

CHARACTERISTICS:

BEX Molded Plastic Zip-Tip® Spray Nozzles are designed to allow fast and easy installation and removal of spray nozzle tips and adapters, while providing positive alignment of spray pattern. Double VITON® O-Ring seals are supplied standard with each nozzle tip. Seals are located on, and removed with, the nozzle tip for easy flushing. A variety of models and spray patterns are available.

CONSTRUCTION:

Molded plastic spray nozzles are available in glass reinforced polypropylene or PVDF (Kynar®). Other materials are available upon request. All models are available in either BSPT or NPT threads. (NOTE: Metal and molded plastic ZIP-TIP® components are not interchangeable.)

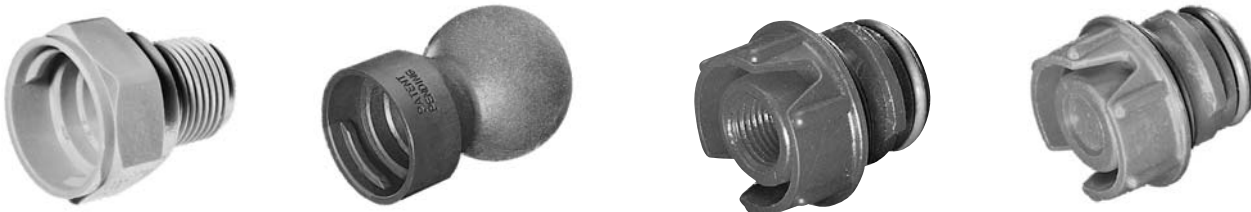
DIMENSIONS

NOZZLE BSPT PIPE SIZE	Length L (mm)	Dim. A (mm)	Dim LOA (mm)
ZF	31	25	43
ZS	31	25	43
ZSW	31	25	43
ZTA	31	25	43
ZPLUG	31	32	43

TYPICAL APPLICATIONS:

- Spray Washing & Rinsing
- Parts Cleaning
- Pretreatment

ZIP-TIP BODIES AND ADAPTERS



ZBD

1/8" - 1/2" BSPT Male Only
Glass reinforced polypropylene or PVDF

KZBD

To be used with K-Ball® Clip-On Nozzle Assemblies.
Glass reinforced polypropylene or PVDF.
(See page 61)

ZTA

1/8" - 3/8" BSPT Female Only
Glass reinforced polypropylene or PVDF

ZPLUG

To shut off individual nozzles
Glass reinforced polypropylene or PVDF

HOW TO ORDER BEX ZIP-TIPS

COMPLETE ASEMBLIES:

Indicate ZBD connection size (1/8", 1/4", 3/8" or 1/2") followed by model number (ZF, ZS, ZSW or ZSQ) found on pages 55-57. Then indicate material of construction (Glass reinforced polypropylene, Red PVDF or Natural PVDF).

REPLACEMENT TIPS ONLY

Indicate the tip model number (ZF, ZS, ZSW or ZSQ) found on pages 55-57. Then indicate material of construction (Glass reinforced polypropylene, Red PVDF or Natural PVDF).



Zip-Tip® with Tabz™

Finger Tabz for easier insertion and removal. Available on all models.

QUICK DISCONNECT

SPRAY CHARACTERISTICS:

ZF-Series spray nozzles produce a flat, fan-shaped spray pattern with spray angles available from 15° to 110° measured at 3 bar. Spray angles generally increase with pressure, as shown in the capacity table.

Spray density tapers off toward the outside of these sprays, to permit overlapping of spray patterns while maintaining uniform spray density.

CONSTRUCTION:

Molded plastic spray nozzles are available in glass reinforced polypropylene or PVDF (Kynar®).

COLOR CODING:

Zip-Tip flat "V" spray tips are color-coded for easy identification.



TYPICAL APPLICATIONS:

- Parts Cleaning
- Metal Washing
- Foam Control
- Asphalt Spraying
- Gravel Washing
- Vehicle Washing
- Fertilizer Spraying
- Dishwashers

Additional sizes may be available upon request. Please contact your BEX distributor.

