

Hison Axial Flow Fans

Introduction

Hison Marine Axial Flow Fans, formerly know as Howden Fans are manufactured to international Quality Standard. Axial flow fans are available from sizes 305mm to 1800mm diameter, and incorporated with heavy duty marine grade impellers with aerofoil blades for better efficiencies and lower sound level.

Performance

Ranges from 100m³/hr to 250000m³/hr and static pressure up to 125mmwg

Construction

Fans for marine industries and offshore project are ruggedly constructed to withstand stringent and hostile environment.

Explosion proof motors and spark Resistance Construction Fans are available on requirement. Spark Resistant Construction Fans are built in accordance to AMCA standard 99-0401-86, Type B Constructions.

Anti-Spark Ring on standard fans is available on request.

Testing

Performance of fans are tested in accordance to AMCA Publication 211 and comply with the requirement of the AMCA Certified Ratings Program.

Sound ratings shown are based on tests and procedures in accordance with AMCA Standard 300 and 301

Direction of Airflow

Versatility of airflow direction of form 'B' or form 'A'

Typical Applications

- Air Conditioning
- Building Ventilation
- Marine Industries
- Offshore Projects
- Oven Exhaust
- Spray Booth Exhaust
- Cooling
- Kitchen Exhaust, etc....

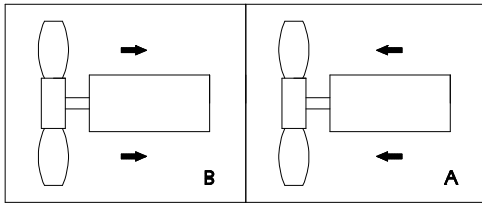


Airtrade System certifies that the Hison Axial Flow Fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

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Direction of Airflow

Versatility of airflow direction of form 'B' or form 'A'



Surface Coating

- Hot Dipped Galvanized to EN ISO 461:1999 which also comply to ASTM A123, A153 and BS 729.
- Blasted to SA 2-1/2 and coated with Hi-Built epoxy paint for marine environment and most industries applications.
- Special painting to user specification is available upon request.

Impeller

Adjustable Blades angles design to meet varied volume and pressure system requirements featuring the blade shank with tapered conical section. The tapered section fits into a conical slot in the hub, providing a taper lock fit. A bolt is cast into the blade, projecting into the hub and is secured on the inside by lock-washer and nut.



Balancing Standard

All fan impellers are statically and dynamically balanced to ISO 1940-1973 (E) G: 6.3 standards.

Motors

All Fans shall be supplied with totally enclosed, high efficiency motors of IP 55 degree of protection, foot-mounted Class F insulation, built to International Standard (IEC)

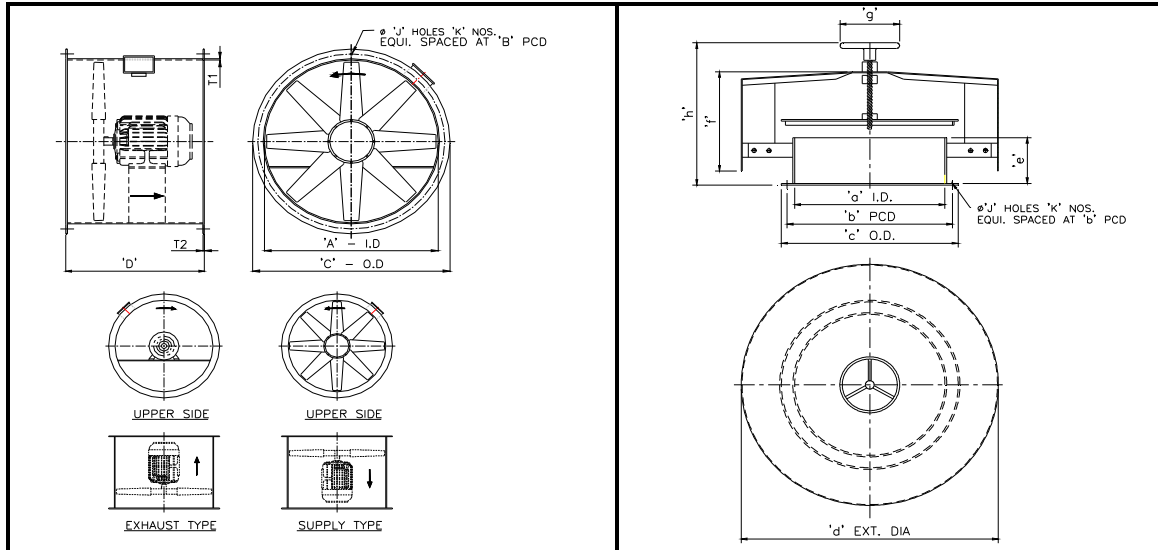
Special motors such as Explosion Proof, 2 speeds, Class H or D.C. motors are available to suit each specific application.

