

# Engine Exhaust Silencers

A wide range of silencers to address many applications



# IAC Acoustics

## Making the World a Quieter Place

**Founded on an unrivalled history of engineering with some of the most pioneering discoveries in the industry, the IAC Acoustics brand is synonymous with technological innovation.**

From controlling noise at a power station to tuning the sound in a TV or radio studio, IAC Acoustics has had a positive impact on society and helped to shape what can be achieved to make speech more intelligible, music more enjoyable, reduce the impact of industrial noise and protect people's sense of hearing.

The continual success of our products and services over the decades has brought the brand a reputation for quality and reliability among customers, whether they are multinational corporations or independent family businesses. This is supported by the expertise and passion of our workforce, the people behind the products, including designers, engineers and industry specialists.

To face the ever increasing noise reduction demands of the future, we will strive to further enhance our ability to reduce excessive noise. We aim to focus on developing tomorrow's solution today, innovating faster and delivering solutions that meet the requirements of the next generation. In doing so, we will stay true to our key values and founding philosophy to make the world a quieter place.

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# Markets



Power Plants



Cogeneration



UPS (Uninterruptible Power Systems)



Emergency Supply



Industrial Applications



Mobile Applications  
(Civil and military)



Marine Applications

# Applications

Our **engine exhaust silencers** are designed to reduce the exhaust noise of internal combustion engines of all types (diesel or gas).

## Designs

- Cylindrical silencers
- Box silencers
- Hockey puck (other shape available)
- Catalytic silencers
- Spark arrestors
- Other shapes and functionalities available on demand

## Material

- Carbon steel
- Stainless steel
- Other grade available on demand

## Applications

- Power plants
- Biogas and Waste to Heat plants...
- Engine test beds
- Any operation with reciprocating engines
- Cogeneration plants
- Emergency supply
- Marine
- Railways

## Key factors

- Performance guarantee from 10 up to 50 dB(A) and more
- Wide range of aerodynamic performance
- Ability to reduce skin temperature
- IAC Acoustics offer adaptable products that take into account specific requirements: Nuclear environment, ATEX ...

Acoustic expertise and competences» enable IAC Acoustics to propose optimized solutions.

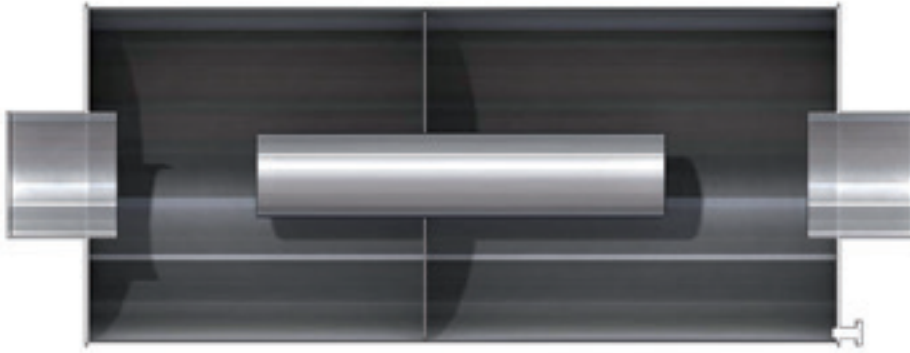
A wide range of accessories are also available in “3AC” range of “[Accessories catalog](#)”.





# Sound proofing technologies

## Reactive



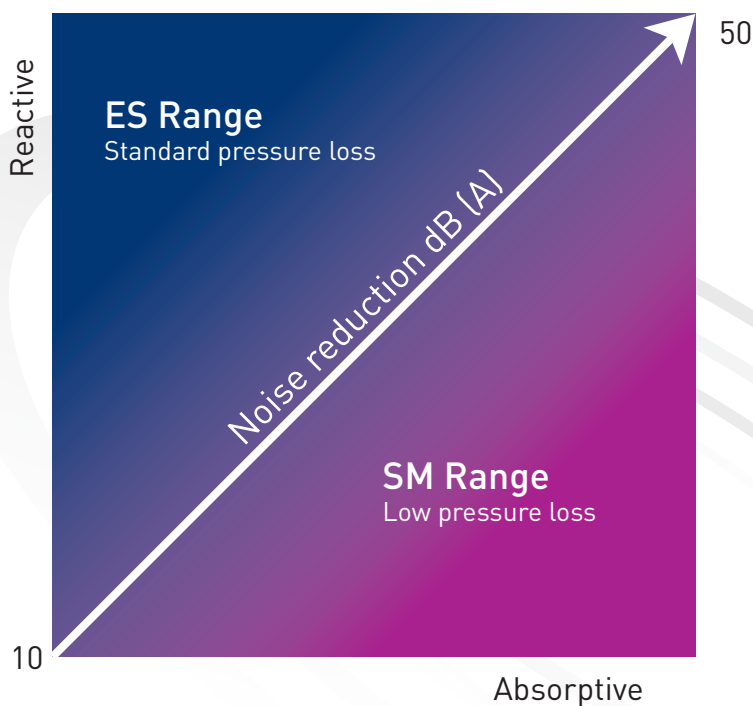
Generic term for soundproofing through reflecting and interfering waves.

## Absorptive



Sound attenuation broadband device with low pressure drop. Acoustic absorption by infill.

## Two ranges to cover any request



# Range and application



Cogeneration



Power plants



Industrial Applications



Mobile Applications  
(Civil and military)



Marine Applications  
(Military, transport,  
off-shore, sailing)



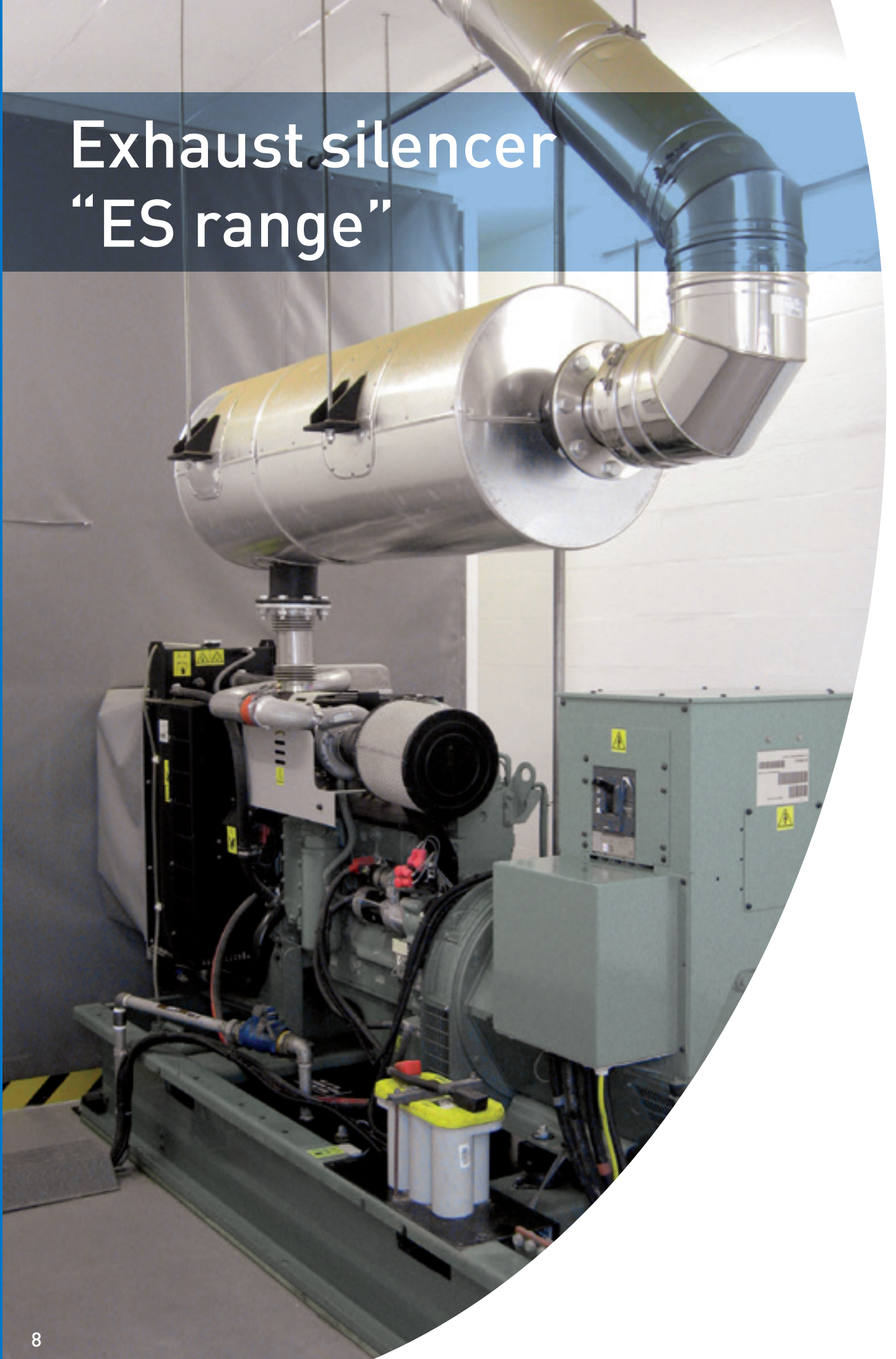
UPS (uninterruptible  
power systems)



