

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 cut-off near the orifice. This can be very important in situations where excessive after drip has a negative impact on the system environment.

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.

With our technology we can achieve humidification and cooling without wetting.

Application

- Adiabatic cooling
- Humidification
- Disinfection
- Dust control
- Wood processing
- Green houses

Features

- Field proven performance for over 75 years
- Accurate, flow rate and spray angle
- Produces a finely atomized mist


Availability

- Standard flow rate: 0,70-87 L/h
- Spray angle: 30°, 45°, 60° and 80°
- Spray pattern: hollow or solid
- Optional bronze filter

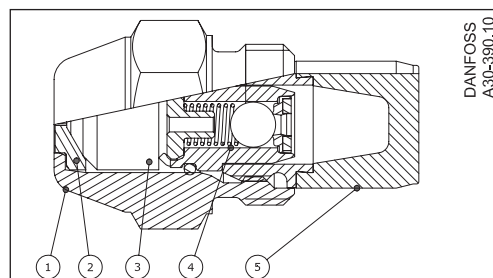
Identification

As an example nozzles are marked with the following.

Danfoss		HX-AD		0.50	80° H
---------	--	-------	---	------	-------

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

Design

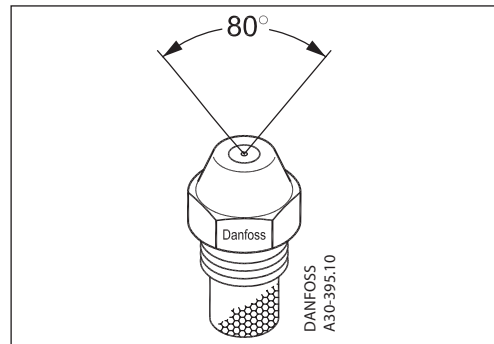


- 1: Nozzle housing
- 2: Disc
- 3: Cone
- 4: Anti-drip valve
- 5: HX screw

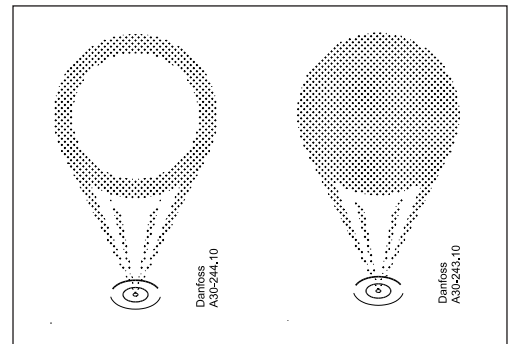
Data sheet

Anti-drip spray nozzles type HX-AD

Spray angle and spray pattern



80° spray angle



Hollow spray

Solid spray

Technical data

Material and construction

The nozzle housing and screw are tin/nickel plated brass. This coating is very robust and provides a highly 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. Disc and cone are also available in a stainless steel (AISI 303) version.

The part in the cut-off valve are made of stainless steel (AISI 303) and the O-ring and valve seat are FPM.

Tightening torque

Recommended tightening torque	15 to 20 Nm
Maximum tightening torque	25 Nm

Performance

Minimum recommended operation pressure is 10 bar.

Maximum current operation pressure: 40 bar.

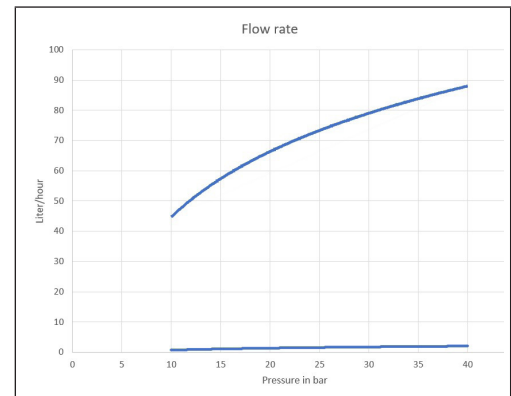
Future maximum operation pressure: 70 bar.

Cut-off valve

The cut-off valve has a closing pressure between 4 to 6 bar and opening pressure at 8 bar.

Flow rates

Standard flow rates are available in the region between the curves in the diagram below. Higher flow rates and pressure up to 70 bar will be available in future.



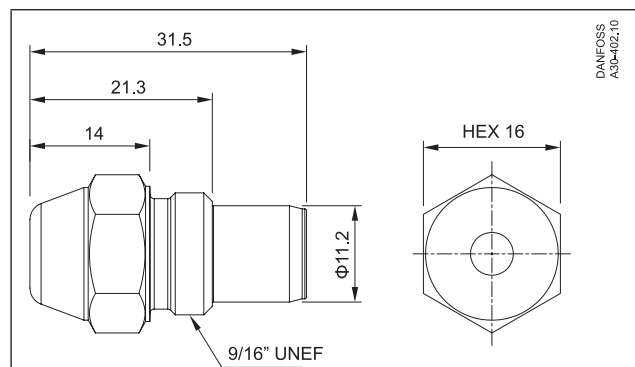
Further flow rates on request

Nozzle type HX-AD

Nozzles are available with 4 different spray angles going from 30° to 80°.

2 different spray patterns Solid or Hollow, though 30° only comes with Solid.

Dimensions



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.