See chart on page 54 for dimensions.

SPRAY ANGLE @ 3bar	ZF MODEL	TIP COLOR	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	7 bar	10 bar	20 bar	30 bar	1.5 bar	3 bar	5 bar	
110°	ZF11003	Lime Green	1.1	0.37	0.48	0.57	0.68	0.84	0.97	1.18	1.37	1.53	1.81	2.16	3.06	3.74	92°	110°	118°	
	ZF11004	Lime Green	1.2	0.50	0.64	0.76	0.91	1.12	1.29	1.58	1.82	2.04	2.41	2.88	4.08	4.99	90°	110°	112°	
	ZF11005	Lime Green	1.35	0.62	0.81	0.95	0.31	1.40	1.61	1.97	2.28	2.55	3.01	3.6	5.1	6.2	96°	110°	114°	
	ZF11006	Lime Green	1.47	0.75	0.97	1.14	0.37	1.67	1.93	2.37	2.73	3.06	3.6	4.3	6.1	7.5	97°	110°	115°	
	ZF11008	Lime Green	1.70	1.00	1.29	1.53	0.49	2.23	2.58	3.2	3.6	4.1	4.8	5.8	8.2	10.0	100°	110°	115°	
	ZF11010	White	1.91	1.25	1.61	1.91	0.61	2.79	3.2	3.9	4.6	5.1	6.0	7.2	10.2	12.5	102°	110°	115°	
	ZF11015	Grey	2.31	1.87	2.42	2.86	0.92	4.2	4.8	5.9	6.8	7.6	9.0	10.8	15.3	18.7	102°	110°	115°	
	ZF11020	Lt. Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	12.1	14.4	20.4	25.0	103°	110°	112°	
	ZF11030	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	18.1	21.6	30.6	37.4	103°	110°	112°	
	ZF11040	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	24.1	28.8	41	50	103°	110°	112°	
	ZF11050	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	30.1	36	51	62	107°	110°	116°	
	ZF11060	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	36	43	61	75	104°	110°	112°	
	ZF11070	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	42	50	71	87	107°	110°	112°	
	95°	ZF9503	Lime Green	1.1	0.37	0.48	0.57	0.68	0.84	0.97	1.18	1.37	1.53	1.81	2.16	3.06	3.74	86°	95°	101°
		ZF9504	Lime Green	1.2	0.50	0.64	0.76	0.91	1.12	1.29	1.58	1.82	2.04	2.41	2.88	4.08	4.99	86°	95°	101°
		ZF9505	Lime Green	1.35	0.62	0.81	0.95	0.31	1.40	1.61	1.97	2.28	2.55	3.01	3.6	5.1	6.2	86°	95°	101°
ZF9506		Lime Green	1.47	0.75	0.97	1.14	0.37	1.67	1.93	2.37	2.73	3.06	3.6	4.3	6.1	7.5	86°	95°	101°	
ZF9508		Lime Green	1.70	1.00	1.29	1.53	0.49	2.23	2.58	3.2	3.6	4.1	4.8	5.8	8.2	10.0	86°	95°	100°	
ZF9510		White	1.91	1.25	1.61	1.91	0.61	2.79	3.2	3.9	4.6	5.1	6.0	7.2	10.2	12.5	88°	95°	99°	
ZF9515		Grey	2.31	1.87	2.42	2.86	0.92	4.2	4.8	5.9	6.8	7.6	9.0	10.8	15.3	18.7	90°	95°	100°	
ZF9520		Lt. Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	12.1	14.4	20.4	25.0	89°	95°	99°	
ZF9530		Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	18.1	21.6	30.6	37.4	90°	95°	101°	
ZF9540		Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	24.1	28.8	41	50	90°	95°	100°	
