

Centro-M

Inline centrifugal fans

Use

- Supply and extract ventilation systems installed in various premises.
- Direct mounting inside air ductworks.
- Compatible with Ø100 to 450 mm round air ducts.



Air flow:
up to 5260 m³/h
1461 l/s



Power:
from 60 W



Noise level:
from 36 dBA



Design

- The casing is made of steel with a special polymer coating.
- Aerodynamically shaped casing.
- External terminal box for connection to power mains.

Motor

- Single-phase external rotor motor with a centrifugal impeller with backward curved blades.
- Equipped with ball bearings for longer service life.
- Overheating protection by built-in thermal switches with automatic restart.
- Dynamically balanced turbine.
- Some standard sizes have high-powered motors (**Centro-M max**).
- For ventilation of premises with high requirements to noise level low-noise modifications are available (**Centro-M L**).

Speed control

- Smooth speed control with an external thyristor controller or step speed control with an external auto transformer (both available upon separate order).

Mounting

- Any mounting position.
- The fans with the connecting diameter from 100 up to 315 mm are fixed to wall or ceiling with mounting brackets supplied as a standard.
- The fans with the connecting diameter from 355 up to 450 mm are fixed with mounting brackets fixed on the casing.
- Flexible air ducts are fixed on the fan spigots with clamps.



Modifications and options

- FR:** built-in smooth speed controller from 0 to 100 %. The fan is supplied with a pre-wired power cable with IEC plug as a standard. The cable modification with a standard electric plug is also available (**FR1**).



- G:** smooth speed controller with an electronic thermostat and an external temperature sensor that is fixed on 4 m power cable. The fan is supplied with a pre-wired power cable with IEC plug as a standard. The cable modification with a standard electric plug is also available (**G1**).
- max:** high-powered motor.
- L:** low-powered motor.
- W:** the fan is equipped with a pre-wired power cable and IEC plug as a standard. Modification with a standard electric plug is available (**W1**).

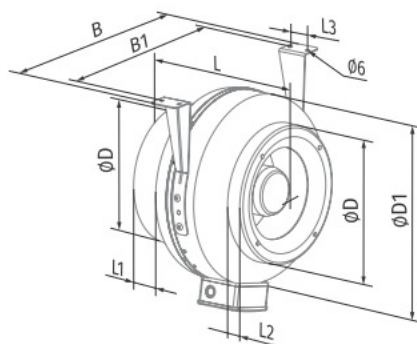
Accessories

Silencer	Panel filter	Pocket filter	Electric heater	Water heater	Backdraft air damper	Shutter	Speed controller
							
SD	KFBK	KFBT	EKH	WKH	VRV	VKA	CDT E1.8

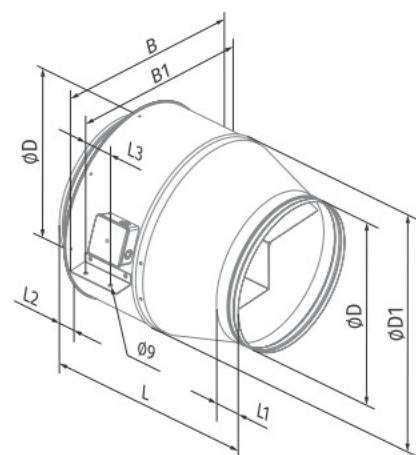
Designation key				ErP Parameter	
Series	Duct diameter	Options	Motor modifications	Overall efficiency	η , [%]
Centro-M	100; 125; 150; 160; 200; 250; 315; 355; 400; 450	FR: built-in smooth speed controller adjustable from 0 to 100 %. The fan is supplied with a pre-wired cable with IEC plug as a standard.	max: high-powered motor	Measurement category	MC
		FR1: built-in smooth speed controller adjustable from 0 to 100 %. The fan is supplied with a pre-wired cable with a standard electric plug.	L: low-powered motor	Efficiency category	EC
		G: smooth speed controller with an electronic thermostat and an external temperature sensor that is fixed on 4 m cable. The fan is supplied with a pre-wired cable with IEC plug as a standard.		Efficiency grade	N
		G1: smooth speed controller with an electronic thermostat and an external temperature sensor that is fixed on 4 m cable. The fan is supplied with a pre-wired power cable with a standard plug.		Variable speed drive	VSD
		W: the fan is equipped with a pre-wired power cable and IEC plug as a standard.		Power	[kW]
		W1: the fan is equipped with a pre-wired power cable and a standard electric plug.		Current	[A]
				Air flow	[m³/h]
				Static pressure	[Pa]
				Speed	[n/min ⁻¹]
				Specific ratio	SR

