

Exhaust Silencer

Product Data

ISTIQ EXHAUST SILENCER come in standard, stock silencers for general-purpose applications and custom models to fit most OEM engines. These include:

MODEL IXP - Multi-Chamber Reactive Type Attenuation - 30 dB

MODEL IXS - Straight Through Absorptive Type Attenuation - 20 dB

MODEL IXC - Supercritical or Combination Attenuation - 35 dB

Applications

ISTIQ EXHAUST SILENCER are designed to efficiently reduce inlet and discharge noise of diesel engines, blowers, vacuum pumps, compressors and all situations requiring control of intake or outlet equipment noise.

Construction

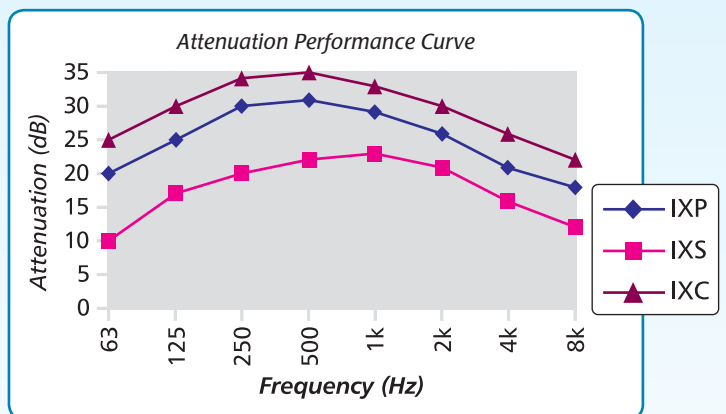


All silencers are constructed from heavy gauge hot rolled cold quenched sheet steel with all welded construction. Internal components are stiffened and braced to minimise resonances and vibration induced fatigue. Flanges are supplied to Table C or American National Standard Institute (ANSI) requirement. Threaded pipe ends are to BSP or metric threads. Drain plugs are fitted as standard for removal of condensate. All external surfaces are finished with high quality silicone based heat resistant aluminium paint which provides lasting protection at temperatures up to 600°C.

Selection Guidelines

When designing an exhaust system there are a number of factors that should be considered to maximize the design in terms of performance and cost. A few of the items that should be taken into consideration include:

- Acoustic Environment into which exhaust is discharging
- Engine Rating, i.e. - exhaust flow
- Allowable engine back pressure
- Engine exhaust outlet noise level
- Engine Exhaust Outlet Design, i.e. single or dual outlets
- Exhaust Piping Arrangement within engine room
- Exhaust Piping Support, Anchoring, and Guiding
- Exhaust Stack Height
- Configuration of Exhaust Silencers, i.e. single or dual inlet





Model IXC-S/E

Supercritical or Combination

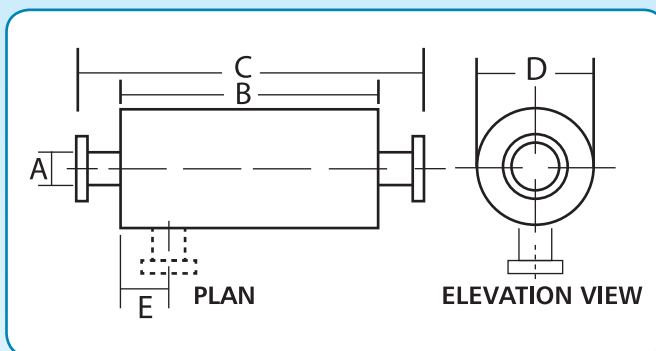
DESCRIPTION

IXC-S and **IXC-E** silencers provide the very highest noise control in all critical situations. These silencers have internal erosion resistant acoustic material for high performance broad band attenuation, protected by heavy duty perforated sheet. This model is a combined design of Multi-Chamber Reactive and Straight Through Absorptive Type. Acoustic performance is good at all frequencies.



Applications

As already stated, these units can be used for noise control of gas exhaust and air flows in all conditions. In the event that you are tasked with the responsibility and designing and selecting an exhaust silencer and piping arrangement, **ISTIQ** can provide direct assistance. If all of the details are supplied, **ISTIQ** will input this information and provide you with our own computer print-out detailing specific recommendations for the exhaust system.



