

ETRI®



DC Axial Fans

10/2008

rosenberg
THE AIR MOVEMENT GROUP

ECO FIT

ETRI



We are proud to form a part of the ROSENBERG family:



Rosenberg Ventilatoren GmbH
Künzelsau, Germany



ECOFIT S.A.
Vendôme, France

- Technical Expertise & Application Engineering
- Outstanding Customer Service
- Design Flexibility & Custom Fan/Motor Equipment
- Stock Fans for Immediate Shipment
- Full Line of Accessory Products & Controls
- Value Added Fabrication

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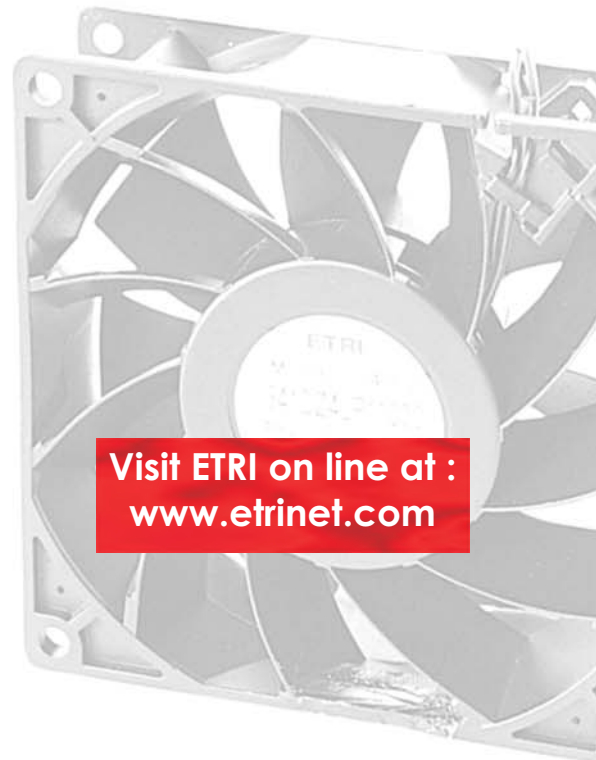
DC Axial Fans

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The following data tables give the main characteristics of our standard fans ; for detailed information or specific request, call our local sales team.

Les tableaux suivants indiquent les caractéristiques principales de nos ventilateurs standards ; pour des informations plus détaillées ou des demandes spécifiques, contactez nos équipes techniques et commerciales.



Visit ETRI on line at :
www.etrinet.com

Catalogue data

In this DC Axial Fans catalogue, we offer models which are in general use.

Our standard product range includes many other versions with variations in supply voltage and speed.

Specific fans are available and can be made to customers specification.

Our application engineers work constantly with our customers specification to offer the best fan selection..

In this way, many special units are produced both for commercial and military applications.

Our test laboratories in Vendôme (France) are available for customers to test their prototype equipment in order to determine the optimum cooling solution.

Further products catalogues:

- AC Axial Fans
- High Performance Fans
- 400 Hz Fans
- Accessories

All the datasheets are still available on the website:

www.etrinet.com

ELECTRICAL, AERODYNAMIC AND INDUSTRIAL DATA

The following information can be found in the data tables:

- Nominal voltage and voltage range
- Rated speed which is an approximate value of the fan speed operating at free air
- Power consumption and line current at free air
- Maximum static pressure corresponding to the pressure at no flow condition
- Maximum air delivery corresponding to airflow at no static pressure value
- Total noise level in decibels from the equilibrium curve A measured 1 meter from the air inlet, the fan operating in free air.

AERODYNAMIC CURVES

The aerodynamic graphs are constructed using a test chamber and method described in CCT Standard 18.10. They are drawn up for an air density of 1,2 kg/m³.

TOLERANCES (Indicative values)

Series 146D, 99Y, 158D, 121D, 148D

Speed / airflow	+/- 6 %
Static pressure	+/- 12 %
Input power	+/- 15 %
Voltage	See voltage range on each technical datasheet

Other series

Speed / airflow	+/- 8 %
Static pressure	+/- 15 %
Input power	+/- 25 %
Voltage	See voltage range on each technical datasheet

EXEMPLE OF CODIFICATION

246 DS 1 L P 1 1 000

Series code

Speed (from lower to higher):

DL, DM, DH, DS, DX, DZ, DY, DG, DR; DK

DW or YW = Special speed

Voltage: 1= 12 V; 2 = 24 V; 4 = 48 V;

5 = 5 V; 9 = special voltage

Connection: L = leads; T = terminals

Housing material: P = plastic; M = metal

Bearing system: 1 = ball bearings;

1 = no option; 3 = speed sensor; 4 = alarm;

5 = variable speed option;

6 = variable speed and alarm;

7 = variable speed and speed sensor

Special features: 500 = TTL output in case

of speed sensor option; 510 = rib type;

600 = tropicalization; 601 = IP54; 602 = IP55;

other: custom designs

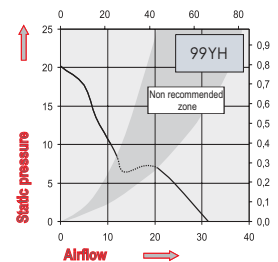
CONDITIONS OF USE

Unstable operating zone for ETRI DC axial fans

Many axial flow fan characteristics have a “stall point”, also referred to as the “unstable zone” or “pumping zone”. It is recommended that fans should not be allowed to operate around the fan stall point otherwise there are serious risks of:

- impeller speed fluctuation causing mechanical instability
- increased motor temperature rise, especially on the bearings
- increased noise and vibration levels
- destruction of the motor mountings, motor bearings, and the fan impeller.

Some small diameter fans may be operated around the stall point, or at higher pressures and lower flow rates, but strictly with the written approval of manufacturer ETRI.

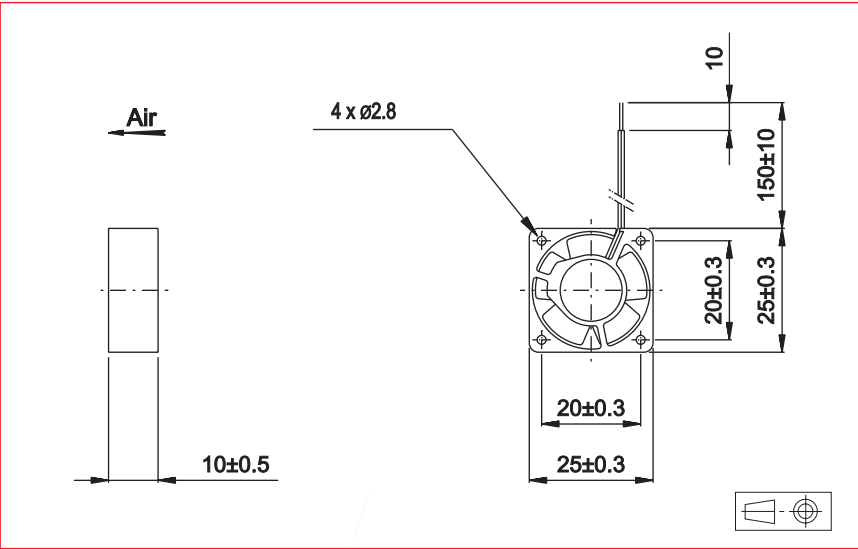


TOLERANCES

The values shown in the data tables and the various curves have been measured from standard design equipment and should be considered nominal.

Without particular specifications, we accept the tolerances given at the beginning of each catalogue.

Drawings: without particular specifications, we accept a tolerance of ± 1 mm.



Approvals

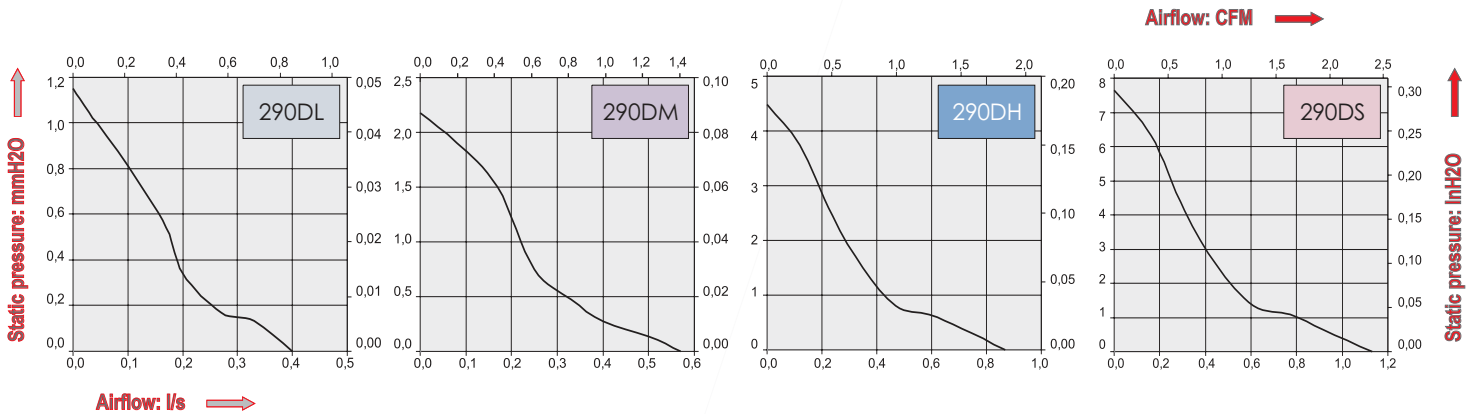


Life expectancy

L-10 LIFE AT 40°C:
30 000 hours

Brushless DC Motor
 Electrical protection: impedance protected
 Housing material: plastic UL 94 VO
 Impeller material: plastic UL 94 VO
 Weight: 10,5 g
 Bearing system: ball bearings

Available with:
 - Speed sensor
 - Alarm
 - IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
290DL5LP11000	5	0,4	18	5000	0,20	(4-6)	X		-10	70
290DL1LP11000	12	0,4	18	5000	0,36	(7-13,2)	X		-10	70
290DM5LP11000	5	0,6	20	7000	0,30	(4-6)	X		-10	70
290DM1LP11000	12	0,6	20	7000	0,48	(7-13,2)	X		-10	70
290DH5LP11000	5	0,9	23,5	10000	0,60	(4-6)	X		-10	70
290DH1LP11000	12	0,9	23,5	10000	0,72	(7-13,2)	X		-10	70
290DS5LP11000	5	1,1	28	13000	0,80	(4-6)	X		-10	70
290DS1LP11000	12	1,1	28	13000	0,96	(7-13,2)	X		-10	70

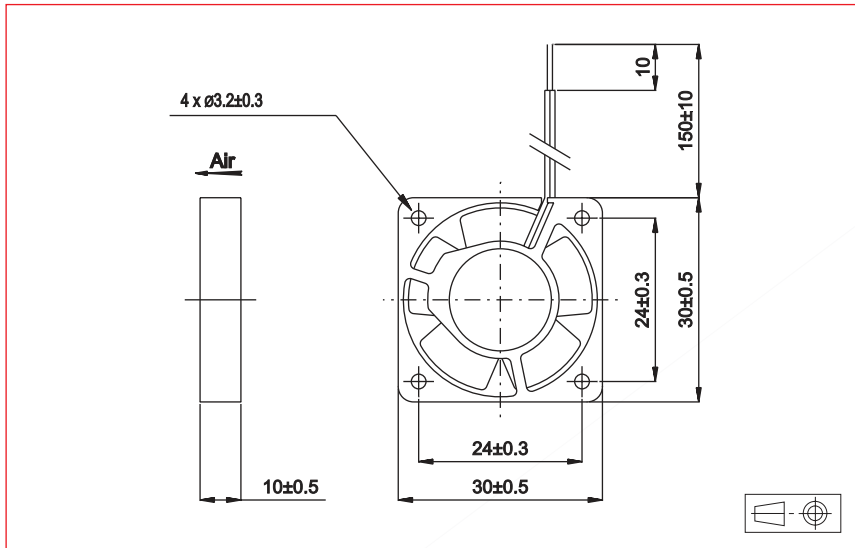
Additional versions:
 Series 215: 25 x 25 x 15 mm, 5V,
 available with speed sensor: consult factory



30 x 30 x 10 mm

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Life expectancy

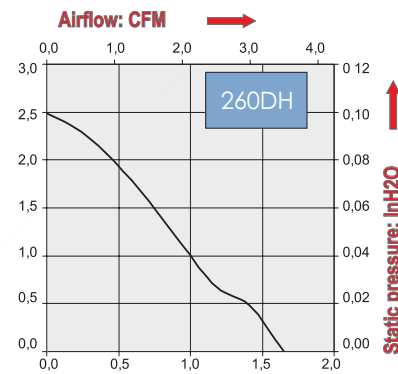
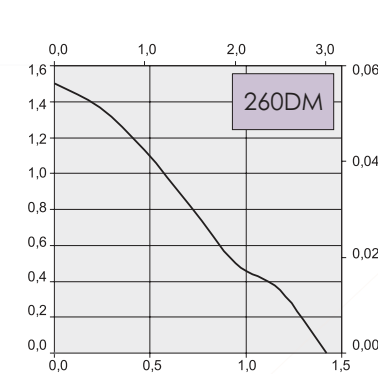
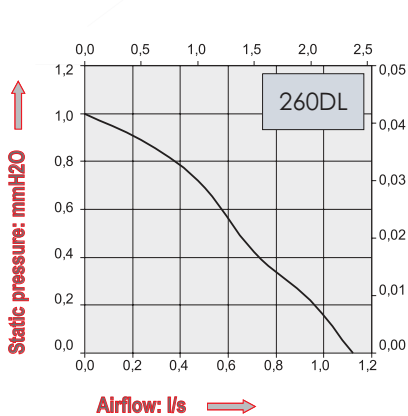
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

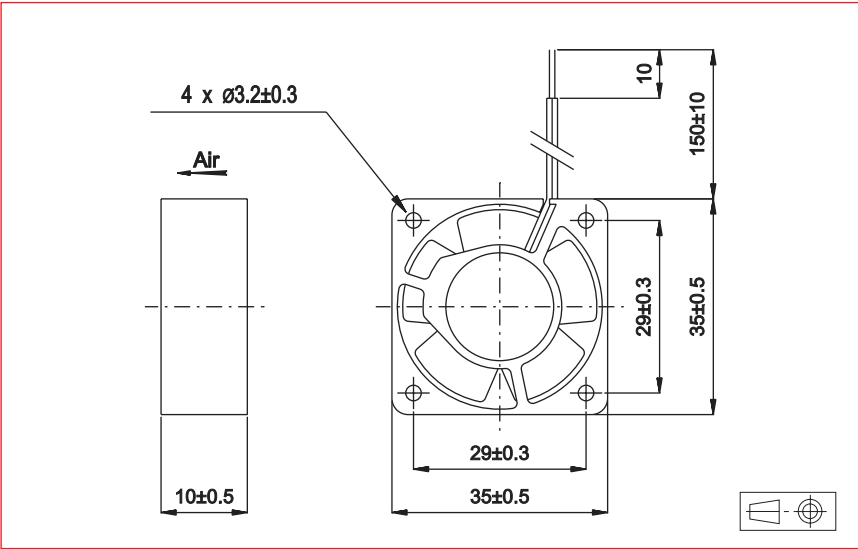
Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 9 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
260DL5LP11000	5	1,1	17,5	6000	0,4	(4,5-5,5)	X		-10	70
260DL1LP11000	12	1,1	17,5	6000	0,6	(9,5-13,8)	X		-10	70
260DM5LP11000	5	1,4	20	7500	0,6	(4,5-5,5)	X		-10	70
260DM1LP11000	12	1,4	20	7500	0,8	(9,5-13,8)	X		-10	70
260DH5LP11000	5	1,7	25	9000	0,8	(4,5-5,5)	X		-10	70
260DH1LP11000	12	1,7	25	9000	1,1	(9,5-13,8)	X		-10	70



Approvals

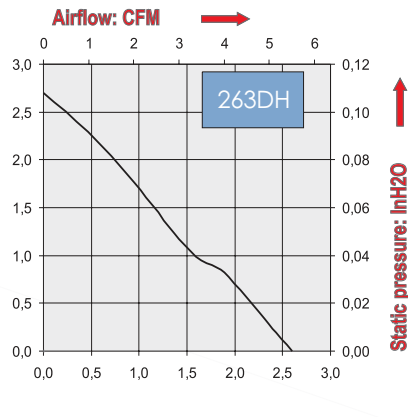
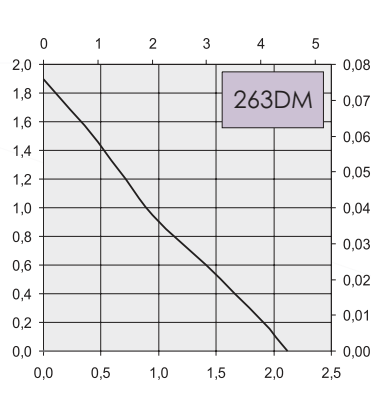
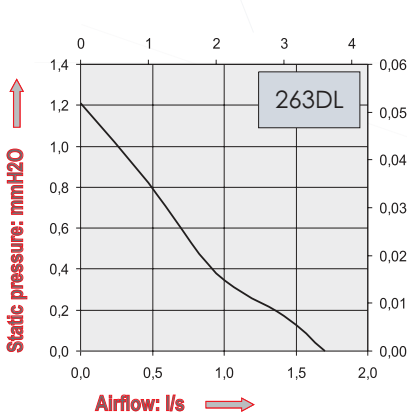


Life expectancy

L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor
 Electrical protection: impedance protected
 Housing material: plastic UL 94 VO
 Impeller material: plastic UL 94 VO
 Weight: 10 g
 Bearing system: ball bearings

Available with:
 - Speed sensor
 - Alarm
 - IP54 / IP55

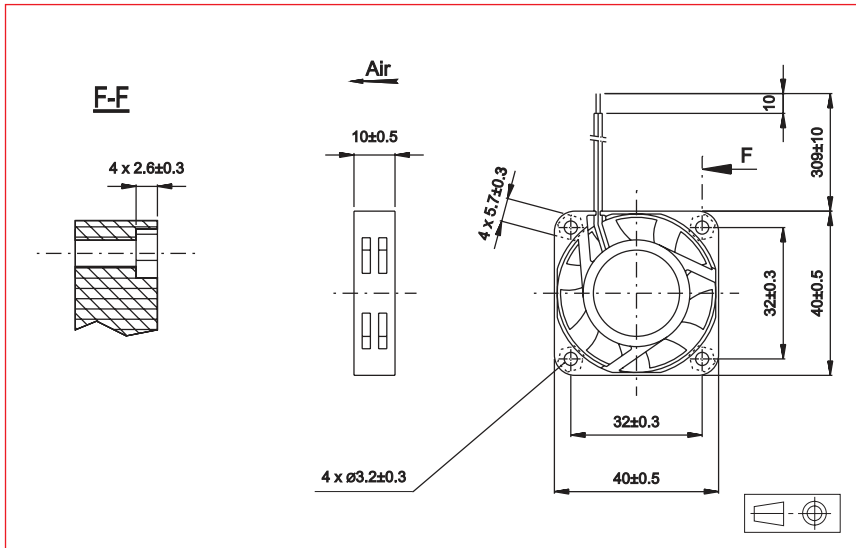


Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
263DL5LP11000	5	1,7	15	4500	0,3	(4,5-5,5)	X		-10	70
263DL1LP11000	12	1,7	15	4500	0,5	(9,5-13,8)	X		-10	70
263DM5LP11000	5	2,1	18	5800	0,5	(4,5-5,5)	X		-10	70
263DM1LP11000	12	2,1	18	5800	0,6	(9,5-13,8)	X		-10	70
263DH5LP11000	5	2,6	22	7000	0,7	(4,5-5,5)	X		-10	70
263DH1LP11000	12	2,6	22	7000	1,1	(9,5-13,8)	X		-10	70

