

Data sheet

ANTI-DRIP SPRAY NOZZLES Type HX-AD

General data sheet

For specific information on this product, please contact Danfoss A/S.

Application



Many nozzles are satisfactory for spraying liquids, but for a positive cut-off ask for the Danfoss Type HX-AD nozzle.

Our exclusive design produces a precisely controlled flow rate and spray angle and includes a liquid cutoff near the orifice. This can be very important in situations where excessive after drip can damage or destroy things located beneath the nozzle.

Chemicals, technical water, and even tap water, if allowed to drip, can foul the environment, or injure industrial materials.

With the HX-AD anti-drip nozzles, operators can achieve fluid cut-off near the orifice while maintaining pressure within the nozzle supply system. The HX-AD nozzle emits a finely atomized spray mist suitable for nearly all humidifying, light wetting, and evaporative cooling application.

The finer and more uniform the water mist, the greater the potential for adhesion between water and the surrounding particles. With our technology we can achieve humidification and cooling without wetting.

Application and features

- Adiabatic cooling
- Humidification
- Disinfection
- Dust control
- Cleaning
- Green houses
- Field proven performance for over 40 years
- Accurate, flow rate and spray angle
- Produces a finely atomized mist

Availability

- Standard flow rate: 0.30 1.35 GPH
- Spray angle: 80°
- · Spray pattern: hollow or solid

Identification

Design

As an example nozzles are marked with the following.



1:	Nozzie	nousing
2:	Disc	

- 3: Cone
- 4: Anti-drip valve
- 5: HX screw

HX-AD	HX nozzle design with anti-drip valve
1-1 1 1 L_1	Batch code
0.50	Flow rate (USgal/h)
80° H	Spray angle and spray pattern

ENGINEERING TOMORROW



Data sheet

Anti-drip spray nozzles type HX-AD



Technical data

Material and construction

The nozzle housing and screw are tin/nickel plated brass. This coating is tight and extremely hart which gives a valuable corrosion resistance. Nickel silver is a trade name for a non-magnetic copper nickel alloy and used for the disc and cone. The material is very popular due to its corrosion resistance in water applications. The part in the cut-off valve are made of stainless steel and the O-ring and valve seat are FKM.

Tightening torque

Decommended tightening targue	130 to 180 lbs-in		
Recommended tightening torque	(15 to 20 Nm)		
	180 lbs-in		
Maximum tightening torque	(20 Nm)		

Performance

Minimum recommended operation pressure is 145 psi (10 bar).

Maximum current operation pressure: 85 psi (40 bar). Future maximum operation pressure: 1015 psi

(70 bar).

Cut-off valve

The cut-off valve has a closing pressure between 60-90 psi (~ 4 to 6 bar).

Flow rates

Flow rates at various operating pressures (Available in future) (GPH - water)

Nozzles with HX valve Flow rate USgal/h	10 bar	35 bar	50 bar	70 bar
0.30 gph 80°				
0.40 gph 80°				
0.50 gph 80°				
0.55 gph 80°				
0.60 gph 80°				
0.65 gph 80°				
0.75 gph 80°				
0.85 gph 80°				
1.00 gph 80°				
1.10 gph 80°				
1.25 gph 80°				
1.35 gph 80°				

Dimensions



Nozzle type HX-AD:

Current standard program

		Spray angels & patterns							
Reference	3	30°		45°		60°		80°	
capacity USgal/h	Solid	Hollow	Solid	Hollow	Solid	Hollow	Solid H	lollow	
0.30 gph			+	+	+	+	S	+	
0.40 gph			+	+	+	+	+	Н	
0.50 gph	+		+	+	+	+	+	Н	
0.55 gph	+		+	+	+	+	+	Н	
0.60 gph	+		+	+	+	+	+	Н	
0.65 gph	+		+	+	+	+	+	Н	
0.75 gph	+		+	+	+	+	+	+	
0.85 gph	+		+	+	+	+	+	Н	
1.00 gph	+		+	+	+	+	+	Н	
1.10 gph	+		+	+	+	+	+	Н	
1.25 gph	+		+	+	+	+	+	+	
1.35 gph	+		+	+	+	+	+	+	

+ available on request

Danfoss A/S

Climate Solutions • danfoss.com • +45 7488 2222

Any information, including, but not limited to information on selection of product, its application or use, product design, weight, dimensions, capacity or any other technical data in product manuals, catalogues descriptions, advertisements, etc. and whether made available in writing, orally, electronically, online or via download, shall be considered informative, and is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogues, brochures, videos and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes to form, fit or function of the product. All trademarks in this material are property of Danfoss A/S or Danfoss group companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.