

# Turbo-E

## Inline mixed-flow fans

### Use

- Supply and extract ventilation systems installed in various premises.
- Mounting in kitchens, bathrooms and other humid premises.
- Compatible with Ø 100 up to 160 mm round air ducts.



**Air flow:**  
up to 530 m<sup>3</sup>/h  
144 l/s



**Power:**  
from 21 W



### Design

- Casing made of impact- and corrosion-resistant ABS plastic (Ø 100-160).
- Ventilation unit with terminal box. Can be turned to any position.
- Special design of the casing permits easy dismantling of the impeller and motor block for fan servicing without dismantling the air duct.

### Motor

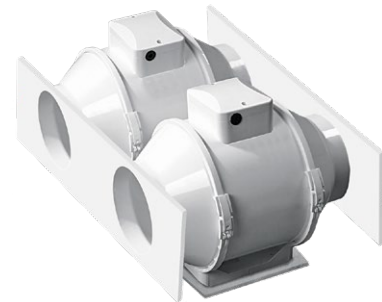
- Two-speed single-phase motor on ball bearings.
- Equipped with thermal overheating protection.

### Speed control

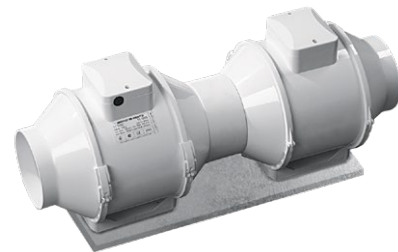
- The built-in switch (option **US**) or external switch for multi-speed fans (available upon separate order) are used to select one of two capacity modes.
- Smooth speed control is possible with a built-in speed controller (**FR** modification) or an external thyristor speed controller (available upon separate order).

### Mounting

- Due to the compact design the fan is the ideal solution for mounting in limited spaces, including space behind a false ceiling.
- The fan can be installed in any section of the ventilation system from intake to the end of the ductworks.
- Wall or ceiling mounting with a mounting plate.
- TD:** mounting kit for installation of one diameter fans in parallel (for boosting capacity).



- TL:** mounting kit for installation of one diameter fans in series (for boosting pressure).



INLINE FANS

### Accessories

Silencers	Filter boxes	Electric heaters	Water heaters	Backdraft air dampers	Air dampers	Clamps	Speed switches	Speed controllers	Timers/Sensors			
SD	KFBK	KFBT	EKH	WKH	VRV	VK / VKA	K	CDP-2/10	CDP-2/5	CDT1 E	CDT E1.8	TE(TI) / HSE(HSI) / LSE(LSI) / IRSE(IRS)

### Modifications

- o **max**: high-powered motor.
- o **T**: turn-off delay timer adjustable from 2 to 30 minutes.
- o **US**: three-position speed switch.



- o **FR1**: smooth speed controller adjustable from 0 to 100 % and power cable with mains plug.



- o **G1**: speed controller, temperature controller with external temperature sensor (cable length 4 m), power cable with mains plug.

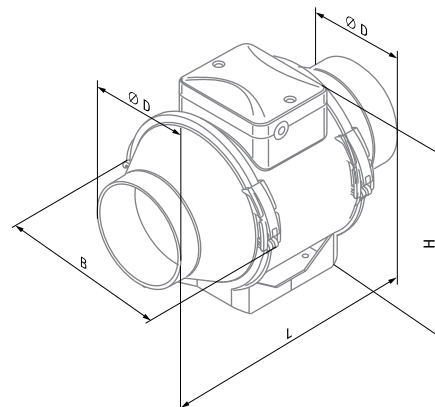


- o **GT1**: speed controller, temperature controller with external temperature sensor (cable length 4 m), 5 min timer switch and power cable with mains plug.
- o **G11**: speed controller, temperature controller with integrated temperature sensor and power cable with mains plug.
- o **GT11**: speed controller, temperature controller with integrated temperature sensor, 5 min timer switch and power cable with mains plug.
- o The **G1** and **G11** modifications enable automatic speed control depending on indoor temperature. The optimal ventilation solution for premises requiring permanent temperature control as greenhouses, orangeries, etc.
- o **W1**: power cable with mains plug.

Designation key			
Series	Duct diameter [mm]	Motor modifications	Modifications
Turbo-E	100; 125; 150; 160	max: high-powered motor	<p><b>T</b>: turn-off delay timer adjustable from 2 to 30 minutes</p> <p><b>US</b>: three-position speed switch</p> <p><b>FR1</b>: smooth speed controller adjustable from 0 to 100 % and power cable with mains plug</p> <p><b>G1</b>: speed controller, temperature controller with external temperature sensor, power cable with mains plug</p> <p><b>GT1</b>: speed controller, temperature controller with external temperature sensor, 5 min timer switch and power cable with mains plug</p> <p><b>G11</b>: speed controller, temperature controller with integrated temperature sensor and power cable mains plug</p> <p><b>GT11</b>: speed controller, temperature controller with integrated temperature sensor, 5 min timer switch and power cable with mains plug</p> <p><b>W1</b>: power cable with mains plug</p>

### Dimensions [mm]

Model	Ø D	B	H	L	Weight [kg]
Turbo-E 100	96	167	190	246	1.45
Turbo-E 125	123	167	190	246	1.79
Turbo-E 125 max	123	223	265	295	3.14
Turbo-E 150	146	223	265	295	3.19
Turbo-E 160	158	233	265	295	3.22



