



# Oil Nozzles

**HFD/HD, SFD/SD**

## Description

Oil nozzles types HFD/HD and SFD/SD are designed for domestic and commercial high pressure oil burners operating with light or heavy fuel. The steel nozzles are available with hollow or solid spray pattern in 3 different spray angles with capacities from 0.3 to 2.50 USgal/h. The types HFD and SFD have two sintered bronze filters while the types HD and SD only have one filter of sintered bronze or monel mesh.

## Features & Benefits

- Light and heavy oil
- EN nozzles from 1.50 to 6.55 kg/h
- 100% test of capacity and performance

## Applications

- Domestic and commercial high pressure oil burners operating with light or heavy fuel

## Ordering

### Product code numbers

Reference capacity [USgal/h]	Hollow HFD/HD				Solid SFD/SD			Specified capacity [kg/h]
	45°	60°	70°	80°	45°	60°	80°	
0.30	-	-	-	-	030F4002	030F6002	030F8002	1.18
0.35	-	-	-	-	030F4003	030F6003	030F8003	1.38
0.40	030H4004	030H6004	030H7004	030H8004	030F4004	030F6004	030F8004	1.56*
0.45	030H4006	030H6006	-	030H8006	030F4006	030F6006	030F8006	1.74*
0.50	030H4008	030H6008	030H7008	030H8008	030F4008	030F6008	030F8008	1.93*
0.55	030H4010	030H6010	-	030H8010	030F4010	030F6010	030F8010	2.13*
0.60	030H4012	030H6012	-	030H8012	030F4012	030F6012	030F8012	2.31*
0.65	030H4014	030H6014	-	030H8014	030F4014	030F6014	030F8014	2.51*
0.75	030H4016	030H6016	-	030H8016	030F4016	030F6016	030F8016	2.90*
0.85	030H4018	030H6018	-	030H8018	030F4018	030F6018	030F8018	3.28*
1.00	030H4020	030H6020	-	030H8020	030F4020	030F6020	030F8020	3.87*
1.10	030H4022	030H6022	-	030H8022	030F4022	030F6022	030F8022	4.30*
1.25	030H4024	030H6024	-	030H8024	030F4024	030F6024	030F8024	4.86*
1.35	030H4026	030H6026	-	030H8026	030F4026	030F6026	-	5.26*
1.50	030H4028	030H6028	-	030H8028	030F4028	030F6028	030F8028	5.84*
1.65	-	030H6029	-	030H8029	030F4029	030F6029	030F8029	6.40*
1.75	030H4030	030H6030	-	030H8030	030F4030	030F6030	030F8030	6.69*
2.00	030H4032	030H6032	-	030H8032	030F4032	030F6032	030F8032	7.56
2.25	030H4034	030H6034	-	030H8034	030F4034	030F6034	030F8034	8.60
2.50	030H4036	030H6036	-	-	030F4036	030F6036	030F8036	9.55

\* EN nozzles

### Identification

The nozzles are marked with the following information (example):



### Stamped on the flats:

<b>0.60</b>	Reference capacity (USgal/h)
<b>60° SFD</b>	Spray angle and pattern (S = solid, H = Hollow, F = Double filter)
<b>2.24</b>	EN specified capacity (kg/h)
<b>EN 60 I</b>	Spray angle & Angle index (according to EN 293/EN 299)
<b>EN specification point</b>	1000 kPa (10 bar), 3.4 cSt., 840 kg/m <sup>3</sup>
	Batch number for internal use
<b>Reference specification point</b>	700 kPa (7 bar), 2.7 cSt., 820 kg/m <sup>3</sup>

### Accessories code numbers



030-0522

**1/4" BSP, NOZZLE HOLDER**

1/4" BSP, NOZZLE HOLDER

Related products

030H6029



030-0523

**1/8" BSP, NOZZLE HOLDER**

1/8" BSP, NOZZLE HOLDER

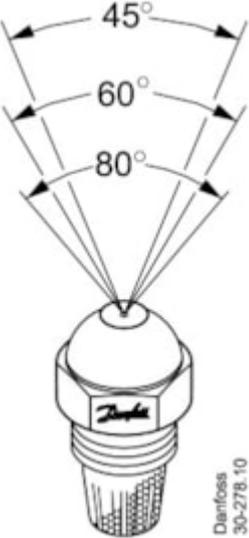
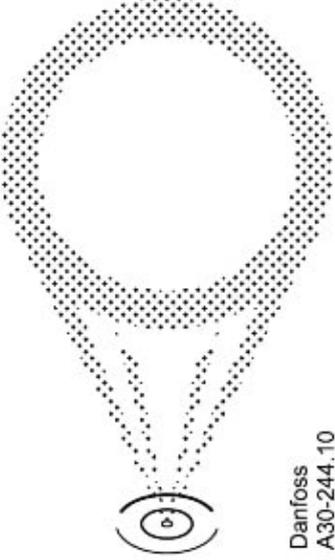
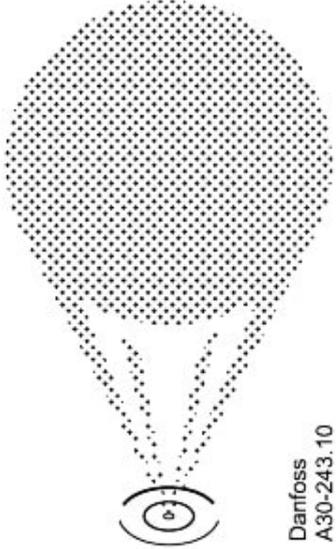
Related products