Overall dimensions [mm]

Type	ØD	ØD1	B	B1	L	L1	L2	L3	Weight [kg]
Centro-M 100 L	98	254	298	258	205	20	25	30	3.45
Centro-M 100	98	254	298	258	205	20	25	30	3.45
Centro-M 125 L	123	254	298	258	205	20	25	30	3.58
Centro-M 125	123	254	298	258	205	20	25	30	3.58
Centro-M 150	149	304	349	309	220	25	25	30	4.17
Centro-M 160	159	304	357	317	220	25	25	30	4.32
Centro-M 200	198	344	390	350	240	25	29	40	5.70
Centro-M 200 max	198	344	390	350	250	25	29	40	5.70
Centro-M 250 L	248	344	390	350	249	25	31	40	5.09
Centro-M 250	248	344	390	350	249	25	31	40	5.09
Centro-M 315	314	404	454	414	260	25	40	40	7.30
Centro-M 315 max	314	404	454	414	288	25	40	40	7.30
Centro-M 355 L	353	460	522	522	506	60	60	70	18.80
Centro-M 400	398	570	663	634	570	60	60	70	25.10
Centro-M 450	448	608	700	670	644	60	60	80	27.26



Centro-M 100 – Centro-M 315



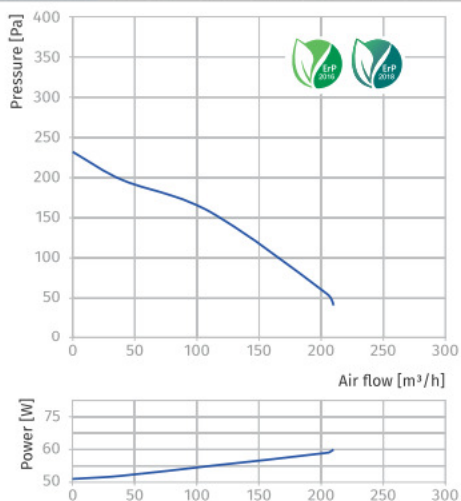
Centro-M 355 – Centro-M 450

Technical data

Parameters	Centro-M 100 L	Centro-M 100	Centro-M 125 L	Centro-M 125
Voltage [V / 50 Hz]	230	230	230	230
Power [W]	60	73	60	75
Current [A]	0.37	0.32	0.37	0.33
Maximum air flow [m³/h (l/s)]	210 (58)	270 (75)	255 (71)	355 (99)
RPM [min⁻¹]	2620	2830	2535	2800
Sound pressure at 3 m [dBA]	36	47	36	47
Transported air temperature [°C]	-25...+55	-25...+55	-25...+55	-25...+55
SEC class	C	C	C	C
Ingress protection rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP44	IP44	IP44
ErP	2016, 2018	2016, 2018	2016, 2018	2016, 2018

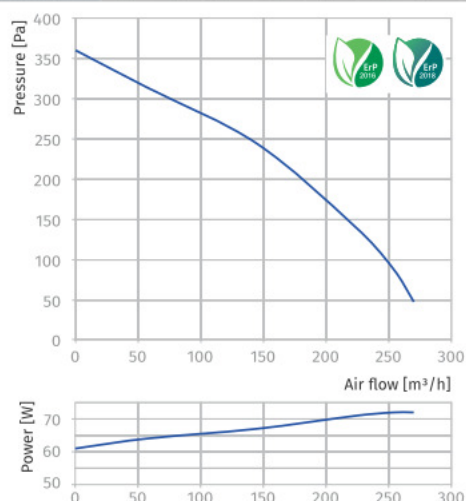
CENTRO-M 100 L

Sound power level, A-weighted	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	64	48	57	57	59	51	47	40	28
LWA to outlet [dBA]	64	52	62	56	57	50	46	39	32
LWA to environment [dBA]	57	23	13	23	38	42	42	31	15