40 x 40 x 10 mm

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Life expectancy

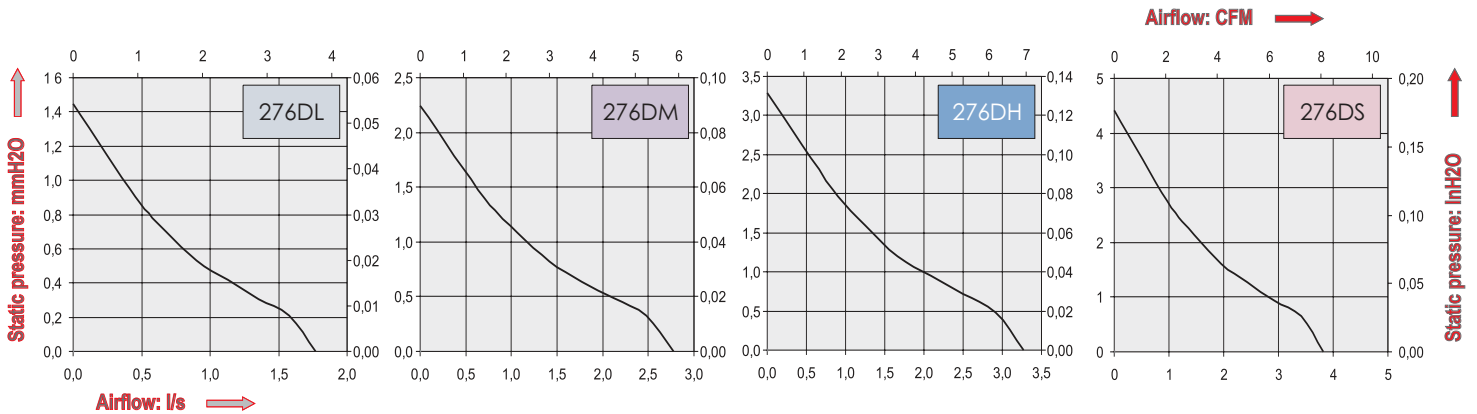
L-10 LIFE AT 40°C :
70 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 15 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- IP54 / IP55



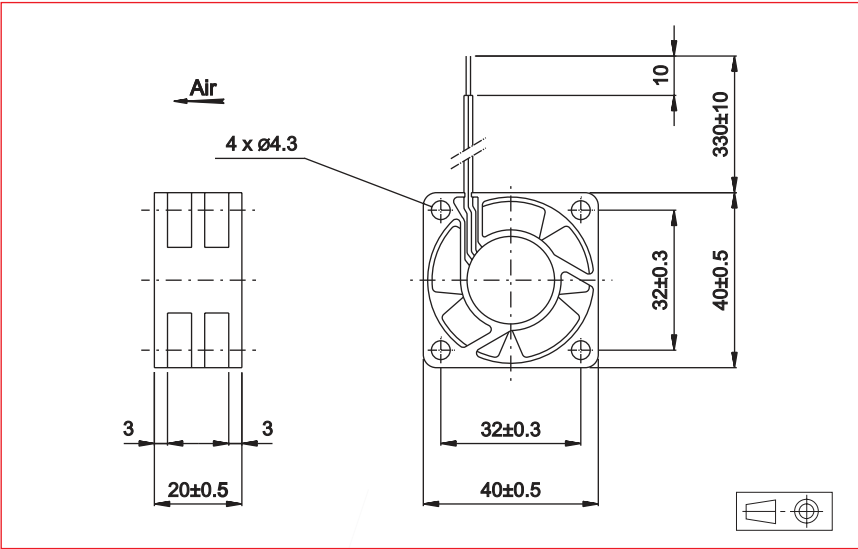
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
276DL5LP11000C	5	1,77	20,5	4000	0,4	(4,5-5,5)	X		-10	70
276DL1LP11000C	12	1,77	20,5	4000	0,6	(9-13,8)	X		-10	70
276DM5LP11000C	5	2,78	24,5	5000	0,5	(4,5-5,5)	X		-10	70
276DM1LP11000C	12	2,78	24,5	5000	0,7	(7-13,8)	X		-10	70
276DH5LP11000C	5	3,27	28,5	6000	0,7	(4,5-5,5)	X		-10	70
276DH1LP11000C	12	3,27	28,5	6000	1,0	(7-13,8)	X		-10	70
276DS5LP11000C	5	3,82	33,0	7000	1,0	(4,5-5,5)	X		-10	70
276DS1LP11000C	12	3,82	33,0	7000	1,2	(7-13,8)	X		-10	70

Additional versions:

Higher speed (276DX): consult factory
Sleeve bearings: consult factory

Accessories:

Refer to Accessories leaflet



Approvals

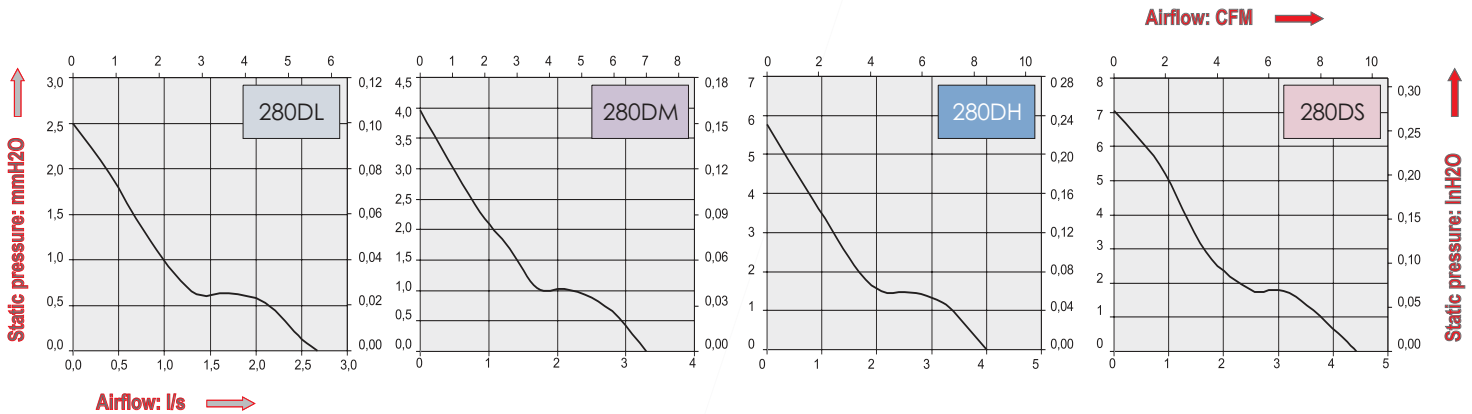


Life expectancy

L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor
 Electrical protection: impedance protected
 Housing material: plastic UL 94 VO
 Impeller material: plastic UL 94 VO
 Weight: 33 g
 Bearing system: ball bearings

Available with:
 - Speed sensor
 - Alarm
 - IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
280DL5LP11000	5	2,6	25	5000	0,70	(4,5-5,5)	X		-10	70
280DL1LP11000	12	2,6	25	5000	0,72	(7-13,8)	X		-10	70
280DL2LP11000	24	2,6	25	5000	1,20	(14-27,6)	X		-10	70
280DM5LP11000	5	3,3	30	6300	1,10	(4,5-5,5)	X		-10	70
280DM1LP11000	12	3,3	30	6300	1,08	(7-13,8)	X		-10	70
280DM2LP11000	24	3,3	30	6300	1,44	(14-27,6)	X		-10	70
280DH5LP11000	5	4,0	33	7600	2,00	(4,5-5,5)	X		-10	70
280DH1LP11000	12	4,0	33	7600	1,44	(7-13,8)	X		-10	70
280DH2LP11000	24	4,0	33	7600	1,68	(14-27,6)	X		-10	70
280DS1LP11000	12	4,4	36	8400	1,92	(7-13,8)	X		-10	70
280DS2LP11000	24	4,4	36	8400	2,16	(14-27,6)	X		-10	70

Additional versions:
 Sleeve bearings: consult factory
 Series 380D (refer to page 6)

Accessories:
 Refer to Accessories leaflet

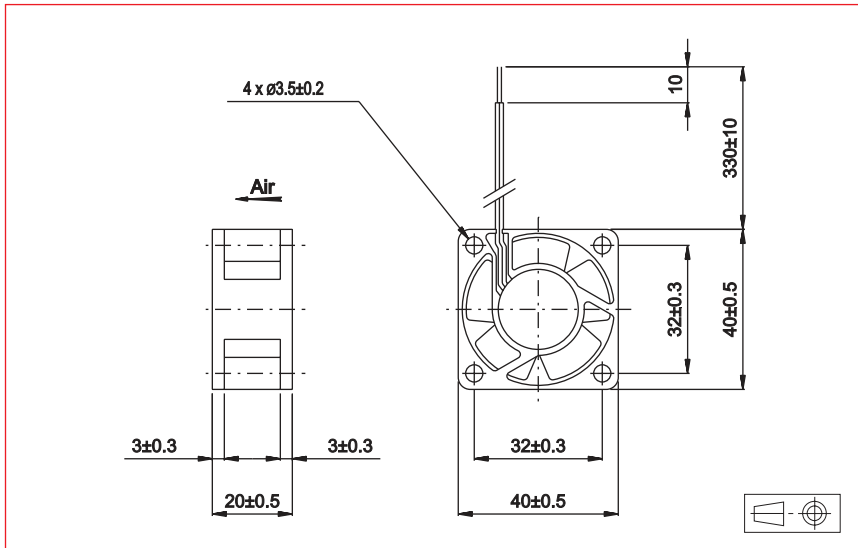


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40 x 40 x 20 mm

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Life expectancy

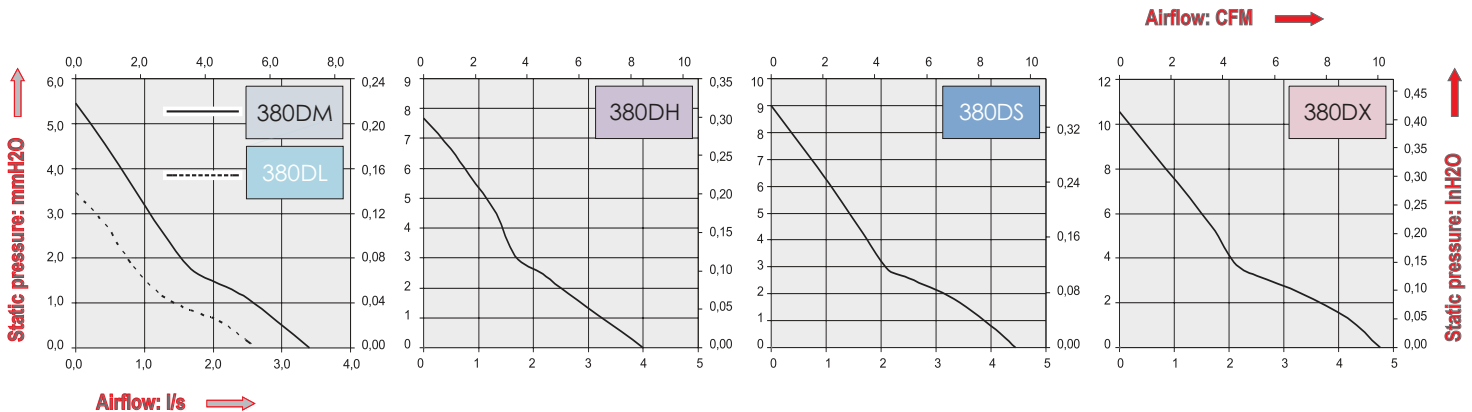
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 28 g (33 g on some models)
Bearing system: ball bearings

Available with:

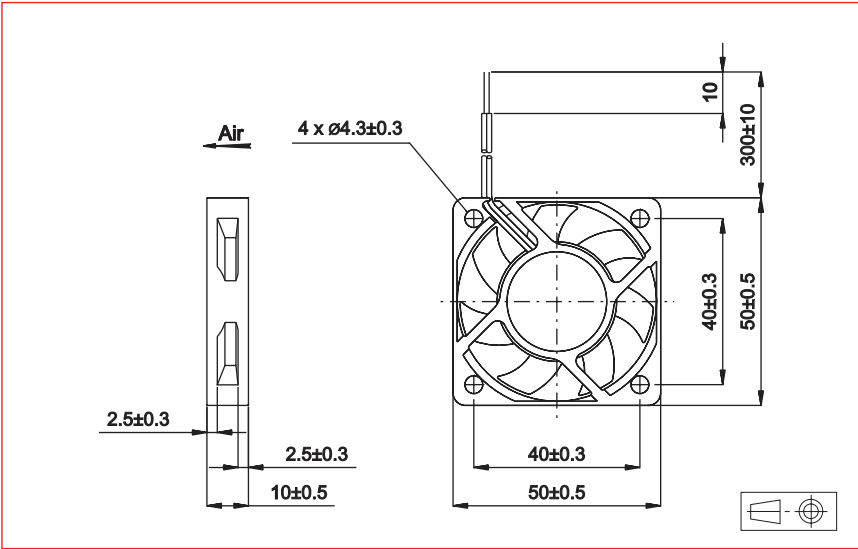
- Speed sensor
- Open collector alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
380DL5LP11000	5	2,6	22	5000	0,5	(4,5-5,5)	X		-10	70
380DL1LP11000	12	2,6	22	5000	0,6	(7-13,8)	X		-10	70
380DL2LP11000	24	2,6	22	5000	1,0	(14-27,6)	X		-10	70
380DM5LP11000	5	3,4	24	6300	0,8	(7-13,2)	X		-10	70
380DM1LP11000	12	3,4	24	6300	0,7	(7-13,8)	X		-10	70
380DM2LP11000	24	3,4	24	6300	1,2	(14-27,6)	X		-10	70
380DH5LP11000	5	4,0	28,5	7600	1,3	(4,5-5,5)	X		-10	70
380DH1LP11000	12	4,0	28,5	7600	1,0	(7-13,8)	X		-10	70
380DH2LP11000	24	4,0	28,5	7600	1,4	(14-27,6)	X		-10	70
380DS5LP11000	5	4,5	30,5	8200	1,5	(4,5-5,5)	X		-10	70
380DS1LP11000	12	4,5	30,5	8200	1,2	(7-13,8)	X		-10	70
380DS2LP11000	24	4,5	30,5	8200	1,7	(14-27,6)	X		-10	70
380DX5LP11000	5	4,8	32,5	9000	1,6	(4,5-5,5)	X		-10	70
380DX1LP11000	12	4,8	32,5	9000	1,4	(7-13,8)	X		-10	70
380DX2LP11000	24	4,8	32,5	9000	2,2	(14-27,6)	X		-10	70

Accessories:
Refer to Accessories leaflet





Approvals



Life expectancy

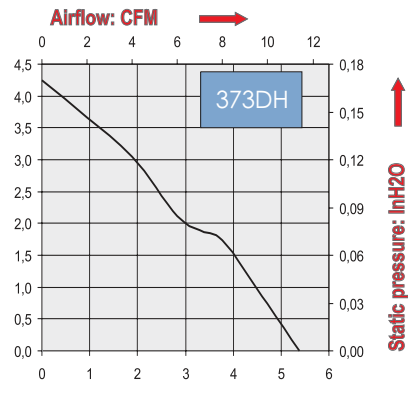
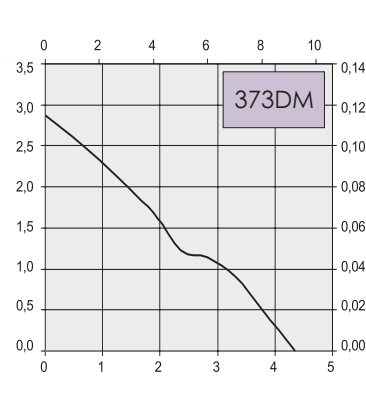
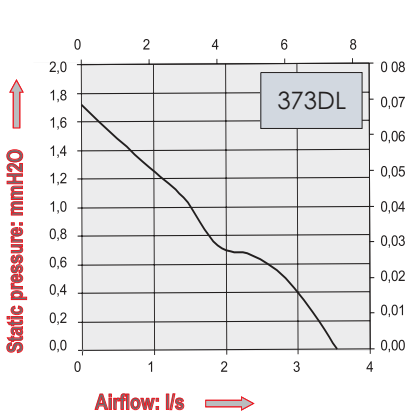
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 25 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Open collector alarm
- IP54 / IP55



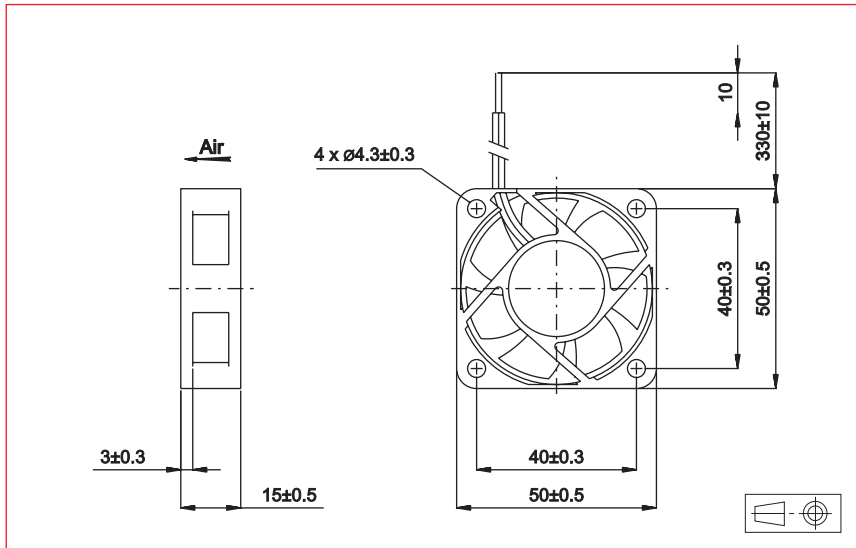
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
373DL1LP11000	12	3,5	18	3500	0,6	(9-13,8)	X		-10	70
373DM1LP11000	12	4,4	24	4500	1,0	(9-13,8)	X		-10	70
373DH1LP11000	12	5,4	30	5500	1,2	(9-13,8)	X		-10	70

Accessories:
Refer to Accessories leaflet

50 x 50 x 15 mm

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Life expectancy

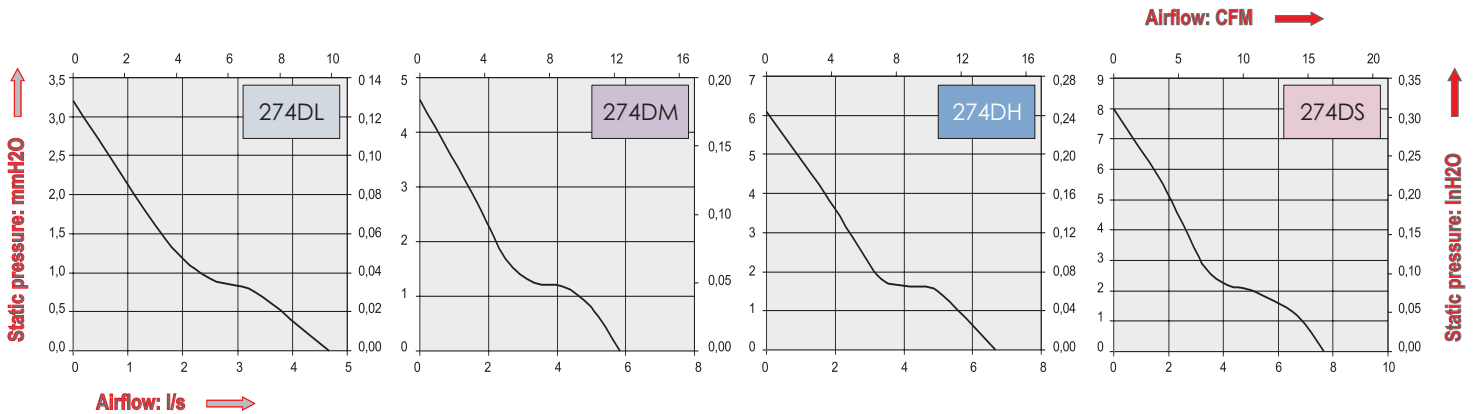
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 32 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- IP54 / IP55



