ENGINEERING
TOMORROW

Data sheet

Oil Nozzles Types HFD/HD and SFD/SD

Application

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

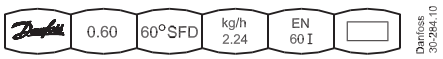
The steel nozzles are available with hollow or solid spray pattern in 3 different spray angles with capacities from 0.3 to 2.50 USgal/h.

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

Identification

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

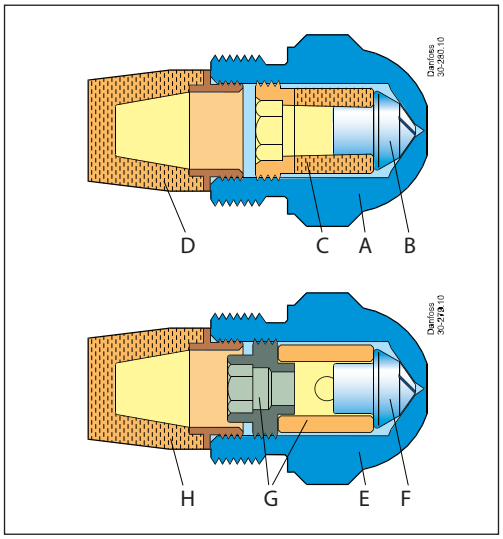


Stamped on the flats	
0.60	Reference capacity (USgal/h)
60° SFD	Spray angle and pattern (S = solid, H = Hollow, F = Double filter)
2.24	EN specified capacity (kg/h)
EN 60 I	Spray angle & Angle index (according to EN 293/EN 299)
EN specification point	1000 kPa (10 bar), 3.4 cSt., 840 kg/m³
▭	Batch no. for internal use
Reference specification point	700 kPa (7 bar), 2.7 cSt., 820 kg/m³

Design

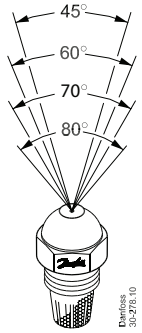
Types HFD and SFD with double sinter filter
- **A:** Nozzle housing
- **B:** Nozzle cone
- **C:** Inner filter (secondary)
- **D:** External filter (primary)

Types HD and SD with single filter (example with external filter)
- **E:** Nozzle housing
- **F:** Nozzle cone
- **G:** Locknut
- **H:** Filter

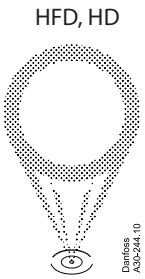


Spray angles/patterns

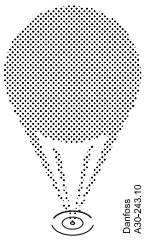
Spray angles



Schematic spray patterns



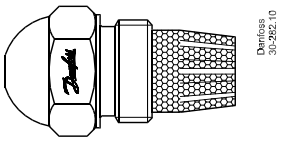
Hollow



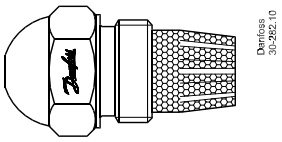
Solid

Technical Data

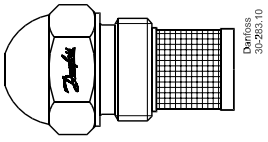
Filters



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



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



Capacity 1.65 – 2.50 USgal/h
105 µm Monel mesh

Tightening torques	
Recommended tightening torque	25 to 30 Nm (2.5 to 3.0 kpm)
Max. tightening torque	35 Nm (3.5 kpm)

Programme

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**	1.12
0.35	-	-	-	-	**030F4003**	**030F6003**	**030F8003**	1.31
0.40	**030H4004**	**030H6004**	**030H7004**	**030H8004**	**030F4004**	**030F6004**	**030F8004**	1.50*
0.45	**030H4006**	**030H6006**	-	**030H8006**	**030F4006**	**030F6006**	**030F8006**	1.68*
0.50	**030H4008**	**030H6008**	**030H7008**	**030H8008**	**030F4008**	**030F6008**	**030F8008**	1.87*
0.55	**030H4010**	**030H6010**	-	**030H8010**	**030F4010**	**030F6010**	**030F8010**	2.06*
0.60	**030H4012**	**030H6012**	-	**030H8012**	**030F4012**	**030F6012**	**030F8012**	2.24*
0.65	**030H4014**	**030H6014**	-	**030H8014**	**030F4014**	**030F6014**	**030F8014**	2.43*
0.75	**030H4016**	**030H6016**	-	**030H8016**	**030F4016**	**030F6016**	**030F8016**	2.81*
0.85	**030H4018**	**030H6018**	-	**030H8018**	**030F4018**	**030F6018**	**030F8018**	3.18*
1.00	**030H4020**	**030H6020**	-	**030H8020**	**030F4020**	**030F6020**	**030F8020**	3.74*
1.10	**030H4022**	**030H6022**	-	**030H8022**	**030F4022**	**030F6022**	**030F8022**	4.12*
1.25	**030H4024**	**030H6024**	-	**030H8024**	**030F4024**	**030F6024**	**030F8024**	4.68*
1.35	**030H4026**	**030H6026**	-	**030H8026**	**030F4026**	**030F6026**	**030F8026**	5.05*
1.50	**030H4028**	**030H6028**	-	**030H8028**	**030F4028**	**030F6028**	**030F8028**	5.61*
1.65	**030H4029**	**030H6029**	-	**030H8029**	**030F4029**	**030F6029**	**030F8029**	6.17*
1.75	**030H4030**	**030H6030**	-	**030H8030**	**030F4030**	**030F6030**	**030F8030**	6.55*
2.00	**030H4032**	**030H6032**	-	**030H8032**	**030F4032**	**030F6032**	**030F8032**	7.48
2.25	**030H4034**	**030H6034**	-	**030H8034**	**030F4034**	**030F6034**	**030F8034**	8.42
2.50	**030H4036**	**030H6036**	-	**030H8036**	**030F4036**	**030F6036**	**030F8036**	9.35

