



## Meggitt Defense Systems

# Military & Aerospace Fans Catalog By Item Number

### 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^3)
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	138 270	3.2 (Pt) 11.7 (Pt)	Electric Motor	11,600 23,000	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	Vanexial	204 185	2.3 (Pt) 3 (Pt)	Electric Motor	11,600	4.4	5.25	0.075
18	Mixed Flow	210	5.1 (Pt)	Electric Motor	23,500	4.37	3.6	0.075
19	Vaneaxial	215 240	8.4 (Ps) 5.4 (Ps)	Electric Motor	23,500	3.5	3.8	0.075
20	Mixed Flow	245	26.2 (Pt)	Electric Motor	21,300	6	24.2	0.071
21	Vaneaxial	250 180	3.2 (Pt) 4 (Pt)	Electric Motor	11,600	4	3.65	0.075
22	Vaneaxial	275 319 400	7.2 (Pt) 5.7 (Pt) 1.8 (Pt)	Electric Motor	11,700	5.5	8.5	0.075
23	Mixed Flow	300 270	2 (Pt) 2.5 (Pt)	Electric Motor	3,445	9.75	23.8	0.068
24	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
25	Vaneaxial	422	9.1 (Ps)	Electric Motor	12,000	6.5	11	0.075
26	Vaneaxial	425	4.25 (Ps)	Electric Motor	22,000	4.1	3.82	0.075
27	Vaneaxial	425	6.9 (Ps)	Electric Motor	11,400	4.65	4.2	0.0765
28	Vaneaxial	430 320	6.0 (Pt) 9 (Pt)	Electric Motor	11,600	5	5.5	0.075
29	Vaneaxial	448	13 (Ps)	Electric Motor	11,600	6.76	11.27	0.0583

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30	Vaneaxial	500 590 740	10.4 (Ps) 9 (Pt) 4 (Pt)	Electric Motor	11,600	5.5	7.7	0.075
31	Mixed Flow	500	5 (Pt)	Electric Motor	3,400	15.17	50	0.068
32	Vaneaxial	550	7.2 (Ps)	Electric Motor	11,400	5.97	7	0.067
33	Mixed Flow	600 185	18.9 (Ps) 3 (Pt)	Electric Motor	16,288	7	19	0.062
34	Vaneaxial	725 515	8.8 (Pt) 12.6 (Pt)	Electric Motor	11,600	5.62	8	0.075
35	Vaneaxial	800	5.16 (Ps)	Hydraulic	5,200	7.9	11	0.0779
36	Vaneaxial	900	9 (Ps)	Electric Motor	12,000	7.75	17	0.075
37	Vaneaxial	950 630	3.0 (Pt) 6.3 (Pt)	Electric Motor	11,600	6.5	7.8	0.075
38	Vaneaxial	1,000	2.2 (Ps)	Shaft	6,000	7.75	8	0.0714
39	Vaneaxial	1,160	9.83 (Pt)	Electric Motor	12,300	6.25	12.75	0.0682
40	Vaneaxial	1,200 800	12 (Ps) 18 (Ps)	Electric Motor	11,700	10.48	17	0.0765
41	Vaneaxial	1,359	7.4 (Ps)	Electric Motor	11,500	7.1	12	0.067
42	Vanexial	1860	5.6 (Ps)	Electric Motor	11,600	8.75	16	0.0582
43	Vanexial	1953	2.3 (Ps)	Electric Motor	5,550	11.4	19.5	0.064
44	Vaneaxial	2,120	6 (Ps)	Shaft	5,775	10.74	14.5	0.066
45	Centrifugal	2,300	6 (Ps)	Shaft	6,573	N/A	23	0.061
46	Vaneaxial	2,370	12.7 (Pt)	Electric Motor	13,000	9.1	25.6	0.0664
47	Vaneaxial	2,413 2,000 2,700	8.4 (Pt) 12 (Pt) 4(Pt)	Electric Motor	11,600	8.5	16.6	0.0765
48	Mixed Flow	2,450	13.8 (Pt)	Shaft	6,912	17.75	19.07	0.0679
49	Mixed Flow	2,562	7.1 (Pt)	Shaft	5,035	9.1	12.5	0.0605
50	Vaneaxial	4,015	24.4 (Pt)	Shaft	10,517	10.46	15.8	0.061
51	Vaneaxial	4,100	8.8 (Ps)	Shaft	9,930	10.22	10.1	0.0581
52	Mixed Flow	4,100	10 (Pt)	Hydraulic Motor	5,200	14.5	43.1	0.068
53	Mixed Flow	5,410	10 (Pt)	Hydraulic Motor	7,300	15.9	56.7	0.07
54	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	7,825	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, custom design or off the shelf. 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.

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