Accessories

- Separate upstream and downstream guide vanes
- Inlet/Outlet Silencers
- Mounting Feet
- Inlet Cones
- Matching Flange
- Mushroom Ventilators
- Control Damper
- Wire Guards
- Anti-Vibration Mountings

* Fan silencers are recommended for sound level exceeding 80dBA at 3m distance.

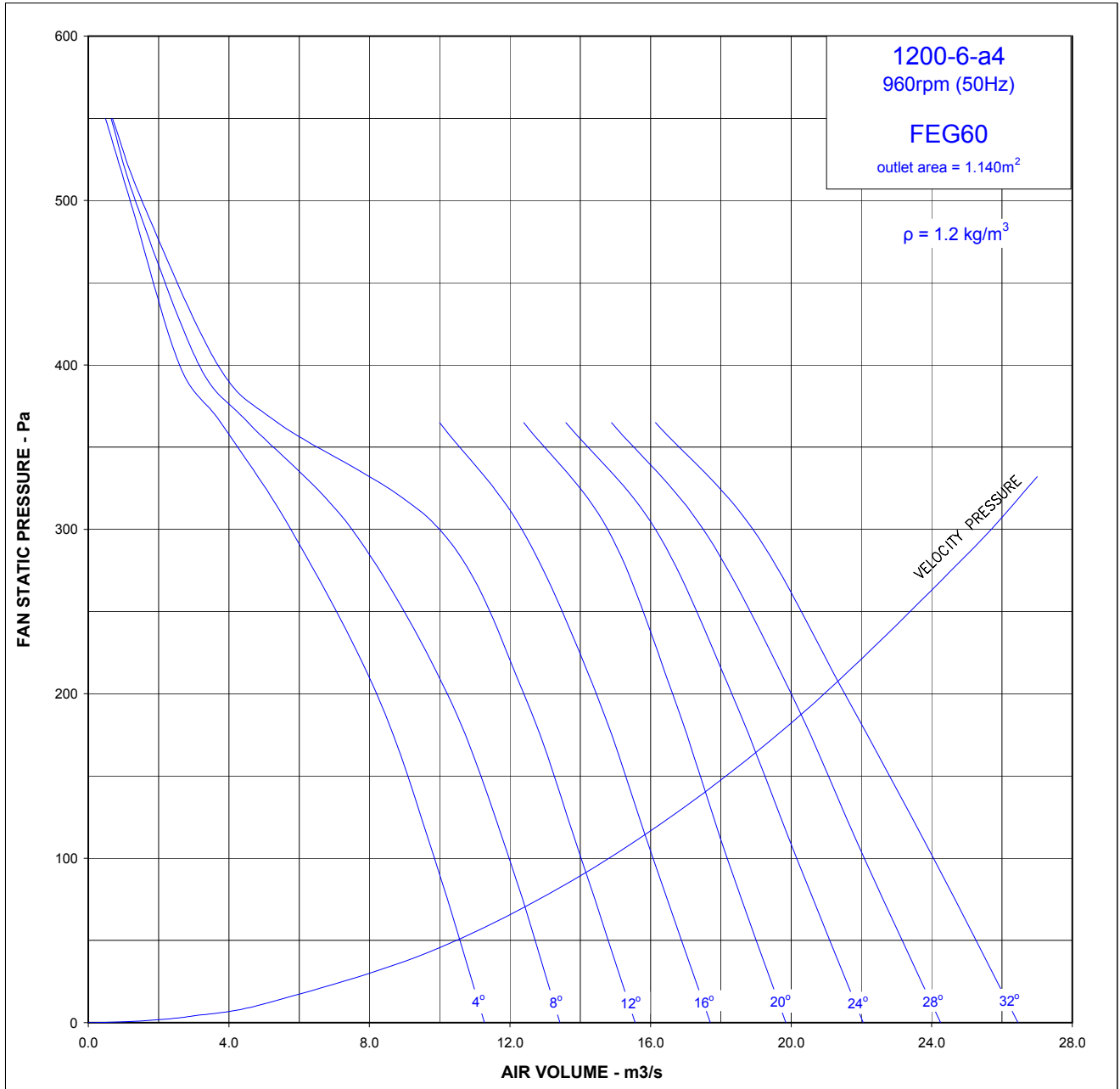
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FAN DIMENSIONS						FLANGE DETAIL		COWLING DIMENSIONS								
FAN MODEL	THICKNESS		A	B	C	D (MAX)	J' MAX	K' NOS	a	b	c	d	e	f	g	h
	T1	T2														
200	3	6	205	248	286	305	12	6	205	248	286	405	115	200	150	325
	6			254	292					254	292					
250	3	6	254	298	336	305	12	6	254	298	336	455	115	200	150	325
	6			305	343					305	343					
300	3	6	305	350	388	356	12	8	305	350	388	560	115	200	150	325
	6			356	394					356	394					
350	3	6	355	400	438	415	12	8	355	400	438	660	115	254	200	380
	6			406	444					406	444					
400	3	6	405	450	488	500	12	8	405	450	488	710	140	305	200	455
	6			456	494					456	494					
450	3	6	455	500	538	600	14	8	455	500	538	812	140	356	200	500
	6			506	544					506	544					
500	3	6	505	550	588	750	14	8	505	550	588	864	150	356	200	510
	6			556	594					556	594					
550	3	6	555	600	638	800	14	8	555	600	638	915	150	356	250	535
	6			606	644					606	644					
600	3	6	605	662	712	850	14	12	605	662	712	965	150	356	250	535
	6			668	718					668	718					
