

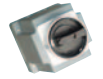
# Smoke extract centrifugal fans



## WVA/WVI

- Smoke extract unit for wall mounting
- 400°C/120 min (type F400) resp. 600°C/120 min (type F600)
- Wide range of accessories
- Certified acc. to EN 12101-3 at TU Munich
- CE-certified acc. to EN 12101-3, 2002-06 at TÜV Süd

## ELECTRICAL ACCESSORIES



REV DVV  
p. 325

The WVI smoke extract fans are used in case of fire to extract smoke gases from rooms, and also for daily ventilation (dual purpose fans). Smoke-free escape ways increase the chances to rescue people in case of fire.

The casing is manufactured from steel, powder coated RAL 7032. The base frame consists of galvanised steel. The impeller with backward-curved blades is manufactured from galvanised steel resp. stainless steel (type F600).

Thermal motor protection on request (PTC or thermal contact). In case of fire all motor protective devices must be bridged to guarantee functional capability.

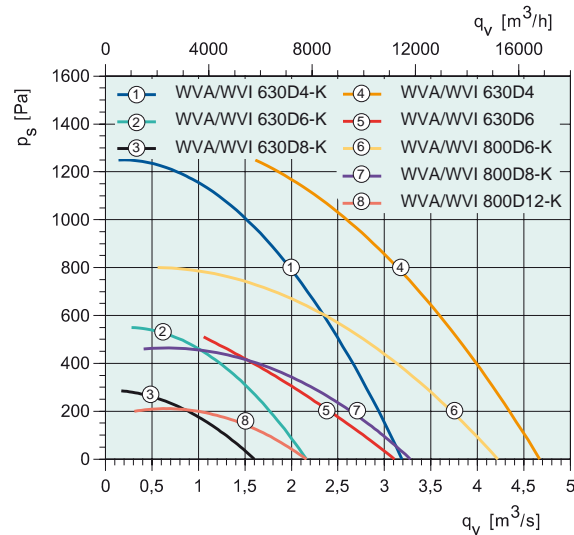
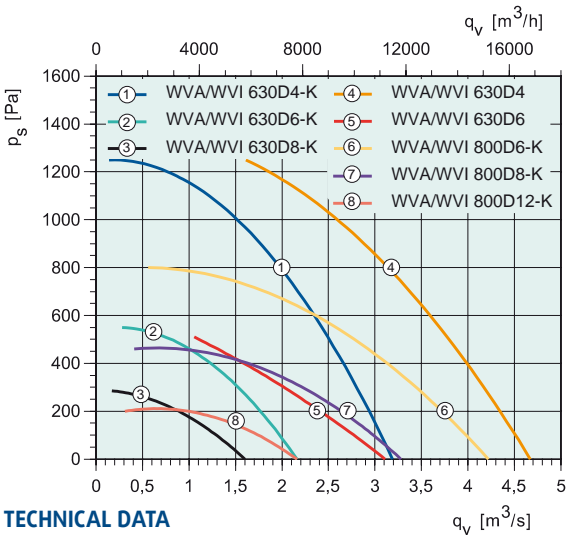
### WVA

For installation only outside the building. Fans are certified for horizontal installation on a wall, motor pointing downwards.

### WVI

With insulated motor for installation inside the building and inside the fire zone. Cooling of motor via air duct (accessories). Fans are certified for horizontal installation on a outer wall, motor facing downwards.