ZF9550		Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	30.1	36	51	62	91°	95°	101°	
ZF9560		Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	36	43	61	75	92°	95°	102°	
ZF9570		Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	42	50	71	87	92°	95°	103°	
80°		ZF8002	Lime Green	0.91	0.25	0.32	0.38	0.46	0.56	0.64	0.79	0.91	1.0	1.2	1.4	2.0	2.45	74°	80°	83°
		ZF8003	Lime Green	1.1	0.37	0.48	0.57	0.68	0.84	0.97	1.18	1.37	1.53	1.81	2.16	3.06	3.74	74°	80°	83°
		ZF8004	Lime Green	1.2	0.50	0.64	0.76	0.91	1.12	1.29	1.58	1.82	2.04	2.41	2.88	4.08	4.99	74°	80°	83°
	ZF8005	Lime Green	1.35	0.62	0.81	0.95	0.31	1.40	1.61	1.97	2.28	2.55	3.01	3.6	5.1	6.2	74°	80°	83°	
	ZF8006	Lime Green	1.47	0.75	0.97	1.14	0.37	1.67	1.93	2.37	2.73	3.06	3.6	4.3	6.1	7.5	74°	80°	83°	
	ZF8008	Lime Green	1.70	1.00	1.29	1.53	0.49	2.23	2.58	3.2	3.6	4.1	4.8	5.8	8.2	10.0	75°	80°	83°	
	ZF8010	White	1.91	1.25	1.61	1.91	0.61	2.79	3.2	3.9	4.6	5.1	6.0	7.2	10.2	12.5	75°	80°	83°	
	ZF8015	Grey	2.31	1.87	2.42	2.86	0.92	4.2	4.8	5.9	6.8	7.6	9.0	10.8	15.3	18.7	74°	80°	86°	
	ZF8020	Lt. Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	12.1	14.4	20.4	25.0	74°	80°	85°	
	ZF8030	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	18.1	21.6	30.6	37.4	75°	80°	86°	
	ZF8040	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	24.1	28.8	41	50	76°	80°	85°	
	ZF8050	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	30.1	36	51	62	77°	80°	84°	
	ZF8060	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	36	43	61	75	77°	80°	84°	
	ZF8070	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	42	50	71	87	78°	80°	87°	
	65°	ZF6502	Lime Green	0.91	0.25	0.32	0.38	0.46	0.56	0.64	0.79	0.91	1.0	1.2	1.4	2.0	2.45	53°	65°	72°
		ZF6503	Lime Green	1.1	0.37	0.48	0.57	0.68	0.84	0.97	1.18	1.37	1.53	1.81	2.16	3.06	3.74	53°	65°	72°
ZF6504		Lime Green	1.2	0.50	0.64	0.76	0.91	1.12	1.29	1.58	1.82	2.04	2.41	2.88	4.08	4.99	54°	65°	72°	
ZF6505		Lime Green	1.35	0.62	0.81	0.95	0.31	1.40	1.61	1.97	2.28	2.55	3.01	3.6	5.1	6.2	54°	65°	72°	
ZF6506		Lime Green	1.47	0.75	0.97	1.14	0.37	1.67	1.93	2.37	2.73	3.06	3.6	4.3	6.1	7.5	54°	65°	72°	
ZF6508		Lime Green	1.70	1.00	1.29	1.53	0.49	2.23	2.58	3.2	3.6	4.1	4.8	5.8	8.2	10.0	55°	65°	71°	
ZF6510		White	1.91	1.25	1.61	1.91	0.61	2.79	3.2	3.9	4.6	5.1	6.0	7.2	10.2	12.5	57°	65°	73°	
ZF6512		Orange	2.08	1.50	1.93	2.29	2.73	3.3	3.9	4.7	5.5	6.1	7.2	8.6	12.2	15.0	59°	65°	71°	

