

MagFan ONE - sets new standards



MagFan ONE is our "conventional" ON/OFF wall fan. The MagFan ONE sets new standards in terms of efficiency, capacity and pressure performance. It will simply revolutionize the market for ON/OFF controlled wall fans. The MagFan ONE is in every aspect identical to the existing MagFan, except it is an on/off fan. It is still a direct drive fan, so no belts and pulleys – hence no maintenance.

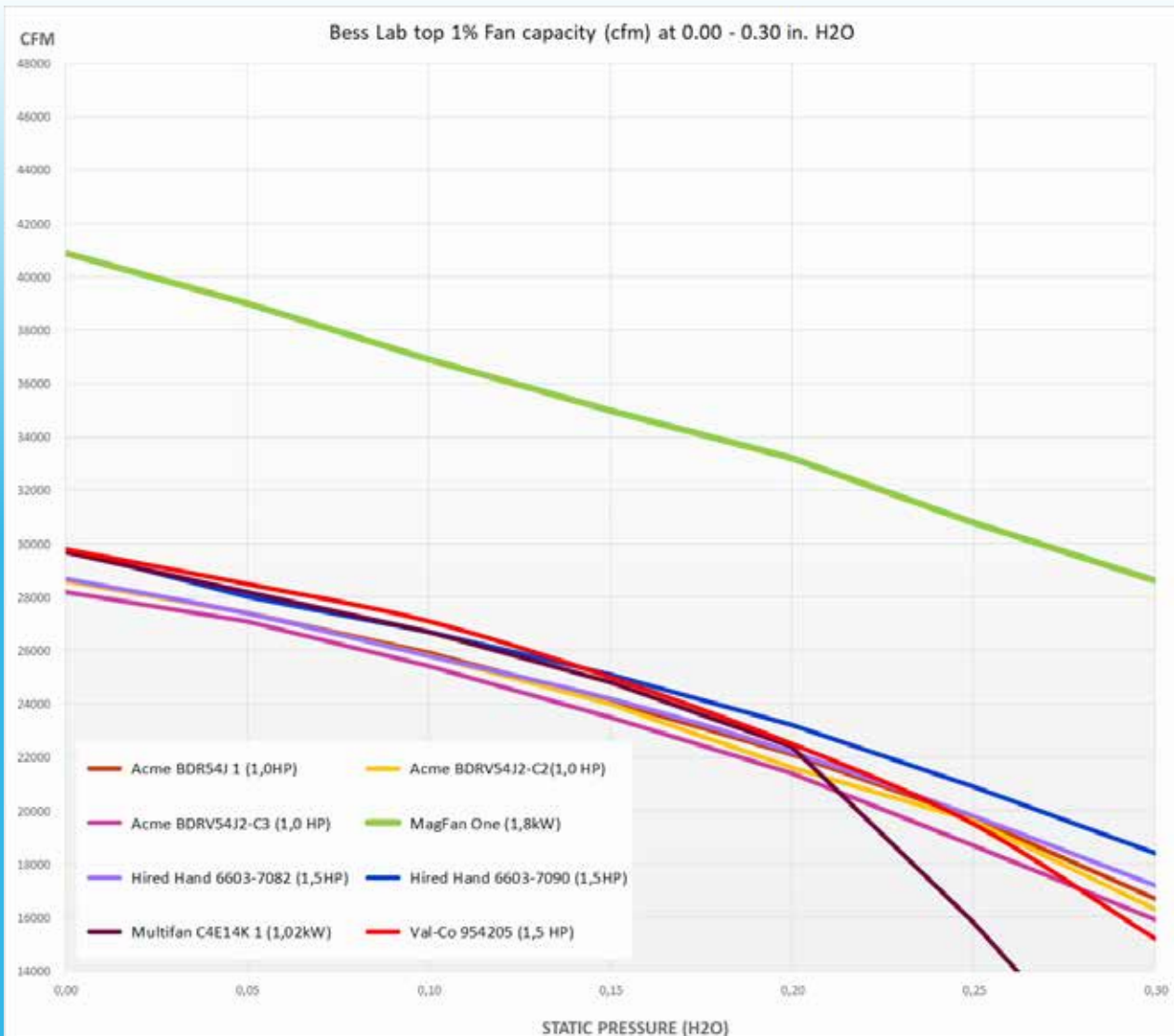
MagFan ONE - Best in Test at Bess Lab

Each year, Bess Lab, Illinois, and University of Georgia define the top 1% of all fans tested by two key parameters:

