B03 · INDUSTRIAL DUCT FANS

# AS-AX-EXP

## Industrial Axial Fans with Explosion-Proof Motor



AS-AX-EXP axial fans with explosion-proof motors are intended for locations that require ATEX compliance. The explosion-proof motor and the aluminium band around the impeller allow use in ATEX Zone 2, gas groups IIA, IIB and IIC. Selection of the ATEX class is the responsibility of the customer.

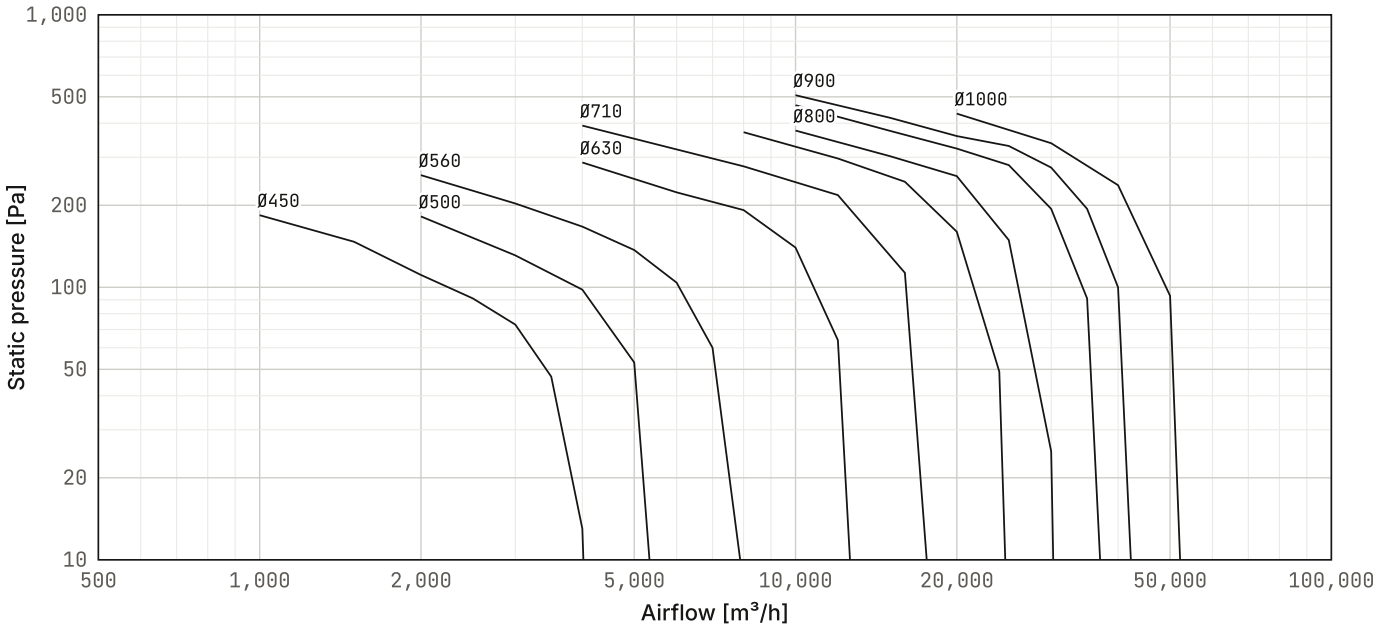
The casing is made of galvanized sheet steel with round connections. The fan can be installed in-line in a duct, on a wall or on a roof, with horizontal or vertical air discharge. Aluminium impellers with 5 blades, balanced to ISO 1940-1, cover sizes from Ø450 to Ø1,000 mm.

The direct-drive, 4-pole explosion-proof motors have TEFC cooling, IP55 protection and class F insulation and are rated for S1 and S2 duty; efficiency class is IE2 or IE3, depending on the motor. Versions for 400 V 3~ 50 Hz and 60 Hz supplies are available. Operating air temperature: −20 °C to +50 °C. Standards: IEC 60335-2-80, ISO 1940-1.

| AIRFLOW UP TO | STATIC PRESSURE UP TO | IMPELLER Ø | MOTOR POWER |
|---|---|---|---|
| 54,570 m³/h | 694 Pa | 450 – 1,000 mm | 0.55 – 7.5 kW |
| **SPEED** | **SUPPLY** | **TEMPERATURE CLASS** | **MOTOR** |
| 1,453 – 1,478 min⁻¹ | 400 V 3~ · 50 Hz | 50°C | IP55 · F |

## Selection chart

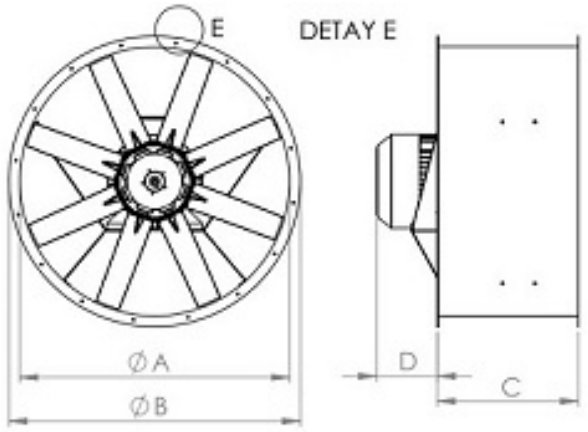
50 Hz · Static pressure at 1.204 kg/m³ with the standard motor.



