SNP | THE SPRAY NOZZLE PEOPLE

EHP

Electric nozzle
Hygienic version

BETE® PERFORMANCE SPRAY ENGINEERING

PRECISION SPRAYING

KEY APPLICATIONS

- Application of antimicrobial agents for food safety
- Application of preservatives & mould inhibitors to help extend shelf life
- Application of egg wash
- Coat bottles to minimize scuff damage
- Apply water to balance moisture loss from the freezing process
- Apply coatings & release agents to pans, cookie sheets & conveyors to prevent sticking
- Apply viscous coatings like syrups, glazes & chocolate

KEY BENEFITS

- Control a wide range of flow rates
- Guarantee an even and uniform application rate
- Reduce consumption of expensive coatings
- Reduce overspray waste & improve product quality
- Exact target coatings secure a clean & safe environment
- Promote increased production
- Reduce maintenance & downtime
- Reliable spray dosing provides an accurate calorie count
- Apply flavorings, oil & butter to enhance the appearance & improve the taste of products

Electric Hydropulse® - Hygienic Design	
Liquid inlet connection	1/8", NPT or BSPP, or 1/2" tri-clamp
Maximum liquid flow rate	3.8 LPS
Maximum rated pressure	17 bar
Thermal insulation class	F (155°C/311°F)
Power	9.4W @24 VDC
Maximum cycle frequency	150 cycles/sec
Nozzle construction	Stainless steel wetted components, Food grade Viton® (FKM) seals compliant with CFR 21.1700.2600, hygienic design

Electric HydroPulse® (EHP) nozzles for hygienic applications ensure precision volumes of expensive ingredients and compounds are sprayed directly onto the processing target, with overspray waste virtually eliminated.

The EHP hygienic spray nozzles can be paired with the FlexFlow™ Precision Spray Control system which provides ultimate timing control, achieving uniform coverage even if conveyor speed is adjusted.

EHP

How they work

EHP spray nozzles do not require a compressed air source and are capable of cycling on/off up to 150 cycles per second. These features afford the option of using high-frequency cycling known as Pulse Width Modulation (PWM) to vary the liquid spray flow rate at constant supply pressure with little change in spray performance by adjusting the duty cycle. When the spray cycles at a high enough frequency, coverage uniformity is maintained because the duration between pulses of spray is short enough to ensure there are no gaps in the spray coverage. For ultimate control, use with the FlexFlow™ control system.

EHP BJ fan nozzle tips
Flow rate l/min*
Angles : 0°, 15°, 40°, 50°, 65°, 80°, 95°, 110°, Material : 303, 316 ss

	Litres per minute @ BAR						
Tip	0.3	0.5	1	2	5	10	15
**BJ0067	0.083	0.11	0.15	0.21	0.26	0.49	0.61
BJ01	0.12	0.16	0.22	0.31	0.38	0.72	0.87
BJ015	0.18	0.23	0.33	0.45	0.57	1.1	1.3
BJ02	0.23	0.3	0.42	0.61	0.76	1.4	1.7
BJ03	0.34	0.45	0.61	0.87	1.1	2	2.5
BJ04	0.42	0.57	0.79	1.1	1.4	2.5	3.1
BJ05	0.53	0.68	0.95	1.3	1.6	2.9	3.5
BJ06	0.61	0.76	1.1	1.5	1.8	3.2	3.8

** Only available in angles up to and including 65°.

EHP BJH fan nozzle tips
Flow rate l/min*
Angles: 5° - 120°, Material : Tungsten Carbide Insert with 303 ss housing

	Litres per minute @ BAR				
Tip	2	3	5	10	15
BJH-0.18			0.038	0.057	0.068
BJH-0.28			0.098	0.14	0.17
BJH-0.38			0.18	0.25	0.31
BJH-0.45	0.16	0.19	0.25	0.35	0.42
BJH-0.53	0.21	0.26	0.33	0.45	0.57
BJH-0.66	0.33	0.42	0.53	0.72	0.91
BJH-0.78	0.45	0.57	0.72	1	1.2
BJH-0.89	0.57	0.72	0.91	1.3	1.6
BJH-0.99	0.72	0.87	1.1	1.6	2
BJH-1.14	0.95	1.1	1.5	2	2.5
BJH-1.29	1.1	1.4	1.8	2.5	3
BJH-1.45	1.4	1.7	2.1	2.9	3.5
BJH-1.60	1.5	1.9	2.3	3.2	3.8

* Maximum flows shown above. Flow rates can be turned down to 5% of listed value using PWM (Pulse Width Modulation).
Contact us for more details.

EHP CW nozzle tips: full cone (F) and hollow cone (H)
Flow rate l/min*

Angles: 80° and 120°, Material : 303, 316 ss

	Litres per minute @ BAR							
Tip	0.3	0.5	1	2	3	5	10	15
CW-25F	0.31	0.38	0.53	0.76	0.91	1.2	1.7	
CW-50F	0.53	0.68	0.95	1.3	1.6	2	2.8	2
CW-75F	0.72	0.91	1.2	1.7	2	2.6	3.5	3.4
CW-100F	0.83	1	1.4	1.9	2.2	2.8	3.8	
CW-25H	0.31	0.38	0.53	0.76	0.91	1.2	1.7	2
CW-50H	0.53	0.68	0.95	1.3	1.6	2	2.8	3.4
CW-75H	0.72	0.91	1.2	1.7	2	2.6	3.5	
CW-100H	0.83	1	1.4	1.9	2.2	2.8	3.8	

* Maximum flows shown above. Flow rates can be turned down to 5% of listed value using PWM (Pulse Width Modulation).
Contact us for more details.