

Aerospace Fans - by Air Flow

MEGGITT



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.

Designed for minimum weight, high performance and maximum efficiency

- Types: Vaneaxial, mixed flow, centrifugal
- Temp: -65°F - +220°F
- Speeds: 3,600 – 24,000 RPM
- Flow: 50 - 23,000 CFM
- Press rise: (2" - 35") water gauge
- Drive: AC/DC motor, hydraulic motor, gearbox
- Power: 0.2 - 100 HP
- Integral AC/DC motors:
115/200 VAC, 60 Hz
28, 270 and 600 VDC

Airborne Applications

Avionics cooling
Scavenge
ECS systems
Hoist cooling
Transmission cooling (heat exchanger air flow)

Ground Applications

Engine cooling
Transmission cooling
Crew vent
NBC systems
Electronic cooling
Air conditioning

Aerospace Fans - by Air Flow



Item #	Name	Air Flow (cfm) P1	Pressure Rise (iwg) I1	Fan Type	Drive Type	Speed (rpm)	Envelope Diameter (inch)	Weight (lb)	Input Power (V)	Voltage Type	Flow (cfm) P2	Pressure Rise (iwg) I2	Flow	Pressure Rise (iwg) I3	Density (lb/ft^3)
1	FAN,MIXED FLOW W/CONTRLR	67	8 (Ps)	MIXED FLOW	ELECTRIC MOTOR	20900	3.9	3.6	28	DC					0.075
2	FAN,MIXED FLOW W/CONTRLR	67	8 (Ps)	MIXED FLOW	ELECTRIC MOTOR	20900	3.9	3.6	28	DC					0.075
3	FAN ASSEMBLY	85	1.5 (Pt)	AXIAL	ELECTRIC MOTOR	3545	7.5	18.56	450	AC					14.7 (PSIA)
4	FAN ASSEMBLY	85	2.5 (Pt)	AXIAL	ELECTRIC MOTOR	3522	6	21.54	450	AC					14.7 (PSIA)
5	FAN,V-AXIAL,CV-22,CV COOL	90	4.0 (Pt)	AXIAL	ELECTRIC MOTOR	23600	3	1.9	200	AC	110	2 (Pt)			0.075
6	MIXED FLOW FAN ASSEMBLY	109	35 (Pt)	MIXED FLOW	ELECTRIC MOTOR	23500	6.41	10.1	200	AC	245	31.4 (Pt)	354	4 (Pt)	0.075
7	FAN ASSEMBLY, VANEAXIAL	125	7.5 (Pt)	AXIAL	ELECTRIC MOTOR	23300	2.99	2	200	AC	143	3.5 (Pt)	152	1.5 (Pt)	0.075
8	CENTRIFUGAL FAN	150	2 (Pt)	CENTRIFUGAL	ELECTRIC MOTOR	3500	N/A	18.45	450	AC					14.7 (PSIA)
9	FAN ASSEMBLY	165	7.5 (Ps)	AXIAL	ELECTRIC MOTOR	23600	3.5	3.3	200	AC	190	4.5 (Ps)			0.075
10	FAN, VANEAXIAL SIRFC LRU 2B/3	180	9.75 (Pt)	AXIAL	ELECTRIC MOTOR	24000	3.5	3.8	115	AC	215	9.06 (Pt)	240	5.5 (Pt)	0.075
11	FAN, VANEAXIAL, CV-22	185	3 (Pt)	AXIAL	ELECTRIC MOTOR	11600	4	4.25	200	AC	204	2.3 (Pt)			0.075