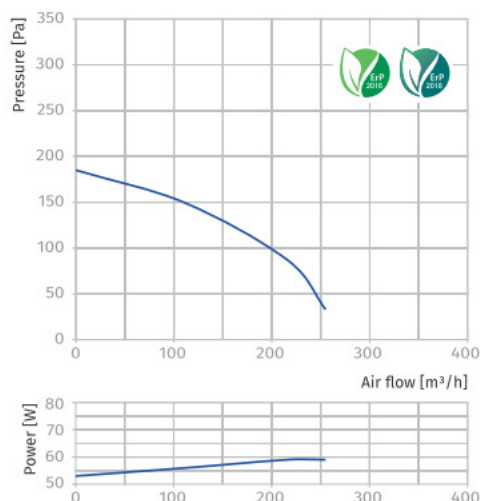
CENTRO-M 100

Sound power level, A-weighted	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	73	47	63	67	68	60	55	54	38
LWA to outlet [dBA]	77	54	66	73	66	66	60	55	46
LWA to environment [dBA]	63	45	60	55	41	25	7	18	22



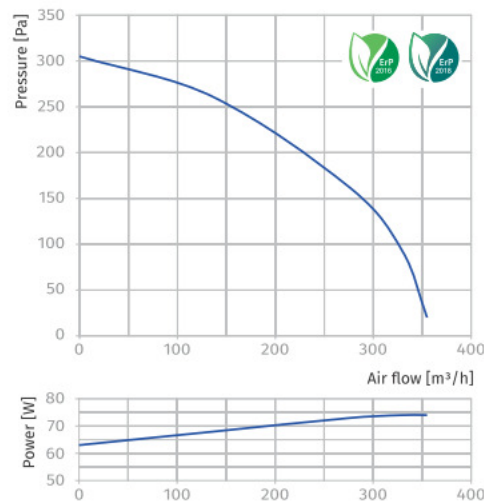
CENTRO-M 125 L

Sound power level, A-weighted	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	60	34	51	53	56	46	43	34	29
LWA to outlet [dBA]	62	33	52	59	58	51	49	41	32
LWA to environment [dBA]	65	44	61	59	43	30	17	30	28



CENTRO-M 125

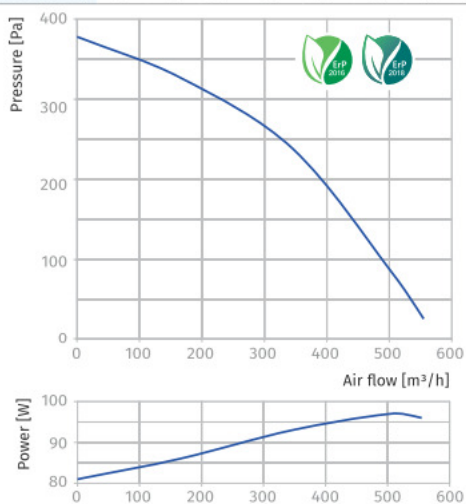
Sound power level, A-weighted	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	73	54	67	68	67	64	61	51	41
LWA to outlet [dBA]	76	57	69	68	72	71	65	57	45
LWA to environment [dBA]	62	51	61	60	46	36	22	31	27



Parameters	Centro-M 150	Centro-M 160	Centro-M 200	Centro-M 200 max
Voltage [V / 50 Hz]	230	230	230	230
Power [W]	98	98	154	193
Current [A]	0.43	0.43	0.67	0.84
Maximum air flow [m³/h (l/s)]	555 (154)	555 (154)	950 (264)	1100 (306)
RPM [min⁻¹]	2705	2660	2375	2780
Sound pressure at 3 m [dBA]	47	47	48	51
Transported air temperature [°C]	-25...+55	-25...+55	-25...+50	-25...+45
SEC class	B	B	B	–
Ingress protection rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP44	IP44	IP44
ErP	2016, 2018	2016, 2018	2016, 2018	2016, 2018