- Energy Efficiency Rating should be 22 CFM/Watt or higher
- Air Flow Ratio (AFR) should be 0.79 or higher

MagFan ONE stands out

With 22.4 cfm/Watt MagFan ONE has one of the highest Energy Efficiency Ratings of all fans tested at Bess Lab and therefore it becomes a member of the top 1% fans. With an Air Flow Ratio of 0.85 MagFan ONE has the best Air Flow Ratio of all the top 1% fans and it significantly outperforms the top 1% fans when it comes to capacity. The results are impressive. At 0.1" WC Magfan ONE delivers 36900 CFM which is a good 30% more than the best of the rest. In other words, it outperforms all other top 1% fans by a wide margin.



MagFan ONE in short:

- Built to last, maintenance-free
- Capacity up to 69500 m³/h (40900 cfm)
- Pressure capability up to 100 Pascal
- Asynchronous 3-phase motor: 1.8kW, 720 rpm, 50Hz
- Saves 75% on transportation costs

University of Illinois Department of Agricultural and Biological Engineering
Bioenvironmental and Structural Systems Lab
Final Report

Project Number: 18465
Test Date: September 11, 2018

Fan:

Make- DACS
Model- MagFan One
Blade dia.- 56.3" (1430)
Orifice dia.- 56.8" (1442)

Blade:

Number- 3
Shape- propeller
Material- poly
Pitch- -
Clearance- 0.4" (10 mm)

Drive Sheaves:

Drive dia.- direct
Axle dia.- drive

Motor:

Make- DACS
Model- Y2G112M2-8
Hp- 1.8 kW
RPM- 700
Volts- 230 / 400
Amps- 8.5 / 4.9
Hz- 50
Phase- 3
S. F.- 1

Housing:

Material- poly
Intake area- 61.5" x 61.5" (1562x1562)
Discharge- 56.8" (1442)
Depth- 12" (305)

Shutter: Roller door

Material- Plastic
Doors- 1
Columns- 1
Door length 1800 mm
Location- intake

Guards:

Description- wire
Spacing- 1.6" x 2.9" / 5.4" concentric
Location- intake / exhaust

Discharge Cone:

Depth- 47"
Minor dia.- 56.8"
Major dia.- 68.5"

Notes: Roll door housing with bell mouth intake frame

Test Conditions:

T(wb) F: 66.5 Barometric pressure, recorded 29.47
T(db) F: 79 Barometric Pressure, corrected 29.34 (In. Hg)



SI Units

Static Pressure (in.H2O)	Airflow (cfm)	rpm	Volts	Amps	Watts	cfm/Watt	SI Units			
							Static Pressure (Pa)	Airflow (m ³ /hr.)	(m ³ /hr)/W	W/1000m ³ /hr
0.00	40900	729	399.1	3.76	1428	28.7	0	69500	48.7	21
0.05	39000	728	399.1	3.86	1537	25.4	12	66300	43.1	23
0.10	36900	724	399.1	3.98	1650	22.4	25	62700	38	26
0.15	35000	722	399.1	4.08	1750	20.0	37	59500	34	29
0.20	33200	720	399.1	4.18	1837	18.1	50	56400	30.7	33
0.25	30800	718	399.1	4.28	1925	16.0	62	52300	27.2	37
0.30	28600	716	399.1	4.35	1994	14.3	75	48500	24.3	41
0.35	25900	715	399.1	4.40	2030	12.8	87	44000	21.7	46
0.40	22200	715	399.0	4.40	2033	10.9	100	37700	18.5	54