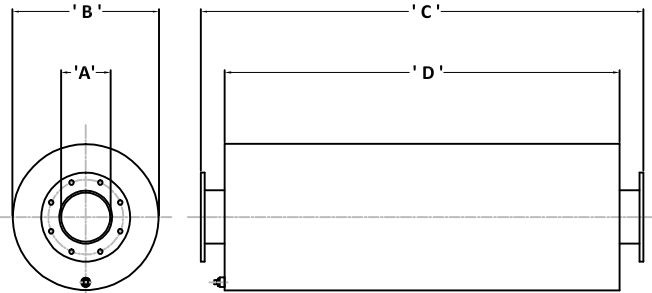




HPRA 1 Type: Expansion/Dissipative Exhaust Gas Silencers.

25dB(A) Insertion Loss

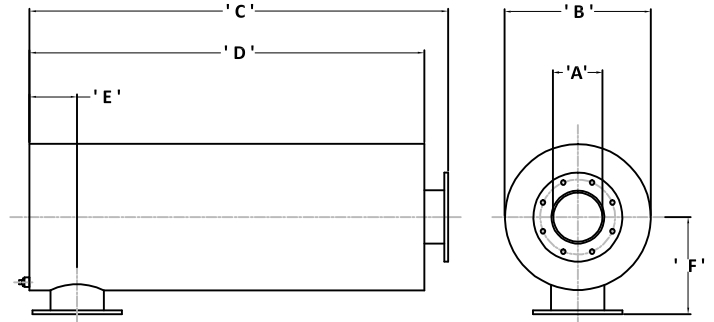
AXIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	Wt. (kg)
HPRA1 050 (F & S)	50.8	210.0	950.0	800.0	12.0
HPRA1 063 (F & S)	63.5	260.0	950.0	800.0	19.0
HPRA1 075 (F & S)	76.2	260.0	1000.0	850.0	30.5
HPRA1 090 (F & S)	88.9	310.0	1100.0	950.0	37.0
HPRA1 100 (F & S)	101.6	360.0	1200.0	1050.0	41.5
HPRA1 125 (F)	127.0	410.0	1300.0	1150.0	56.0
HPRA1 150 (F)	152.4	460.0	1550.0	1400.0	90.0
HPRA1 175 (F)	177.8	510.0	1650.0	1500.0	120.0
HPRA1 200 (F)	203.2	560.0	1800.0	1650.0	138.0
HPRA1 225 (F)	228.6	610.0	2000.0	1850.0	165.0
HPRA1 250 (F)	254.0	660.0	2200.0	2020.0	235.0
HPRA1 300 (F)	304.8	760.0	2400.0	2220.0	420.0
HPRA1 350 (F)	355.6	920.0	2700.0	2520.0	580.0
HPRA1 400 (F)	406.4	1020.0	3000.0	2820.0	725.0
HPRA1 450 (F)	457.2	1170.0	3200.0	3000.0	884.0
HPRA1 500 (F)	508.0	1270.0	3500.0	3300.0	1090.0
HPRA1 550 (F)	558.8	1370.0	3800.0	3600.0	1371.0
HPRA1 600 (F)	609.6	1470.0	4000.0	3800.0	1635.0

'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.
 Add 100.0mm to Dimensions 'B' for acoustically treated versions

