

Danfoss – Spray Technologies

Born in Water

75 years of Evolution, time for the next leap

We've put our 75 years of oil spraying knowledge and experience into developing a **portfolio of sustainable water nozzles**.



Danfoss **Slimline**

Danfoss **HX**

A flexible range **that covers** your diverse needs

Precision

Ensuring the best spraying performance by highest repeatability of each nozzle.

Performance

Outstanding water atomization combined with a high-quality spray pattern.

Efficiency

Best water atomization combined with high quality spray pattern at given system pressure.

The Danfoss difference...

We've put **75 years of experience** into water.

Our new water nozzles are developed, produced, and constantly improved, based on our simplex pressure swirl atomization principle.

Our **guarantee** and **promise**

Premium quality, high performance, long-lasting reliability, meeting the highest repeatability and efficiency standards

75 Years



> 250. Mio Nozzles produced

Applications

Danfoss water application nozzles are suitable for a wide range of operational areas:



Humidification

Water mist to humidify HVAC systems in buildings



Pest control

Efficient water mist sprays for mosquito control



Agriculture

Efficient water mist sprays for agricultural applications



Adiabatic cooling

High quality water mist to cool down ambient air



Dust control

Water mist for dust control in harsh working environments



Wood processing

Perfect evaporation for wood processing



Fire fighting

High pressure water mist for fire protection systems

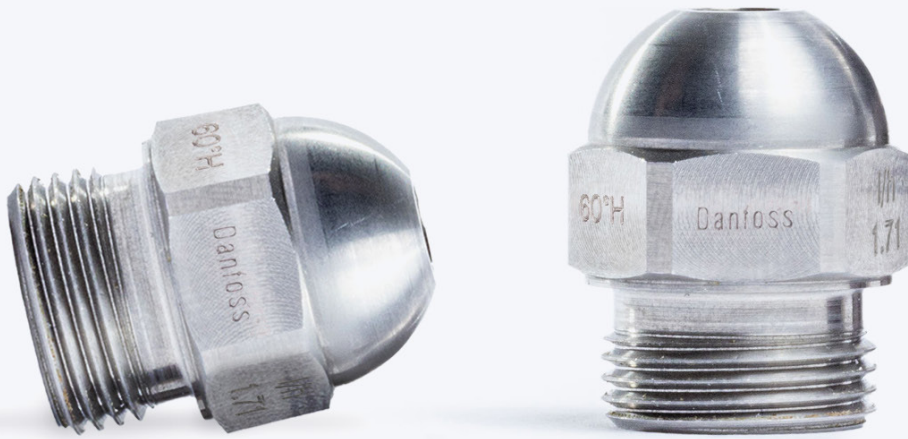
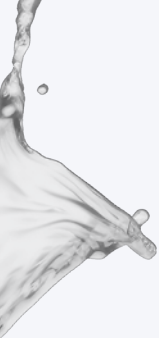


Artificial snow production

High pressure water mist for snow production

Get to know our water nozzles

adjusted & customized to meet your needs



Meet the classic HX

Specifications

Material properties

- ▶ **Disk & cone:** Nickel Silver / Stainless Steel (AISI303)
- ▶ **Housing:** Brass – Plating SnNi (Tin-Nickel)
- ▶ **Filter adapter:** Brass – Plating SnNi (Tin-Nickel)
- ▶ **Bottom screw:** Brass – Plating SnNi (Tin-Nickel)
- ▶ **Valve:** Stainless Steel (AISI303)

Connection properties

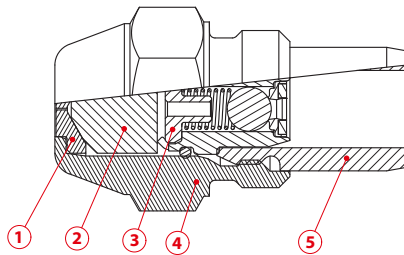
- ▶ **Thread size:** 9/16 – 24 UNEF
- ▶ **Thread size:** 1/4"

Operational properties

- ▶ **Angle variation:** 30°–80°
- ▶ **Pressure:** Up to 80 bar

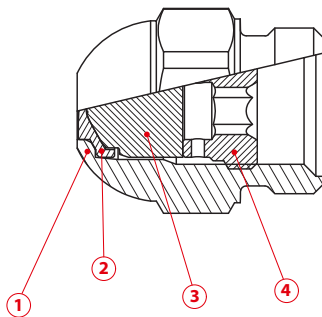
Technical Facts

- ▶ Angle and capacity are specified at a pressure of **10 bar (25°C Water)**
- ▶ The nozzle valve has an opening pressure of **5,5 bar**
- ▶ Our nozzles are available with or without **Anti drip function**
- ▶ Packaging size: **50 pcs. / 10 pcs.**



Parts list

ITEM	DESCRIPTION
1	Disc
2	Cone
3	HX Valve
4	HX Housing
5	HX Screw



Parts list

ITEM	DESCRIPTION
1	Disc
2	HX Housing
3	Cone
4	Bottom Screw



Danfoss water nozzles are **designed for all water-based fluids.**

The nozzle's lifetime depends on the specifications you choose.



