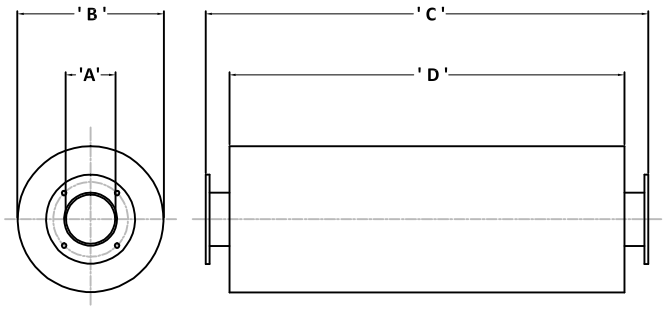
HPRA 2 Type: Expansion/Dissipative Exhaust Gas Silencers. 35dB(A) Insertion Loss

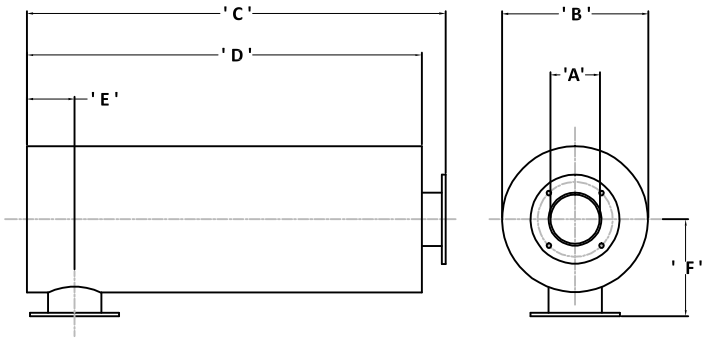
AXIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	Wt. (kg)
HPRA2 050 (F & S)	50.8	210.0	1200.0	1050.0	15.5
HPRA2 063 (F & S)	63.5	260.0	1300.0	1150.0	23.5
HPRA2 075 (F & S)	76.2	260.0	1400.0	1250.0	35.5
HPRA2 090 (F & S)	88.9	310.0	1500.0	1350.0	42.0
HPRA2 100 (F & S)	101.6	360.0	1600.0	1450.0	51.5
HPRA2 125 (F)	127.0	410.0	1800.0	1650.0	71.0
HPRA2 150 (F)	152.4	460.0	2000.0	1850.0	110.0
HPRA2 175 (F)	177.8	510.0	2350.0	2200.0	142.0
HPRA2 200 (F)	203.2	560.0	2700.0	2550.0	175.0
HPRA2 225 (F)	228.6	610.0	2800.0	2650.0	195.0
HPRA2 250 (F)	254.0	660.0	2900.0	2720.0	305.0
HPRA2 300 (F)	304.8	760.0	3200.0	3020.0	520.0
HPRA2 350 (F)	355.6	920.0	3600.0	3420.0	724.0
HPRA2 400 (F)	406.4	1020.0	4000.0	3820.0	915.0
HPRA2 450 (F)	457.2	1170.0	4200.0	4000.0	1118.0
HPRA2 500 (F)	508.0	1270.0	4600.0	4400.0	1342.0
HPRA2 550 (F)	558.8	1370.0	5000.0	4800.0	1713.0
HPRA2 600 (F)	609.6	1470.0	5300.0	5000.0	2046.0

'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.
Acoustic treatment of the primary and secondary chamber cases are available, if required.