**EN nozzles*

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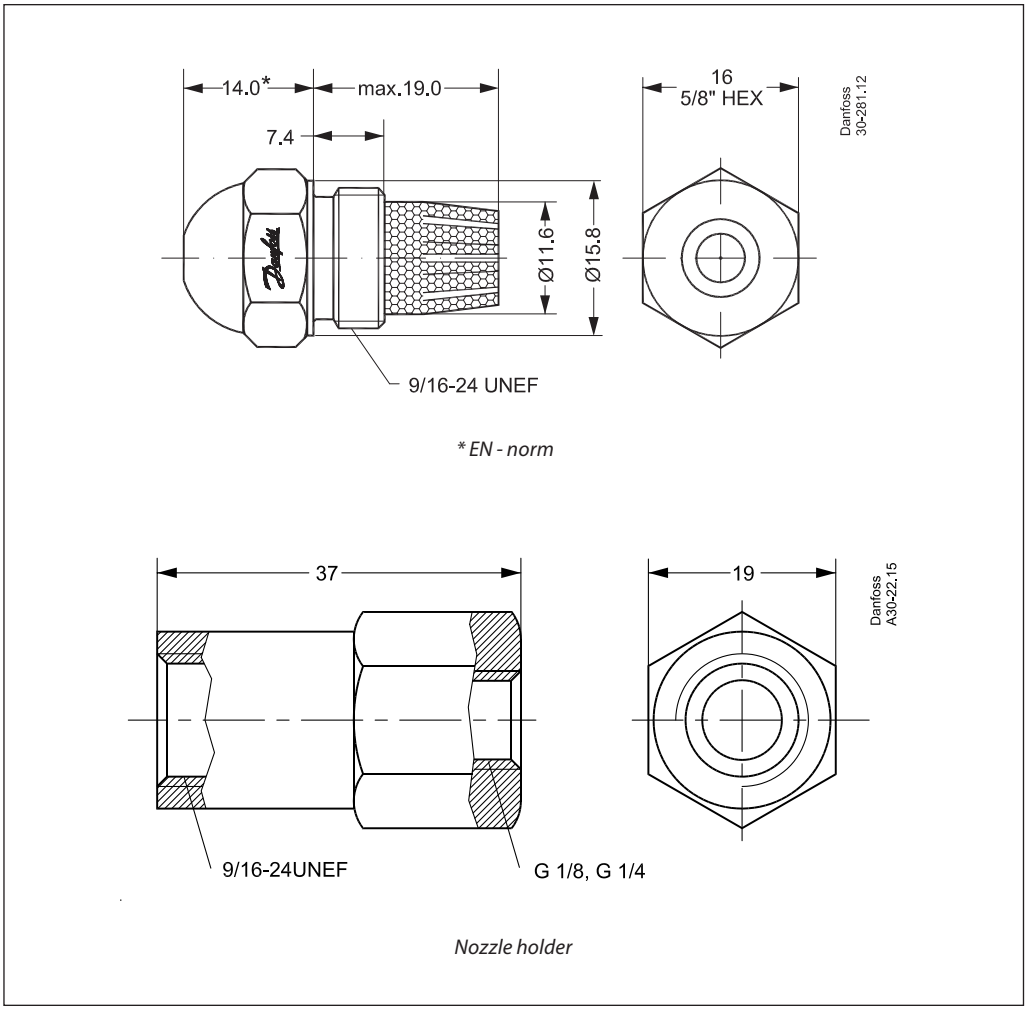
Dimensions


14.0*
max.19.0
7.4
16
5/8" HEX
Danfoss
30-281.12
Ø11.6
Ø15.8
9/16-24 UNEF
* EN - norm
37
19
Danfoss
A30-22.15
9/16-24UNEF
G 1/8, G 1/4
Nozzle holder

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