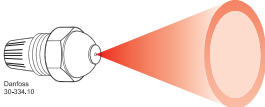
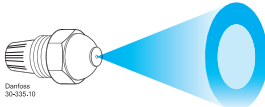
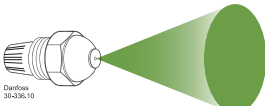
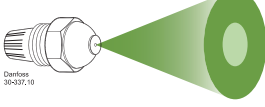
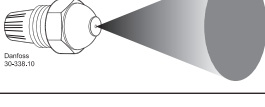





# Oil Burner Nozzles Series – Steel

## Program Overview

For specific information on this product please contact Danfoss Hago Inc.

Spray pattern	Description	Spray angle / Flow range
	<b>"H" – Hollow cone – Red caps</b> The "H" nozzle distributes atomised oil droplets evenly throughout a narrow band inside the outer edge of the spray cone pattern. Typical applications are oil burners that produce a hollow air pattern and lower firing rate applications.	For available spray angles and flow rate range, please refer to our standard program on US steel nozzles shown on page 2.  For other requests, please contact Danfoss Hago.
	<b>"S-S" – Semi Solid cone – Blue caps</b> The "S-S" nozzle distributes atomised oil droplets evenly throughout the entire spray cone pattern at lower flow rates, however the spray cone pattern becomes more hollow as the flow rate increases. The "S-S" nozzle is good for applications where exact burner air pattern characteristics cannot be determined or where the use of a defined hollow or solid spray pattern is not providing good combustion results. The "S-S" nozzle can be used as replacement for the "W" Universal nozzle or the "HO" nozzle as well.	
	<b>"ES" – Solid cone – Green caps</b> The "ES" nozzle distributes atomised oil droplets evenly throughout the spray pattern in low firing rate applications. For those applications specifying an "ES" type solid spray pattern, this nozzle will provide optimum combustion efficiency.	
	<b>"P" – Solid cone – Green caps</b> The "P" nozzle produces a solid spray cone pattern in the lower flow rates and becomes more hollow as the flow rate increases. This nozzle series is an extension of the "B" and "ES" nozzle series. Specially designed with a pocketed disc, the "P" nozzle reduces combustion noise and flame pulsation in applications.	
	<b>"B" – Solid cone – Black caps</b> The "B" nozzle concentrates distribution of atomised oil droplets towards the center of the spray cone pattern. Designed for high static pressure oil burners specifying a type "B" spray pattern, this nozzle will provide optimum combustion efficiency in these applications.	
	<b>"DFN" Dual filtration – White caps</b> The "DFN" nozzle is available in hollow (H-DFN) and solid (B-DFN) spray patterns. Dual filters enhance protection and increase reliability against clogging in low flow rate nozzles.	

**Save time  
and money**

with our well-known  
programs of steel nozzles.





## US Steel Nozzles – sizes available

### Hollow spray pattern

Type H (Hollow)					
GPH	30°	45°	60°	70°	80°
0.65					
0.70					
0.75					
0.85					
0.90					
1.00					
1.10					
1.20					
1.25					
1.35					
1.50					
1.65					
1.75					
2.00					
2.25					
2.50					
2.75					
3.00					
3.25					
3.50					
3.75					
4.00					
4.25					
4.50					
5.00					
5.50					
6.00					
6.50					
7.00					
7.50					
8.00					
8.50					
9.00					
9.50					
10.00					
11.00					
12.00					
13.00					
14.00					
15.00					
16.00					
17.00					
18.00					
19.00					
20.00					

Type H DFN (Hollow)		
GPH	60°	80°
0.30		
0.40		
0.45		
0.50		
0.55		
0.60		

	Normally stocked
	Speical order – Minimum order qty = 192
	Special order – Minimum order qty = 96

### Semi-Solid spray pattern

Type SS (Semi-Solid)						
GPH	45°	60°	70°	80°	90°	
0.65						
0.75						
0.85						
0.90						
1.00						
1.10						
1.20						
1.25						
1.35						
1.50						
1.65						
1.75						
2.00						
2.25						
2.50						
2.75						
3.00						
3.25						
3.50						
3.75						
4.00						
4.25						
4.50						
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9.50						
10.00						
11.00						
12.00						
13.00						
14.00						
15.00						
16.00						
17.00						
18.00						
19.00						
20.00						
21.00						
22.00						
23.00						
24.00						
25.00						
26.00						
27.00						
28.00						
29.00						
30.00						
31.00						
32.00						

### Solid spray pattern

Type ES (Solid)				
GPH	45°	60°	70°	80°
0.65				
0.70				
0.75				
0.85				
0.90				
1.00				
1.10				
1.20				
1.25				
1.35				
1.50				
1.65				
1.75				

Type B (Solid)				
GPH	45°	60°	70°	80°
0.65				
0.75				
0.85				
0.90				
1.00				
1.10				
1.20				
1.25				
1.35				
1.50				
1.65				
1.75				
2.00				

Type P (Solid)				
GPH	45°	60°	70°	80°
2.00				
2.25				
2.50				
2.75				
3.00				
3.25				
3.50				
3.75				
4.00				
4.25				
4.50				
5.00				
5.50				
6.00				
6.50				
7.00				
7.50				
8.00				
8.50				
9.00				
10.00				
11.00				
12.00				
13.00				
14.00				
15.00				
16.00				
17.00				
18.00				
19.00				
20.00				
21.00				
22.00				
23.00				
24.00				
25.00				

Type B DFN (solid)		
GPH	60°	80°
0.30		
0.35		
0.40		
0.45		
0.50		
0.55		
0.65		

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