



AmFog
NOZZLE
TECHNOLOGIES
INC

**Nozzles and components for
misting, fogging and
humidifying applications**

AMFOG NOZZLES

AmFog nozzles are designed to accomplish an extremely high emission velocity with a low flow rate. This ability allows for the atomization of liquids into aerosol particles of micron size that are dispersed evenly into the environment throughout the working pressure range. The nozzles' ability for better atomization, effectively evaporates their output even in climates with fairly high relative humidity.

All of AmFog nozzles' orifices and inner components are made of stainless steel 303. Bodies are made of various materials and various types (See charts).

These nozzles are ideal for a multitude of uses (Please see the application chart for some examples of use).

All AmFog nozzles are competitively priced to be highly cost effective.

ADVANTAGES

Dynamic nozzles.

The nozzle possesses a rotatable stainless steel internal shaft for superior atomization (Most other types of nozzles are static). The internal shaft acts as a secondary filter and anti drip check valve. With nozzle installed facing above the horizontal, on shutdown, the movable shaft drops and seats itself into the body to act as a check valve.

Stainless steel orifice for durability, rigidity, corrosion resistance and reliability.

Stainless steel results in a longer lasting misting pattern and nozzle life, outlasting brass and plastic orifices many times over (e.g. polyacetal 4.5 times*). Stainless steel orifices do not distort under high pressure as do certain plastic types.

Stainless steel core allows for a robust nozzle

More capable of withstanding shock and rough handling (e.g. dropping) than nozzles constructed from softer engineered materials or impingement type nozzles.

AmFog's MODULAR approach with accessories, gives designers and users the ability to achieve design and performance goals through greater flexibility.

* SOURCE: ENGINEERED MATERIALS HANDBOOK™ VOL. 2. ENGINEERING PLASTICS ASM INTERNATIONAL

NOZZLE CHARACTERISTICS:
SPRAY PATTERN:
 CONE SHAPE

SPRAY ANGLE:
 DEPENDING ON PRESSURE:
 0.20mm 55-70 deg.
 0.30mm 65-75 deg.
 0.40mm 80 deg.
 0.50mm 80 deg.

SPRAY CHARACTERISTICS:
 PRODUCES A HIGH PERCENTAGE
 OF LESS THAN 50 MICRON SIZE
 DROPLETS AT HIGHER PRESSURE
 RANGES

MIN. PRESSURE REQUIRED
 0.20mm: 18 Kg /cm / 250 PSI+
 0.30mm: 3 Kg/cm / 45 PSI+
 0.40mm: 3 Kg/cm / 45 PSI+
 0.50mm: 3 Kg/cm / 45 PSI+

To calculate higher or lower flow rates from the table below. The following formula may be used.

$$\frac{GPM_1}{GPM_2} = \sqrt{\frac{PSI_1}{PSI_2}}$$

PSI=KNOWN PRESSURE
 GPM=KNOWN FLOW RATE
EXAMPLE:

To calculate the flow rate for a 0.3mm Orifice at 300 PSI.