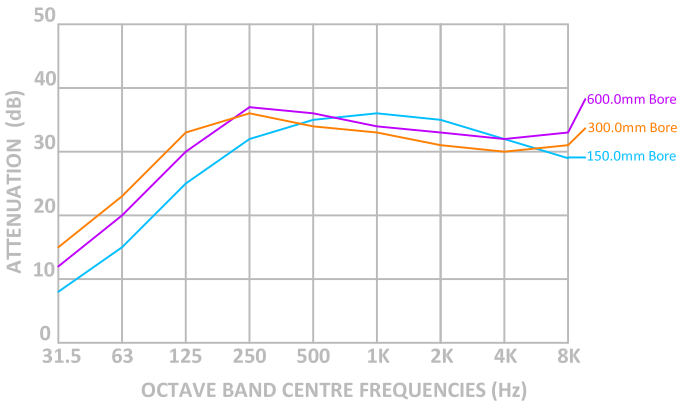
RADIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HPRA2-SE 050 (F & S)	50.8	210.0	1125.0	1050.0	50.0/ 210.0	180.0	14.7
HPRA2-SE 063 (F & S)	63.5	260.0	1225.0	1150.0	70.0/ 260.0	205.0	22.5
HPRA2-SE 075 (F & S)	76.2	260.0	1325.0	1250.0	80.0/ 260.0	205.0	34.5
HPRA2-SE 090 (F & S)	88.9	310.0	1425.0	1350.0	90.0/ 310.0	230.0	41.0
HPRA2-SE 100 (F & S)	101.6	360.0	1525.0	1450.0	95.0/ 360.0	255.0	49.0
HPRA2-SE 125 (F)	127.0	410.0	1725.0	1650.0	110.0/ 410.0	280.0	68.0
HPRA2-SE 150 (F)	152.4	460.0	1925.0	1850.0	120.0/ 460.0	305.0	105.0
HPRA2-SE 175 (F)	177.8	510.0	2275.0	2200.0	135.0/ 510.0	355.0	138.0
HPRA2-SE 200 (F)	203.2	560.0	2625.0	2550.0	145.0/ 600.0	380.0	170.0
HPRA2-SE 225 (F)	228.6	610.0	2725.0	2650.0	165.0/ 620.0	380.0	190.0
HPRA2-SE 250 (F)	254.0	660.0	2810.0	2720.0	180.0/ 720.0	420.0	300.0
HPRA2-SE 300 (F)	304.8	760.0	3110.0	3020.0	205.0/ 750.0	470.0	515.0
HPRA2-SE 350 (F)	355.6	920.0	3510.0	3420.0	230.0/ 850.0	550.0	716.0
HPRA2-SE 400 (F)	406.4	1020.0	3910.0	3820.0	255.0/ 940.0	600.0	908.0
HPRA2-SE 450 (F)	457.2	1170.0	4100.0	4000.0	290.0/1050.0	660.0	1110.0
HPRA2-SE 500 (F)	508.0	1270.0	4500.0	4400.0	320.0/1200.0	710.0	1335.0
HPRA2-SE 550 (F)	558.8	1370.0	4900.0	4800.0	345.0/1300.0	785.0	1705.0
HPRA2-SE 600 (F)	609.6	1470.0	5150.0	5000.0	380.0/1400.0	835.0	2035.0

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.
Add 100.0mm to 'B' dimension for Acoustically treated versions.

TYPICAL INSERTION LOSS FIGURES FOR HPRA-2 & HPRA2-SE TYPE UNITS (Not Binding)



The HPRA2 & HPRA2-SE (Side-Entry) type exhaust gas silencers, utilize 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 energy conversion systems effectively transpose available noise energy into heat, which is then carried away by the exhaust gas flow or via the silencer casing to atmosphere. The two concepts acting in unison provide a design that gives superior low frequency attenuation coupled to the above average insertion loss in medium and higher frequencies of the octave band width to give an improved broad spectrum coverage. This produces an exhaust gas silencer with an overall noise reduction capability of approximately 35dB(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.

The design is aimed to offer noise levels around 85dB(A) at one meter from the exhaust gas outlet, using a single primary silencer only. It therefore has a wide scope of appeal including, large and small diesel generators in a variety of mobile and stationary situations, main propulsion and power generation in marine installations as well as heavy, medium and light duty pumping applications, where exhaust noise is perceived as an inherent problem to local surroundings. To achieve substantially lower noise levels the design can be directly or remotely coupled to the HSLS,HESLS or HXSLS dissipative acoustically packed low pressure drop straight line silencer. This action will lead to a more acceptable emission level for any environment where the need arises.
Consult PGS Engineering Staff for further details prior to order.