



## FOGGING & HUMIDIFICATION

PAPER STORAGE • TEXTILE MILLS  
LIQUID STORAGE TANKS • AIR DUCTS  
PRODUCE STORAGE ROOMS  
GREENHOUSES • HATCHERIES  
CONCRETE PIPE CURING



# FOGGING & HUMIDIFICATION INTRODUCTION



## RELIABLE & COST-EFFECTIVE HUMIDIFICATION SOLUTIONS

For reliable, cost-effective humidification, we offer a wide selection of air atomizing nozzles for adding humidity to air, adding moisture to paint tanks to reduce sparking, moisturizing small spaces plus more. Complete humidification packages can be assembled to connect to existing air and fluid lines. We can provide everything you need except piping and wiring.

### PRODUCT RANGE

- **AirJet® Fogger Nozzles:** for high-quality fog in large open spaces, you'll find these nozzles offer operating flexibility, easy maintenance and dependable clog-free performance
- **MiniFogger® III:** in small and hard-to-reach spaces, the MiniFogger is ideal. Compact and lightweight, it fits in corners and installs easily on walls and ceilings to provide economical, efficient humidification
- **Air Atomizing Nozzles:** choose from siphon-fed or pressure-fed nozzles that provide efficient humidity and low-cost installation and operation
- **Wall-Mounted Humidification Units:** Self-contained unit includes multiple air atomizing nozzles and is ready to connect to existing air and liquid lines
- **Accessories:** a wide choice of accessories, including humidistats, switching relays, float boxes, float valves and pipe hangers are available



# FOGGING & HUMIDIFICATION TABLE OF CONTENTS



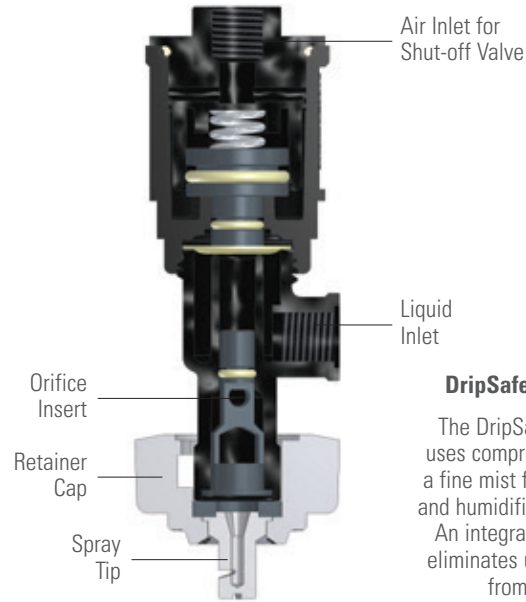
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NOTE: The products listed above are designed specifically for fogging and humidification applications. Other atomizing nozzles found elsewhere in this catalog can also be used for these applications. **Contact your local representative for additional applications assistance.**



**OVERVIEW: FOGGING & HUMIDIFICATION**

- Liquid and compressed air are mixed to produce a finely atomized spray for rapid evaporation and efficient humidification
- Drop size may be controlled by adjusting air and water pressure to create a wet or a dry fog, depending on application requirements
- Several configurations are available to produce flow rates up to 72 gph (272 lph)
- Nozzles are available that operate using normal municipal water pressure – without the use of high-pressure pumps
- A variety of nozzle bodies are available for convenient mounting and positioning



**DripSafe AirJet Fogger**

The DripSafe AirJet Fogger uses compressed air to create a fine mist for fogging, cooling and humidification applications. An integrated shut-off valve eliminates unwanted dripping from the nozzle.

**QUICK REFERENCE GUIDE**

Product Number	Connection Type	Max Flow
<b>45265 DripSafe™ AirJet® Fogger</b>	.290" (7.4 mm) hose shank for 1/4" air hose or tubing (atomizing air) 1/4" NPT or BSPT (shut-off valve air) 1/4" NPT or BSPT (liquid)	4.5 gph (17.0 lph)
<b>45269 DripSafe AirJet Fogger</b>	.290" (7.4 mm) hose shank for 1/4" air hose or tubing (atomizing air) 1/4" NPT or BSPT (shut-off valve air) Split-eyelet connection for 1/2", 3/4" or 1" liquid supply pipe	4.5 gph (17.0 lph)
<b>23412 AirJet Fogger</b>	.290" (7.4 mm) hose shank for 1/4" air hose or tubing (atomizing air) 1/4" NPT or BSPT (liquid)	7.9 gph (29.9 lph)
<b>QJ25655 AirJet Fogger</b>	.290" (7.4 mm) hose shank for 1/4" air hose or tubing (atomizing air) Split-eyelet connection for 1/2", 3/4" or 1" liquid supply pipe	7.9 gph (29.9 lph)
<b>YMF MiniFogger® III</b>	1/4" NPT or BSPT (air) 1/8" NPT or BSPT (liquid)	1.22 gpm (4.6 lpm)
<b>1/4JH</b>	1/4" NPT or BSPT (air and liquid)	72 gph (272 lph)
<b>1/4JT</b>	1/4" NPT or BSPT (air and liquid)	11.6 gph (43.9 lph)

