

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 Atomisation index and index angle (According to EN 293/299)

Batch no. for internal use

Reference specification point: 700 kPa (7 bar), 3.4 cSt., 820 kg/m³

EN specification point: 1000 kPa (10 bar), 3.4 cSt., 840 kg/m³

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 4 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.

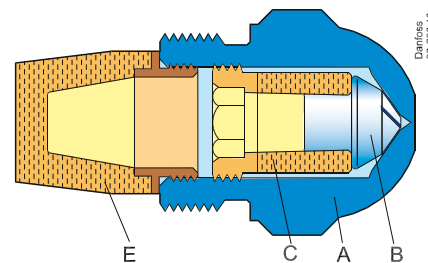
Application and Features

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

Design

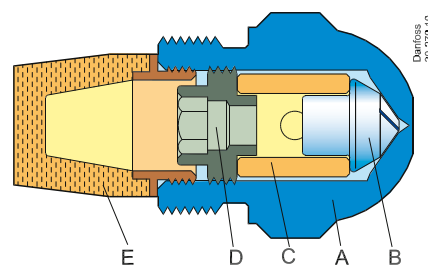
Types HFD and SFD with double sinter filter.

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

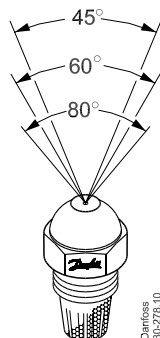


Types HD and SD with single filter (example with external filter)

- A Nozzle housing
- B Nozzle cone
- C Spacer
- D Locknut
- E Filter

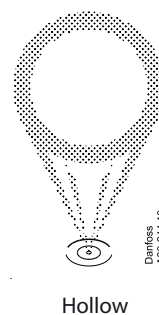


Spray angles

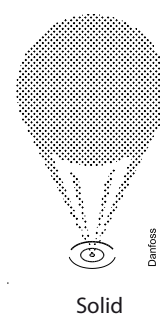


Spray patterns

HFD, HD

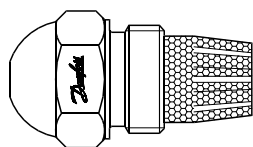


SFD, SD



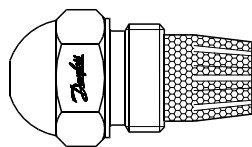
Technical Data

Filters



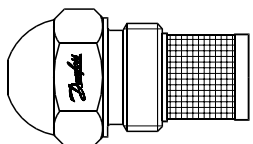
Danfoss
30-282.10

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



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Capacity 1.10 - 1.50 USgal
30-40 µm sintered bronze



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Capacity 1.65 – 2.50 USgal/h
105 µm Monel mesh

Tightening torques

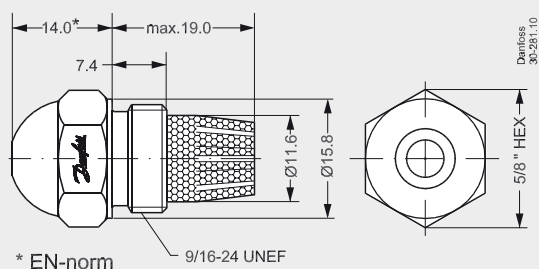
Recommended tightening torque	15 to 20 Nm (1.5 to 2.0 kpm)
Max. tightening torque	25 Nm (2.5 kpm)

Programme

■ EN nozzles

Reference capacity USgal/h	Spray angles/patterns						Specified capacity kg/h
	45°		60 °		80 °		
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

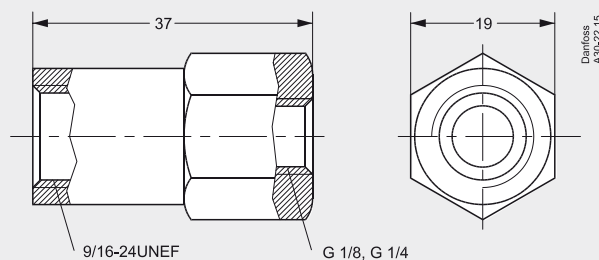
Dimensions



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* EN-norm

9/16-24 UNEF



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A30-22.15

G 1/8, G 1/4

Nozzle holder