



# LINEO RANGE

IN-LINE MIXED FLOW FANS





**VORTICE S.p.A.** is part of a multinational group,<sup>[1]</sup> **VORTICE GROUP**, which operates through its own companies or local distributors in over 90 countries worldwide and has a rich product portfolio that guarantees air quality and climate comfort. The headquarters of VORTICE S.p.A are in Tribiano (Milan).



VORTICE GROUP also includes:

<sup>[1/2]</sup> **BUSINESS UNIT INDUSTRIAL**, born from the acquisition in 2010 of Loran srl, based in Isola della Scala (VR). 2024 become Vortice's BUSINESS UNIT INDUSTRIAL.

<sup>[3]</sup> **VORTICE LIMITED**, the UK subsidiary of VORTICE S.p.A., established in 1977 and based in Burton on Trent.

<sup>[4]</sup> **VORTICE VENTILATION SYSTEM**, a company inaugurated in 2013 with headquarters in Changzhou, China.

<sup>[5]</sup> **CASALS VENTILACIÓN AIR INDUSTRIAL S.L.**, historic Spanish brand, based in Sant Joan de les Abadesses, Girona, acquired in 2019.

<sup>[6]</sup> **VORTICE LATAM S.A.**, based in Alajuela in Costa Rica, established in 2012.

<sup>[7]</sup> **VORTICE POLSKA** new representative office in Warsaw, Poland, established in 2026.



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## Certifications

The LINEO range products are CE marked according to the Directives and Regulations listed below. Their compliance with safety and EMC Standards is certified by IMQ.

### Relevant Directives and Regulations for the CE Marking

- Machinery Directive (2006/42/CE)
- Low Voltage Directive (2014/35/EU)
- Electromagnetic Compatibility Directive (2014/30/EU)
- Ecodesign Directive (2009/125/EC)
- RoHS Directive (2011/65/EU)
- WEEE Directive (2012/19/EU)
- ERP Regulation No. 327/2011/EU

### Electrical safety standards

- EN 60335-1
- EN 60335-2-80
- EN 62233
- EN 60529

### Standards associated

with the Machinery Directive

- EN 60204-1
- EN 12100
- EN 12499
- EN 13857

Electromagnetic compatibility standards

- EN 55014-1
- EN 55014-2
- EN 61000-3-2
- EN 61000-3-3

The technical solutions adopted to minimize noise emissions without compromising performance are patented.

Vortice is a member of AMCA (Air Movement & Control Association), grouping the leading global manufacturers of air movement equipment.

# LINEO RANGE

## In-line mixed flow fans

The LINEO range products are “mixed flow” fans specifically designed for horizontal or vertical ducted installation

VENTILATION OF RESIDENTIAL,  
COMMERCIAL OR INDUSTRIAL PREMISES.

They all have high levels of energy efficiency and meet the requirements of ERP Regulation 327/2011/EU. The fans in the renewed LINEO range boast

HIGH PERFORMANCE, LOW ENERGY CONSUMPTION, LOW NOISE  
EMISSIONS AND EASE OF INSTALLATION AND MAINTENANCE  
placing them at the top of the category.

## KEY FEATURES

- High-performance, top-of-the-range.
- Easy maintenance. Each component allows easy connection and disconnection with the nearby elements, and easy access to the inner components (motor-impeller) and their replacement. In the case of silenced products, the sound absorbing shells refitted at the end of the maintenance process, restore the original sound performance under test conditions.
- The motors have a minimum guaranteed life in continuous operation at maximum speed and at maximum ambient temperature of 30,000 or 40,000 hours depending on the type.
- Completeness of the range, designed to offer the ideal product to meet the specific requirements of the system in terms of performance, consumption, quiet operation, operating costs and purchase price.



## THE DESIGN

### Construction features common to the range

- A central motor mount which encloses the fan motor unit and houses the wiring devices externally, in an easily reachable position.
- The main body, fixed to a pair of end supports arranged for connection to the suction and delivery pipes, which is designed to rotate on its own axis to facilitate the housing of the product in small spaces and its wiring through the contacts positioned on its external surface.
- The ease with which it can be removed without altering the surrounding piping system, greatly speeds up and facilitates maintenance.
- The air flow rectifiers on the delivery side work in synergy with the upstream impeller, optimise the managed air flow, maximising performance and increasing efficiency, reducing the occurrence of vortices and minimising noise emissions.
- The mixed flow type impellers, combine the advantages of helical fans (high flow rates and flow around the axis of the impeller), with the high pressures of centrifugal fans;
- the directly coupled motors have shafts mounted on ball bearings, ensuring a virtually “maintenance free” operation.
- The timer in the T models allows the operation of the appliance to be programmed at maximum speed and ease at a range between 3' and 20', which can be set during installation.

The LINEO range products are characterised by technopolymer enclosures for increased fire resistance safety class E2, according to EN ISO 11925-2:2010 and have a high degree of protection against water the classification only applies to a properly installed product

# LINEO QUIET ES RANGE

## In-line mixed flow fans


The LINEO QUIET range products are characterised by the use of a sound-absorbing coating, which is fully integrated in the outer casing and optimised to minimise environmental sound emissions.

**HIGH-LEVEL PERFORMANCE,  
AT THE TOP OF THE RANGE.**



because energy  
has to be....

**SAVED**



The impeller profiles,  
the flow rectifiers and ogival profile  
of the flow driver work in synergy with  
the upstream impeller optimise the  
managed air flow, maximising performance  
and increasing efficiency, reducing  
the occurrence of vortices and  
minimising noise  
emissions.



because silence  
has to be.... **BUILT**

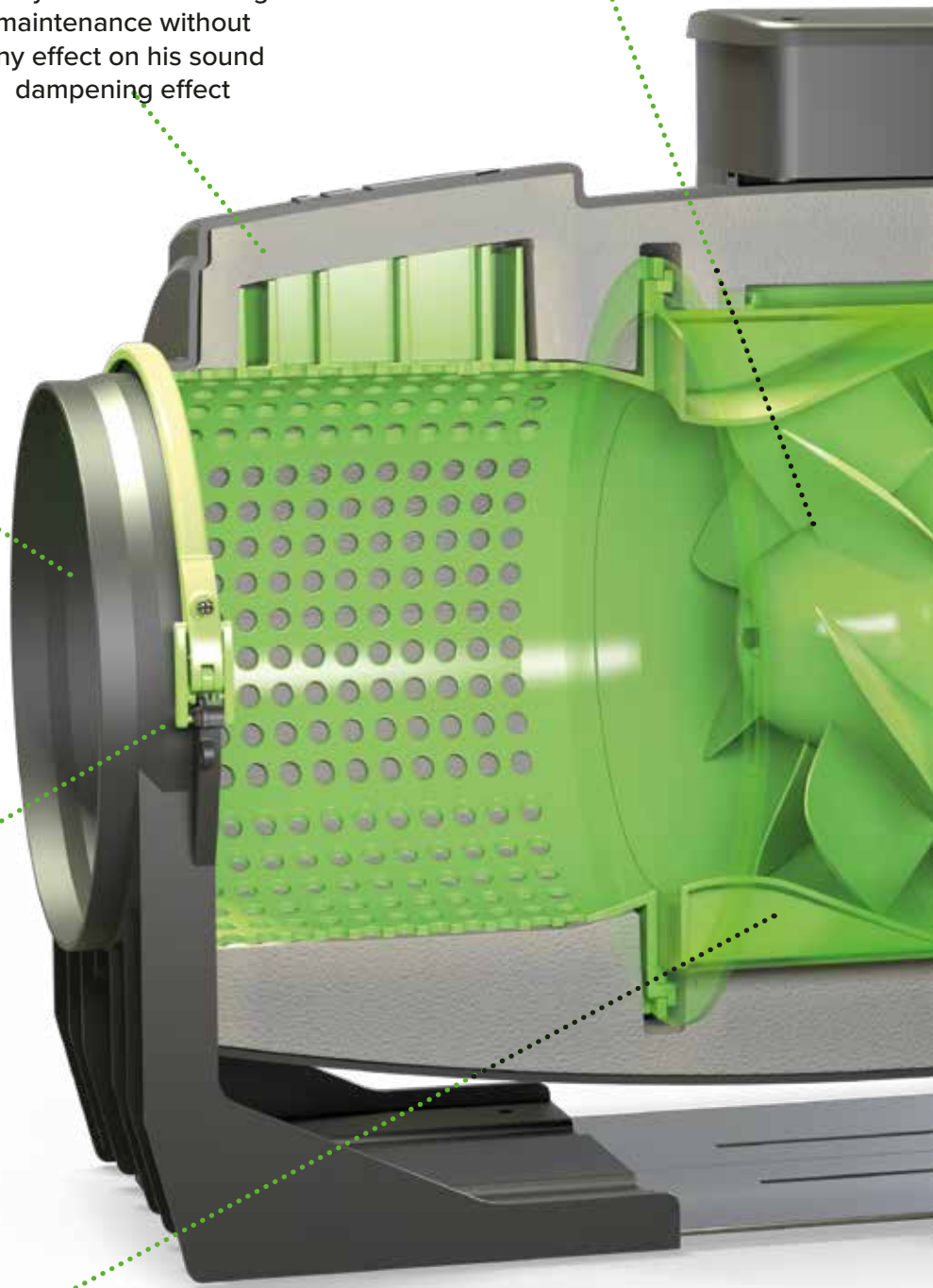
**IMPELLER**  
Designed to reach the ERP  
efficiency levels

**CO-MOULDED SHELL**  
Easily removable during  
maintenance without  
any effect on his sound  
dampening effect

**INLET NOZZLE**  
Dimensioned to sustain the  
product in the wall and ceiling  
installation

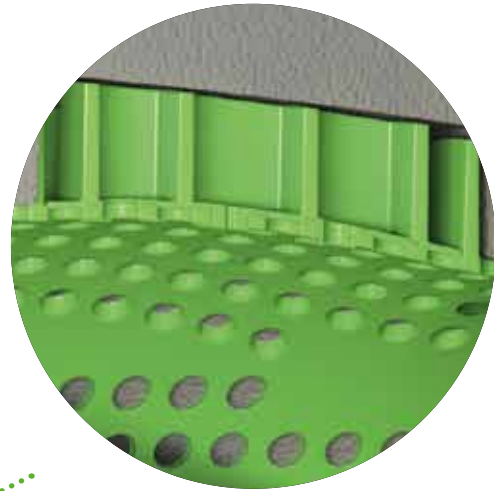


**DIVERGENT ELEMENT**  
It helps the impeller to increase  
the performance





**ELECTRIC BOX**  
Produced in a material  
granting electrical and fire  
resistance



**HELMHOLTZ RESONATOR GROUP**  
Passive sound dampener used  
to decreased the noise levels at  
predetermined frequencies

**FLOW DRIVER**  
It corrects the airflow after  
the impeller and the rectifier,  
avoiding energy losses  
due to vortices

**RECTIFIER BLADES**  
Designed with the impeller  
to rectify the airflow and avoid flow  
problems on the downstream  
part of the product

**CO-MOULDED SHELL**  
Easily removable during  
maintenance without  
any effect on his sound  
dampening effect

# LINEO QUIET ES RANGE

equipped with EC brushless motors

The products in the LINEO QUIET ES range differ from the corresponding versions of the LINEO QUIET range due to the use of electronically controlled 2 speed EC brushless (low consumption) motors. Each speed can be set at installation. Alternatively the units can run at 1 speed only, adjustable by user through 0-10V signal.



# LINEO QUIET RANGE

equipped with AC motors

The LINEO QUIET range products are fitted with traditional AC motors, 2 or 3 speed depending on the model.