**DRIPSAFE™ AIRJET® FOGGER NOZZLES**

- High quality, cost-efficient dry fog with average drop size of fifteen microns or less
- Drop size can be adjusted by changing the ratio of compressed air to water
- High-volume/high-efficiency air atomization is ideal for large/open structures and areas with high air exchange rates
- Drip safe air-actuated shut-off valve prevents liquid flow until air pressure at the nozzle is sufficient for fine atomization
- Flat spray tip has a large orifice that reduces clogging
- Spray set-up and built-in strainer are quickly removed by hand if cleaning is required
- Can use PVC pipe and low-pressure air tubing
- Operates using normal pressures found in municipal water systems, eliminates the need for expensive, high-pressure hydraulic pumps
- Spray tip is brass; valve and body are polymer
- Minimum air pressure range of 25 to 35 psi (1.7 to 2.5 bar)



**45265 AirJet Fogger** – Threaded 1/4" NPT or BSPT connection

**45269 AirJet Fogger** – Split-eyelet design provides fast installation of the nozzle onto the liquid supply pipe. No additional pipe fittings are required. Pipe cutting, threading and brazing are eliminated.

**PERFORMANCE DATA:  
45265 AND 45269 DRIPSAFE AIRJET FOGGER NOZZLES**

Water Pressure*	Fluid Orifice No. 16 (0.41 mm Dia.)								Fluid Orifice No. 20 (0.51 mm Dia.)								Fluid Orifice No. 26 (0.66 mm Dia.)							
	Air Pressure*								Air Pressure*								Air Pressure*							
	0.7	1.5	2	3	3.5	4	5	5.5	0.7	1.5	2	3	3.5	4	5	5.5	0.7	1.5	2	3	3.5	4	5	5.5
1.5	4.5	4.2	-	-	-	-	-	-	11.7	6.4	-	-	-	-	-	-	12.5	6.8	-	-	-	-	-	-
	<b>42</b>	<b>71</b>	-	-	-	-	-	-	<b>40</b>	<b>79</b>	-	-	-	-	-	-	<b>37</b>	<b>68</b>	-	-	-	-	-	-
2	6.4	5.7	4.5	-	-	-	-	-	13.6	7.9	6.4	-	-	-	-	-	16.3	12.9	7.9	-	-	-	-	-
	<b>40</b>	<b>68</b>	<b>96</b>	-	-	-	-	-	<b>37</b>	<b>71</b>	<b>102</b>	-	-	-	-	-	<b>31</b>	<b>59</b>	<b>91</b>	-	-	-	-	-
2.8	7.6	6.4	5.7	5.3	-	-	-	-	16.3	11.7	8.3	-	-	-	-	-	-	17.0	13.6	9.1	-	-	-	-
	<b>40</b>	<b>68</b>	<b>93</b>	<b>119</b>	-	-	-	-	<b>34</b>	<b>65</b>	<b>96</b>	-	-	-	-	-	-	<b>54</b>	<b>79</b>	<b>110</b>	-	-	-	-

\*At the stated pressure in bar.

In each line, figures in plain face indicate water atomized in gph at psi water pressure. Figures in boldface indicate atomizing air in scfm at psi air pressure.

1. Values in red show optimum evaporation under normal room conditions, when center line of spray is 5' (1.5 m) from the lower surface.
2. Values in blue can require up to 10' (3 m) for evaporation. Other values may be used where extended heat or higher air velocity exist or where slight surface wetting is permitted.
3. AirJet Fogger has a horizontal throwing distance of 15' (4.5 m) and will expand to approximately 8' (2.4 m) wide and 3' (.9 m) thick.

