

# Primo

## Inline mixed flow fans

### Use

- Inline fans for supply and exhaust ventilation of various commercial and industrial premises requiring powerful air flow.
- The fans are compatible with Ø 355 and 400 mm air ducts.
- Combines wide capabilities and high performance features of axial and centrifugal fans, providing powerful air flow.



**Air flow:**  
up to 3350 m<sup>3</sup>/h  
931 l/s



**Power:**  
from 126 W



**Noise level:**  
from 47 dBA



### Design

- The fan casing is made of polymer and reinforced with a metal housing. Due to the conically shaped polymer impeller with specially profiled blades, the air stream circular velocity increases, which results in higher air flow and pressure, as compared to characteristics of standard axial fans.
- The specially designed diffuser, impeller and airflow rectifier at the fan outlet provide smooth air flow distribution and enable the best combination of high capacity, powerful pressure and low noise.
- The fan casing is equipped with an airtight terminal box for connection to power mains.

### Motor

- Equipped with three-speed four-pole asynchronous motors.
- 220–240 V single phase at 50 Hz.
- Equipped with ball bearings for longer service life (up to 40 000 hours).
- All motors have manual reset thermal overload protection.

### Overall Dimensions [mm]

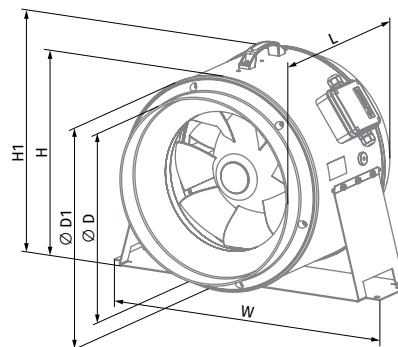
Model	Ø D	Ø D1	H	H1	L	W
Primo 355	355	406	408	439	372	566
Primo 400	400	451	453	484	415	623

### Speed control

- The fans are controlled by either a three-stage **CDPE-3 E5** controller or a smooth thyristor controller connected to the maximum speed terminal.

### Mounting

- The fans can be mounted at any place and at any angle within the ductwork system. Several fans may be installed in one system in parallel to attain higher air capacity or in series to increase operating pressure in the system. The fan casing is equipped with fixing brackets for suspended mounting.
- The fans can be mounted using a **UM Primo** bracket of the appropriate size (ordered separately).



#### Designation key

Series	Duct diameter [mm]
Primo	355; 400

#### Modifications

- US:** three-speed switch
- FR1:** smooth speed controller adjustable from 0 to 100%
- G1:** speed controller, temperature controller with external temperature sensor, power cable with mains plug
- W1:** power cable with mains plug

### Technical data

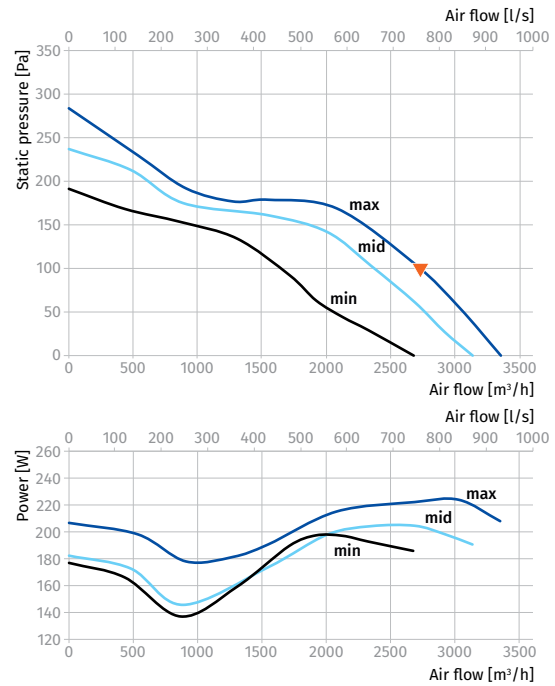
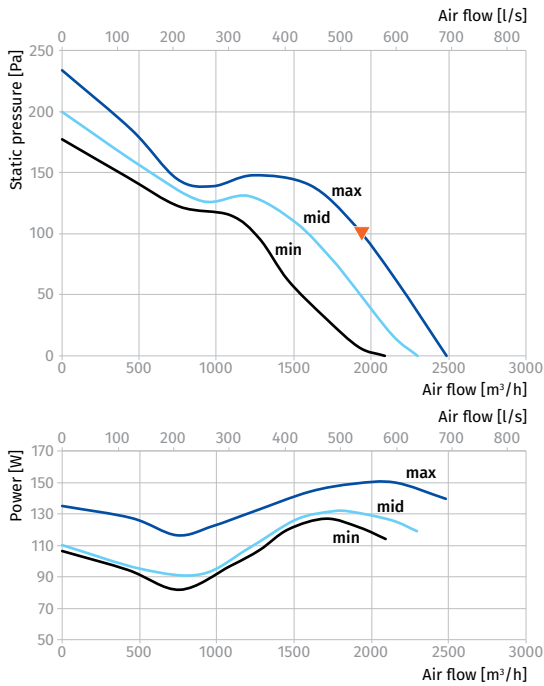
Parameters	Primo 355			Primo 400			
	min	mid	max	min	mid	max	
Speed							
Voltage [V / 50 Hz]		1~ 230			1~ 230		
Power [W]	126	131	150	197	204	224	
Current [A]	0.60	0.58	0.66	0.91	0.90	0.98	
Maximum air flow [m³/h (l/s)]	2090 (581)	2296 (638)	2485 (690)	2677 (744)	3136 (871)	3350 (931)	
RPM [min <sup>-1</sup> ]	1350	1400	1470	1320	1390	1446	
Sound pressure at 3 m [dBA]	38	38	43	40	42	43	
Transported air temperature [°C]		-25...+55			-25...+55		
Protection rating		IPX4			IPX4		
Motor protection rating		IP44			IP44		
ErP compliance		2018			2018		

#### PRIMO 355

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to inlet [dBA]	69	50	61	63	60	63	60	56	48	49	59
L <sub>WA</sub> to outlet [dBA]	69	56	61	63	61	65	59	54	48	49	59
L <sub>WA</sub> to environment [dBA]	63	42	49	61	53	57	50	46	35	43	53

#### PRIMO 400

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to inlet [dBA]	71	57	62	66	65	64	61	55	47	51	61
L <sub>WA</sub> to outlet [dBA]	73	57	65	63	67	68	63	59	51	52	62
L <sub>WA</sub> to environment [dBA]	64	45	52	53	57	60	54	48	38	43	53



INLINE FANS