Emergency supply



# Exhaust silencer “ES range”





# ES-IN

Noise reduction range: 8 - 12 dB (A)

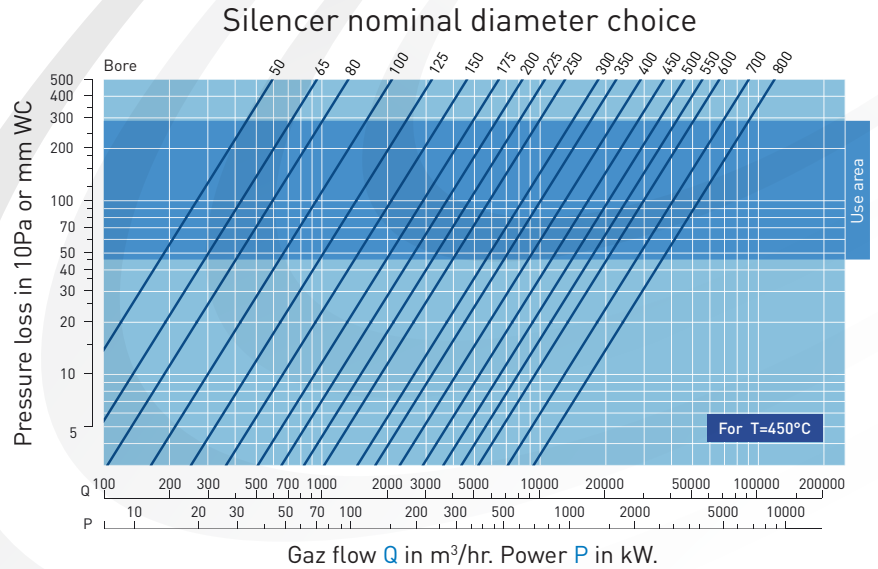
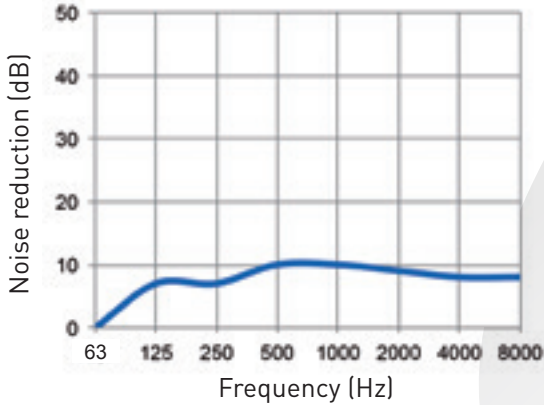
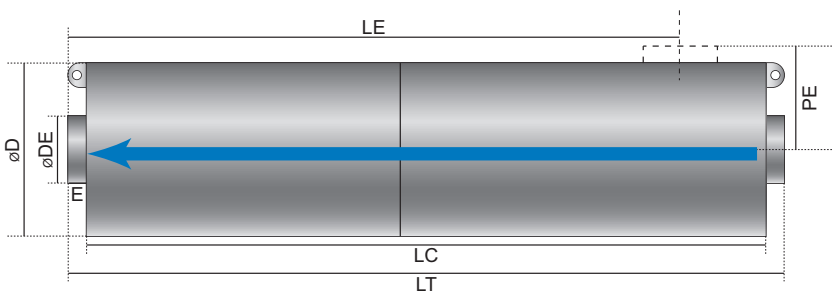


Table of dimensions

Bore Ø	ØDE	ØD	LT	LE	E	PE	LC	Weight
100	114	254	914	787	85	203	744	24
125	140	254	1067	940	100	229	867	27
150	168	305	1067	914	110	229	847	35
200	219	457	1245	1041	110	330	1025	110
250	246	559	1575	1270	110	381	1355	164
300	324	660	1600	1295	110	432	1380	259
350	356	762	1930	1549	120	483	1690	346

Options: flanges, counter-flanges, gaskets and bolts



These figures are indicative  
Dimensions are given in mm  
Weight in Kg.

Dimensions are given without flanges,  
add 5 mm for each welded flange  
Tolerance on length below  
400 mm  $\pm$  4 mm.

# ES-RE

Noise reduction range: 12 - 15 dB (A)

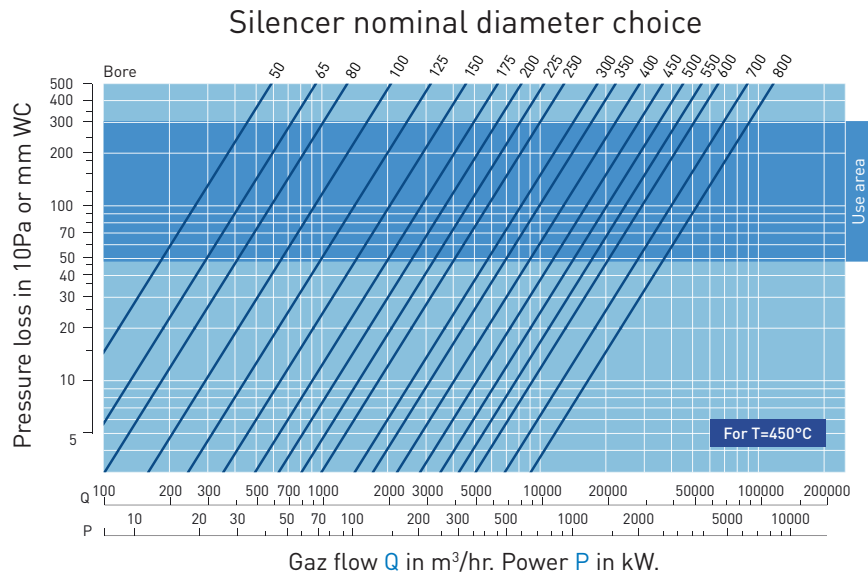
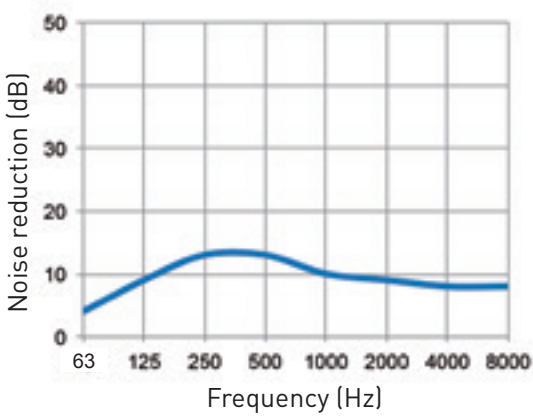
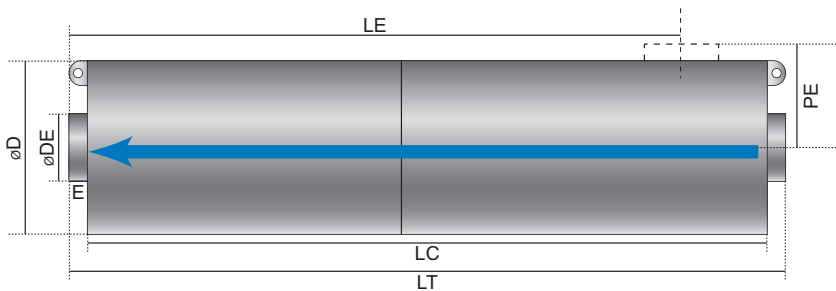


Table of dimensions

Bore Ø	ØDE	ØD	LT	LE	E	PE	LC	Weight
50	60	152	914	838	70	152	774	13
65	76	203	1067	965	70	178	927	21
80	89	203	1067	965	70	178	927	21
100	114	254	1168	1041	85	203	998	29
125	140	254	1372	1219	100	229	1172	34
150	168	305	1372	1219	110	229	1152	43
200	219	457	1549	1346	110	330	1329	124
250	246	559	1880	1575	110	381	1660	182
300	324	660	1905	1575	110	432	1685	299
350	356	762	2540	2159	120	483	2300	413
400	406	914	2896	2464	120	559	2656	585
450	457	914	3200	2743	120	559	2960	733
500	508	1067	3531	3023	130	635	3271	1008

Options: flanges, counter-flanges, gaskets and bolts

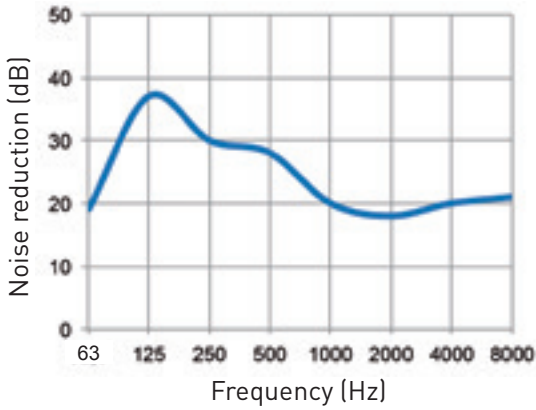


These figures are indicative  
Dimensions are given in mm  
Weight in Kg.