A) Divide 250PSI by 300PSI = 0.833

B) $\sqrt{0.833} = 0.913$

C) Divide 1.42 GPH by 0.913= 1.55 GPH

TYPICAL USES

		COOLING	HUMIDIFYING WASHING	DISEASE & PEST CONTROL	DUST, AIR & GAS CONTROL	FROST DAMAGE CONTROL	CHEMICAL FERTILIZER
ANIMAL	AVIARIES	☑	☑	☑	☑		
	BARNs	☑		☑	☑		
	DIARY	☑		☑	☑		
	HOGS	☑	☑	☑	☑		
	HORSES	☑		☑	☑		
	KENNELS	☑		☑	☑		
	LIVESTOCK	☑		☑	☑		
POULTRY	☑		☑	☑	☑		
ZOOS	☑	☑	☑	☑	☑		
AGRICULTURE	FLOWERS	☑	☑	☑		☑	☑
	FOLIAR FEEDING	☑	☑	☑			☑
	GREENHOUSES	☑	☑	☑			☑
	HYDROPONICS	☑	☑	☑			☑
	ORCHARDS	☑	☑	☑		☑	☑
	PLANTS	☑	☑	☑		☑	☑
	PROPAGATION	☑	☑	☑		☑	☑
STORAGE	☑	☑	☑	☑		☑	
TISSUE CULTURE							☑
VINEYARDS		☑	☑		☑		☑
RECREATION	AMUSEMENT PARKS	☑					
	GOLF	☑					
	HOTELS	☑					
	LIVING AREAS	☑					
	RESTAURANTS	☑					
	SPECTATOR AREAS	☑					
TENNIS COURTS	☑						
INDUSTRIAL	AIR & GASES		☑				☑
	CIRCUIT BOARDS		☑				☑
	COILS	☑					☑
	COOLING TOWERS	☑	☑				☑
	CONCRETE CURING	☑	☑				☑
	CONSTRUCTION	☑					☑
	GINNING		☑	☑			☑
	MINING	☑	☑				☑
	ODOR CONTROL		☑				☑
	OUTDOOR WORK	☑					☑
	PAPER MAKING		☑				☑
	PLASTIC EXTRUSION	☑					☑
	POLLUTION CONTROL		☑				☑
	RADIATORS	☑					☑
	ROOFS	☑					☑
	SPINNING	☑	☑				☑
	STORAGE	☑	☑				☑
TEXTILES	☑	☑				☑	

FLOW RATE S*

ORIFICE O-RING COLOR	ORIFICE DIA. **	Kg/cm PSI	4	7	10	14	25	35	45	56	70	105
			60	100	150	200	350	500	650	800	1000	1500
YELL	0.15mm	LPM			0.023	0.026	0.033	0.036	0.043	0.046	0.050	0.076
	LPH				1.40	1.16	2.00	2.60	2.60	3.03	4.60	
RED	0.2mm	LPM			0.028	0.033	0.046	0.048	0.056	0.066	0.070	0.081
	LPH				1.70	2.00	2.80	2.90	3.40	4.00	4.20	4.90
BLACK	0.008"	GPM			0.007	0.008	0.012	0.013	0.015	0.017	0.018	0.021
	GPH				0.45	0.52	0.75	0.77	0.90	1.05	1.10	1.30
BROWN	0.3mm	LPM	0.028	0.036	0.045	0.048	0.063	0.068	0.078	0.088	0.093	0.116
	LPH		1.70	2.20	2.70	2.90	3.79	4.10	4.70	5.30	5.60	7.00
GREEN	0.012"	GPM	0.007	0.009	0.012	0.013	0.016	0.018	0.020	0.023	0.026	0.030
	GPH		0.46	0.59	0.72	0.77	1.00	1.08	1.25	1.40	1.60	1.65
GREEN	0.4mm	LPM	0.045	0.051	0.070	0.085	0.108	0.116	0.126	0.140	0.150	0.165
	LPH		2.70	3.10	4.20	5.10	6.50	7.00	7.58	8.40	8.90	9.90
GREEN	0.016"	GPM	0.011	0.013	0.018	0.022	0.028	0.030	0.033	0.036	0.040	0.043
	GPH		0.71	0.82	1.10	1.35	1.70	1.85	2.00	2.20	2.40	2.60
GREEN	0.5mm	LPM	0.056	0.07	0.083	0.088	0.113	0.133	0.150	0.158	0.165	0.166
	LPH		3.40	4.20	5.00	5.30	6.80	8.00	9.00	9.50	9.90	10.00
GREEN	0.020"	GPM	0.015	0.018	0.021	0.023	0.030	0.035	0.040	0.042	0.043	0.045
	GPH		0.90	1.10	1.30	1.40	1.80	2.10	2.40	2.50	2.60	2.70

* FLOW RATES TESTED WITH WATER UNDER CONTROLLED LABORATORY CONDITIONS. FLOW RATES CAN VARY DUE TO ENVIRONMENT, FLUID VISCOSITY AND FLUID DENSITY.