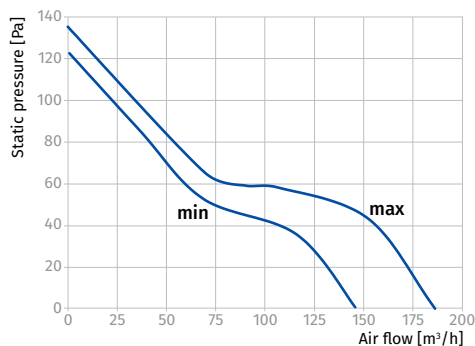
## Technical data

Parameters	Turbo-E 100		Turbo-E 125	
	min	max	min	max
Speed				
Voltage [V]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Frequency [Hz]	50/60	50/60	50/60	50/60
Power [W]	21	33	23	37
Current [A]	0.11	0.21	0.18	0.27
Maximum air flow [m <sup>3</sup> /h (l/s)]	145 (40)	187 (52)	220 (61)	280 (78)
RPM [min <sup>-1</sup> ]	2180	2385	1950	2455
Sound pressure level at 3 m [dBA]	27	36	28	37
Transported air temperature [°C]	-25...+40		-25...+40	
SEC class	C		B	
IP rating	IPX4		IPX4	
Motor IP rating	IPX4		IPX4	
ErP	-		-	

To comply with ErP 2018 it is necessary to use a speed controller and local demand control typology (connect the sensor).

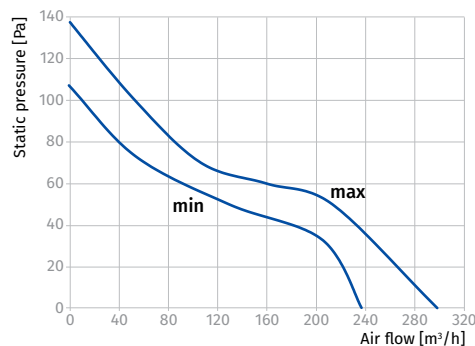
### TURBO-E 100

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	54	19	35	50	49	44	37	25	17	33	43
LWA to outlet [dBA]	53	17	34	50	49	48	36	24	17	32	42
LWA to env. [dBA]	47	14	29	43	43	39	33	22	15	27	37
<b>Max speed</b>											
LWA to inlet [dBA]	59	24	34	53	54	53	48	37	26	38	48
LWA to outlet [dBA]	57	23	33	52	52	52	47	37	26	37	47
LWA to env. [dBA]	52	18	29	46	48	47	43	33	23	32	42



### TURBO-E 125

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	54	26	38	52	50	44	38	27	17	34	44
LWA to outlet [dBA]	54	25	37	51	49	43	38	28	18	33	43
LWA to env. [dBA]	49	21	32	46	45	40	35	25	16	29	39
<b>Max speed</b>											
LWA to inlet [dBA]	60	20	31	57	51	51	50	39	27	39	49
LWA to outlet [dBA]	59	20	31	56	51	51	49	39	26	38	48
LWA to env. [dBA]	54	16	27	51	46	47	45	36	24	34	44



Parameters	Turbo-E 125 max		Turbo-E 150 / Turbo-E 160	
Speed	min	max	min	max
Voltage [V]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Frequency [Hz]	50/60	50/60	50/60	50/60
Power [W]	47	60	47	60
Current [A]	0.21	0.27	0.21	0.27
Maximum air flow [m³/h (l/s)]	295 (82)	440 (122)	405 (113)	520 (144)
RPM [min <sup>-1</sup> ]	1850	2510	1680	2460
Sound pressure level at 3 m [dBA]	31	42	33	44
Transported air temperature [°C]	-25...+60		-25...+60	
SEC class	C		B	
IP rating	IPX4		IPX4	
Motor IP rating	IPX4		IPX4	
ErP	2018		2018	

To comply with ErP 2018 it is necessary to use a speed controller and local demand control typology (connect the sensor).

### TURBO-E 125 MAX

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	56	28	38	53	51	49	46	37	24	36	46
LWA to outlet [dBA]	55	27	37	52	50	48	45	37	23	35	45
LWA to env. [dBA]	52	23	33	47	46	44	42	34	21	31	41
<b>Max speed</b>											
LWA to inlet [dBA]	67	38	49	63	63	60	57	50	38	47	57
LWA to outlet [dBA]	66	38	48	61	62	59	56	48	37	46	56
LWA to env. [dBA]	63	34	45	58	58	56	53	46	35	42	52

### TURBO-E 150 / TURBO-E 160

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Min speed</b>											
LWA to inlet [dBA]	66	35	46	63	60	57	53	43	28	45	55
LWA to outlet [dBA]	65	34	45	62	59	56	53	43	28	44	54
LWA to env. [dBA]	54	24	35	50	49	47	44	36	23	33	43
<b>Max speed</b>											
LWA to inlet [dBA]	75	42	52	71	69	67	64	56	43	54	64
LWA to outlet [dBA]	74	41	50	70	69	66	63	56	42	53	63
LWA to env. [dBA]	64	32	41	59	58	57	54	58	36	44	54