Dimensions are given without flanges,  
add 5 mm for each welded flange  
Tolerance on length below  
400 mm ± 4 mm.

# ES-CR

Noise reduction range: 25 - 30 dB (A)



Silencer nominal diameter choice

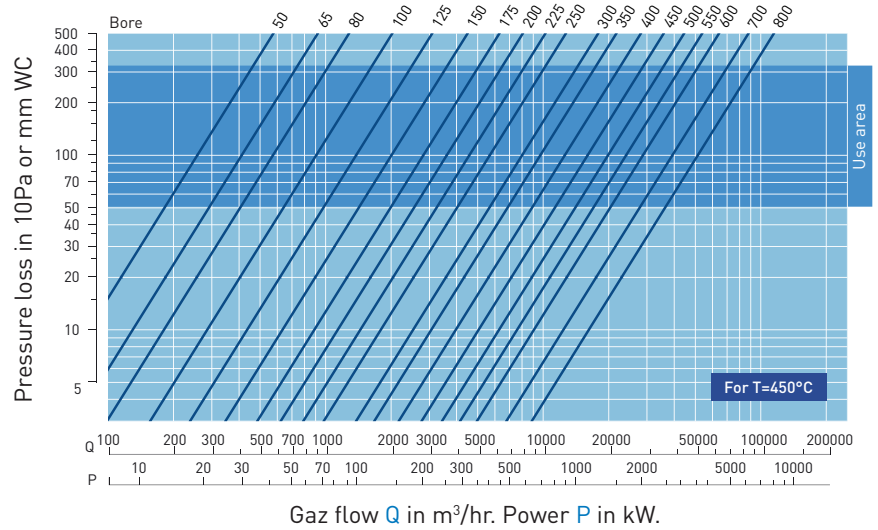
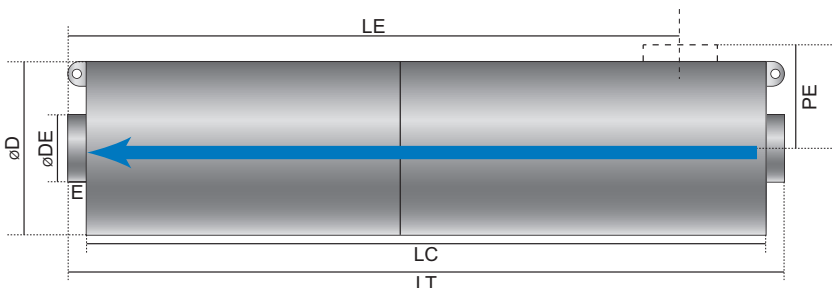


Table of dimensions

Bore Ø	ØDE	ØD	LT	LE	E	PE	LC	Weight
50	60	203	787	686	70	178	647	24
65	76	203	1041	940	70	178	901	33
80	89	254	1067	940	70	203	927	42
100	114	305	1397	1245	85	254	1227	68
125	140	356	1549	1372	100	279	1349	92
150	168	406	1854	1651	110	305	1634	131
200	219	508	1905	1676	110	356	1685	220
250	246	610	2515	2235	110	406	2295	365
300	324	711	2540	2235	110	457	2320	513
350	356	762	3454	3099	120	483	3214	808
400	406	914	3531	3124	120	559	3291	987
450	457	1067	3581	3124	120	660	3341	1176
500	508	1067	4166	3683	130	660	3906	1382

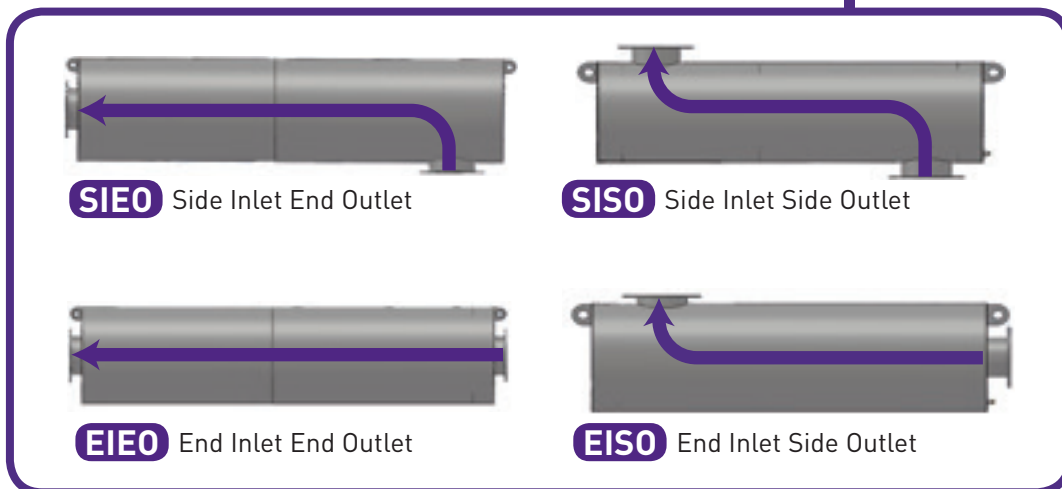
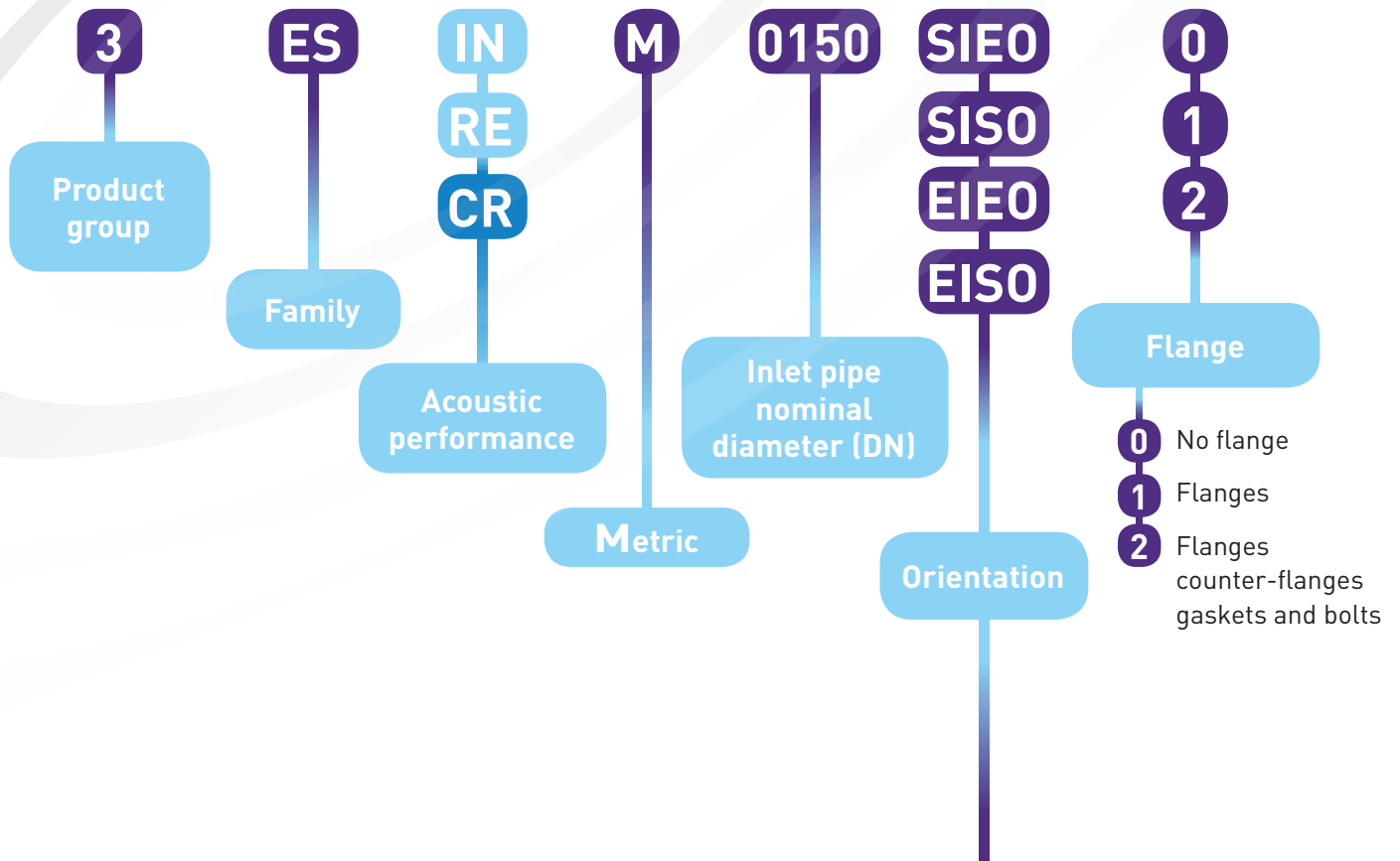
Options: flanges, counter-flanges, gaskets and bolts



These figures are indicative  
Dimensions are given in mm  
Weight in Kg.

