

# Iso-K

## Sound-insulated inline fans

### Use

- Hot and highly polluted air extract up to +120 °C in high resistance condition.
- Kitchen placement extract systems (combined with grease filters).
- Ventilation for baking halls.
- Welding gas extract.
- The fans is available for round air ducts Ø 150, 160, 200, 250, 315, 355, 400, 450 mm.



**Air flow:**  
up to 8138 m<sup>3</sup>/h  
2261 l/s



**Power:**  
from 180 W



**Noise level:**  
from 41 dBA



### Design

- Galvanized steel casing internally filled with 50 mm thermal- and sound-insulating layer made of non-flammable mineral wool.
- The fan casing is installed on a supporting mounting frame with integrated vibration isolators.
- The swivel motor-impeller block is attached to the swivel door which facilitates the fan servicing.

### Motor

- Single- or three-speed motor.
- Galvanized steel impeller.
- Equipped with ball bearings for longer service life.
- Dynamically balanced impeller.
- F class motor winding insulation and IP54 ingress protection rating.

### Operation and speed control

- Smooth or step-up speed control with an auto transformer or frequency inverter (both available upon separate order).

### Mounting

- Compatible with round air ducts. The spigot diameter matches the standard air duct sizes.
- Mounting to the wall with the mounting angle bracket **UM Iso-K**. Available upon separate order.
- External terminal box on the motor for connection to power mains.

### Overall dimensions [mm]

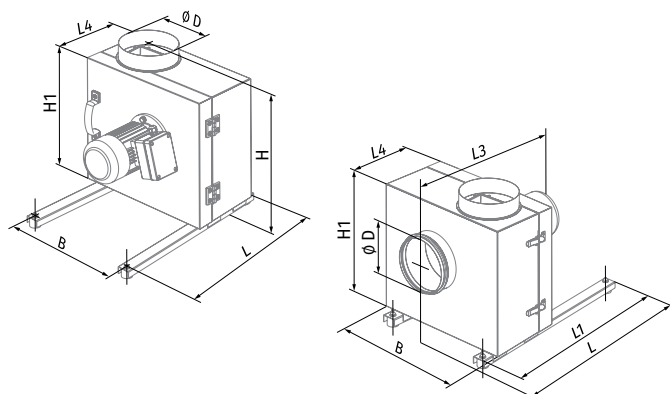
Type	Ø D	B	B1	H	H1	L	L1	L2	L3	L4	Weight [kg]
Iso-K 150 4E	150	410	330	540	365	525	500	470	475	205	17
Iso-K 150 4D	150	410	330	540	365	525	500	470	475	205	17
Iso-K 160 4E	160	410	330	540	365	525	500	470	475	205	17
Iso-K 160 4D	160	410	330	540	365	525	500	470	475	205	17
Iso-K 200 4E	200	485	365	600	425	625	600	570	515	235	25
Iso-K 200 4D	200	485	365	600	425	625	600	570	515	235	25
Iso-K 250 4E	250	575	435	665	505	700	675	645	620	285	40
Iso-K 250 4D	250	575	435	665	505	700	675	645	620	285	40
Iso-K 315 4E	315	690	550	708	600	715	700	650	612	327	53
Iso-K 315 4D	315	690	550	708	600	715	700	650	612	327	52
Iso-K 315 2E	315	690	550	708	600	715	700	650	672	327	61
Iso-K 315 2D	315	690	550	708	600	715	700	650	672	327	60
Iso-K 355 4E	355	740	600	764	655	727	700	650	637	352	60
Iso-K 355 4D	355	740	600	764	655	727	700	650	637	352	59
Iso-K 355 2E	355	740	600	764	655	727	700	650	637	352	68
Iso-K 355 2D	355	740	600	764	655	727	700	650	637	352	65
Iso-K 400 4E	400	906	700	900	790	908	900	850	747	402	92
Iso-K 400 4D	400	906	700	900	790	908	900	850	747	402	92
Iso-K 400 6E	400	906	700	900	790	908	900	850	687	402	87
Iso-K 400 6D	400	906	700	900	790	908	900	850	687	402	87
Iso-K 450 4E	450	996	750	980	870	925	900	850	782	437	109
Iso-K 450 4D	450	996	750	980	870	925	900	850	782	437	109
Iso-K 450 6E	450	996	750	980	870	925	900	850	739	437	105
Iso-K 450 6D	450	996	750	980	870	925	900	850	739	437	105