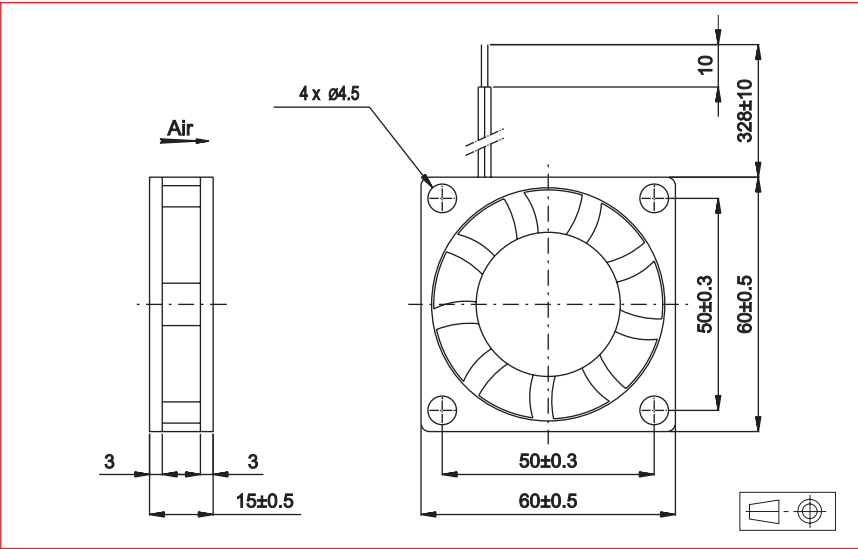
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
274DL5LP11000	5	4,7	24	4000	0,8	(4,5-5,5)	X		-10	70
274DL1LP11000	12	4,7	24	4000	0,7	(7-13,8)	X		-10	70
274DL2LP11000	24	4,7	24	4000	1,7	(14-27,6)	X		-10	70
274DM5LP11000	5	5,8	28	4800	1,1	(4,5-5,5)	X		-10	70
274DM1LP11000	12	5,8	28	4800	1,0	(7-13,8)	X		-10	70
274DM2LP11000	24	5,8	28	4800	1,7	(14-27,6)	X		-10	70
274DH5LP11000	5	6,7	32	5600	1,6	(4,5-5,5)	X		-10	70
274DH1LP11000	12	6,7	32	5600	1,2	(7-13,2)	X		-10	70
274DH2LP11000	24	6,7	32	5600	2,2	(14-27,6)	X		-10	70
274DS1LP11000	12	7,7	36	6400	1,6	(7-13,8)	X		-10	70
274DS2LP11000	24	7,7	36	6400	2,6	(14-27,6)	X		-10	70

Additional versions:

Mixed bearings (1 ball + 1 sleeve): consult factory

Accessories:

Refer to Accessories leaflet



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Life expectancy

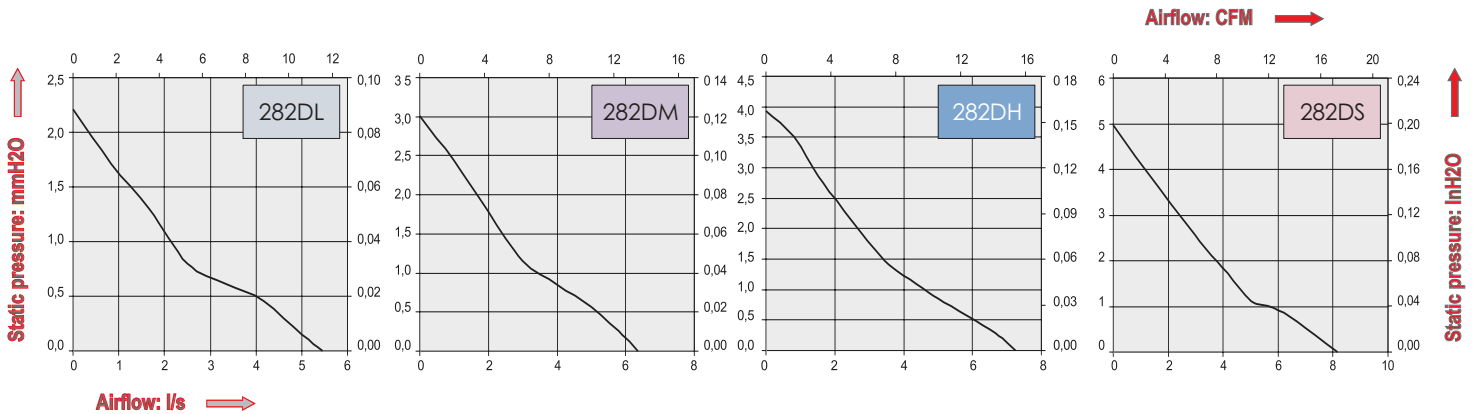
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 44g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
282DL1LP11000	12	5,5	24	3000	0,8	(7-13,8)	X		-10	70
282DL2LP11000	24	5,5	24	3000	1,0	(14-27,6)	X		-10	70
282DM1LP11000	12	6,4	29	3500	1,0	(7-13,8)	X		-10	70
282DM2LP11000	24	6,4	29	3500	1,2	(14-27,6)	X		-10	70
282DH1LP11000	12	7,3	32	4000	1,2	(7-13,8)	X		-10	70
282DH2LP11000	24	7,3	32	4000	1,9	(14-27,6)	X		-10	70
282DS1LP11000	12	8,2	35	4500	1,4	(7-13,8)	X		-10	70
282DS2LP11000	24	8,2	35	4500	2,4	(14-27,6)	X		-10	70

Additional versions:

5V (ball or mixed bearing, available with speed sensor)

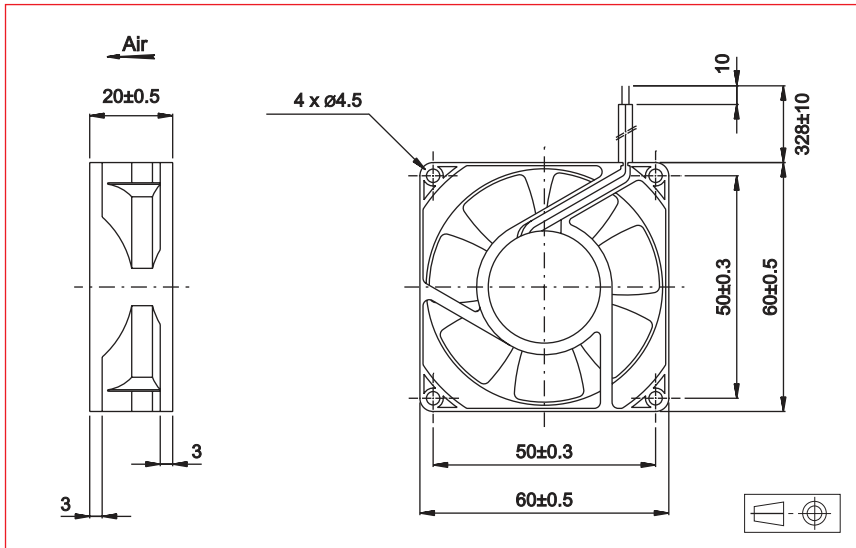
Accessories:

Refer to Accessories leaflet

60 x 60 x 20 mm

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DC Axial Fans



Approvals



Life expectancy

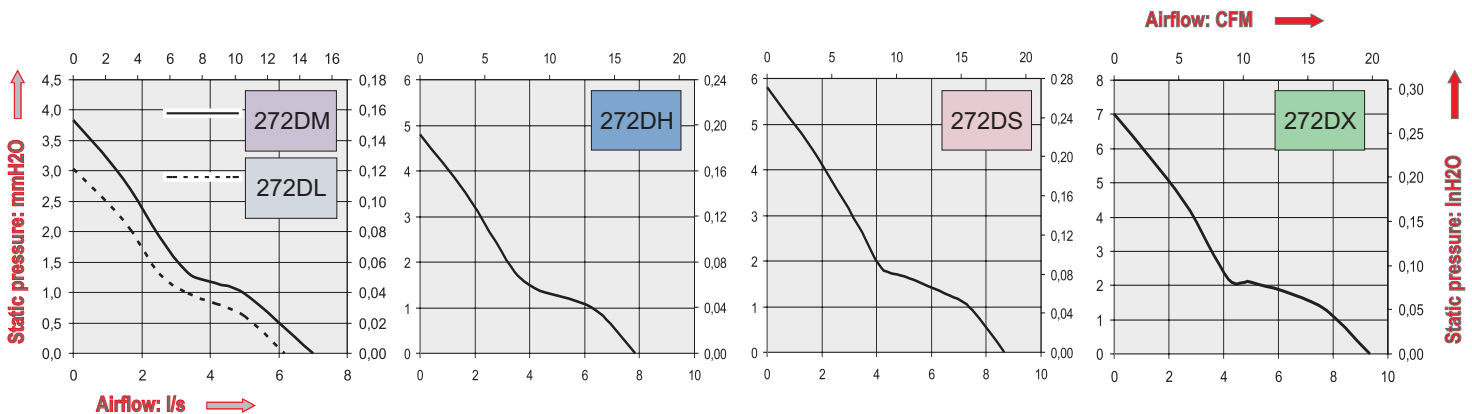
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 62 g
Bearing system: ball bearings

Available with:

- Variable speed
- Speed sensor
- Alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
272DL5LP11000	5	6,2	24	3200	0,70	(4,5-5,5)	X		-10	70
272DL1LP11000	12	6,2	24	3200	0,84	(7-13,8)	X		-10	70
272DL2LP11000	24	6,2	24	3200	0,72	(14-27,6)	X		-10	70
272DM5LP11000	5	7,0	26	3600	0,95	(4,5-5,5)	X		-10	70
272DM1LP11000	12	7,0	26	3600	1,08	(7-13,8)	X		-10	70
272DM2LP11000	24	7,0	26	3600	0,96	(14-27,6)	X		-10	70
272DH5LP11000	5	7,8	28	4000	1,20	(4,5-5,5)	X		-10	70
272DH1LP11000	12	7,8	28	4000	1,32	(7-13,8)	X		-10	70
272DH2LP11000	24	7,8	28	4000	1,20	(14-27,6)	X		-10	70
272DS5LP11000	5	8,7	31	4400	1,65	(4,5-5,5)	X		-10	70
272DS1LP11000	12	8,7	31	4400	1,80	(7-13,8)	X		-10	70
272DS5LP11000	24	8,7	31	4400	1,68	(14-27,6)	X		-10	70
272DX1LP11000	12	9,3	33	4800	2,16	(7-13,8)	X		-10	70
272DX2LP11000	24	9,3	33	4800	2,16	(14-27,6)	X		-10	70

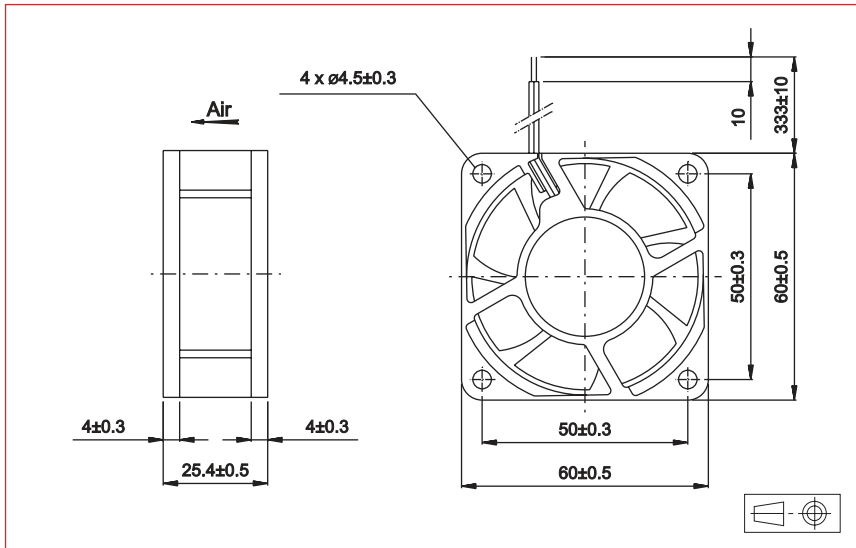
Accessories:

Refer to Accessories leaflet

60 x 60 x 25 mm

ETRI®

DC Axial Fans



Approvals

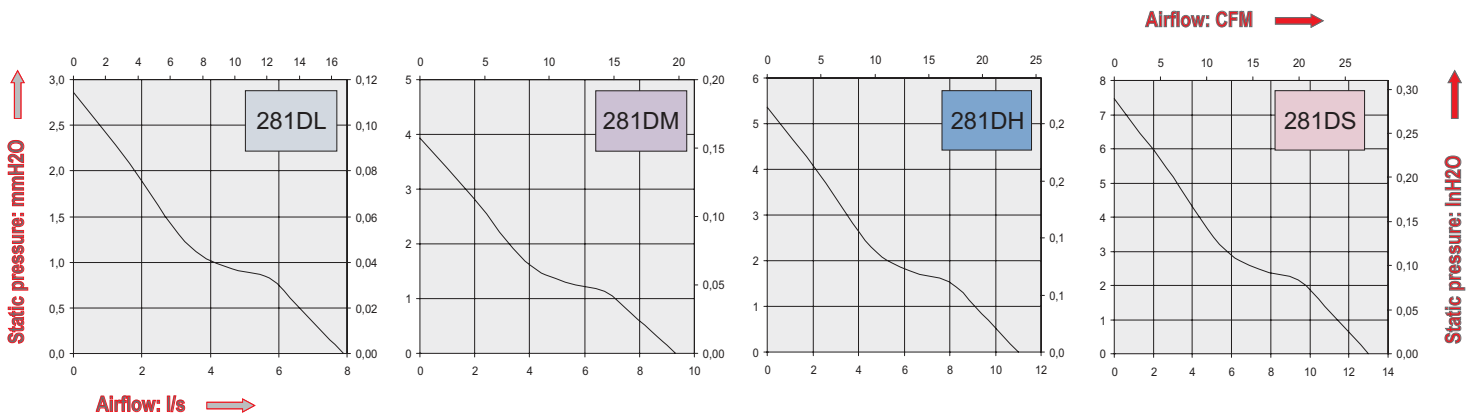


Life expectancy

L-10 LIFE AT 40°C :
70 000 hours

Brushless DC Motor
 Electrical protection : impedance protected,
 Housing material : plastic UL 94 VO
 Impeller material : plastic UL 94 VO
 Weight : 80g
 Bearing system: ball bearings

Available with:
 - Speed sensor
 - Alarm
 - IP54 / IP55

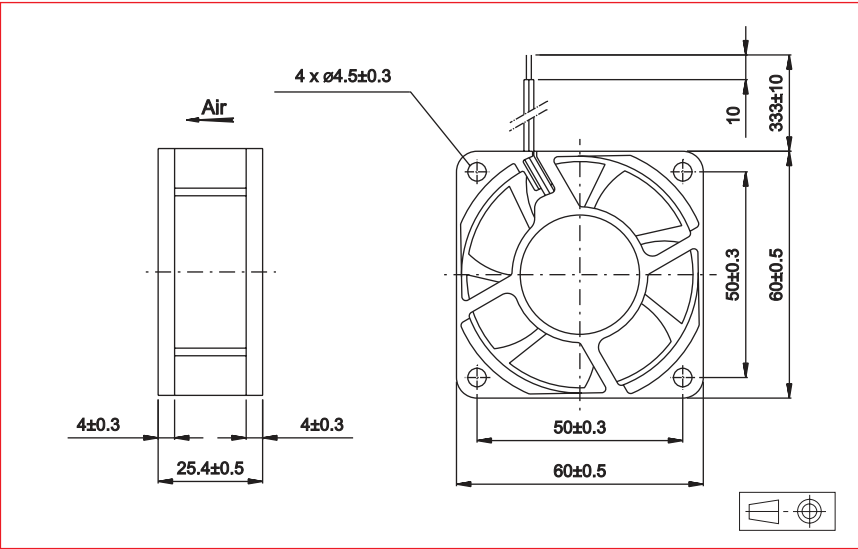


Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
281DL1LP11000B	12	7,9	26,5	3100	0,96	(4-13,8)	X		-10	70
281DL2LP11000B	24	7,9	26,5	3100	1,44	(14-27,6)	X		-10	70
281DM1LP11000B	12	9,3	31	3600	1,56	(4-13,8)	X		-10	70
281DM2LP11000B	24	9,3	31	3600	1,68	(14-27,6)	X		-10	70
281DH1LP11000B	12	11	34	4250	1,68	(4-13,8)	X		-10	70
281DH2LP11000B	24	11	34	4250	2,16	(14-27,6)	X		-10	70
281DS1LP11000B	12	13	40	5000	2,04	(4-13,8)	X		-10	70
281DS2LP11000B	24	13	40	5000	2,64	(14-27,6)	X		-10	70
281DS4LP11000B	48	13	40	5000	3,84	(28-56)	X		-10	70

Additional versions:
Higher speeds (refer to page 13)

Accessories:
Refer to Accessories leaflet





Approvals

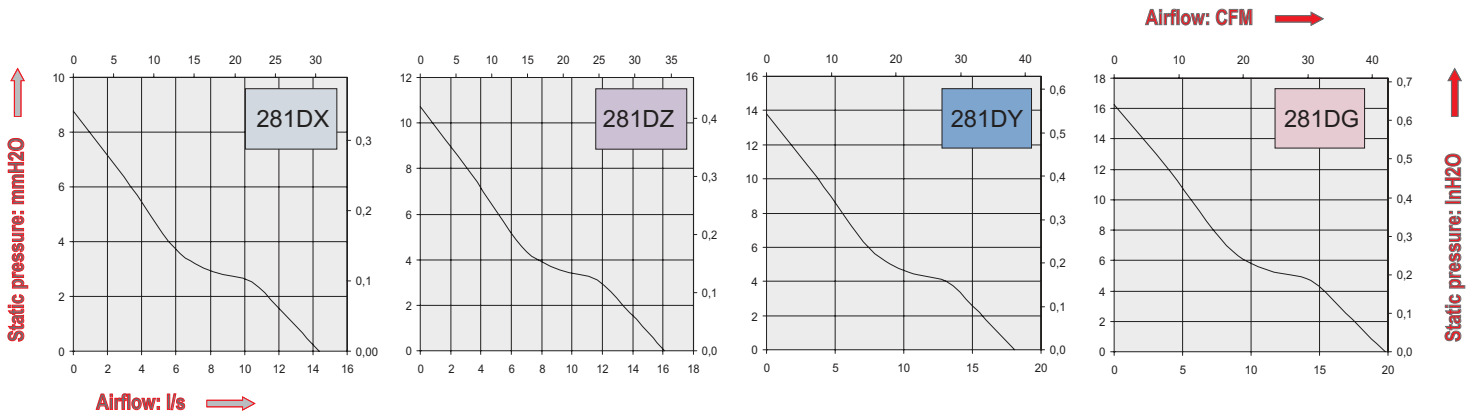


Life expectancy

L-10 LIFE AT 40°C :
70 000 hours

Brushless DC Motor
 Electrical protection: impedance protected,
 Housing material: plastic UL 94 VO
 Impeller material: plastic UL 94 VO
 Weight: 80 g
 Bearing system: ball bearings

Available with:
 - Speed sensor
 - Alarm
 - IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
281DX1LP11000B	12	14,4	42,5	5500	2,76	(4-13,8)	X		-10	70
281DX2LP11000B	24	14,4	42,5	5500	3,36	(14-27,6)	X		-10	70
281DX4LP11000B	48	14,4	42,5	5500	4,32	(28-56)	X		-10	70
281DZ1LP11000B	12	16,1	44,5	6000	3,24	(4-13,8)	X		-10	70
281DZ2LP11000B	24	16,1	44,5	6000	4,08	(14-27,6)	X		-10	70
281DZ4LP11000B	48	16,1	44,5	6000	5,28	(28-56)	X		-10	70
281DY1LP11000B	12	18,1	46,5	6800	4,56	(4-13,8)	X		-10	70
281DY2LP11000B	24	18,1	46,5	6800	5,76	(14-27,6)	X		-10	70
281DY4LP11000B	48	18,1	46,5	6800	6,72	(28-56)	X		-10	70
281DG1LP11000B	12	19,8	50,5	7500	6,60	(7-13,2)	X		-10	70

