

Data sheet

# Oil Nozzles Type OD

Application

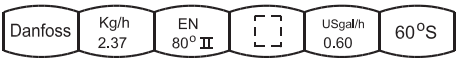
Oil nozzles type OD are designed for domestic and commercial high-pressure oil burners operating with light or heavy fuel. They are available with 4 different spray angles, 3 spray patterns and sizes from 0.20 to 35.0 USgal/h. As to construction and atomizing, the OD nozzle is the basic model for all Danfoss oil nozzles.

Features:

- Light and heavy oil
- EN nozzles from 1.46 to 6.55 kg/h
- Standard nozzles from 0.20 to 35 USgal/h
- 100% test of capacity and performance in accordance with EN

Identification

The EN nozzles 1.46 to 6.55 kg/h are marked with this information.  
Other nozzles are without EN marking.

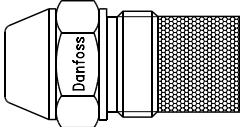
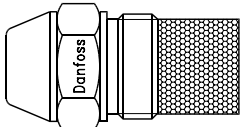
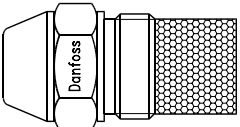
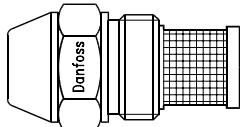
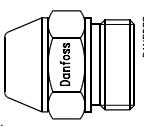


Danfoss  
A30-166.11

Stamped on the flats:

|                                                                                     |                                                                                |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 2.37                                                                                | EN specified capacity (kg/h)                                                   |
| EN 80° II                                                                           | Spray angle & Angle index (according to EN 293/EN 299)                         |
| EN specification point                                                              | 1000 kPa (10 bar), 3.4 cSt., 840 kg/m <sup>3</sup><br>Capacity tolerance: ± 4% |
|  | Serial number for internal use                                                 |
| 0.60                                                                                | Reference capacity (USgal/h)                                                   |
| 60° S                                                                               | Spray angle & pattern (H = Hollow, S = Solid, B = Semi-solid)                  |
| Reference specification point                                                       | 700 kPa (7 bar), 3.4 cSt., 820 kg/m <sup>3</sup>                               |

Filters

|                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |
| Capacity 0.20 to 0.35 USgal/h:<br>30 µm sintered bronze                             | Capacity 0.40 to 0.85 USgal/h:<br>45 µm sintered bronze                               |
|  |  |
| Capacity 1.00 to 1.75 USgal/h:<br>75 µm sintered bronze                             | Capacity 2.00 to 11.0 USgal/h:<br>140 µm mesh filter                                  |
|  |                                                                                       |
| Capacity 12.00 to 35.0 USgal/h:<br>without filter                                   |                                                                                       |

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

## Technical data

| Reference capacity<br>USgal/h | Spray angles/patterns |       |       |       | Specified capacity<br>kg/h |
|-------------------------------|-----------------------|-------|-------|-------|----------------------------|
|                               | 30°                   | 45°   | 60°   | 80°   |                            |
| 0.20 <sup>1</sup>             |                       |       | S     |       | 0.76                       |
| 0.25 <sup>1</sup>             |                       |       | S     |       | 0.95                       |
| 0.30 <sup>1</sup>             |                       |       | H S   | H S   | 1.15                       |
| 0.35 <sup>1</sup>             |                       |       | H S   | H S   | 1.35                       |
| 0.40                          |                       | S     | H S   | H S   | 1.46                       |
| 0.45                          |                       | S     | H S   | H S   | 1.66                       |
| 0.50                          | S                     | H S   | H S   | H S   | 1.87                       |
| 0.55                          |                       | H S   | H S   | H S   | 2.11                       |
| 0.60                          | S                     | H S   | H S B | H S B | 2.37                       |
| 0.65                          |                       | H S B | H S B | H S B | 2.67                       |
| 0.75                          | S                     | H S B | H S B | H S B | 2.84                       |
| 0.85                          | S                     | H S   | H S B | H S B | 3.31                       |
| 1.00                          | S                     | H S B | H S B | H S B | 3.72                       |
| 1.10                          |                       | H S   | H S   | H S   | 4.24                       |
| 1.20                          |                       | H S   | H S   | H S   | 4.45                       |
| 1.25                          | S                     | H S B | H S B | H S B | 4.71                       |
| 1.35                          |                       | H S   | H S B | H S   | 5.17                       |
| 1.50                          | S                     | H S B | H S B | H S B | 5.84                       |
| 1.65                          |                       | H S   | H S   | H S   | 6.08                       |
| 1.75                          | S                     | H S   | H S   | H S   | 6.55                       |
| 2.00                          | S                     | H S B | H S B | H S B | 7.42                       |
| 2.25                          | S                     | H S B | H S B | H S   | 8.35                       |
| 2.50                          | S                     | H S B | H S B | H S B | 9.29                       |
| 2.75                          | S                     | H S B | H S B | H S   | 10.5                       |
| 3.00                          | S                     | H S B | H S B | H S B | 11.6                       |
| 3.50                          |                       | S     | S     | S     | 12.9                       |
| 3.75                          |                       | B     | B     |       | 13.8                       |
| 4.00                          |                       | S     | S     | S     | 14.2                       |
| 4.50                          |                       | S B   | S B   | S B   | 16.1                       |
| 5.00                          |                       | S B   | S B   | S B   | 18.5                       |
| 5.50                          |                       | S B   | S B   | S B   | 20.9                       |
| 6.00                          |                       | S B   | S B   | S B   | 23.4                       |
| 6.50                          |                       | B     | B     |       | 26.1                       |
| 7.00                          |                       |       | S     |       | 27.9                       |
| 7.50                          |                       | B     | B     | B     | 29.8                       |
| 8.00                          |                       |       | S     |       | 31.5                       |
| 8.50                          |                       | B     | B     | B     | 33.1                       |
| 9.00                          |                       |       | S     |       | 35.4                       |
| 10.00                         |                       | B     | B     | B     | 37.7                       |
| 11.00                         |                       | B     | B     | B     | 42.5                       |
| 12.00                         |                       | B     | B     | B     | 47.7                       |
| 13.50                         |                       | B     | B     |       | 54.3                       |
| 15.00                         |                       | B     | B     | B     | 60.4                       |
| 17.00                         |                       |       | B     |       | 67.4                       |
| 19.50                         |                       |       | B     | B     | 76.2                       |
| 22.00                         |                       | B     | B     |       | 86.4                       |
| 25.00                         |                       |       | B     |       | 96.7                       |
| 28.00                         |                       |       | B     |       | 109.5                      |
| 31.50                         |                       | B     | B     | B     | 122.5                      |
| 35.00                         |                       | B     |       |       | 133.5                      |