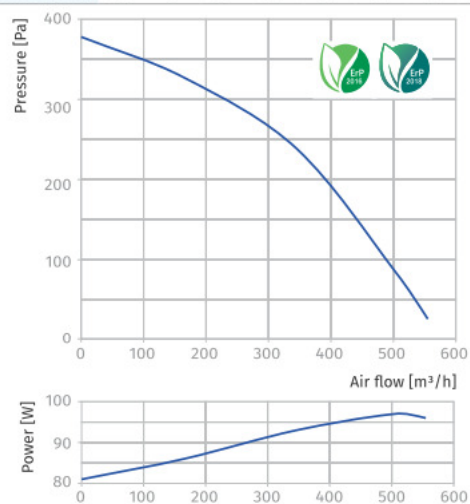
CENTRO-M 150

Sound power level, A-weighted	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	72	45	65	62	67	59	59	49	38
LWA to outlet [dBA]	74	42	69	63	71	63	59	50	37
LWA to environment [dBA]	62	41	59	55	39	19	17	28	22



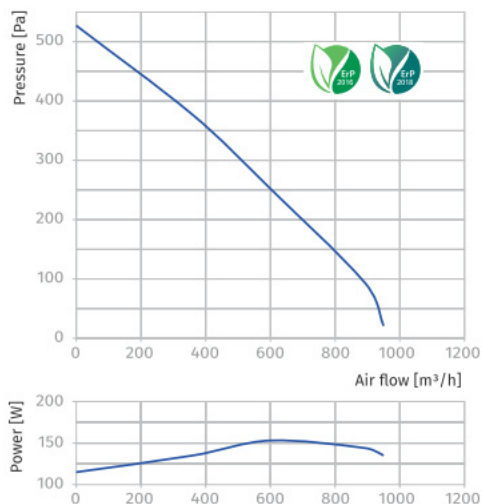
CENTRO-M 160

Sound power level, A-weighted	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	68	41	65	64	63	61	57	47	35
LWA to outlet [dBA]	70	47	67	68	66	64	60	51	41
LWA to environment [dBA]	60	40	61	55	39	18	16	28	22



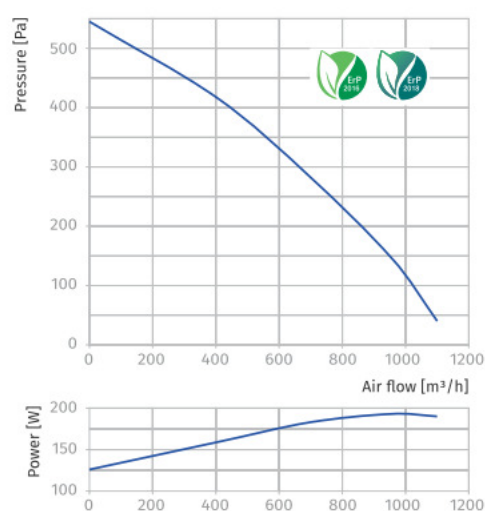
CENTRO-M 200

Sound power level, A-weighted	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	75	47	68	65	72	65	61	59	49
LWA to outlet [dBA]	75	51	72	68	75	67	65	59	50
LWA to environment [dBA]	65	46	61	59	47	31	28	46	42



CENTRO-M 200 MAX

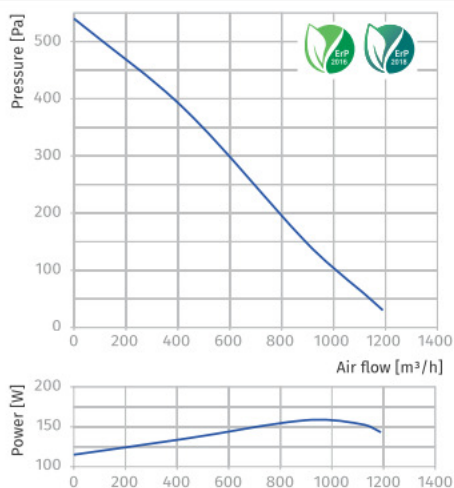
Sound power level, A-weighted	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	75	48	66	72	73	66	63	58	49
LWA to outlet [dBA]	78	51	70	74	71	64	64	60	53
LWA to environment [dBA]	66	49	64	60	45	35	28	46	41



