



Water nozzles

Anti-Drip Spray Nozzles HX-AD

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

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-AD	80	1.80	030L5068
Water nozzles	HX-AD	80	1.78	030L5069
Water nozzles	HX-AD	80	2.14	030L5070
Water nozzles	HX-AD	80	2.09	030L5071
Water nozzles	HX-AD	80	2.41	030L5072
Water nozzles	HX-AD	80	2.44	030L5073
Water nozzles	HX-AD	80	5.57	030L5080

Identification

As an example nozzles are marked with the following.

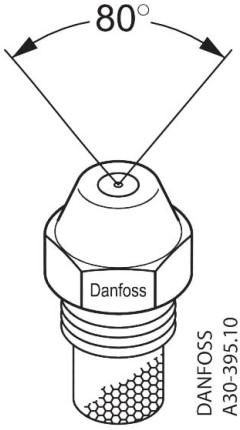
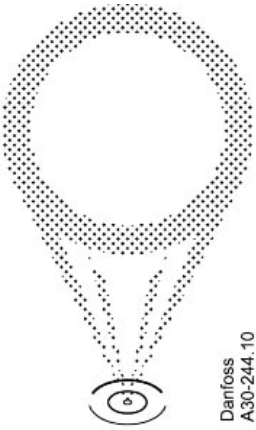
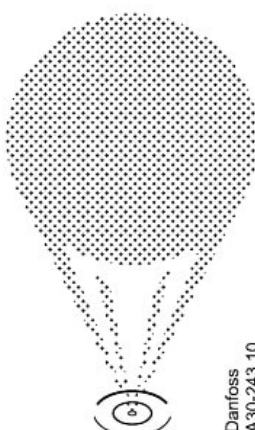
Danfoss		HX-AD		0.50	80° H
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HX-AD	HX nozzle design with anti-drip valve
	Batch code
0.50	Flow rate (USgal/h)
80° H	Spray angle and spray pattern

Functions

Operation

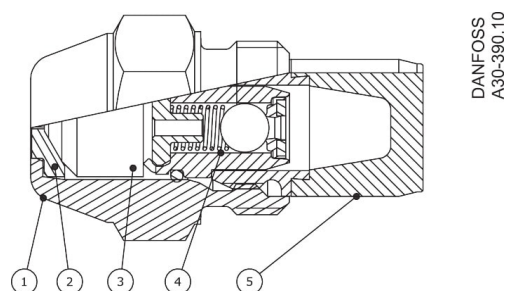
Spray angle and spray pattern

		
80° spray angle	Hollow spray	Solid spray

Product details

Design

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



Materials

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.

Capacity

Flow rates

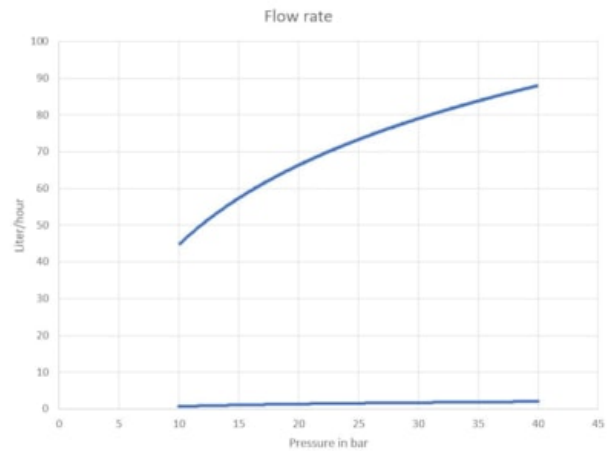
Standard flow rates are available in the region between the curves in the diagram.

Higher flow rates and pressure up to 70 bar will be available in future.

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.



Further flow rates on request

Performance and environmental conditions

Performance

Minimum recommended operation pressure is 10 bar.

Maximum current operation pressure: 40 bar. Future

maximum operation pressure: 70 bar.

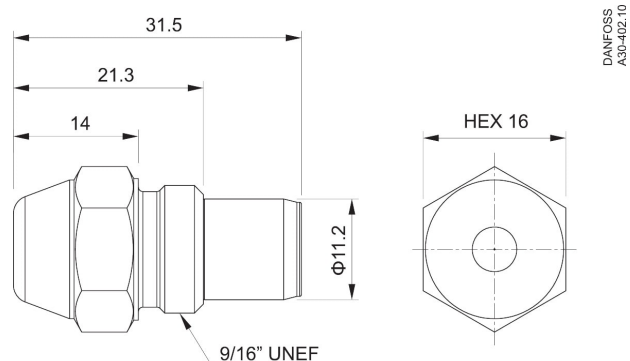
Cut-off valve

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

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

Dimensions & weights

Weight	Anti-drip spray nozzles type HX-AD	
	Gross weight	0.033 kg
	Net weight	0.031 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
Export Control Declaration	Non Oil Nozzles	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.



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