** OTHER SIZES AVAILABLE ON REQUEST



Micro Physical Size Nozzles with Direct Pipe Insertion & Anti Drip Capability



DESIGN FEATURES

Fine Atomization Micro Physical Size

Micro physical size allows for placement of nozzles into small confined areas normally not possible with other types of nozzles.

Unobtrusive Neat Appearance

Stainless Steel Core

Long Lasting & Robust

Low Cost

Hand Tightening

No wrench required for tightening or removal.

Hand tightening for ease of installation and quick maintenance saves time.

Self Sealing

O-rings for leak proof seal.

No tape or sealant required.

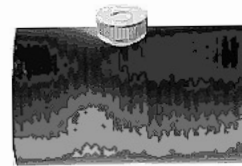
High Pressure Anti Drip Capability

Specifically designed to fit and work with ADP2/3/4/5 Series and SP Series for optimum performance.

(See ADP Series and SP Series charts).

Ideal for Direct Pipe Insertion

Can be installed directly into rigid piping or tubing of almost any size providing there is adequate wall thickness.



**No Extra Fittings Equals
Lowers Installation Costs**

MATERIAL	APPROX. ORIFICE DIA	NOZZLE NUMBER	WT .PER / 100 gms / lbs	THREAD SIZE	APPROX. DIM. Ht. Dia.	
BRASS BODY	.2mm/.008"	00002	272 / 0.61	10/24 UNC/2A	0.43" x 0.38" 1100mm x 965mm	
	.3mm/.012"	00003				
	.4mm/.015"	00004				
	.5mm/.020"	00005				
	STAINLESS STEEL BODY	.2mm/.008"	00032	290 / 0.64		12/24 UNC/2A
		.3mm/.012"	00033			
		.4mm/.015"	00034			
		.5mm/.020"	00035			
ALUMINUM BODY		.2mm/.008"	00102	260 / 0.57	10/24 UNC/2A	
		.3mm/.012"	00103			
		.4mm/.015"	00104			
		.5mm/.020"	00105			
	ALUMINUM BODY	.2mm/.008"	00132	272 / 0.60	12/24 UNC/2A	
		.3mm/.012"	00133			
		.4mm/.015"	00134			
		.5mm/.020"	00135			
2mm/.008"		00202	114 / 0.25			10/24 UNC/2A
.3mm/.012"	00203					
.4mm/.015"	00204					
.5mm/.020"	00205					

AF SERIES

Nozzles 1/8" NPT



DESIGN FEATURES

Fine Atomization
Stainless steel core
Long Lasting

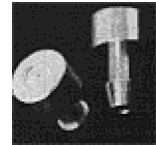
Robust
Low Cost
Filter Cartridge Insertion Capability

Filters of different micron sizes available for fine filtration. (See FIL Series chart).

MATERIAL	APPROX. ORIFICE DIA	NOZZLE NUMBER	WT .PER / 100 gms / lbs	THREAD SIZE	APPROX. DIM. Ht. Dia.
BRASS	.2mm/.008"	00012	830 / 1.82	1/8" NPT	0.59" x 0.44" / 0.5" 1500mm x 1110mm / 1270mm
	.3mm/.012"	00013			
	.4mm/.015"	00014			
	.5mm/.020"	00015			

BARB SERIES

Nozzles



DESIGN FEATURES

Fine Atomization
Stainless Steel Core
Long Lasting
Barb

Robust
Low Cost
Tube Insertion Capability

For use with 1/8" ID Hose.

Barb designed for better sealing.

Can be inserted into 1/8" Tubing or can be inserted into punctured irrigation tubing for various horticulture and agriculture misting requirements.