Dimensions are given without flanges,  
add 5 mm for each welded flange  
Tolerance on length below  
400 mm ± 4 mm.

# Product referencing for ES range



Installation, operating and maintenance manuals available upon requests

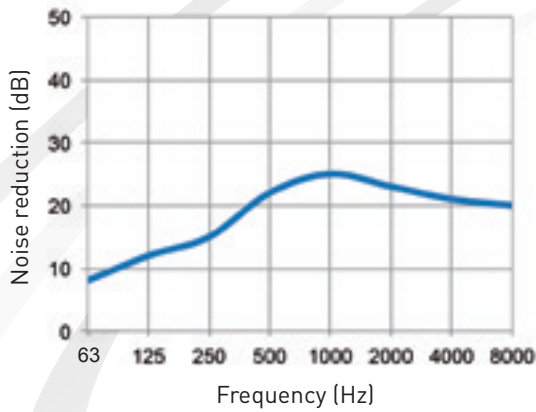


# Exhaust silencer “SM range”

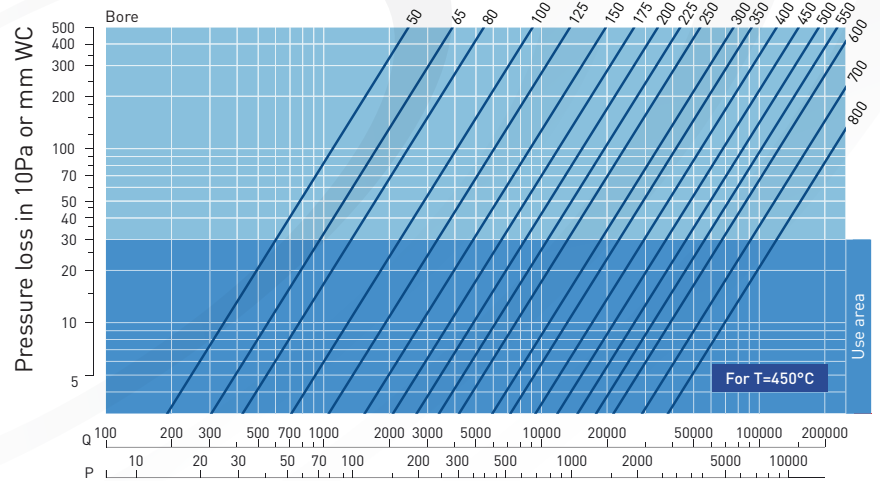


# SM 15P

Noise reduction range: 15 - 20 dB (A)



Silencer nominal diameter choice

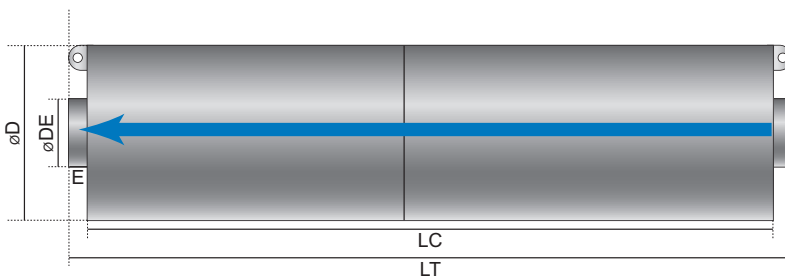


Gaz flow  $Q$  in  $m^3/hr$ . Power  $P$  in  $kW$ .

Table of dimensions

Bore $\varnothing$	$\varnothing DE$	$\varnothing D$	LT	LC	Weight
50	60	158	456	356	4
65	76	158	556	456	4
80	89	209	651	551	8
100	114	208	767	667	9
125	140	260	876	776	16
150	168	300	1087	957	26
175	194	304	1206	1086	27
200	219	360	1345	1215	36
225	246	400	1534	1314	49
250	274	456	1720	1500	57
300	324	500	1900	1680	80
350	356	550	2165	1925	109
400	406	655	2446	2176	169
450	457	758	2700	2500	288
500	508	858	2930	2730	317
550	557	958	3120	2920	435
600	609	1108	3120	2820	557
700	710	1208	3575	3275	704
800	812	1308	3900	3600	875

Options: flanges, counter-flanges, gaskets and bolts



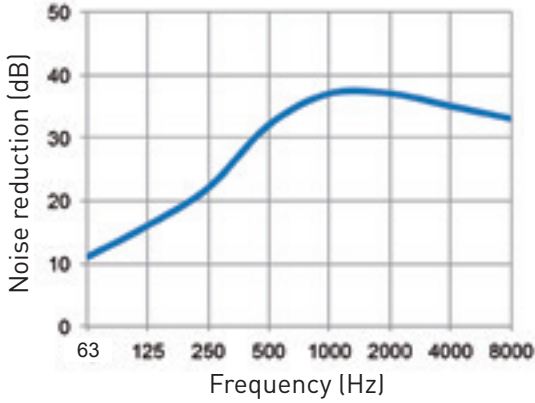
These figures are indicative. Dimensions are given in mm. Weight in Kg.

Dimensions are given without flanges, add 5 mm for each welded flange. Tolerance on length below 400 mm  $\pm 4$  mm.

Above characteristics are given for end inlet and end outlet arrangement. Other arrangements available upon request.

# SM 25P

Noise reduction range: 20 - 27 dB (A)



Silencer nominal diameter choice

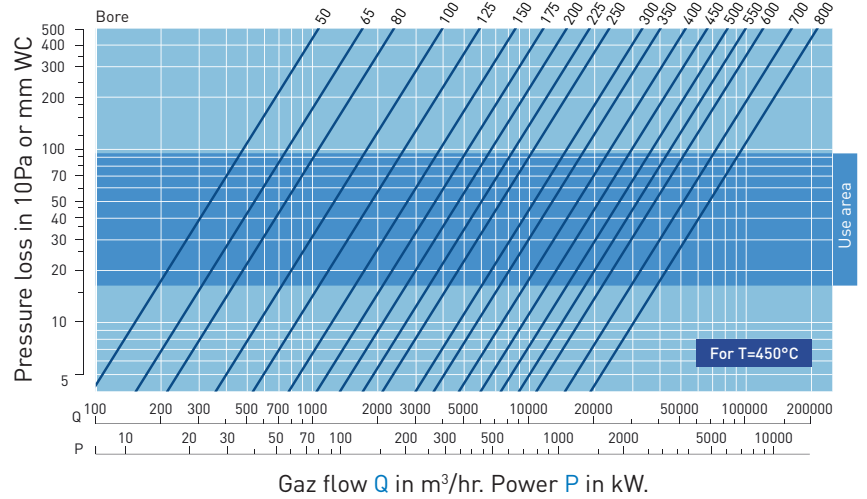
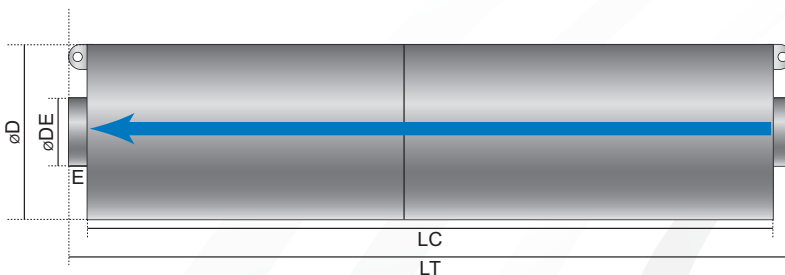


Table of dimensions

Bore Ø	ØDE	ØD	LT	LC	Weight
50	60	158	456	356	4
65	76	158	556	456	4
80	89	209	651	551	9
100	114	208	767	667	11
125	140	260	876	776	18
150	168	300	1087	957	29
175	194	304	1206	1086	30
200	219	360	1345	1215	42
225	246	400	1534	1314	56
250	274	456	1720	1500	67
300	324	500	1900	1680	92
350	356	550	2165	1925	125
400	406	655	2446	2176	190
450	457	758	2700	2500	314
500	508	858	2930	2730	377
550	557	958	3120	2920	488
600	609	1108	3120	2820	682
700	710	1208	3575	3275	857
800	812	1308	3900	3600	1106

Options: flanges, counter-flanges, gaskets and bolts



These figures are indicative.  
Dimensions are given in mm.  
Weight in Kg.