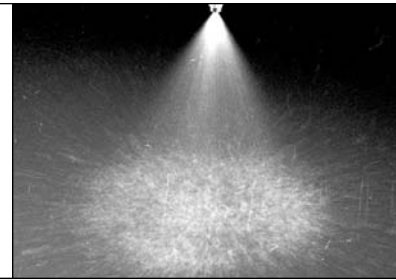
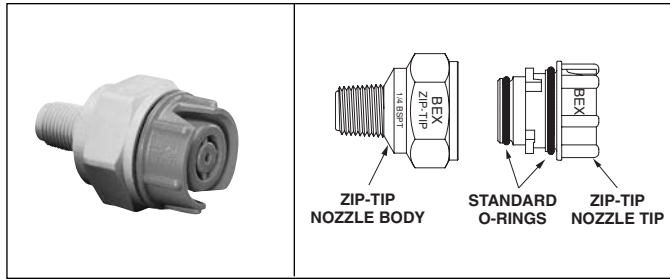
QUICK DISCONNECT

SPRAY ANGLE @ 3 bar	ZF MODEL	TIP COLOR	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	7 bar	10 bar	20 bar	30 bar	1.5 bar	3 bar	5 bar	
65°	ZF6515	Grey	2.31	1.87	2.42	2.86	3.4	4.2	4.8	5.9	6.8	7.6	9.0	10.8	15.3	18.7	59°	65°	72°	
	ZF6520	Lt. Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	12.1	14.4	20.4	25.0	61°	65°	72°	
	ZF6530	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	18.1	21.6	30.6	37	62°	65°	72°	
	ZF6540	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	24.1	28.8	41	50	63°	65°	72°	
	ZF6550	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	30.1	36	51	62	63°	65°	73°	
	ZF6560	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	36	43	61	75	63°	65°	73°	
	ZF6570	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	42	50	71	87	63°	65°	74°	
50°	ZF5002	Lime Green	0.91	0.25	0.32	0.38	0.46	0.56	0.64	0.79	0.91	1.0	1.2	1.4	2.0	2.45	53°	65°	72°	
	ZF5003	Lime Green	1.1	0.37	0.48	0.57	0.68	0.84	0.97	1.18	1.37	1.53	1.81	2.16	3.06	3.74	53°	65°	72°	
	ZF5004	Lime Green	1.2	0.50	0.64	0.76	0.91	1.12	1.29	1.58	1.82	2.04	2.41	2.88	4.08	4.99	54°	65°	72°	
	ZF5005	Lime Green	1.35	0.62	0.81	0.95	0.31	1.40	1.61	1.97	2.28	2.55	3.01	3.6	5.1	6.2	54°	65°	72°	
	ZF5006	Lime Green	1.47	0.75	0.97	1.14	0.37	1.67	1.93	2.37	2.73	3.06	3.6	4.3	6.1	7.5	54°	65°	72°	
	ZF5008	Lime Green	1.70	1.00	1.29	1.53	0.49	2.23	2.58	3.2	3.6	4.1	4.8	5.8	8.2	10.0	55°	65°	71°	
	ZF5010	White	1.91	1.25	1.61	1.91	0.61	2.79	3.2	3.9	4.6	5.1	6.0	7.2	10.2	12.5	57°	65°	73°	
	ZF5012	Orange	2.08	1.50	1.93	2.29	2.73	3.3	3.9	4.7	5.5	6.1	7.2	8.6	12.2	15.0	59°	65°	71°	
	ZF5015	Grey	2.31	1.87	2.42	2.86	0.92	4.2	4.8	5.9	6.8	7.6	9.0	10.8	15.3	18.7	59°	65°	72°	
	ZF5020	Lt. Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	12.1	14.4	20.4	25.0	61°	65°	72°	
	ZF5030	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	18.1	21.6	30.6	37.4	62°	65°	72°	
	ZF5040	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	24.1	28.8	41	50	63°	65°	72°	
	ZF5050	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	30.1	36	51	62	63°	65°	73°	
	ZF5060	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	36	43	61	75	63°	65°	73°	
	ZF5070	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	42	50	71	87	63°	65°	74°	
	40°	ZF4002	Lime Green	0.91	0.25	0.32	0.38	0.46	0.56	0.64	0.79	0.91	1.0	1.2	1.4	2.0	2.45	26°	40°	46°
		ZF4003	Lime Green	1.1	0.37	0.48	0.57	0.68	0.84	0.97	1.18	1.37	1.53	1.81	2.16	3.06	3.74	30°	40°	45°
ZF4004		Lime Green	1.2	0.50	0.64	0.76	0.91	1.12	1.29	1.58	1.82	2.04	2.41	2.88	4.08	4.99	32°	40°	45°	
ZF4005		Lime Green	1.35	0.62	0.81	0.95	0.31	1.40	1.61	1.97	2.28	2.55	3.01	3.6	5.1	6.2	35°	40°	44°	
ZF4006		Lime Green	1.47	0.75	0.97	1.14	0.37	1.67	1.93	2.37	2.73	3.06	3.6	4.3	6.1	7.5	37°	40°	44°	
ZF4008		Lime Green	1.70	1.00	1.29	1.53	0.49	2.23	2.58	3.2	3.6	4.1	4.8	5.8	8.2	10.0	35°	40°	43°	
ZF4010		White	1.91	1.25	1.61	1.91	0.61	2.79	3.2	3.9	4.6	5.1	6.0	7.2	10.2	12.5	30°	40°	43°	