### Designation key

Series	Spigot diameter [mm]	Motor	
		Number of poles	Phase
Iso-K	150; 160; 200; 250; 315; 355; 400; 450	2; 4; 6	E: single-phase D: three-phase

### Accessories

Backdraft air dampers	Fixing brackets	Sleeves	Flexible connectors
			
VRV	UM Iso-K	V Iso-K	EVA



### Technical data

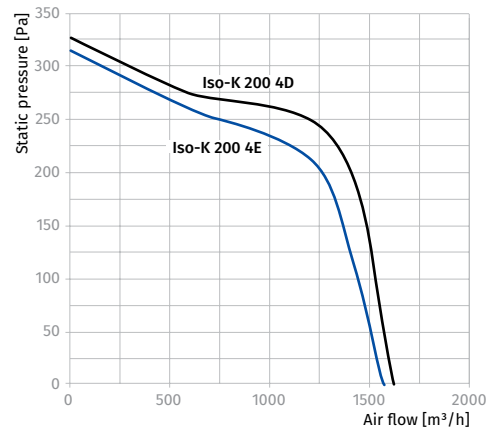
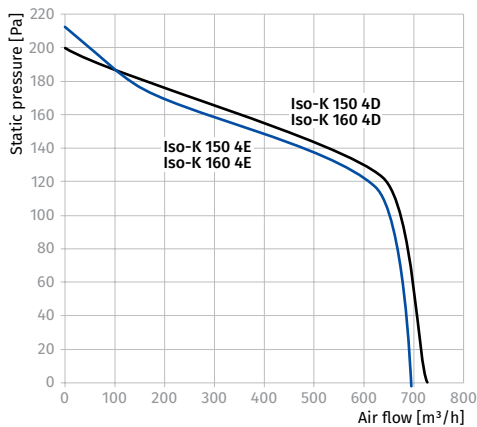
Parameters	Iso-K 150 4E / Iso-K 160 4E	Iso-K 150 4D / Iso-K 160 4D	Iso-K 200 4E	Iso-K 200 4D	Iso-K 250 4E	Iso-K 250 4D
Voltage [V]	1 ~ 230	3 ~ 400	1 ~ 230	3 ~ 400	1 ~ 230	3 ~ 400
Frequency [Hz]	50	50	50	50	50	50
Power [W]	180	180	550	750	1500	1500
Current [A]	1.7	0.6	3.0	2.0	11.0	3.4
Maximum air flow [m³/h (l/s)]	700 (194)	730 (203)	1600 (444)	1650 (458)	3400 (945)	3500 (972)
RPM [min <sup>-1</sup> ]	1450	1455	1475	1465	1500	1470
Sound pressure at 3 m [dBA]	41	41	45	45	51	51
Transported air temperature [°C]	-20...+120	-20...+120	-20...+120	-20...+120	-20...+120	-20...+120
IP rating	IP54	IP54	IP54	IP54	IP54	IP54
Motor IP rating	IP54	IP54	IP54	IP54	IP54	IP54

#### ISO-K 150 4E / ISO-K 160 4E, ISO-K 150 4D / ISO-K 160 4D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet [dBA]	76	68	70	72	62	59	63	57	61
L <sub>WA</sub> to outlet [dBA]	77	73	77	79	70	66	67	60	53
L <sub>WA</sub> to environment [dBA]	57	51	56	57	50	49	48	40	33

