

NEW

CA ES RANGE

Energy Saving in-line centrifugal fans in metal

Suitable for domestic, commercial and industrial applications: kitchens, bathrooms, offices, laboratories, factories, shops, laundromats, restaurants, bars, theatres, ballrooms, etc.



- **8 models: CA 100 ES, CA 125 ES, CA 150 Q ES, CA 150 ES, CA 160 ES, CA 200 ES, CA 250 ES, CA 315 ES.**
- Stripped and phosphated steel structure, painted with polyester powder which is particularly resistant to the aggressive action of atmospheric agents.
- Centrifugal impellers with moulded reverse blades in resin plastic.
- Three-phase brushless motor.
- Two levels of airflow, pressure, noise emissions and consumption (for all the models with a diameter until 200).
- Low noise emissions.
- Low specific consumption levels.
- Wide range of continuous operation temperatures between -25°C and +50°C.
- Galvanised steel mounting brackets.
- IMQ Performance certified technical data for models with a diameter of 100, 125, 150, 160 and 200.
- Protection rating: IP44.
- Insulation class: II. □
- Insulation class: I. ⊕ (for models 250 ES and 315 ES).



TECHNICAL DATA

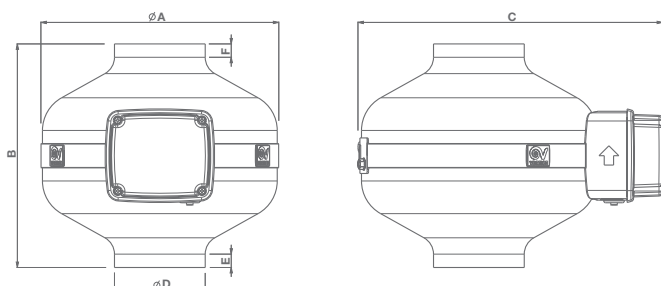
Models	Code	W		A		RPM		Max Airflow				Max Pressure				Lp dB(A)*	Max °C	
		min	max	min	max	min	max	m³/h		l/s		mmH₂O		Pa				min
CA 100 ES	16170	11	29	0.12	0.29	1310	2020	170	270	47	75	16	7	157	363	24.9	36.8	50
		19	55	0.20	0.53	1690	2530	220	340	61	94	27	49	265	480	35.4	43.4	
		35	80	0.35	0.75	2140	2880	280	380	78	105	43	51	422	500	38.5	46.9	
CA 125 ES	16171	11	29	0.12	0.29	1180	1820	220	350	61	97	14	34	137	333	25.3	38.4	50
		19	55	0.20	0.53	1520	2310	280	440	78	122	23	47	225	461	33.2	45.9	
		35	80	0.35	0.75	1930	2620	370	500	103	139	38	49	373	480	40.3	49.7	
CA 150 Q ES	16172	11	29	0.12	0.29	1170	1810	240	380	67	105	11	26	108	255	27.5	40	50
		19	55	0.20	0.53	1515	2300	310	490	86	136	18	42	176	412	34.7	46.6	
		35	80	0.35	0.75	1925	2590	410	560	114	155	30	45	294	441	41.5	49.6	
CA 150 ES	16173	20	30	0.21	0.30	1230	1420	420	480	117	133	17	22	167	216	30.3	34.3	50
		44	105	0.43	0.93	1620	2170	550	750	153	208	29	51	284	500	38	47.3	
		58	120	0.55	1.05	1800	2260	630	820	175	228	36	56	353	549	41.4	48.1	
CA 160 ES	16174	20	30	0.21	0.30	1230	1410	470	540	130	150	17	22	167	216	34.3	35.1	50
		44	105	0.43	0.93	1620	2160	630	840	175	233	29	51	284	500	39.2	47.1	
		58	120	0.55	1.05	1780	2230	700	890	194	247	36	56	353	549	41.7	48.1	
CA 200 ES	16175	20	30	0.21	0.30	1210	1385	580	675	161	187	15	20	147	196	32.1	34.8	50
		44	105	0.43	0.93	1600	2140	770	1050	214	292	26	47	255	461	38	46.7	
		58	120	0.55	1.05	1760	2240	880	1120	244	311	31	50	304	490	40.8	47.6	
CA 250 ES	16176	140		1.20		3050		1150		319		73		716		57.3		50
CA 315 ES	16177	148		1.27		1935		1800		500		51		500		50.7		50

* Sound pressure level measured at 3 m in free field conditions with long-cased appliance in delivery mode in accordance with standard EN ISO 9614.

Electrical supply: 230 V ~ 50 Hz.









DIMENSIONS



Models	Ø A	B	C	Ø D	E	F	Kg
CA 100 ES	255	239	330	97	15	15	2.7
CA 125 ES				122	23	23	2.6
CA 150 Q ES				147	30	30	2.6
CA 150 ES	347	275	422	147	17	17	4.5
CA 160 ES				157	18	18	4.6
CA 200 ES				197	20	17	4.6
CA 250 ES				267	30	35	4.9
CA 315 ES	406	362	455	315	35	30	6.9

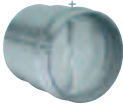
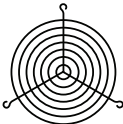


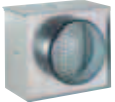

Dimensions (mm)







PRODUCT ACCESSORIES

Models		Code	Product							
			CA 100 ES code 16170	CA 125 ES code 16171	CA 150 ES code 16172	CA 150 Q ES code 16173	CA 160 ES code 16174	CA 200 ES code 16175	CA 250 ES code 16176	CA 315 ES code 16177
	C HCS Environmental sensor for humidity	12994	●	●	●	●	●	●	●	●
	C TEMP Environmental sensor for temperature	12992	●	●	●	●	●	●	●	●
	C SMOKE Environmental sensor for air quality	12993	●	●	●	●	●	●	●	●
	C PIR Passive infrared sensor	12998	●	●	●	●	●	●	●	●
	C TIMER Adjustable over-run timer	12999	●	●	●	●	●	●	●	●
	CA-MU	22674	●	●	●	●	●	●	●	●

