



## Meggitt Defense Systems

# Military & Aerospace Fans Catalog

### Applications

- Avionics cooling
- Scavenge
- Environmental control systems
- Hoist cooling
- Transmission cooling  
(heat exchanger air flow)
- Engine cooling
- Crew vent
- NBC systems
- Electronics cooling
- Air conditioning

### Key features

- Types: vaneaxial, mixed flow, centrifugal
- Drive: AC/DC motor, hydraulic motor, shaft
- Press rise: (2" - 35") water gauge
- Speeds: 3,600 – 24,000 RPM
- Temp: -65°F - +220°F
- Flow: 67 - 15,600 CFM
- Power: 0.2 - 100 HP
- Integral AC/DC motors:  
115/200 VAC, 60 Hz  
28, 270 and 600 VDC

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Item #	Fan Type	Air Flow (cfm)	Pressure Rise (iwg)	Drive Type	Speed (rpm)	Envelope Diameter (in)	Weight (lb)	Density (lb/ft <sup>3</sup> )
1	Mixed Flow	67	8 (Ps)	Electric Motor	20,900	3.9	3.6	0.075
2	Vaneaxial	85	1.5 (Pt)	Electric Motor	3,545	9.1	18.56	0.07
3	Vaneaxial	85	2.5 (Pt)	Electric Motor	3,522	9.85	21.54	0.07
4	Vaneaxial	90 110	4.0 (Pt) 2 (Pt)	Electric Motor	23,500	3	1.9	0.075
5	Centrifugal	100 20	10 (Ps) 0.5-1.5 (Ps)	Electric motor	11,600 4,000	7.75	17	0.075
6	Mixed Flow	109 245 354	40.2(Pt) 31.4 (Pt) 4 (Pt)	Electric Motor	23,575	6.35	10.1	0.075
7	Centrifugal	120 120	16.5 (Ps) 29.7 (Ps)	Electric motor	10,350 12,800	8.5	10.5	0.075
8	Vaneaxial	125 143 152	5.11 (Pt) 3.5 (Pt) 1.5 (Pt)	Electric Motor	23,200	3	2	0.075
9	Vaneaxial	138 170 270	3.2 (Pt) 2.5 (Pt) 11.7 (Pt)	Electric motor	11,600	3.88	4.5	0.0722
10	Centrifugal	138	14 (Ps)	Electric motor	11,500	6.46	7.3	0.0765
11	Centrifugal	150	2 (Pt)	Electric Motor	3,500	N/A	23.74	0.07
12	Vaneaxial	165 190	7.5 (Ps) 4.5 (Ps)	Electric Motor	23,600	3.5	3.3	0.075
13	Vaneaxial	180 215 240	9.75 (Pt) 9.06 (Pt) 5.5 (Pt)	Electric Motor	24,000	3.5	3.8	0.075
14	Vaneaxial	185 204	3 (Pt) 2.3 (Pt)	Electric Motor	11,600	4	4.25	0.075
15	Mixed Flow	189	11.8 (Ps)	Electric motor	23,000	6.1	6	0.0585
16	Mixed Flow	193 220 260	9.3 (Pt) 8.45 (Pt) 5.5 (Pt)	Electric Motor	11,640	5.5	6	0.075
17	Mixed Flow	210	5.1 (Pt)	Electric motor	22,000	4.37	3.6	0.075
18	Vaneaxial	215 240	8.4 (Ps) 5.4 (Ps)	Electric Motor	23,500	3.5	3.8	0.075
19	Vaneaxial	250 180	3.2 (Pt) 4 (Pt)	Electric Motor	11,600	4	3.65	0.075
20	Vaneaxial	275 319 400	7.2 (Pt) 5.7 (Pt) 1.8 (Pt)	Electric motor	11,700	5.5	8.5	0.075
21	Mixed Flow	300 270	2 (Pt) 2.5 (Pt)	Electric Motor	3,445	9.75	23.8	0.068
22	Vaneaxial	338 210 51	6.3 (Pt) 2.44 (Pt) 0.15 (Pt)	Electric motor	17,250 10,650 2,000	6	7.88	0.067
23	Vaneaxial	422	9.1 (Ps)	Electric motor	12,000	6.5	11	0.075
24	Vaneaxial	425	4.25 (Ps)	Electric motor	22,000	4.1	3.82	0.075
25	Vaneaxial	425	6.9 (Ps)	Electric motor	11,400	4.65	4.2	0.0765
26	Vaneaxial	430 320	6.0 (Pt) 9 (Pt)	Electric Motor	11,600	5	5.5	0.075
27	Vaneaxial	448	13 (Ps)	Electric motor	11,600	6.76	11.27	0.0583