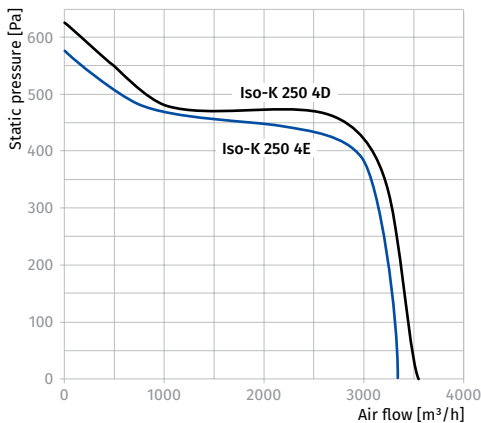
#### ISO-K 200 4E, ISO-K 200 4D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet [dBA]	79	71	75	75	66	62	65	58	64
L <sub>WA</sub> to outlet [dBA]	82	78	78	81	74	68	69	64	56
L <sub>WA</sub> to environment [dBA]	59	53	60	58	54	50	51	42	36



#### ISO-K 250 4E, ISO-K 250 4D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet [dBA]	82	75	79	80	71	65	68	63	65
L <sub>WA</sub> to outlet [dBA]	85	79	80	82	79	71	70	65	61
L <sub>WA</sub> to environment [dBA]	63	55	63	61	57	53	53	45	41



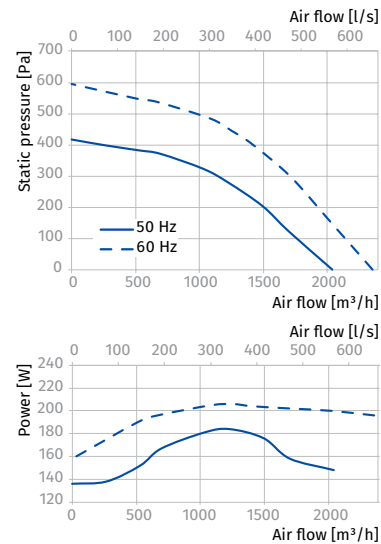
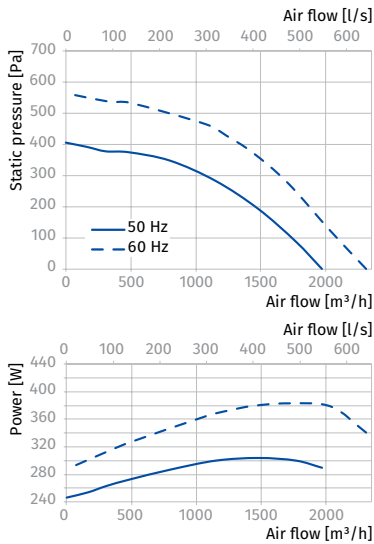
Parameters	Iso-K 315 4E		Iso-K 315 4D		Iso-K 315 2E		Iso-K 315 2D	
Voltage [V]	1 ~ 230		3 ~ 400		1 ~ 230		3 ~ 400	
Frequency [Hz]	50	60	50	60	50	60	50	60
Power [W]	304	383	184	206	1531	2816	1225	2011
Current [A]	1.84	1.72	0.70	0.70	7.35	11.92	2.80	3.40
Maximum air flow [m³/h (l/s)]	1970 (547)	2310 (642)	2040 (567)	2355 (654)	4695 (1304)	5345 (1485)	4710 (1308)	5290 (1470)
RPM [min <sup>-1</sup> ]	1475	1750	1488	1776	3125	3384	3025	3328
Sound pressure at 3 m [dBA]	46	47	46	48	53	55	52	54
Max. transported air temperature [°C]	-20...+120		-20...+120		-20...+120		-20...+120	
IP rating	IP54		IP54		IP54		IP54	
Motor IP rating	IP54		IP54		IP54		IP54	

**ISO-K 315 4E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	85	66	69	83	78	79	78	73	64	65	75
LWA to outlet [dBA]	87	66	71	84	79	81	79	74	66	67	77
LWA to environment [dBA]	67	45	49	63	58	59	58	53	44	46	56

**ISO-K 315 4D**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	85	64	83	79	75	71	69	64	59	65	75
LWA to outlet [dBA]	87	77	85	80	77	72	70	66	61	67	77
LWA to environment [dBA]	67	51	65	60	56	51	49	44	39	46	56