030H6029

## Functions

### Operation

Spray angles and spray pattern

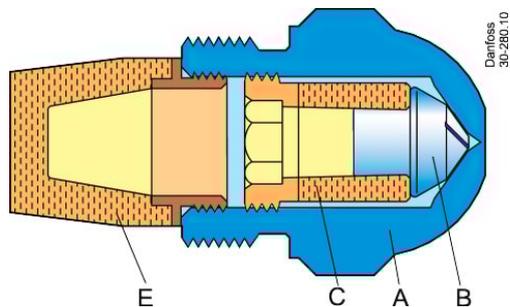
Spray angles	Schematic spray patterns	
 <p>Danfoss 30-278.10</p>	 <p>Danfoss A30-244.10</p>	 <p>Danfoss A30-243.10</p>
	HFD, HD (Hollow)	SFD, SD (Solid)

## Product details

### Design

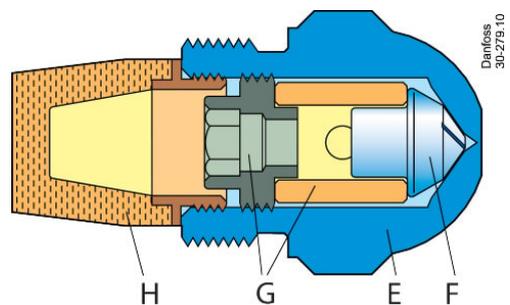
#### Types HFD and SFD with double sinter filter

- A: Nozzle housing
- B: Nozzle cone
- C: Inner filter (secondary)
- E: External filter (primary)



#### Types HD and SD with single filter (example with external filter)

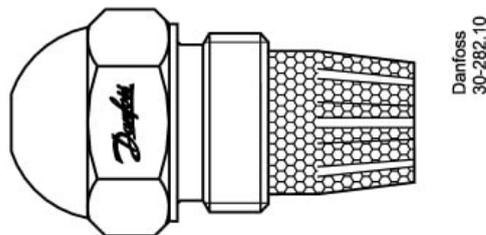
- E: Nozzle housing
- F: Nozzle cone
- G: Locknut
- H: Filter



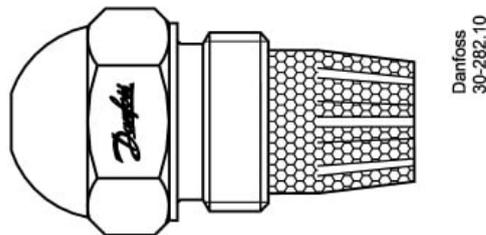
### Capacity

#### Filters

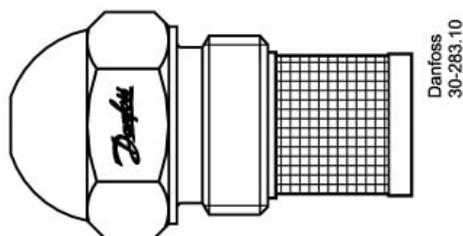
Capacity 0.30 – 1.00 USgal/h 30-40 µm sintered bronze (primary and secondary)



Capacity 1.10 - 1.50 USgal/h 30-40 µm sintered bronze

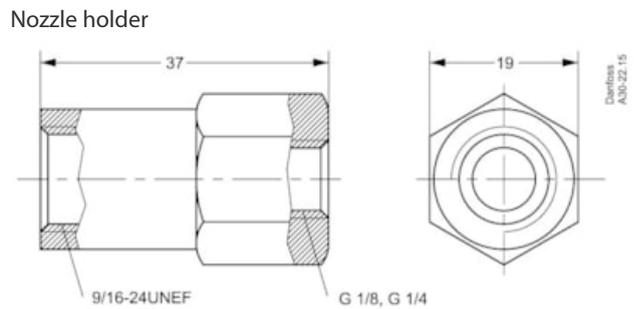
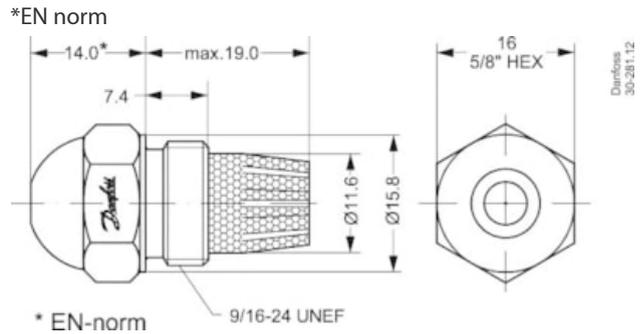


Capacity 1.65 – 2.50 USgal/h 105 µm Monel mesh



## Dimensions & weights

Weight	Nozzles type HFD/DH and SFD/SD	
	Gross weight	0.036 kg
	Net weight	0.033 kg
	Volume	0.024 Liter



## Installation

### Tightening torque

<b>Recommended tightening torque</b>	25 to 30 Nm (2.5 to 3.0 kpm)
<b>Max. tightening torque</b>	35 Nm (3.5 kpm)

## 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	<a href="#">Oil Nozzles</a>	Danfoss	

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