Benefits

- ✓ 75 years in design & function
- ✓ High corrosive resistant plating
- ✓ Anti drip function
- ✓ Individual customization

Get to know our water nozzles

adjusted & customized
to meet your needs



Meet the Slimline

Specifications

Material properties

- ▶ **Disk & cone:** Stainless Steel (AISI303)
- ▶ **Housing:** Brass – Plating SnNi (Tin-Nickel)
- ▶ **Screw:** Brass – Plating SnNi (Tin-Nickel)
- ▶ **Valve:** Stainless Steel (AISI303)

Connection properties

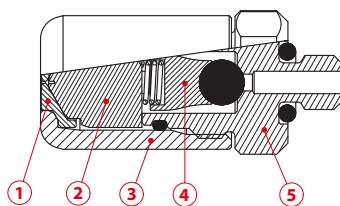
- ▶ **Thread size:** UNC 10-24
- ▶ **Thread size:** UNC 12-24
- ▶ **Thread size:** M5

Operational properties

- ▶ **Angle variation:** 30°–80°
- ▶ **Pressure:** Up to 80 bar

Technical Facts

- ▶ Angle and capacity are specified at a pressure of **14 bar (25°C Water)**
- ▶ The nozzle valve has an opening pressure of **5,5 bar**
- ▶ Our nozzles are available with or without **Anti drip function**
- ▶ Packaging size: **50 pcs.**



Parts list

ITEM	DESCRIPTION
1	Disc
2	Cone
3	SL Housing
4	SL Valve
5	SL Screw



Danfoss water nozzles are **designed for all water-based fluids.**

Lifetime depends on the nozzle specification you choose.



Your Benefits

- ✓ Unique & compact design
- ✓ Anti drip function
- ✓ High corrosive resistant plating
- ✓ Mounting by hand
- ✓ Individual customization

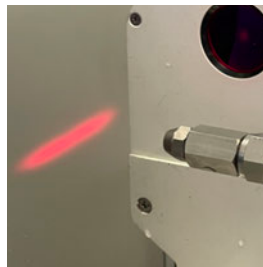
We have done the measurements.

You can rely on our repeatability and high-end quality.

We've tested, investigated and evaluated to deliver the best performance.

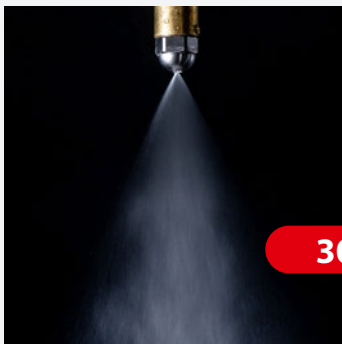
A lot goes into each small droplet...

Following the premises of Fraunhofer diffraction scattered light absorbent particles method, our nozzles atomize water and water-based fluids into very fine droplets, associated with the best homogeneous spray pattern.

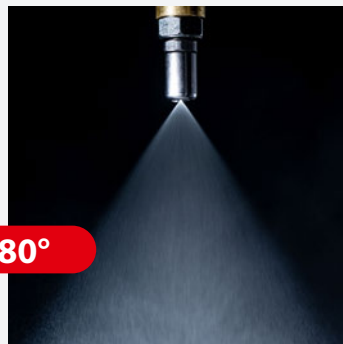


We achieve droplet sizes down to **8 μm** depending on the pressure and the water quality.

Measured with 50mm distance (at 25°C) and 14 bar.



30°-80°



Spray angle and pressure are directly correlated.

We've calculated the measurements so we know the dependency. That's why we can provide the angle range that meets the needs of your application.

Lifetime...?

Corrosion resistance

Our **SnNi plating** survives > 240h in salt spray testing according to **DS/EN ISO 9227**



Assistance & service:

We help with choosing the optimal combination and specification to ensure the best outcome for your needs.



To take advantage of this service, please

✓ **contact your regional sales manager**

OR

✓ **send an E-mail to: R159227@danfoss.com**



Putting our knowledge
to work **for you**



Danfoss

Our range of water spray nozzles covers a wide range of applications. And we back everything up with the solidity of Danfoss support. In short, **we put a lot in, so you get the right drops out.**