Commercial ventilation

because environment  
has to be.... **SUSTAINED**





# LINEO QUIET ES RANGE

In-line mixed flow fans equipped with EC Brushless motors

## TECHNICAL AND PERFORMANCE DATA - LINEO QUIET ES\*

Models	Code	V~50/60HZ	W		RPM	Max Airflow		Max Pressure		Protection grade**	°C max	KG
			4/6/8/10V	A		4/6/8/10V	4/6/8/10V	4/6/8/10V	Pa			
				4/6/8/10V		m³/h	l/s	mmH₂O				
LINEO 100 QUIET ES	17170	220-240	6,2	0,09	1140	135	37,5	3,5	34,3	IP45	60	3,8
			8,3	0,12	1450	175	48,6	58	56,9			
			14,7	0,18	2050	250	69,4	11,4	111,8			
			23	0,26	2510	300	83,3	24,8	243,2			
LINEO 125 QUIET ES	17171	220-240	6,6	0,10	1080	180	50	3,3	32,4	IP45	60	3,6
			8,8	0,12	1340	225	62,5	5,6	54,9			
			16	0,18	1865	320	88,9	11	107,9			
			24	0,26	2210	380	105,6	23,7	232,4			
LINEO 150 QUIET ES	17172	220-240	7,7	0,11	1015	250	69,4	4,6	45,1	IP45	60	5,4
			10,6	0,14	1240	305	84,7	7,5	73,6			
			20	0,24	1700	430	119,4	14,7	144,2			
			31	0,34	2030	515	143,1	24,2	237,3			
LINEO 160 QUIET ES	17173	220-240	7,7	0,11	1010	250	69,4	4,5	44,1	IP45	60	5,2
			10,6	0,14	1245	315	87,5	7,5	73,6			
			19,7	0,23	1685	435	120,8	14,4	141,2			
			31	0,34	2035	525	145,8	23,9	234,4			
LINEO 200 QUIET ES	17174	220-240	15,2	0,18	1380	570	158,3	8,6	84,3	IP45	50	8,6
			25,3	0,27	1705	720	200	13,9	136,3			
			52,4	0,52	2245	945	262,5	22,9	224,6			
			88	0,78	2700	1145	318,1	33,6	329,5			
LINEO 250 QUIET ES	17175	220-240	20	0,19	1365	750	208,3	10,1	99,1	IP45	50	13,4
			35	0,28	1680	940	261,1	15,6	153			
			75	0,60	2250	1250	347,2	26,6	260,9			
			125	0,97	2680	1485	412,4	37,5	367,8			
LINEO 315 QUIET ES	17176	220-240	42	0,31	1260	1400	388,9	12,9	126,5	IP45	50	28,3
			72	0,51	1560	1730	480,6	19,5	191,2			
			155	1,10	2070	2300	638,9	33,8	331,5			
			220	1,52	2350	2630	730,6	38,7	379,5			

\* all data referred to supply at 50 Hz

\*\* protection grade referred to ducted units

## SOUND LEVELS - LINEO QUIET ES

Models	Code	SOUND POWER Lw dB (A)											
		INTAKE				SUPPLY				BREAKOUT			
		4V	6V	8V	10V	4V	6V	8V	10V	4V	6V	8V	10V
LINEO 100 QUIET ES	17170	37,7	42,9	53,4	55,6	38,1	43,6	54,2	58,2	30,4	36,4	45,3	51,4
LINEO 125 QUIET ES	17171	37,9	41,8	52	55	38,5	43,1	53,9	57,5	31,8	36,9	45,6	49,2
LINEO 150 QUIET ES	17172	40	44,7	53,2	58,2	40,9	45,9	53,8	58,2	34,2	39,1	46,5	51,5
LINEO 160 QUIET ES	17173	40,6	45,7	54,1	59,5	41,1	46,3	54	58,8	33	37,9	45,2	49,7
LINEO 200 QUIET ES	17174	48,7	54,3	60,8	65,5	48,1	53,6	60,4	65,2	40,2	45,3	51,4	56,3
LINEO 250 QUIET ES	17175	54,4	59,5	65,9	70,4	54,8	59,9	66,2	70,7	45,2	50,3	57,8	61,5
LINEO 315 QUIET ES	17176	61,9	66,2	71,8	74	58,7	63,4	69,4	72	54	56,3	65,1	68,8

Models	Code	SOUND PRESSURE Lp dB(A)*											
		INTAKE				SUPPLY				BREAKOUT			
		4V	6V	8V	10V	4V	6V	8V	10V	4V	6V	8V	10V
LINEO 100 QUIET ES	17170	20,2	25,4	35,9	38,1	20,6	26,1	36,7	40,7	9,9	15,9	24,8	30,9
LINEO 125 QUIET ES	17171	20,4	24,3	34,5	37,5	21	25,6	36,4	40	11,3	16,4	25,1	28,7
LINEO 150 QUIET ES	17172	22,5	27,2	35,7	40,7	23,4	28,4	36,3	40,7	13,7	18,6	26	31
LINEO 160 QUIET ES	17173	23,1	28,2	36,6	42	23,6	28,8	36,5	41,3	12,5	17,4	24,7	29,2
LINEO 200 QUIET ES	17174	31,2	36,8	43,3	48	30,6	36,1	42,9	47,7	19,7	24,8	30,9	35,8
LINEO 250 QUIET ES	17175	36,9	42	48,4	52,9	37,3	42,4	48,7	53,2	24,7	29,8	37,3	41
LINEO 315 QUIET ES	17176	44,4	48,7	54,3	56,5	41,2	45,9	51,9	54,5	33,5	35,8	44,6	48,3

\* Calculated in free field conditions at 3 m distance, spherical distribution.



# LINEO QUIET ES RANGE

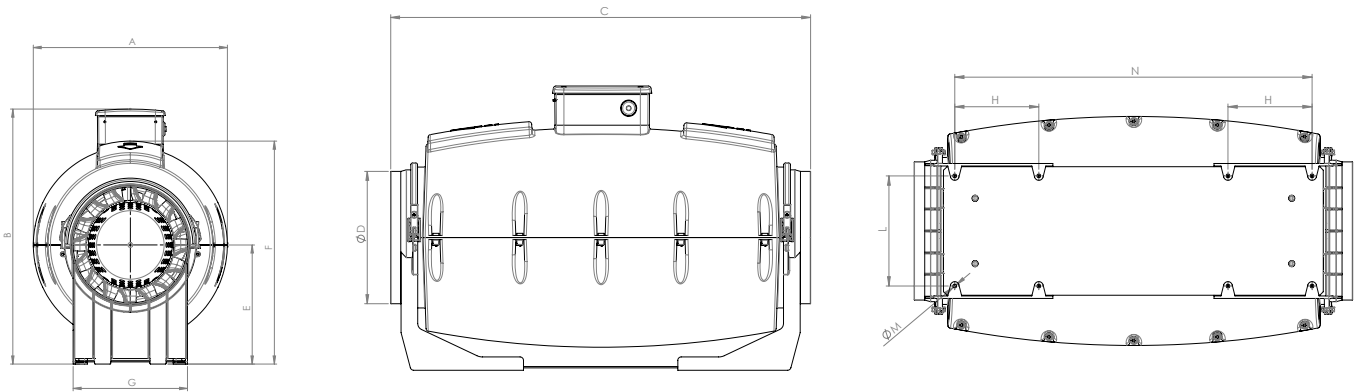
In-line mixed flow fans equipped with EC Brushless motors

## DIMENSIONS - LINEO QUIET ES

Models	Code	A	B	C	Ø D	E	F	G	H	L	Ø M	N	VERSION
LINEO 100 QUIET ES	17170	210	294.6	639	97	130	235	135	120	67.5	5.5	320	B
LINEO 125 QUIET ES	17171	210	294.6	504.5	122	130	235	135	120	67.5	5.5	320	B
LINEO 150 QUIET ES	17172	232	320.6	685	147	145	261.5	170	132	85	5.5	360	B
LINEO 160 QUIET ES	17173	232	320.6	570	156.5	145	261.5	170	135	85	5.5	360	B
LINEO 200 QUIET ES	17174	322.5	417.6	625.5	194.5	195	363.5	190	120	155	5.5	510	A
LINEO 250 QUIET ES	17175	318	411.9	751.5	243	189.5	363.5	200	70	170	6.5	604.5	A
LINEO 315 QUIET ES	17176	415.5	557.8	940	307	234	441	309	110	255	8.5	780	A

