Oil Nozzles
Types HFD/HD and SFD/SD

General Data Sheet
For specific information on this product, please contact Danfoss Burner Components

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



0.60	Reference capacity (USgal/h)
60° SFD	Spray angle and pattern (S = solid, H = Hollow, F = Double filter)
2.24	EN specified capacity (kg/h)
EN 60 I	Spray angle & Angle index (According to EN 293/ EN 299)
EN specification point:	1000 kPa (10 bar), 3.4 cSt., 840 kg/m^3
⬚	Batch no. for internal use
Reference specification point:	700 kPa (7 bar), 2.7 cSt., 820 kg/m^3

Oil nozzles types HFD/HD and SFD/SD are designed for domestic and commercial high pressure oil burners operating with light or heavy fuel.

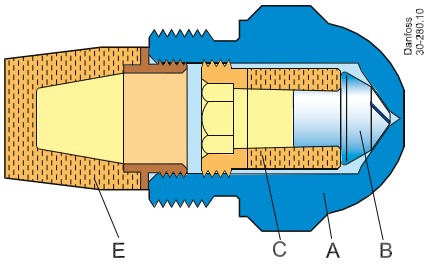
The steel nozzles are available with hollow or solid spray pattern in 3 different spray angles with capacities from 0.3 to 2.50 USgal/h.
The types HFD and SFD have two sintered bronze filters while the types HD and SD only have one filter of sintered bronze or stainless steel strainer.

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

Design

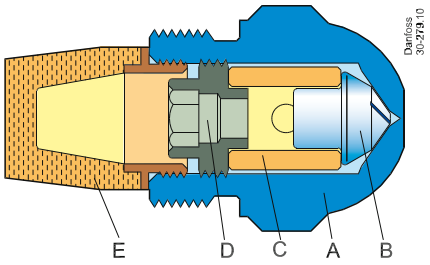
Types HFD and SFD with double sinter filter.

A Nozzle housing (416 grade stainless steel)
B Nozzle cone
C Inner filter (secondary)
E External filter (primary)

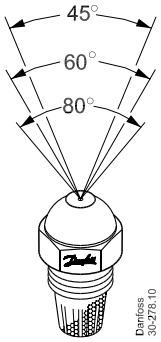


Types HD and SD with single filter (example with external filter)

A Nozzle housing (416 grade stainless steel)
B Nozzle cone
C Spacer
D Locknut
E Filter

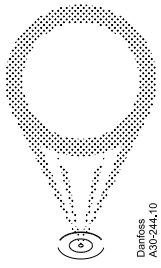


Spray angles



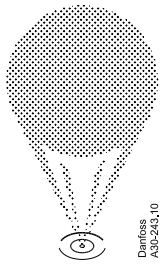
Spray patterns

HFD, HD



Hollow

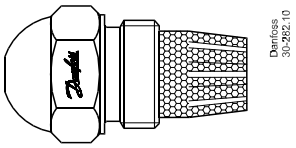
SFD, SD



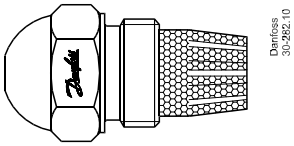
Solid

Technical Data

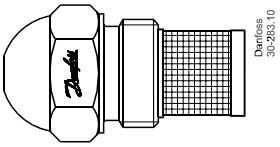
Filters



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



Capacity 1.10 - 1.50 USgal
30-40 µm sintered bronze



Capacity 1.65 – 2.50 USgal/h
120 mesh stainless steel strainer

Tightening torques

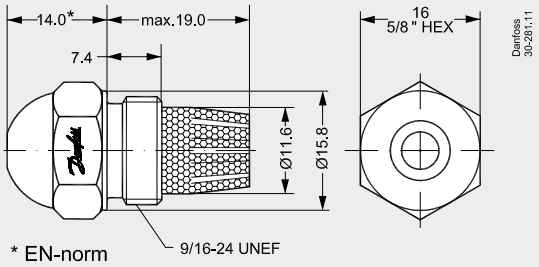
Recommended tightening torque	15 to 20 Nm (1.5 to 2.0 kpm)
Max. tightening torque	25 Nm (2.5 kpm)

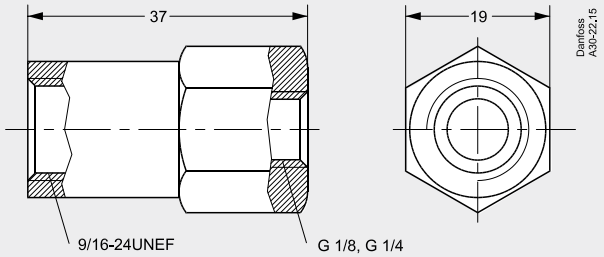
Programme

■ EN nozzles

Reference capacity USgal/h	Spray angles/patterns 45°		60 °		80 °		Specified capacity kg/h
0.30		SFD		SFD		SFD	1.12
0.35		SFD		SFD		SFD	1.31
0.40	HFD	SFD	HFD	SFD	HFD	SFD	1.50
0.45	HFD	SFD	HFD	SFD	HFD	SFD	1.68
0.50	HFD	SFD	HFD	SFD	HFD	SFD	1.87
0.55	HFD	SFD	HFD	SFD	HFD	SFD	2.06
0.60	HFD	SFD	HFD	SFD	HFD	SFD	2.24
0.65	HFD	SFD	HFD	SFD	HFD	SFD	2.43
0.75	HFD	SFD	HFD	SFD	HFD	SFD	2.81
0.85	HFD	SFD	HFD	SFD	HFD	SFD	3.18
1.00	HFD	SFD	HFD	SFD	HFD	SFD	3.74
1.10	HD	SD	HD	SD	HD	SD	4.12
1.25	HD	SD	HD	SD	HD	SD	4.68
1.35	HD	SD	HD	SD	HD	SD	5.05
1.50	HD	SD	HD	SD	HD	SD	5.61
1.65	HD	SD	HD	SD	HD	SD	6.17
1.75	HD	SD	HD	SD	HD	SD	6.55
2.00	HD	SD	HD	SD	HD	SD	7.48
2.25	HD	SD	HD	SD	HD	SD	8.42
2.50	HD	SD	HD	SD	HD	SD	9.35

Dimensions





Nozzle holder

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