Description and sizes on page 98

SYSTEM COMPONENTS

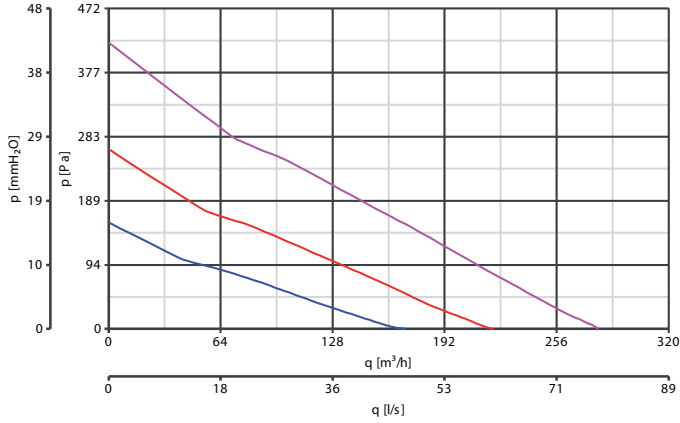
Models	Code	Product							
		CA 100 ES code 16170	CA 125 ES code 16171	CA 150 ES code 16172	CA 150 Q ES code 16173	CA 160 ES code 16174	CA 200 ES code 16175	CA 250 ES code 16176	CA 315 ES code 16177
	IN-LINE-S 100 Backdraught shutter nominal diameter 100 mm	22551	●						
	IN-LINE-S 125 Backdraught shutter nominal diameter 125 mm	22556		●					
	IN-LINE-S 150 Backdraught shutter nominal diameter 150 mm	22562			●	●			
	IN-LINE-S 160 Backdraught shutter nominal diameter 160 mm	22563					●		
	IN-LINE-S 200 Backdraught shutter nominal diameter 200 mm	22566						●	
	IN-LINE-S 250 Backdraught shutter nominal diameter 250 mm	22571							●
	N-LINE-S 315 Backdraught shutter nominal diameter 315 mm	22576							●
	CA-G 100 Protection grille nominal diameter 100 mm	22750	●						
	CA-G 125 Protection grille nominal diameter 125 mm	22755		●					
	CA-G 150 Protection grille nominal diameter 150 mm	22760			●	●			
	CA-G 160 Protection grille nominal diameter 160 mm	22762					●		
	CA-G 200 Protection grille nominal diameter 200 mm	22765						●	
	CA-G 250 Protection grille nominal diameter 250 mm	22770							●
	CA-G 315 Protection grille nominal diameter 315 mm	22775							●
	AH 100 Duct heater nominal diameter 100	22796	●						
	AH 125 Duct heater nominal diameter 125	22797		●					
	AH 150 Duct heater nominal diameter 150	22759			●	●			
	AH 160 Duct heater nominal diameter 160	22798					●		
	AH 200 Duct heater nominal diameter 200	22790						●	
	AH 250 Duct heater nominal diameter 250	22791							●
	AH 315 Duct heater nominal diameter 315	22792							●
	NA 100 Noise attenuator nominal diameter 100	22780	●						
	NA 125 Noise attenuator nominal diameter 125	22781		●					
	NA 150 Noise attenuator nominal diameter 150	22756			●	●			
	NA 160 Noise attenuator nominal diameter 160	22783					●		
	NA 200 Noise attenuator nominal diameter 200	22784						●	
	NA 250 Noise attenuator nominal diameter 250	22785							●
	NA 315 Noise attenuator nominal diameter 315	22786							●
	AF 100 Filter box nominal diameter 100	22793	●						
	AF 125 Filter box nominal diameter 125	22794		●					
	AF 150 Filter box nominal diameter 150	22799			●	●			
	AF 160 Filter box nominal diameter 160	22795					●		
	AF 200 Filter box nominal diameter 200	22787						●	
	AF 250 Filter box nominal diameter 250	22788							●
	GGR 100 Gravity shutter for models with nominal diameter 100	22332	●						
	GGR 125 Gravity shutter for models with nominal diameter 125	22333		●					
	GGR 150/160 Gravity shutter for models with nominal diameter 150/160	22334			●	●	●		
	GGR 200 Gravity shutter for models with nominal diameter 200	22335						●	
	GGR 250 Gravity shutter for models with nominal diameter 250	22336							●
	GGR 315 Gravity shutter for models with nominal diameter 315	22337							●

Models		Code	Product							
			CA 100 ES code 16170	CA 125 ES code 16171	CA 150 ES code 16172	CA 150 Q ES code 16173	CA 160 ES code 16174	CA 200 ES code 16175	CA 250 ES code 16176	CA 315 ES code 16177
	FG 100 Fixed grille for models with nominal diameter 100	22165	●							
	FG 125 Fixed grille for models with nominal diameter 125	22166		●						
	FG 150 Fixed grille for models with nominal diameter 150	22167			●	●	●			
	AV 100 Air valve nominal diameter 100	22189	●							
	AV 125 Air valve nominal diameter 125	22190		●						
	AV 150 Air valve nominal diameter 150	22191			●	●				
	AV 160 Air valve nominal diameter 160	22192					●			
	AV 200 Air valve nominal diameter 200	22193						●		
	CD 200 Air diffuser nominal diameter 200	22127						●		
	CD 250 Air diffuser nominal diameter 250	22168							●	
	CD 315 Air diffuser nominal diameter 315	22169								●
	AFD 100-4 Aluminium flexible duct nominal diameter 100	22175	●							
	AFD 125-4 Aluminium flexible duct nominal diameter 125	22176		●						
	AFD 150-4 Aluminium flexible duct nominal diameter 150	22177			●	●				
	AFD 160-10 Aluminium flexible duct nominal diameter 160	22178					●			
	AFD 200-10 Aluminium flexible duct nominal diameter 200	22179						●		
	AFD 250-10 Aluminium flexible duct nominal diameter 250	22180							●	
	AFD 315-10 Aluminium flexible duct nominal diameter 315	22181								●
	AFD-I 100-4 Insulated aluminium flexible nominal diameter 100	22182	●							
	AFD-I 125-4 Insulated aluminium flexible nominal diameter 125	22183		●						
	AFD-I 150-4 Insulated aluminium flexible nominal diameter 150	22184			●	●				
	AFD-I 160-10 Insulated aluminium flexible nominal diameter 160	22185					●			
	AFD-I 200-10 Insulated aluminium flexible nominal diameter 200	22186						●		
	AFD-I 250-10 Insulated aluminium flexible nominal diameter 250	22187							●	
	AFD-I 315-10 Insulated aluminium flexible nominal diameter 315	22188								●
	CA-FU 100 Pipe clamps (2 pieces) nominal diameter 100	22667	●							
	CA-FU 125 Pipe clamps (2 pieces) nominal diameter 125	22668		●						
	CA-FU 150 Pipe clamps (2 pieces) nominal diameter 150	22669			●	●				
	CA-FU 160 Pipe clamps (2 pieces) nominal diameter 160	22666					●			
	CA-FU 200 Pipe clamps (2 pieces) nominal diameter 200	22671						●		
	CA-FU 250 Pipe clamps (2 pieces) nominal diameter 250	22672							●	
	CA-FU 315 Pipe clamps (2 pieces) nominal diameter 315	22673								●