650	3	6	655	712	762	850	14	12	655	712	762	1016	150	356	250	535
	6			718	768					718	768					
700	3	6	705	762	812	850	14	12	705	762	812	1118	150	400	250	580
	6			768	818					768	818					
750	3	6	755	812	862	850	14	12	755	812	862	1220	150	455	250	635
	6			818	868					818	868					
800	3	6	805	862	912	850	14	12	805	862	912	1220	150	455	250	635
	6			868	918					868	918					
900	4.5	6	905	977	1040	915	18	16	905	977	1040	1524	200	560	560	760
	6			980	1043					980	1043					
	9			987	1050					987	1050					
1000	4.5	6	1005	1077	1140	1065	18	16	1005	1077	1140	1625	200	560	560	760
	6			1080	1143					1080	1143					
	9			1087	1150					1087	1150					
1200	4.5	6	1205	1290	1366	1220	18	20	1205	1290	1366	2032	250	610	560	865
	6			1293	1369					1293	1369					
	9			1300	1376					1300	1376					
1250	4.5	6	1255	1340	1416	1220	18	20	1255	1340	1416	2135	250	610	560	865
	6			1343	1419					1343	1419					
	9			1350	1426					1350	1426					
1400	6	9	1405	1493	1569	1350	20	20	1405	1493	1569	2500	300	915	762	1185
	9			1500	1576					1500	1576					
1500	6	9	1505	1593	1669	1400	20	20	1505	1593	1669	2600	300	950	762	1220
	9			1600	1676					1600	1676					
1600	6	9	1605	1693	1769	1500	20	20	1605	1693	1769	2800	300	1000	762	1270
	9			1700	1776					1700	1776					
1800	6	9	1805	1893	1969	1600	20	20	1805	1893	1969	3000	350	1200	762	1470
	9			1900	1976					1900	1976					