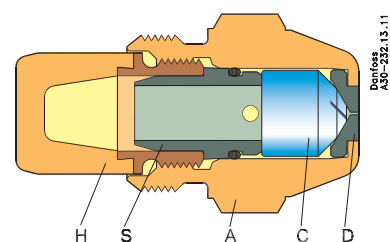
EN nozzles

<sup>1</sup>Capacity tolerances: ±6%

## Design

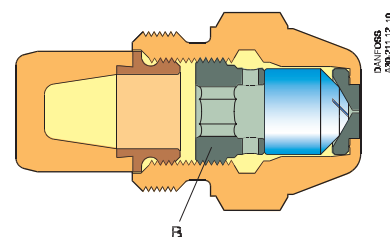
### Sizes 0.20-0.60 USgal/h with O-ring sealing

- A. Nozzle housing
- C. Nozzle cone
- D. Orifice disc
- H. Filter
- S. O-ring holder

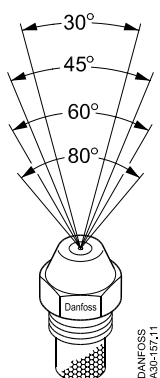


### Sizes 0.65-35.00 USgal/h with bottom screw

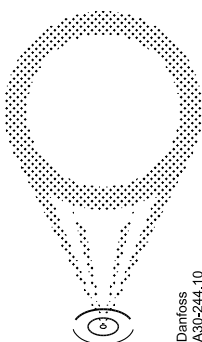
- B. Bottom screw



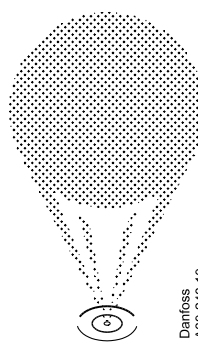
## Spray angles



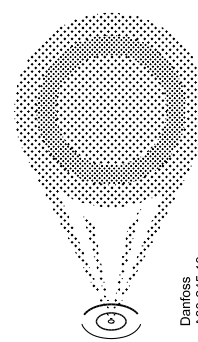
## Spray patterns



H (Hollow)

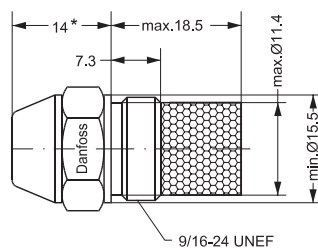


S (Solid)

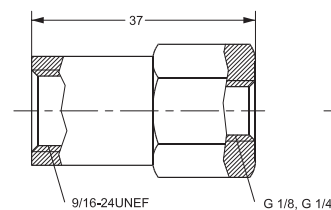
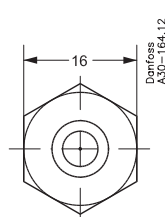


B (Semi-solid)

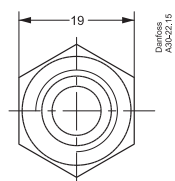
## Dimensions



\*EN standard



Nozzle holder





Additional documentation on burner components is available on <http://heating.danfoss.com/> or <https://store.danfoss.com/>

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