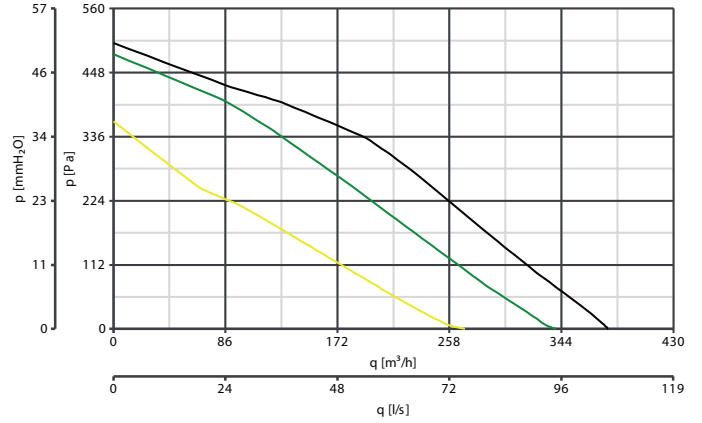
Description and sizes on page 98

PERFORMANCE CURVES

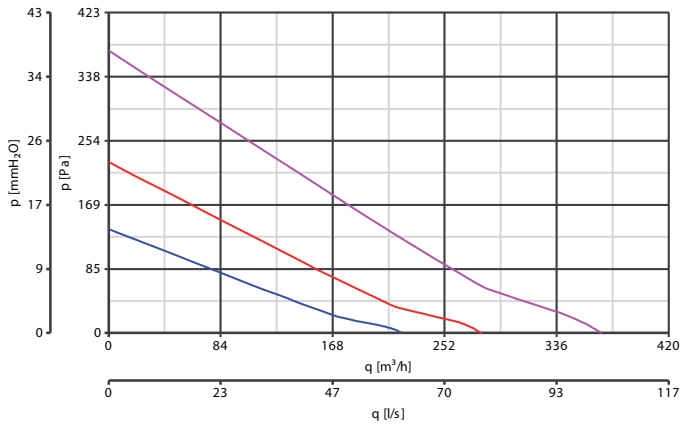
CA 100 ES - min speed



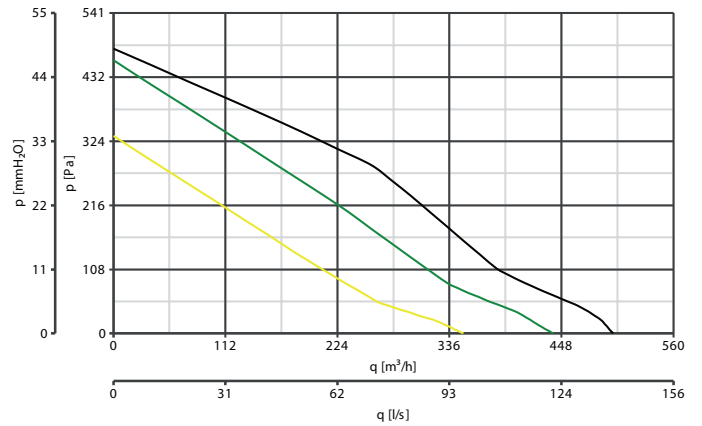
CA 100 ES - max speed



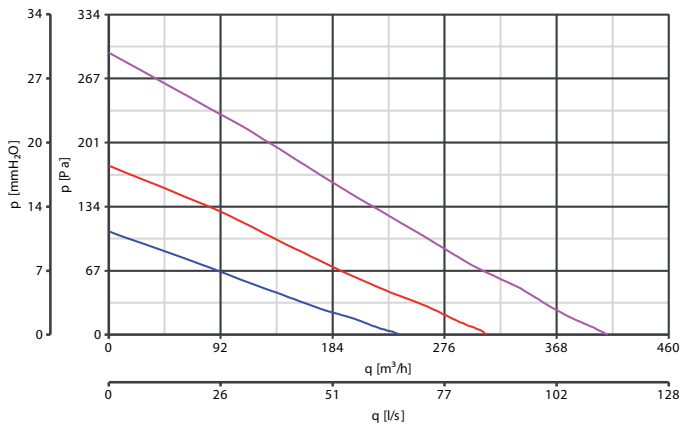
CA 125 ES - min speed



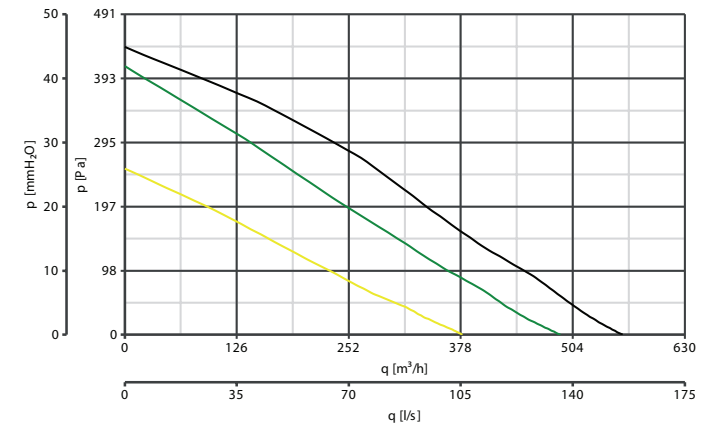
CA 125 ES - max speed



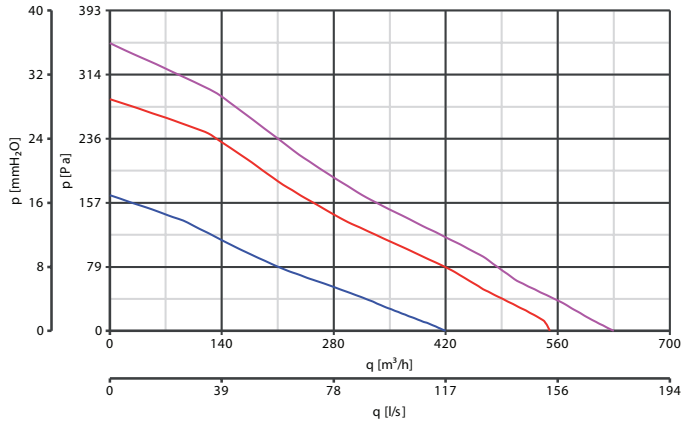
CA 150 Q ES - min speed



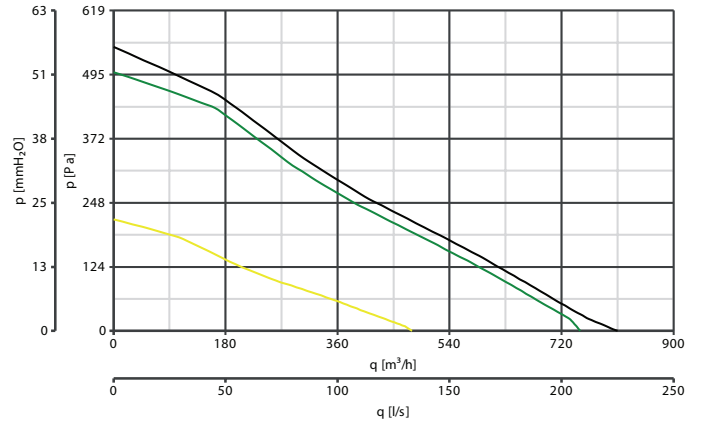
CA 150 Q ES - max speed



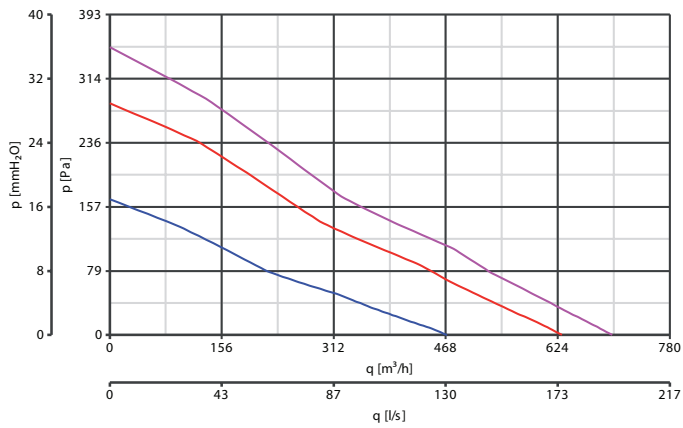
CA 150 ES - min speed



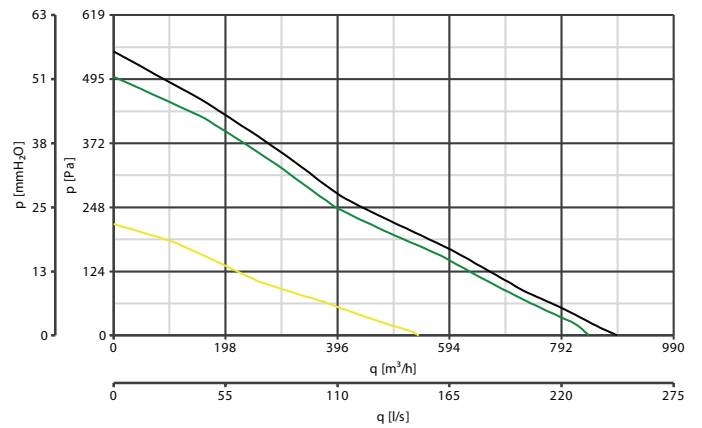
CA 150 ES - max speed



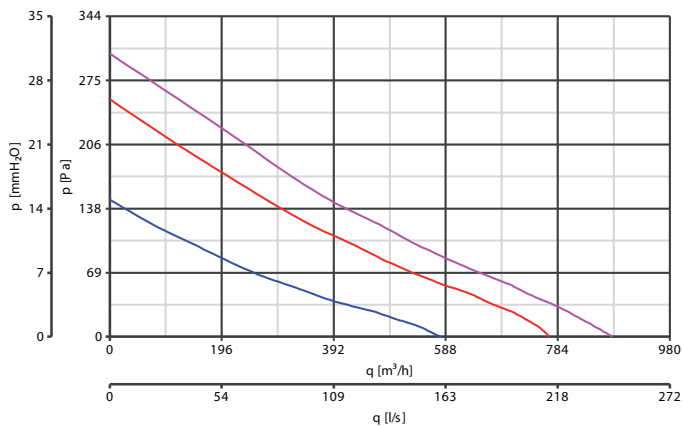
CA 160 ES - min speed



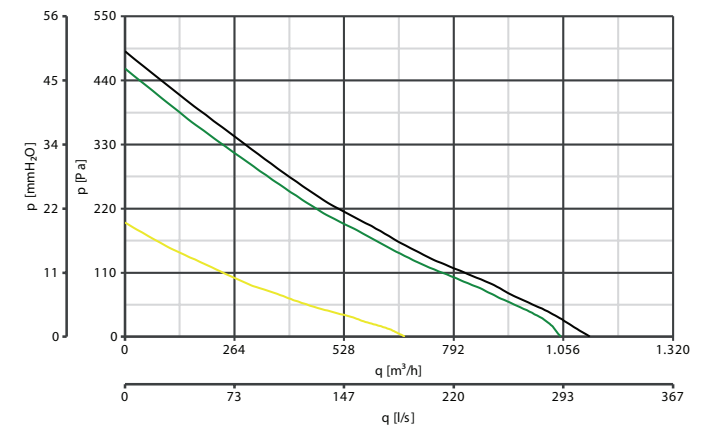
CA 160 ES - max speed



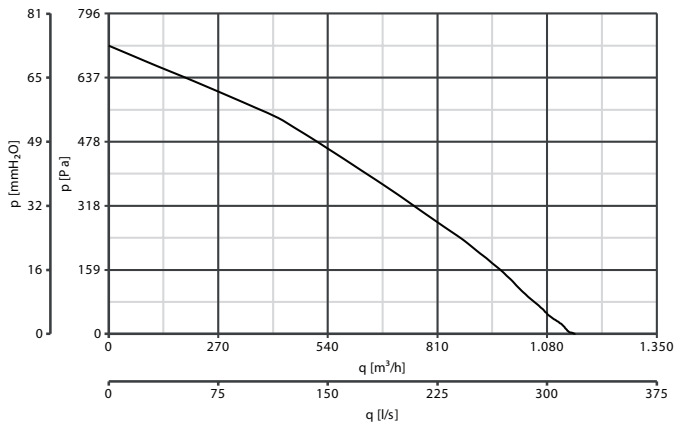
CA 200 ES - min speed



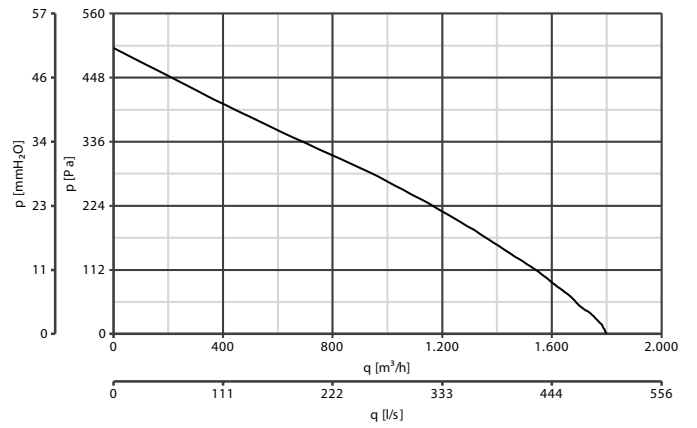
CA 200 ES - max speed



CA 250 ES



CA 315 ES



min speed

- min. setting
- nominal setting
- max. setting

max speed

- min. setting
- nominal setting
- max. setting

p = static pressure

NEW

LINEO ES RANGE

"Energy Saving" mixed flow extractor fans

Suitable for domestic, commercial and industrial applications: kitchens, bathrooms, offices, laboratories, factories, shops, laundromats, models, restaurants, bars, theatres, ballrooms, etc.



- **8 models:** from 100 to 315 diameter.
- Enclosure and impellers made of self-extinguishing V0 mineral charged polypropylene.
- EC brushless motors.
- Ball bearing motors for at least 30.000 hours operation without mechanical malfunction.
- 2 speeds.
- Controllable through Vortice environmental sensors and DUO two-speed controller.
- Protection rating: IP44 (inline installation).
- Insulation class: I (for model LINEO ES 315).
- Insulation class: II.