MATERIAL	APPROX. ORIFICE DIA	NOZZLE NUMBER	WT .PER / 100 gms / lbs	APPROX. DIM. Ht. Dia.
BRASS	.3mm/.012"	00023	250 / 0.55	0.51" x 0.32" 1300mm x 800mm
	.4mm/.015"	00024		
	.5mm/.020"	00025		

ADP2 SERIES

Anti Drip Body or Adapter 1/8" NPT to 10/24 UNC/2B



DESIGN FEATURES

Anti Drip Body

Designed to work with MT Series nozzles, SP Series Springs and CV Series Ball Stems for optimum performance. Available in various pressure shutoff capabilities. (See SP Series chart).

Adapter

Ideal for converting 1/8" NPT System to MT series nozzles in order to take advantage of capabilities, cost and less filter cartridge replacement

Filter Cartridge insertion capability

Filters of different micron sizes available for fine filtration. (See Fil Series Chart.)

MATERIAL	PART NUMBER	WT .PER / 100 gms / lbs	THREAD SIZE	APPROX. DIM. Ht. Dia.
BRASS	01010	980 / 2.17	1/8" NPT 10/24 UNC/2B	0.693" x 0.437" 1500mm x 1110mm

ADP3 SERIES

Anti Drip Body / Extension 10/24 UNC/2B 12/24 UNC/2B



DESIGN FEATURES

Anti Drip Body

Designed to work with MT Series nozzles, SP Series Springs and CV Series Ball Stems for optimum performance. Available in various pressure shutoff capabilities. (See SP Series Chart).

Extension

For longer nozzle reach.

MATERIAL	PART NUMBER	WT .PER/100 gms / lbs	THREAD SIZE	APPROX. DIM. Ht. Dia.
BRASS	01000	510 / 1.12	10/24 unc/2A-2B	.675" x .350" 170mm x 90mm
	01033	610 / 1.35	12/24/unc/2A-2B	
STAINLESS STEEL	01100	420 / 0.92	10/24 unc/2A-2B	170mm x 90mm
	01133	510 / 1.12	12/24 unc/2A-2B	

ADP4 SERIES

Anti Drip Body / Adapter 12/24unc/2A To 10/24unc/2B 14/28unc/2A TO 12/24unc/2B



DESIGN FEATURES

Anti Drip Body

Designed to work with MT Series nozzles, SP Series Springs and CV Series Valve Balls for optimum performance. Available in various pressure shutoff capabilities. (See SP Series chart)

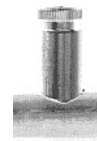
Adapter

For converting from MT Series 12/24 UNC/2A nozzles to 10/24 UNC/2A nozzles

MATERIAL	PART NUMBER	WT .PER / 100 gms / lbs	THREAD SIZE	APPROX. DIM. Ht. Dia.
BRASS	01030	640 / 1.40	12/24/2A-10/24/2B	.680" X .380"
	01043	650 / 1.44	1/4/28/2A-12/24/2B	173mm x 96mm

ADP5 SERIES

Anti Drip Risers / Extensions For direct welding or sweating to 3/8"-1/2" OD pipe



DESIGN FEATURES

Anti Drip Riser

Ideal for incorporating Anti Drip device into delivery pipe.

Designed to work with MT Series nozzles, SP Series Springs and CV Series Ball Stems for optimum performance. Available in various pressure shutoff capabilities. (See SP Series chart)

Slim unobtrusive appearance

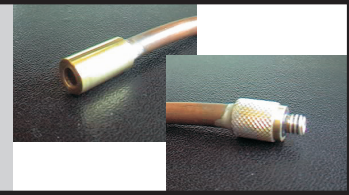
Extension

For longer nozzle reach

MATERIAL	PART NUMBER	WT .PER / 100 gms / lbs	TO FIT PIPE	THREAD SIZE	APPROX. DIM. Ht. Dia.	
BRASS	01060	680 / 1.50	1/2" OD	10/24 UNC/2B	Bottom of curve .585" x .375 148mm x 95mm	
	01063	635 / 1.40		12/24/UNC/2B		
	01064	570 / 1.25		1/4/28 UNC/2B		
316 STAINLESS STEEL	01160	640 / 1.40	1/2" OD	10/24 UNC/2B	Top pf curve .252" x .375"	
	01163	595 / 1.30		12/24 UNC/2B		
	01170	01173	595 / 1.30	3/8" OD	10/24 UNC/2B	133mm x 95mm
					12/24 UNC/2B	