Note:

- 1) The dimensions quoted in this publication are generally correct, but should be checked at the time of ordering. Hison reserves the right to change design and specifications without notice.
- 2) All dimensions in mm.
- 3) Inspection doors are standard for 800mm dia fan and above.
- 4) Certified dimensions and weights can be furnished after receipt of order.

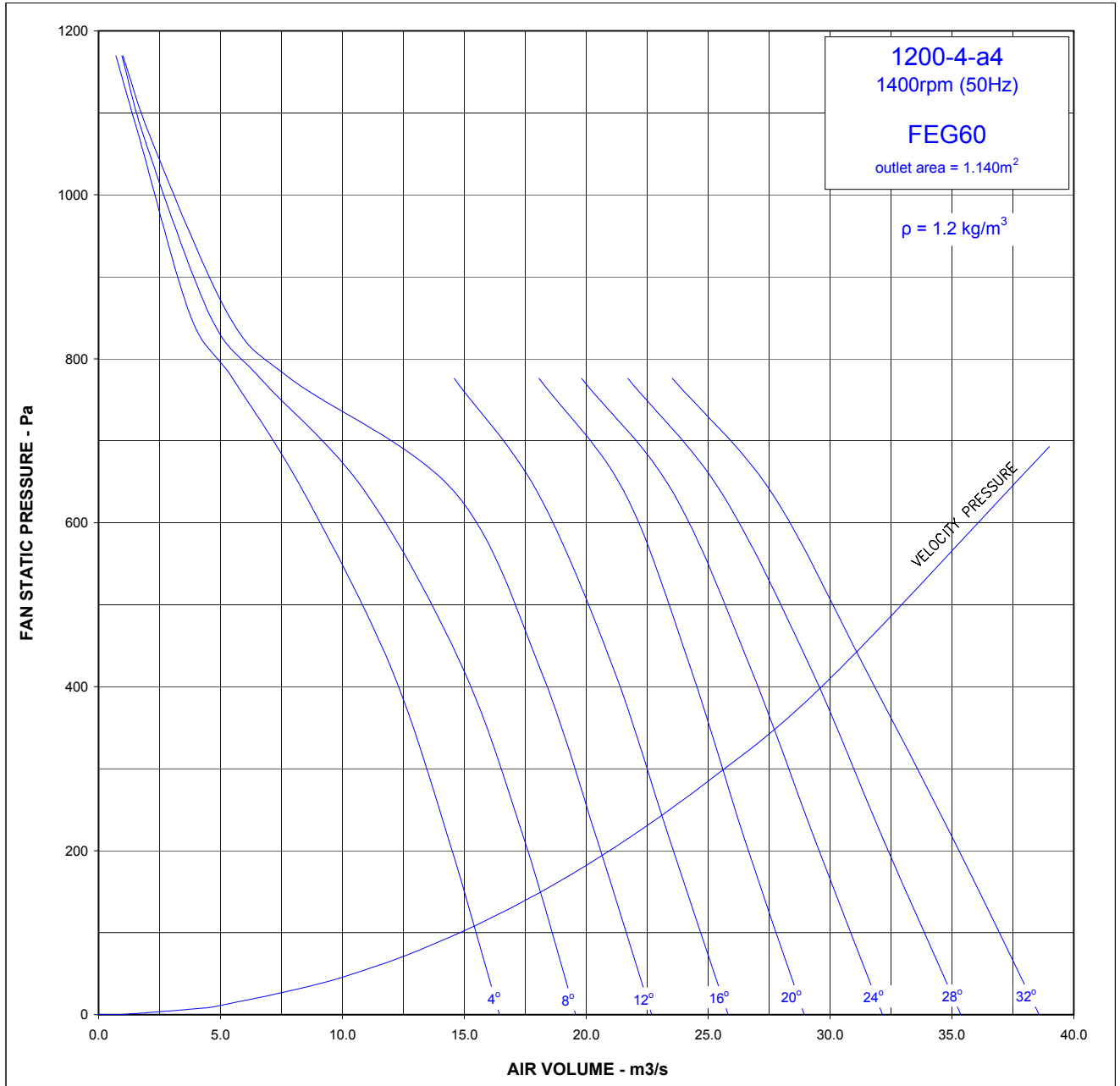


PITCH ANGLE	PERFORMANCE m ³ /s @ STATIC Pa								Max kW	TOTAL EFF. (%)	SOUND POWER DATA (dB)									
	0	100	200	300	365	400	500	550			63Hz	125Hz	250Hz	500Hz	1.0KHz	2.0KHz	4.0KHz	8.0KHz	Overall Sound Power Level (Lw)	Sound Pressure Level @3m Q1 Directivity (dBA)
4°	11.27	9.85	8.21	5.76	3.77	2.60	1.19	0.49	4.04	52	91	96	101	97	93	88	77	75	104	78
8°	13.42	11.97	10.22	7.50	4.55	3.15	1.34	0.65	5.55	49	91	96	100	97	93	88	78	77	103	78
12°	15.56	14.03	12.39	10.00	5.39	3.69	1.52	0.69	7.06	50	91	96	99	97	93	88	80	78	103	77
16°	17.70	16.07	14.46	12.34	10.00	-	-	-	8.57	54	91	95	97	96	93	88	81	80	102	77
20°	19.85	18.18	16.63	14.78	12.39	-	-	-	10.07	58	91	95	96	96	93	88	82	81	102	77
24°	22.05	20.156	18.32	16.14	13.59	-	-	-	12.38	54	94	96	97	97	94	88	82	81	103	78
28°	24.25	22.08	20.00	17.50	14.89	-	-	-	14.72	52	96	97	99	99	94	88	82	82	104	79
32°	26.45	24.05	21.52	18.91	16.14	-	-	-	17.22	53	99	98	100	100	95	88	82	82	106	80



Airtrade System certifies that the model 1200-X-a4 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