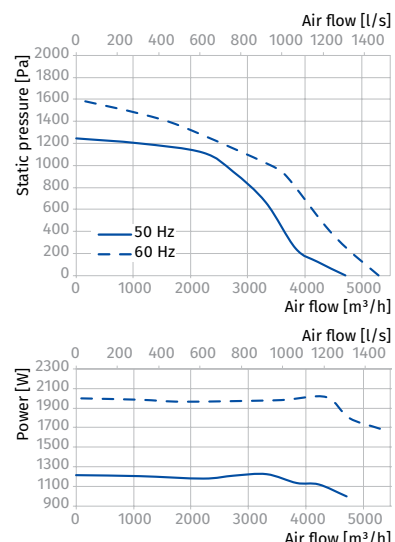
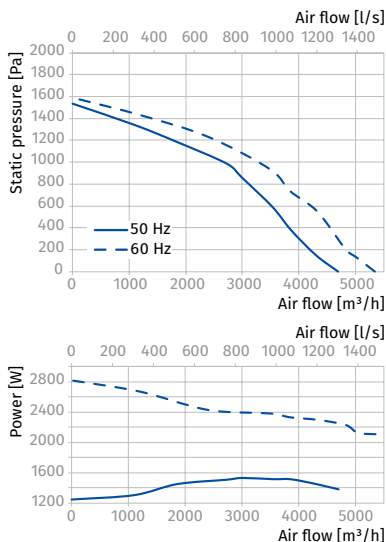


**ISO-K 315 2E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	92	59	65	82	90	84	83	81	74	72	82
LWA to outlet [dBA]	94	61	67	84	92	86	85	83	76	74	84
LWA to environment [dBA]	74	40	46	63	71	65	64	62	55	53	63

**ISO-K 315 2D**

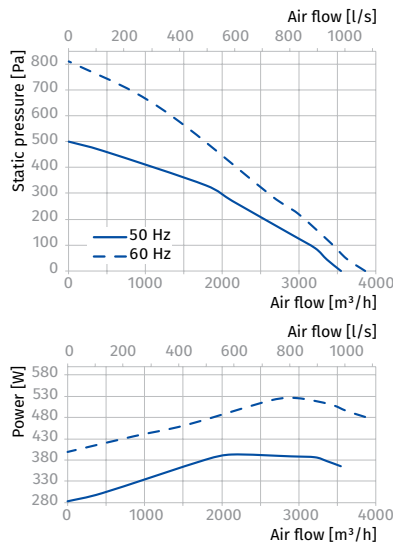
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	90	58	64	80	89	82	81	79	72	70	80
LWA to outlet [dBA]	92	60	66	82	91	84	83	81	74	72	82
LWA to environment [dBA]	72	39	45	62	70	64	63	61	54	52	62



Parameters	Iso-K 355 4E		Iso-K 355 4D		Iso-K 355 2E	Iso-K 355 2D
Voltage [V]	1 ~ 230		3 ~ 400		1 ~ 230	3 ~ 400
Frequency [Hz]	50	60	50	60	50	50
Power [W]	393	525	405	580	2621	3145
Current [A]	2.11	2.34	0.87	1.25	12.66	6.12
Maximum air flow [m³/h (l/s)]	3545 (985)	3860 (1072)	3155 (876)	3270 (908)	6570 (1825)	6185 (1718)
RPM [min <sup>-1</sup> ]	1517	1705	1379	1578	2890	2652
Sound pressure at 3 m [dBA]	50	52	49	50	54	54
Max. transported air temperature [°C]	-20...+120		-20...+120		-20...+120	-20...+120
IP rating	IP54		IP54		IP54	IP54
Motor IP rating	IP54		IP54		IP54	IP54