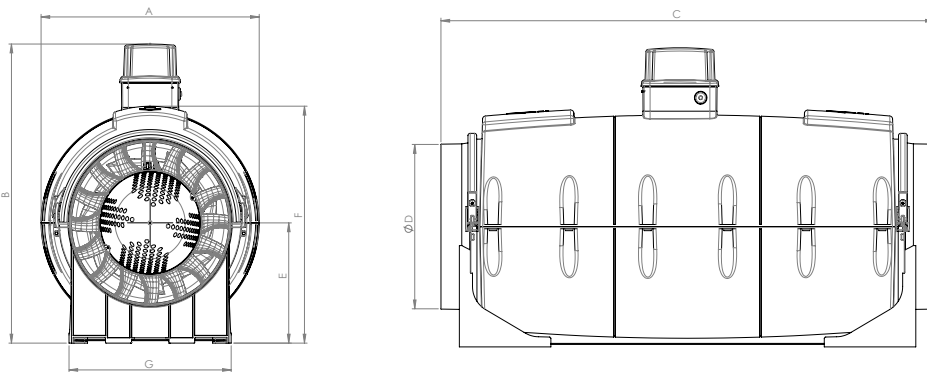
### VERSION A

LINEO 200 QUIET ES - LINEO 250 QUIET ES



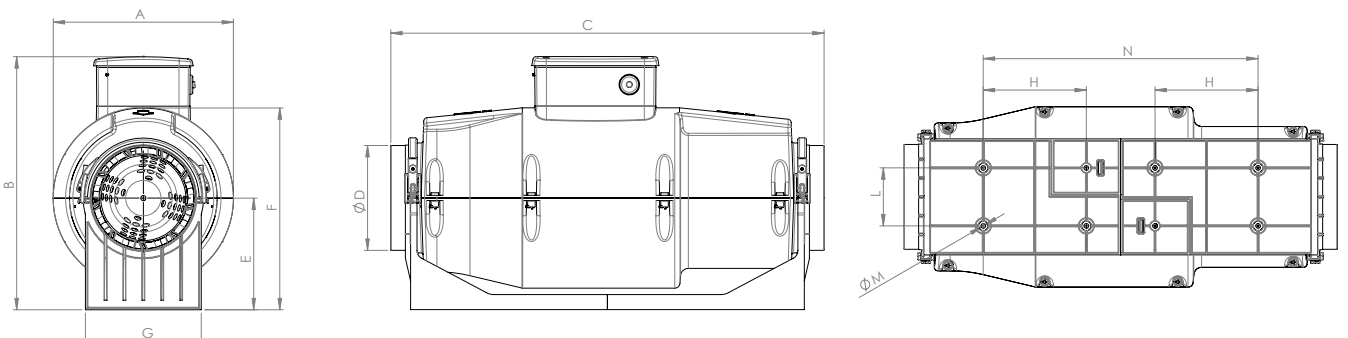
### VERSION A

LINEO 315 QUIET ES



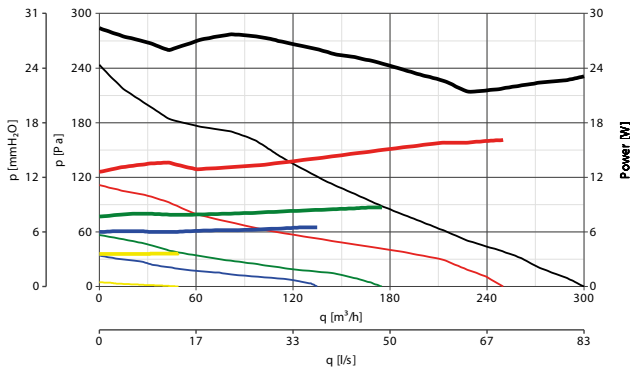
### VERSION B

LINEO 100 QUIET ES - LINEO 125 QUIET ES - LINEO 150 QUIET ES - LINEO 160 QUIET ES

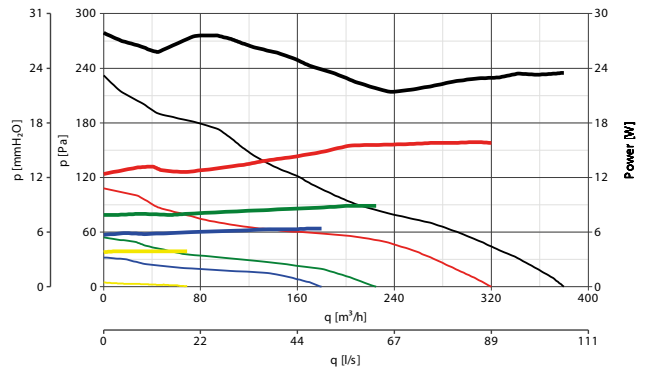


PERFORMANCE AND ABSORPTION CURVES - LINEO QUIET ES

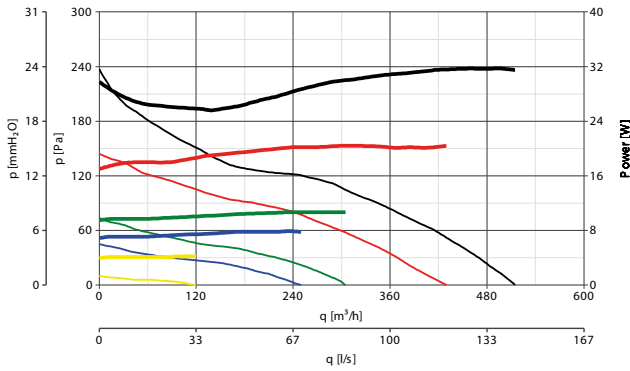
LINEO 100 QUIET ES



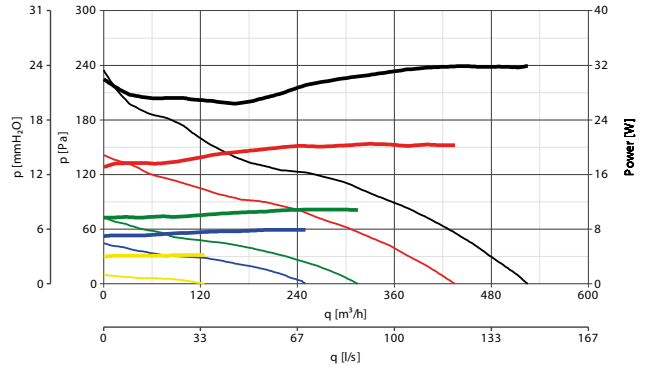
LINEO 125 QUIET ES



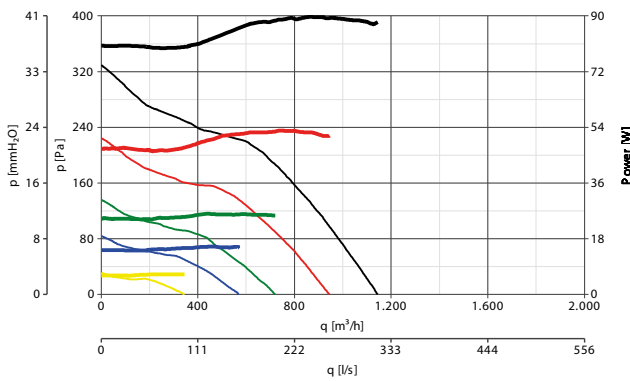
LINEO 150 QUIET ES



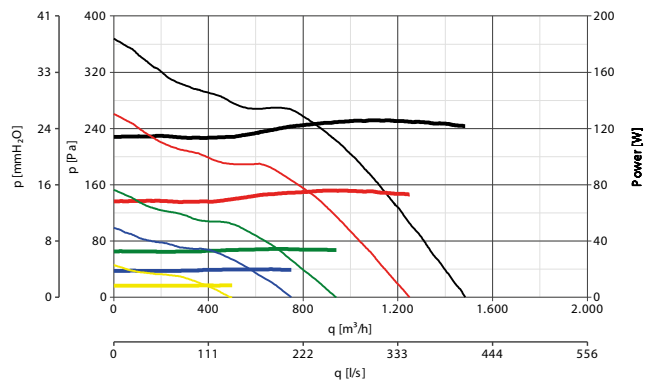
LINEO 160 QUIET ES



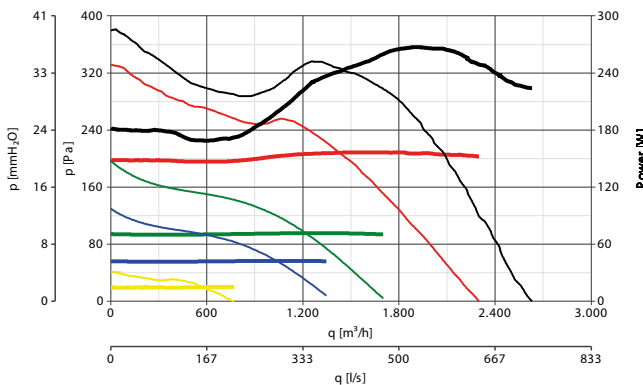
LINEO 200 QUIET ES



LINEO 250 QUIET ES










LINEO 315 QUIET ES



CONSUMPTION	PERFORMANCE
— 10V	— 10V
— 8V	— 8V
— 6V	— 6V
— 4V	— 4V

## CONTROLLERS - LINEO QUIET ES

MODELLO	DESCRIPTION	CODE	PRODUCT
	<b>POT-IT</b> - POTENTIOMETER COMPATIBLE WITH FLUSHMOUNTING IN UNI 503 ELECTRIC BOX	12826	17170 - 17171 - 17172 - 17173 - 17174 17175 - 17176
	<b>POT</b> - POTENTIOMETER COMPATIBLE WITH FLUSHMOUNTING IN DIN ELECTRIC BOX	12828	17170 - 17171 - 17172 - 17173 - 17174 17175 - 17176
	<b>C TEMP</b> - TEMPERATURE SENSOR	12992	ALL PRODUCTS
	<b>C SMOKE</b> - AIR QUALITY SENSOR	12993	ALL PRODUCTS
	<b>C HCS</b> - HUMIDITY SENSOR	12994	ALL PRODUCTS
	<b>C PIR</b> - PASSIVE INFRARED SENSOR	12998	ALL PRODUCTS
	<b>C TIMER</b> - TIMER	12999	ALL PRODUCTS

## ENERGY EFFICIENCY DATA REQUIRED BY REG. ERP N° 327/211

Attribute name	LINEO 250 QUIET ES 17175	LINEO 315 QUIET ES 17176
Overall efficiency ( $\eta$ )	50,53	59,06
Test category	D	D
Data at the point of maximum efficiency ( $\eta$ )	936	1619,4
Efficiency category	totale	totale
Efficiency grade ( $\eta$ )	70,5	75,8
Variable speed drive	Si	Si
Year of construction	2020	2020
Model number	17175	17176
Power at peak efficiency (kW)	0,125	0,253
Pressure at high efficiency point (Pa)	243,38	332,35
Maximum efficiency point speed (RPM)	2617	2350
Specific ratio	<1,04	<1,04





# LINEO QUIET RANGE

In-line mixed flow fans equipped with AC motors

## TECHNICAL AND PERFORMANCE DATA - LINEO QUIET\*

Models	Code	V~50 HZ	W min/ med/max	A min/ med/max	RPM min/ med/max	Max Airflow		Max Pressure		Protection grade**	Max °C	KG
						m <sup>3</sup> /h	l/s	mmH <sub>2</sub> O	Pa			
						min/med/max	min/med/max	min/med/max	min/med/max			
LINEO 100 QUIET	17160	220-240	11	0,09	1455	150	41,7	9	88,3	IP45	45	3,8
LINEO 100 T QUIET	17190		24	0,11	1880	200	55,6	11,5	112,8			
LINEO 125 QUIET	17161	220-240	11	0,09	1125	190	52,8	8	78,5	IP45	45	3,6
LINEO 125 T QUIET	17191		24	0,11	1475	250	69,4	10	98,1			
LINEO 150 QUIET	17162	220-240	24	0,14	1040	255	70,8	10,5	103	IP45	55	5,4
LINEO 150 T QUIET	17192		37	0,17	1430	350	97,2	15,5	152			
LINEO 160 QUIET	17163	220-240	24	0,14	1040	255	70,8	10,5	103	IP45	55	5,2
LINEO 160 T QUIET	17193		37	0,17	1430	350	97,2	15,5	152			
LINEO 200 QUIET	17164	220-240	80	0,34	1880	805	223,6	20,6	202	IPX5	50	8,6
LINEO 200 T QUIET	17194		95	0,42	2380	1045	290,3	26,3	257,9			
LINEO 250 QUIET	17165	220-240	95	0,42	1640	960	266,7	20,2	198,1	IPX5	50	13,4
			125	0,55	2320	1340	372,2	30,3	297,2			
			150	0,65	2750	1550	430,6	34,6	339,3			
LINEO 315 QUIET	17166	220-240	215	0,95	1930	2070	575	30,6	300,1	IPX5	50	28,3
			270	1,15	2360	2530	702,8	43,3	424,6			
			360	1,55	2705	2890	802,8	53,6	525,7			

\* all data referred to supply at 50 Hz

\*\* protection grade referred to ducted units

## SOUND LEVELS - LINEO QUIET

Models	Code	SOUND POWER Lw dB (A)								
		INTAKE			SUPPLY			BREAKOUT		
		min.	med.	max	min.	med.	max	min.	med.	max
LINEO 100 QUIET	17160									
LINEO 100 T QUIET	17190	40,3	48,3	52,8	40	47,8	52,6	36,5	44	48,9
LINEO 125 QUIET	17161									
LINEO 125 T QUIET	17191	39,2	44,1	52,2	38,6	44,6	52,5	32,8	40,9	47,4
LINEO 150 QUIET	17162									
LINEO 150 T QUIET	17192	39,8	48,4	58,3	40,5	48,4	58	34,9	43,4	52,1
LINEO 160 QUIET	17163									
LINEO 160 T QUIET	17193	41,6	50	60,4	42,1	49,4	59,5	34,6	43	50,7
LINEO 200 QUIET	17164									
LINEO 200 T QUIET	17194	57,2	62,8	65,5	56,2	62	64,8	48	53,4	56
LINEO 250 QUIET	17165	61,1	67,6	70,9	61,2	67,9	71,2	52,7	59	62,4
LINEO 315 QUIET	17166	69,3	73,3	75,9	68	72,1	74,9	60	64,4	67,5

Modello	Code	SOUND PRESSURE LP dB(A)*								
		INTAKE			SUPPLY			BREAKOUT		
		min.	med.	max	min.	med.	max	min.	med.	max
LINEO 100 QUIET	17160									
LINEO 100 T QUIET	17190	22,8	30,8	35,3	22,5	30,3	35,1	16	23,5	28,4
LINEO 125 QUIET	17161									
LINEO 125 T QUIET	17191	21,7	26,6	34,7	21,1	27,1	35	12,3	20,4	26,9
LINEO 150 QUIET	17162									
LINEO 150 T QUIET	17192	22,3	30,9	40,8	23	30,9	40,5	14,4	22,9	31,6
LINEO 160 QUIET	17163									
LINEO 160 T QUIET	17193	24,1	32,5	42,9	24,6	31,9	42	14,1	22,5	30,2
LINEO 200 QUIET	17164									
LINEO 200 T QUIET	17194	39,7	45,3	48	38,7	44,5	47,3	27,5	32,9	35,5
LINEO 250 QUIET	17165	43,6	50,1	53,4	43,7	50,4	53,7	32,2	38,5	41,9
LINEO 315 QUIET	17166	51,8	55,8	58,4	50,5	54,6	57,4	39,5	43,9	47

\* Calculated in free field conditions at 3 m distance, spherical distribution.



