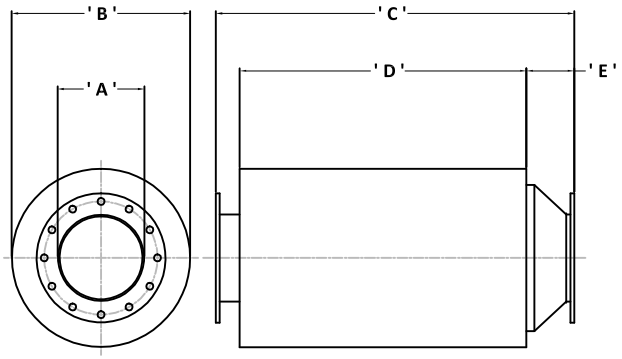
HPSS1 & HPSS1-SE Type: Central Pod-Low Pressure Drop - Air Intake Attenuator - 35dB(A) Insertion Loss

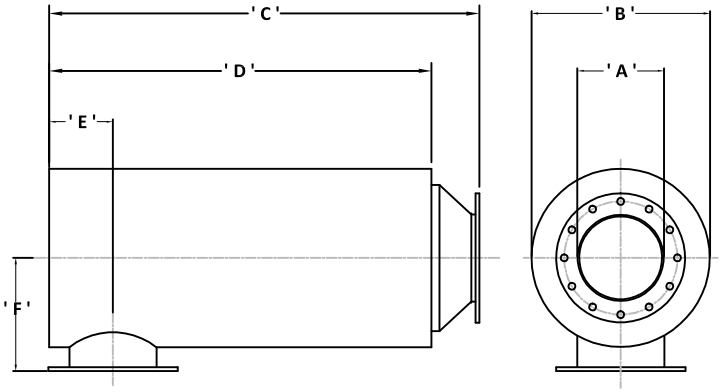
AXIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	Wt. (kg)
HPSS1 300 (F)	304.8	610.0	1250.0	1000.0	150.0	120.0
HPSS1 350 (F)	355.6	710.0	1450.0	1200.0	150.0	170.0
HPSS1 400 (F)	406.4	760.0	1650.0	1350.0	200.0	225.0
HPSS1 450 (F)	457.2	810.0	1800.0	1500.0	200.0	275.0
HPSS1 500 (F)	508.0	920.0	2100.0	1750.0	250.0	395.0
HPSS1 550 (F)	558.8	1020.0	2400.0	2050.0	250.0	470.0
HPSS1 600 (F)	609.6	1070.0	2550.0	2200.0	250.0	610.0
HPSS1 650 (F)	660.4	1120.0	2650.0	2300.0	250.0	725.0
HPSS1 700 (F)	711.2	1170.0	2850.0	2500.0	250.0	830.0
HPSS1 750 (F)	762.0	1220.0	3050.0	2650.0	300.0	900.0
HPSS1 800 (F)	812.8	1270.0	3250.0	2850.0	300.0	1050.0
HPSS1 850 (F)	863.6	1320.0	3450.0	3050.0	300.0	1420.0
HPSS1 900 (F)	914.4	1370.0	3600.0	3200.0	300.0	1640.0

'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 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.
Smaller & larger sizes are available upon request as well as bespoke design and manufacture.
All units can be installed vertically or horizontally without detriment acoustically.

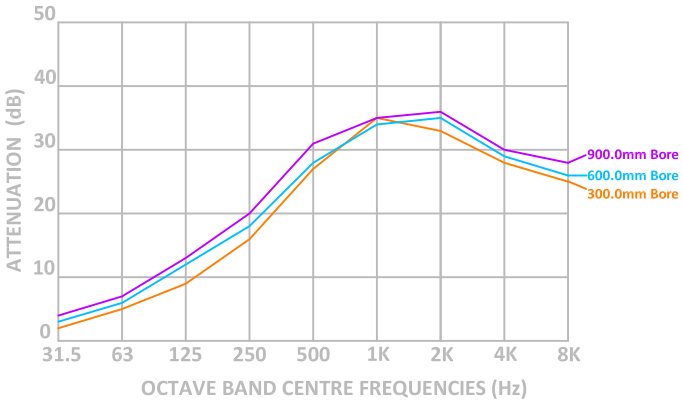
RADIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HPSS1-SE 300 (F)	304.8	610.0	1700.0	1450.0	225.0	405.0	160.0
HPSS1-SE 350 (F)	355.6	710.0	1950.0	1700.0	250.0	455.0	230.0
HPSS1-SE 400 (F)	406.4	760.0	2200.0	1900.0	275.0	480.0	300.0
HPSS1-SE 450 (F)	457.2	810.0	2500.0	2100.0	300.0	505.0	360.0
HPSS1-SE 500 (F)	508.0	920.0	2750.0	2400.0	325.0	560.0	510.0
HPSS1-SE 550 (F)	558.8	1020.0	3150.0	2750.0	350.0	610.0	600.0
HPSS1-SE 600 (F)	609.6	1070.0	3300.0	2950.0	375.0	635.0	800.0
HPSS1-SE 650 (F)	660.4	1120.0	3450.0	3100.0	400.0	660.0	925.0
HPSS1-SE 700 (F)	711.2	1170.0	3700.0	3350.0	425.0	685.0	1030.0
HPSS1-SE 750 (F)	762.0	1220.0	3950.0	3550.0	450.0	710.0	1175.0
HPSS1-SE 800 (F)	812.8	1270.0	4200.0	3800.0	475.0	735.0	1350.0
HPSS1-SE 850 (F)	863.6	1320.0	4450.0	4050.0	500.0	760.0	1660.0
HPSS1-SE 900 (F)	914.4	1370.0	4650.0	4250.0	525.0	785.0	2000.0

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, 316L, 304, 304L, as well as Corten A & B, Monel & Brass
All units are supplied with drain points,where required.

TYPICAL INSERTION LOSS FIGURES FOR HPSS1 & HPSS1-SE TYPE UNITS (Not Binding)



The HPSS1 & HPSS1-SE (Side-Entry) type air intake attenuators are relatively simple energy converting units, utilizing both the flow energy in the intake duct and upstream noise from axial or centrifugal fans, turbochargers, superchargers or roots blowers or other such air moving equipment to excite individual fibres of different lengths in the acoustic infill to create friction resulting in heat energy being formed, which is then dissipated to the air flow.
The design also inadvertently uses the Helmholtz principle to increase the insertion loss to approximately 35 dB(A) giving a clean type silencer with a low pressure drop and good capabilities at 500 hertz and greater in the octave band spectrum.
The design has a central pod totally obscuring the line of sight which combats the flow velocity noise associated with the vast quantities of cool air required to feed all forms of internal combustion engines, small gas turbines, boilers and blowers of all sizes and configurations.
With additional modifications the silencer design can be used inline in low pressure pipelines for steam, air, or gas lines, where noise radiation is evident. Under the same circumstances the equipment can also be used for discharge applications on similar products including internal combustion engine exhaust gas systems including boiler flues, chimneys and stacks. The concept can also be extended to longer lengths increasing the insertion loss with little or no increase in pressure drop to cope with the most arduous noise tasks and installations.
Consult PGS Engineering Staff for further details prior to order.