	65°	
	BF6540	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	63°	65°	
	BF6550	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	63°	65°	
	BF6560	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	63°	65°	
	BF6570	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	63°	65°	
	BF65100	Brown	5.99	12.5	16.1	19.1	22.8	27.9	32	39	46	51	58°	65°	
50°	BF5020	Light Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	63°	50°	
	BF5030	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	63°	50°	
	BF5040	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	43°	50°	
	BF5050	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	43°	50°	
	BF5060	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	43°	50°	
	BF5070	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	43°	50°	
	BF50100	Brown	5.99	12.5	16.1	19.1	22.8	27.9	32	39	46	51	44°	50°	
40°	BF4040	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	33°	40°	
	BF4050	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	35°	40°	
	BF4060	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	37°	40°	
	BF4070	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	35°	40°	
	BF40100	Brown	5.99	12.5	16.1	19.1	22.8	27.9	32	39	46	51	33°	40°	
25°	BF2540	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	22°	25°	
	BF2550	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	20°	25°	
	BF2560	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	18°	25°	
	BF2570	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	19°	25°	
	BF25100	Brown	5.99	12.5	16.1	19.1	22.8	27.9	32	39	46	51	21°	25°	
15°	BF15100	Brown	5.99	12.5	16.1	19.1	22.8	27.9	32	39	46	51	13°	15°	
	BF15120	Black	6.55	15.0	19.3	22.9	27.3	33	39	47	55	61	12°	15°	
	BF15150	Black	7.34	18.7	24.2	28.6	34	42	48	59	68	76	12°	15°	

**BFL FLOODING  
SPRAY NOZZLE  
BALLS**

(for 1", 1-1/4", 1-1/2" and 2" pipe)



**SPRAY CHARACTERISTICS:**

A wide, flat shaped spray with low impact. The spray is deflected 75° from the centerline of the nozzle, as shown.

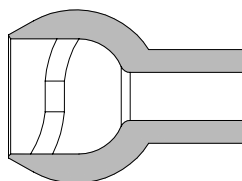
**TYPICAL APPLICATIONS:**

Flooding nozzles are often used at the beginning and end of phosphate stages, to prevent mist carry over. They can also be used for "wetting" surfaces during long drain stages.

MODEL NUMBER	EQUIV. ORIFICE DIAMETER (mm)	CAPACITY (L/min) AT VARIOUS PRESSURES (bar)										SPRAY ANGLE @	
		0.2 bar	0.3 bar	0.5 bar	0.7 bar	1 bar	1.5 bar	2 bar	2.5 bar	3 bar	4 bar	0.5 bar	1.5 bar
<b>BFL5</b>	1.93	1.02	1.25	1.61	1.91	2.28	2.79	3.2	3.6	3.9	4.6	114°	130°
<b>BFL10</b>	2.79	2.04	2.50	3.2	3.8	4.6	5.6	6.4	7.2	7.9	9.1	134°	146°
<b>BFL18</b>	3.78	3.7	4.5	5.8	6.9	8.2	10.0	11.6	13.0	14.2	16.4	130°	142°
<b>BFL24</b>	4.24	4.9	6.0	7.7	9.2	10.9	13.4	15.5	17.3	18.9	21.9	121°	136°
<b>BFL30</b>	4.65	6.1	7.5	9.7	11.4	13.7	16.7	19.3	21.6	23.7	27.3	120°	133°
<b>BFL40</b>	5.54	8.2	10.0	12.9	15.3	18.2	22.3	25.8	28.8	31.6	36	130°	144°

**BPH HOLLOW CONE  
PHOSPHATING  
NOZZLE BALLS**

(for 1", 1-1/4", 1-1/2" and 2" pipe)



**SPRAY CHARACTERISTICS:**

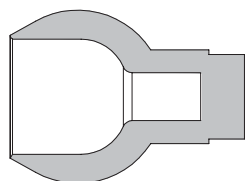
A hollow cone pattern with low impact. BPH nozzle balls are made of glass reinforced polypropylene. Available in three models.

**TYPICAL APPLICATIONS:**

Designed specifically for phosphate stages. This large droplet, low impact spray results in tighter and more consistent phosphate crystalline structure. It minimizes the misting of phosphate spray, thus reducing 'pre-coating', streaking, and carry over to adjacent stages.

MODEL NUMBER	SPRAY BALL COLOR	MAXIMUM FREE PASSAGE (mm)	CAPACITY (L/min) AT VARIOUS PRESSURES (bar)									SPRAY ANGLE @			
			0.2 bar	0.3 bar	0.5 bar	0.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	0.3 bar	0.5 bar	0.7 bar	1.5 bar
<b>BPH28</b>	<b>White</b>	4.56	5.7	7.0	9.0	10.7	12.8	15.6	18.0	22.1	25.5	44°	52°	53°	55°
<b>BPH51</b>	<b>Grey</b>	1.91	10.2	12.5	16.1	19.1	22.8	27.9	32.2	39	46	37°	40°	42°	48°
<b>BPH53</b>	<b>Black</b>	3.78	10.2	12.5	16.1	19.1	22.8	27.9	32.2	39	46	62°	70°	71°	73°

**KPLUG SHUT-OFF  
PLUG**



**TYPICAL APPLICATIONS:**

The KPLUG nozzle ball is used in place of any other nozzle ball to completely shut off the flow through the assembly.

QUICK DISCONNECT