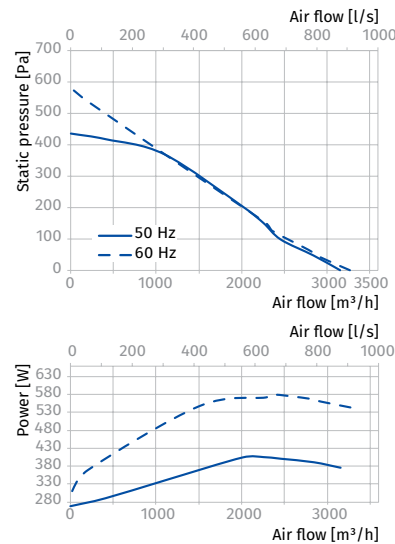
### ISO-K 355 4E

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	89	74	76	86	81	83	81	75	68	69	79
LWA to outlet [dBA]	91	72	78	88	83	84	83	77	69	71	81
LWA to environment [dBA]	71	50	57	67	62	63	62	55	48	50	60



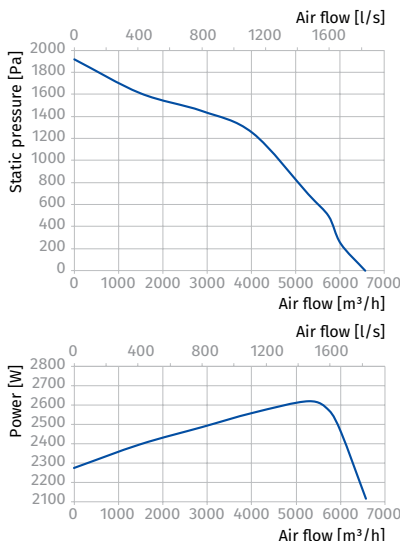
### ISO-K 355 4D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	88	67	87	82	78	74	71	67	62	68	78
LWA to outlet [dBA]	90	80	88	84	80	75	73	68	64	70	80
LWA to environment [dBA]	70	54	68	63	59	54	51	46	41	49	59



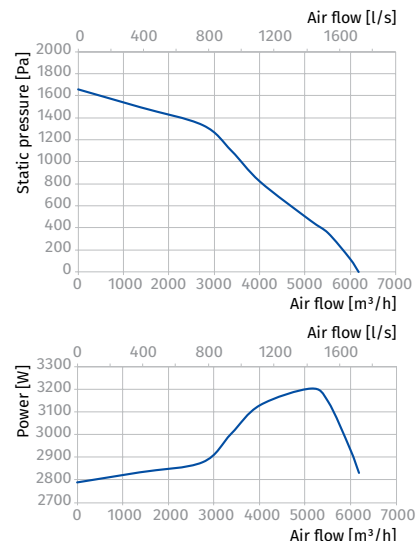
### ISO-K 355 2E

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	92	59	66	80	90	85	83	81	73	72	82
LWA to outlet [dBA]	94	65	68	83	92	86	84	82	76	74	84
LWA to environment [dBA]	74	39	46	62	72	66	65	63	56	54	64



### ISO-K 355 2D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	92	59	65	82	90	84	83	81	74	72	82
LWA to outlet [dBA]	94	61	67	84	92	86	85	83	76	74	84
LWA to environment [dBA]	74	40	47	64	72	66	65	63	55	54	64



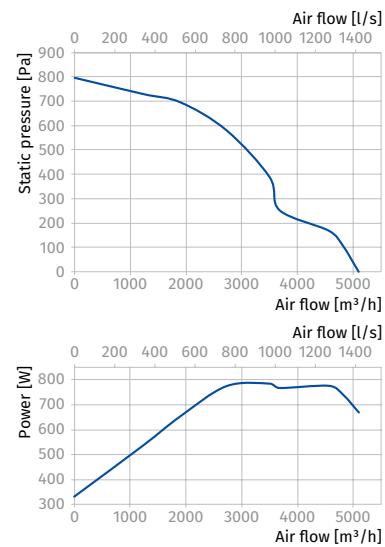
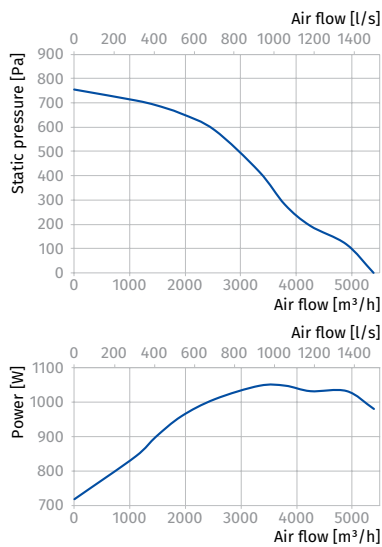
Parameters	Iso-K 400 4E	Iso-K 400 4D	Iso-K 400 6E	Iso-K 400 6D
Voltage [V]	1 ~ 230	3 ~ 400	1 ~ 230	3 ~ 400
Frequency [Hz]	50	50	50	50
Power [W]	1048	785	362	357
Current [A]	5.00	2.25	1.71	0.92
Maximum air flow [m³/h (l/s)]	5392 (1498)	5098 (1416)	2915 (810)	2966 (824)
RPM [min <sup>-1</sup> ]	1440	1470	930	948
Sound pressure at 3 m [dBA]	54	53	48	47
Max. transported air temperature [°C]	-20...+120	-20...+120	-20...+120	-20...+120
IP rating	IP54	IP54	IP54	IP54
Motor IP rating	IP54	IP54	IP54	IP54