### QUICK SELECTION



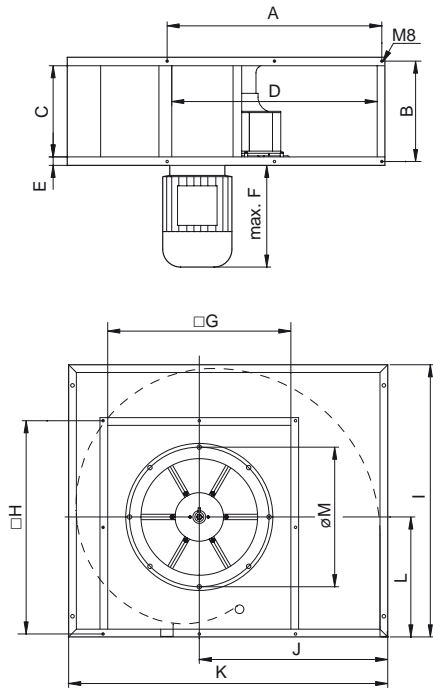
### TECHNICAL DATA

Art no. WVA F400		30736	30737	95099	30739	30740	95101	30742	30743	95103
Art no. WVA F600		30789	30790	95100	30792	30793	95102	30795	30796	95104
Art no. WVI F400		30763	30764	95105	30766	30767	95107	30769	30770	95109
Art no. WVI F600		30815	30816	95106	30818	30819	95108	30821	30882	95110
<b>WVA/WVI</b>		<b>400D4</b>	<b>400D4-6</b>	<b>400D4-8</b>	<b>450D4</b>	<b>450D4-6</b>	<b>450D4-8</b>	<b>560D4</b>	<b>560D4-6</b>	<b>560D4-8</b>
Voltage/Frequency	V/50 Hz	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~
Power at shaft	kW	0.55	0.55/0.18	0.5/0.12	1.1	1.1/0.37	1.1/0.25	1.5	1.7/1.2	2.0/0.5
Current	A	1.6	1.7/0.8	1.6/0.6	2.7	3/1.4	3.1/1.2	3.6	4.6/3.7	5.0/2.0
Starting current	A	6.6	6.8/2.4	5.8/1.3	11.8	10.8/5.9	12.4/3.0	17.3	23.9/13.3	22.5/6.0
Max air flow	m³/s	1.22	1.22/0.778	1.22/0.61	1.81	1.81/1.15	1.81/0.89	2.5	2.5/1.56	2.5/1.19
R.p.m.	min <sup>-1</sup>	1390	1420/940	1410/670	1390	1420/950	1400/690	1390	1450/940	1420/700
Max. temp. of transported air	°C	55	55	55	55	55	55	55	55	55
Max. temp. of transported air*	°C	400/600	400/600	400/600	400/600	400/600	400/600	400/600	400/600	400/600
Sound pressure level 4 m	dB(A)	68	68/54	68/48	75	75/63	75/56	77	77/66	77/59
Sound pressure level 10 m	dB(A)	57	57/43	57/37	64	64/52	64/45	66	66/55	66/48
Weight	kg	48	48	48	64	67	67	81	87	89
Insulation class, motor		F	F	F	F	F	F	F	F	F
Enclosure class, motor		IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54
Wiring diagram p. 375-384		13a Y	15a	14a	13a Y	15a	14a	13a Y	15a	14a

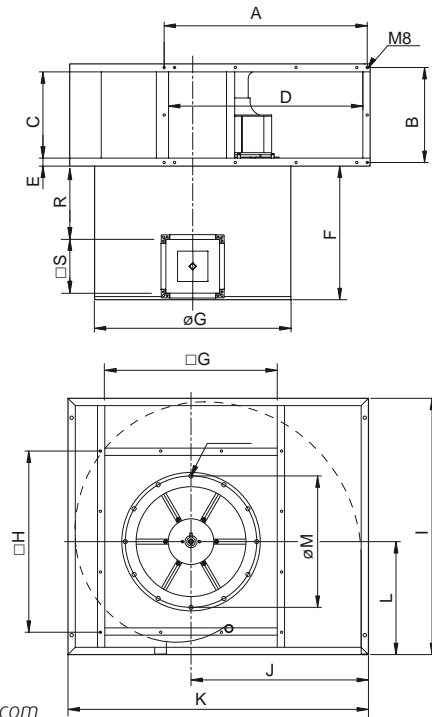
\* for 120 min

**DIMENSIONS**

**WVA**



**WVI**



More detailed dimensions on [www.systemair.com](http://www.systemair.com)

**VENTILATION ACCESSORIES**

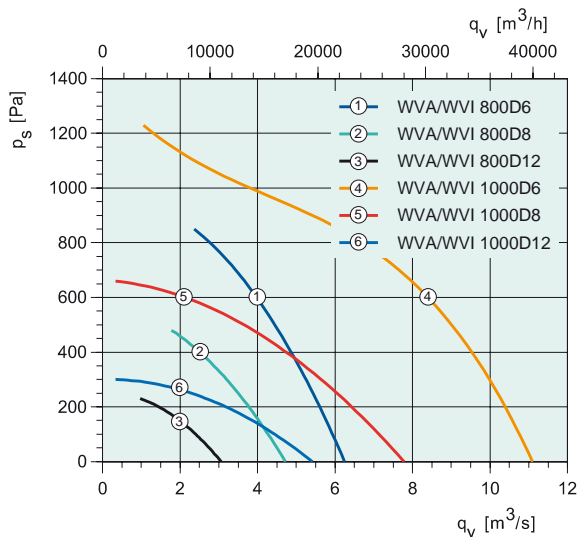
-  EPSN/EPIN p. 373
-  IN p. 374
-  SN p. 374
-  WBK-W p. 373
-  ZHJ p. 373