Additional versions:
Lower speeds (refer to page 12)

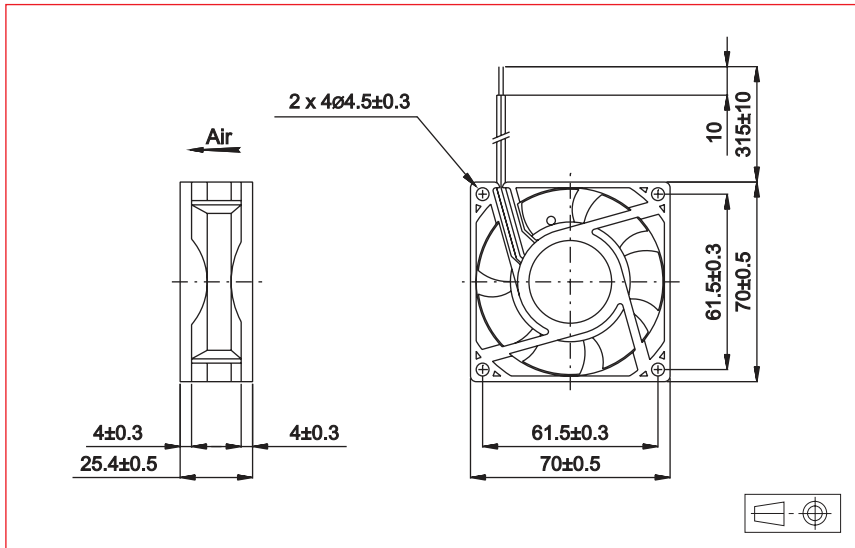
Accessories:
Refer to Accessories leaflet



70 x 70 x 25 mm

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DC Axial Fans



Approvals



Life expectancy

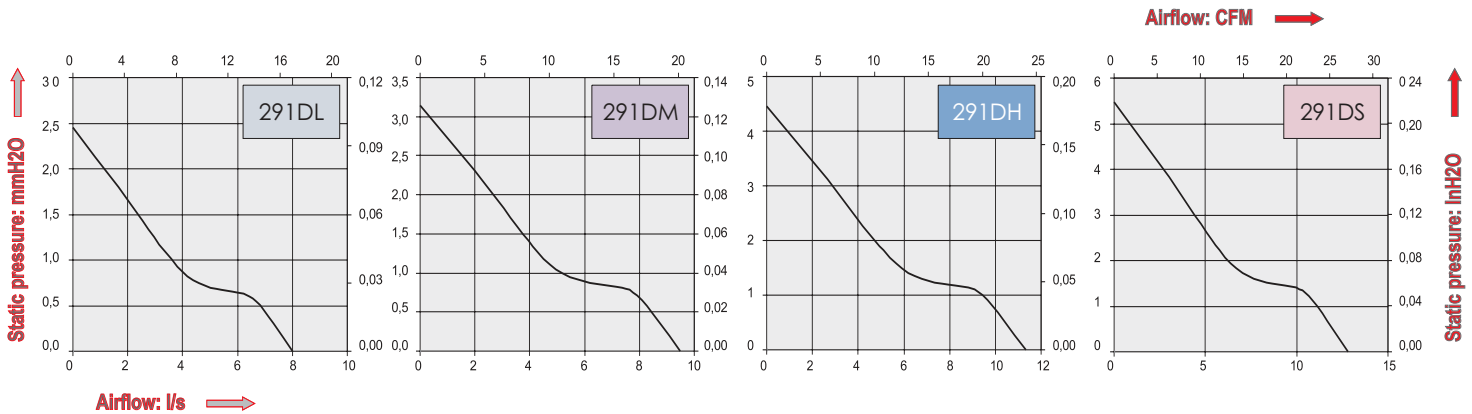
L-10 LIFE AT 40°C:
70 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 77 g
Bearing system: ball bearings

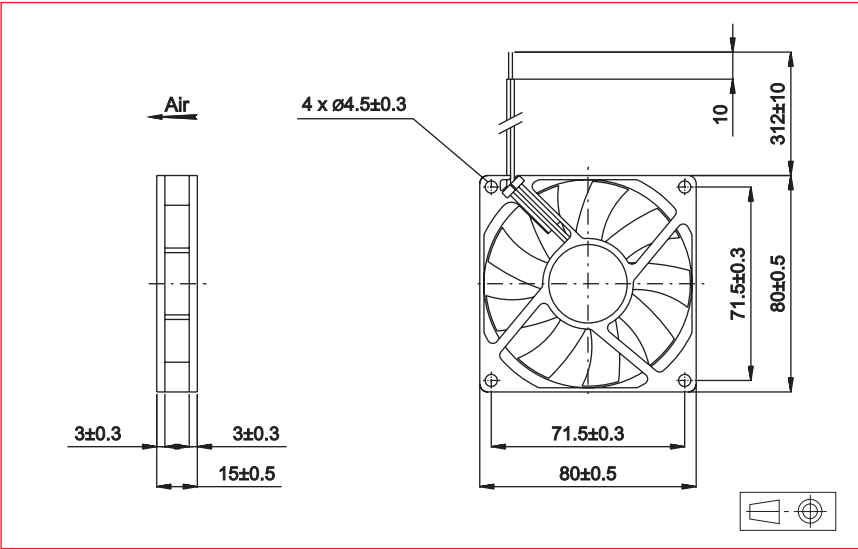
Available with:

- Speed sensor
- Alarm (except for 5 V)
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
291DL5LP11000	5	8,0	24,5	2600	0,8	(4,5-5,5)	X		0	70
291DL1LP11000	12	8,0	24,5	2600	1,0	(7-13,8)	X		0	70
291DL2LP11000	24	8,0	24,5	2600	1,0	(14-27,6)	X		0	70
291DL4LP11000	48	8,0	24,5	2600	1,4	(28-56)	X		0	70
291DM5LP11000	5	9,5	28	3000	1,1	(4,5-5,5)	X		0	70
291DM1LP11000	12	9,5	28	3000	1,2	(7-13,8)	X		0	70
291DM2LP11000	24	9,5	28	3000	1,2	(14-27,6)	X		0	70
291DM4LP11000	48	8,5	28	3000	1,9	(28-56)	X		0	70
291DH5LP11000	5	11,3	32	3600	2,0	(4,5-5,5)	X		0	70
291DH1LP11000	12	11,3	32	3600	1,6	(7-13,8)	X		0	70
291DH2LP11000	24	11,3	32	3600	1,9	(14-27,6)	X		0	70
291DH4LP11000	48	11,3	32	3600	1,9	(28-56)	X		0	70
291DS1LP11000	12	12,8	35	4000	2,0	(7-13,8)	X		0	70
291DS2LP11000	24	12,8	35	4000	2,4	(14-27,6)	X		0	70
291DS4LP11000	48	12,8	35	4000	2,4	(28-56)	X		0	70

Accessories:
Refer to Accessories leaflet



Approvals



Life expectancy

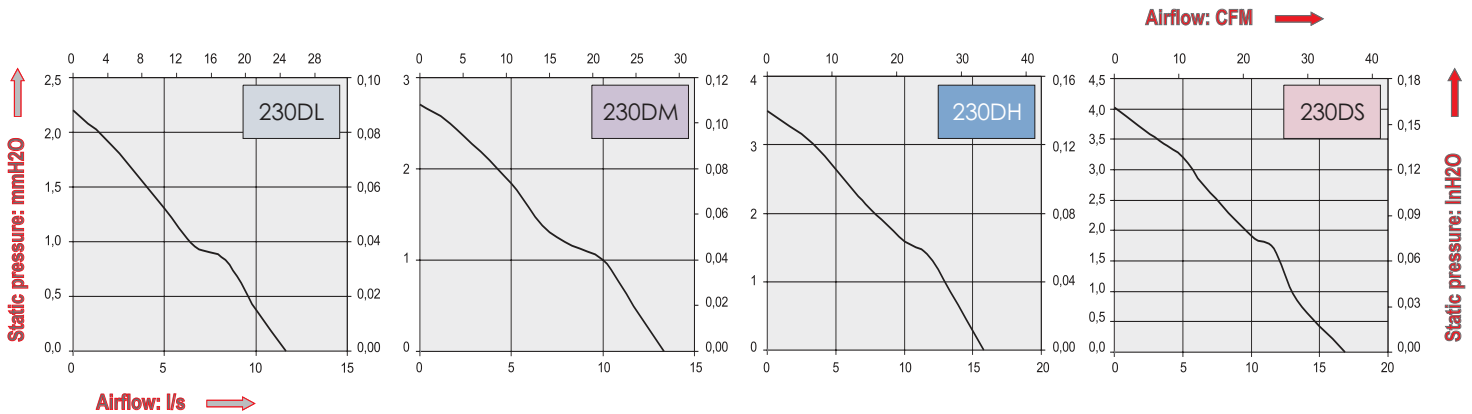
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 58 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Open collector alarm
- IP54 / IP55



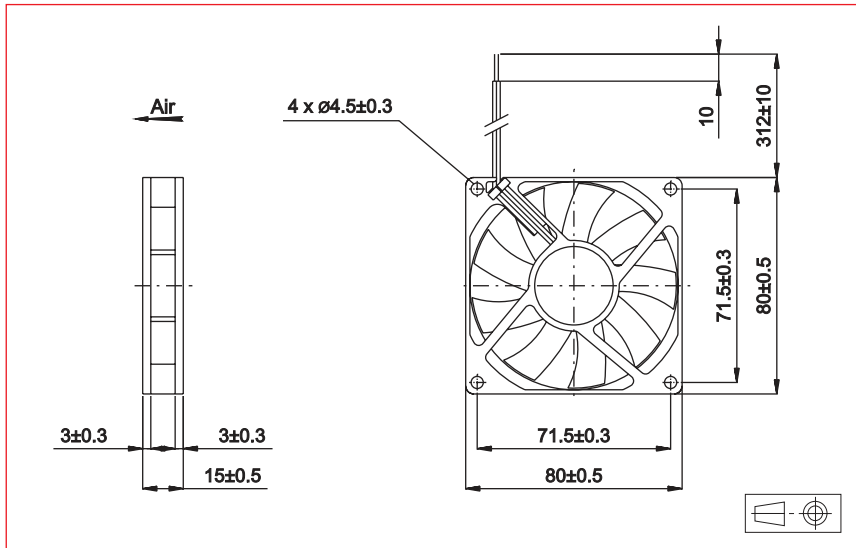
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
230DL1LP11000	12	11,7	27,5	2400	1,1	(7-13,8)	X		-10	70
230DL2LP11000	24	11,7	27,5	2400	1,2	(14-27,6)	X		-10	70
230DM1LP11000	12	13,3	30,5	2700	1,3	(7-13,8)	X		-10	70
230DM2LP11000	24	13,3	30,5	2700	1,4	(14-27,6)	X		-10	70
230DH1LP11000	12	15,8	34	3100	1,7	(7-13,8)	X		-10	70
230DH2LP11000	24	15,8	34	3100	1,9	(14-27,6)	X		-10	70
230DS1LP11000	12	16,8	37	3400	1,9	(7-13,8)	X		-10	70
230DS2LP11000	24	16,8	37	3400	2,4	(14-27,6)	X		-10	70

Additional versions: Higher speeds (see page 16) **Accessories:** Refer to Accessories leaflet

80 x 80 x 15 mm

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DC Axial Fans



Approvals



Life expectancy

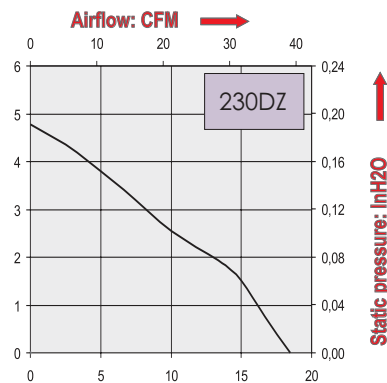
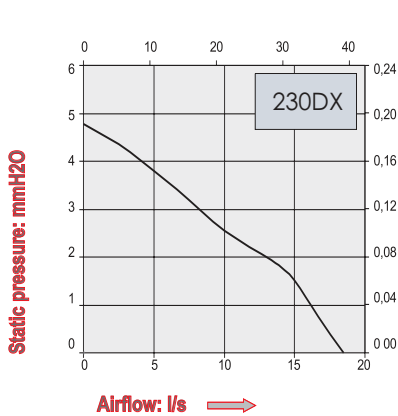
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 58 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Open collector alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
230DX1LP11000	12	18,5	39,5	3700	2,3	(7-13,8)	X		-10	70
230DX2LP11000	24	18,5	39,5	3700	2,9	(14-27,6)	X		-10	70
230DZ1LP11000	12	20,2	42,5	4000	3,2	(7-13,8)	X		-10	70
230DZ2LP11000	24	20,2	42,5	4000	4,1	(14-27,6)	X		-10	70

Additional versions:
Lower speeds (see page page 15)

Accessories:
Refer to Accessories leaflet

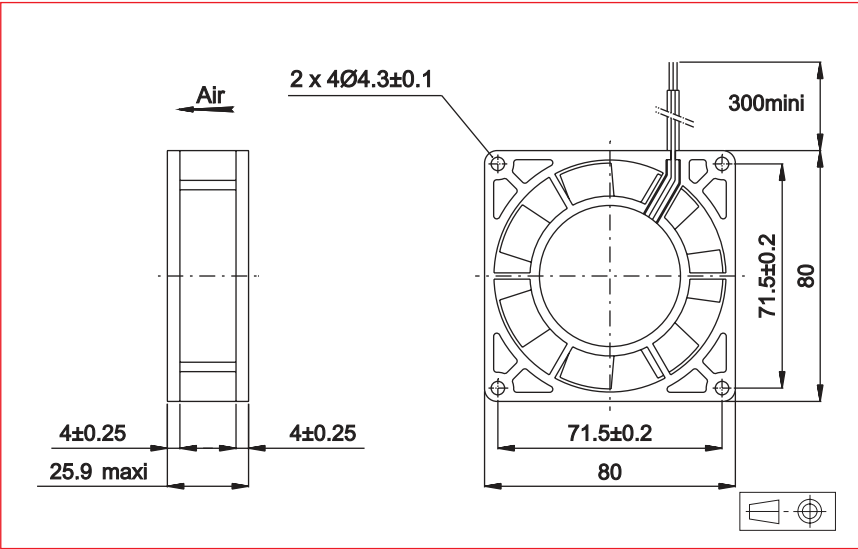


Approvals



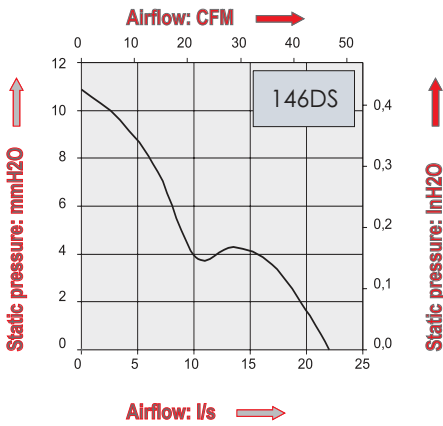
Life expectancy

L-10 LIFE AT 40°C:
80 000 hours



Brushless DC Motor
 Electrical protection: integrated circuit
 Housing material: plastic UL 94 VO
 Impeller material: plastic UL 94 VO
 Weight: 144 g
 Bearing system: ball bearings

Available with:
 - Speed sensor



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
146DS1LP11000	12	22,0	44	5585	7	(6-13,8)	X		-15	55
146DS2LP11000	24	22,0	44	5585	7	(15-28)	X		-15	55
146DS4LP11000	48	22,0	44	5585	7	(28-56)	X		-15	55

Additional versions:
IP54: consult factory

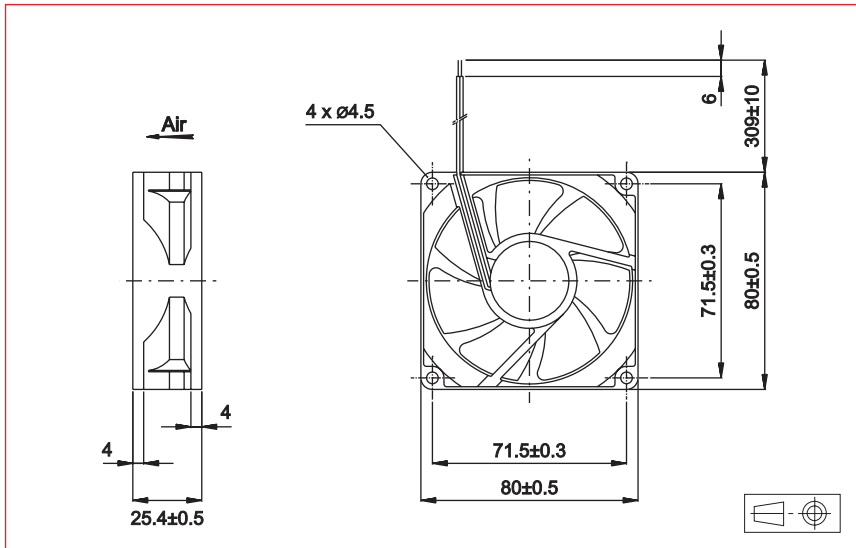
Accessories:
Refer to Accessories leaflet



80 x 80 x 25 mm

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DC Axial Fans



Approvals

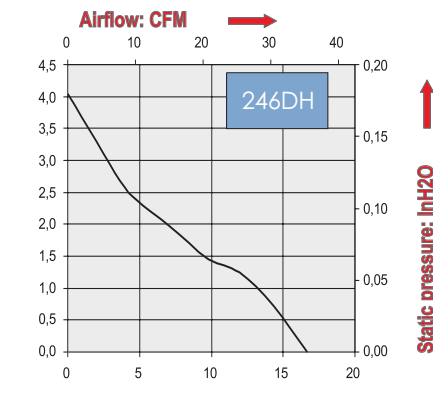
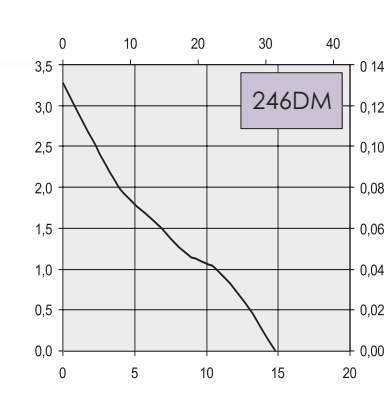
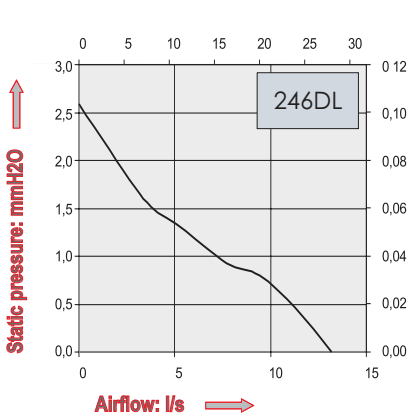


Life expectancy

L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor
 Electrical protection: impedance protected
 Housing material: plastic UL 94 VO
 Impeller material: plastic UL 94 VO
 Weight: 88 g
 Bearing system: ball bearings

