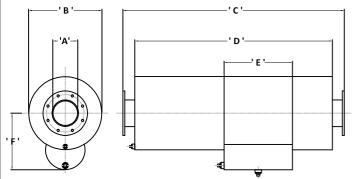


## **HPAA 1 Type: Expansion/Dissipative Spark Arrestor Exhaust Gas Silencers** 25dB(A)Insertion loss

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



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HPAA1 050 (F&S)	50.8	210.0	950.0	800.0	180.0	155.0	11.5
HPAA1063 (F&S)	63.5	260.0	950.0	800.0	180.0	205.0	18.0
HPAA1 075 (F&S)	76.2	260.0	1000.0	850.0	180.0	225.0	29.5
HPAA1 090 (F&S)	88.9	310.0	1150.0	1000.0	180.0	275.0	36.0
HPAA1 100 (F&S)	101.6	360.0	1200.0	1050.0	230.0	275.0	40.5
HPAA1 125 (F)	127.0	410.0	1300.0	1150.0	280.0	300.0	55.0
HPAA1 150 (F)	152.4	460.0	1550.0	1400.0	280.0	355.0	88.0
HPAA1 175 (F)	177.8	510.0	1650.0	1500.0	430.0	380.0	118.0
HPAA1 200 (F)	203.2	560.0	1800.0	1650.0	430.0	405.0	136.0
HPAA1 225 (F)	228.6	610.0	2000.0	1850.0	430.0	430.0	163.0
HPAA1 250 (F)	254.0	660.0	2200.0	2020.0	430.0	455.0	232.0
HPAA1 300 (F)	304.8	760.0	2400.0	2220.0	430.0	505.0	417.0
HPAA1 350 (F)	355.6	920.0	2700.0	2520.0	585.0	605.0	577.0
HPAA1 400 (F)	406.4	1020.0	3000.0	2820.0	585.0	655.0	722.0
HPAA1 450 (F)	457.2	1170.0	3200.0	3000.0	585.0	730.0	880.0
HPAA1 500 (F)	508.0	1270.0	3500.0	3300.0	736.0	810.0	1085.0
HPAA1 550 (F)	558.8	1370.0	3800.0	3600.0	736.0	855.0	1365.0
HPAA1 600 (F)	609.6	1470.0	4000.0	3800.0	736.0	930.0	1628.0

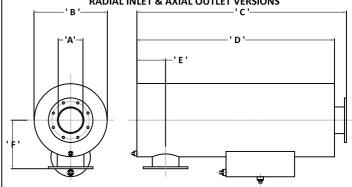
- 'S' denotes B.S.P. Screwed versions are available as standard
- 'F' denotes Flanged versions are available in BS 10 Table 'D' drillings as standard. given are in millimeters.

All weights stated are in kilograms.

All the dimensions and weights given are approximate and may vary under manufacturing conditions

All dimensions and weights given are applications and may only under manufacturing. All dimensions and weights given are not binding and may change without prior warning. All units can be installed vertically, horizontally without detriment acoustically. Acoustic treatment available for the primary chamber, if required. Add 100.0mm to Dimension 'B' for acoustically treated versions.

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



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HPAA1-SE 050 ( F & S )	50.8	210.0	875.0	800.0	60.0	180.0	11.3
HPAA1-SE 063 ( F & S )	63.5	260.0	875.0	800.0	70.0	205.0	17.8
HPAA1-SE 075 ( F & S )	76.2	310.0	975.0	850.0	75.0	230.0	29.3
HPAA1-SE 090 ( F & S )	88.9	360.0	925.0	1000.0	80.0	255.0	35.8
HPAA1-SE 100 ( F & S )	101.6	360.0	1125.0	1050.0	90.0	255.0	40.3
HPAA1-SE 125 (F)	127.0	410.0	1225.0	1150.0	110.0	280.0	54.5
HPAA1-SE 150 (F)	152.4	460.0	1475.0	1400.0	130.0	305.0	87.5
HPAA1-SE 175 (F)	177.8	510.0	1575.0	1500.0	140.0	330.0	117.0
HPAA1-SE 200 (F)	203.2	560.0	1675.0	1650.0	165.0	355.0	135.0
HPAA1-SE 225 (F)	228.6	610.0	1925.0	1850.0	175.0	380.0	162.0
HPAA1-SE 250 (F)	254.0	660.0	2110.0	2020.0	185.0	420.0	230.0
HPAA1-SE 300 (F)	304.8	760.0	2310.0	2220.0	210.0	470.0	415.0
HPAA1-SE 350 (F)	355.6	920.0	2610.0	2520.0	250.0	550.0	575.0
HPAA1-SE 400 (F)	406.4	1020.0	2910.0	2820.0	280.0	600.0	720.0
HPAA1-SE 450 (F)	457.2	1170.0	3100.0	3000.0	270. 0	685.0	877.0
HPAA1-SE 500 (F)	508.0	1270.0	3400.0	3300.0	300.0	735.0	1081.0
HPAA1-SE 550 (F)	558.8	1370.0	3700.0	3600.0	330.0	785.0	1360.0
HPAA1-SE 600 (F)	609.6	1470.0	3900.0	3800.0	360.0	885.0	1623.0

The 'F' dimension is variable anywhere between the two dimensions given in millimeters. 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.

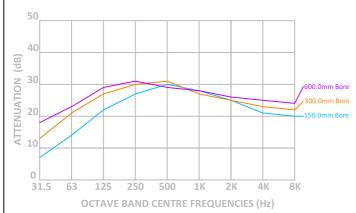
Alternative materials of construction are available if required. These include stainless steel

Types 321, 316, 316L, 304 304L as well as Corten A & B, Monel & Brass

All units are supplied with cleaning and drain points.

Conforms to EEC 98/37/EC & BS-EN 1834-1, Machinery Directives and all known amendments.

## **TYPICAL INSERTION LOSS FIGURES FOR HPAA-1 & HPAA1-SE TYPE UNITS (Not Binding)**



The HPAA1 & HPAA1-SE (Side-Entry) type, spark arrestor exhaust gas silencers utilizes both the low and middle frequency expansion/reflection principles as well as the high frequency dissipative techniques of the mineral fibre packed straight line silencer. These complimentary energy conversion systems effectively convert noise energy into heat energy, which is then carried away by the silencer casing or the exhaust gas flow into the surrounding atmosphere. The two concepts acting together provide a design that gives good broad spectrum coverage at all frequencies. This coupled to the highly efficient centrifugal spark arrestor design produces a silencer with an overall noise reduction capability of approximately 25dB(A) dependant upon the engine firing frequency and power output of the driver concerned with a slightly lower pressure drop than the HPA series. Acoustically treated versions are readily available upon request with higher acoustic performance. The equipment can be used stand alone silencer on a varied range of applications and as the exacting spark arresting performance meets the requirements of EEC 98/37/EC and BS 1834-1 Machinery Directive and all their amendments, this design is ideal for hazardous on-shore based power generation applications as well a multitude of off-shore marine installations. The design can also be close coupled or remotely mounted to an HSLS, HESLS or HXSLS series, dissipative silencer to reduce exhaust gas noise to a lower more acceptable emission level suitable for any environment where the specific need arises.

The range of units can also be supplied in various austenitic stainless steel options if requested. Consult PGS Engineering staff for further details prior to order.