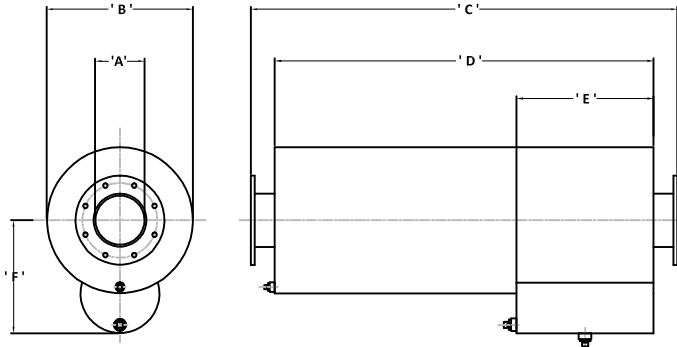




HPA 2 Type: Centrifugal Resonator Spark Arrestor Exhaust Gas Silencers 24dB(A) Insertion Loss

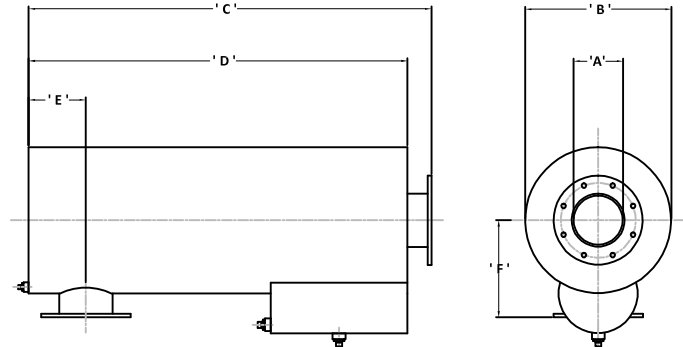
AXIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HPA2 038 (F & S)	38.1	210.0	760.0	610.0	180.0	155.0	4.0
HPA2 050 (F & S)	50.8	210.0	760.0	610.0	180.0	155.0	5.0
HPA2 063 (F & S)	63.5	260.0	870.0	720.0	180.0	205.0	8.0
HPA2 075 (F & S)	76.2	310.0	970.0	820.0	180.0	225.0	14.0
HPA2 090 (F & S)	88.9	360.0	1070.0	920.0	230.0	275.0	30.0
HPA2 100 (F & S)	101.6	360.0	1220.0	1070.0	280.0	275.0	44.0
HPA2 125 (F)	127.0	410.0	1400.0	1250.0	280.0	300.0	52.0
HPA2 150 (F)	152.4	460.0	1600.0	1450.0	430.0	355.0	75.0
HPA2 175 (F)	177.8	510.0	1750.0	1600.0	430.0	380.0	110.0
HPA2 200 (F)	203.2	560.0	1930.0	1780.0	430.0	405.0	135.0
HPA2 225 (F)	228.6	610.0	2100.0	1900.0	430.0	430.0	175.0
HPA2 250 (F)	254.0	660.0	2310.0	2130.0	430.0	455.0	200.0
HPA2 300 (F)	304.8	760.0	2770.0	2590.0	430.0	505.0	330.0
HPA2 350 (F)	355.6	920.0	2970.0	2790.0	585.0	605.0	430.0
HPA2 400 (F)	406.4	1020.0	3020.0	2840.0	585.0	655.0	600.0
HPA2 450 (F)	457.2	1170.0	3230.0	3030.0	585.0	730.0	830.0
HPA2 500 (F)	508.0	1270.0	3660.0	3460.0	736.0	810.0	970.0
HPA2 550 (F)	558.8	1370.0	4100.0	3900.0	736.0	855.0	1195.0
HPA2 600 (F)	609.6	1530.0	4300.0	4000.0	736.0	930.0	1500.0

'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.
All dimensions 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 not binding and may change without prior warning.
All units can be installed vertically, horizontally without detriment acoustically.
Acoustical treatment of primary chamber casing available, if required.
Add 100.0mm to Dimensions 'B' for acoustically treated versions.