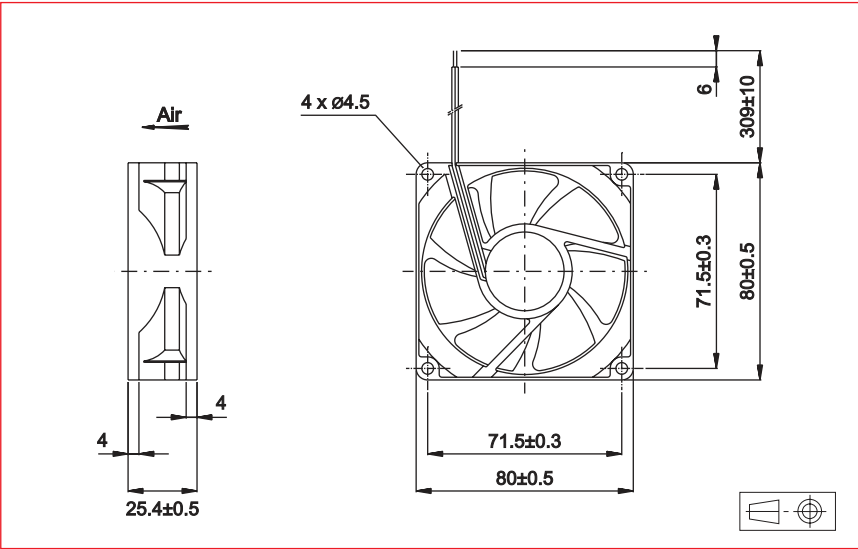
Available with:
 - Variable speed
 - Speed sensor
 - Alarm
 - IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
246DL5LP11000	5	13,2	25	2400	1,2	(4,5-5,5)	X		-10	70
246DL1LP11000	12	13,2	25	2400	1,1	(7-13,8)	X		-10	70
246DL2LP11000	24	13,2	25	2400	1,1	(14-27,6)	X		-10	70
246DL4LP11000	48	13,2	25	2400	2,4	(38-56)	X		-10	70
246DM5LP11000	5	14,8	28	2700	1,7	(4,5-5,5)	X		-10	70
246DM1LP11000	12	14,8	28	2700	1,4	(7-13,8)	X		-10	70
246DM2LP11000	24	14,8	28	2700	1,4	(14-27,6)	X		-10	70
246DM4LP11000	48	14,8	28	2700	2,9	(38-56)	X		-10	70
246DH5LP11000	5	16,7	31	3000	2,2	(4,5-5,5)	X		-10	70
246DH1LP11000	12	16,7	31	3000	1,9	(7-13,8)	X		-10	70
246DH2LP11000	24	16,7	31	3000	1,7	(14-27,6)	X		-10	70
246DH4LP11000	48	16,7	31	3000	3,4	(38-56)	X		-10	70

Accessories:
Refer to Accessories leaflet





Approvals

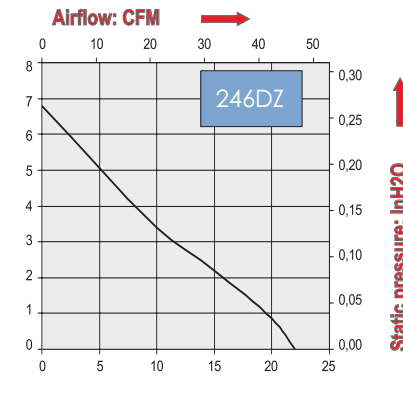
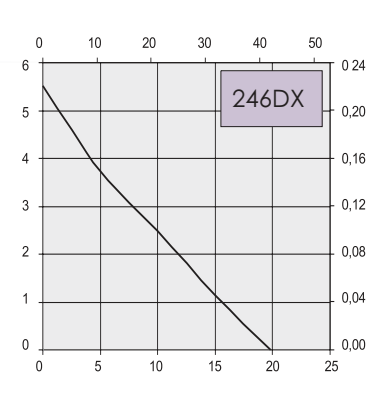
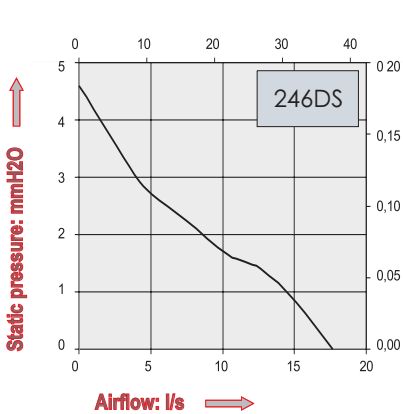


Life expectancy

L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor
 Electrical protection: impedance protected
 Housing material: plastic UL 94 VO
 Impeller material: plastic UL 94 VO
 Weight: 88 g
 Bearing system: ball bearings

Available with:
 - Variable speed
 - Speed sensor
 - Alarm
 - IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
246DS1LP11000	12	17,7	34	3250	2,4	(7-13,8)	X		-10	70
246DS2LP11000	24	17,7	34	3250	2,2	(14-27,6)	X		-10	70
246DX1LP11000	12	19,8	39	3600	3,1	(7-13,8)	X		-10	70
246DX2LP11000	24	19,8	39	3600	3,4	(14-27,6)	X		-10	70
246DZ1LP11000	12	22,0	40	4000	4,1	(7-13,8)	X		-10	70
246DZ2LP11000	24	22,0	40	4000	3,8	(14-27,6)	X		-10	70

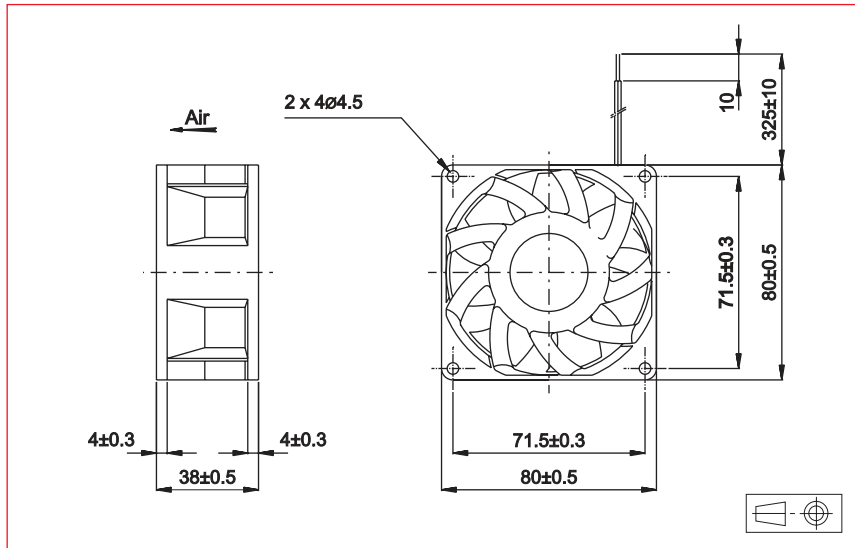
Accessories:
Refer to Accessories leaflet



80 x 80 x 38 mm

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DC Axial Fans



Approvals



Life expectancy

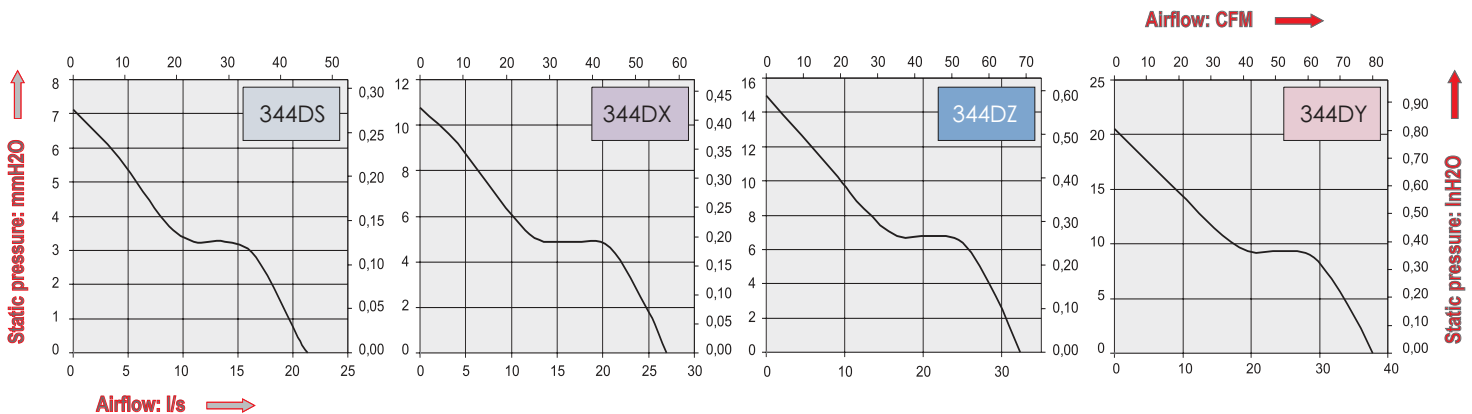
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 170 g
Bearing system: ball bearings

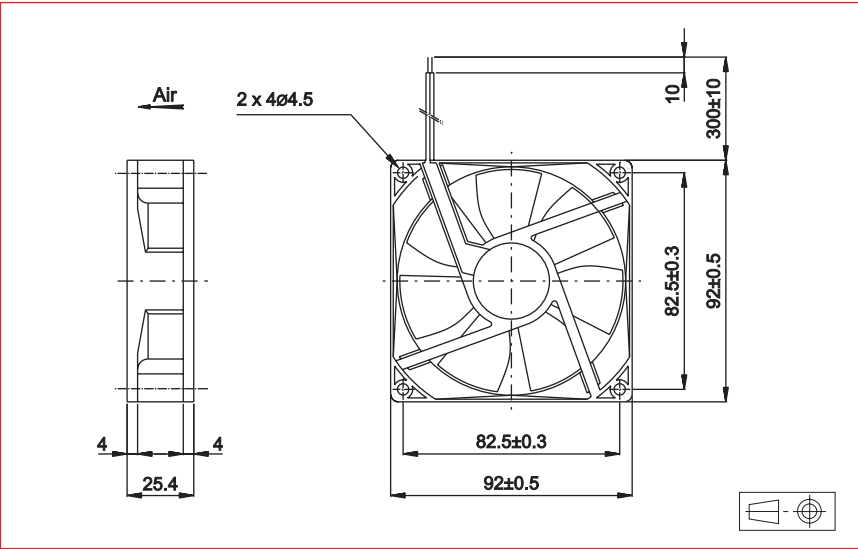
Available with:

- Speed sensor
- Open collector alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
344DS1LP11000	12	21,3	39	3400	2,4	(7-13,8)	X		-10	70
344DS2LP11000	24	21,3	39	3400	3,6	(14-27,6)	X		-10	70
344DS4LP11000	48	21,3	39	3400	3,8	(28-56)	X		-10	70
344DX1LP11000	12	27,0	44,5	4200	4,6	(7-13,8)	X		-10	70
344DX2LP11000	24	27,0	44,5	4200	5,8	(14-27,6)	X		-10	70
344DX4LP11000	48	27,0	44,5	4200	5,3	(28-56)	X		-10	70
344DZ1LP11000	12	32,3	48,5	4900	7,0	(7-13,8)	X		-10	70
344DZ2LP11000	24	32,3	48,5	4900	8,2	(41-27,6)	X		-10	70
344DZ4LP11000	48	32,3	48,5	4900	7,7	(28-56)	X		-10	70
344DY1LP11000	12	37,8	52,5	5700	10,8	(7-13,8)	X		-10	70
344DY2LP11000	24	37,8	52,5	5700	12,0	(14-27,6)	X		-10	70

Accessories:
Refer to Accessories leaflet



Approvals



Life expectancy

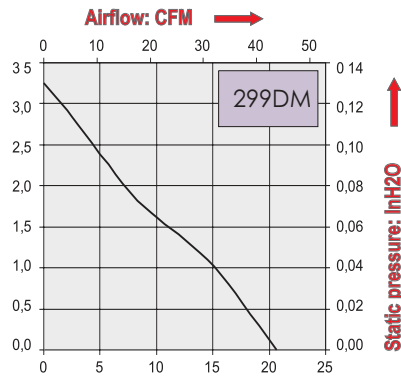
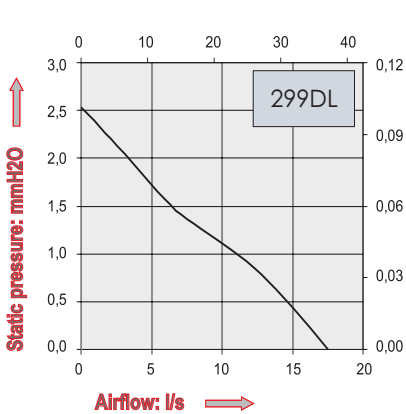
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 99 g
Bearing system: ball bearings

Available with:

- Variable speed
- Speed sensor
- Alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
299DL1LP11000	12	17,5	25	2100	0,8	(7-13,8)	X		-10	70
299DL2LP11000	24	17,5	25	2100	1,4	(14-27,6)	X		-10	70
299DL4LP11000	48	17,5	25	2100	2,4	(38-56)	X		-10	70
299DM1LP11000	12	20,7	30	2400	1,3	(7-13,8)	X		-10	70
299DM2LP11000	24	20,7	30	2400	1,9	(14-27,6)	X		-10	70
299DM4LP11000	48	20,7	30	2400	2,4	(38-56)	X		-10	70

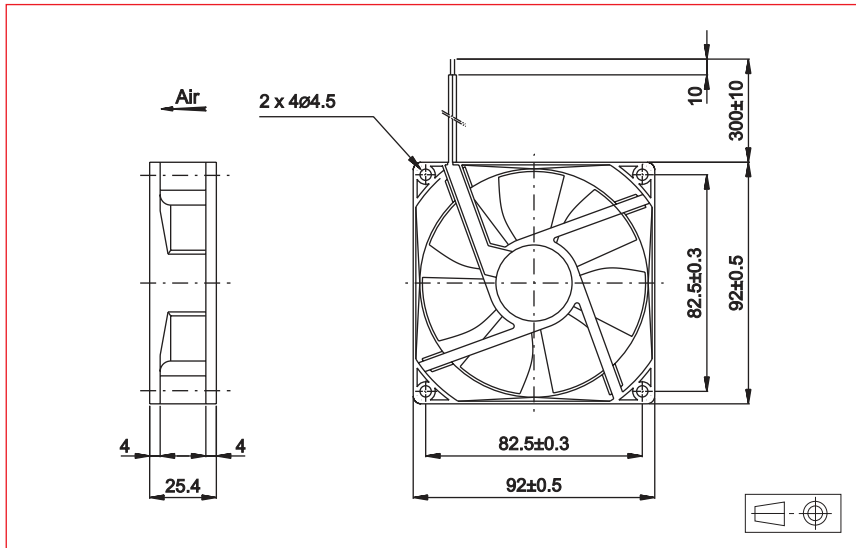
Additional versions:
Higher speeds (see page 22)

Accessories:
Refer to Accessories leaflet

92 x 92 x 25 mm

ETRI®

DC Axial Fans



Approvals



Life expectancy

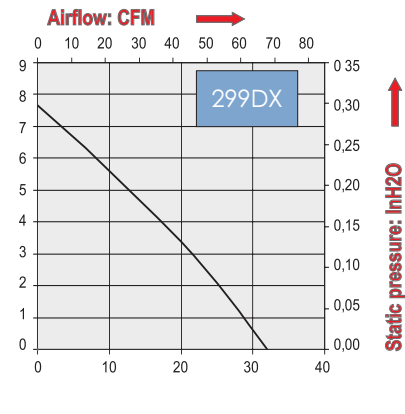
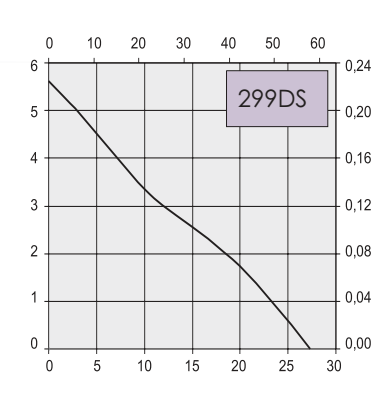
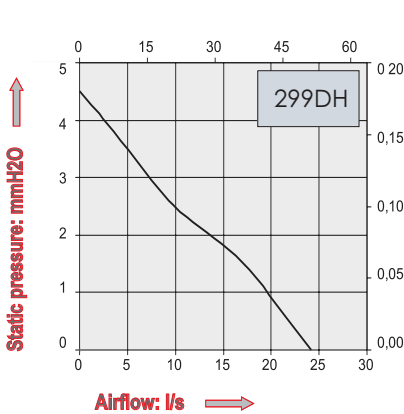
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing and impeller material: plastic UL 94 VO
Weight: 99 g
Bearing system: ball bearings

Available with:

- Variable speed
- Speed sensor
- Alarm
- IP54 / IP55



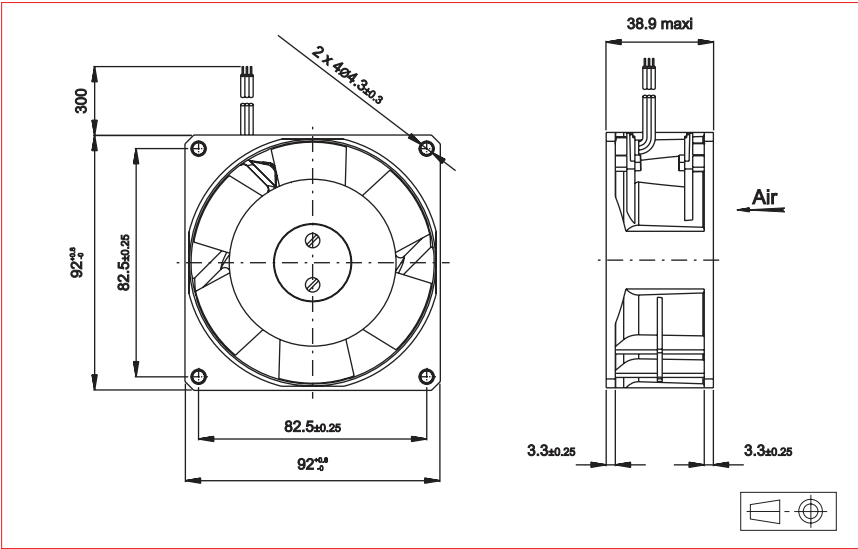
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
299DH1LP11000	12	24,2	34	2850	1,9	(7-13,8)	X		-10	70
299DH2LP11000	24	24,2	34	2850	2,4	(14-27,6)	X		-10	70
299DH4LP11000	48	24,2	34	2850	2,9	(38-56)	X		-10	70
299DS1LP11000	12	27,3	38	3200	3,0	(7-13,8)	X		-10	70
299DS2LP11000	24	27,3	38	3200	3,1	(14-27,6)	X		-10	70
299DS4LP11000	48	27,3	38	3200	3,8	(38-56)	X		-10	70
299DX1LP11000	12	32,0	45	3800	4,8	(7-13,8)	X		-10	70
299DX2LP11000	24	32,0	45	3800	5,3	(14-27,6)	X		-10	70

Additional versions:

Lower speeds (see page 21)

Accessories:

Refer to Accessories leaflet



Approvals

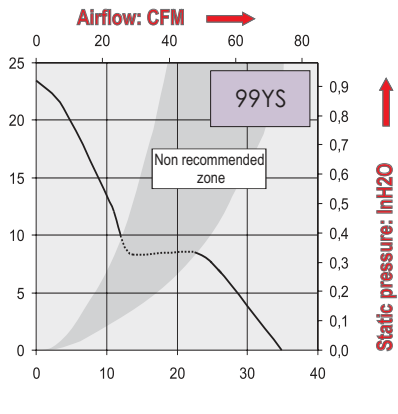
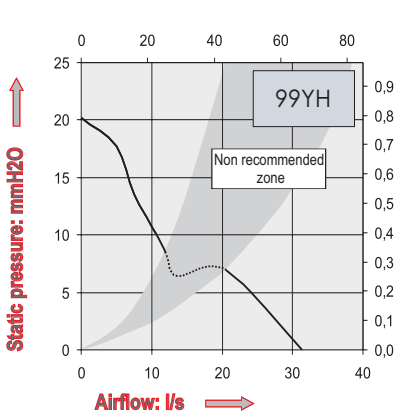