12	FAN ASSEMBLY, MIXED FLOW	193	9.3 (Pt)	MIXED FLOW	ELECTRIC MOTOR	11640	5.5	6	118	AC	220	8.45 (Pt)	260	5.5 (Pt)	0.075
13	MIXED FLOW FAN ASSEMBLY	215	8.4 (Ps)	AXIAL	ELECTRIC MOTOR	23500	3.5	3.8	200	AC	240	5.4 (Ps)			0.075
14	ASSEMBLY, RH AVIONICS, V-22	250	3.2 (Pt)	AXIAL	ELECTRIC MOTOR	11600	4	3.65	200	AC	180	4 (Pt)			0.075
15	MIXED FLOW FAN	300	2 (Pt)	MIXED FLOW	ELECTRIC MOTOR	3326	9.75	23.8	450	AC	270	2.5 (Pt)			14.7 (PSIA)
16	FAN,V-AXIAL,CV-22,ECS VEN	430	6.0 (Pt)	AXIAL	ELECTRIC MOTOR	11600	5	5.5	200	AC	320	9 (Pt)			0.075
17	RECIRCULATION/VENTILATION FAN	500	9 (Ps)	AXIAL	ELECTRIC MOTOR	11600	5.5	7.7	200	AC	590	9 (Pt)	740	4 (Pt)	0.075
18	FAN, VANEAXIAL	550	7.2 (Ps)	AXIAL	ELECTRIC MOTOR	11400	5.97	7	200	AC					0.075
19	FAN,V-AXIAL,CV-22,AVIONIC	725	8.8 (Pt)	AXIAL	ELECTRIC MOTOR	11600	5.62	8	200	AC	515	12.6 (Pt)			0.075
20	FAN,V-AXIAL,CV-22,LH AVIO	950	3.0 (Pt)	AXIAL	ELECTRIC MOTOR	11600	6.5	7.8	200	AC	630	6.3 (Pt)			0.075
21	FAN ASSEMBLY	1000	2.2 (Ps)	AXIAL	SHAFT	6000	7.75	8	SHAFT DRIVE	N/A					0.0714
22	VANEAXIAL FAN ASSEMBLY	1160	9.83 (Pt)	AXIAL	ELECTRIC MOTOR	11600	6.25	13.7	270	DC					0.075
23	VANEAXIAL FAN ASSEMBLY	1160	9.83 (Pt)	AXIAL	ELECTRIC MOTOR	12,300	6.25	12.75	270	DC					0.0682
24	FAN, VANEAXIAL	1359	7.4 (Ps)	AXIAL	ELECTRIC MOTOR	11600	7.1	N/A	200	AC					0.075
25	FAN, VANEAXIAL	1359	7.4 (Ps)	AXIAL	ELECTRIC MOTOR	11600	7.1	N/A	200	AC					0.075
26	FAN ASSEMBLY	2120	6 (Ps)	AXIAL	SHAFT	5775	10.74	14.5	SHAFT DRIVE	N/A					0.066
27	FAN ASSEMBLY, CENTRIFUGAL	2300	6 (Ps)	CENTRIFUGAL	SHAFT	6573	N/A	23	SHAFT DRIVE	N/A					0.061
28	FAN-EXHAUST AIR.ACS	2413	8.4 (Pt)	AXIAL	ELECTRIC MOTOR	11600	8.5	16.6	200	AC	2000	12 (Pt)	2700	4 (Pt)	0.0765
29	BLOWER ASSEMBLY	2562	7.1 (Pt)	MIXED FLOW	SHAFT	5035	9.1	12.5	SHAFT DRIVE	N/A					0.0605
30	COOLING FAN ASSEMBLY	4100	10 (Pt)	MIXED FLOW	HYDRAULIC MOTOR	5400	14.5	43.1	N/A	N/A					
31	OIL COOLER BLOWER	4100	8.8 (Ps)	AXIAL	SHAFT	9930	10.22	10.1	SHAFT DRIVE	N/A					0.0581
32	SCAVENGE FAN ASSEMBLY	5410	10 (Pt)	MIXED FLOW	HYDRAULIC MOTOR	7300	15.9	56.7	N/A	N/A					
33	COOLING FAN, VANEAXIAL	15,670	17.25 (Ps)	AXIAL	HYDRAULIC MOTOR	7800	21.36	87.37	N/A	N/A					0.0577