

# HYDROPULSE® - ELECTRIC - EHP - FOOD GRADE HYGIENIC DESIGN

<b>Liquid inlet connection</b>	1/8", NPT or BSPP; or 1/2" Tri-Clamp
<b>Maximum liquid flow rate</b>	3.8 LPM
<b>Maximum rated pressure</b>	17 bar
<b>Thermal insulation class</b>	F 155°C
<b>Power</b>	9.3W @ 24VDC
<b>Maximum cycle frequency</b>	150 cycles/sec
<b>Nozzle construction</b>	All stainless steel wetted components, Food grade Viton® (FKM) seals compliant with 21 CFR 177.2600, hygienic design
<b>Interchangeable BJ, BJH, and CW nozzle tip options.</b>	



# HYDROPULSE® - ELECTRIC - EHPI - INDUSTRIAL DESIGN

<b>Liquid inlet connection</b>	1/8", NPT or BSPP
<b>Maximum liquid flow rate</b>	3.8 LPM
<b>Maximum rated pressure</b>	20 bar
<b>Thermal insulation class</b>	F 155°C
<b>Power</b>	10.4W @ 24VDC
<b>Maximum cycle frequency</b>	50 cycles/sec
<b>Nozzle construction</b>	Stainless steel wetted components, Viton® (FKM) seals
<b>Interchangeable BJ, BJH, and CW nozzle tip options.</b>	



## BENEFITS

- Precision volume sprays directly on the target
- Reduced waste and minimal over spray maintains a clean, safe environment
- Uniform and repeatable coverage improves product consistency
- Each nozzle provides a wide range of flow rates

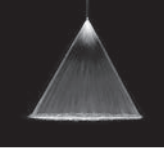

BETE's electric-actuated HydroPulse Spray Nozzles assure precision volumes are sprayed directly onto your processing target, with overspray waste virtually eliminated. Pair with the BETE® FlexFlow™ Precision Spray Control System to achieve uniform coverage, even if you adjust your conveyor speed.

Electric HydroPulse 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.

## Flow Rates of BJ (Fan) Tips on EHP and EHPI Bodies, L/min\*

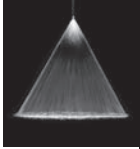

0°, 15°, 25°, 40°, 50°, 65°, 80°, 95°, 110° Spray Angles, Standard Materials 303 and 316 Stainless Steel

	Nozzle Inlet Pressure, bar								
	0.3	0.5	1	2	3	5	10	15	
**BJ0067	0.083	0.11	0.15	0.21	0.26	0.34	0.49	0.61	
BJ01	0.12	0.16	0.22	0.31	0.38	0.49	0.72	0.87	
BJ015	0.18	0.23	0.33	0.45	0.57	0.76	1.1	1.3	
BJ02	0.23	0.3	0.42	0.61	0.76	0.98	1.4	1.7	
BJ03	0.34	0.45	0.61	0.87	1.1	1.4	2	2.5	
BJ04	0.42	0.57	0.79	1.1	1.4	1.8	2.5	3.1	
BJ05	0.53	0.68	0.95	1.3	1.6	2	2.9	3.5	
BJ06	0.61	0.76	1.1	1.5	1.8	2.3	3.2	3.8	

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

## Flow Rates of BJH (Fan) Tips on EHP and EHPI Bodies, L/min\*

5° to 120° Spray Angles, Tungsten Carbide Insert with 303 Stainless Steel Housing


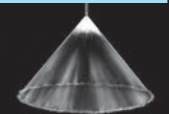
	Nozzle Inlet Pressure, bar					
	2	3	5	10	15	
BJH-0.18			0.038	0.057	0.068	
BJH-0.28			0.098	0.14	0.17	
BJH-0.38			0.18	0.25	0.31	
BJH-0.45	0.16	0.19	0.25	0.35	0.42	
BJH-0.53	0.21	0.26	0.33	0.45	0.57	
BJH-0.66	0.33	0.42	0.53	0.72	0.91	
BJH-0.78	0.45	0.57	0.72	1	1.2	
BJH-0.89	0.57	0.72	0.91	1.3	1.6	
BJH-0.99	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	

*Tungsten carbide orifice inserts for maximum wear resistance and service life.*

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

## Flow Rates of CW (Full or Hollow Cone) Tips on EHP and EHPI Bodies, L/min\*

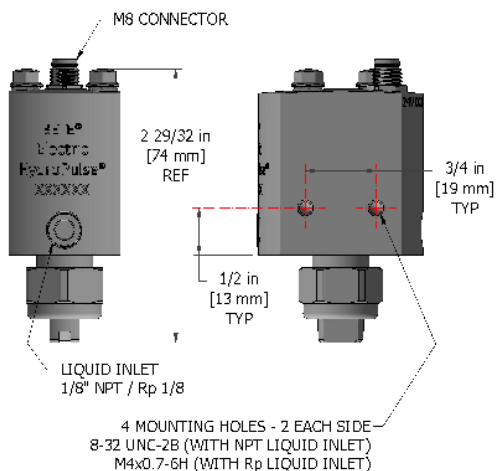
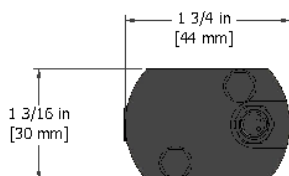
*80° and 120° Spray Angles, Standard Materials 303 and 316 Stainless Steel*

	Nozzle Inlet Pressure, bar							
	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	2
CW-50F	0.53	0.68	0.95	1.3	1.6	2	2.8	3.4
CW-75F	0.72	0.91	1.2	1.7	2	2.6	3.5	
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	



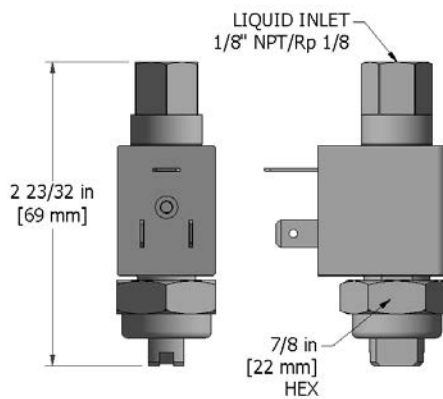
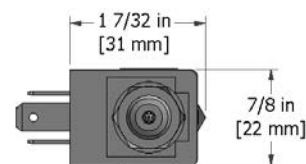
\* Maximum flows shown above. Flow rates can be turned down to 5% of listed value using PWM (Pulse Width Modulation). Contact BETE for details.

### EHP Nozzle



WEIGHT - 385 g

### EHPI Nozzle



WEIGHT - 115 g