Life expectancy

L-10 LIFE AT 40°C:
25 000 hours

Brushless DC Motor
 Electrical protection: impedance protected
 Housing material: plastic UL 94 VO
 Impeller material: plastic UL 94 VO
 Weight: 370 g
 Bearing system: ball bearings

Available with:
 - Speed sensor
 - Alarm



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
99YH2LP11000	24	31,4	52	5500	7,8	(21,6-26,4)	X		-40	85
99YS2LP11000	24	35,3	54,6	6060	11,7	(21,6-26,4)	X		-40	85

Additional versions:
 Salt spray protected - shock and vibration protected - marine specifications
 IP54: consult factory

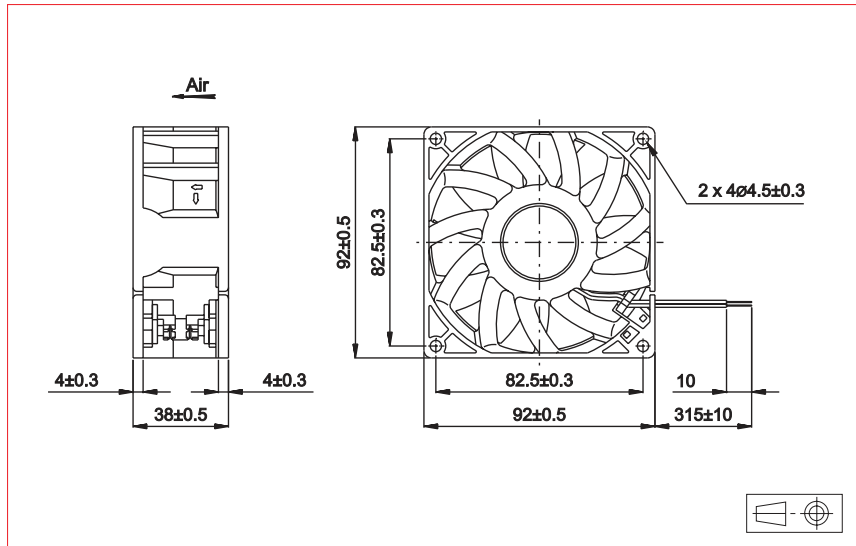
Accessories:
 Refer to Accessories leaflet



92 x 92 x 38 mm

ETRI®

DC Axial Fans



Approvals



Life expectancy

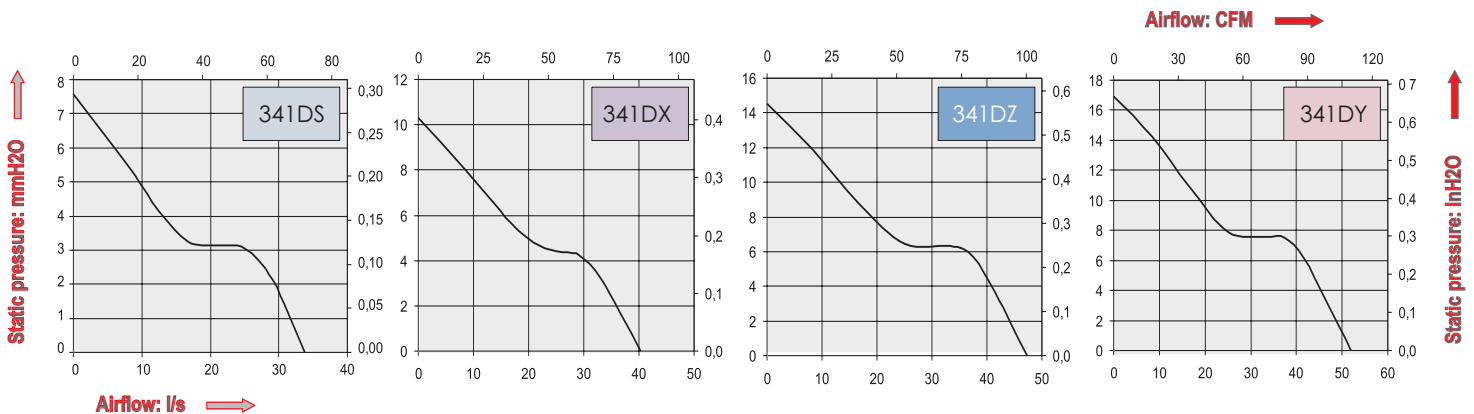
L-10 LIFE AT 40°C:
70 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 198 g
Bearing system: ball bearings

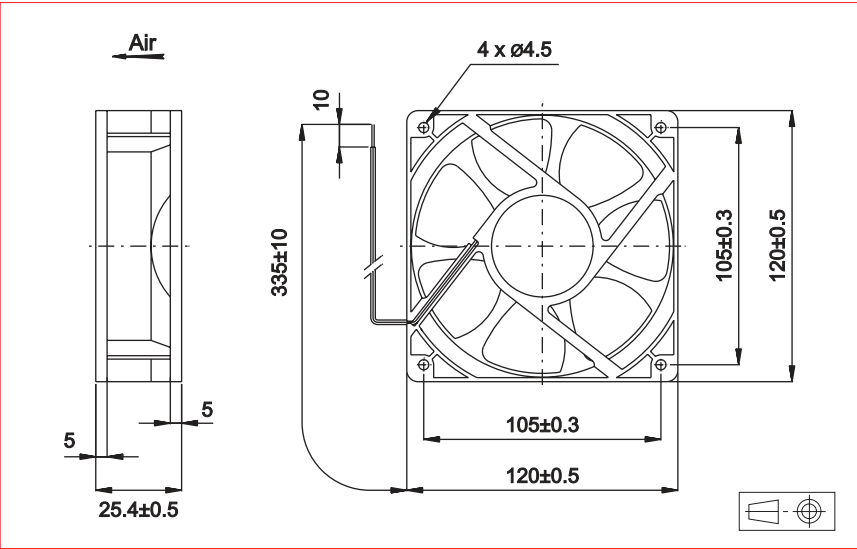
Available with:

- Speed sensor
- Alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
341DS1LP11000	12	33,8	42,5	3200	4,2	(7-13,8)	X		-10	70
341DS2LP11000	24	33,8	42,5	3200	4,3	(14-27,6)	X		-10	70
341DS4LP11000	48	33,8	42,5	3200	4,8	(28-56)	X		-10	70
341DX1LP11000	12	40,3	47,5	3800	6,0	(7-13,8)	X		-10	70
341DX2LP11000	24	40,3	47,5	3800	6,7	(14-27,6)	X		-10	70
341DX4LP11000	48	40,3	47,5	3800	6,7	(28-56)	X		-10	70
341DZ1LP11000	12	47,3	52,5	4400	9,0	(7-13,8)	X		-10	70
341DZ2LP11000	24	47,3	52,5	4400	9,6	(14-27,6)	X		-10	70
341DZ4LP11000	48	47,3	52,5	4400	9,6	(28-56)	X		-10	70
341DY1LP11000	12	52,0	55,0	4800	12,0	(7-13,8)	X		-10	70
341DY2LP11000	24	52,0	55,0	4800	12,0	(14-27,6)	X		-10	70

Accessories:
Refer to Accessories leaflet



Approvals



Life expectancy

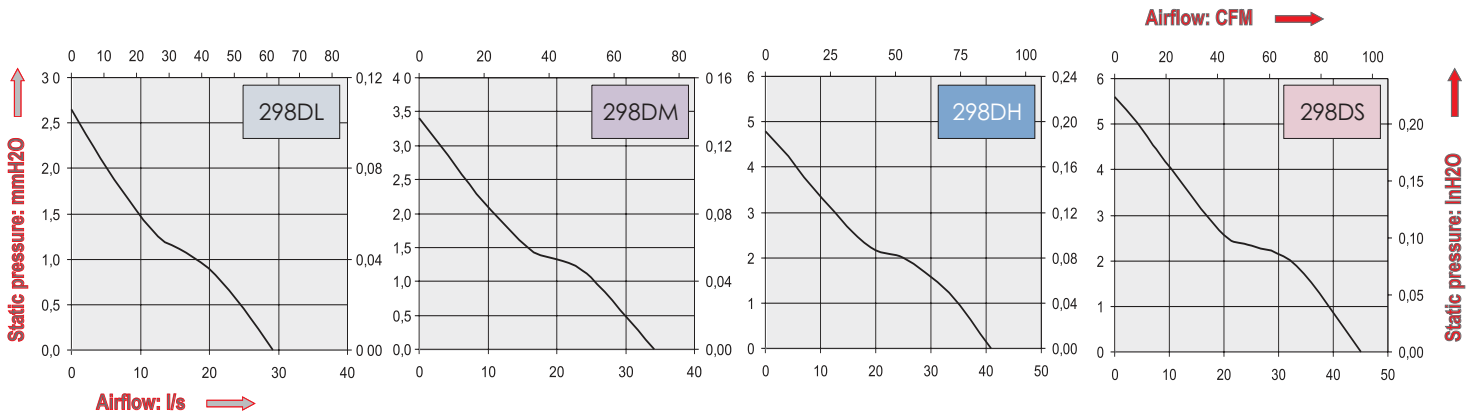
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 180 g
Bearing system: ball bearings

Available with:

- Variable speed
- Speed sensor
- Alarm
- IP54 / IP55



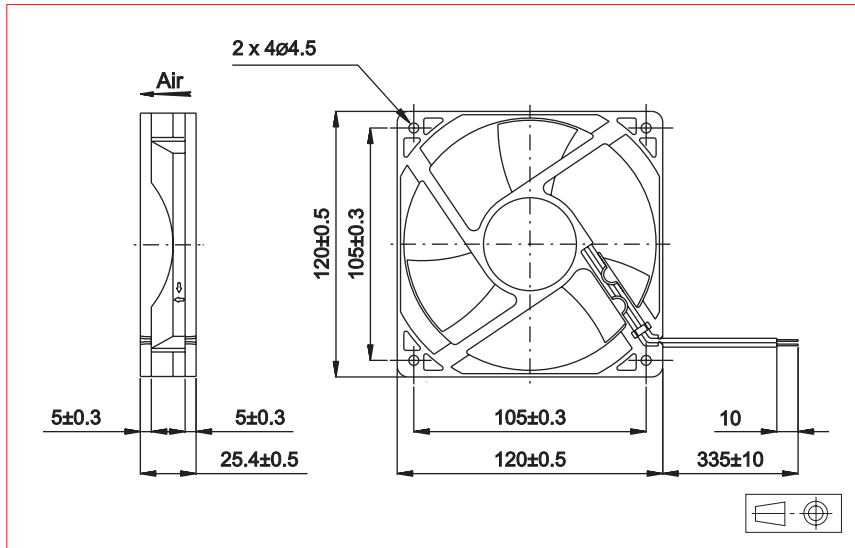
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
298DL1LP11000	12	29,2	30,2	1750	1,68	(7-13,8)	X		-10	70
298DL2LP11000	24	29,2	30,2	1750	2,40	(14-27,6)	X		-10	70
298DM1LP11000	12	34,2	34	2100	2,40	(7-13,8)	X		-10	70
298DM2LP11000	24	34,2	34	2100	3,36	(14-27,6)	X		-10	70
298DH1LP11000	12	40,8	37,6	2470	4,32	(7-13,8)	X		-10	70
298DH2LP11000	24	40,8	37,6	2470	4,80	(14-27,6)	X		-10	70
298DS1LP11000	12	45,6	42,5	2800	7,32	(7-13,8)	X		-10	70
298DS2LP11000	24	45,6	42,5	2800	6,24	(14-27,6)	X		-10	70

Additional versions: Series: 398D (refer to page 26) **Accessories:** Refer to Accessories leaflet

120 x 120 x 25 mm

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DC Axial Fans



Approvals



Life expectancy

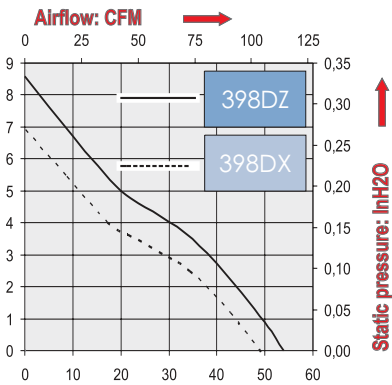
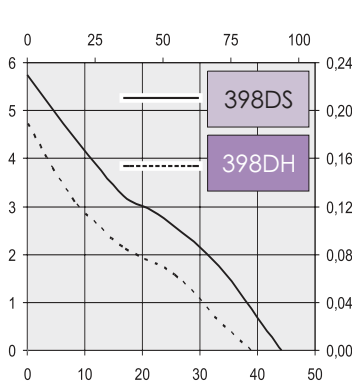
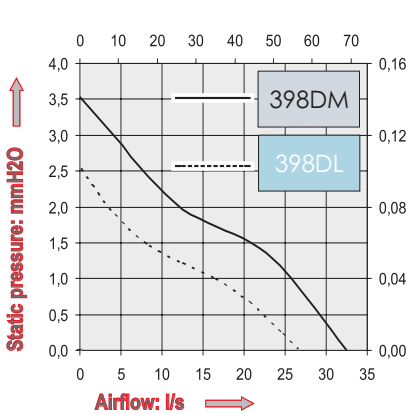
L-10 LIFE AT 40°C:
70 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 180 g
Bearing system: ball bearings

Available with:

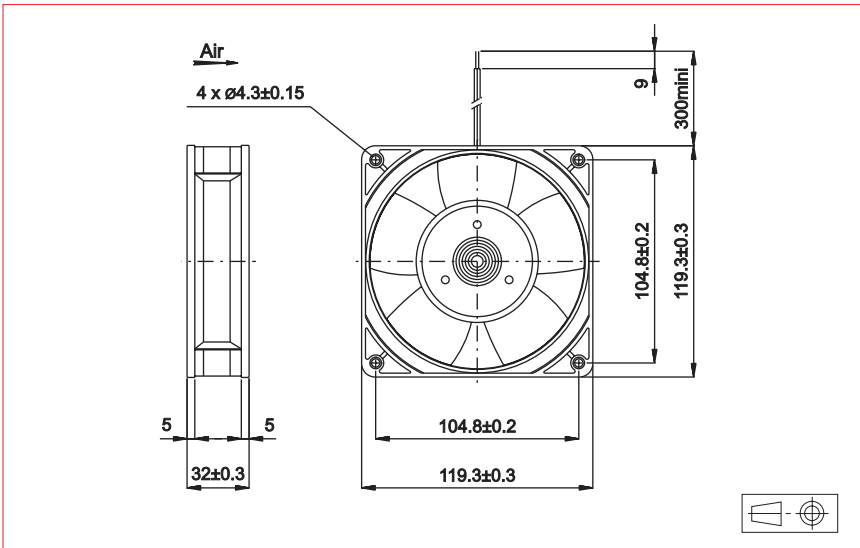
- Speed sensor
- Alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
398DL1LP11000	12	27,0	31	1950	1,68	(7-13,8)	X		-10	60
398DL2LP11000	24	27,0	31	1950	1,68	(14-27,6)	X		-10	60
398DL4LP11000	48	27,0	31	1950	1,92	(28-56)	X		-10	60
398DM1LP11000	12	32,5	34	2300	2,04	(7-13,8)	X		-10	60
398DM2LP11000	24	32,5	34	2300	2,16	(14-27,6)	X		-10	60
398DM4LP11000	48	32,5	34	2300	2,40	(28-56)	X		-10	60
398DH1LP11000	12	38,8	39	2670	3,24	(7-13,8)	X		-10	60
398DH2LP11000	24	38,8	39	2670	3,36	(14-27,6)	X		-10	60
398DH4LP11000	48	38,8	39	2670	3,36	(28-56)	X		-10	60
398DS1LP11000	12	44,2	42,5	3000	3,60	(7-13,8)	X		-10	60
398DS2LP11000	24	44,2	42,5	3000	3,60	(14-27,6)	X		-10	60
398DS4LP11000	48	44,2	42,5	3000	3,84	(28-56)	X		-10	60
398DX1LP11000	12	48,2	45,5	3300	4,80	(7-13,8)	X		-10	60
398DX2LP11000	24	48,2	45,5	3300	4,80	(14-27,6)	X		-10	60
398DZ1LP11000	12	53,8	48,5	3700	6,00	(7-13,8)	X		-10	60
398DZ2LP11000	24	53,8	48,5	3700	6,00	(14-27,6)	X		-10	60

Additional versions:
398DX and 398DZ in 48 V

Accessories:
Refer to Accessories leaflet



Approvals



Life expectancy

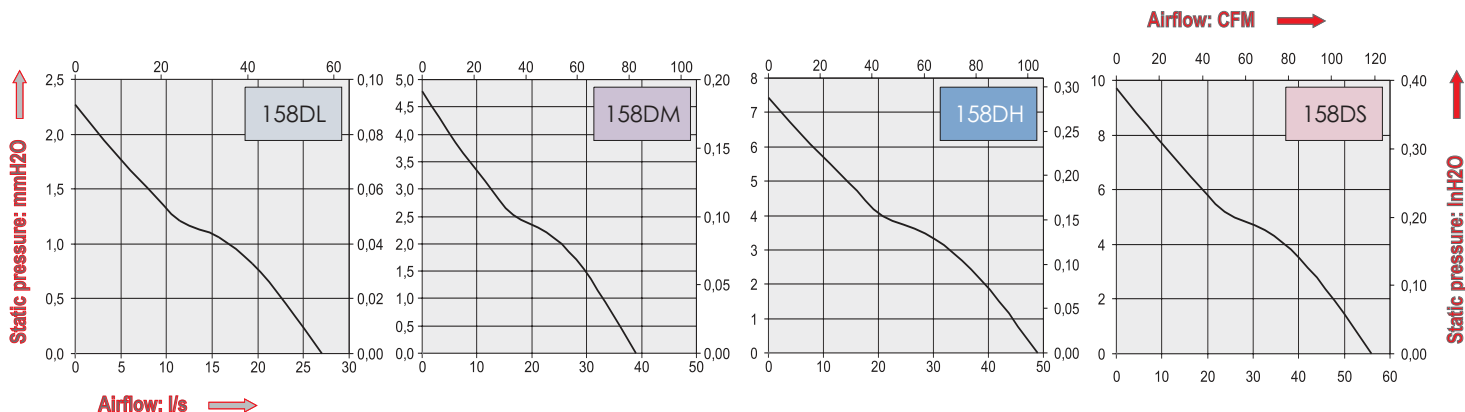
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: integrated circuit
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 230 g
Bearing system: ball bearings

Available with:

- Variable speed
- Speed sensor
- Alarm



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V						l/s	dB(A)	RPM	W
158DL5LP11000	5	27	29,5	1680	1,4	(4,5-6)	X		-20	70
158DL1LP11000	12	27	29,5	1680	1,6	(6-15)	X		-20	70
158DL2LP11000	24	27	29,5	1680	1,8	(15-28)	X		-20	70
158DL4LP11000	48	27	29,5	1680	2,1	(22-56)	X		-20	70
158DM5LP11000	5	39	37,5	2450	3,2	(4,5-6)	X		-20	70
158DM1LP11000	12	39	37,5	2450	3,3	(6-15)	X		-20	70
158DM2LP11000	24	39	37,5	2450	3,5	(15-28)	X		-20	70
158DM4LP11000	48	39	37,5	2450	3,7	(22-56)	X		-20	70
158DH5LP11000	5	49	42,5	3050	6,2	(4,5-6)	X		-20	70
158DH1LP11000	12	49	42,5	3050	6,2	(6-15)	X		-20	70
158DH2LP11000	24	49	42,5	3050	6,2	(15-28)	X		-20	70
158DH4LP11000	48	49	42,5	3050	6,2	(22-56)	X		-20	70
158DS1LP11000	12	55,9	45,5	3480	10	(6-13,2)	X		-20	55
158DS2LP11000	24	55,9	45,5	3480	8,7	(15-28)	X		-20	55
158DS4LP11000	48	55,9	45,5	3480	8,7	(22-56)	X		-20	70

Additional versions:

Over voltages - other speeds - salt spray protected - shock and vibration protected
IP54: consult factory