**ISO-K 400 4E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	<b>86</b>	64	79	80	77	78	77	72	67	<b>65</b>	<b>75</b>
LWA to outlet [dBA]	<b>88</b>	69	68	83	82	81	77	72	67	<b>67</b>	<b>77</b>
LWA to environment [dBA]	<b>74</b>	53	67	68	69	66	61	58	53	<b>54</b>	<b>64</b>

**ISO-K 400 4D**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	<b>85</b>	63	79	80	77	78	77	71	66	<b>65</b>	<b>75</b>
LWA to outlet [dBA]	<b>86</b>	67	66	82	81	80	76	70	65	<b>66</b>	<b>76</b>
LWA to environment [dBA]	<b>73</b>	53	66	67	68	65	60	58	53	<b>53</b>	<b>63</b>

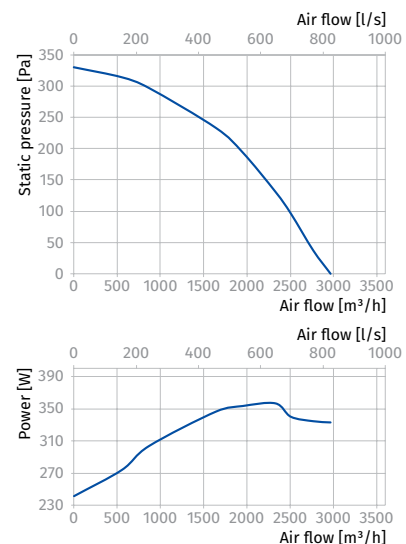
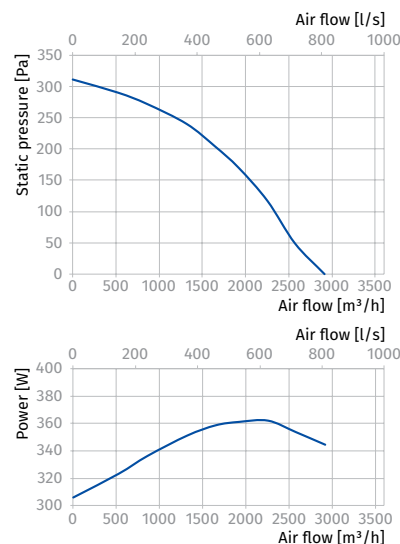


**ISO-K 400 6E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	<b>92</b>	59	65	82	90	84	83	81	74	<b>72</b>	<b>82</b>
LWA to outlet [dBA]	<b>94</b>	61	67	84	92	86	85	83	76	<b>74</b>	<b>84</b>
LWA to environment [dBA]	<b>74</b>	40	46	63	71	65	64	62	55	<b>53</b>	<b>63</b>