**PLACING YOUR ORDER**

**Call 1.630.665.5000 for applications assistance  
or to place an order.**

**AIRJET® FOGGER NOZZLES**

- High quality, cost-efficient dry fog with average drop size of fifteen microns or less
- Drop size can be adjusted by changing air and water pressures
- High-volume/high-efficiency air atomization is ideal for large/open structures and areas with high air exchange rates
- Built-in check valve, spray tip and internal strainer can be quickly serviced without tools
- Flat spray tip has a large orifice that reduces clogging
- Can use PVC pipe and low-pressure air tubing
- Operates using normal pressures found in municipal water systems, eliminates the need for expensive, high-pressure hydraulic pumps
- Spray tip is brass; valve and body are polymer
- Minimum water pressure of 30 psi (2 bar) required for check valve



**23412 AirJet Fogger** – Threaded 1/4" NPT or BSPT connection

**QJ25655 AirJet Fogger** – Split-eyelet design provides fast installation of the nozzle onto the liquid supply pipe. No additional pipe fittings are required. Pipe cutting, threading and brazing are eliminated.

**PERFORMANCE DATA:**

**23412 AND QJ25655 AIRJET FOGGER NOZZLES**

\*At the stated pressure in bar.

Water Pressure*	Fluid Orifice No. 16 (0.41 mm Dia.)								Fluid Orifice No. 20 (0.51 mm Dia.)								Fluid Orifice No. 26 (0.66 mm Dia.)							
	Air Pressure*								Air Pressure*								Air Pressure*							
	0.7	1.5	2	3	3.5	4	5	5.5	0.7	1.5	2	3	3.5	4	5	5.5	0.7	1.5	2	3	3.5	4	5	5.5
1.5'	4.5	4.2	–	–	–	–	–	–	11.7	6.4	–	–	–	–	–	–	12.5	6.8	–	–	–	–	–	–
	<b>42</b>	<b>71</b>	–	–	–	–	–	–	<b>40</b>	<b>79</b>	–	–	–	–	–	–	<b>37</b>	<b>68</b>	–	–	–	–	–	–
2	6.4	6.1	4.5	–	–	–	–	–	13.6	7.9	6.4	–	–	–	–	–	16.3	12.9	7.9	–	–	–	–	–
	<b>40</b>	<b>68</b>	<b>96</b>	–	–	–	–	–	<b>37</b>	<b>71</b>	<b>102</b>	–	–	–	–	–	<b>31</b>	<b>59</b>	<b>91</b>	–	–	–	–	–
3	7.6	6.1	5.7	5.3	–	–	–	–	16.3	11.7	8.3	–	–	–	–	–	–	17.0	13.6	9.1	–	–	–	–
	<b>40</b>	<b>68</b>	<b>93</b>	<b>119</b>	–	–	–	–	<b>34</b>	<b>65</b>	<b>96</b>	–	–	–	–	–	–	<b>54</b>	<b>79</b>	<b>110</b>	–	–	–	–
3.5	7.9	7.2	6.4	5.7	4.9	–	–	–	18.5	14.0	11.7	8.7	–	–	–	–	–	20	17.4	14.0	9.5	3.4	–	–
	<b>40</b>	<b>65</b>	<b>91</b>	<b>119</b>	<b>142</b>	–	–	–	<b>34</b>	<b>62</b>	<b>91</b>	<b>119</b>	–	–	–	–	–	<b>51</b>	<b>76</b>	<b>102</b>	<b>133</b>	<b>167</b>	–	–
4	8.7	7.9	7.2	6.4	5.3	4.9	3.0	–	–	16.3	14.0	11.7	8.3	–	–	–	–	23	20	17.8	14.4	10.6	4.9	–
	<b>37</b>	<b>65</b>	<b>91</b>	<b>116</b>	<b>142</b>	<b>164</b>	<b>193</b>	–	–	<b>59</b>	<b>85</b>	<b>110</b>	<b>142</b>	–	–	–	–	<b>48</b>	<b>71</b>	<b>96</b>	<b>125</b>	<b>153</b>	<b>190</b>	–
5	9.8	9.1	8.3	7.2	6.4	6.4	5.7	3.8	–	18.2	16.3	13.6	11.7	7.9	–	–	–	–	23	21	18.2	15.1	11.4	6.4
	<b>37</b>	<b>65</b>	<b>88</b>	<b>113</b>	<b>139</b>	<b>161</b>	<b>190</b>	<b>215</b>	–	<b>57</b>	<b>82</b>	<b>108</b>	<b>136</b>	<b>167</b>	–	–	–	–	<b>68</b>	<b>93</b>	<b>119</b>	<b>144</b>	<b>175</b>	<b>210</b>
5.5	10.2	9.8	9.1	8.3	7.6	7.2	6.4	6.1	–	20	18.5	15.9	14.0	11.7	8.3	–	–	–	26	23	21	18.2	15.5	11.7
	<b>37</b>	<b>62</b>	<b>88</b>	<b>113</b>	<b>139</b>	<b>161</b>	<b>187</b>	<b>212</b>	–	<b>54</b>	<b>76</b>	<b>102</b>	<b>130</b>	<b>159</b>	<b>190</b>	–	–	–	<b>65</b>	<b>91</b>	<b>116</b>	<b>142</b>	<b>167</b>	<b>198</b>
6	11.0	10.6	9.8	9.1	8.3	7.6	7.2	7.2	–	–	20	18.5	16.3	13.6	11.7	–	–	–	28	26	24	21	18.9	16.3
	<b>34</b>	<b>59</b>	<b>88</b>	<b>110</b>	<b>133</b>	<b>161</b>	<b>184</b>	<b>212</b>	–	–	<b>74</b>	<b>99</b>	<b>125</b>	<b>153</b>	<b>205</b>	–	–	–	<b>62</b>	<b>85</b>	<b>110</b>	<b>136</b>	<b>159</b>	<b>187</b>
7	11.7	11.4	10.6	9.8	9.1	8.7	8.3	8.3	–	–	22	20	18.2	16.3	14.0	11.7	–	–	30	28	26	24	22	18.9
	<b>34</b>	<b>59</b>	<b>85</b>	<b>110</b>	<b>133</b>	<b>159</b>	<b>184</b>	<b>212</b>	–	–	<b>71</b>	<b>93</b>	<b>122</b>	<b>150</b>	<b>167</b>	<b>205</b>	–	–	<b>59</b>	<b>82</b>	<b>108</b>	<b>130</b>	<b>156</b>	<b>181</b>