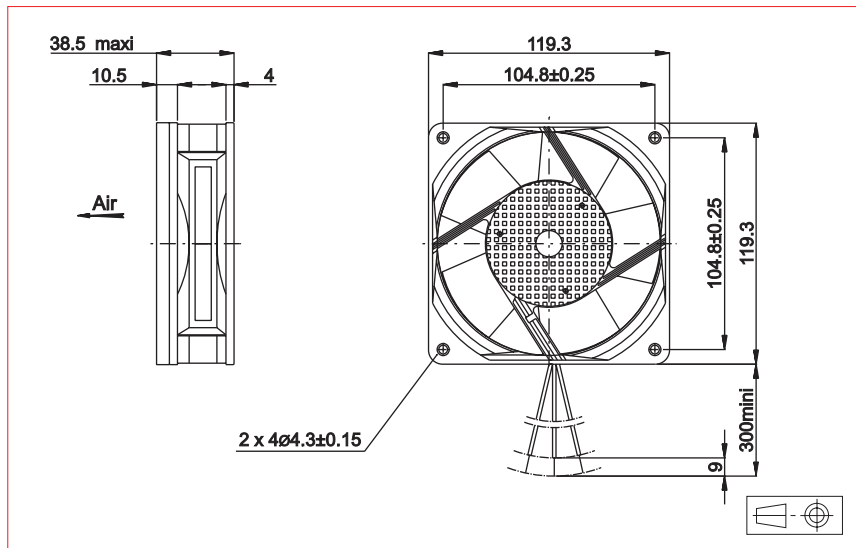
Accessories:

Refer to Accessories leaflet

120 x 120 x 38 mm

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DC Axial Fans



Approvals



Life expectancy

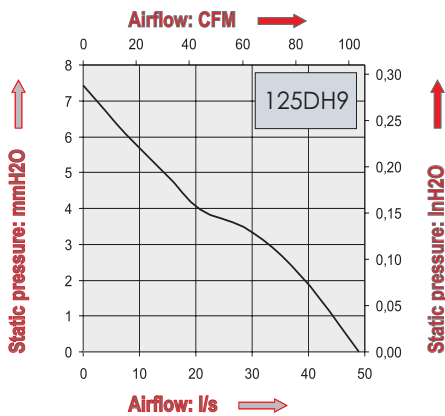
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 280 g
Bearing system: ball bearings

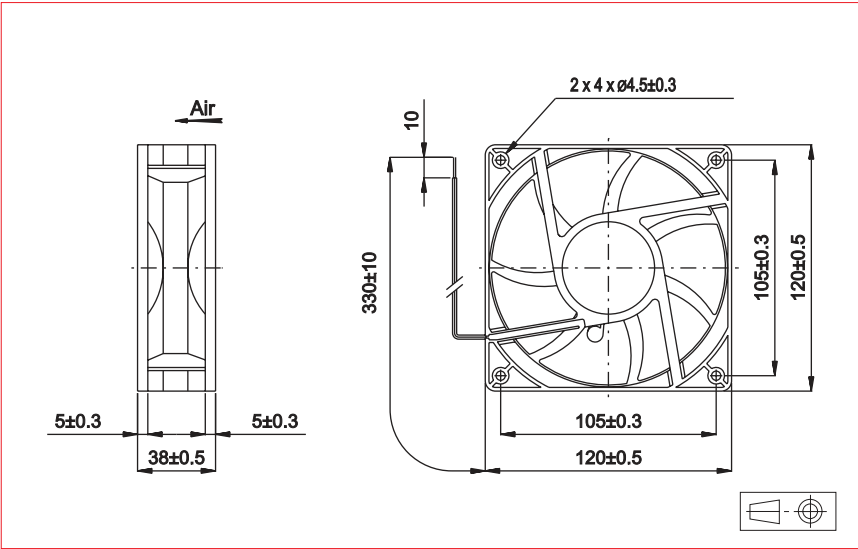
Available with:

- Speed sensor
- Alarm



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
125DH9LP11241	110	49	42,5	3050	7,15	(82-146)	X		-25	70

Additional versions: IP54: consult factory
Accessories: Refer to Accessories leaflet



Approvals

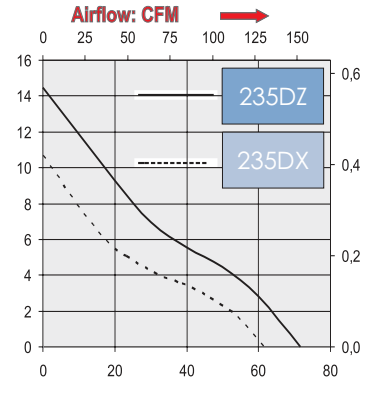
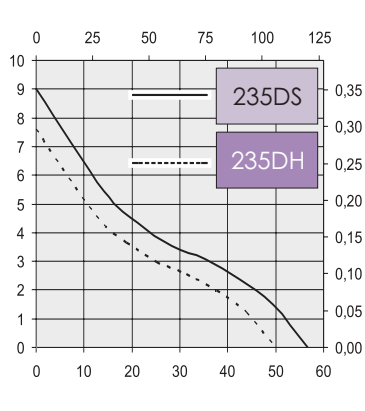
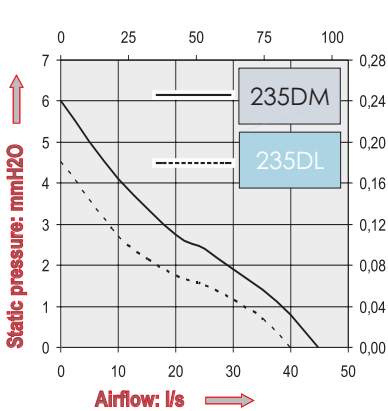


Life expectancy

L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor
 Electrical protection: impedance protected
 Housing material: plastic UL 94 VO
 Impeller material: plastic UL 94 VO
 Weight: 256 g
 Bearing system: ball bearings

Available with:
 - Variable speed
 - Speed sensor
 - Alarm
 - IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
235DL1LP11000	12	40,0	34	2000	2,3	(4-13,8)	X		-10	60
235DL2LP11000	24	40,0	34	2000	3,6	(7-27,6)	X		-10	60
235DL4LP11000	48	40,0	34	2000	2,9	(28-56)	X		-10	60
235DM1LP11000	12	44,8	38	2300	3,1	(4-13,8)	X		-10	60
235DM2LP11000	24	44,8	38	2300	4,6	(7-27,6)	X		-10	60
235DM4LP11000	48	44,8	38	2300	3,8	(28-56)	X		-10	60
235DH1LP11000	12	50,0	41	2600	3,8	(4-13,8)	X		-10	60
235DH2LP11000	24	50,0	41	2600	5,8	(7-27,6)	X		-10	60
235DH4LP11000	48	50,0	41	2600	5,8	(28-56)	X		-10	60
235DS1LP11000	12	56,7	44	2900	5,5	(4-13,8)	X		-10	60
235DS2LP11000	24	56,7	44	2900	7,2	(7-27,6)	X		-10	60
235DS4LP11000	48	56,7	44	2900	7,2	(28-56)	X		-10	60
235DX1LP11000	12	61,3	48	3200	7,2	(4-13,8)	X		-10	60
235DX2LP11000	24	61,3	48	3200	9,1	(7-27,6)	X		-10	60
235DZ1LP11000	12	71,7	53	3700	12,6	(4-13,8)	X		-10	60
235DZ2LP11000	24	71,7	53	3700	12,0	(7-27,6)	X		-10	60

Additional versions:
235DX in 48 V

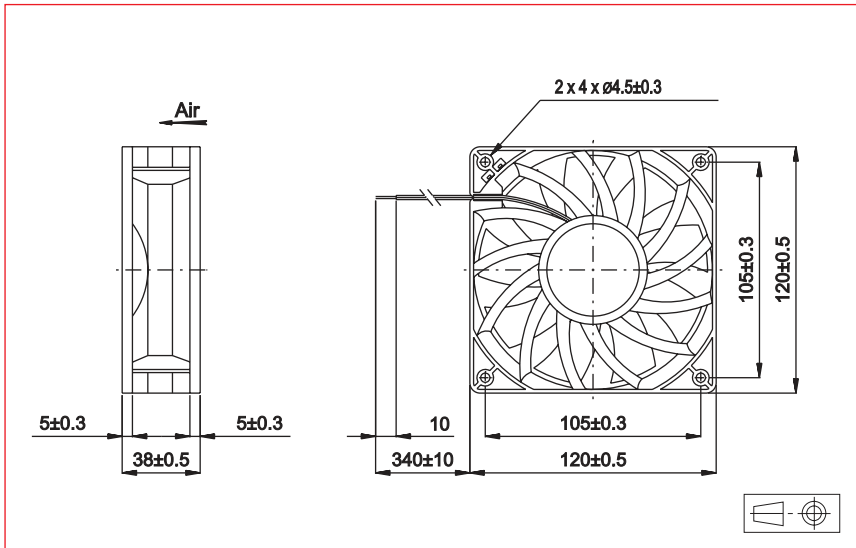
Accessories:
Refer to Accessories leaflet



120 x 120 x 38 mm

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DC Axial Fans



Approvals



Life expectancy

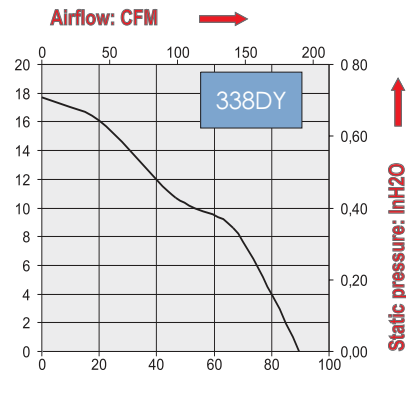
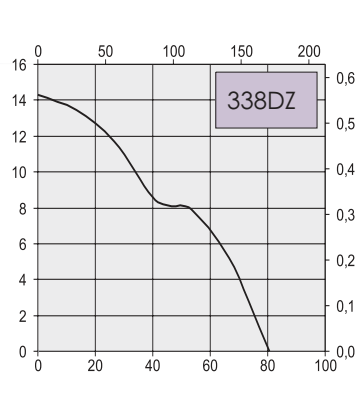
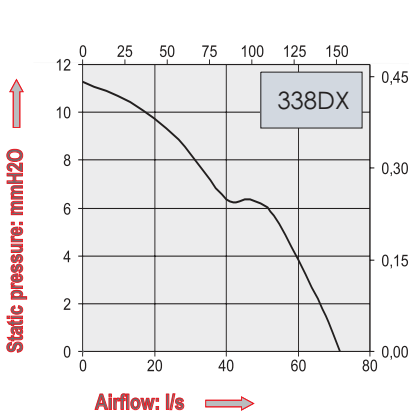
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 370 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- IP54 / IP55

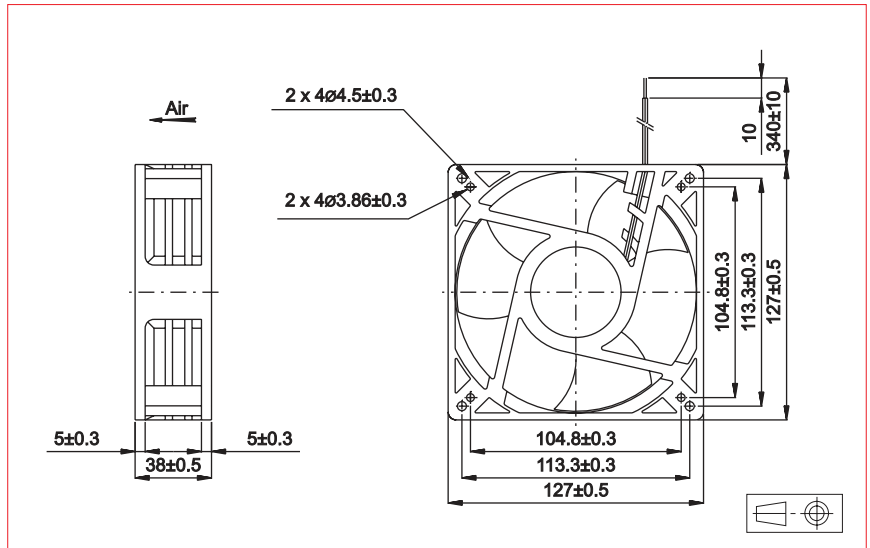


Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
338DX1LP11000	12	71,7	53	3200	12,0	(7-13,2)	X		-10	60
338DX2LP11000	24	71,7	53	3200	13,4	(14-26,4)	X		-10	60
338DX4LP11000	48	71,7	53	3200	13,4	(28-56)	X		-10	60
338DZ1LP11000	12	80,7	56,5	3600	18,0	(7-13,2)	X		-10	60
338DZ2LP11000	24	80,7	56,5	3600	19,2	(14-26,4)	X		-10	60
338DZ4LP11000	48	80,7	56,6	3600	18,2	(28-56)	X		-10	60
338DY1LP11000	12	89,7	59	4000	24,0	(7-13,2)	X		-10	60
338DY2LP11000	24	89,7	59	4000	24,0	(14-26,4)	X		-10	60
338DY4LP11000	48	89,7	59	4000	24,0	(28-56)	X		-10	60

Accessories:
Refer to Accessories leaflet



Approvals



Life expectancy

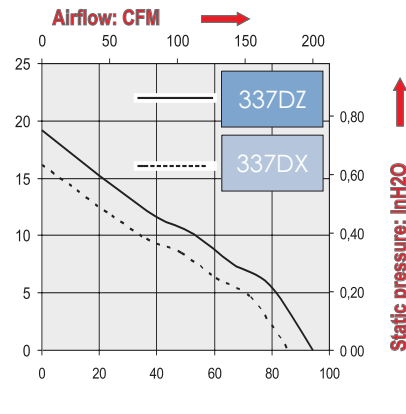
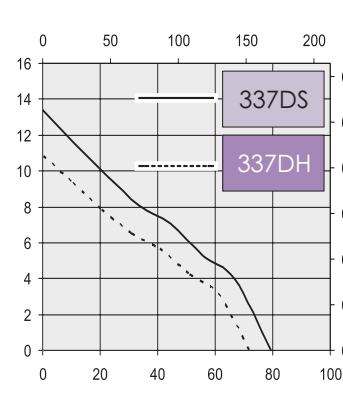
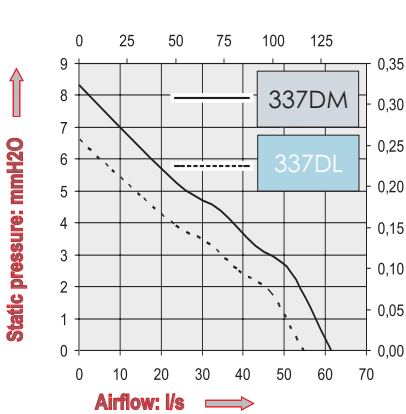
L-10 LIFE AT 40°C:
70 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 370 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
337DL1LP11000	12	53,3	43	2600	4,8	(7-13,6)	X		-10	70
337DL2LP11000	24	53,3	43	2600	5,3	(14-27,6)	X		-10	70
337DL4LP11000	48	53,3	43	2600	5,8	(28-56)	X		-10	70
337DM1LP11000	12	61,4	46,5	3000	7,0	(7-13,6)	X		-10	70
337DM2LP11000	24	61,4	46,5	3000	7,4	(14-27,6)	X		-10	70
337DM4LP11000	48	61,4	46,5	3000	7,7	(28-56)	X		-10	70
337DH1LP11000	12	71,2	49,5	3400	9,8	(7-13,6)	X		-10	70
337DH2LP11000	24	71,2	49,5	3400	9,8	(14-27,6)	X		-10	70
337DH4LP11000	48	71,2	49,5	3400	10,1	(28-56)	X		-10	70
337DS1LP11000	12	79,3	52,5	3800	13,0	(7-13,6)	X		-10	70
337DS2LP11000	24	79,3	52,5	3800	13,0	(14-27,6)	X		-10	70
337DS4LP11000	48	79,3	52,5	3800	10,1	(28-56)	X		-10	70
337DX1LP11000	12	87,3	55,5	4200	16,8	(7-13,6)	X		-10	70
337DX2LP11000	24	87,3	55,5	4200	16,8	(14-27,6)	X		-10	70
337DZ1LP11000	12	94,4	58,5	4600	22,1	(7-13,6)	X		-10	60
337DZ2LP11000	24	94,4	58,5	4600	22,1	(14-27,6)	X		-10	60

Additional versions: 337DX in 48 V

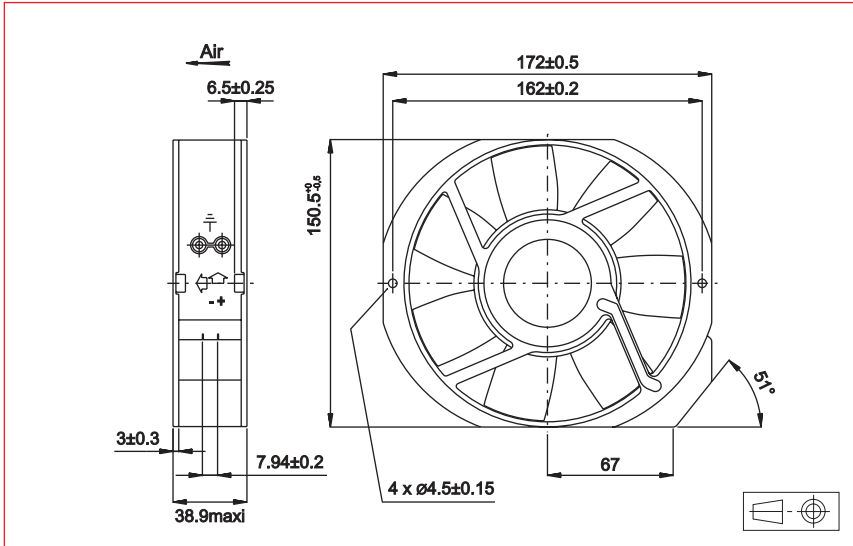
Accessories: Refer to Accessories leaflet



172 x 150 x 38 mm

ETRI®

DC Axial Fans



Approvals



Life expectancy

L-10 LIFE AT 40°C:
80 000 hours

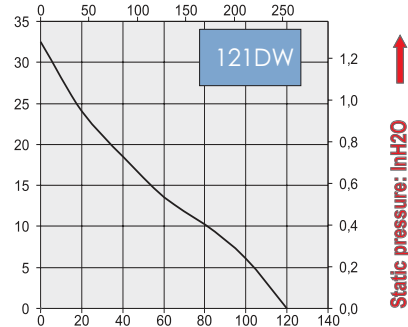
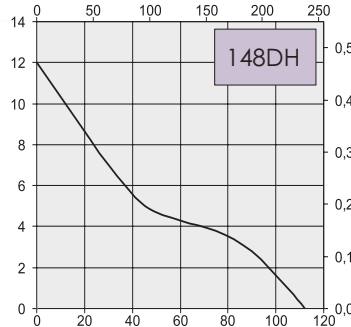
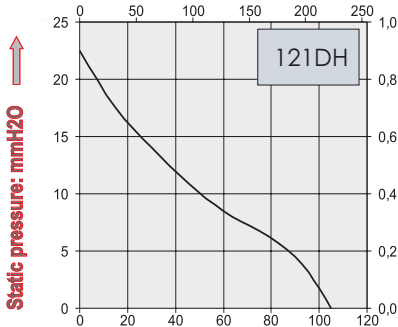
Brushless DC Motor

Electrical protection: integrated circuit
Housing material: plastic UL 94 VO
Impeller material: plastic UL 94 VO
Weight: 770 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- Flying leads
- IP 54
- UL, CSA and C-UL approvals: 148D models

