

Data sheet

HX NOZZLE Type HX

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 water spray ask for the Danfoss Type HX nozzle.

Our exclusive design produces a precisely controlled flow rate and spray angle.

The Type HX nozzles were originally designed to make extra fine atomization and precise control of flow rates wherever required.

Minimum operating pressure is 70 PSI, but increasingly finer droplets result from higher operating pressure.

The HX 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

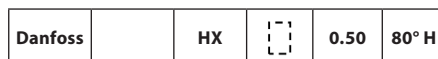
- Adiabatic cooling
- Humidification
- Disinfection
- Dust control
- Cleaning
- Green houses
- Field proven performance for over 40 years
- Accurate, flow rate and spray angle
- Produces a finely atomized mist

Availability

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

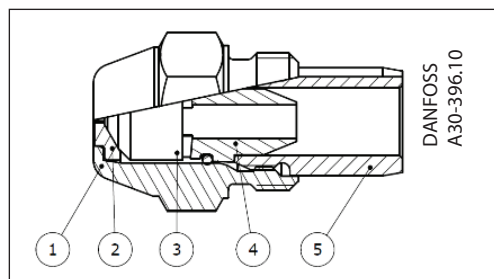
Identification

As an example nozzles are marked with the following.



HX	HX nozzle
	Batch code
0.50	Flow rate (USgal/h)
80° H	Spray angle and spray pattern

Design

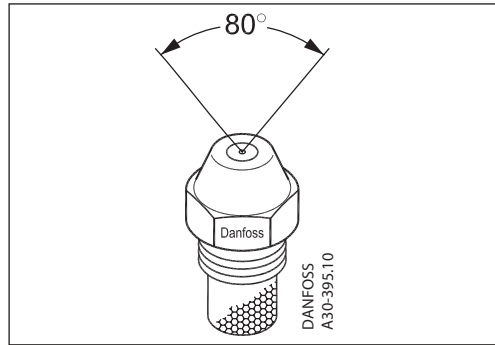


- 1: Nozzle housing
- 2: Disc
- 3: Cone
- 4: O-ring adapter
- 5: HX screw

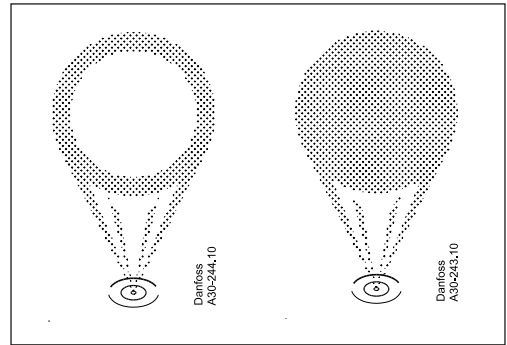
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HX Nozzle Type HX

Spray angle and spray pattern



80° spray angle



Hollow spray

Solid spray

Technical data

Material and construction

The nozzle housing, O-ring adapter and screw are tin/nickel plated brass. This coating is tight and extremely hard 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 O-ring material is FKM.

Tightening torque

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

Performance

Minimum recommended operation pressure is 70 psi (5 bar).

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

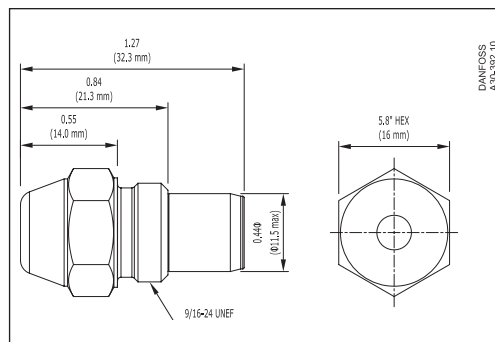
Future maximum operation pressure: 1015 psi (70 bar).

Flow rates

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

HX Nozzle	10 bar	35 bar	50 bar	70 bar
Flow rate USgal/h				
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:

Current standard program

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

+ available on request

Danfoss A/S

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