A06 · CAR PARK & SMOKE EXTRACT FANS

AS-AXF F400

Industrial Axial Smoke Exhaust Fans – F400



AS-AXF F400 axial smoke exhaust fans are built for the higher temperature class and withstand 400 °C for two hours. In combination with jet fans, they evacuate smoke from car parks during a fire.

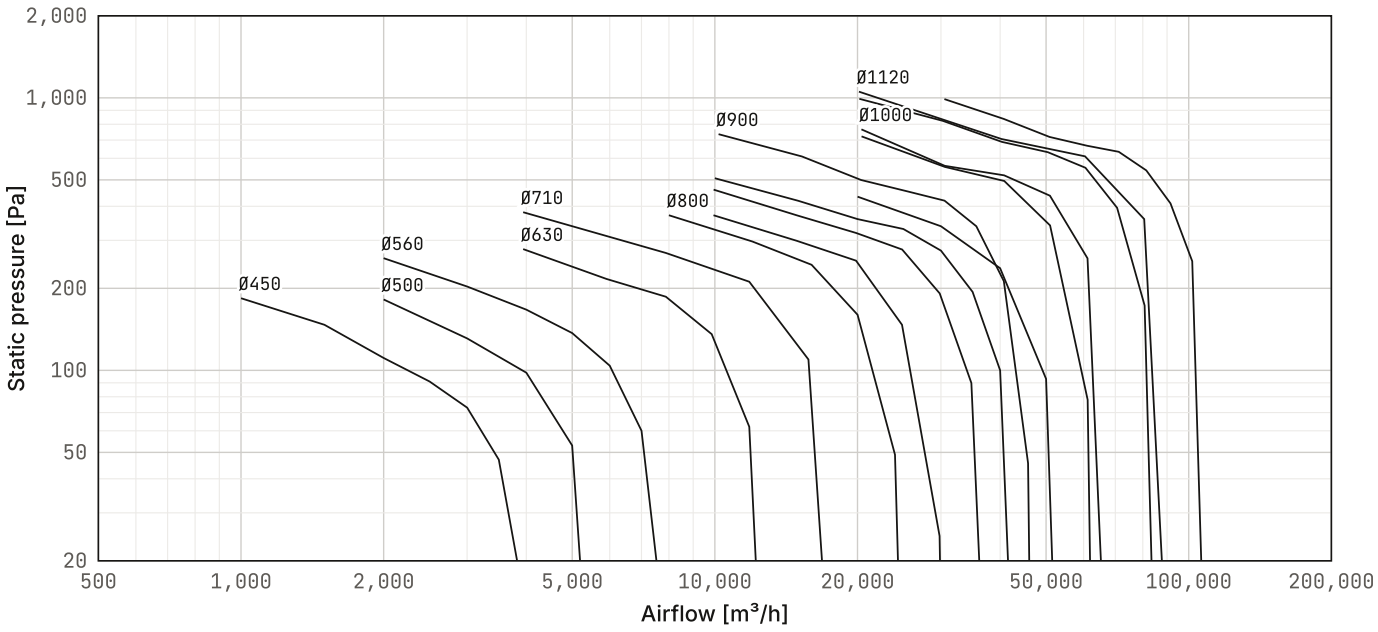
The galvanized sheet steel casing has round connections and can be installed in-line in a duct, on a wall or on a roof. Air discharge can be horizontal or vertical. The aluminium impellers have 5, 8 or 12 blades, are balanced to ISO 1940-1 and cover sizes from Ø450 to Ø1,120 mm.

Direct drive is provided by 4-pole WAT motors with TEAO cooling, IP55 protection and class F insulation. As standard, an IE3 motor rated for F400 smoke duty (400 °C, 2 h) is fitted, suitable for S1 and S2 duty. Versions for 400 V 3~ 50 Hz and 60 Hz supplies are available. Operating air temperature: −20 °C to +400 °C. Standards: IEC 60335-2-80, ISO 1940-1.

AIRFLOW UP TO	STATIC PRESSURE UP TO	IMPELLER Ø	MOTOR POWER
111,881* m³/h	1,363* Pa	450 – 1,120 mm	0.55 – 45 kW
SPEED	**SUPPLY**	**TEMPERATURE CLASS**	**MOTOR**
1,443 – 1,486 min⁻¹	400 V 3~ · 50 Hz	400°C/2h	IE3 F400 standard · IP55 · F

Selection chart

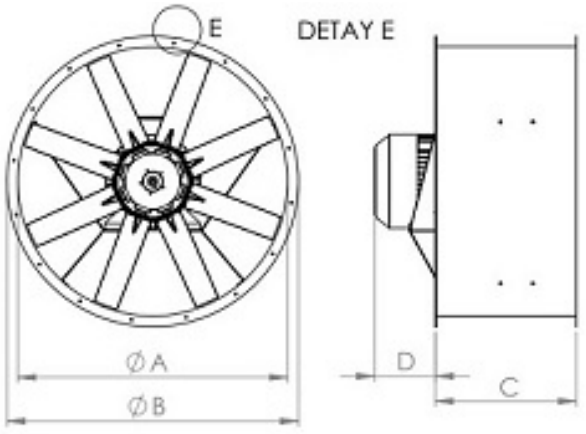
50 Hz · Static pressure at 1.204 kg/m³ with the standard motor. *



