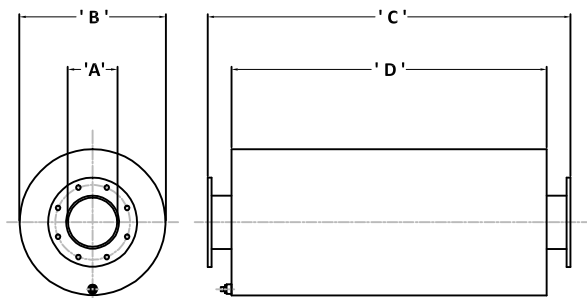




HP 4(AT) Type: Acoustically Treated Resonator Exhaust Gas Silencers. 34dB(A) Insertion Loss.

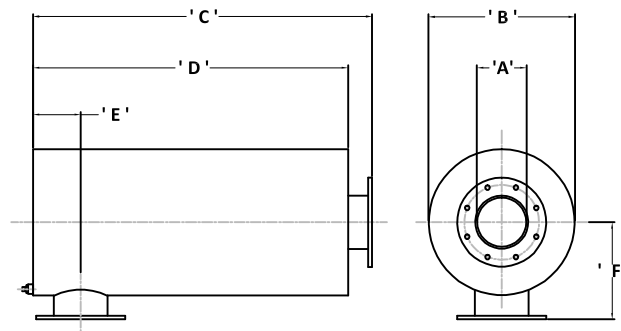
AXIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	Wt. (kg)
HP4 038(AT) [F & S]	38.1	310.0	800.0	650.0	8.0
HP4 050(AT) [F & S]	50.8	360.0	960.0	810.0	11.0
HP4 063(AT) [F & S]	63.5	410.0	1060.0	910.0	18.0
HP4 075(AT) [F & S]	76.2	460.0	1170.0	1020.0	38.0
HP4 090(AT) [F & S]	88.9	510.0	1350.0	1200.0	48.0
HP4 100(AT) [F & S]	101.6	560.0	1370.0	1220.0	58.0
HP4 125(AT) [F]	127.0	610.0	1630.0	1480.0	84.0
HP4 150(AT) [F]	152.4	660.0	1830.0	1680.0	125.0
HP4 175(AT) [F]	177.8	710.0	2000.0	1850.0	175.0
HP4 200(AT) [F]	203.2	760.0	2160.0	2010.0	226.0
HP4 225(AT) [F]	228.6	810.0	2400.0	2220.0	276.0
HP4 250(AT) [F]	254.0	860.0	2620.0	2440.0	348.0
HP4 300(AT) [F]	304.8	1020.0	3000.0	2820.0	538.0
HP4 350(AT) [F]	355.6	1120.0	3230.0	3050.0	690.0
HP4 400(AT) [F]	406.4	1270.0	3400.0	3220.0	840.0
HP4 450(AT) [F]	457.2	1370.0	3860.0	3660.0	1075.0
HP4 500(AT) [F]	508.0	1470.0	4450.0	4250.0	1315.0
HP4 550(AT) [F]	558.8	1570.0	4700.0	4500.0	1585.0
HP4 600(AT) [F]	609.6	1670.0	5300.0	5000.0	2020.0

'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.

