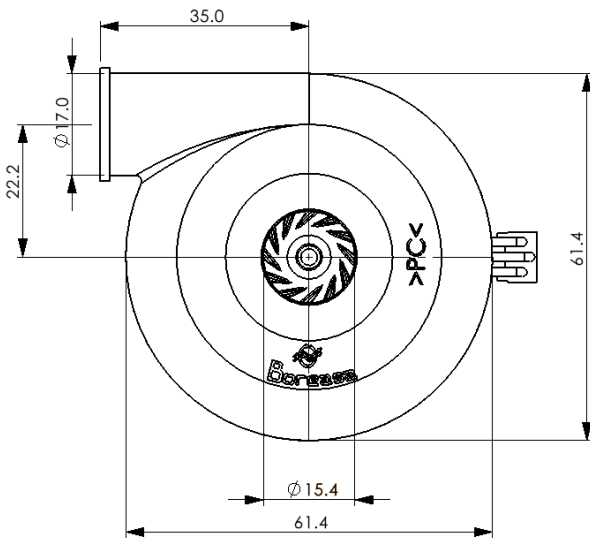


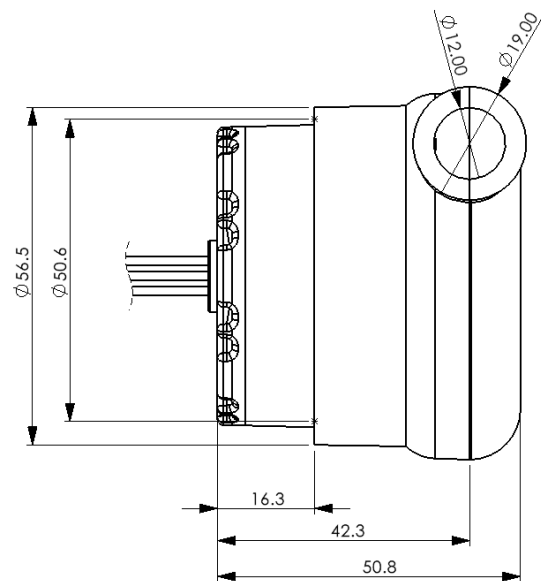
E-mail: sales@boreasa.com, URL: www.boreasa.com

Miniature Centrifugal Blowers C60S1-xxPR-05-Lx Series 61.4 x 61.4 x 50.8 mm (2.42 x 2.42 x 2.00 in)

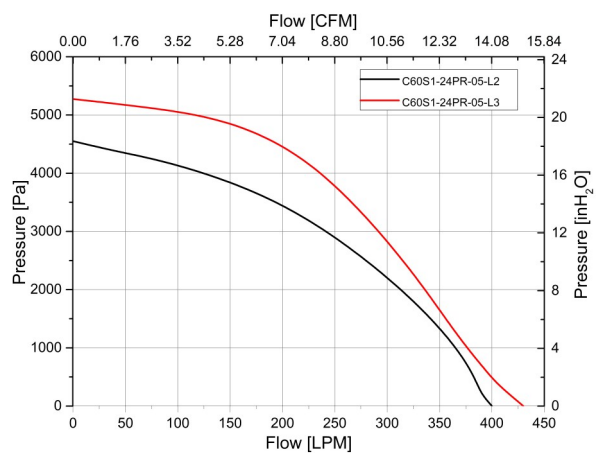
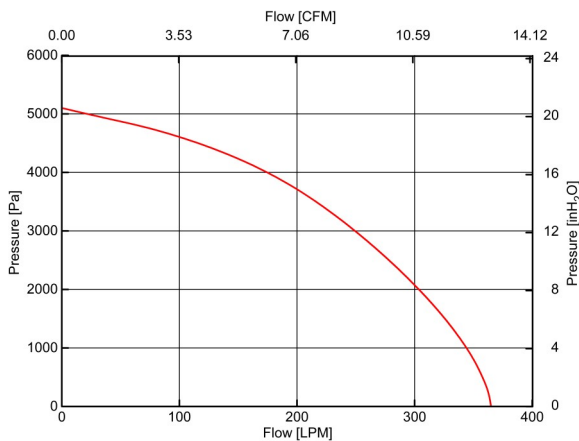
- * Housing and Impeller materials: Thermoplastics
- * Lead Wire: 235 ±10 mm (3 x AWG22)
- * Weight: 221 gr. (7.80 oz)
- * Operational Temperature: -20 to 40°C / -4 to 104°F
- * Three Phase Brushless Motor Sensor Less
- * Connectors: 2510-3P
- * Available in 12 V on demand
- * **Note: This blower uses a brushless sensor-less motor and needs a sensor-less driver to operate**