ZF4015		Grey	2.31	1.87	2.42	2.86	0.92	4.2	4.8	5.9	6.8	7.6	9.0	10.8	15.3	18.7	35°	40°	41°	
ZF4020		Lt. Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	12.1	14.4	20.4	25.0	33°	40°	43°	
ZF4030		Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	18.1	21.6	30.6	37.4	34°	40°	45°	
ZF4040		Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	24.1	28.8	41	50	33°	40°	43°	
ZF4050		Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	30.1	36	51	62	35°	40°	46°	
ZF4060		Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	36	43	61	75	37°	40°	48°	
ZF4070		Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	42	50	71	87	36°	40°	47°	
25°		ZF2503	Lime Green	1.1	0.37	0.48	0.57	0.68	0.84	0.97	1.18	1.37	1.53	1.81	2.16	3.06	3.74	20°	25°	31°
		ZF2504	Lime Green	1.2	0.50	0.64	0.76	0.91	1.12	1.29	1.58	1.82	2.04	2.41	2.88	4.08	4.99	19°	25°	31°
		ZF2505	Lime Green	1.35	0.62	0.81	0.95	0.31	1.40	1.61	1.97	2.28	2.55	3.01	3.6	5.1	6.2	18°	25°	31°
	ZF2506	Lime Green	1.47	0.75	0.97	1.14	0.37	1.67	1.93	2.37	2.73	3.06	3.6	4.3	6.1	7.5	17°	25°	31°	
	ZF2508	Lime Green	1.70	1.00	1.29	1.53	0.49	2.23	2.58	3.2	3.6	4.1	4.8	5.8	8.2	10.0	16°	25°	32°	
	ZF2510	White	1.91	1.25	1.61	1.91	0.61	2.79	3.2	3.9	4.6	5.1	6.0	7.2	10.2	12.5	17°	25°	31°	
	ZF2515	Grey	2.31	1.87	2.42	2.86	0.92	4.2	4.8	5.9	6.8	7.6	9.0	10.8	15.3	18.7	18°	25°	30°	
	ZF2520	Lt. Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	12.1	14.4	20.4	25.0	18°	25°	28°	
	ZF2530	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	18.1	21.6	30.6	37.4	19°	25°	29°	
	ZF2540	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	24.1	28.8	41	50	22°	25°	32°	
	ZF2550	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	30.1	36	51	62	20°	25°	32°	
	ZF2560	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	36	43	61	75	18°	25°	28°	
	ZF2570	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	42	50	71	87	19°	25°	27°	
15°	ZF1505	Lime Green	1.35	0.62	0.81	0.95	0.31	1.40	1.61	1.97	2.28	2.55	3.01	3.6	5.1	6.2	10°	15°	20°	
	ZF1506	Lime Green	1.47	0.75	0.97	1.14	0.37	1.67	1.93	2.37	2.73	3.06	3.6	4.3	6.1	7.5	11°	15°	24°	
	ZF1508	Lime Green	1.70	1.00	1.29	1.53	0.49	2.23	2.58	3.2	3.6	4.1	4.8	5.8	8.2	10.0	11°	15°	21°	
	ZF1510	White	1.91	1.25	1.61	1.91	0.61	2.79	3.2	3.9	4.6	5.1	6.0	7.2	10.2	12.5	13°	15°	16°	
	ZF1515	Grey	2.31	1.87	2.42	2.86	0.92	4.2	4.8	5.9	6.8	7.6	9.0	10.8	15.3	18.7	11°	15°	20°	
	ZF1520	Lt. Blue	2.67	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	12.1	14.4	20.4	25.0	11°	15°	20°	
	ZF1530	Purple	3.28	3.7	4.8	5.7	6.8	8.4	9.7	11.8	13.7	15.3	18.1	21.6	30.6	37.4	11°	15°	18°	
	ZF1540	Green	3.78	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	24.1	28.8	41	50	12°	15°	18°	
	ZF1550	Yellow	4.24	6.2	8.1	9.5	11.4	14.0	16.1	19.7	22.8	25.5	30.1	36	51	62	12°	15°	19°	
	ZF1560	Blue	4.62	7.5	9.7	11.4	13.7	16.7	19.3	23.7	27.3	30.6	36	43	61	75	12°	15°	17°	
	ZF1570	Red	5.00	8.7	11.3	13.3	16.0	19.5	22.6	27.6	32	36	42	50	71	87	12°	15°	19°	