LONG LIFE 30.000 h

THECNICAL DATA

Models	Code	W		A		RPM		Max Airflow				Max Pressure				Lp dB(A)*		Max °C
		min	max	min	max	min	max	m³h		l/s		mmH₂O		Pa		min	max	
LINEO 100 Q ES	17036	4.5	7	0.05	0.08	1420	2120	90	145	25	40	3.6	8	35	78	21.0	33.3	60
		7	12	0.07	0.12	2125	2850	155	210	43	58	9	15	88	147	28.9	40.0	
		10	16.5	0.10	0.16	2560	3300	170	230	47	64	11	18	108	177	33.5	44.5	
LINEO 100 ES	17031	5.5	8	0.06	0.09	1320	1650	140	185	39	51	7	12	69	118	25.3	31.4	60
		8	12	0.09	0.12	1620	2000	180	255	50	71	12	23	118	225	31.4	36.4	
		11	17	0.11	0.17	1920	2330	220	270	61	75	17	26	167	255	35.7	40.8	
LINEO 125 ES	17032	6.5	10.5	0.07	0.11	1285	1660	190	270	53	75	9	16	88	157	28.9	35.1	60
		10	17	0.10	0.17	1600	2040	250	365	69	101	15	29	147	284	34.8	40.3	
		13.5	24	0.13	0.22	1870	2370	300	380	83	105	20	33	196	324	39.3	44.4	
LINEO 150 ES	17033	10	22	0.10	0.20	1340	1875	325	440	90	122	15	28	147	275	35.0	44.1	60
		15	35	0.15	0.31	1630	2230	385	550	107	153	22	43	216	422	41.6	47.1	
		22	52	0.20	0.44	1870	2560	465	620	129	172	31	53	304	520	46.0	53.2	
LINEO 160 ES	17034	10	23	0.10	0.21	1300	1900	325	450	90	125	15	28	147	275	33.8	44.6	60
		15	38	0.15	0.33	1560	2290	385	570	107	158	22	43	216	422	39.2	47.7	
		22	55	0.20	0.45	1830	2620	465	630	129	175	31	53	304	520	45.7	54.1	
LINEO 200 ES	17037	22	34	0.21	0.32	1990	2330	620	760	172	211	13	19	127	186	39.4	44.3	50
		36	57	0.33	0.50	2400	2820	750	1000	208	278	19	27	186	265	44.8	46.2	
		53	74	0.47	0.63	2750	3120	870	1080	242	300	25	37	245	363	45.3	47.5	
LINEO 250 ES	17038	27	59	0.26	0.54	1720	2280	650	850	180	236	19	34	186	333	43.0	50.9	50
		45	95	0.42	0.83	2100	2750	800	1150	222	319	29	51	284	500	47.4	55.0	
		65	124	0.59	1.06	2400	3010	920	1250	255	347	37	65	363	637	50.4	57.3	
LINEO 315 ES	17039	119	240	0.83	1.60	1800	2350	1400	1900	530	389	40	70	392	686	53.2	60.7	50

* Sound pressure level measured at 3 m in free field conditions with long-cased appliance in delivery mode, in accordance with standard EN ISO 3741:2009.

Electric supply: 230 V ~ 50 Hz.

The values in the table refer to three conditions: minimum setting, nominal and maximum setting.



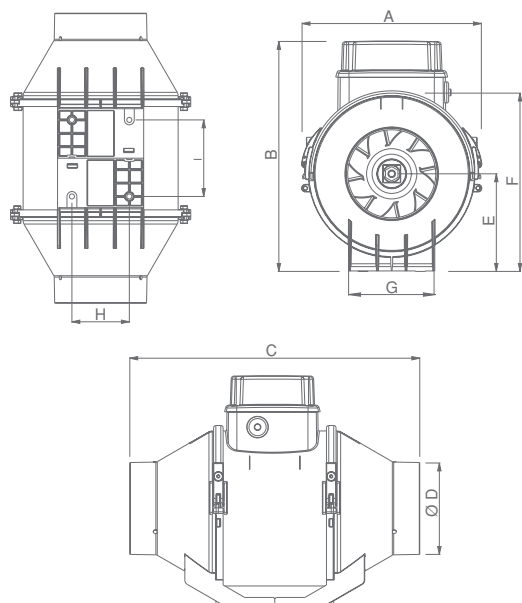
ErP data

Directive 2009/125/EC ErP (Energy related Products)

Models	Code	Measurement cat.	Efficiency cat.	Year of construction	Variable drive	η	N.	(kW) Pe	BEP*			Spec. ratio <1.04
									m ³ /h q	Pa p	RPM	
LINEO 315 ES	17039	C	STATIC	01-01-2013	NO	33.50	50.1	0.261	1061.2	296.95	2350	YES

* Best efficiency point.



DIMENSIONS


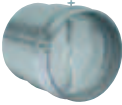


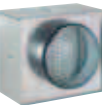



Models	A	B	C	Ø D	E	F	G	H	I	Kg
LINEO 100 Q ES	156	205	231	96	82	152	95	51.5	47.5	1.5
LINEO 100 ES	188.5	240	303	96	101.5	189	90	60	80	1.9
LINEO 125 ES	188.5	240	258	122	101.5	189	90	60	80	1.8
LINEO 150 ES	214.5	265	294	146	112.5	212	110	60	80	2.2
LINEO 160 ES	214.5	265	272.5	156	112.5	212	110	60	80	2.1
LINEO 200 ES	234.5	290	300	196	125.5	235	140	94	100	2.5
LINEO 250 ES	300	350	385	247	152.5	292	176.5	140	145	5.3
LINEO 315 ES	361.5	460	448	312	188.5	359	220.5	178	182	9.5

Dimensions (mm)