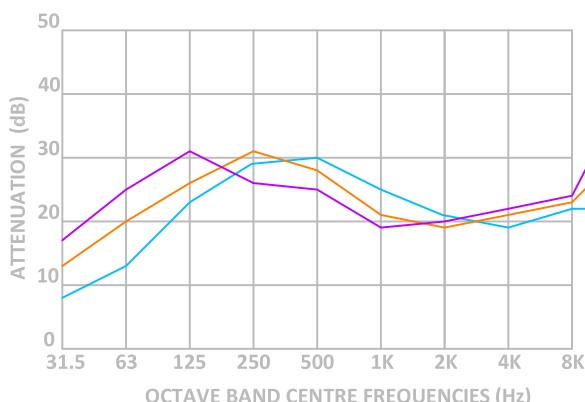
RADIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HPA2-SE 038 (F & S)	38.1	210.0	685.0	610.0	60.0	180.0	3.9
HPA2-SE 050 (F & S)	50.8	210.0	685.0	610.0	70.0	180.0	4.9
HPA2-SE 063 (F & S)	63.5	260.0	785.0	720.0	80.0	205.0	7.8
HPA2-SE 075 (F & S)	76.2	310.0	895.0	820.0	90.0	230.0	13.8
HPA2-SE 090 (F & S)	88.9	360.0	995.0	920.0	100.0	255.0	29.7
HPA2-SE 100 (F & S)	101.6	360.0	1145.0	1070.0	125.0	255.0	43.5
HPA2-SE 125 (F)	127.0	410.0	1325.0	1250.0	150.0	280.0	51.5
HPA2-SE 150 (F)	152.4	460.0	1525.0	1450.0	180.0	305.0	74.0
HPA2-SE 175 (F)	177.8	510.0	1675.0	1600.0	190.0	330.0	109.0
HPA2-SE 200 (F)	203.2	560.0	1855.0	1780.0	210.0	355.0	134.0
HPA2-SE 225 (F)	228.6	610.0	1990.0	1900.0	210.0	480.0	173.0
HPA2-SE 250 (F)	254.0	660.0	2220.0	2130.0	280.0	420.0	198.0
HPA2-SE 300 (F)	304.8	760.0	2680.0	2590.0	290.0	470.0	327.0
HPA2-SE 350 (F)	355.6	920.0	2880.0	2790.0	305.0	550.0	427.0
HPA2-SE 400 (F)	406.4	1020.0	2930.0	2840.0	330.0	600.0	595.0
HPA2-SE 450 (F)	457.2	1170.0	3130.0	3030.0	365.0	685.0	820.0
HPA2-SE 500 (F)	508.0	1270.0	3560.0	3460.0	400.0	735.0	960.0
HPA2-SE 550 (F)	558.8	1370.0	4000.0	3900.0	430.0	785.0	1190.0
HPA2-SE 600 (F)	609.6	1530.0	4150.0	4000.0	460.0	915.0	1490.0

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 drain points.
Conforms to EEC 98/37/EC and BS-EN 1834-1 Machinery Directives and all amendments.

TYPICAL INSERTION LOSS FIGURES FOR HPA2 & HPA2-SE TYPE UNITS (Not Binding)



The HPA2 & HPA2-SE (Side-Entry) type, spark arrestor exhaust gas silencers are a simple energy converter design utilizing the exhaust gas velocity and differing volumes to create rapid changes in exhaust gas speed resulting in noise energy conversion in to heat energy which is then dissipated to the silencer casing or carried away by the exhaust gas flow. The design also uses the reflective principles well known in acoustic work to bounce dominant frequencies back on themselves canceling each other out. This increases the overall insertion loss to 24dB(A) at the lower frequencies including the fundamental firing frequency of the engine to give a silencer with medium pressure drop and good capabilities at the lower range frequencies. Acoustically treated versions are readily available upon request with higher acoustic insertion losses.

The design also cleverly incorporates a highly efficient centrifugal spark arrestor capability and can be used as a stand alone module for hazardous marine and onshore applications meeting the requirements of the EEC 98/37/EC and BS-EN 1834-1 Machinery Directives and all their amendments. The design can also be close coupled or remotely mounted to a HSLS, HESLS or HXSLS series dissipative silencer to reduce exhaust gas noise to a lower more acceptable emission level dependent upon the actual specification requirements.

The design is also available in various austenitic stainless steel for offshore applications subject to acceptable certification requirements being met in full Consult PGS Engineering Staff for further details prior to order.