\*For applications with liquid pressures below 30 psi (2 bar), request end cap sub-assembly 21950-20-NYB.

In each line, figures in plain face indicate water atomized in gph (l/h) at psi (bar) water pressure. Figures in boldface indicate atomizing air in scfm (NI/min) at psi (bar) air pressure.

1. Values in red show optimum evaporation under normal room conditions, when center line of spray is 5' (1.5 m) from the lower surface.
2. Values in blue can require up to 10' (3 m) for evaporation. Other values may be used where extended heat or higher air velocity exist or where slight surface wetting is permitted.
3. AirJet Fogger has a horizontal throwing distance of 15' (4.5 m) and will expand to approximately 8' (2.4 m) wide and 3' (.9 m) thick.

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**YMF MINIFOGGER® III**

- High quality, cost-efficient dry fog with drop sizes seven to ten microns
- Compact design of 4.5" (115 mm) tall ideal for humidification applications with limited space
- Can be easily installed on a header, on a wall or on a ceiling
- Available with up to four stainless steel spray nozzle set-ups, each with automatic spray pattern alignment
- Choice of spray set-ups provide flow rates ranging from 0.24 to 1.22 gph (0.9 to 4.6 l/hr)
- 0.46 lbs. (210 g) for single spray set-up type; 0.55 lbs. (250 g) for multiple four set-up types
- Body, retainer cap and tank constructed of corrosion-resistant polypropylene with stainless steel air and water inlet connections
- Materials compatible with deionized water
- Easy to maintain – no tools required



**PERFORMANCE DATA:**  
**YMF MINIFOGGER III**

\*At the stated pressure in bar.

Spray Set-up No.	Air Capacity* (liters per minute)			Flow Rate Capacity* (liters per hour)			Sauter Mean Dia. (µm)		
	2.5 bar	3 bar	4 bar	2.5 bar	3 bar	4 bar	2.5 bar	3 bar	4 bar
SU1.0N	30	35	45	.9	1.0	1.1	8.5	7.6	6.7
SU2.5N				2.3	2.5	2.6	9.6	8.5	7.6
SU3.0N				2.8	3.0	3.2	9.8	9.0	8.4
SU4.3N				4.0	4.3	4.6	12.2	11.6	10.8

The standard MiniFogger III has four spray set-ups. Single spray set-ups are available. Contact your local representative for more information.

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