# SERIE LINEO QUIET

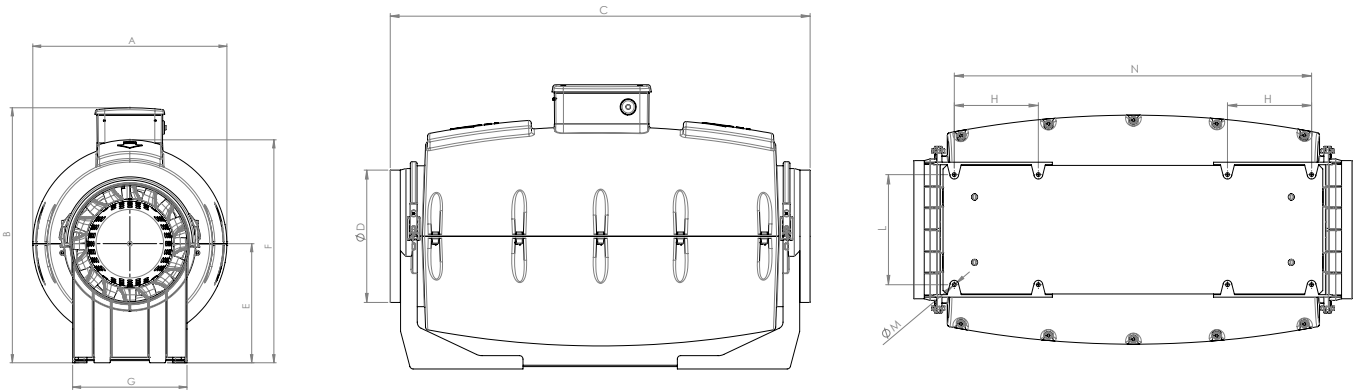
In-line mixed flow fans equipped with AC motors

## DIMENSIONS - LINEO QUIET

Models	Code	A	B	C	Ø D	E	F	G	H	L	Ø M	N	VERSION
LINEO 100 QUIET	17160	210	294.5	639	97	130	235	135	120	67.5	5.5	320	A
LINEO 100 QUIET T	17190												
LINEO 125 QUIET	17161	210	294.6	504.5	122	130	235	135	120	67.5	5.5	320	A
LINEO 125 QUIET T	17191												
LINEO 150 QUIET	17162	232	320.5	685	147	145	261.5	170	132	85	5.5	360	A
LINEO 150 QUIET T	17192												
LINEO 160 QUIET	17163	232	320.5	570	156.5	145	261.5	170	135	85	5.5	360	A
LINEO 160 QUIET T	17193												
LINEO 200 QUIET	17164	322.5	417.5	625.5	194.5	195	363.5	190	120	155	5.5	510	B
LINEO 200 QUIET T	17194												
LINEO 250 QUIET	17165	318	412	751.5	243	189.5	363.5	200	70	170	6.5	604.5	B
LINEO 315 QUIET	17166												415.5

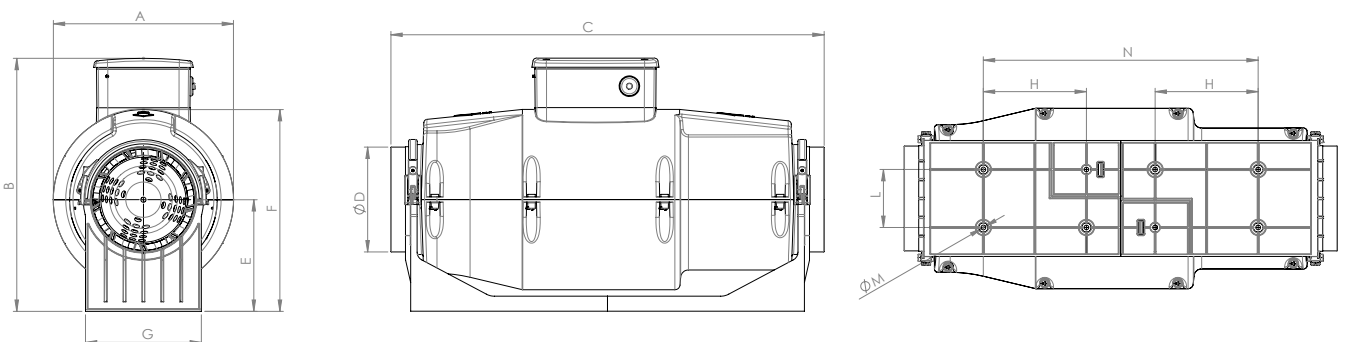
### VERSION A

LINEO 200 QUIET - LINEO 200 QUIET T - LINEO 250 QUIET - LINEO 315 QUIET



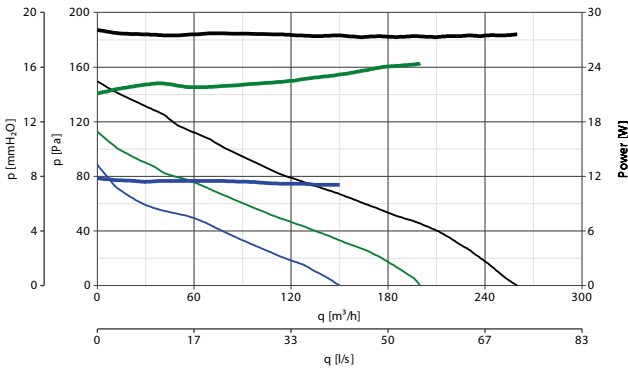
### VERSION B

LINEO 100 QUIET - LINEO 100 QUIET T - LINEO 125 QUIET - LINEO 125 QUIET T  
LINEO 150 QUIET - LINEO 150 QUIET T - LINEO 160 QUIET - LINEO 160 QUIET T

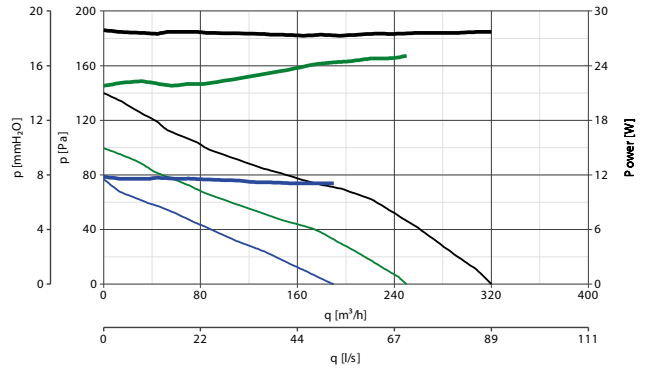


# PERFORMANCE AND ABSORPTION CURVES - LINEO QUIET

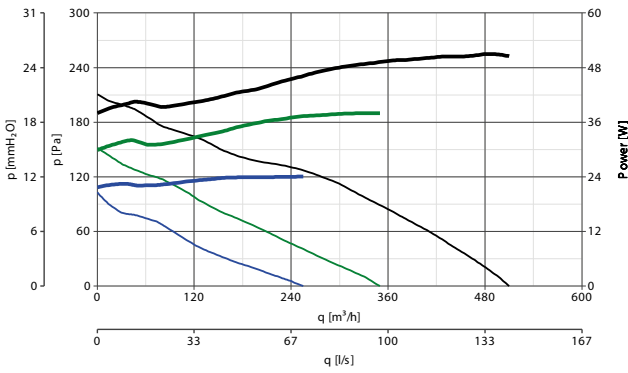
LINEO 100 QUIET - LINEO 100 T QUIET



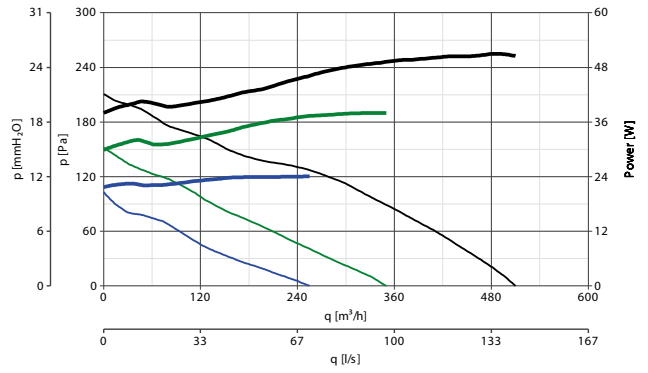
LINEO 125 QUIET - LINEO 125 T QUIET



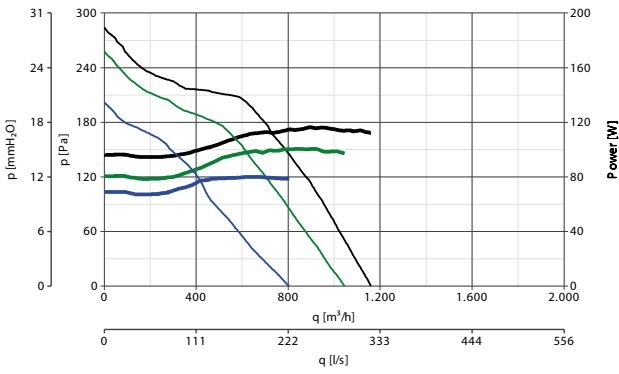
LINEO 150 QUIET - LINEO 150 T QUIET



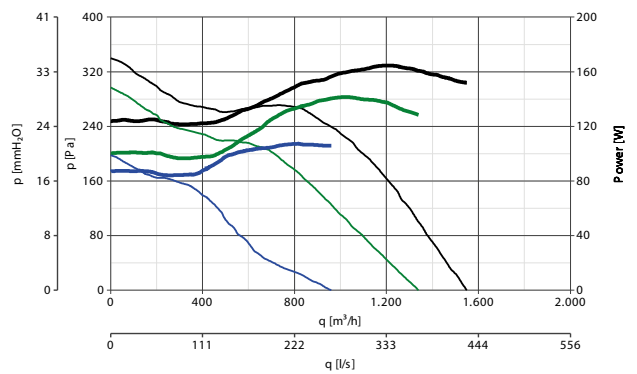
LINEO 160 QUIET - LINEO 160 T QUIET



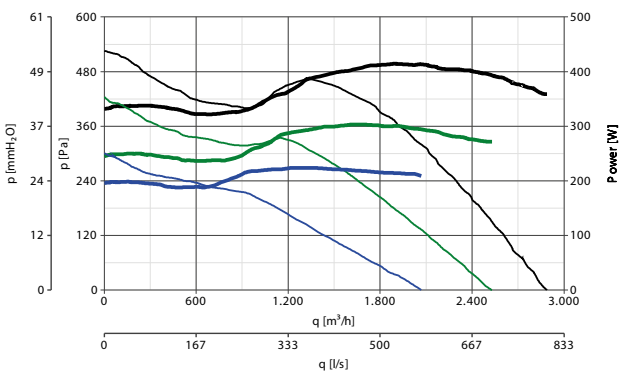
LINEO 200 QUIET - LINEO 200 T QUIET



LINEO 250 QUIET











LINEO 315 QUIET



CONSUMPTION	PERFORMANCE
— 10V	— 10V
— 6V	— 6V
— 4V	— 4V

## CONTROLLERS - LINEO QUIET

MODELS	DESCRIPTION	CODE	PRODUCT
	<b>C5 0.5</b> - 5 SPEED CONTROLLER	12987	17160 - 17161 - 17162 - 17163 - 17164 17165 - 17166
	<b>C 1.5</b> - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	17160 - 17161 - 17162 - 17163 - 17164 17165 - 17166
	<b>C 2.5</b> - ELECTRONIC SPEED CONTROLLER 2.5 A	12967	17165 - 17166
	<b>KIT SCB5</b> - CONVERTS SCR5 TO A BUILT-IN VERSION	22483	12987 - 12966 - 12967
	<b>KIT SCB</b> - BUILT-IN CONTROLLER ADAPTOR	22481	12987 - 12966 - 12967
	<b>TRIO-LINEO 503</b> - 3 SPEED SELECTOR	12891	17160 - 17161 - 17162 - 171763 - 17164 17165 - 17166 - 17190 - 17191 - 17192 17193 - 17194
	<b>C TEMP</b> - TEMPERATURE SENSOR	12992	ALL PRODUCTS
	<b>C SMOKE</b> - AIR QUALITY SENSOR	12993	ALL PRODUCTS
	<b>C HCS</b> - RELATIVE HUMIDITY SENSOR	12994	ALL PRODUCTS
	<b>C PIR</b> - PASSIVE INFRARED SENSOR	12998	ALL PRODUCTS
	<b>C TIMER</b> - TIMER	12999	ALL PRODUCTS

## ENERGY EFFICIENCY DATA REQUIRED BY REG.ERP N°327/211

Attribute name	LINEO 250 QUIET 17165	LINEO 315 QUIET 17166
Overall efficiency ( $\eta$ )	41,03	48,17
Test category	C	C
Data at the point of maximum efficiency ( $\eta$ )	925,9	1736,62
Efficiency category	statica	statica
Efficiency grade ( $\eta$ )	60,1	62,7
Variable speed drive	No	No
Year of construction	2020	2020
Model number	17165	17166
Power at peak efficiency (kW)	0,154	0,411
Pressure at high efficiency point (Pa)	245,8	410,60
Maximum efficiency point speed (RPM)	2793	2630
Specific ratio	1	1





# LINEO RANGE

In-line mixed flow fans

The LINEO range products are fitted with multi speed induction motors.