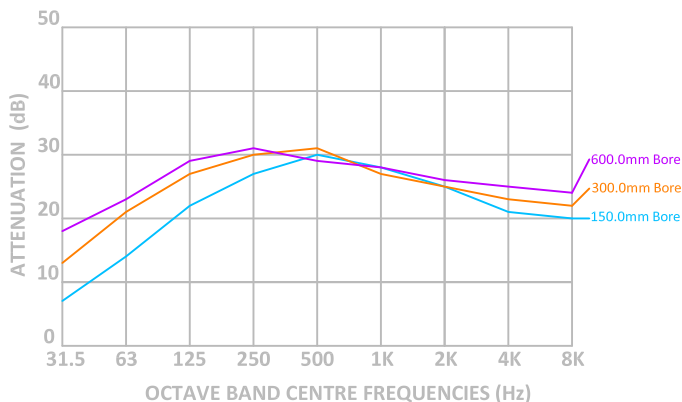
RADIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HPRA1-SE 050 (F & S)	50.8	210.0	875.0	800.0	50.0/ 210.0	180.0	11.7
HPRA1-SE 063 (F & S)	63.5	260.0	875.0	800.0	70.0/ 260.0	205.0	18.7
HPRA1-SE 075 (F & S)	76.2	260.0	925.0	850.0	80.0/ 260.0	205.0	30.0
HPRA1-SE 090 (F & S)	88.9	310.0	1025.0	950.0	90.0/ 310.0	230.0	36.5
HPRA1-SE 100 (F & S)	101.6	360.0	1125.0	1050.0	95.0/ 360.0	255.0	41.0
HPRA1-SE 125 (F)	127.0	410.0	1225.0	1150.0	110.0/ 410.0	280.0	55.0
HPRA1-SE 150 (F)	152.4	460.0	1625.0	1550.0	120.0/ 460.0	305.0	89.0
HPRA1-SE 175 (F)	177.8	510.0	1725.0	1650.0	135.0/ 520.0	355.0	118.0
HPRA1-SE 200 (F)	203.2	560.0	1925.0	1850.0	145.0/ 600.0	380.0	136.0
HPRA1-SE 225 (F)	228.6	610.0	2110.0	2020.0	165.0/ 620.0	380.0	162.0
HPRA1-SE 250 (F)	254.0	660.0	2310.0	2220.0	180.0/ 725.0	420.0	233.0
HPRA1-SE 300 (F)	304.8	760.0	2610.0	2520.0	205.0/ 740.0	470.0	417.0
HPRA1-SE 350 (F)	355.6	920.0	2910.0	2820.0	230.0/ 850.0	550.0	575.0
HPRA1-SE 400 (F)	406.4	1020.0	3220.0	3030.0	255.0/ 940.0	600.0	720.0
HPRA1-SE 450 (F)	457.2	1170.0	3400.0	3200.0	290.0/1050.0	660.0	880.0
HPRA1-SE 500 (F)	508.0	1270.0	3600.0	3400.0	320.0/1200.0	710.0	1085.0
HPRA1-SE 550 (F)	558.8	1370.0	3700.0	3600.0	345.0/1300.0	785.0	1365.0
HPRA1-SE 600 (F)	609.6	1470.0	3900.0	3800.0	380.0/1400.0	835.0	1630.0

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.

TYPICAL INSERTION LOSS FIGURES FOR HPRA-1 & HPRA1-SE TYPE UNITS (Not Binding)



The HPRA1 & HPRA1-SE (Side-Entry) type exhaust gas silencers utilizing both the low frequency expansion/reflection principles as well as the high frequency dissipative techniques of the mineral fibre packed straight line silencer. These complimentary conversion systems effectively transpose noise energy into heat energy, which is then carried away by the exhaust gas flow or via the silencer casing to atmosphere. The two concepts acting together provide a design that gives good low frequency attenuation coupled to the medium and higher frequencies of the octave band width to give a broad spectrum coverage. This produces a silencer with an overall noise reduction capability of approximately 25dB(A) dependant upon the engine firing frequency and power output of the main prime mover under consideration with a lower pressure drop than the HP series. Acoustically treated versions are readily available with increased insertion loss capabilities as required. The design is aimed at providing a noise level approximately 95dB(A) at one meter from the exhaust outlet and can be used as a single primary silencer on large and small diesel powered generators in a variety of mobile, and stationary situations, main propulsion and power generation in marine installations as well as heavy, medium and small pumping applications, where noise is not considered to be a major factor to the immediate local surroundings. The design can also be close coupled or remotely mounted to the SLS, ESLs or XSLs series dissipative acoustically packed low pressure drop straight line silencer to reduce exhaust gas noise to a lower more acceptable emission level suitable for any environment where the need arises. Consult PGS Engineering Staff for further details prior to order.