PRODUCT ACCESSORIES

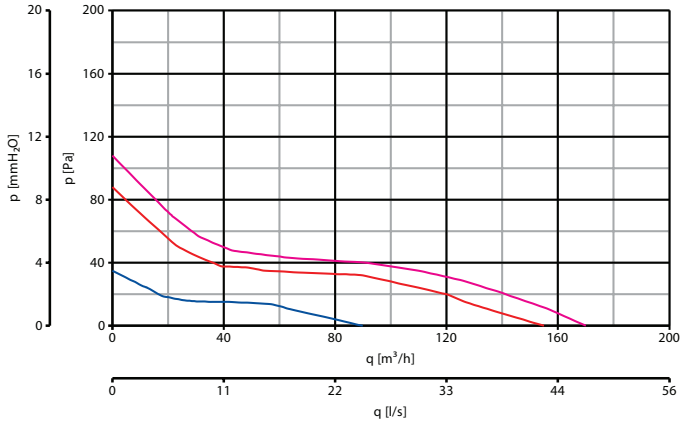
Models	Code	Product								
		LINEO 100 Q ES code 17036	LINEO 100 ES code 17031	LINEO 125 ES code 17032	LINEO 150 ES code 17033	LINEO 160 ES code 17034	LINEO 200 ES code 17037	LINEO 250 ES code 17038	LINEO 315 ES code 17039	
	AFD-I 100-4 Insulated aluminium flexible duct nominal diameter 100	22182	●	●						
	AFD-I 125-4 Insulated aluminium flexible duct nominal diameter 125	22183			●					
	AFD-I 150-4 Insulated aluminium flexible duct nominal diameter 150	22184				●				
	AFD-I 160-10 Insulated aluminium flexible duct nominal diameter 160	22185					●			
	AFD-I 200-10 Insulated aluminium flexible duct nominal diameter 200	22186						●		
	AFD-I 250-10 Insulated aluminium flexible duct nominal diameter 250	22187							●	
	AFD-I 315-10 Insulated aluminium flexible duct nominal diameter 315	22188								●
	AH 100 Duct heater nominal diameter 100	22796	●	●						
	AH 125 Duct heater nominal diameter 125	22797			●					
	AH 150 Duct heater nominal diameter 150	22759				●				
	AH 160 Duct heater nominal diameter 160	22798					●			
	AH 200 Duct heater nominal diameter 200	22790						●		
	AH 250 Duct heater nominal diameter 250	22791							●	
	AH 315 Duct heater nominal diameter 315	22792								●
	AV 100 Air valve nominal diameter 100	22189	●	●						
	AV 125 Air valve nominal diameter 125	22190			●					
	AV 150 Air valve nominal diameter 150	22191				●				
	AV 160 Air valve nominal diameter 160	22192					●			
	AV 200 Air valve nominal diameter 200	22193						●		
	C HCS Environmental sensor for humidity	12994	●	●	●	●	●	●	●	●
	C PIR Passive infrared sensor	12998	●	●	●	●	●	●	●	●
	C SMOKE Environmental sensor for air quality	12993	●	●	●	●	●	●	●	●
	C TEMP Environmental sensor for temperature	12992	●	●	●	●	●	●	●	●
	C TIMER Adjustable over-run timer	12999	●	●	●	●	●	●	●	●
	CD 160 Air diffuser nominal diameter 160	22128					●			
	CD 200 Air diffuser nominal diameter 200	22127						●		
	CD 250 Air diffuser nominal diameter 250	22168							●	
	CD 315 Air diffuser nominal diameter 315	22169								●
	DUO Speed controller	22914	●	●	●	●	●	●	●	●
	FG 100 Fixed grille for models with nominal diameter 100	22165	●	●						
	FG 125 Fixed grille for models with nominal diameter 125	22166			●					
	FG 150 Fixed grille for models with nominal diameter 150	22167				●	●			

Models	Code	Product									
		LINEO 100 Q ES code 17036	LINEO 100 ES code 17031	LINEO 125 ES code 17032	LINEO 150 ES code 17033	LINEO 160 ES code 17034	LINEO 200 ES code 17037	LINEO 250 ES code 17038	LINEO 315 ES code 17039		
	GGR 100 Gravity shutter for models with nominal diameter 100	22332	●	●							
	GGR 120/125 Gravity shutter models with nominal diameter 125	22333			●						
	GGR 150/160 Gravity shutter models with nominal diameter 150/160	22334				●	●				
	GGR 200 Gravity shutter models with nominal diameter 200	22335						●			
	GGR 250 Gravity shutter models with nominal diameter 250	22336							●		
	GGR 315 Gravity shutter models with nominal diameter 315	22337								●	
	IN-LINE-S 100 Backdraught shutter nominal diameter 100	22551	●	●							
	IN-LINE-S 125 Backdraught shutter nominal diameter 125	22556			●						
	IN-LINE-S 150 Backdraught shutter nominal diameter 150	22562				●					
	IN-LINE-S 160 Backdraught shutter nominal diameter 160	22563					●				
	IN-LINE-S 200 Backdraught shutter nominal diameter 200	22566						●			
	IN-LINE-S 250 Backdraught shutter nominal diameter 250	22571							●		
	IN-LINE-S 315 Backdraught shutter nominal diameter 315	22576								●	
	NA 100 Noise attenuator nominal diameter 100	22780	●	●							
	NA 125 Noise attenuator nominal diameter 125	22781			●						
	NA 150 Noise attenuator nominal diameter 150	22756				●					
	NA 160 Noise attenuator nominal diameter 160	22783					●				
	NA 200 Noise attenuator nominal diameter 200	22784						●			
	NA 250 Noise attenuator nominal diameter 250	22785							●		
	NA 315 Noise attenuator nominal diameter 315	22786								●	
	TRA 250 Outlet port protection grille for models with nominal diameter 250	51150					●	●	●		
	AF 100 Air filter nominal diameter 100	22793	●	●							
	AF 125 Air filter nominal diameter 125	22794			●						
	AF 150 Air filter nominal diameter 150	22799				●					
	AF 160 Air filter nominal diameter 160	22795					●				
	AF 200 Air filter nominal diameter 200	22787						●			
	AF 250 Air filter nominal diameter 250	22788							●		
	AF 315 Air filter nominal diameter 315	22789								●	
	AFD 100-4 Aluminium flexible duct nominal diameter 100	22175	●	●							
	AFD 125-4 Aluminium flexible duct nominal diameter 125	22176			●						
	AFD 150-4 Aluminium flexible duct nominal diameter 150	22177				●					
	AFD 160-10 Aluminium flexible duct nominal diameter 160	22178					●				
	AFD 200-10 Aluminium flexible duct nominal diameter 200	22179						●			
	AFD 250-10 Aluminium flexible duct nominal diameter 250	22180							●		
	AFD 315-10 Aluminium flexible duct nominal diameter 315	22181								●	