**THE BEST COMPROMISE AMONG  
PERFORMANCE, POWER CONSUMPTION  
AND NOISE EMISSION.**



## KEY FEATURES

Complete range, 26 models with a nominal diameter between 100 mm and 315 mm,  
18 equipped with AC motors and 8 equipped with brushless EC motors.

With or without timer and silenced.

Flexibility and ease of installation ideal for your specific  
performance-related requirements, consumption.  
needs and operating costs.

# EASY AND FLEXIBLE INSTALLATION

## LINEO RANGE equipped with AC motors



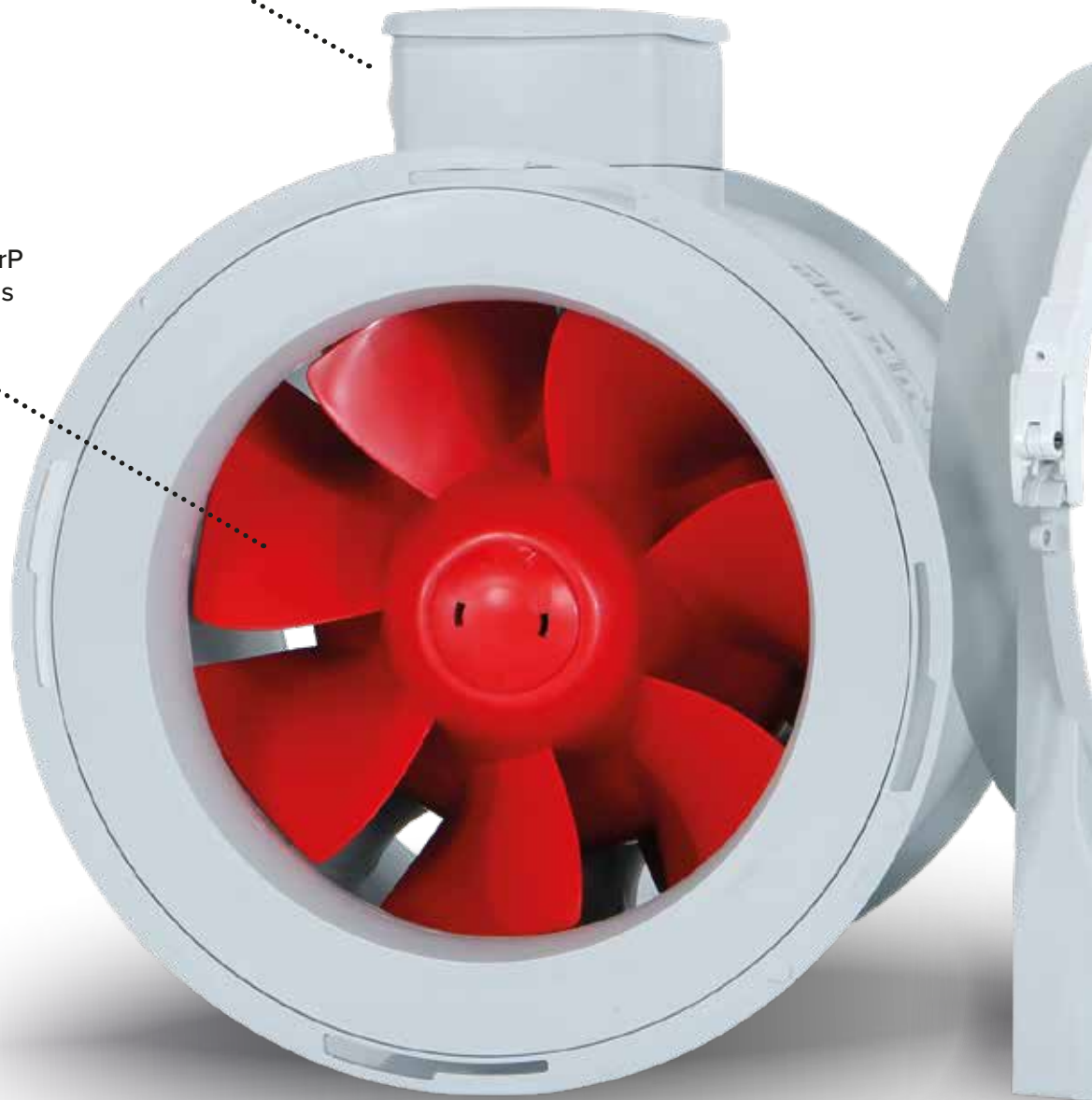
## LINEO ES RANGE equipped with EC Brushless motors



# EASY ...MAINTENANCE

ELECTRICAL BOX MADE  
from plastic that ensures  
electrical and fire  
resistance

IMPELLER  
designed to meet ErP  
efficiency standards



**PROTECTIVE COVER**  
It corrects the airflow after the  
impeller and the rectifier, avoiding  
energy losses due to vortexes

**CABLE TIES**





# LINEO RANGE

In-line mixed flow fans equipped with AC motors

## TECHNICAL AND PERFORMANCE DATA - LINEO\*

Models	Code	V 50/60HZ	W 50HZ min/max	A min/ max	RPM min/ max	Max Airflow		Max Pressure		Sound Pressure Lp dB (A)**	Protection grade***	°C max (50HZ)	°C max (60HZ)	KG
						m <sup>3</sup> /h min/max	l/s min/max	mmH <sub>2</sub> O min/max	Pa min/max					
LINEO 100	17144	220-240	20	0.09	1860	180	50	13	127.5	30.7	IP44	60	50	1.8
LINEO 100 T	17185		23	0.11	2450	255	70.8	16.5	161.9	39.4				
LINEO 100 Q	17143	220-240	12	0.09	1860	155	43.1	6.5	63.8	29.4	IP44	60	50	1.8
LINEO 100 Q T	17184		15	0.11	2450	200	55.6	7.5	73.6	37.9				
LINEO 125	17145	220-240	25	0.11	1570	250	69.4	13	127.5	33.9	IP44	60	50	1.8
LINEO 125 T	17186		33	0.15	2140	365	101.4	17	166.8	43				
LINEO 150	17146	220-240	40	0.18	1580	385	106.9	21	206	41.4	IP44	60	50	2.4
LINEO 150 T	17187		58	0.26	2100	550	152.8	27	264.9	50.5				
LINEO 160	17147	220-240	40	0.18	1580	385	106.9	21	206	41.4	IP44	60	50	2.4
LINEO 160 T	17188		58	0.26	2100	550	152.8	27	264.9	50.5				
LINEO 200 Q	17148	220-240	45	0.22	1780	700	194.4	13	127.5	39.6	IP44	60	50	4.3
LINEO 200 Q T	17189		75	0.37	2740	950	263.9	29	284.5	49.0				
LINEO 250 Q	17149	220-240	85	0.40	1850	720	200	34	333.5	49.1	IP44	60	45	5.8
LINEO 250 Q T	17197		110	0.50	2550	990	275	53	519.9	56.2				

\* All data referred to supply at 50 Hz

\*\* Calculated in free field conditions at 3 m distance

\*\*\* Protection referred to ducted units

Models	Code	V ~ 50 HZ	W min/med/ max	A min/med/ max	RPM min/med/ max	Max Airflow		Max Pressure		Protection grade***	Max °C	KG
						m <sup>3</sup> /h min/med/max	l/s min/med/max	mmH <sub>2</sub> O min/med/max	Pa min/med/max			
LINEO 200	17180	220 - 240	80	0.34	1925	815	226.4	21.5	210.9	IPX5	50	4,9
LINEO 200 T	17177		95	0.42	2450	1025	284.7	27.3	267.7			
LINEO 250	17181	220 - 240	95	0.42	1500	675	241.7	20.1	197.1	IPX5	50	5,3
			125	0.55	2240	1240	344.4	31.6	309.9			
			150	0.65	2730	1470	408.3	37.6	368.7			
LINEO 315	17182	220 - 240	210	0.95	1900	1845	512.5	29.9	293.2	IPX5	50	9,5
			270	1.15	2370	2330	647.2	44.4	435.4			
			360	1.55	2710	2740	761.1	57	559			

## SOUND LEVELS - LINEO 200 - 250 - 315

Models	Code	SOUND POWER Lw dB (A)								
		INTAKE			SUPPLY			BREAKOUT		
		min	med.	max	min	med.	max	min	med.	max
LINEO 200	17180	64.9	69.5	72.9	78.6	70.5	74.3	57.4	63.7	67.5
LINEO 200 T	17177									
LINEO 250	17181	63.9	71.7	75.5	64.7	72.3	74.9	56	61.3	64.7
LINEO 315	17182	70.9	76.0	79.7	72.2	77.9	82.5	63.4	68.2	72.1

Models	Code	SOUND PRESSURE Lp dB (A)*								
		INTAKE			SUPPLY			BREAKOUT		
		min	med.	max	min	med.	max	min	med.	max
LINEO 200	17180	47.4	52.0	55.4	51.9	52.9	56.8	36.9	43.1	46.9
LINEO 200 T	17177									
LINEO 250	17181	46.4	54.1	58.0	47.1	54.8	57.4	35.5	40.8	35.5
LINEO 315	17182	53.4	58.5	62.2	54.7	60.4	64.9	42.9	47.6	51.6

\* Calculated in free field conditions at 3 m distance



# LINEO RANGE

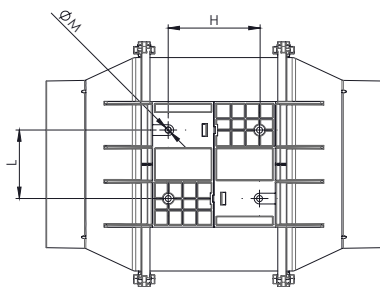
In-line mixed flow fans equipped with AC motors

## DIMENSIONS - LINEO

Models	Code	A	B	C	Ø D	E	F	G	H	L	Ø M	N
LINEO 100	17144	188.5	211	303	96	101.5	189	90	60	80	5.5	-
LINEO 100 T	17185	188.5	211	303	96	101.5	189	90	60	80	5.5	-
LINEO 100 Q	17143	156	174	231	96	82	152	95	51.5	47.5	4.5	-
LINEO 100 Q T	17184	156	174	231	96	82	152	95	51.5	47.5	5.5	-
LINEO 125	17145	188.5	211	258	122	101.5	189	90	60	80	5.5	-
LINEO 125 T	17186	188.5	211	258	122	101.5	189	90	60	80	5.5	-
LINEO 150	17146	214.5	234	294	146	112.5	212	110	60	80	5.5	-
LINEO 150 T	17187	214.5	234	294	146	112.5	212	110	60	80	5.5	-
LINEO 160	17147	214.5	234	272.5	156	112.5	212	110	60	80	5.5	-
LINEO 160 T	17147	214.5	234	272.5	156	112.5	212	110	60	80	5.5	-
LINEO 200	17180	270	373	396	194.5	195	330	190	120	155	5.5	-
LINEO 200 T	17177	270	373	396	194.5	195	330	190	120	155	5.5	280
LINEO 200 Q	17148	234.5	266	300	196	125.5	235	140	94	100	5.5	-
LINEO 200 Q T	17189	234.5	266	300	196	125.5	235	140	94	100	5.5	-
LINEO 250	17181	300	378	322	243	190	329	200	70	170	5.5	174.5
LINEO 250 Q	17149	300	322	385	247	152.5	292	176.5	140	145	5.5	-
LINEO 250 Q T	17189	300	322	385	247	152.5	292	176.5	140	145	5.5	174.5
LINEO 315	17182	373	446	420	307	224	398	309	110	255	8.5	259.5

