



# Water nozzles

## Nozzles HX

## Description

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

## Features & Benefits

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

## Applications

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

## Ordering

### Product code numbers

To find code numbers for ordering please consult the Danfoss Burner Components Service Manual.


[The service manual](#) is intended to make it easy for you to find the most suitable components and service from the comprehensive Danfoss range.

Product group	Type	Spray angle [°]	Capacity [l/h]	Code number
Water nozzles	HX	80	1.12	030L5303
Water nozzles	HX	80	1.12	030L5643
Water nozzles	HX	60	1.12	030L5623
Water nozzles	HX	80	1.27	030L5144
Water nozzles	HX	80	1.46	030L5645
Water nozzles	HX	80	1.46	030L5145
Water nozzles	HX	80	1.83	030L5147
Water nozzles	HX	60	1.83	030L5627
Water nozzles	HX	80	2.14	030L5148
Water nozzles	HX	80	2.34	030L5149
Water nozzles	HX	80	2.34	030L5649
Water nozzles	HX	60	2.78	030L5291
Water nozzles	HX	60	2.78	030L5631
Water nozzles	HX	60	2.87	030L5630
Water nozzles	HX	80	2.87	030L5650
Water nozzles	HX	80	2.87	030L5150
Water nozzles	HX	80	3.34	030L5153
Water nozzles	HX	60	3.34	030L5633
Water nozzles	HX	80	3.34	030L5653
Water nozzles	HX	60	3.34	030L5293
Water nozzles	HX	80	3.56	030L5152
Water nozzles	HX	80	4.21	030L5154
Water nozzles	HX	60	4.96	030L5295
Water nozzles	HX	60	4.96	030L5635
Water nozzles	HX	80	5.95	030L5657
Water nozzles	HX	60	5.95	030L5637
Water nozzles	HX	80	6.95	030L5659
Water nozzles	HX	80	12.27	030L5400
Water nozzles	HX	60	16.87	030L5640
Water nozzles	HX	60	39.20	030L5821

### Identification

The nozzles are marked with the following information:

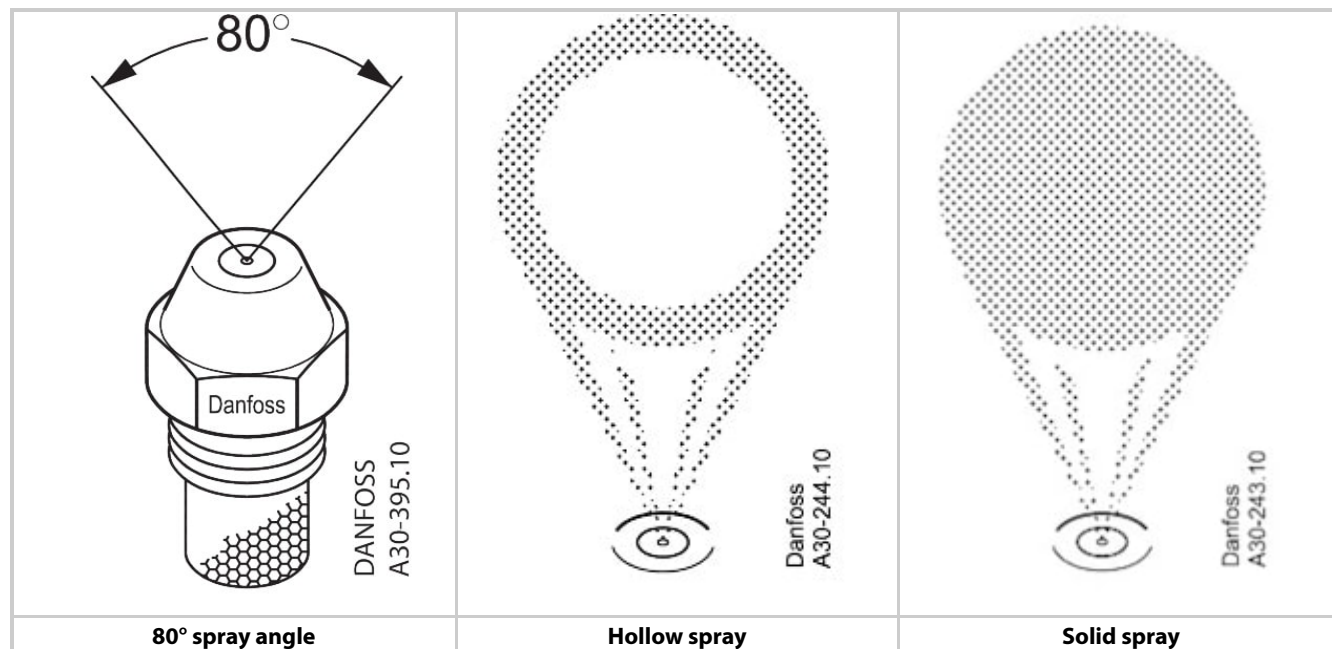
Danfoss			0.50	80° H
---------	--	---	------	-------

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

## Functions

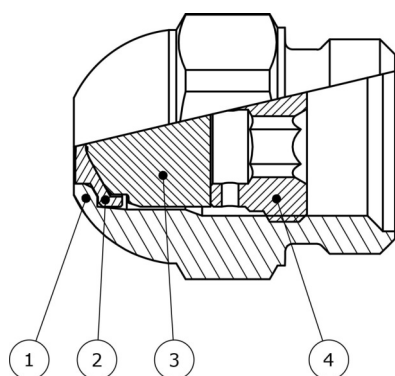
### Operation

#### Spray angle and spray pattern



## Product details

### Design



- 1: Round shaped HX housing
- 2: Disc
- 3: Cone
- 4: Bottom screw

- Standard flow rate: 0,70 - 115 L/h
- Spray angle: 60°, 80° (30° and 45° on request)
- Spray pattern: hollow or solid
- Optional bronze filter

## Materials

The nozzle housing is tin/nickel plated brass.