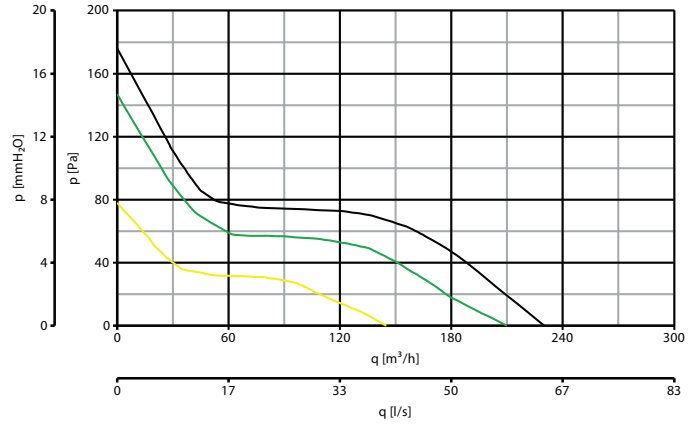
Description and sizes on page 98

PERFORMANCE CURVES

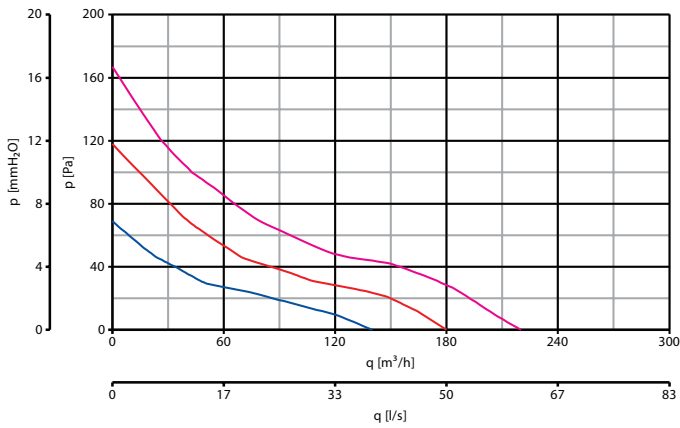
LINEO 100 Q ES - min speed



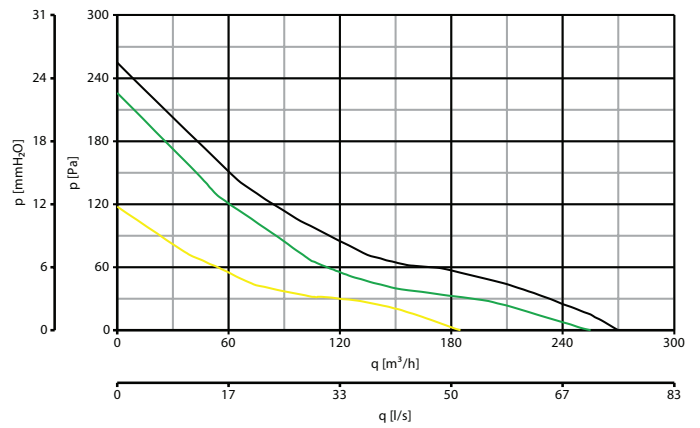
LINEO 100 Q ES - max speed



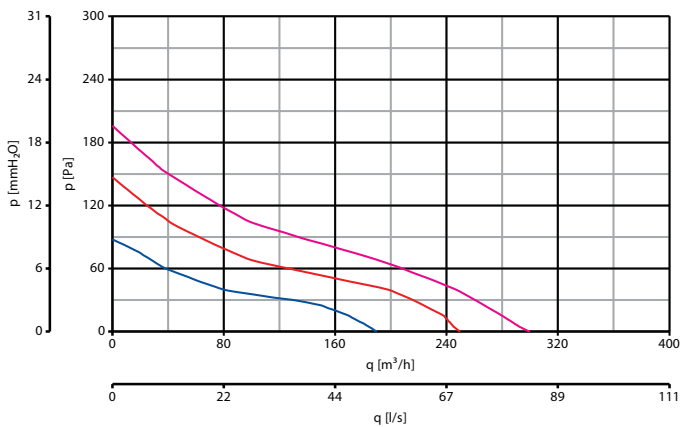
LINEO 100 ES - min speed



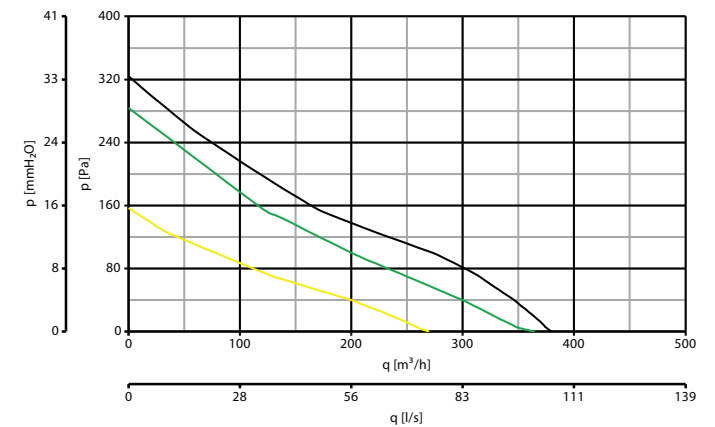
LINEO 100 ES - max speed



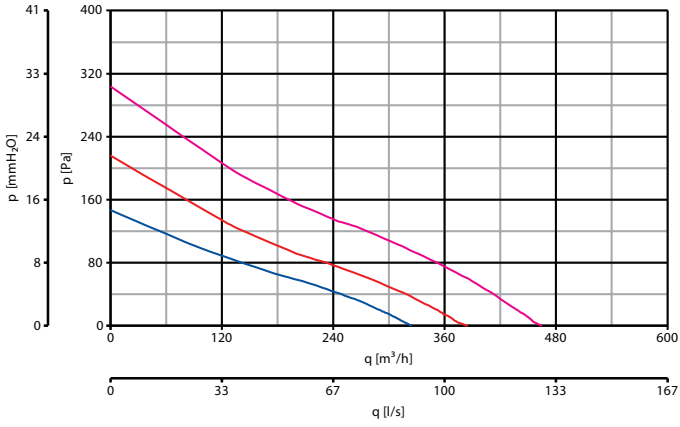
LINEO 125 ES - min speed



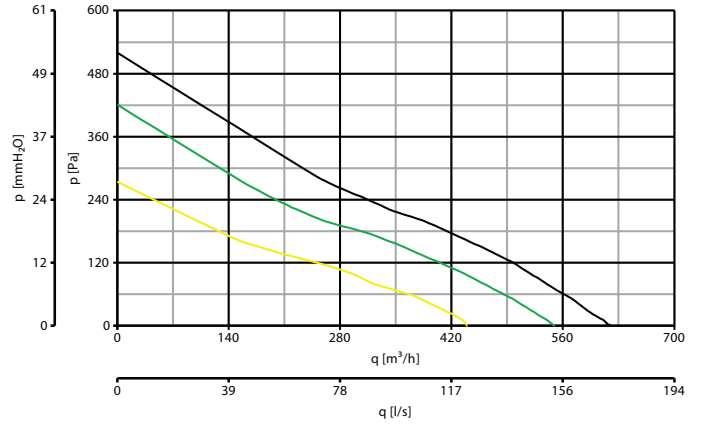
LINEO 125 ES - max speed



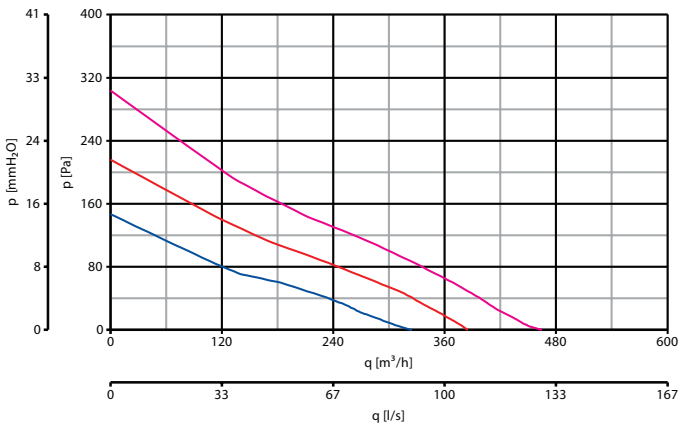
LINEO 150 ES - min speed