WVA	A	B	C	D	E	F	□G	□H	I	J	K	L	øM	øP	R	□S	Inlet duct connection ø
400	536	286	250	500	33	250	500	536	670	472	790	290	356 (8xM8)	510	116	200	315
450	746	286	250	710	33	300	500	536	764	528	886	340	395 (8xM8)	638	240	200	355
560	746	316	280	710	33	350	630	666	855	590	991	380	438 (12xM8)	638	200	225	400
630	836	391	355	800	33	450	710	746	1055	730	1237	465	541 (12xM8)	808	349	225	500
800	1156	436	400	1120	43	450	900	936	1300	930	1545	560	647 (16xM10)	980	295	250	630
1000	1446	666	630	1400	43	600	1180	1216	1400	1010	1700	580	751 (16xM10)	980	442	250	710

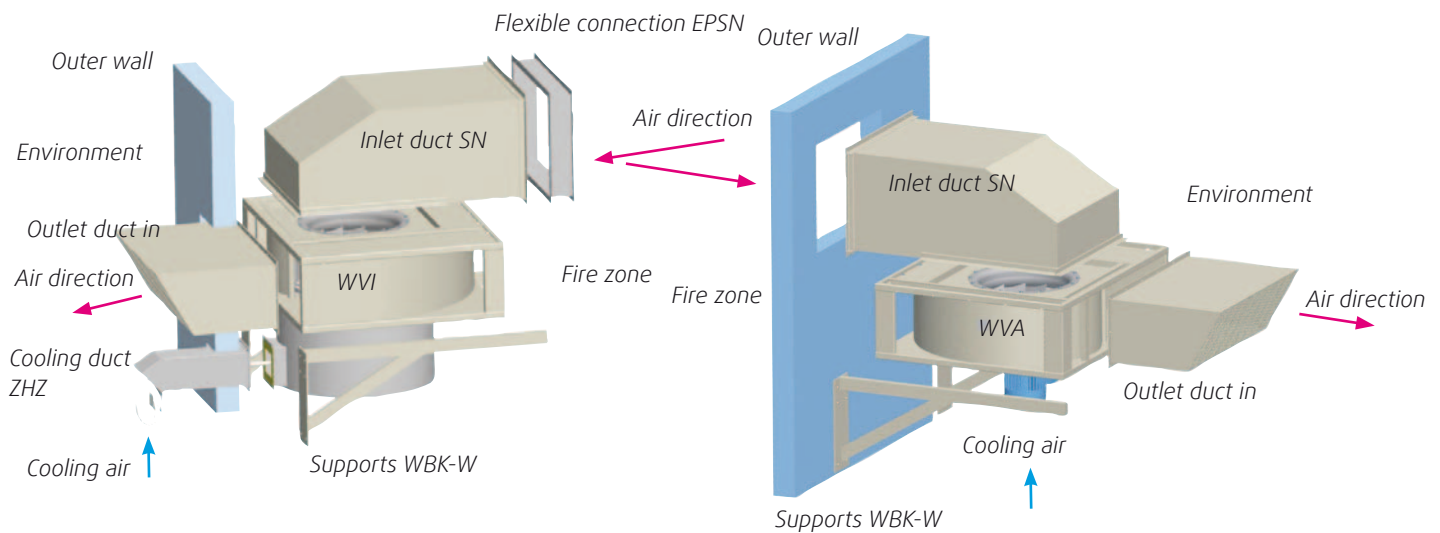
Art no. WVA F400		30750	30751	30752	30746	30747	30757	30758	30759	30754
Art no. WVA F600		30802	30803	30804	30798	30799	30809	30810	30811	30806
Art no. WVI F400		30776	30777	30778	30772	30773	30783	30784	30785	30780
Art no. WVI F600		30828	30829	30830	30824	30825	30835	30836	30837	30832
<b>WVA/WVI</b>		<b>630D4-K</b>	<b>630D4-6-K</b>	<b>630D4-8-K</b>	<b>630D4</b>	<b>630D4-6</b>	<b>800D6-K</b>	<b>800D6-8-K</b>	<b>800D6-12-K</b>	<b>800D6</b>
Voltage/Frequency	V/50 Hz	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~
Power at shaft	kW	3.0	3.0/0.9	3.6/0.9	5.5	5.5/1.7	2.2	2.2/0.9	2.5/0.5	5.5
Current	A	6.9	6.9/3.3	8.0/3.2	11.0	12.0/4.5	5.7	6.0/3.3	7.5/2.7	13.0
Starting current	A	38.0	38.0/13	44.0/10.0	75.5	81.6/20.3	30.2	27.7/11.7	38.0/5.2	75.4
Max air flow	m³/s	3.28	3.28/2.17	3.28/1.61	4.75	4.75/3.06	4.28	4.28/3.31	4.28/2.17	6.19
R.p.m.	min <sup>-1</sup>	1400	1450/975	1430/710	1440	1460/970	930	965/730	970/465	950
Max. temp. of transported air	°C	55	55	55	55	55	55	55	55	55
Max. temp. of transported air*	°C	400/600	400/600	400/600	400/600	400/600	400/600	400/600	400/600	400/600
Sound pressure level 4 m	dB(A)	78	78/69	78/62	85	85/77	74	74/65	74/55	78
Sound pressure level 10 m	dB(A)	67	67/58	67/51	74	74/66	63	63/54	63/44	67
Weight	kg	169	176	175	179	183	204	220	211	231
Insulation class, motor		F	F	F	F	F	F	F	F	F
Enclosure class, motor		IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54
Wiring diagram p. 375-384		13a D	15a	14a	13a D	15a	13a Y	15a	14a	13a D