*Performance certified is for installation type D - Ducted inlet, Ducted outlet
 *Performance ratings do not include the effects of appurtenances (accessories)
 *The AMCA Certified Ratings Seal applies to air performance and the Fan Efficiency Grade ratings only.
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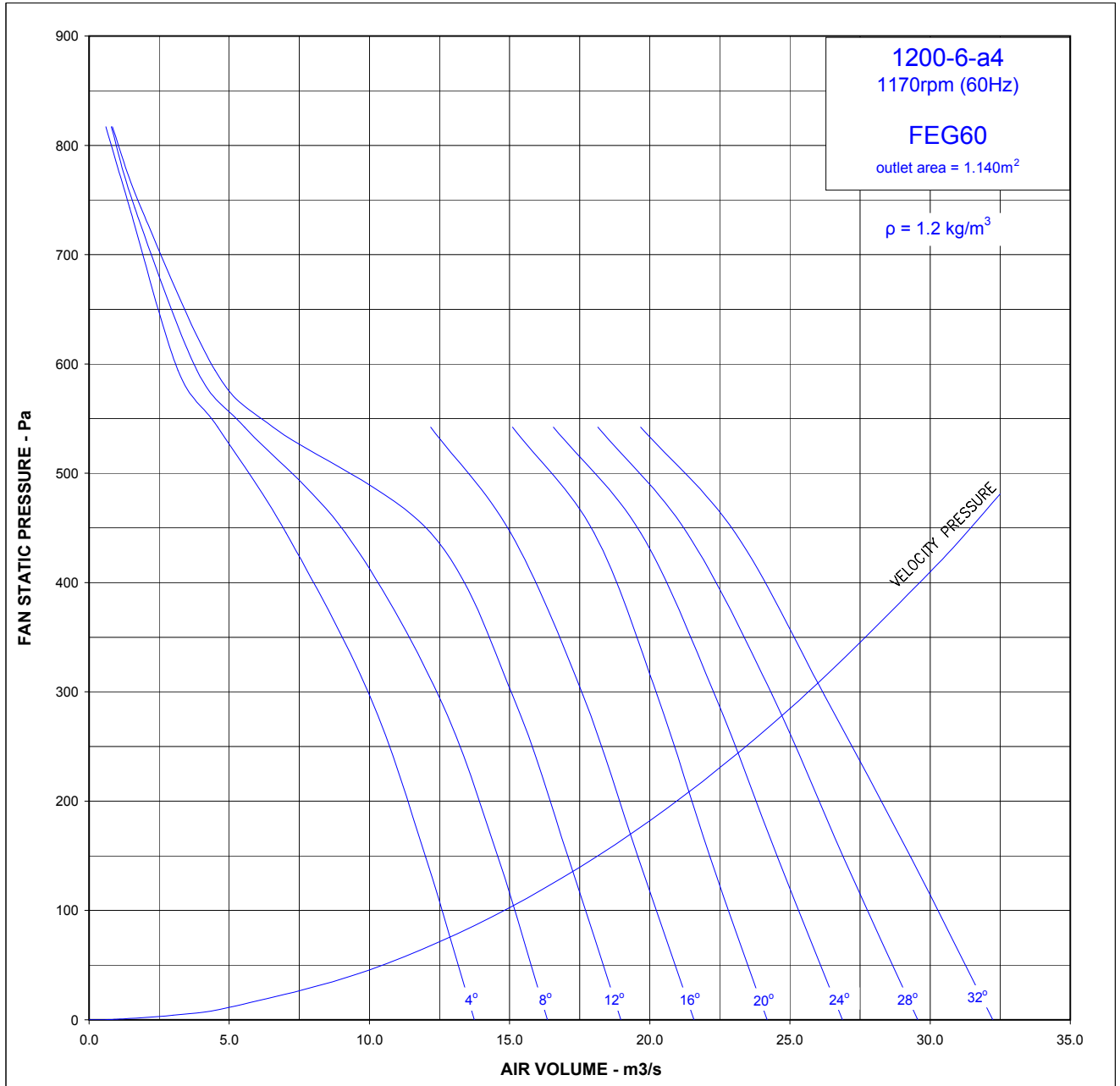


PITCH ANGLE	PERFORMANCE m3/s @ STATIC Pa								Max kW	TOTAL EFF. (%)	SOUND POWER DATA (dB)									
	0	213	425	638	776	851	1063	1170			63Hz	125Hz	250Hz	500Hz	1.0KHz	2.0KHz	4.0KHz	8.0KHz	Overall Sound Power Level (Lw)	Sound Pressure Level @3m Q1 Directivity (dBA)
4°	16.44	14.37	11.97	8.40	5.50	3.79	1.73	0.71	12.54	52	98	101	108	107	103	99	91	84	112	88
8°	19.57	17.46	14.90	10.94	6.63	4.60	1.95	0.95	17.21	49	98	101	106	107	103	99	92	86	111	87
12°	22.69	20.45	18.07	14.58	7.85	5.38	2.22	1.00	21.89	50	98	101	105	106	103	99	92	87	111	87
16°	25.82	23.43	21.08	17.99	14.58	-	-	-	26.57	54	98	101	104	105	103	99	93	88	110	87
20°	28.94	26.51	24.25	21.56	18.07	-	-	-	31.25	58	98	101	103	104	103	99	93	90	110	86
24°	32.15	29.39	26.71	23.54	19.81	-	-	-	38.40	54	100	103	104	106	104	99	93	90	111	87
28°	35.37	32.20	29.17	25.52	21.72	-	-	-	45.67	52	103	105	105	107	105	100	93	90	112	88
32°	38.58	35.08	31.39	27.58	23.54	-	-	-	53.40	53	106	107	107	108	106	100	93	90	114	89