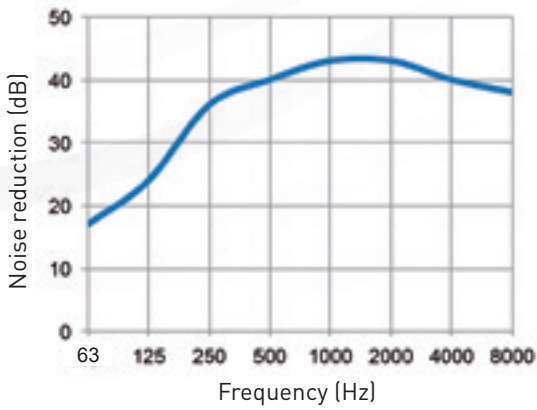
Dimensions are given without flanges, add 5 mm for each welded flange. Tolerance on length below 400 mm  $\pm 4$  mm.

Above characteristics are given for end inlet and end outlet arrangement.  
Other arrangements available upon request.



# SM 30P

Noise reduction range: 28 - 33 dB (A)



Silencer nominal diameter choice

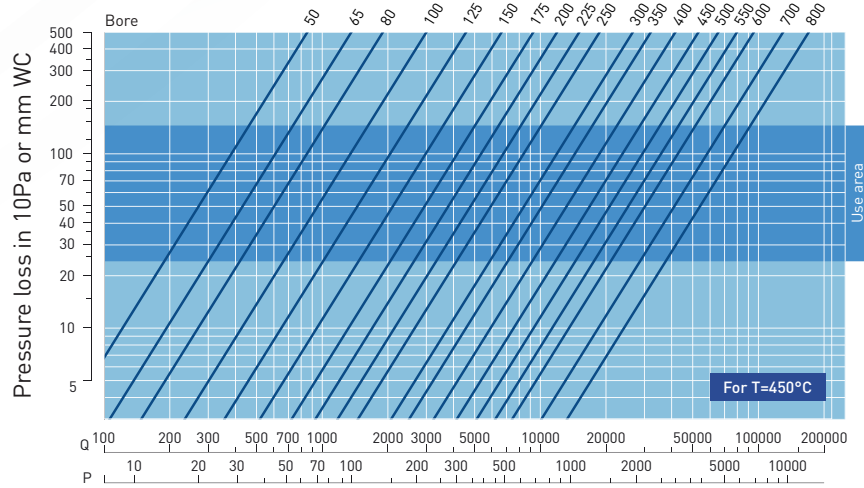
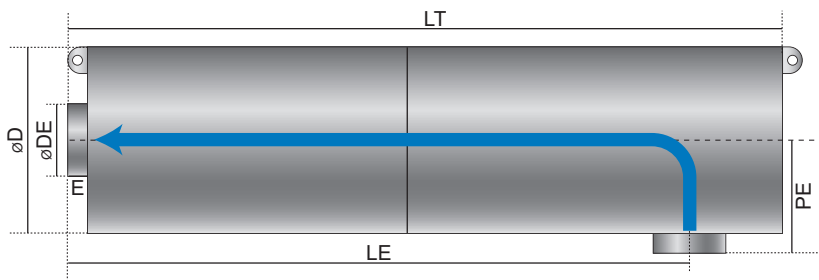


Table of dimensions

Bore Ø	ØDE	ØD	LT	LE	E	PE	Weight
50	60	180	560	440	70	165	7
65	76	200	740	590	70	175	10
80	89	250	900	710	70	210	16
100	114	300	1100	880	85	230	26
125	140	400	1250	1025	100	300	43
150	168	450	1540	1250	130	330	69
175	194	500	1750	1440	110	330	88
200	219	550	2050	1670	110	375	115
225	246	600	2300	1880	110	405	149
250	274	650	2650	2260	110	450	187
300	324	750	2980	2500	110	475	255
350	356	850	3350	2850	120	550	334
400	406	900	3850	3300	120	575	486
450	457	1008	4300	3670	120	625	720
500	508	1108	4750	4045	130	685	900
550	557	1208	4950	4175	135	740	1042
600	609	1310	5200	4370	145	800	1246
700	710	1510	6000	5150	150	905	1716
800	812	1612	6850	5650	165	975	2342

Options: flanges, counter-flanges, gaskets and bolts



These figures are indicative.  
Dimensions are given in mm.  
Weight in Kg.

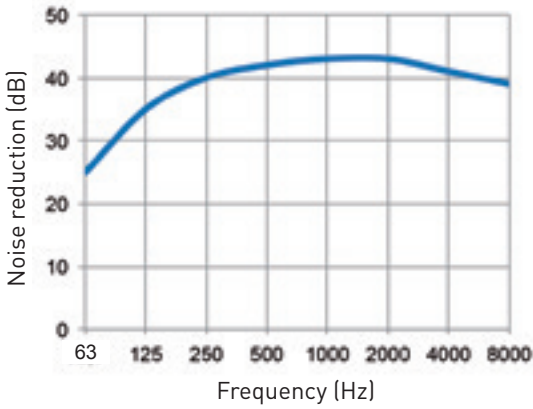
Dimensions are given without flanges, add 5 mm for each welded flange. Tolerance on length below 400 mm ± 4 mm.

Above characteristics are given for side inlet and end outlet arrangement. Other arrangements available upon request.



# SM 40P

Noise reduction range: 34 - 44 dB (A)



Silencer nominal diameter choice

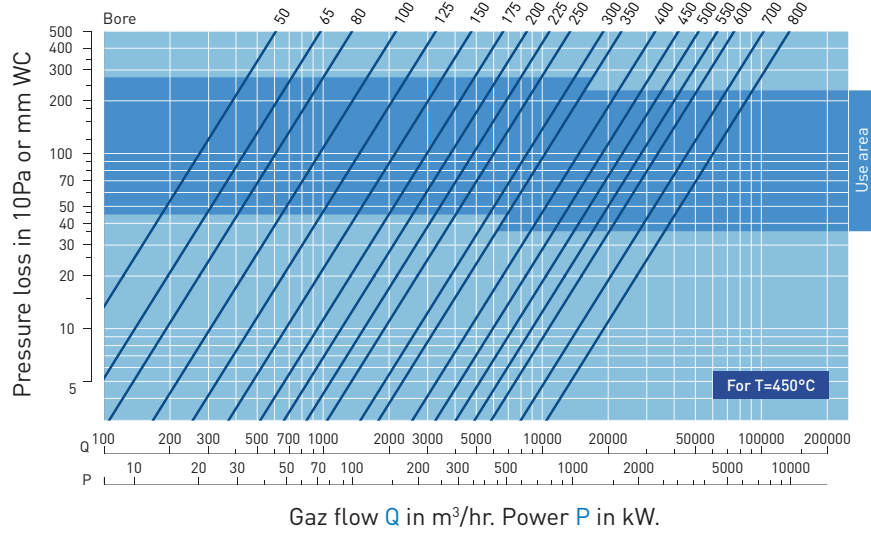
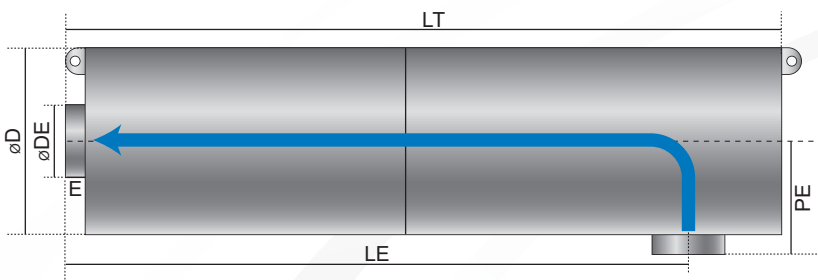


Table of dimensions

Bore Ø	ØDE	ØD	LT	LE	E	PE	Weight
50	60	305	890	760	70	225	23
65	76	355	1100	970	70	250	36
80	89	405	1255	1080	70	275	47
100	114	455	1440	1260	70	300	60
125	140	455	1755	1550	100	330	76
150	168	608	2065	1795	100	405	145
175	194	608	2210	1945	110	415	175
200	219	639	2600	2305	110	440	225
225	246	708	2800	2430	110	465	260
250	274	758	3125	2700	110	490	340
300	324	799	3505	3060	110	525	415
350	356	908	3500	3115	120	575	583
400	406	960	3895	3465	120	600	672
450	457	1008	4295	3825	130	635	828
500	508	1108	4590	4100	130	685	1009
550	557	1210	4680	4175	140	745	1192
600	609	1210	4920	4375	150	760	1307
700	710	1510	5435	4765	150	910	1979
800	812	1610	5900	5180	170	975	2315

Options: flanges, counter-flanges, gaskets and bolts



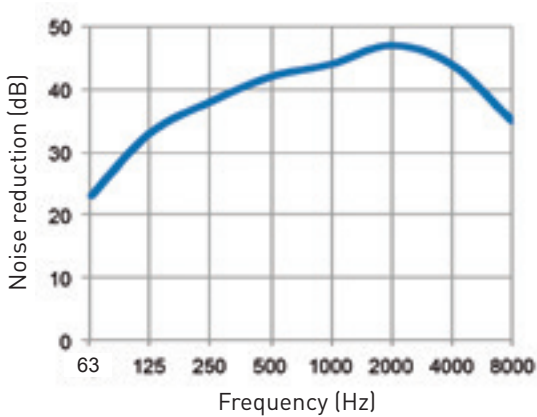
These figures are indicative.  
Dimensions are given in mm.  
Weight in Kg.