This coating is very robust and provides a highly valuable corrosion resistance.

Stainless Steel AISI 303 is used for the disc and cone. The material is very popular due to its corrosion resistance in water applications.

## Capacity

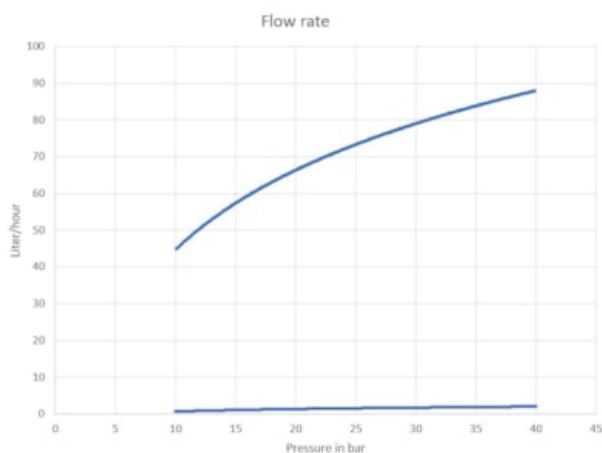
### Performance

Minimum recommended operation pressure is 5 bar.

Maximum operation pressure: 80 bar.

### Flow rates

Standard flow rates are available in the region between the curves in the diagram below.

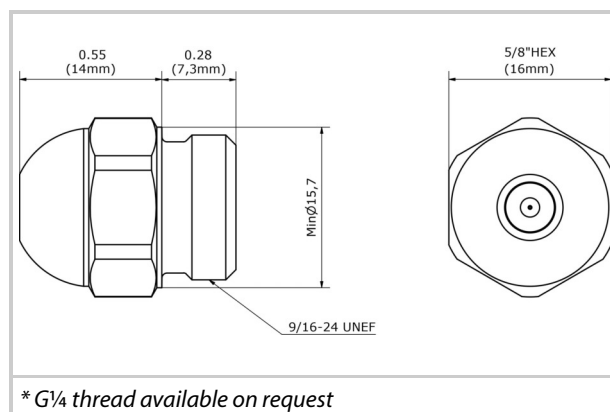


Nozzles are available with 4 different spray angles going from 30° to 80°.

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

## Dimensions & weights

Weight	Nozzles type HX	
	Gross weight	0.033 kg
	Net weight	0.032 kg
	Volume	0.023 Liter



## Installation

### Tightening torque

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

## Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the 'Declaration of Conformity'. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Certification body	Approval topic
Manufacturer's Declaration	<a href="#">Danfoss MD 030L.00</a>	Danfoss	EU RoHS
Export Control Declaration	<a href="#">Non Oil Nozzles</a>	Danfoss	

## Contact details

### Online support

Danfoss offers a wide range of support along with our products, including digital information, software, mobile apps and expert guidance. See the possibilities below.



#### The Danfoss Design center

Discover the Design Center, our advanced digital platform that streamlines product selection. With integrated tools and enhanced type pages, it's simpler than ever to access product information and documentation, and to select the right products. Check the availability of Danfoss products at partner locations and enjoy seamless transitions from selection to purchase with our basket-to-basket functionality. Whether you're buying from our distributors or directly from the Product Store, the Design Center simplifies your experience. Learn more at: [designcenter.danfoss.com](https://designcenter.danfoss.com).



#### The Danfoss product store

The Danfoss Products Store is a one-stop shop available 24/7 for our customers, no matter where you are in the world or what area of industry you work in. Browse our catalog, check product details and documentation, view your prices and product availability, and quickly finalize your purchase. Start browsing at: [store.danfoss.com](https://store.danfoss.com).



#### Danfoss Partner Portal/Product Data tool

Designed to support you with easy access to product data extracts, essential resources, tools, and information. The Partner Portal provides a centralized hub for product documentation, training materials, marketing assets, and technical support, ensuring you have everything you need to succeed and grow your business with Danfoss. The Partner Portal is available 24/7 at: [partner.danfoss.com](https://partner.danfoss.com) and is ready to support your business.



#### Find technical documentation

Find technical documentation you need to get your project up running. Get direct access to our official collection of data sheets, certificates and declarations, manuals and guides, 3D models and drawings, case stories, brochures, and much more. Start searching now at: [documentation.danfoss.com](https://documentation.danfoss.com).



#### Danfoss Learning

Danfoss Learning is a free online learning platform. It features courses and materials specifically designed to help engineers, installers, service technicians, and wholesalers better understand the products, applications industry topics, and trends that will help you do your job better. Find your local Danfoss website here: [learning.danfoss.com](https://learning.danfoss.com).



#### Get local information and support

Local Danfoss websites are the main sources for help and information about our company and products. Find product availability, get the latest regional news, or connect with a nearby expert - all in your own language. Find your local Danfoss website here: [danfoss.com](https://danfoss.com).

#### 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 description, 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 products. 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.