Parameters	Centro-M 250 L	Centro-M 250	Centro-M 315	Centro-M 315 max
Voltage [V / 50 Hz]	230	230	230	230
Power [W]	158	194	171	296
Current [A]	0.69	0.85	0.77	1.34
Maximum air flow [m³/h (l/s)]	1190 (331)	1310 (364)	1400 (389)	1880 (522)
RPM [min⁻¹]	2315	2790	2600	2720
Sound pressure at 3 m [dBA]	52	52	52	54
Transported air temperature [°C]	-25...+50	-25...+50	-25...+50	-25...+45
SEC class	–	–	–	–
Ingress protection rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP44	IP44	IP44
ErP	2016, 2018	2016, 2018	2016, 2018	2015, 2016, 2018

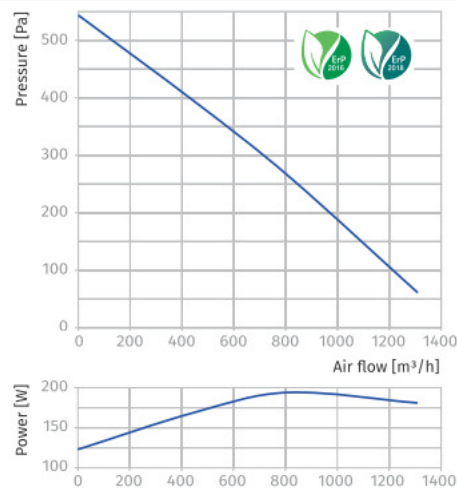
CENTRO-M 250 L

Sound power level, A-weighted	Octave frequency bands [Hz]								
	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	68	46	57	60	65	62	58	60	54
LWA to outlet [dBA]	75	44	59	64	65	67	65	68	59
LWA to environment [dBA]	60	44	57	52	47	36	39	51	45



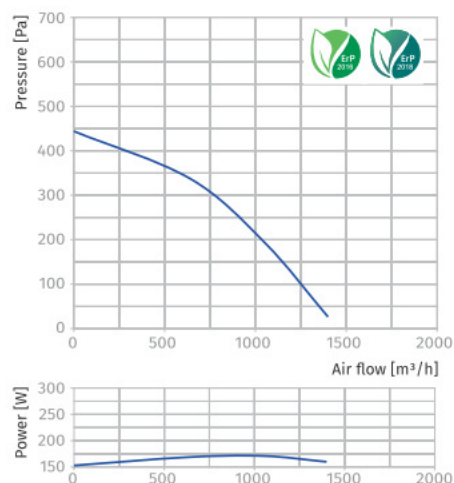
CENTRO-M 250

Sound power level, A-weighted	Octave frequency bands [Hz]								
	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	75	60	68	65	67	66	60	53	48
LWA to outlet [dBA]	77	62	71	74	70	71	69	59	50
LWA to environment [dBA]	65	57	62	60	50	43	37	45	38



CENTRO-M 315

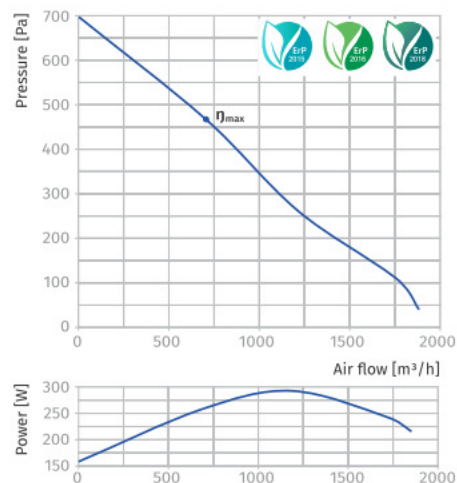
Sound power level, A-weighted	Octave frequency bands [Hz]								
	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	71	35	51	61	69	66	62	59	56
LWA to outlet [dBA]	75	42	58	62	71	69	67	59	57
LWA to environment [dBA]	60	34	49	56	50	44	49	53	50