ADP6 SERIES

M / F Sleeve / Connectors
For placement at either end
of 1/4" OD copper pipe



DESIGN FEATURES

Anti Drip Body

Designed to work with MT Series nozzles, SP Series Springs and CV Series Ball Stems for optimum performance. Available in various pressure shutoff capabilities. (See SP Series Chart).

Extension

For longer nozzle reach and special effects. Male and female sleeve / connector ready for soldering / brazing / sweating onto the ends of 1/4" copper piping (precut by user).

MATERIAL	PART NUMBER	WT .PER/100 gms / lbs	THREAD SIZE	APPROX. DIM. Ht. Dia.
BRASS	01008	585 / 1.29	10/24 unc/2A	.675" x .375"
	01038	585 / 1.29	12/24/unc/2A	170mm x 95mm
	01080	785 / 1.73	10/24 unc/2B	.705" x .375"
	01083	750 / 1.65	12/24 unc/2B	180mm x 95mm

FIL SERIES

Filter cartridges
for fine filtration



DESIGN FEATURES

Filter Cartridge

Finer filtration than mesh strainers. Available in various filtration sizes.

Specifically designed to fit AF Series Nozzles and ADP2 Series Anti Drip / Adapter

MATERIAL	PART NUMBER	WT .PER / 1000 gms / lbs	APPROX FILTERATION	APPROX. DIM. Ht. Dia.
POLY- ETHYLENE	04220	124 / 0.275	20 micron	0.35" x 0.26"
	04285		85 micron	890mm x 660mm



DESIGN FEATURES

Ball Stems

Designed to match and seal precisely with all Series of Anti Drip Bodies.

Made from a compound specifically formulated for this type of application.

Remains pliable with superior sealing qualities over a longer use cycle

Check Valve Balls

Replacement Precision Balls for DV2 and DV3 Series Auto Release Drain Valves

MATERIAL	PART NUMBER	WT .PER / 1000 gms / lbs	FITS
NBR	04402	30 / 0.065	AUTO RELEASE DRAIN VALVE
	04403		
	04404	32 / 0.07	ANTI DRIP



DESIGN FEATURES

O-Rings

Specifically designed to fit and seal precisely with:

MT Series Nozzles

ADP3 & ADP4 Series Anti Drip Bodies

DV2 & DV3 Series Auto Release Drain Valves

MATERIAL	PART NUMBER	WT .PER / 1000 gms / lbs	COLOR
NBR	04410	15 / 0.014	BLACK
	04412		BROWN
VR	04414	15 / 0.014	GREEN
	04415		RED

P1 SERIES

Plugs



DESIGN FEATURES

Plug

Used for fine tuning Mist and Fog Systems.

Example

Where variable conditions exist (e.g. Seasonal humidity) differing amounts of mist/fog may be required over time. In order to achieve these optimum conditions, Plugs can be interspersed into a system as required.

MATERIAL	PART NUMBER	WT .PER / 100 gms / lbs	THREAD SIZE	APPROX. DIM. Ht. Dia.
BRASS	00000	295 / 0.65	10/24 UNC/2A	0.43" x 0.380"
	00030	313 / 0.70	12/24 UNC/2A	1.090mm x 965mm

SD SERIES

Stepped Drill



DESIGN FEATURES

Stepped, Drill

Designed for single operation drilling of 10/24 UNC thread, hole and flat surface for the positive seating of O-rings on 10/24UNC/2A threaded products

MATERIAL	PART NUMBER	WT .PER / 1 gms / lbs	THREAD SIZE	APPROX. DIM. Ht. Dia.
HSS	09100	370 / 0.074	10/24 UNC/2A	3.25" x 0.375" 8.25cms x 950mm

SP SERIES

Anti Drip & Auto Release Drain Valve Springs



DESIGN FEATURES

Anti Drip Springs

Available in various pressure shutoff rates for optimum performance.. Specifically designed to fit the all Anti Drip Bodies, MT Series nozzles and CV Series Ball Stems for easy removal and installation.