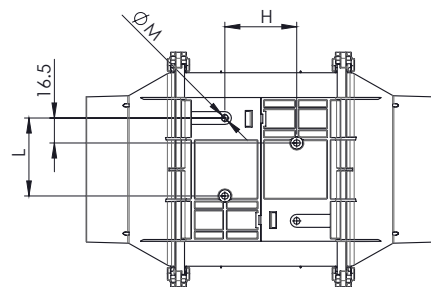
### VERSION

LINEO 100 - LINEO 100 T - LINEO 125 - LINEO 125 T - LINEO 150 - LINEO 150 T  
 LINEO 160 - LINEO 160 T - LINEO 200 Q - LINEO 200 Q T - LINEO 250 Q - LINEO 250 Q T



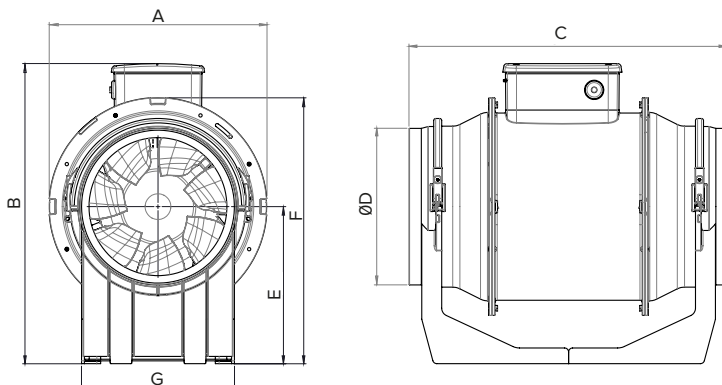
### VERSION B

LINEO 100 Q  
 LINEO Q T



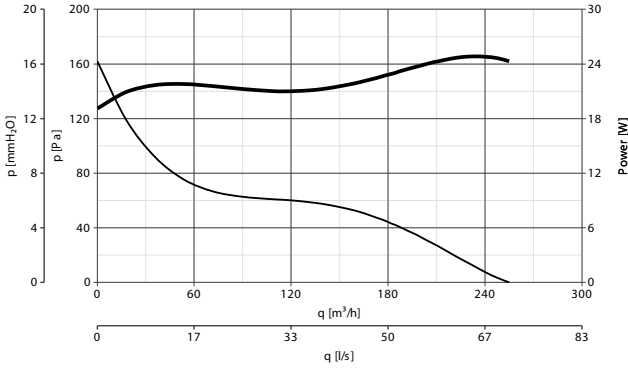
### VERSION C

LINEO 200 - LINEO 200 T - LINEO 250 - LINEO 315

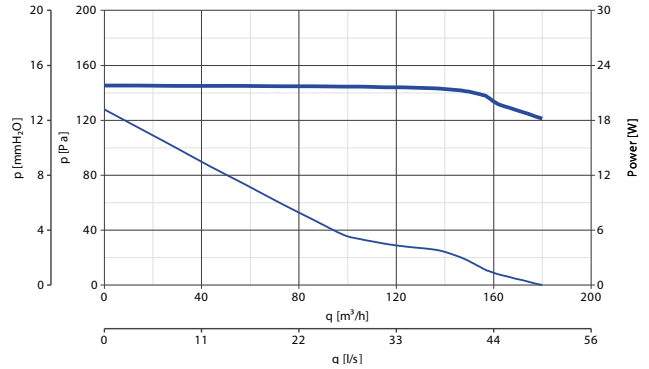


PERFORMANCE AND ABSORTION CURVES - LINEO

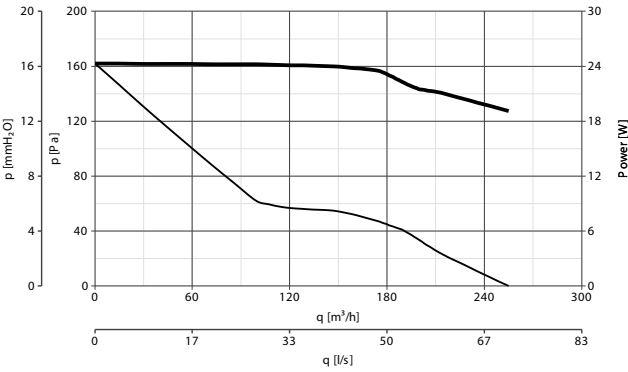
LINEO 100 - MAX SPEED



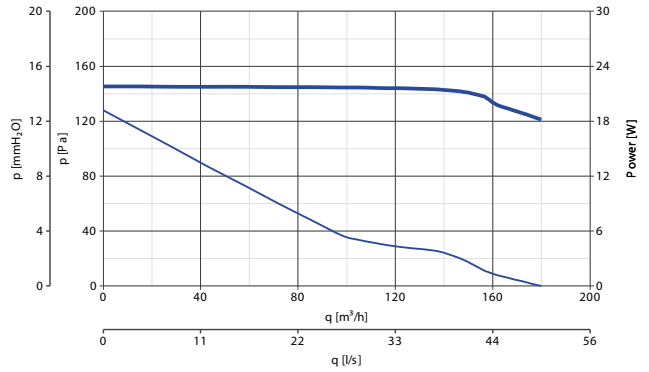
LINEO 100 - MIN SPEED



LINEO 100 T - MAX SPEED



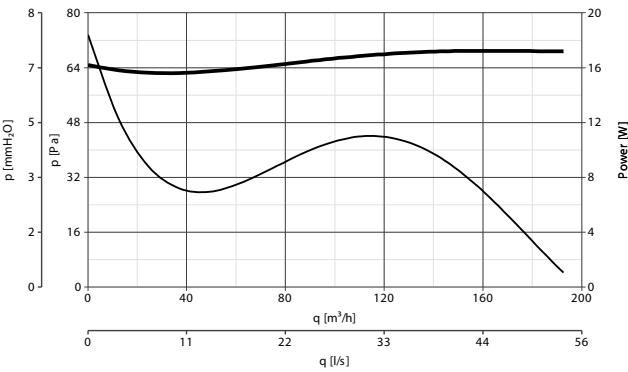
LINEO 100 T - MIN SPEED



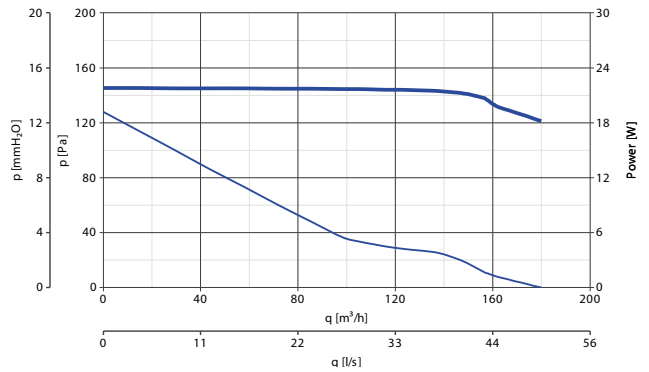
CONSUMPTION  
 — max  
 — min

PERFORMANCE  
 — max  
 — min

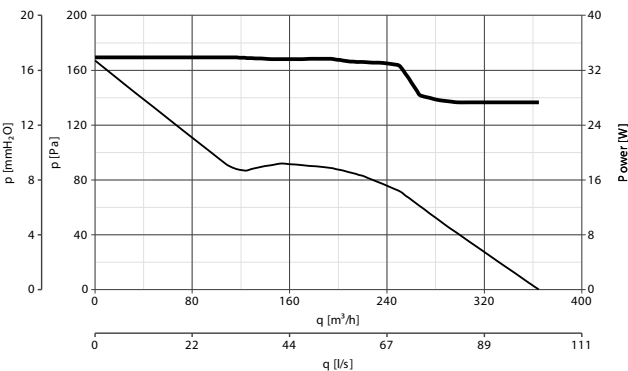
LINEO 100 Q - LINEO 100 Q T - MAX SPEED



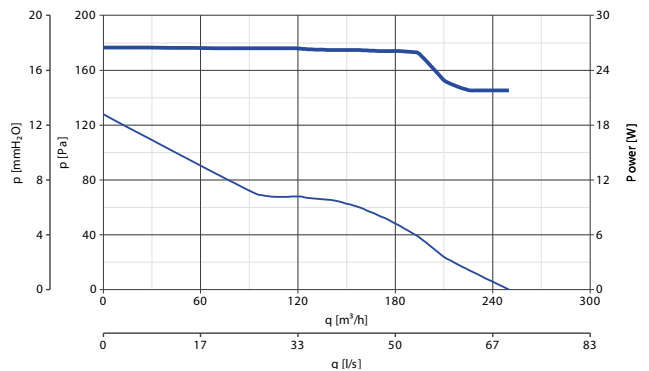
LINEO 100 Q - LINEO 100 Q T - MIN SPEED



LINEO 125 - LINEO 125 T - MAX SPEED

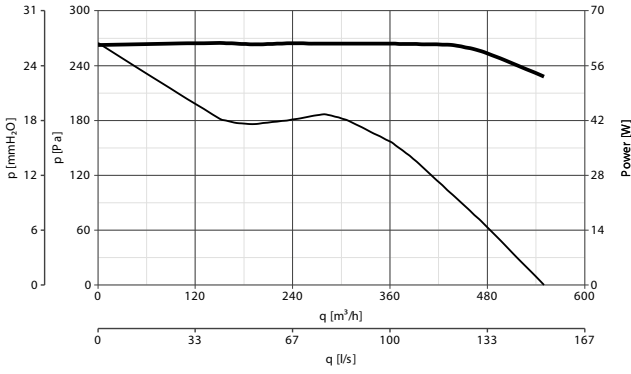


LINEO 125 - LINEO 125 T - MIN SPEED

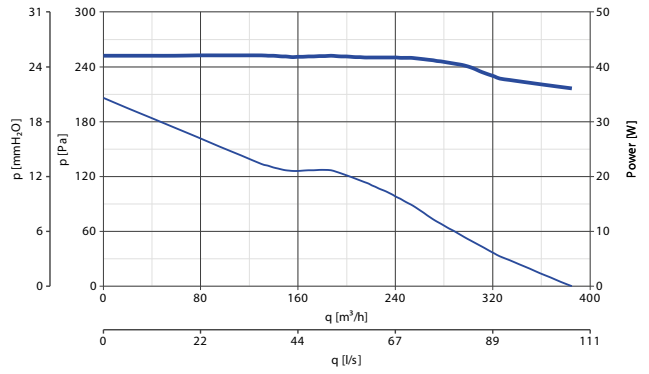


PERFORMANCE AND ABSORTION CURVES - LINEO

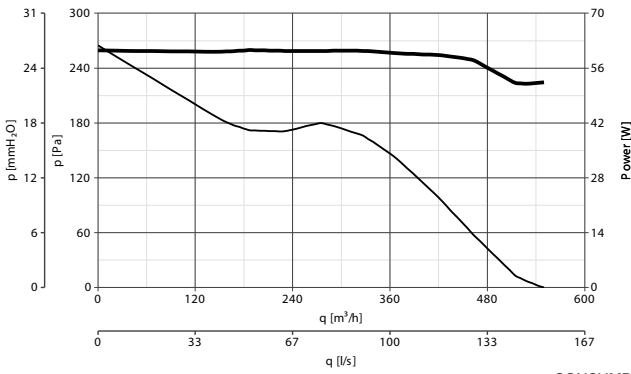
LINEO 150 - LINEO 150 T - MAX SPEED



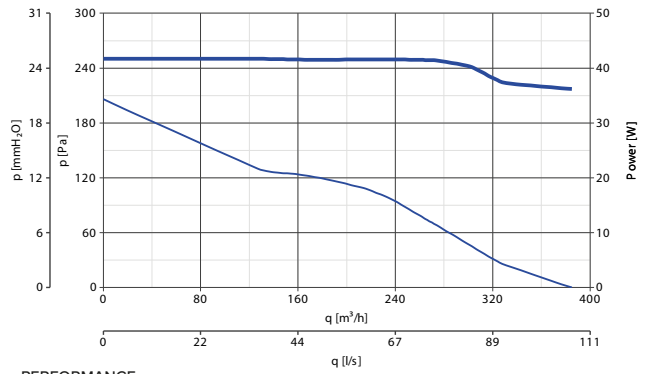
LINEO 150 - LINEO 150 T - VELOCITÀ MIN



LINEO 160 - LINEO 160 T - MAX SPEED



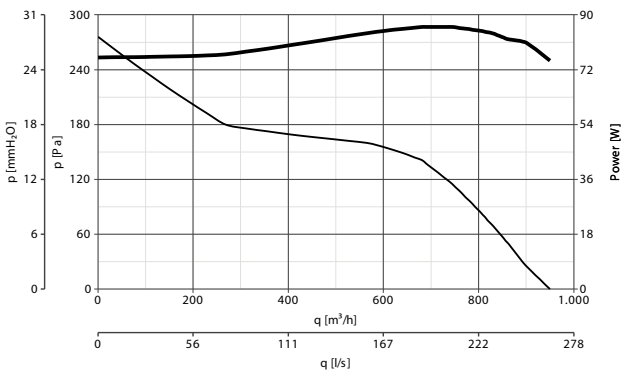
LINEO 160 - LINEO 160 T - MIN SPEED



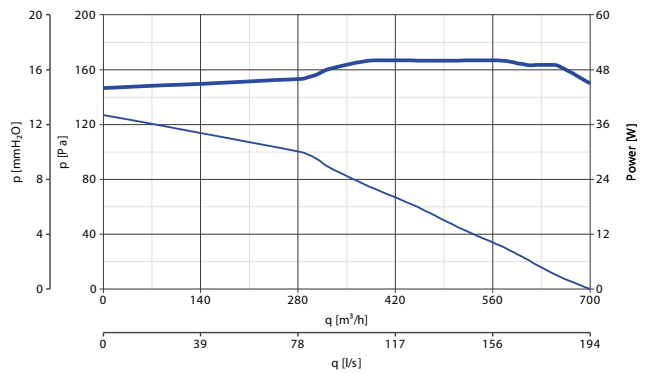
CONSUMPTION  
 — max  
 — min

PERFORMANCE  
 — max  
 — min

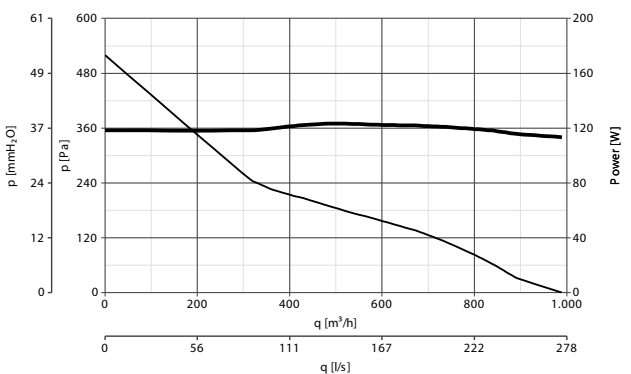
LINEO 200 Q - LINEO 200 Q T - MAX SPEED



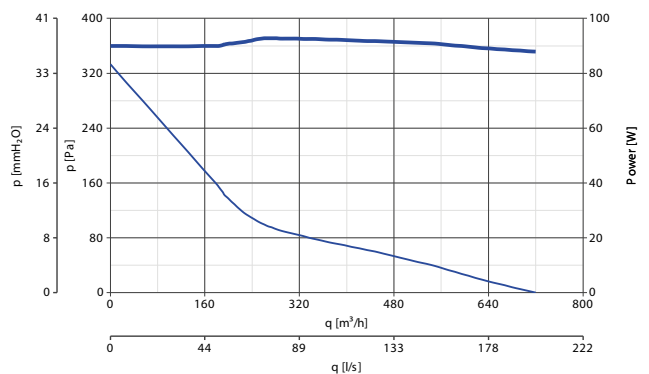
LINEO 200 Q - LINEO 200 Q T MIN SPEED



LINEO 250 Q - LINEO 250 Q T - MAX SPEED

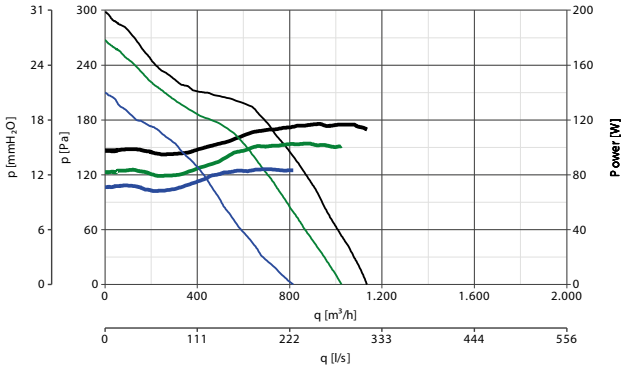


LINEO 250 Q - LINEO 250 Q T - MIN SPEED

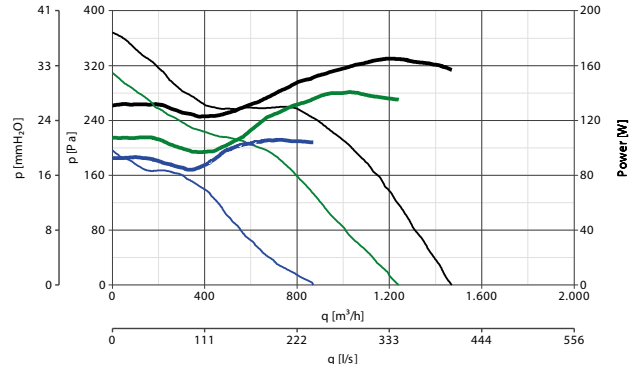


PERFORMANCE AND ABSORTION CURVES - LINEO

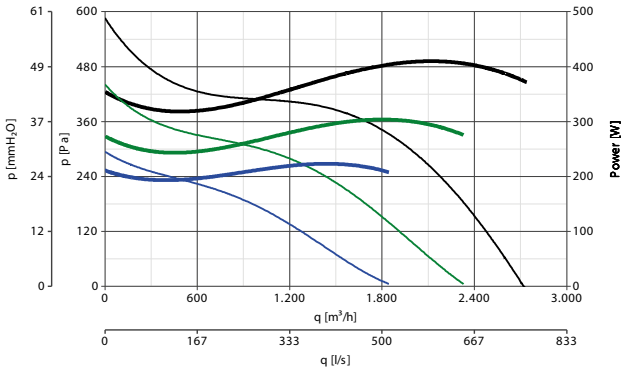
LINEO 200 - LINEO 200 T



LINEO 250



LINEO 315



CONSUMPTION	PERFORMANCE
— MAX	— MAX
— MID	— MID
— MIN	— MIN



# LINEO ES RANGE

In-line mixed flow fans equipped with EC Brushless motors

## TECHNICAL AND PERFORMANCE DATA - LINEO ES\*

Models	Code	V ~ 50/60HZ	W		RPM 4/6/8/10V	Max Airflow		Max Pressure		Protection grade**	Max °C	KG
			4/6/8/10V	A 4/6/8/10V		m <sup>3</sup> /h 4/6/8/10V	l/s 4/6/8/10V	mmH <sub>2</sub> O 4/6/8/10V	Pa 4/6/8/10V			