Dimension in mm						
PIPE DIAMETER (A)	OVERALL DIAMETER (D)	OVERALL LENGTH (End) (C)	OVERALL LENGTH (Side) (C)	OVERALL LENGTH (B)	OFFSET (E)	WEIGHT (Kg)
50	254	1050	975	900	180	27
75	350	1200	1125	1050	200	55
100	400	1369	1294	1219	230	70
125	450	1369	1294	1219	230	95
150	550	1675	1600	1525	250	115
200	660	1850	1775	1700	300	160
250	710	2588	2513	2438	350	225
300	760	2588	2513	2438	400	315
350	920	3450	3375	3300	450	510
400	1020	3807	3732	3657	500	705
450	1470	4470	4370	4270	550	960

Attenuation								
Frequency	63	125	250	500	1k	2k	4k	8k
dB	26	30	35	37	34	32	26	22

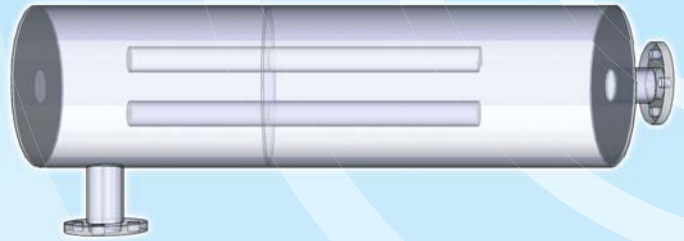
Exhaust Silencer

Model IXP-S/E (Side or End Entry)

Multi Chamber Reactive Type

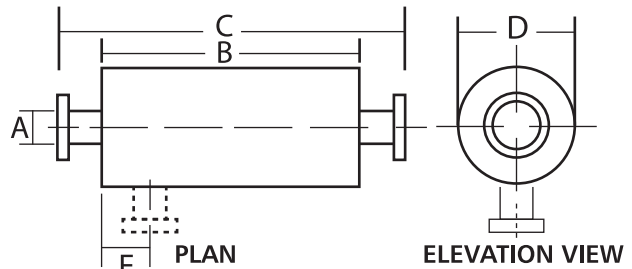
DESCRIPTION

IXP-S or **IXP-E** silencers are multi chamber reactive type units for applications where better than standard acoustic performance is required. These residential grade silencers have good pressure drop characteristics and are available with side or end entry or side inlet and outlet. They can be installed in any orientation without loss of acoustic performance.



Applications

These silencer can be used for noise control of two or four stroke internal combustion and diesel engines, the intake and discharge of rotary and reciprocating blowers, the intake and discharge of vacuum pumps and air compressors and for noise control of all gas handling systems. Designed for maximum all round performance, these silencers can provide overall reductions of 25-30 dB(A) depending on the characteristics of the machine to be silenced.



Dimension in mm

PIPE DIAMETER (A)	OVERALL DIAMETER (D)	OVERALL LENGTH (End) (C)	OVERALL LENGTH (Side) (C)	OVERALL LENGTH (B)	OFFSET (E)	WEIGHT (Kg)
50	254	1050	975	900	180	25
75	350	1200	1125	1050	200	50
100	400	1369	1294	1219	230	65
125	450	1369	1294	1219	230	88
150	550	1675	1600	1525	250	107
200	660	1850	1775	1700	300	150
250	710	2588	2513	2438	350	215
300	760	2588	2513	2438	400	300
350	920	3450	3375	3300	450	480
400	1020	3807	3732	3657	500	665
450	1270	4470	4370	4270	550	870

Attenuation

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k
dB	21	26	32	33	32	28	23	18

Model IXS-E (End Inlet)

Straight Through Absorptive Type DESCRIPTION

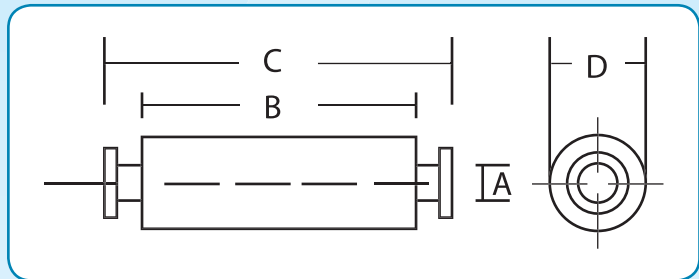
IXS-E absorption type silencer are straight through type with end inlets and end outlets. Used in all applications where medium acoustic performance

is required. The absorptive design results in minimal pressure loss as the gas flow through the silencer bore. Acoustic Performance is achieved by long strand fibreglass with high acoustic absorption, retained and protected by a perforated sheet steel tube.



Applications

The **IXS-E** can be used for inlet and exhaust of air, steam or dry gas. Typical applications include intakes of petrol and diesel engines, intakes and discharges of rotary blowers, screw axial and reciprocating compressors, discharge of vacuum pumps, blowers and boiler flues.



Dimension in mm				
PIPE DIAMETER (A)	OVERALL DIAMETER (D)	OVERALL LENGTH (C)	OVERALL LENGTH (B)	WEIGHT (Kg)
50	150	925	825	12
75	200	1075	975	18
100	225	1319	1219	35
125	225	1319	1219	45
150	380	1650	1500	68
200	380	1950	1800	110
250	550	1950	1800	150
300	650	2300	2100	195
350	750	2638	2438	250
400	850	2880	2680	375
450	990	3175	2925	470

Attenuation								
Frequency (Hz)	63	125	250	500	1k	2k	4k	8k
dB	11	18	22	24	25	22	18	13