C60S1-12PR-05-L2



C60S1-24PR-05-Lx



NOTES: - Performances are dependent on the driver used and the test conditions. The data in this spec. sheet was obtained using Boreasa test chamber at 20°C (±2° C) and sea level, and using a Boreasa D30/5/4QF-E2 driver. It may be different than data measured in other conditions or with other drivers.
- Specifications are subject to change without notice.
- Boreasa blowers have been designed and are manufactured to meet the medical device industry requirements. However, it is not possible to test blowers in all conceivable customer application configurations. Consequently, to be used in life support equipment, blowers must be life tested and validated by customers, in their actual application conditions, in a statistically meaningful quantity.



Technical Data

		C60S1-12PR-05	C60S1-24PR-05	
		L2	L2	L3
V _{CC} Nominal Voltage	V	12	24	
V _{CC} Voltage Range	V	9~14	10~28	
R _{Phase-Phase}	Ohm	0.42	0.83	0.75
L _{Inductance}	mH	0.15	0.46	0.42
I _N freeblowing @Nom. Volt.	A	3.13	1.67	2.13
I _N work. point @Nom. Volt.	A	2.68	1.30	1.59
I _N static @Nom. Volt.	A	1.25	0.62	0.69
n freeblowing @Nom. Volt.	rpm	32'150	35'100	37'900
n work. point @Nom. Volt.	rpm	36'000	36'500	38'900
n static @Nom. Volt.	rpm	39'150	37'200	40'900
V freeblowing @Nom. Volt.	l/min	365	400	430
V work. point @Nom. Volt.	l/min	196	210	235
P work. point @Nom. Volt.	Pa	3'915	3'480	4'172
P static @Nom. Volt.	Pa	5'100	4'550	5'275
MTTF (L10)	Hr	>20'000		
I _{Inertia}	g*mm ²	2'750		
LpA work. point	dB(A)	<48.5		

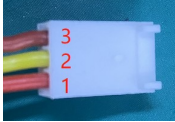
- NOTES:
- Working point is an example close to 50% max flow.
 - Measured at distance of 1 meter from inlet, with open inlet, outlet connected to breathing tube and 4 mm orifice in sound chamber at 1 kPa.
 - The phase inductance and impedance are measured by LCR at 1 kHz, including the connector.
 - Tolerances based on specified speed data according to ISO 13348, Grade 4: pressure ±10%, power ±16%, speed ±5% and flowrate ±5%.



For information, to receive a quotes or to place an order, e-mail us at sales@boreasa.com

E-mail: sales@boreasa.com, URL: www.boreasa.com

Electrical Connections



Wire

Description

Connector Pin

Red	V	Motor winding 2
Yellow	W	Motor winding 3
Brown	U	Motor winding 1

2510-3P
PIN 1
PIN 2
PIN 3

Blower Limits and Warning

- * No Hot-Swap allowed
- * Max. allowed temperature on Heat Sink: 75° C
- * Max. cont. speed: 52'000 rpm
- * Blocking the impeller more than 20 seconds may result in damages or destruction of the blower, unless current is limited to values listed above.

Manufacturing System

Blowers manufactured by ISO9001-2015 certified manufacturer