Dimensions are given without flanges, add 5 mm for each welded flange. Tolerance on length below 400 mm ± 4 mm.

Above characteristics are given for side inlet and end outlet arrangement. Other arrangements available upon request.

# SM 40C

Noise reduction range: 37 - 44 dB (A)



Silencer nominal diameter choice

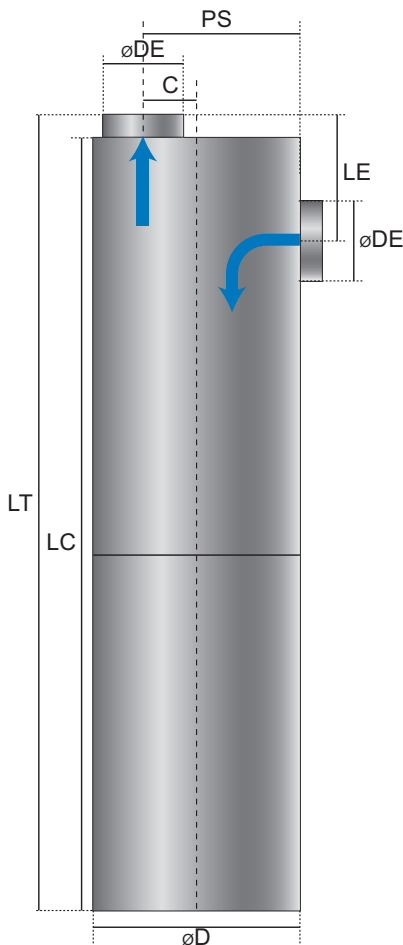
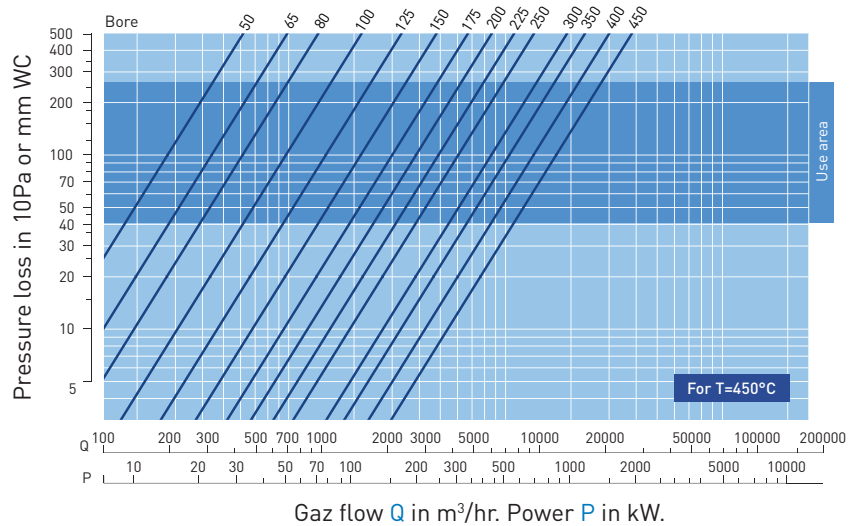


Table of dimensions

Bore Ø	ØDE	ØD	LT	LE	LC	C	PS	Weight
50	60	305	770	190	700	50	275	31
65	76	305	770	200	700	50	275	32
80	89	355	900	210	830	60	310	35
100	114	406	1050	220	980	70	350	45
125	140	456	1300	260	1200	90	420	60
150	168	555	1465	280	1365	110	490	100
175	194	555	1530	310	1420	110	500	105
200	219	605	1770	320	1660	125	540	135
225	246	705	1890	340	1780	150	615	190
250	274	755	2060	350	1950	160	650	280
300	324	856	2260	380	2150	185	730	330
350	356	956	2520	410	2400	200	810	460
400	406	1008	2710	440	2590	220	845	530
450	457	1108	2965	490	2845	245	920	660

Options: flanges, counter-flanges, gaskets and bolts

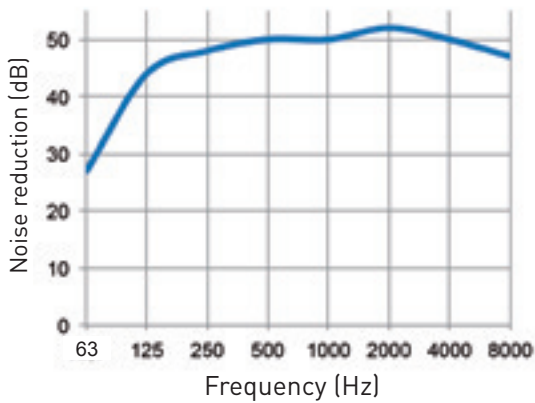
These figures are indicative.  
Dimensions are given in mm.  
Weight in Kg.

Dimensions are given without flanges, add 5 mm for each welded flange.  
Tolerance on length below 400 mm ± 4 mm.

Above characteristics correspond to the given sketch.

# SM 50P

Noise reduction range: 45 - 50 dB (A)



Silencer nominal diameter choice

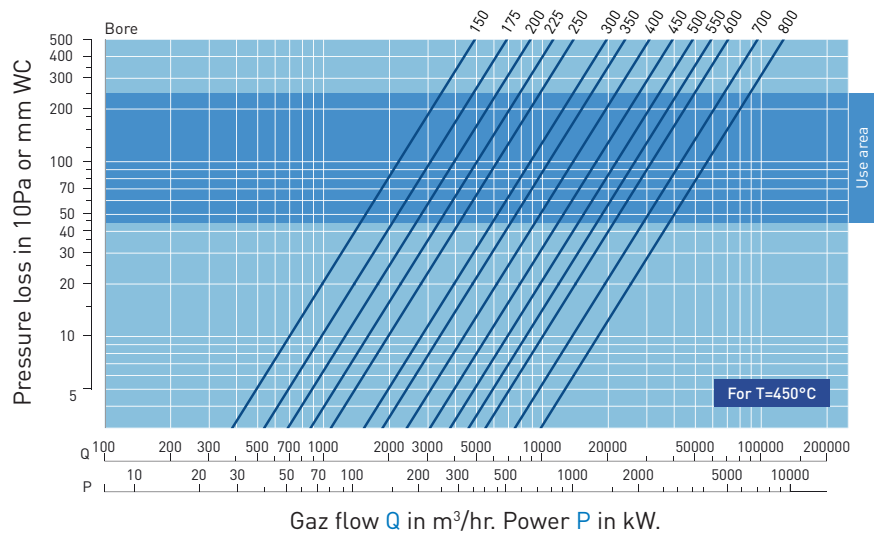
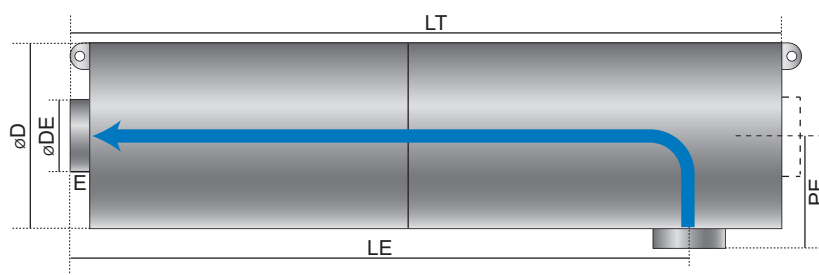


Table of dimensions

Bore Ø	ØDE	ØD	LT	LE	E	PE	Weight
150	168	658	2550	2285	110	415	260
175	194	658	2800	2505	110	440	280
200	220	708	3000	2630	110	465	330
225	246	758	3200	2775	110	490	380
250	274	800	3400	2955	110	525	430
300	324	908	4300	3915	120	575	690
350	356	958	4500	4070	120	600	750
400	406	1008	4800	4330	120	620	860
450	457	1008	5130	4640	130	630	965
500	508	1110	5300	4810	130	685	1110
550	557	1200	5505	4860	140	755	1450
600	609	1308	5800	5255	150	760	1780
700	710	1510	6300	5585	150	905	2230
800	812	1608	6600	5785	170	975	2540