QUICK DISCONNECT

Full cone spray nozzles

ZS SERIES



FULL-CONE SPRAY



ZS

Spray Angles: Wide range
Capacities: Up to 8.4 L/min @ 0.7 bar
Materials: Glass-filled Poly or PVDF

Features: A full-cone spray with uniform spray distribution. Removable patented vane is standard.

MODEL NUMBER	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	5 bar	6 bar	8 bar	0.5 bar	1.5 bar	5 bar
ZS1	0.84	--	--	--	--	0.46	0.56	0.64	0.79	0.91	1.02	1.12	1.29	--	55°	52°
ZS1.5	1.17	--	--	--	0.57	0.68	0.84	0.97	1.18	1.37	1.53	1.67	1.93	--	65°	57°
ZS2	1.30	--	--	0.64	0.76	0.91	1.12	1.29	1.58	1.82	2.04	2.23	2.58	54°	59°	60°
ZS3	1.30	--	0.75	0.97	1.14	1.37	1.67	1.93	2.37	2.73	3.06	3.3	3.9	50°	53°	60°
ZS3.5	1.30	0.71	0.87	1.13	1.33	1.60	1.95	2.26	2.76	3.2	3.6	3.9	4.5	48°	58°	61°
ZS5	1.63	1.02	1.25	1.61	1.91	2.28	2.79	3.2	3.9	4.6	5.1	5.6	6.4	60°	75°	70°
ZS6	1.63	1.22	1.50	1.93	2.29	2.73	3.3	3.9	4.7	5.5	6.1	6.7	7.7	67°	75°	70°
ZS6.5	2.31	1.32	1.62	2.09	2.48	2.96	3.6	4.2	5.1	5.9	6.6	7.3	8.4	48°	56°	50°
ZS7.5	2.31	1.53	1.87	2.42	2.86	3.4	4.2	4.8	5.9	6.8	7.6	8.4	9.7	55°	65°	48°
ZS8.5	2.31	1.73	2.12	2.74	3.2	3.9	4.7	5.5	6.7	7.7	8.7	9.5	11.0	58°	65°	63°
ZS10	2.31	2.04	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	11.2	12.9	60°	65°	62°
ZS14	2.31	2.85	3.5	4.51	5.3	6.4	7.8	9.0	11.1	12.8	14.3	15.6	18.0	78°	85°	75°
ZS15	2.59	2.85	3.5	4.8	5.3	6.8	8.4	9.7	11.8	13.7	15.3	16.7	19.3	63°	65°	60°
ZS18	2.59	3.7	4.5	5.8	6.9	8.2	10.0	11.6	14.2	16.4	18.3	20.1	23.2	85°	88°	76°
ZS20	2.59	4.1	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	22.3	25.8	76°	82°	75°
ZS22	2.90	4.5	5.5	7.1	8.4	10.0	12.3	14.2	17.4	20.1	22.4	24.6	28.4	76°	78°	76°

See chart on page 54 for dimensions.