LINEO 100 ES	17159	50HZ 220 - 240	6.5	0.07	1070	140	38.9	3.7	36.3	IP45	60	2.3
			8.7	0.09	1345	175	48.6	6.1	59.8			
			16	0.15	1900	250	250	11.4	111.8			
			20	0.20	2220	305	84.7	26.4	258.9			
LINEO 100 Q ES	17158	220 - 240	5	0.05	1090	70	19.4	1.2	11.8	IP45	60	1.8
			6.2	0.06	1450	105	29.2	2.3	22.6			
			10.5	0.10	2300	165	45.8	5.2	51			
			20	0.20	3435	260	72.2	15.7	154			
LINEO 125 ES	17178	220 - 240	7	0.07	1090	170	47.2	3.8	37.3	IP45	60	2.2
			10	0.10	1395	220	61.1	6.5	63.7			
			18	0.17	1940	315	87.5	11.8	115.7			
			25	0.25	2270	370	102.8	30.2	296.2			
LINEO 150 ES	17179	220 - 240	11	0.10	2125	500	138.9	8.5	83.4	IP45	60	2.6
			17	0.16	1595	370	102.8	13.8	135.3			
			34	0.30	1260	290	80.6	22.7	222.6			
			55	0.50	2480	590	163.9	44.2	433.5			
LINEO 160 ES	17183	220 - 2440	12	0.11	1305	300	83.3	9	9	IP45	60	2.7
			19	0.17	1645	385	106.9	14.8	145.1			
			37	0.33	2165	510	141.7	23.5	230.5			
			60	0.55	2625	630	175	47.2	462.9			
LINEO 200 ES	17167	220 - 240	15.8	0.19	1380	560	155.6	9.2	90.2	IP45	50	4.6
			25.7	0.28	1700	700	194.4	14.4	141.2			
			52.8	0.53	2220	920	255.6	24	235.4			
			90	0.80	2680	1100	305.6	34.9	342.4			
LINEO 250 ES	17168	220 - 240	20	0.20	2270	750	208.3	10.4	102	IP45	50	5
			35	0.30	1695	995	276.4	16.3	159.9			
			80	0.70	1370	1245	345.8	27.8	272.6			
			125	1.00	2680	1500	416.7	40.5	397.2			
LINEO 315 ES	17169	220 - 240	45	0.38	1310	1385	384.7	14.2	139.3	IP45	50	9.2
			75	0.64	1580	1720	477.8	21.3	208.9			
			165	1.35	2130	2300	638.9	37.7	369.7			
			220	1.75	2360	2560	711.1	42.3	414.8			

\* all data referred to supply at 50 Hz

\*\* Protection referred to ducted units

## SOUND LEVELS - LINEO ES

Models	Code	SOUND POWER Lw dB (A)											
		INTAKE				SUPPLY				BREAKOUT			
		4V	6V	8V	10V	4V	6V	8V	10V	4V	6V	8V	10V
LINEO 100 ES	17159	63.3	69.4	78.2	82.6	62.1	68.4	77.5	82	35.5	39.5	47.8	52.3
LINEO 100 Q ES	17158	57.8	64.9	75.1	85.7	54.9	64.9	73.5	85.7	35.1	37.4	47.5	56.6
LINEO 125 ES	17178	64.1	68.2	76.7	81.4	63.6	68.6	77.5	81.5	36.8	40.5	48.8	52.2
LINEO 150 ES	17179	67.9	74.6	82.1	87.9	69.6	75.2	82.1	86.4	41.5	47.8	56.1	62.5
LINEO 160 ES	17183	68.4	76.4	83.1	87.5	69.1	76	82.8	86.9	42.4	49.4	57	62.3
LINEO 200 ES	17167	78.5	83.9	86.9	89.4	77.5	82.9	85.4	88.4	55.6	60.4	62.8	65
LINEO 250 ES	17168	74.2	79.1	85.1	88.9	74.4	79.2	84.9	88.5	49.5	54.3	61.4	64
LINEO 315 ES	17169	83.1	88	90.7	92.8	80.8	88.2	88.8	90	63	64.6	65.3	68.1

