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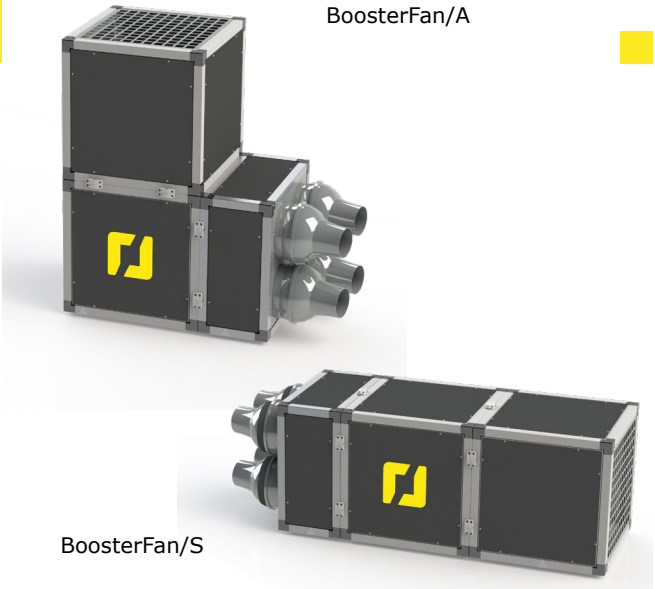
BOOSTERFAN

BOOSTER FAN TO INCREASE THE AIRFLOW

Additional fan for use with a diluter system. There are two types and functionalities:

- **BoosterFan/S**: fan with *straight* airflow to enlarge the throw between two Diluter systems
- **BoosterFan/A**: fan with *angled* airflow to enhance the return flow to the Diluter system

The booster fans are recommended for use in large workshops with a relatively low welding intensity. In this situation the filter capacity is sufficient but the airflow is too low to cover the entire area.



BoosterFan/A

BoosterFan/S

APPLICATIONS

The BoosterFan is intended for use with all common welding processes.

Specific circumstances to use a BoosterFan

- A large workshops with a relatively low amount of welding fume. In such case the filtration capacity is enough, but the circulation of the air needs a boost.
- To enlarge the throw of a Diluter when there is a lack of space to install a second Diluter.
- To prevent the air from getting stuck in a blind spot of the workshop, such as dead corners, niches and in case of L-shape workshops.

Advantages

- Optimization of air circulation
- Enhanced effectiveness of the Diluter system
- Cost saving; in the above situations, it is more cost effective to install a BoosterFan than a second (or more) Diluter systems

Installation

- Height of workshop: min. 7-8 m
- Blow angle of the nozzles: 2 to 5° upwards (to avoid draft at working height)

The use of a BoosterFan closes the "circle of air"

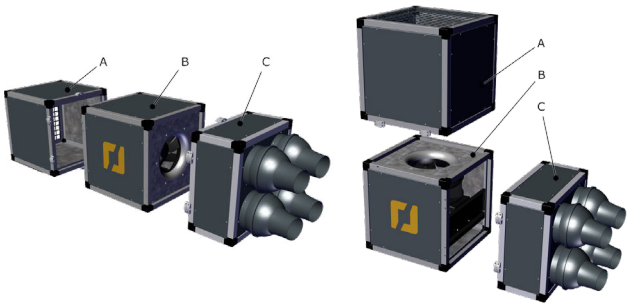
SPECIFICATIONS

■ **Physical dimensions and properties**	
Material (housing): • plates • frames • corner pieces	 electro-zinc coated steel (according to DIN EN 10152) – steel grade DC01+ZE – sheet thickness: 1,5 mm • aluminium 6060 • polyamide
Nozzles: • number • material • diameter housing • diameter opening	 • 4 • powder coated aluminium • Ø 250 mm • Ø 140 mm
Colour	grey RAL 7011
Weight (net)	98 kg (216 lbs.)
■ **Fan**	
Type of fan	centrifugal
Motor design	EC
Energy efficiency	IE4
Number of blades	6
Protection class	IP 54
Insulation class	F
■ **Performance** (see also chart on page 3)	
Capacity	max. 4000 m³/h
Working range	1200-4400 m³/h
Speed	max. 1550 rpm
Noise level (according to ISO 3746)	<65 dB(A)
Throw	up to 50 metres
■ **Electrical data**	
Connection voltage	230V/1ph/50-60Hz
Power	1,1 kW
Nominal current	4,9 A
Speed adjustment	1-10 VDC by potentiometer (inside fan box of BoosterFan)
Fan control	Integration with ControlPro control platform for: – start/stop by relay output – alarm function (NC)
Motor protection	thermal overload protection
Electric connection	refer to the wiring diagram on page 4
■ **Ambient conditions**	
Process temperature: • min. • nom. • max.	 • 5°C (41°F) • 20°C (68°F) • 60°C (140°F)
Max. relative humidity	90%
Suitable for outdoor use	no
Storage conditions	• 5-45°C (41-113°F) • relative humidity max. 80%

application data sheet

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■ Product combinations	
MDB-Diluter PRO	environmental diluter system with ControlPro control equipment
SCS-Diluter PRO	
■ Scope of supply	