Auto Release Drain Valve Springs

Replacement springs for DV2 and DV3 Series Auto Release Drain Valves

MATERIAL	PART NUMBER	WT .PER / 1000 gms / lbs	APPROX. PRESSURE AT		FITS
			CLOSE	RELEASE	
BRASS	04010			1 Kg/cm ² / 14 PSI	AUTO RELEASE
STAINLESS STEEL	04175	67 / 0.148		5 Kg/cm ² / 70 PSI	AUTO RELEASE
	04170	67 / 0.148	5 Kg/cm ² / 70 PSI	10 Kg/cm ² / 145 PSI	ANTI DRIP
	04135	17 / 0.039	3 Kg/cm ² / 35 PSI	5 Kg/cm ² / 75 PSI	ANTI DRIP

DV2 SERIES

Auto Release Drain Valve 1/8" NPT



DESIGN FEATURES

Automatically opens at given pressure to allow for the drainage of liquid from systems.

Used for the following:

The prevention of supply line freezing.

The release of pressure in supply line and thus the slowing of mineral build on nozzle heads.

MATERIAL	PART NUMBER	WT .PER / 100 gms / lbs	APPROX. PRESSURE ON RELEASE	THREAD SIZE	APPROX. DIM.	
					Ht.	Dia.
BRASS	02010		1 Kg/cm ² / 14 PSI		.99" x .437"/.5"	
	02015	1.250 / 2.75	5 Kg/cm ² / 70 PSI	1/8" NPT	2.515mm x 1.111mm/1.270mm	

DV3 SERIES

Micro Physical Size Auto Release Drain Valve



DESIGN FEATURES

Micro Physical Size

Micro physical size allows for placement of valve into small confined areas normally not possible with other types of valves.

Unobtrusive neat appearance

Automatically opens at given pressure to allow for the drainage of liquid from systems.

Used for the following:

The prevention of supply line freezing.
The release of pressure in supply line and thus the slowing of mineral build on nozzle heads.

MATERIAL	PART NUMBER	WT .PER / 100 gms / lbs	APPROX. PRESSURE ON RELEASE	THREAD SIZE	APPROX. DIM. Ht. Dia.
BRASS	02000	800 / 1.75	1 Kg/cm ² / 14 PSI	10/24 unc/2A	.875" X .380" 222mm x 965mm
	02005		5 Kg/cm ² / 70 PSI	10/24/unc/2A	
	02030	900 / 2.0	1 Kg/cm ² / 14 PSI	12/24 unc/2A	
	02035		5 Kg/cm ² / 70 PSI	12/24/unc/2A	
STAINLESS STEEL	02100	660 / 1.45	1 Kg/cm ² / 14 PSI	10/24 unc/2A	
	02105		5 Kg/cm ² / 70 PSI	10/24/unc/2A	
	02130	755 / 1.66	1 Kg/cm ² / 14 PSI	12/24 unc/2A	
	02135		5 Kg/cm ² / 70 PSI	12/24/unc/2A	

T3 SERIES

Brass Barb Tee Fitting



DESIGN FEATURES

Barb

For use with 1/4" ID Hose and MT Series Nozzles.

Low Profile

Unobtrusive appearance

MATERIAL	PART NUMBER	WT .PER / 10 gms / lbs	THREAD SIZE	APPROX. DIM. Ht. Dia.
BRASS	03002	205 / 0.45	10/24 UNC/2B	2.125" X 0.50" 5.63cms X 1.27cms



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