CENTRO-M 315 MAX

Sound power level, A-weighted	Octave frequency bands [Hz]								
	Gen.	63	125	250	500	1000	2000	4000	8000
LWA to inlet [dBA]	77	54	67	72	70	67	67	64	56
LWA to outlet [dBA]	81	54	71	72	71	69	72	64	60
LWA to environment [dBA]	68	56	66	62	57	47	54	55	51

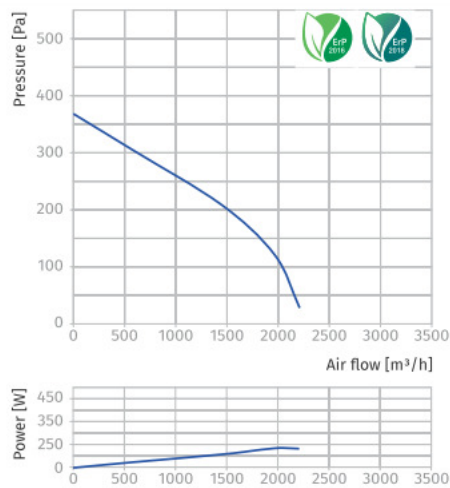
η, [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
46.9	A	Static	64.2	No	0.226	0.99	702	470	2780	1



Parameters	Centro-M 355 L	Centro-M 400	Centro-M 450
Voltage [V / 50 Hz]	230	230	230
Power [W]	233	460	665
Current [A]	1.06	2.23	2.89
Maximum air flow [m³/h (l/s)]	2210 (614)	3050 (847)	5260 (1461)
RPM [min⁻¹]	1375	1370	1265
Sound pressure at 3 m [dBA]	58	61	65
Transported air temperature [°C]	-25...+45	-40...+80	-40...+70
SEC class	–	–	–
Ingress protection rating	IPX4	IPX4	IPX4
Motor IP rating	IP44	IP44	IP44
ErP	2016, 2018	2016, 2018	2016, 2018

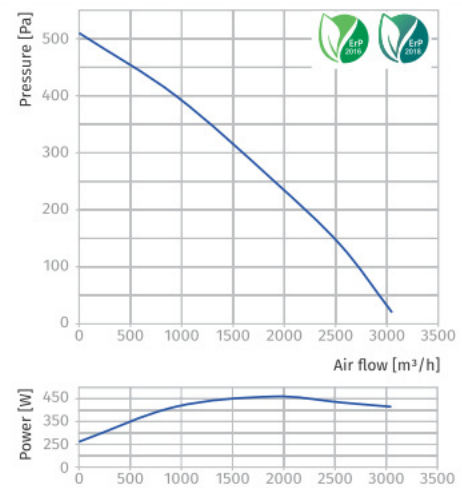
CENTRO-M 355 L

Sound power level, A-weighted	Octave frequency bands [Hz]								
	Gen.	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet [dBA]	66	54	49	56	63	61	58	56	46
L _{WA} to outlet [dBA]	63	53	53	62	61	58	52	51	43
L _{WA} to environment [dBA]	53	50	48	49	49	45	39	36	24



CENTRO-M 400

Sound power level, A-weighted	Octave frequency bands [Hz]								
	Gen.	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet [dBA]	68	53	48	56	59	58	60	55	48
L _{WA} to outlet [dBA]	65	52	55	62	62	58	56	51	41
L _{WA} to environment [dBA]	56	47	47	49	47	43	42	37	25



CENTRO-M 450

Sound power level, A-weighted	Octave frequency bands [Hz]								
	Gen.	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet [dBA]	64	51	50	55	60	60	60	53	44
L _{WA} to outlet [dBA]	64	52	51	61	61	60	56	51	41
L _{WA} to environment [dBA]	54	46	48	51	47	44	42	37	24