BoosterFan/S **BoosterFan/A**

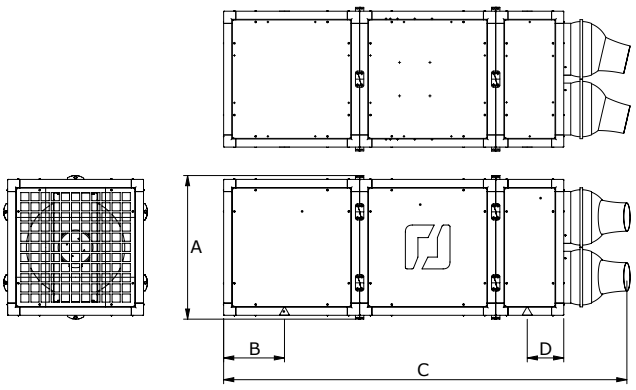
Assembly that consists of an inlet box (A), a fan box (B) and an outlet box with 4 adjustable nozzles (C)
Mounting material and main switch not included

■ Order information	
Type: • BoosterFan/S • BoosterFan/A	Article no.: • 0000300923 • 0000300922
Number/package	1
■ Shipping data	
Gross weight (incl. pallet)	113 kg (249 lbs.)
Packing dimensions (incl. pallet) • BoosterFan/S • BoosterFan/A	 • 1988 x 708 x 708 mm (78 x 28 x 28 in.) • 1335 x 708 x 1340 mm (53 x 28 x 53 in.)
Max. number/pallet	1
Harmonized Tariff Code	84145925
Country of origin	Netherlands