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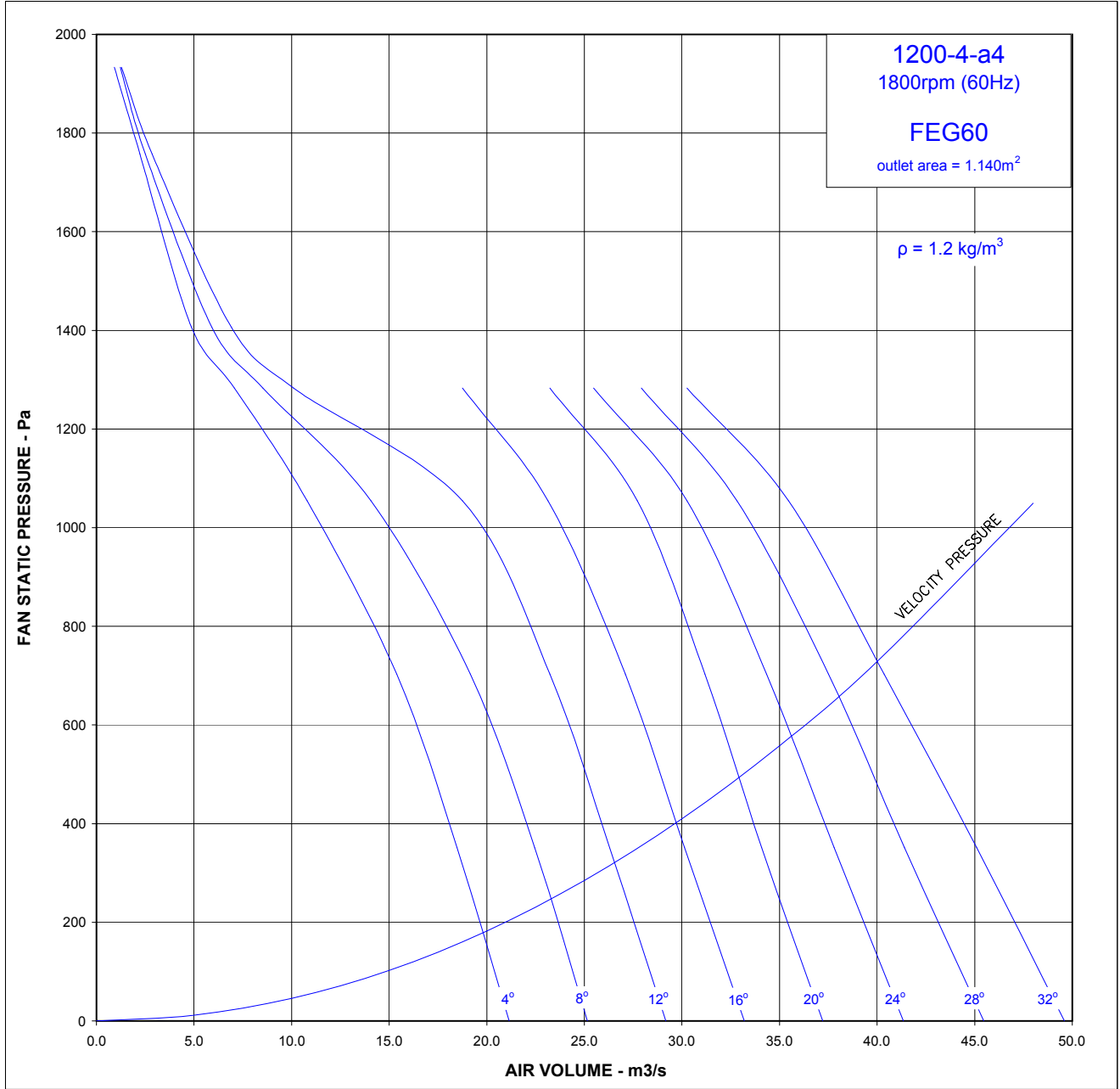