Airflow: CFM →



Airflow: l/s →

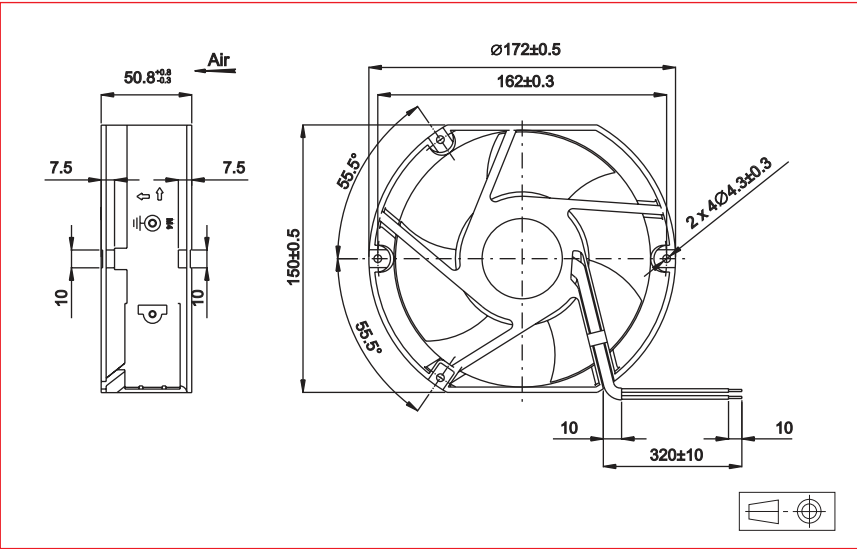
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
121DH2TM11200	24	105	62	4000	23	(19-28)	X	X	-10	55
148DH1TM11000	12	110	57	3100	13	(9-15)	X	X	-10	70
148DH2TM11000	24	112	58	3100	16,4	(19-28)	X	X	-10	55
148DH4TM11000	48	112	58	3100	16,3	(40-57)	X	X	-10	55
148DH9TM11207	110	112	58	3100	13,4	(76-140)	X	X	-25	70
121DW2TM11200	24	120	66	4650	30	(19-26,5)	X	X	-10	55
121DW9TM11200	28	120	66	4650	30	(19-31)	X	X	-10	55

Additional versions:

Others speeds - salt spray protection
IP54: consult factory

Accessories:

Refer to Accessories leaflet



Approvals

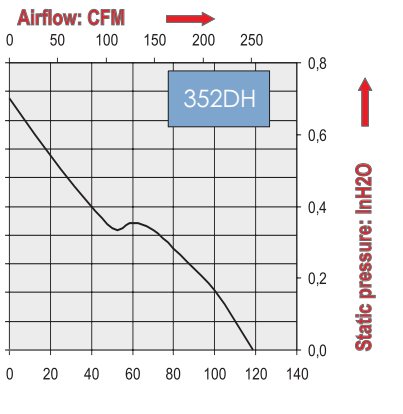
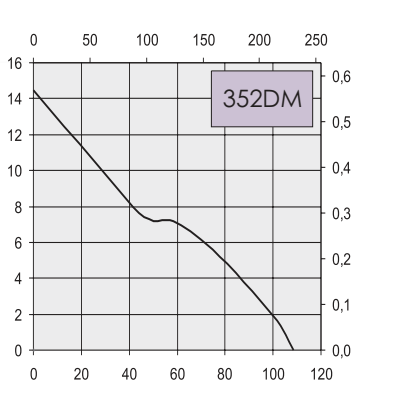
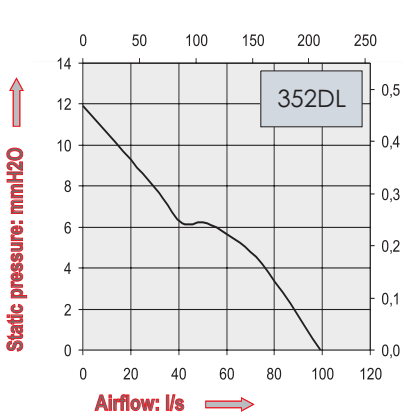


Life expectancy

L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor
 Electrical protection: impedance protected
 Housing material: aluminium
 Impeller material: plastic UL 94 VO
 Weight: 840 g
 Bearing system: ball bearings

Available with:
 - Speed sensor
 - Alarm
 - IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
352DL1LM11000	12	99,2	50	2800	10,1	(8-14)	X		-10	70
352DL2LM11000	24	99,2	50	2800	10,1	(12-28)	X		-10	70
352DL4LM11000	48	99,2	50	2800	11,5	(24-56)	X		-10	70
352DM1LM11000	12	108,7	52	3050	12,6	(8-14)	X		-10	70
352DM2LM11000	24	108,7	52	3050	11,8	(12-28)	X		-10	70
352DM4LM11000	48	108,7	52	3050	13,9	(24-56)	X		-10	70
352DH1LM11000	12	118,8	55	3350	16,8	(8-14)	X		-10	70
352DH2LM11000	24	118,8	55	3350	15,1	(12-28)	X		-10	70
352DH4LM11000	48	118,8	55	3350	16,8	(24-56)	X		-10	70

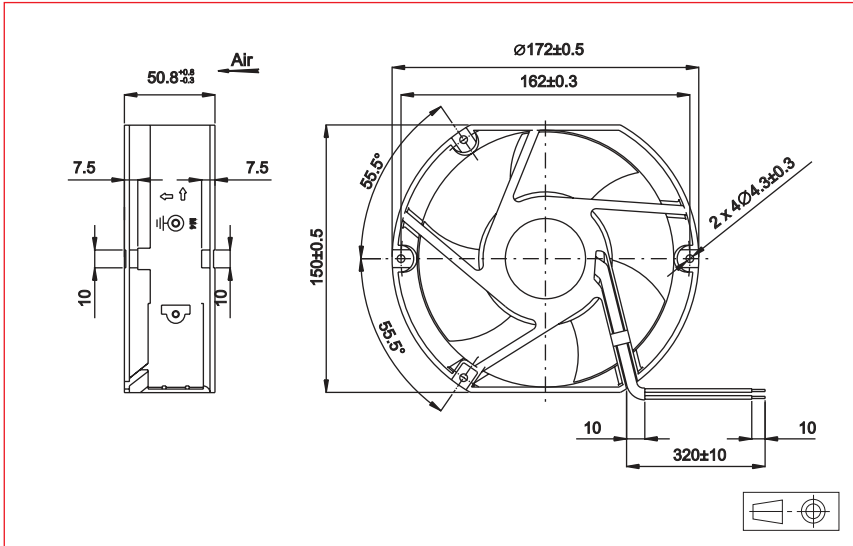
Additional versions:
Higher speeds (see page 34)

Accessories:
Refer to Accessories leaflet

172 x 150 x 50 mm

ETRI®

DC Axial Fans



Approvals



Life expectancy

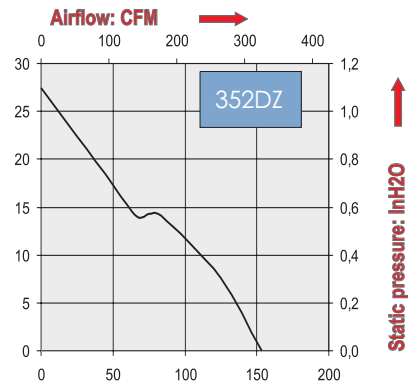
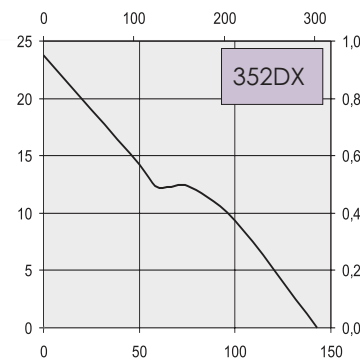
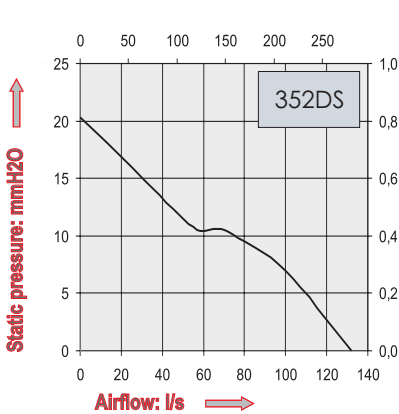
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: aluminium
Impeller material: plastic UL 94 VO
Weight: 840 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- IP54 / IP55

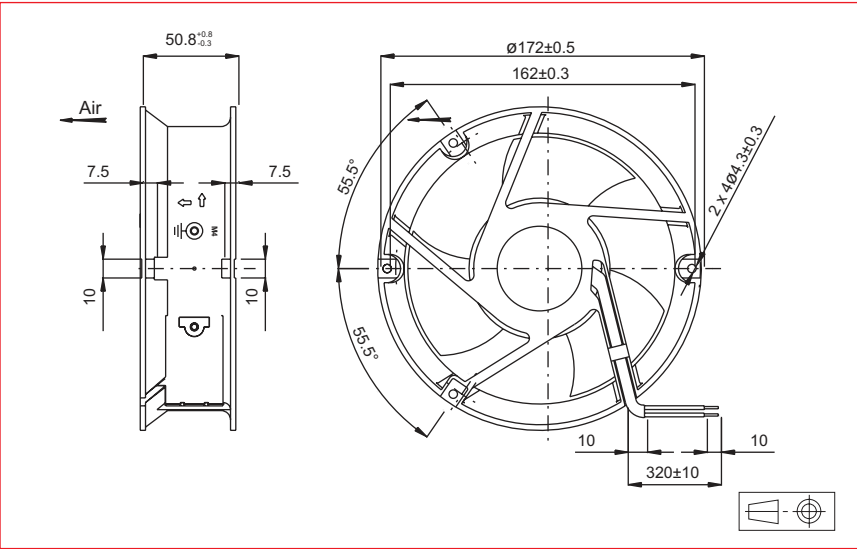


Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
352DS1LM11000	12	132,0	57,5	3700	25,3	(8-14)	X		-10	70
352DS2LM11000	24	132,0	57,5	3700	20,4	(12-28)	X		-10	70
352DS4LM11000	48	132,0	57,5	3700	23,5	(24-56)	X		-10	70
352DX2LM11000	24	142,7	60	4000	30,7	(12-28)	X		-10	70
352DX4LM11000	48	142,7	60	4000	30,7	(28-53)	X		-10	70
352DZ2LM11000	24	153,3	63	4300	32,9	(12-28)	X		-10	70

Additional versions:
Lower speeds (see page 33)

Accessories:
Refer to Accessories leaflet





Approvals



Life expectancy

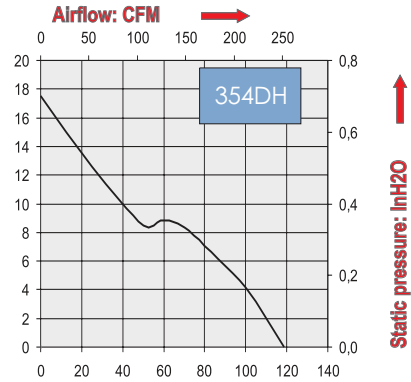
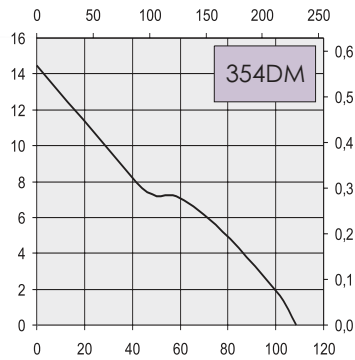
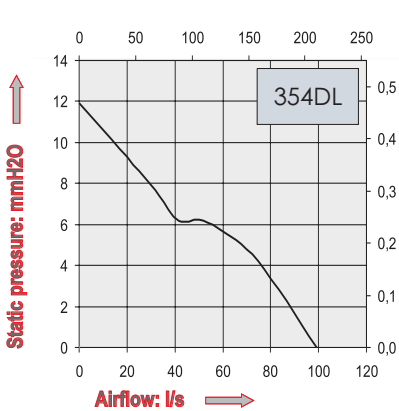
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: aluminium
Impeller material: plastic UL 94 VO
Weight: 840 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
354DL1LM11000	12	99,2	50	2800	10,1	(8-14)	X		-10	70
354DL2LM11000	24	99,2	50	2800	10,1	(12-28)	X		-10	70
354DL4LM11000	48	99,2	50	2800	11,5	(24-56)	X		-10	70
354DM1LM11000	12	108,7	52	3050	12,6	(8-14)	X		-10	70
354DM2LM11000	24	108,7	52	3050	11,8	(12-28)	X		-10	70
354DM4LM11000	48	108,7	52	3050	13,9	(24-56)	X		-10	70
354DH1LM11000	12	118,8	55	3350	16,8	(8-14)	X		-10	70
354DH2LM11000	24	118,8	55	3350	15,1	(12-28)	X		-10	70
354DH4LM11000	48	118,8	55	3350	16,8	(24-56)	X		-10	70

Additional versions: Higher speeds (refer to page 36)

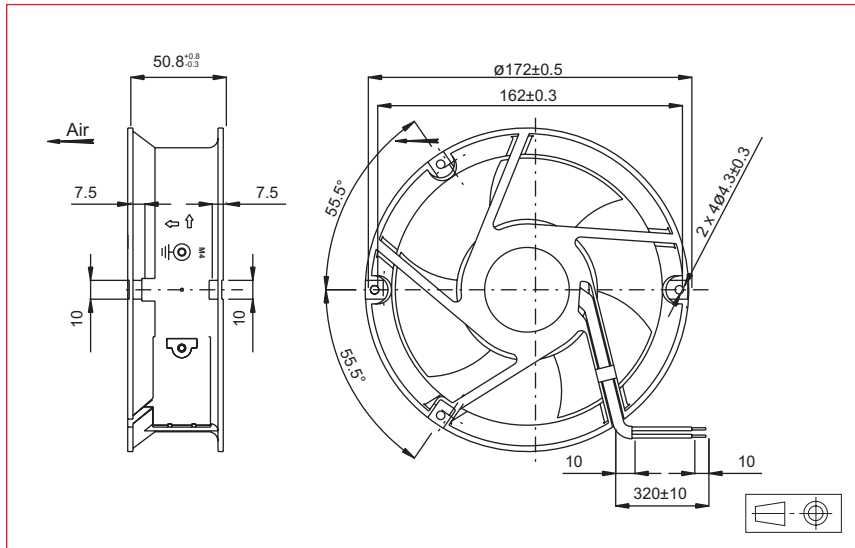
Accessories: Refer to Accessories leaflet



Ø 172 x 50 mm

ETRI®

DC Axial Fans



Approvals



Life expectancy

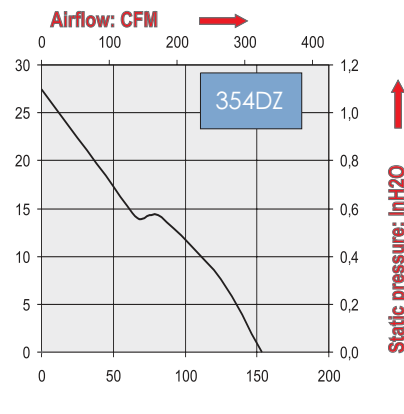
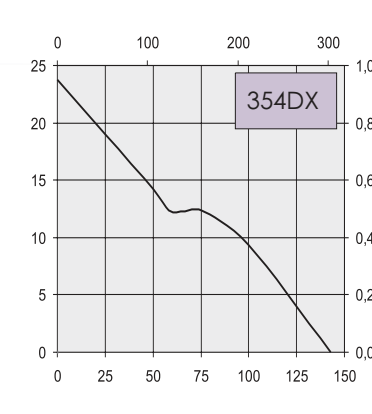
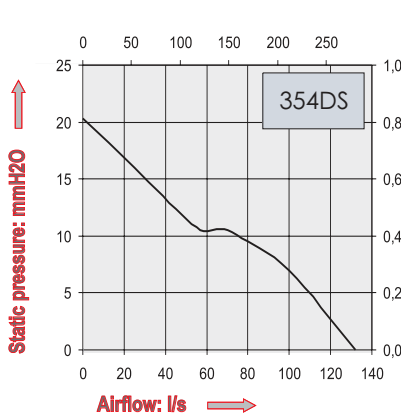
L-10 LIFE AT 40°C:
80 000 hours

Brushless DC Motor

Electrical protection: impedance protected
Housing material: aluminium
Impeller material: plastic UL 94 VO
Weight: 840 g
Bearing system: ball bearings

Available with:

- Speed sensor
- Alarm
- IP54 / IP55



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Input Power	Voltage range	Connection type		Operating temperature	
	V	l/s	dB(A)	RPM	W	V	Leads	Terminals	Min.°C	Max.°C
354DS1LM11000	12	132,0	57,5	3700	25,3	(8-14)	X		-10	70
354DS2LM11000	24	132,0	57,5	3700	20,4	(12-28)	X		-10	70
354DS4LM11000	48	132,0	57,5	3700	23,5	(24-56)	X		-10	70
354DX2LM11000	12	142,7	60	4000	26,4	(12-28)	X		-10	70
354DX4LM11000	24	142,7	60	4000	30,7	(24-56)	X		-10	70
354DZ2LM11000	48	153,3	63	4300	32,9	(12-28)	X		-10	70

Additional versions:
Lower speeds (Refer to page 35)

Accessories:
Refer to Accessories leaflet



A key partner in cooling solutions

ETRI's comprehensive fan line includes over 7000 fans which operate under a wide variety of voltages and frequencies. Thanks to extensive designing and testing equipment, our engineers are able to offer the best technical solution suitable to various applications, such as industrial, electronics, telecom, railway or military.

High quality fans

ETRI has been known for more than 60 years as a global leader in cooling products, and carries on its tradition of excellence using innovative designs and materials to produce high quality fans and blowers, through its ISO 9002 certified manufacturing plant. Most of ETRI fans are UL and CSA approved, and according to the European directives, they comply with EMI and electrical safety standards. Certificates are available on request.

An international presence

ETRI offers an international presence through its network of local offices (Europe & USA) distributors and representative offices in more than 50 countries. Complete list is available on our web site.

Votre partenaire en ventilation

Avec plus de 7000 références, ETRI propose une large gamme de ventilateurs répondant aux exigences les plus sévères pour des applications industrielles, électroniques, ferroviaires ou militaires. La gamme de produits standard est régulièrement complétée par des développements spécifiques réalisés sur cahier des charges.

Le choix de la qualité

ETRI vous apporte la réponse adaptée à vos besoins en vous proposant des solutions innovantes dans le domaine de la ventilation industrielle tout en garantissant les meilleurs niveaux de qualité. Les ventilateurs ETRI sont pour la plupart homologués UL et CSA, et conformément aux directives européennes, répondent aux normes EMI et de sécurité électrique. Les certificats sont disponibles sur simple demande.

Une présence internationale

Grâce à ses agences implantées en Europe et aux Etats-Unis, et à son large réseau de distributeurs, ETRI vous offre une présence internationale dans plus de 50 pays. La liste complète de nos représentants est disponible sur notre site internet.

www.etrinet.com

Votre agence locale ou distributeur / Your local agency or distributor:



About Rosenberg...

Rosenberg is a competitive medium sized company with around 1400 employees worldwide.

During the last 25 years the Rosenberg group has been complemented in Europe by six additional works in France, Italy, Hungary, Czech Republic and Germany, in addition to the numerous subsidiaries and partners around the world.

Our aim is for high quality production backed by top class service for our clients. Thus a continuous flow of information and good cooperation between you, our dear customers, and us is most important, to jointly achieve a continuous evolution of our products and their quality.

A propos de Rosenberg...

Rosenberg est une entreprise performante à taille humaine qui emploie environ 1400 collaborateurs dans le monde entier.

Durant ces 25 dernières années, le Groupe Rosenberg s'est développé en Europe avec 6 nouvelles implantations en France, Italie, Hongrie, République Tchèque ainsi qu'en Allemagne, en plus des nombreux partenaires et distributeurs déjà présents à l'échelle mondiale.

Notre objectif est d'assurer un très haut niveau de qualité de produits doublé d'un service clients irréprochable.

De ce fait, maintenir une communication constante et une bonne coopération entre vous, nos chers clients, et nous, est la condition clé pour le développement de nos produits et de notre savoir-faire.

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