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28	Vaneaxial	500 590 740	10.4 (Ps) 9 (Pt) 4 (Pt)	Electric Motor	11,600	5.5	7.7	0.075
29	Mixed Flow	500	5 (Pt)	Electric motor	3,400	15.17	50	0.068
30	Vaneaxial	550	7.2 (Ps)	Electric Motor	11400	5.97	7	0.067
31	Vaneaxial	725 515	8.8 (Pt) 12.6 (Pt)	Electric Motor	11600	5.62	8	0.075
32	Vaneaxial	800	5.16 (Ps)	Hydraulic	5,200	7.9	11	0.0779
33	Vaneaxial	900	9 (Ps)	Electric motor	12,000	7.75	17	0.075
34	Vaneaxial	950 630	3.0 (Pt) 6.3 (Pt)	Electric Motor	11,600	6.5	7.8	0.075
35	Vaneaxial	1000	2.2 (Ps)	Shaft	6,000	7.75	8	0.0714
36	Vaneaxial	1160	9.83 (Pt)	Electric Motor	12,300	6.25	12.75	0.0682
37	Vaneaxial	1200 800	12 (Ps) 18 (Ps)	Electric motor	11,700	10.48	17	0.0765
38	Vaneaxial	1,359	7.4 (Ps)	Electric Motor	11,500	7.1	12	0.067
39	Vaneaxial	2,120	6 (Ps)	Shaft	5,775	10.74	14.5	0.066
40	Centrifugal	2,300	6 (Ps)	Shaft	6,573	N/A	23	0.061
41	Vaneaxial	2,370	12.7 (Pt)	Electric motor	13,000	9.1	25.6	0.0664
42	Vaneaxial	2,413 2,000 2,700	8.4 (Pt) 12 (Pt) 4(Pt)	Electric Motor	11,600	8.5	16.6	0.0765
43	Mixed Flow	2,450	13.8 (Pt)	Shaft	6,912	17.75	19.07	0.0679
44	Mixed Flow	2,562	7.1 (Pt)	Shaft	5,035	9.1	12.5	0.0605
45	Vaneaxial	4,015	24.4 (Pt)	Shaft	10,517	10.46	15.8	0.061
46	Vaneaxial	4,100	8.8 (Ps)	Shaft	9,930	10.22	10.1	0.0581
47	Mixed Flow	4,100	10 (Pt)	Hydraulic Motor	5,200	14.5	43.1	0.068
48	Mixed Flow	5,410	10 (Pt)	Hydraulic Motor	7,300	15.9	56.7	0.07
49	Vaneaxial	5,500	7.7 (Pt)	Electric motor	7,900	12	42.5	0.075
50	Vaneaxial	6,015	24.4 (Pt)	Shaft	9,739	12	16.7	0.061
51	Vaneaxial	10,000	6.9 (Ps)	Hydraulic	3,950	18.9	33.6	0.075
52	Vaneaxial	15,670	17.25 (Ps)	Hydraulic Motor	78,250	21.36	87.37	0.056
53	Vaneaxial	19,500	8 (Pt)	Shaft	3,800	24	135	0.0684

## Pressure Rise

Pt - Total Pressure

Ps - Static Pressure



Meggitt Defense Systems has many years' experience producing high-performance aerospace fans. Our design process considers all aspects of the application before forming an integrated solution resulting in maximum aerodynamic performance for a given volume and weight. Our propulsion-cooling fans have been produced in a wide variety of configurations, ranging from axial to centrifugal flow, with various drives. Fan drive methods include the use of AC induction, brushless DC and hydraulic motors, and direct shaft drive.

Meggitt Defense Systems fans are found on many air platforms, such as the AH-64 Apache, Sikorsky H-60 Blackhawk, C-130 Hercules, C-17 Globemaster, Chinook CH-47 and CH-53 and the V-22 Osprey. We are developing aerospace fans for various Future Combat Systems (FCS) vehicles.

## Contact

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