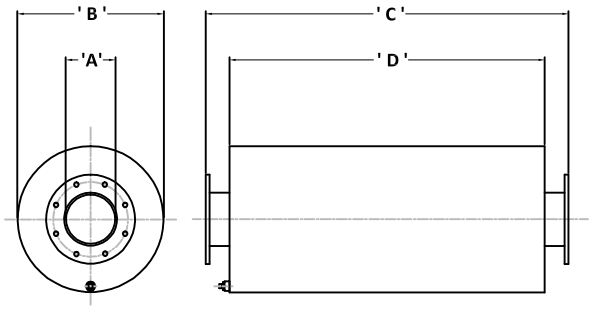
HP 3(AT) Type: Acoustically Treated Resonator Exhaust Gas Silencers. 30dB(A) Insertion Loss

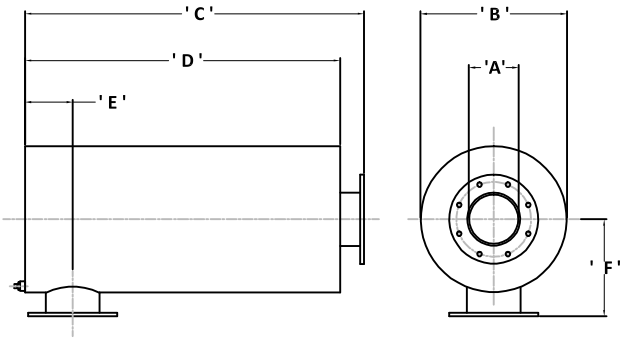
AXIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	Wt. (kg)
HP3 038(AT) [F & S]	38.1	310.0	760.0	610.0	6.5
HP3 050(AT) [F & S]	50.8	310.0	760.0	610.0	7.4
HP3 063(AT) [F & S]	63.5	360.0	870.0	720.0	10.5
HP3 075(AT) [F & S]	76.2	410.0	970.0	820.0	16.5
HP3 090(AT) [F & S]	88.9	460.0	1070.0	920.0	35.0
HP3 100(AT) [F & S]	101.6	460.0	1220.0	1070.0	50.0
HP3 125(AT) [F]	127.0	510.0	1400.0	1250.0	60.0
HP3 150(AT) [F]	152.4	560.0	1600.0	1450.0	84.0
HP3 175(AT) [F]	177.8	610.0	1750.0	1600.0	120.0
HP3 200(AT) [F]	203.2	660.0	1930.0	1780.0	145.0
HP3 225(AT) [F]	228.6	710.0	2100.0	1950.0	190.0
HP3 250(AT) [F]	254.0	760.0	2310.0	2130.0	220.0
HP3 300(AT) [F]	304.8	860.0	2770.0	2590.0	355.0
HP3 350(AT) [F]	355.6	1020.0	2970.0	2790.0	465.0
HP3 400(AT) [F]	406.4	1120.0	3020.0	2840.0	625.0
HP3 450(AT) [F]	457.2	1270.0	3230.0	3030.0	860.0
HP3 500(AT) [F]	508.0	1370.0	3660.0	3460.0	1025.0
HP3 550(AT) [F]	558.8	1470.0	4100.0	3900.0	1250.0
HP3 600(AT) [F]	609.6	1630.0	4300.0	4000.0	1480.0

'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.