Models	Code	SOUND PRESSURE LP dB(A)*											
		INTAKE				SUPPLY				BREAKOUT			
		4V	6V	8V	10V	4V	6V	8V	10V	4V	6V	8V	10V
LINEO 100 ES	17159	45.8	51.9	60.7	65.1	44.6	50.9	59.9	64.4	15	18.9	27.2	31.8
LINEO 100 Q ES	17158	40.2	47.3	57.6	68.2	37.3	47.4	56	68.1	14.6	16.9	27	36.1
LINEO 125 ES	17178	46.6	50.6	59.1	63.9	46	51.1	60	64	16.2	20	28.3	31.6
LINEO 150 ES	17179	50.4	57.1	64.6	70.3	52.1	57.7	64.5	68.9	21	27.2	35.5	41.9
LINEO 160 ES	17183	50.9	58.9	65.6	70	51.5	58.5	65.6	69.3	21.9	28.9	36.5	41.8
LINEO 200 ES	17167	60.9	66.4	69.4	71.9	60	65.3	67.9	70.8	35.1	39.9	42.3	44.5
LINEO 250 ES	17168	56.7	61.5	67.6	71.3	56.9	61.6	67.3	71	29	33.7	40.9	43.4
LINEO 315 ES	17169	65.6	70.4	73.2	75.3	63.3	70.6	71.2	72.4	42.5	44	44.8	47.5

\* Calculated in free field conditions at 3 m distance



# LINEO ES RANGE

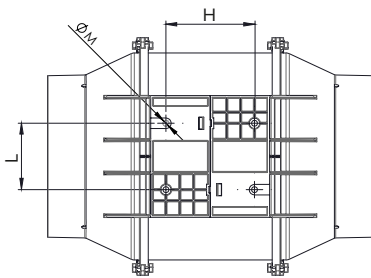
In-line mixed flow fans equipped with EC Brushless motors

## DIMENSIONS - LINEO ES

Models	Code	A	B	C	Ø D	E	F	G	H	L	Ø M	N
LINEO 100 ES	17159	188.5	240	303	96	101.5	189	90	60	80	5.5	-
LINEO 100 Q ES	17158	156	205	231	96	82	152	95	51.5	47.5	4.5	-
LINEO 125 ES	17178	188.5	240	258	122	101.5	189	90	60	80	5.5	-
LINEO 150 ES	17179	214.5	265	294	146	112.5	212	110	60	80	5.5	-
LINEO 160 ES	17183	214.5	265	272.5	156	112.5	212	110	60	80	5.5	-
LINEO 200 ES	17167	270	372.5	396	194.5	195	330	190	120	155	5.5	280
LINEO 250 ES	17168	300	377.5	322	243	190	329	200	70	170	6.5	174.5
LINEO 315 ES	17169	373	506	420	307	224	398	309	110	255	8.5	259.5

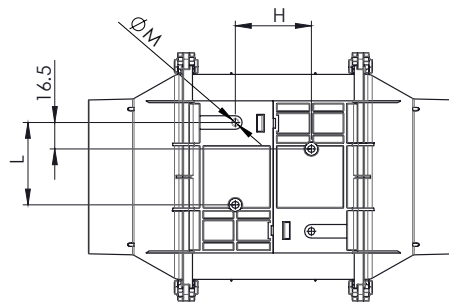
### VERSION A

LINEO 100 ES - LINEO 125 ES  
LINEO 150 ES - LINEO 160 ES



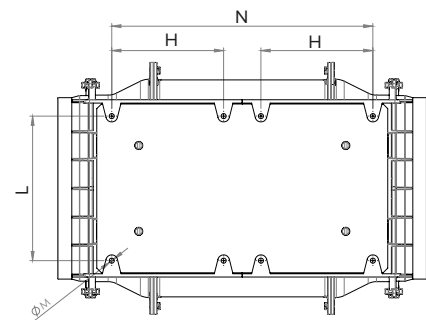
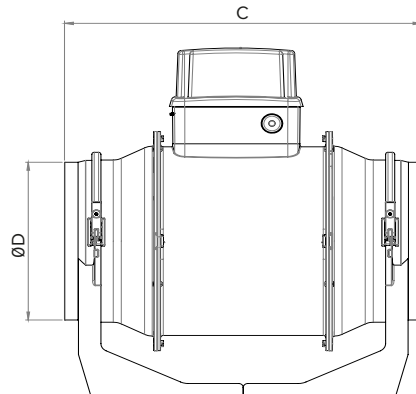
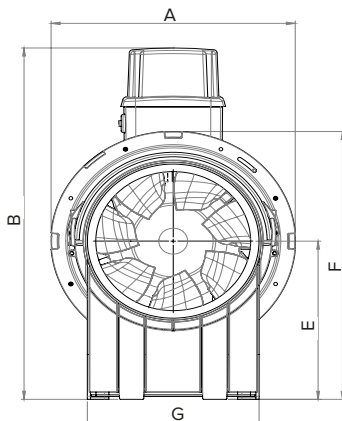
### VERSION B

LINEO 100 Q ES

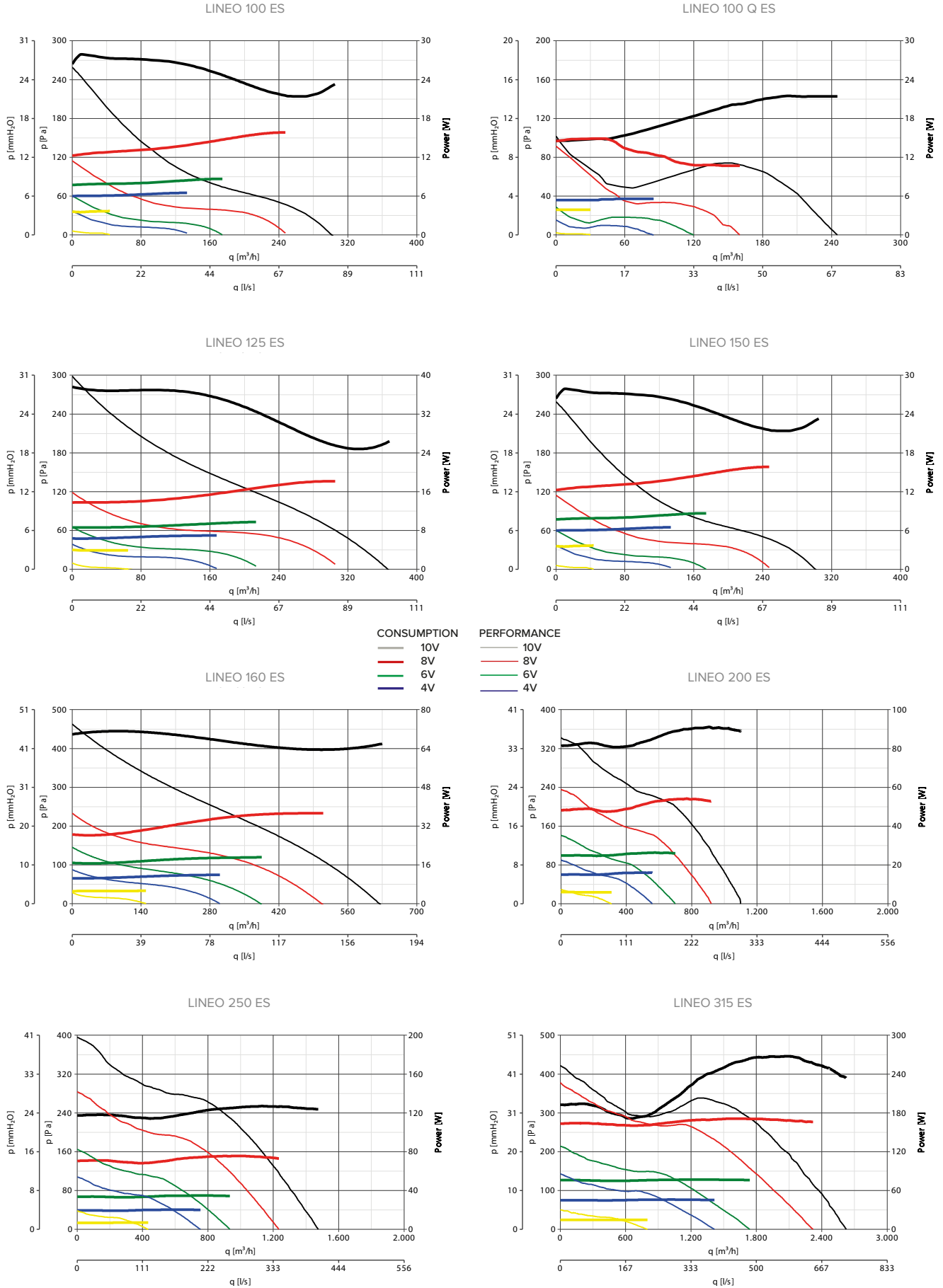


### VERSION C












LINEO 200 ES - LINEO 250 ES - LINEO 315 ES




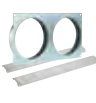



PERFORMANCE AND ABSORTION CURVES - LINEO ES



**CONTROLLERS - LINEO ES**

MODELS	DESCRIPTION	CODE	PRODUCT
	<b>C5 0.5</b> - 5 SPEED CONTROLLER	12987	17180
	<b>C 1.5</b> - ELECTRONIC SPEED CONTROLLER - 1.5 A	12966	17180
	<b>C 2.5</b> - ELECTRONIC SPEED CONTROLLER - 2.5 A	12967	17181 - 17182
	<b>KIT SCB5</b> - CONVERTS SCR5 TO A BUILT-IN VERSION	22483	12987 - 12966 - 12967
	<b>KIT SCB</b> - BUILT-IN CONTROLLER ADAPTOR	22481	12987 - 12966 - 12967
	<b>POT-IT</b> - POTENTIOMETER COMPATIBLE WITH FLUSH MOUNTING IN UNI 503 ELECTRIC BOX	12826	17158 - 17159 - 17179 - 17183 - 17187 17167 - 17168 - 17169
	<b>POT</b> - POTENTIOMETER COMPATIBLE WITH FLUSH MOUNTING IN DIN ELECTRIC BOX	12828	17158 - 17159 - 17179 - 17183 - 17187 17167 - 17168 - 17169
	<b>TRIO-LINEO 503</b> - 3 SPEED SELECTOR	12891	17181 - 17177 - 17182
	<b>DUO</b> - 2 SPEED SELECTOR	22914	17144 - 17185 - 17143 - 17184 - 17145 17186 - 17146 - 17187 - 17147 - 1718 17148 - 17189 - 17149 - 17197
	<b>C TEMP</b> - TEMPERATURA SENSOR	12992	ALL PRODUCTS
	<b>C SMOKE</b> - AIR QUALITY SENSOR	12993	ALL PRODUCTS
	<b>C HCS</b> - RELATIVE HUMIDITY SENSOR	12994	ALL PRODUCTS
	<b>C PIR</b> - PASSIVE INFRARED SEMSOR	12998	ALL PRODUCTS
	<b>C TIMER</b> - TIMER	12999	ALL PRODUCTS

**ACCESSORIES ON REQUEST - LINEO**

MODELS	DESCRIPTION	CODE	PRODUCT	
		100	22584	
	<b>LINEO-C</b> - IN-LINE INSTALLATION KITS	125	22585	17159 - 17158
		150	22586	17178
		160	22587	17179
				17183
		100	22577	
	<b>LINEO-PF</b> - SIDE BY SIDE INSTALLATION KITS	125	22578	17159 - 17158
		150	22579	17178
		160	22581	17179
				17183
	<b>LINEO-SF 500</b> - BRACKET FOR IN-LINE APPLICATIONS	22593	17143 - 17184 - 17144 - 17185 - 17159 17158 - 17145 - 17186 - 17178 - 17146 17187 - 17179 - 17147 - 17188 - 17183 17148 - 17189 - 17180 - 17177 - 17167	
	<b>LINEO-SF 700</b> - BRACKET FOR IN-LINE APPLICATIONS	22594	17149 - 17197 - 17168 - 17169	
		100	22701	
	<b>LINEO-G</b> - PROTECTION GRILLE	125	22702	17143 - 17184 - 17144 17185 - 17159 - 17158
		150	22703	17145 - 17186 - 17178
		160	22704	17146 - 17187 - 17179
				17147 - 17188 - 17183
		200	22705	17148 - 17189 - 17180 - 17177 - 17167
		250	22706	17149 - 17197 - 17168
		22707	17169	





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