## 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-AX-EXP 450-5-25 | 450 | 0.55 | 1,456 | 400 V 3~ | 1.6 | 4,180 | 253 | 69 |
| AS-AX-EXP 500-5-25 | 500 | 0.55 | 1,453 | 400 V 3~ | 1.6 | 5,845 | 305 | 72 |
| AS-AX-EXP 560-5-25 | 560 | 0.75 | 1,466 | 400 V 3~ | 2.0 | 8,150 | 358 | 75 |
| AS-AX-EXP 630-5-30 | 630 | 1.1 | 1,465 | 400 V 3~ | 1.6 | 13,480 | 452 | 80 |
| AS-AX-EXP 710-5-30 | 710 | 1.5 | 1,472 | 400 V 3~ | 3.7 | 19,210 | 522 | 83 |
| AS-AX-EXP 800-5-30 | 800 | 2.2 | 1,459 | 400 V 3~ | 4.7 | 25,560 | 577 | 85 |
| AS-AX-EXP 800-5-35 | 800 | 3.0 | 1,463 | 400 V 3~ | 6.5 | 30,940 | 634 | 89 |
| AS-AX-EXP 900-5-35 | 900 | 4.0 | 1,471 | 400 V 3~ | 8.1 | 39,250 | 664 | 90 |
| AS-AX-EXP 900-5-40 | 900 | 5.5 | 1,472 | 400 V 3~ | 10.9 | 44,635 | 694 | 93 |
| AS-AX-EXP 1000-5-40 | 1,000 | 7.5 | 1,478 | 400 V 3~ | 15.1 | 54,570 | 691 | 94 |

## Dimensions [mm]




| Model | A | B | C | D | E |
|---|---|---|---|---|---|
| AS-AX-EXP 450-5-25 | 450 | 530 | 320 | 50 | 11 |
| AS-AX-EXP 500-5-25 | 500 | 580 | 320 | 70 | 11 |
| AS-AX-EXP 560-5-25 | 560 | 640 | 320 | 60 | 11 |
| AS-AX-EXP 630-5-30 | 630 | 710 | 420 | 45 | 11 |
| AS-AX-EXP 710-5-30 | 710 | 790 | 420 | 25 | 11 |
| AS-AX-EXP 800-5-30 | 800 | 880 | 420 | 50 | 11 |
| AS-AX-EXP 800-5-35 | 800 | 880 | 420 | 50 | 11 |
| AS-AX-EXP 900-5-35 | 900 | 980 | 520 | 0 | 11 |
| AS-AX-EXP 900-5-40 | 900 | 980 | 520 | 35 | 11 |
| AS-AX-EXP 1000-5-40 | 1,000 | 1,080 | 520 | 150 | 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-AX-EXP 450-5-25 | 45 | 56 | 71 | 70 | 71 | 69 | 66 | 61 | **77** | 69 |
| AS-AX-EXP 500-5-25 | 48 | 59 | 74 | 73 | 74 | 72 | 69 | 64 | **80** | 72 |
| AS-AX-EXP 560-5-25 | 51 | 62 | 77 | 76 | 77 | 75 | 72 | 67 | **83** | 75 |
| AS-AX-EXP 630-5-30 | 56 | 67 | 82 | 81 | 82 | 80 | 77 | 72 | **88** | 80 |

## 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-AX-EXP 710-5-30 | 59 | 70 | 85 | 84 | 85 | 83 | 80 | 75 | **91** | 83 |
| AS-AX-EXP 800-5-30 | 61 | 72 | 87 | 86 | 87 | 85 | 82 | 77 | **93** | 85 |
| AS-AX-EXP 800-5-35 | 65 | 76 | 91 | 90 | 91 | 89 | 86 | 81 | **97** | 89 |
| AS-AX-EXP 900-5-35 | 66 | 77 | 92 | 91 | 92 | 90 | 87 | 82 | **98** | 90 |
| AS-AX-EXP 900-5-40 | 69 | 80 | 95 | 94 | 95 | 93 | 90 | 85 | **101** | 93 |
| AS-AX-EXP 1000-5-40 | 70 | 81 | 96 | 95 | 96 | 94 | 91 | 86 | **102** | 94 |

**Notes**

Sound pressure level at 1 m (free field) from the AEROMIS product database.
10 model(s) also available for 60 Hz — see the fan selector.
Full performance, acoustic octave bands, motor options and datasheets: AEROMIS fan selector.