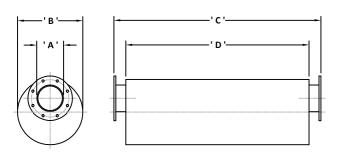


## HSEA & HSEA-SE Type: High Speed **Expansion/Absorption Exhaust Gas** Silencers. 25dB(A) Insertion Loss

## **AXIAL INLET & AXIAL OUTLET VERSIONS**

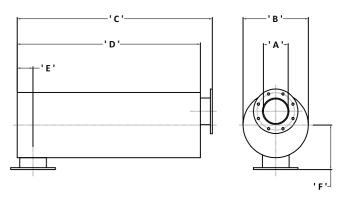


Silencer Part Number	'A'	'B'	'C'	'D'	Wt. (kg)
HSEA 038 (F&S)	38.1	115.0	550.0	470.0	2.8
HSEA 050 (F&S)	50.8	140.0	725.0	635.0	5.7
HSEA 063 (F&S)	63.5	178.0	840.0	750.0	10.2
HSEA 075 (F&S)	76.2	203.0	1030.0	880.0	12.8
HSEA 090 (F&S)	88.9	260.0	1210.0	1060.0	24.0
HSEA 100 (F&S)	101.6	280.0	1210.0	1060.0	29.0
HSEA 125 (F)	127.0	360.0	1210.0	1060.0	40.0
HSEA 150 (F)	152.4	410.0	1420.0	1270.0	47.0
HSEA 175 (F)	177.8	460.0	1500.0	1350.0	77.0
HSEA 200 (F)	203.2	510.0	1650.0	1500.0	100.0
HSEA 225 ( F )	228.6	560.0	1750.0	1600.0	140.0
HSEA 250 (F)	254.0	610.0	2050.0	1900.0	210.0
HSEA 300 ( F )	304.8	710.0	2400.0	2200.0	349.0
HSEA 350 (F)	355.6	820.0	2600.0	2400.0	410.0

- 'S' denotes B.S.P. Screwed versions are available as standard.
  'F' denotes Flanged Versions are available in BS 10 Table 'b' drillings as standard.
  All the dimensions and weights given are approximate and may vary under manufactur

All dimensions and weights given are not binding and may change without prior warning. Larger sizes are available upon request as well as bespoke design and manufacture. All units can be installed vertically or horizontally without detriment acoustically.

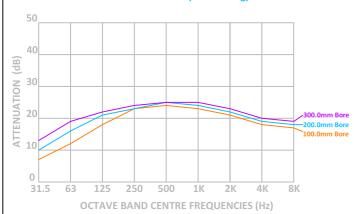
## **RADIAL INLET & AXIAL OUTLET VERSIONS**



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HSEA 038-SE (F&S)	38.1	115.0	510.0	475.0	50.0	95.0	2.8
HSEA 050-SE (F&S)	50.8	140.0	770.0	635.0	50.0	105.0	5.7
HSEA 063-SE (F&S)	63.5	178.0	785.0	750.0	60.0	135.0	10.2
HSEA 075-SE (F&S)	76.2	203.0	955.0	880.0	65.0	180.0	12.8
HSEA-SE 090 (F&S)	88.9	260.0	1135.0	1060.0	70.0	205.0	24.0
HSEA-SE 100 (F&S)	101.6	280.0	1135.0	1060.0	75.0	215.0	29.0
HSEA-SE 125 ( F )	127.0	360.0	1135.0	1060.0	90.0	255.0	40.0
HSEA-SE 150 (F)	152.4	410.0	1345.0	1270.0	100.0	280.0	47.0
HSEA-SE 175 (F)	177.8	460.0	1425.0	1350.0	115.0	305.0	77.0
HSEA-SE 200 ( F )	203.2	510.0	1575.0	1500.0	127.0	330.0	100.0
HSEA-SE 225 ( F )	228.6	560.0	1675.0	1600.0	150.0	355.0	140.0
HSEA-SE 250 ( F )	254.0	610.0	1975.0	1900.0	165.0	380.0	210.0
HSEA-SE 300 ( F )	304.8	710.0	2300.0	2200.0	190.0	455.0	349.0
HSEA-SE 350 ( F )	355.6	820.0	2500.0	2400.0	215.0	510.0	410.0

All units are manufactured from mild carbon steel to BS-EN 10025 S275JR or equal. The standard external protection is one coat heat resisting aluminium paint suitable for elevated temperatures. Alternative finishes including such processes as Aluminium/Zinc metal spray and galvanizing are available at extra cost, if required. Alternative materials of construction are available if required. These include stainless steel Types 321, 316, 3161, 304 3041 as well as Corten A & B, Monel & Brass All units are supplied with drain points if required.

## **TYPICAL INSERTION LOSS FIGURES FOR HSEA & HSEA-SE TYPE UNITS (Not Binding)**



The HSEA & HSEA-SE (Side-Entry) type exhaust gas silencer is a small envelope design, simple energy converter utilizing both the expansion and reflection qualities of the pure resonator designs with the added ability use the exhaust gas noise energy to excite individual fibres of different lengths in the acoustic infill to create friction resulting in heat energy which is then dissipated to the silencer casing or passed into the exhaust gas flow. The design also inadvertently uses the Helmholz principle to increase the overall insertion loss to approximately 25 dB(A)to give a silencer with a lower pressure drop and good capabilities at the middle frequencies of the octave band width.

Primarily designed for use on high speed diesel and petrol engines running up to 3,800 rpm such as pump sets, lighting rigs and other similar applications. The design has also been used quite successfully in military and commercial vehicle, P.S.V and off road vehicles all terrain vehicles over the years. The equipment can be used as stock type silencer for many varied installations. Due to the the overall effect on the centre frequencies of the octave band spectrum, this design can be used singularly as a stand alone unit, alternatively be close coupled or remotely mounted with a HSLS, HESLS or HXSLS series, dissipative silencer to reduce exhaust gas noise levels to very low acoustic levels for mobile packages with a smaller footprint than the standard ranges of silencers produced. Consult PGS Engineering staff for further details prior to order.