Technical data 50 Hz

Model	Ø [mm]	Motor [kW]	Speed [min⁻¹]	Supply	I [A]	Max. airflow [m³/h]	Max. pressure [Pa]	LpA 1 m [dB(A)]
AS-AXF F400 450-5-25 IE3 F400	450	0.55	1,452	400 V 3~	1.4	4,180	253	69
AS-AXF F400 500-5-25 IE3 F400	500	0.55	1,452	400 V 3~	1.4	5,845	305	72
AS-AXF F400 560-5-25 IE3 F400	560	0.75	1,460	400 V 3~	1.9	8,150	358	75
AS-AXF F400 630-5-30 IE3 F400	630	1.1	1,443	400 V 3~	2.6	13,278*	439*	80
AS-AXF F400 710-5-30 IE3 F400	710	1.5	1,450	400 V 3~	3.4	18,924*	507*	83
AS-AXF F400 800-5-30 IE3 F400	800	2.2	1,458	400 V 3~	5.3	25,560	577	85
AS-AXF F400 800-5-35 IE3 F400	800	3.0	1,453	400 V 3~	6.5	30,730*	625*	89
AS-AXF F400 900-5-35 IE3 F400	900	4.0	1,462	400 V 3~	8.5	39,011*	656*	90
AS-AXF F400 900-5-40 IE3 F400	900	5.5	1,475	400 V 3~	11.3	44,635	694	93
AS-AXF F400 900-8-40 IE3 F400	900	15.0	1,480	400 V 3~	30.6	47,027*	982*	94
AS-AXF F400 1000-5-40 IE3 F400	1,000	7.5	1,474	400 V 3~	15.4	54,570	691	94
AS-AXF F400 1000-8-40 IE3 F400	1,000	18.5	1,485	400 V 3~	36.0	63,489*	1,121*	97
AS-AXF F400 1000-8-45 IE3 F400	1,000	22.0	1,486	400 V 3~	43.5	70,396*	1,159*	99
AS-AXF F400 1120-8-40 IE3 F400	1,120	30.0	1,484	400 V 3~	60.6	87,382*	1,323*	100
AS-AXF F400 1120-8-45 IE3 F400	1,120	30.0	1,484	400 V 3~	60.6	95,918*	1,363*	102
AS-AXF F400 1120-12-50 IE3 F400	1,120	45.0	1,485	400 V 3~	81.4	111,881*	1,324*	110

Dimensions [mm]



Model	A	B	C	D	E
AS-AXF F400 450-5-25	450	530	320	50	11
AS-AXF F400 500-5-25	500	580	320	70	11
AS-AXF F400 560-5-25	560	640	320	60	11
AS-AXF F400 630-5-30	630	710	420	45	11
AS-AXF F400 710-5-30	710	790	420	25	11
AS-AXF F400 800-5-30	800	880	420	50	11
AS-AXF F400 800-5-35	800	880	420	50	11
AS-AXF F400 900-5-35	900	980	520	0	11
AS-AXF F400 900-5-40	900	980	520	35	11
AS-AXF F400 900-8-40	900	980	520	75	11
AS-AXF F400 1000-5-40	1,000	1,080	520	150	11
AS-AXF F400 1000-8-40	1,000	1,080	520	180	11

Dimensions [mm]

Model	A	B	C	D	E
AS-AXF F400 1000-8-45	1,000	1,080	520	250	11
AS-AXF F400 1120-8-40	1,120	1,200	520	250	11
AS-AXF F400 1120-8-45	1,120	1,200	520	300	11
AS-AXF F400 1120-12-50	1,120	1,200	520	300	11

Sound power level Lw [dB] per octave band

casing radiated · 63–8000 Hz

Model	63	125	250	500	1k	2k	4k	8k	Total	LpA 1 m [dB(A)]
AS-AXF F400 450-5-25	45	56	71	70	71	69	66	61	**77**	69
AS-AXF F400 500-5-25	48	59	74	73	74	72	69	64	**80**	72
AS-AXF F400 560-5-25	51	62	77	76	77	75	72	67	**83**	75
AS-AXF F400 630-5-30	56	67	82	81	82	80	77	72	**88**	80
AS-AXF F400 710-5-30	59	70	85	84	85	83	80	75	**91**	83
AS-AXF F400 800-5-30	61	72	87	86	87	85	82	77	**93**	85
AS-AXF F400 800-5-35	65	76	91	90	91	89	86	81	**97**	89
AS-AXF F400 900-5-35	66	77	92	91	92	90	87	82	**98**	90
AS-AXF F400 900-5-40	69	80	95	94	95	93	90	85	**101**	93
AS-AXF F400 900-8-40	70	81	96	95	96	94	91	86	**102**	94
AS-AXF F400 1000-5-40	70	81	96	95	96	94	91	86	**102**	94
AS-AXF F400 1000-8-40	73	84	99	98	99	97	94	89	**105**	97
AS-AXF F400 1000-8-45	75	86	101	100	101	99	96	91	**107**	99
AS-AXF F400 1120-8-40	76	87	102	101	102	100	97	92	**108**	100
AS-AXF F400 1120-8-45	78	89	104	103	104	102	99	94	**110**	102
AS-AXF F400 1120-12-50	86	97	112	111	112	110	107	102	**118**	110

Notes

* Curve scaled to the speed of the standard motor with the fan laws ($Q \propto n$, $p \propto n^2$).
Sound pressure level at 1 m (free field) from the AEROMIS product database.
16 model(s) also available for 60 Hz — see the fan selector.
Full performance, acoustic octave bands, motor options and datasheets: AEROMIS fan selector.