PITCH ANGLE	PERFORMANCE m³/s @ STATIC Pa								Max kW	TOTAL EFF. (%)	SOUND POWER DATA (dB)								Overall Sound Power Level (Lw)	Sound Pressure Level @3m Q1 Directivity (dBA)
	0	149	297	446	542	594	743	817			63Hz	125Hz	250Hz	500Hz	1.0KHz	2.0KHz	4.0KHz	8.0KHz		
4°	13.74	12.01	10.00	7.02	4.59	3.17	1.45	0.60	7.32	52	95	100	104	102	98	93	85	79	108	83
8°	16.35	14.59	12.45	9.14	5.54	3.84	1.63	0.79	10.05	49	95	99	102	102	98	93	86	80	107	83
12°	18.97	17.09	15.10	12.19	6.56	4.49	1.85	0.83	12.78	50	95	99	101	101	98	93	87	82	107	82
16°	21.58	19.58	17.62	15.04	12.19	-	-	-	15.51	54	95	98	100	101	98	93	88	83	106	82
20°	24.19	22.15	20.27	18.02	15.10	-	-	-	18.24	58	95	97	99	100	98	94	89	85	106	82
24°	26.87	24.57	22.32	19.67	16.56	-	-	-	22.41	54	97	99	100	101	99	94	89	85	107	83
28°	29.56	26.91	24.38	21.33	18.15	-	-	-	26.66	52	99	101	102	102	100	94	89	85	108	83
32°	32.24	29.32	26.23	23.05	19.67	-	-	-	31.17	53	102	102	103	104	100	94	89	85	110	84



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PITCH ANGLE	PERFORMANCE m3/s @ STATIC Pa								Max kW	TOTAL EFF. (%)	SOUND POWER DATA (dB)									
	0	352	703	1055	1283	1406	1758	1934			63Hz	125Hz	250Hz	500Hz	1.0KHz	2.0KHz	4.0KHz	8.0KHz	Overall Sound Power Level (Lw)	Sound Pressure Level @3m Q1 Directivity (dBA)
4°	21.14	18.47	15.39	10.80	7.07	4.87	2.23	0.92	26.64	52	102	105	112	113	110	106	99	92	117	94
8°	25.16	22.45	19.16	14.06	8.53	5.91	2.51	1.22	36.59	49	102	105	111	112	110	106	100	93	117	94
12°	29.18	26.30	23.23	18.75	10.10	6.92	2.85	1.28	46.53	50	102	105	109	111	109	106	100	94	116	93
16°	33.20	30.13	27.11	23.13	18.75	-	-	-	56.47	54	102	105	108	110	109	106	101	95	115	93
20°	37.21	34.08	31.18	27.72	23.23	-	-	-	66.41	58	102	105	107	109	109	106	101	97	115	92
24°	41.34	37.79	34.34	30.26	25.48	-	-	-	81.61	54	105	107	108	110	110	106	101	97	116	93
28°	45.47	41.40	37.50	32.81	27.92	-	-	-	97.06	52	107	110	110	112	111	107	101	97	118	94
32°	49.60	45.10	40.35	35.46	30.26	-	-	-	113.49	53	110	112	111	113	112	108	101	97	119	95



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