

EXL Fogger Series 500

EXL Fogger

The EXL 500 Series low-flow foggers operate at a pressure range of 35 to 80 PSI (2.5 to 5.5 BAR), producing micro-sized droplets to cool or humidify conditions by reducing temperature and increasing humidity.

High heat can damage both fruit and foliage, and key physiological processes such as photosynthesis are compromised when temperatures reach 95°F to 104°F. With the increasing severity and duration of heat waves during the summer, the use of foggers to cool vines or fruit tree canopies can lower canopy and fruit temperatures, and improve fruit quality and vine performance.

Application

- Cooling and humidifying for vines and fruit trees

Features

- Supports optimal cooling or humidifying conditions by reducing temperature and increasing humidity
- Incorporates a vortex design that swirls water droplets into a fine mist; the higher the pressure, the smaller the droplets.
- Influences canopy and foliage by decreasing temperature by up to 20°F
- Produces a droplet size of 50 to 100 microns (100 m at 50 PSI)
- Available with five flow rates and color-coded interchangeable nozzles
- Manufactured from superior, durable plastics with UV protection for extended life operation



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Specifications

- Flow rate: .8 to 3 GPH (3 to 11.3 L/H)
- Operating pressure: 35 to 80 PSI (2.4 to 5.5 BAR)
- Nominal flow rate at 50 PSI (3.5 BAR)
- Pattern: 360°
- Recommended spacing: approximately 3' - 4'
- Trajectory angle: approximately 70°
- Average droplet size: 50-100 microns
- Inlet size: 1/4" (4 mm) barb, 10-32 thread or 1/2" base
- Body color: Black or beige
- Materials:
 - Body and cover: Polyester
 - O-ring: Buna-N
- Filter requirements: flow up to 1.5 GPH (6 l/h) requires a minimum of 200 mesh (80 microns); 2 GPH (8 l/h) and up requires 155 mesh (200 microns)



Flow rate & diameter				
Model	50-500-13	50-500-20	50-501-25	50-501-35
Nozzle color	Black	Green	Brown	Gray
Nozzle size (in)	0.013	0.020	0.025	0.035
Flow rate (GPH)	1.0	1.5	2.0	3.0
Diameter (ft)	2.5	3.5	3.5	4.0
Misting angle	70°	70°	70°	80°
GPH at 30 PSI	0.85	1.26	1.58	2.21
GPH at 35 PSI	0.91	1.36	1.68	2.40
GPH at 40 PSI	0.98	1.49	1.83	2.61
GPH at 45 PSI	1.04	1.52	1.91	2.78
GPH at 50 PSI	1.07	1.58	2.02	2.91
GPH at 55 PSI	1.14	1.64	2.09	3.02
GPH at 60 PSI	1.17	1.71	2.18	3.17
GPH at 65 PSI	1.20	1.74	2.26	3.26
GPH at 70 PSI	1.26	1.82	2.31	3.42

Flow rate & diameter				
Model	50-500-13	50-500-20	50-500-25	50-500-35
Nozzle color	Black	Green	Brown	Gray
Nozzle size (mm)	0.33	0.51	0.64	0.89
Flow rate (LPH)	3.8	5.7	7.6	11.4
Diameter (m)	0.8	1.1	1.1	1.2
Misting angle	70°	70°	70°	80°
LPH at 2.1 BAR	3.21	4.77	5.98	8.37
LPH at 2.4 BAR	3.44	5.15	6.36	9.08
LPH at 2.8 BAR	3.71	5.64	6.93	9.88
LPH at 3.1 BAR	3.94	5.75	7.23	10.52
LPH at 3.4 BAR	4.05	5.98	7.65	11.02
LPH at 3.8 BAR	4.32	6.21	7.91	11.43
LPH at 4.1 BAR	4.43	6.47	8.25	12.00
LPH at 4.5 BAR	4.54	6.59	8.55	12.34
LPH at 4.8 BAR	4.77	6.89	8.74	12.95

How to specify	
Model	Description
50-500-10	.8 GPH purple nozzle (black body)
50-500-13	1 GPH black nozzle (black body)
50-500-20	1.5 GPH green nozzle (black body)
50-500-25	2 GPH brown nozzle (black body)
50-500-35	3 GPH gray nozzle (black body)
07-044	.8 GPH purple nozzle (beige body)
07-045	1 GPH black nozzle (beige body)
07-046	1.5 GPH green nozzle (beige body)
07-052	2 GPH brown nozzle (beige body)

Extreme temperature effects on grapevines

Climate, and especially temperature, can either have a positive or negative impact on vines. While the amount of sunshine and rainfall will have an impact on grape composition (sugar, acidity, etc...), extreme temperatures can also cause irreversible damage to grapevines and may have an influence on other fruit types. Extreme heat can be very harmful to grapevines, especially if it lasts for several days and occurs during the ripening period. The climactic optimum for grapevines is between 77°F and 95°F (25°C and 35°C). Above 95°F, grape skin is exposed to burn marks, and over 140°F, to scorching, which is detrimental to grape ripening. Also, the synthesis of anthocyanins, sugar, and polyphenols is stopped. Flavonoid synthesis, which leads to the production of tannin is affected as well. During the ripening period, grapes undergo important chemical transformations and are very sensitive to extremely hot temperatures.

Packaging Information

Model	Description	Pack Qty	Box Qty	Box Size	Box Weight
50-500-XX	Barbed Fogger	1000	4000	21" x 10" x 11"	28 lbs.