Options: flanges, counter-flanges, gaskets and bolts

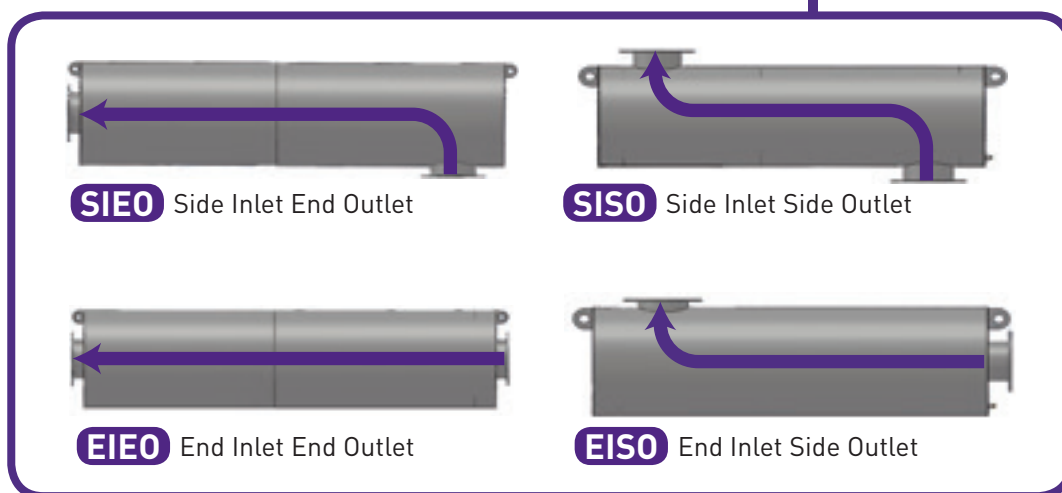
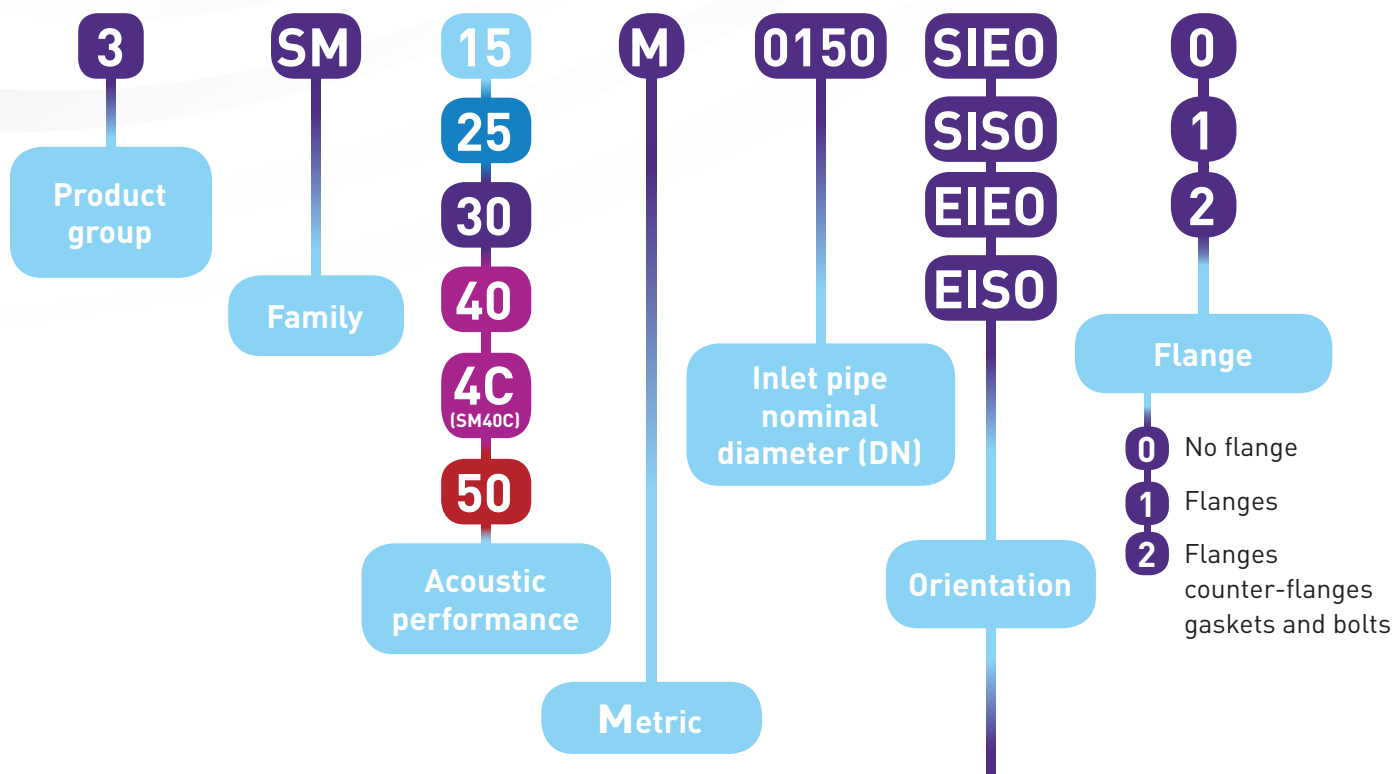


These figures are indicative.  
Dimensions are given in mm.  
Weight in Kg.

Dimensions are given without flanges, add 5 mm for each welded flange. Tolerance on length below 400 mm ± 4 mm.

Above characteristics are given for side inlet and end outlet arrangement.  
Other arrangements available upon request.

# Product referencing for SM range



## Standard arrangement:

SM15 & SM25: end inlet - end outlet (EIEO)

SM30, SM40 & SM50: side inlet - end outlet (SIEO)