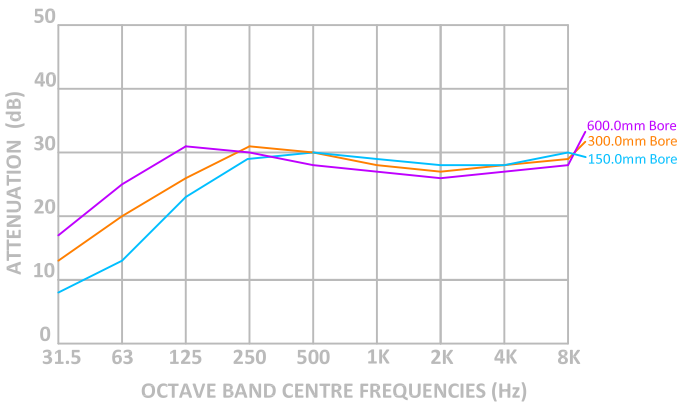
RADIAL INLET & AXIAL OUTLET VERSIONS



Silencer Part Number	'A'	'B'	'C'	'D'	'E'	'F'	Wt. (kg)
HP3-SE 038(AT) [F & S]	38.1	310.0	685.0	610.0	45.0/ 275.0	180.0	6.8
HP3-SE 050(AT) [F & S]	50.8	310.0	685.0	610.0	50.0/ 300.0	180.0	7.5
HP3 -SE063(AT) [F & S]	63.5	360.0	795.0	720.0	70.0/ 400.0	205.0	10.8
HP3-SE 075(AT) [F & S]	76.2	410.0	895.0	820.0	80.0/ 450.0	230.0	17.5
HP3-SE 090(AT) [F & S]	88.9	460.0	995.0	920.0	90.0/ 500.0	255.0	37.0
HP3-SE 100(AT) [F & S]	101.6	460.0	1145.0	1070.0	95.0/ 540.0	255.0	53.0
HP3-SE 125(AT) [F]	127.0	510.0	1325 .0	1250.0	110.0/ 690.0	280.0	63.0
HP3-SE 150(AT) [F]	152.4	560.0	1535.0	1460.0	120.0/ 750.0	305.0	88.0
HP3-SE 175(AT) [F]	177.8	610.0	1535.0	1460.0	135.0/ 760.0	330.0	123.0
HP3-SE 200(AT) [F]	203.2	660.0	1855.0	1780.0	145.0/ 925.0	355.0	148.0
HP3-SE 225(AT) [F]	228.6	710.0	2205.0	2130.0	165.0/ 985.0	395.0	195.0
HP3-SE 250(AT) [F]	254.0	760.0	2220.0	2130.0	180.0/1105 .0	420.0	225.0
HP3-SE 300(AT) [F]	304.8	860.0	2680.0	2590.0	205.0/1380.0	470.0	360.0
HP3-SE 350(AT) [F]	355.6	1020.0	2880.0	2790.0	255.0/1400.0	550.0	470.0
HP3 -SE 400(AT) [F]	406.4	1120.0	2930.0	2840.0	290.0/1425.0	600.0	630.0
HP3-SE 450(AT) [F]	457.2	1270.0	3130.0	3030.0	320.0/1525.0	685.0	865.0
HP3-SE 500(AT) [F]	508.0	1370.0	3560.0	3460.0	345.0/1750.0	735.0	1030.0
HP3-SE 550(AT) [F]	558.8	1470.0	4000.0	3900.0	345.0/1980.0	785.0	1255.0
HP3 -SE600(AT) [F]	609.6	1630.0	4150.0	4000.0	380.0/2010.0	915.0	1590.0

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 HP3(AT) & HP3(AT)-SE TYPE UNITS (Not Binding)



The HP3(AT) & HP3(AT)-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 exhaust gas speed resulting in noise energy being converted into heat energy, which is then partially absorbed into the acoustic lining. 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 approximately 30dB(A) centered at the lower frequencies including the fundamental firing frequency to give a silencer with medium pressure drop and good capabilities at the low to middle frequency range. 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 at the tailpipe.

The equipment can be used singularly as a stand alone silencer on irrigation pumps, small and larger power generation plants and similar installations where noise is not considered to be significant problem to local surroundings. Due to the effect on the lower frequencies this design is mainly used as a primary silencer for both land based power generation applications as well as various marine uses. 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 dependant upon the environmental issues.

The design can also be used in a modified state on rotary/ centrifugal compression units, blowers and other air handling equipment in both the intake and discharge modes. Consult PGS Engineering Staff for further details prior to order.