WIDE ANGLE FULL-CONE



ZSW

Spray Angles: Up to 125° @ 0.7 bar
Capacities: Up to 9.2 L/min @ 0.7 bar
Materials: Glass-filled Poly or PVDF

Features: A wide full-cone spray with uniform spray distribution. Removable patented vane is standard.

MODEL NUMBER	MAXIMUM FREE PASSAGE (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	6 bar	8 bar	0.5 bar	1.5 bar	5 bar
ZS2.8W	1.30	--	0.90	1.07	1.28	1.56	1.80	2.21	2.55	2.85	3.13	3.6	110°	105°	96°
ZS4.3W	1.30	--	1.39	1.64	1.96	2.40	2.77	3.4	3.9	4.4	4.8	5.5	117°	108°	100°
ZS5.6W	1.63	--	1.80	2.14	2.55	3.13	3.6	4.4	5.1	5.7	6.3	7.2	117°	110°	100°
ZS8W	2.06	2.00	2.58	3.05	3.6	4.5	5.2	6.3	7.3	8.2	8.9	10.3	118°	110°	103°
ZS10W	2.31	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	11.2	12.9	118°	108°	102°
ZS12W	2.31	3.00	3.9	4.6	5.5	6.7	7.7	9.5	10.9	12.2	13.4	15.5	120°	112°	102°
ZS14W	2.31	3.5	4.5	5.3	6.4	7.8	9.0	11.1	12.8	14.3	15.6	18.0	118°	114°	104°
ZS17W	2.59	4.2	5.5	6.5	7.7	9.5	11.0	13.4	15.5	17.3	19.0	21.9	118°	117°	102°
ZS20W	2.59	5.0	6.4	7.6	9.1	11.2	12.9	15.8	18.2	20.4	22.3	25.8	120°	120°	106°
ZS24W	2.59	6.0	7.7	9.2	10.9	13.4	15.5	18.9	21.9	24.5	26.8	30.9	122°	118°	106°

See chart on page 54 for dimensions.

FULL-SQUARE SPRAY



ZSQ

Spray Angles: Wide range
Capacities: Up to 6.8 L/min @ 0.7 bar
Materials: Glass-filled Poly or PVDF

Features: A full-square spray with uniform spray distribution. Removable patented vane is standard.

MODEL NUMBER	MAXIMUM FREE PASSAGE (mm)	CAPACITY (L/min) AT VARIOUS PRESSURES (bar)											Spray Angle @		
		0.7 bar	1 bar	0.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	5 bar	6 bar	8 bar	0.5 bar	1.5 bar	5 bar
ZS3.6SQ	1.45	--	1.16	1.37	1.64	2.01	2.32	2.84	3.3	3.7	4.0	4.6	42°	55°	50°
ZS4.8SQ	1.63	--	1.55	1.83	2.19	2.68	3.09	3.8	4.4	4.9	5.4	6.2	50°	65°	60°
ZS6SQ	2.06	--	1.93	2.29	2.73	3.3	3.9	4.7	5.5	6.1	6.7	7.7	30°	65°	60°
ZS10SQ	2.31	2.50	3.2	3.8	4.6	5.6	6.4	7.9	9.1	10.2	11.2	12.9	61°	67°	60°
ZS12SQ	2.31	3.00	3.9	4.6	5.5	6.7	7.7	9.5	10.9	12.2	13.4	15.5	71°	76°	69°
ZS14SQ	2.31	3.5	4.5	5.3	6.4	7.8	9.0	11.1	12.8	14.3	15.6	18.0	78°	85°	75°
ZS18SQ	2.59	4.5	5.8	6.9	8.2	10.0	11.6	14.2	16.4	18.3	20.1	23.2	85°	88°	76°

See chart on page 54 for dimensions.

See pages 2, 3 and 4 for engineering data and spray coverage.

QUICK DISCONNECT