APPROVALS/CERTIFICATES

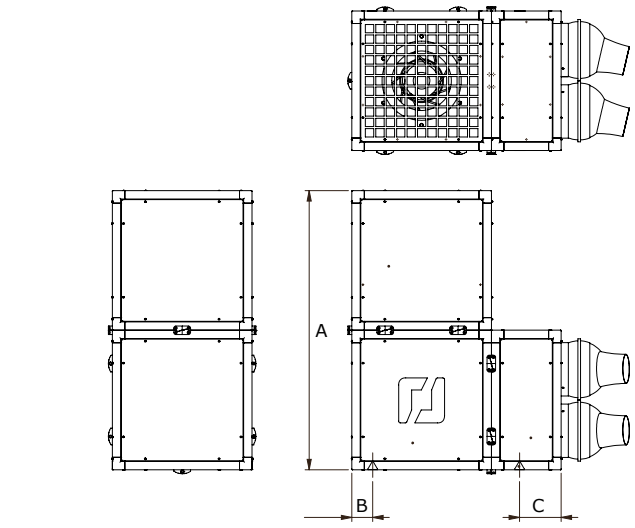
CE	
RoHS	

DIMENSIONS



	mm	inch
A	708	27⅞
B	300	12¾
C	1988	78¼
D	180	7⅛

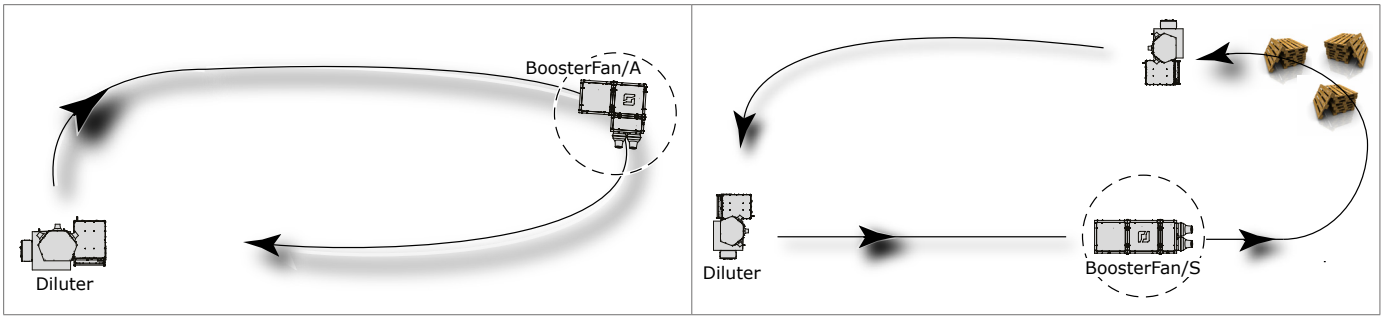
BoosterFan/S



	mm	inch
A	1340	52¾
B	100	3⅞
C	200	7⅞

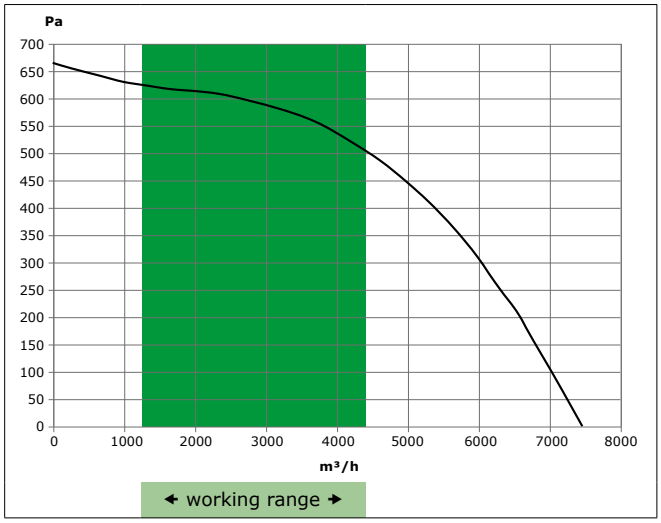
BoosterFan/A

INSTALLATION EXAMPLES



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WORKING RANGE

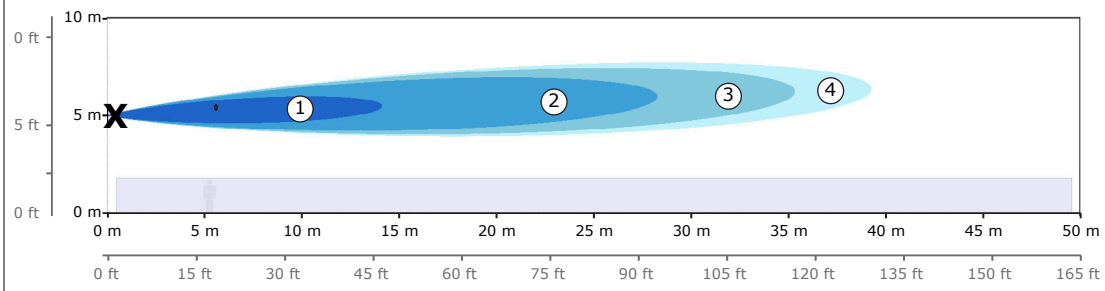
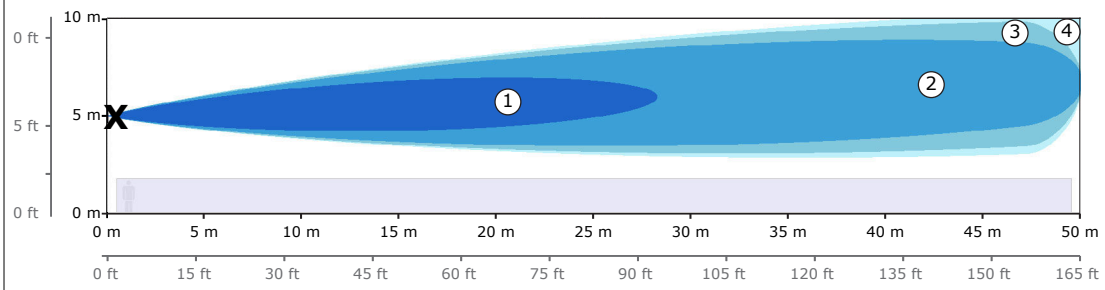


PERFORMANCE

Capacity BoosterFan:		Max. throw at air speed: (adjust volume between these two values)	
Total	Per nozzle	0,5 m/s	0,25 m/s
1200 m³/h	300 m³/h	8 m	13 m
1600 m³/h	400 m³/h	11 m	23 m
2000 m³/h	500 m³/h	14 m	28 m
3000 m³/h	750 m³/h	22 m	40 m
4000 m³/h	1000 m³/h	27 m	50 m

SIMULATION OF AIRFLOW

The images below give an indication of the expected throw of the BoosterFan.

	THROW (simulated)
Capacity BoosterFan: Total | 2000 m³/h Per nozzle | 500 m³/h Throw*) | >25 m *) speed 2	
Capacity BoosterFan: Total | 4000 m³/h Per nozzle | 1000 m³/h Throw*) | >50 m *) speed 2	

Settings	
Workshop: • Dimensions • Height • Temperature • Blow angle of the nozzles	 50 x 40 m 10 m 21°C 2° upwards
X Position of BoosterFan	
Speed 1	0,50 m/s
Speed 2	0,25 m/s
Speed 3	0,20 m/s
Speed 4	0,15 m/s

Product type	**BoosterFan**
Article no.	*refer to Order information*
Product category	general filtration systems
Version	090821/B

Always check the latest version on **www.plymovent.com**

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WIRING DIAGRAM