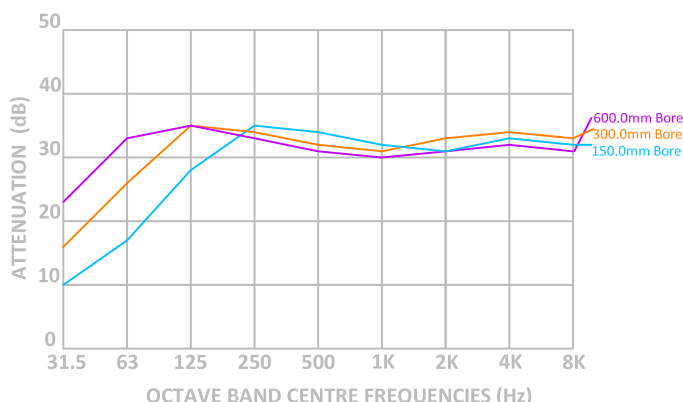
RADIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HP4-SE 038(AT) [F & S]	38.1	310.0	725.0	650.0	45.0/ 300.0	180.0	9.0
HP4-SE 050(AT) [F & S]	50.8	360.0	885.0	810.0	50.0/ 400.0	205.0	12.5
HP4-SE 063(AT) [F & S]	63.5	410.0	985.0	910.0	70.0/ 450.0	230.0	20.0
HP4-SE 075(AT) [F & S]	76.2	460.0	1095.0	1020.0	80.0/ 500.0	255.0	43.0
HP4-SE 090(AT) [F & S]	88.9	510.0	1275.0	1200.0	90.0/ 600.0	280.0	53.0
HP4-SE 100(AT) [F & S]	101.6	560.0	1145.0	1220.0	95.0/ 630.0	305.0	60.0
HP4-SE 125(AT) [F]	127.0	660.0	1535.0	1460.0	110.0/ 790.0	305.0	90.0
HP4-SE 150(AT) [F]	152.4	660.0	1755.0	1680.0	120.0/ 900.0	355.0	130.0
HP4-SE 175(AT) [F]	177.8	710.0	1725.0	1850.0	135.0/ 920.0	380.0	180.0
HP4-SE 200(AT) [F]	203.2	760.0	2085.0	2010.0	145.0/1000.0	405.0	230.0
HP4-SE 225(AT) [F]	228.6	810.0	2310.0	2220.0	165.0/1150.0	430.0	282.0
HP4-SE 250(AT) [F]	254.0	860.0	2530.0	2440.0	180.0/1275.0	470.0	355.0
HP4-SE 300(AT) [F]	304.8	1020.0	2910.0	2820.0	205.0/1485.0	550.0	545.0
HP4-SE 350(AT) [F]	355.6	1120.0	3140.0	3050.0	255.0/1585.0	600.0	696.0
HP4-SE 400(AT) [F]	406.4	1270.0	3310.0	3220.0	290.0/1650.0	600.0	845.0
HP4-SE 450(AT) [F]	457.2	1370.0	3760.0	3660.0	320.0/1880.0	735.0	1080.0
HP4-SE 500(AT) [F]	508.0	1470.0	4350.0	4250.0	345.0/2200.0	785.0	1320.0
HP4-SE 550(AT) [F]	558.8	1570.0	4600.0	4500.0	365.0/2320.0	865.0	1590.0
HP4-SE 600(AT) [F]	609.6	1670.0	5150.0	5000.0	380.0/2570.0	965.0	2025.0

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 HP4(AT) & HP4(AT)-SE TYPE UNITS (Not Binding)



The HP4 & HP4-SE (Side-Entry) type, exhaust gas silencers are a simple energy converter designs utilizing the exhaust gas velocity and differing volumes to create rapid changes in the exhaust gas speed resulting in noise energy conversion into heat energy, which is then partially absorbed into the acoustic lining. The designs also use 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 approximately 34dB(A) centered at the lower frequencies including the fundamental firing frequency of the engine to give a silencer with medium pressure drop and higher capabilities at the low to middle frequency range of the octave band spectrum. These acoustically treated versions are readily available with increased insertion loss capabilities at the higher frequencies, reducing the noise breakout from the casing to lower than that of the tailpipe. The equipment can be used singularly as a stand alone silencer on irrigation applications, small and large power generation plants and similar installations where noise is considered to be an inherent problem to local surroundings. Due to the effect on the lower frequencies this design is generally used for both land based installations as well as various marine propulsion situations. 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 suitable for any environment dependant upon the individual requirements. The design can also be used in a modified state on rotary/ centrifugal compression units, blowers and other air handling equipment in both intake and discharge modes. Consult PGS Engineering Staff for further details.