**ISO-K 400 6D**

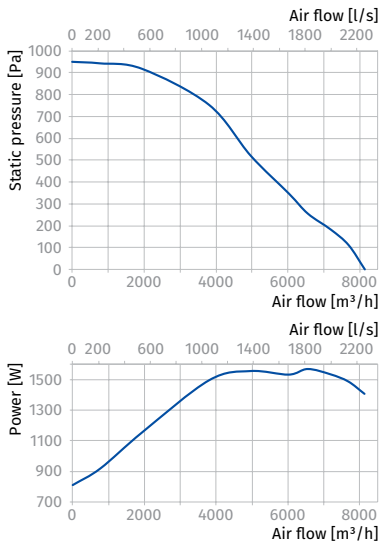
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	<b>77</b>	47	58	71	72	69	70	69	65	<b>57</b>	<b>67</b>
LWA to outlet [dBA]	<b>80</b>	59	62	72	74	74	72	68	63	<b>59</b>	<b>69</b>
LWA to environment [dBA]	<b>68</b>	48	49	60	62	62	60	55	52	<b>47</b>	<b>57</b>



Parameters	Iso-K 450 4E	Iso-K 450 4D	Iso-K 450 6E	Iso-K 450 6D
Voltage [V]	1 ~ 230	3 ~ 400	1 ~ 230	3 ~ 400
Frequency [Hz]	50	50	50	50
Power [W]	1570	1350	594	454
Current [A]	7.25	2.81	2.85	1.33
Maximum air flow [m³/h (l/s)]	8138 (2261)	7840 (2178)	5299 (1472)	4991 (1386)
RPM [min <sup>-1</sup> ]	1470	1450	970	920
Sound pressure at 3 m [dBA]	57	56	50	49
Max. transported air temperature [°C]	-20...+120	-20...+120	-20...+120	-20...+120
IP rating	IP54	IP54	IP54	IP54
Motor IP rating	IP54	IP54	IP54	IP54

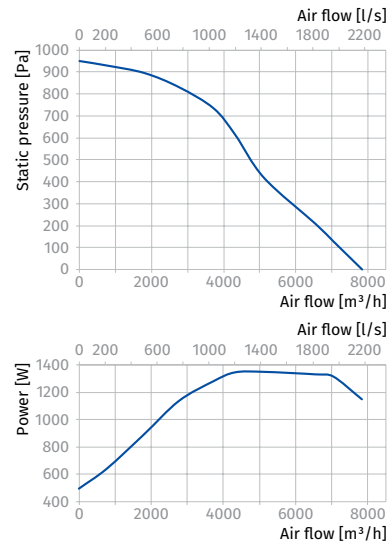
### ISO-K 450 4E

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	90	67	83	84	81	82	81	75	70	69	79
LWA to outlet [dBA]	92	72	71	87	86	85	81	75	70	71	81
LWA to environment [dBA]	77	56	70	71	72	69	64	61	56	57	67



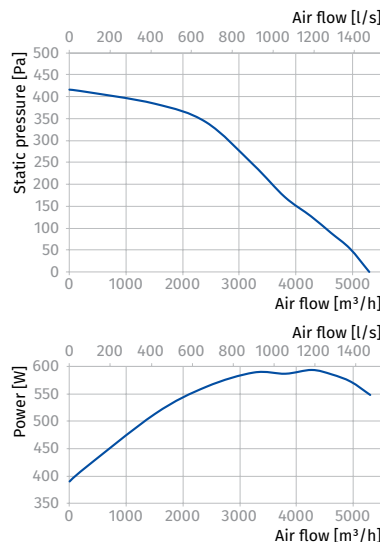
### ISO-K 450 4D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	89	66	83	84	81	82	81	74	69	69	79
LWA to outlet [dBA]	91	71	70	87	86	85	81	74	69	71	81
LWA to environment [dBA]	77	55	70	71	72	69	63	60	55	56	66



### ISO-K 450 6E

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	81	49	61	74	76	73	74	73	68	61	71
LWA to outlet [dBA]	84	62	65	76	78	78	76	72	67	63	73
LWA to environment [dBA]	71	50	52	63	65	66	63	58	55	50	60



### ISO-K 450 6D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	80	48	60	73	75	71	72	71	67	59	69
LWA to outlet [dBA]	82	61	64	75	76	76	75	70	65	62	72
LWA to environment [dBA]	70	49	51	62	64	65	62	57	54	49	59