Other arrangements available upon request

Installation, operating and maintenance manuals available upon requests



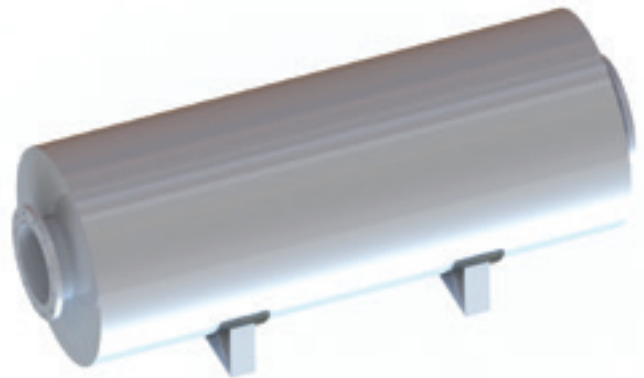
# Optional equipments



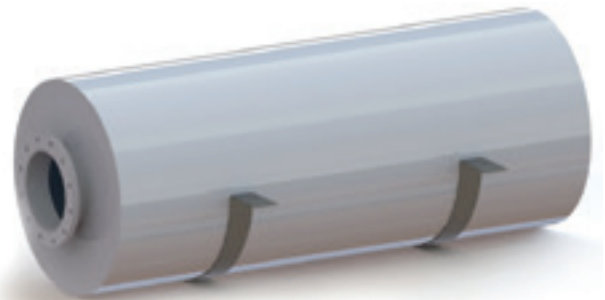
# Add-ons



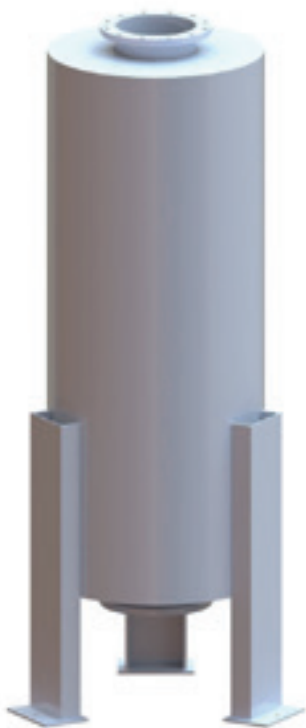
Vertical supports: type V



Horizontal supports: type H



Horizontal supports: type HC



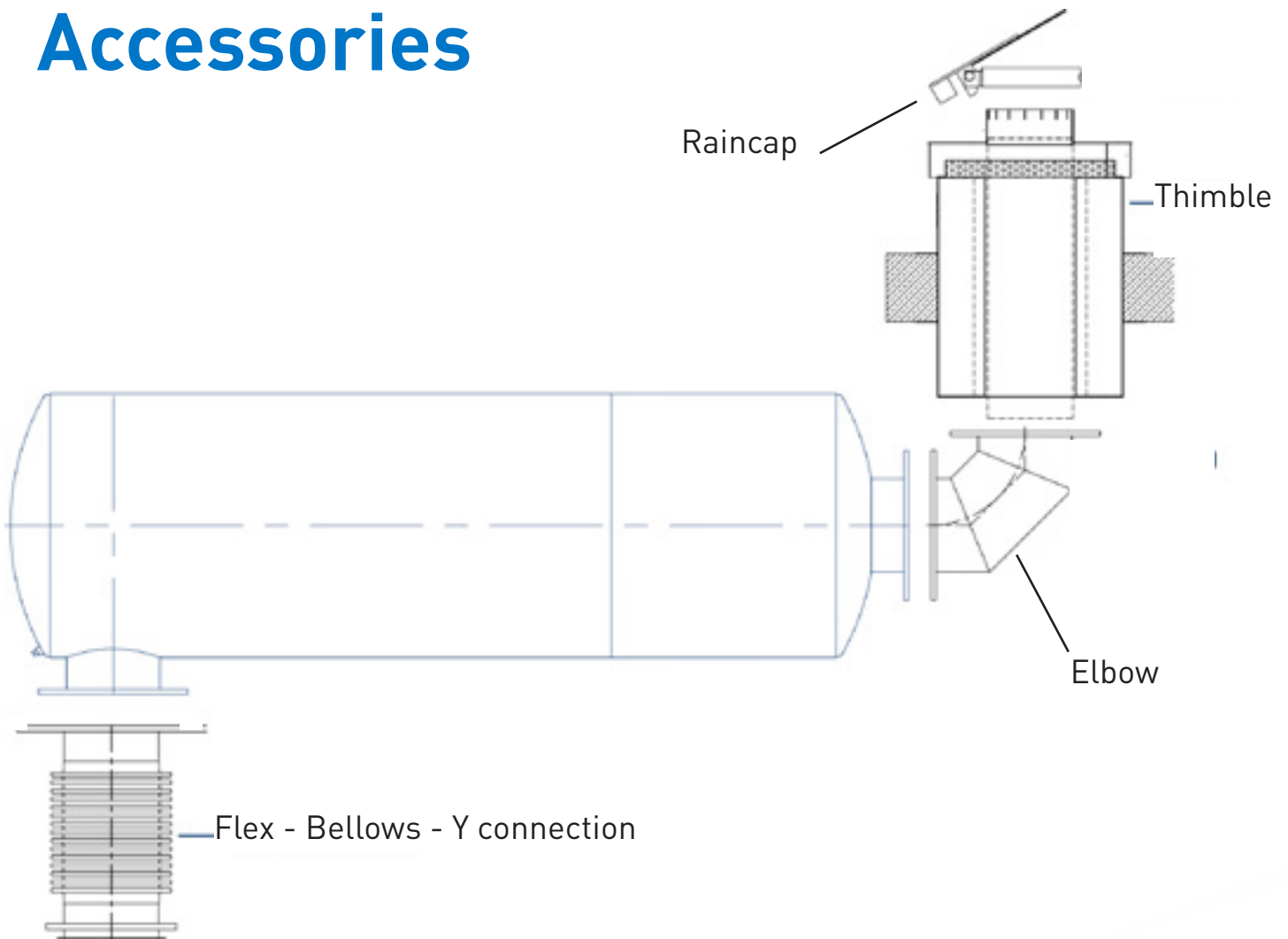
Vertical supports: type VP

## OPTIONAL FEATURES

- Catalyst (refer to “3EC Emission control” product catalog)
- Integrated spark arrestors (refer to “3EC Emission control” product catalog)
- Special outdoor protection (metal spray...)
- Other material (Stainless steel, corten steel...)
- Flanges, counter-flanges, gaskets, bolts
- Supports

For any special equipment, please contact IAC Acoustics.

# Accessories



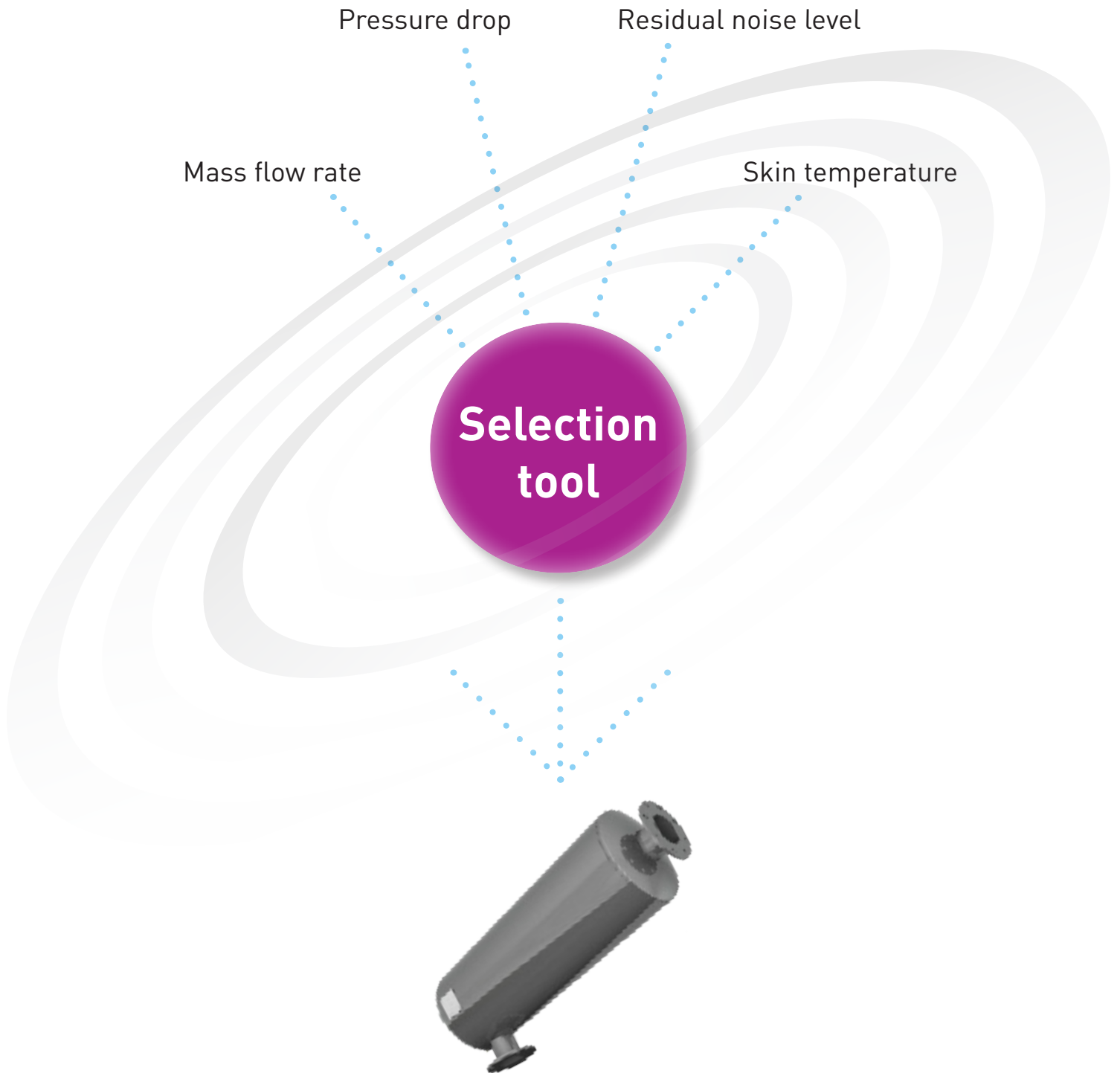
Refer to “[3AC Accessories range](#)” catalog

- Special inlet and outlet connections
- Flanges according to ANSI, ISO, DIN, BS ... standards
- Tube couplers
- Horizontal supports
- Vertical mounting legs
- Horizontal mounting saddles
- Sliding rings
- Mounting brackets
- Clamps & half clamps
- Elbows - Mitred & formed
- Nut/Bolt/Gasket kits
- Corrugated flex connections
- Bellows
- “Y” pieces
- Drain
- Pipe hangers
- Rain guards
- Rain caps - Standard & Heavy duty
- Thimbles
- Weathershields
- Thermal wrap

Refer to “[AVM](#)” catalog

- Anti-vibration mounts
- Spring mounts

# Selection tool



Contact IAC Acoustics to receive your unique username and password, then visit: <http://power.iac-acoustics.com>

# Some of our customers

- 2H energy
- ADV Altares
- AEEN
- Bombardier
- Caterpillar
- Clarke Energy
- CNIM
- COFELY GDF Suez
- Cummins
- Daihatsu
- Dalkia
- Deutz
- EDF
- Eiffage Energie
- Eneria
- Eurodiesel
- Euro power techno
- FG Wilson
- FPT
- Ingersoll Rand
- Kohler
- Man
- Moteurs Baudouin
- MTU
- Perkins
- SDMO
- SNCF



# Contacts

For a list of IAC  
locations worldwide  
please refer to our  
website.



**making the world a quieter place**

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