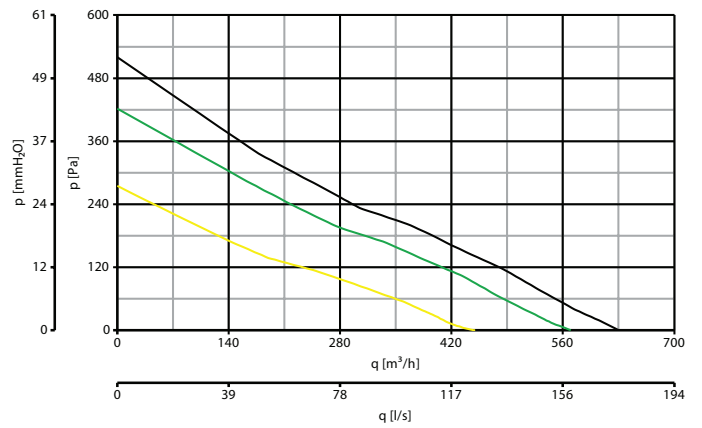
LINEO 150 ES - max speed



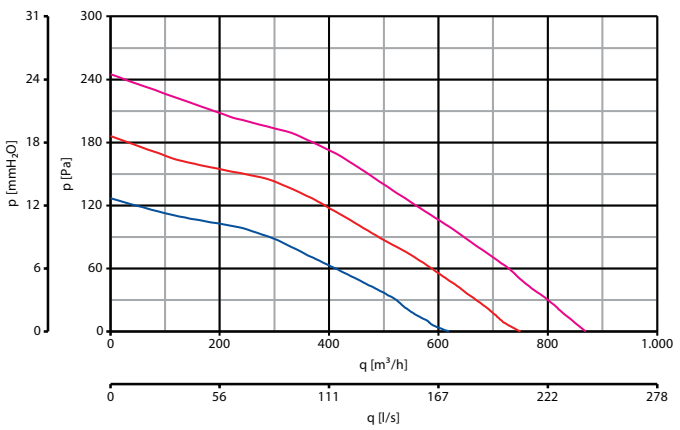
LINEO 160 ES - min speed



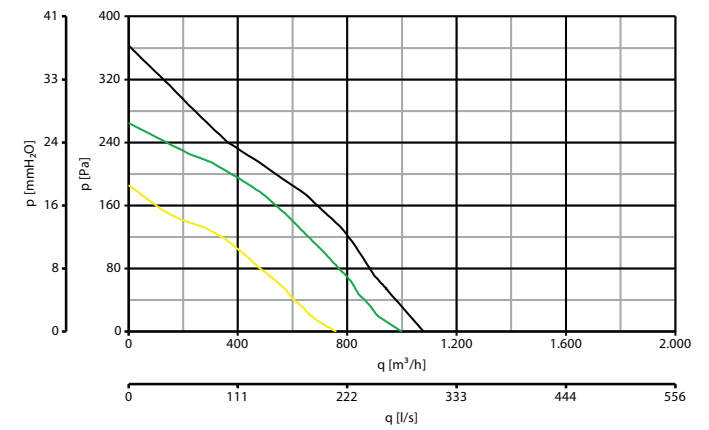
LINEO 160 ES - max speed



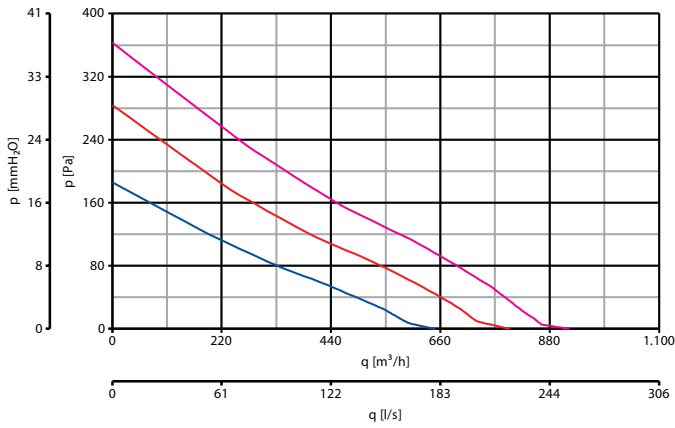
LINEO 200 ES - min speed



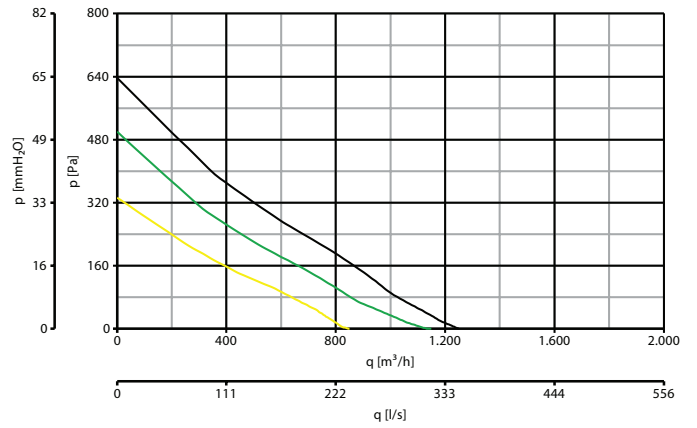
LINEO 200 ES - max speed



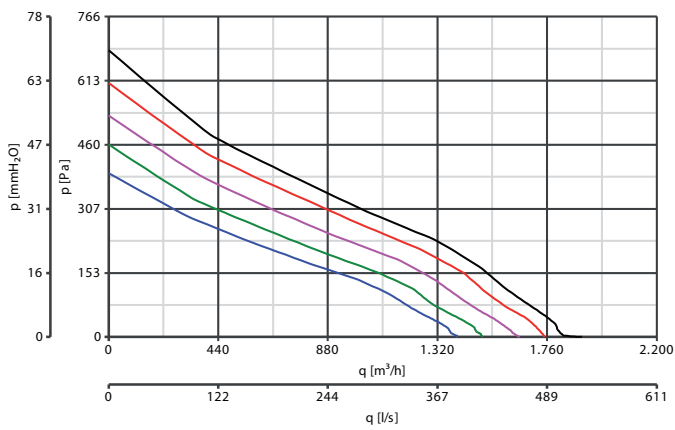
LINEO 250 ES - min speed



LINEO 250 ES - max speed



LINEO 315 ES



min speed

- min. setting
- nominal setting
- max. setting

max speed

- min. setting
- nominal setting
- max. setting

p = static pressure