\* for 120 min

# Smoke extract centrifugal fans

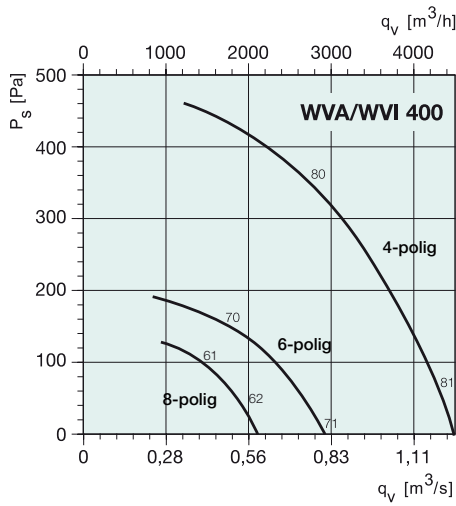


## Installation examples

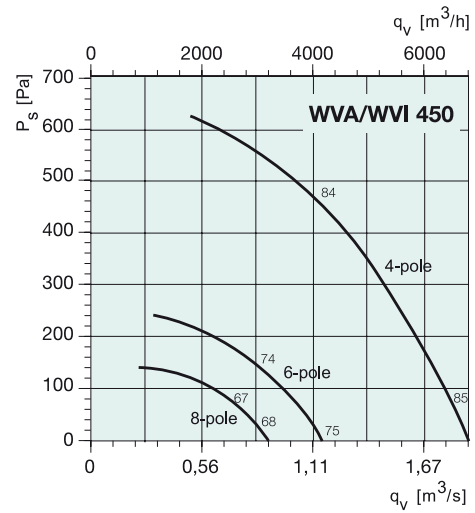


Art no. WVA F400		30755	30756	30760	30761	30762			
Art no. WVA F600		30807	30808	30812	30813	30814			
Art no. WVI F400		30781	30782	30786	30787	30788			
Art no. WVI F600		30833	30834	30838	30839	30840			
<b>WVA/WVI</b>		<b>800D6-8</b>	<b>800D6-12</b>	<b>1000D6</b>	<b>1000D6-8</b>	<b>1000D6-12</b>			
Voltage/Frequency	V/50 Hz	400 3~	400 3~	400 3~	400 3~	400 3~			
Power at shaft	kW	5.7/2.4	5.1/1.0	11.0	11.0/5.0	12.0/2.4			
Current	A	12.3/6.2	13.5/4.4	22.0	22.0/15.0	23.0/7.5			
Starting current	A	62.8/21.7	75.0/12.0	154	154/82.5	140.0/23.3			
Max air flow	m <sup>3</sup> /s	6.19/4.72	6.19/3.06	11.1	11.1/8.11	11.1/5.42			
R.p.m.	min <sup>-1</sup>	960/720	960/470	965	970/730	960/480			
Max. temp. of transported air	°C	55	55	55	55	55			
Max. temp. of transported air*	°C	400/600	400/600	400/600	400/600	400/600			
Sound pressure level 4 m	dB(A)	78/68	78/57	83	83/75	83/67			
Sound pressure level 10 m	dB(A)	67/57	67/46	72	72/64	72/56			
Weight	kg	231	249	407	472	472			
Insulation class, motor		F	F	F	F	F			
Enclosure class, motor		IP 54	IP 54	IP 54	IP 54	IP 54			
Wiring diagram p. 375-384		15a	14a	13a D	15a	14a			

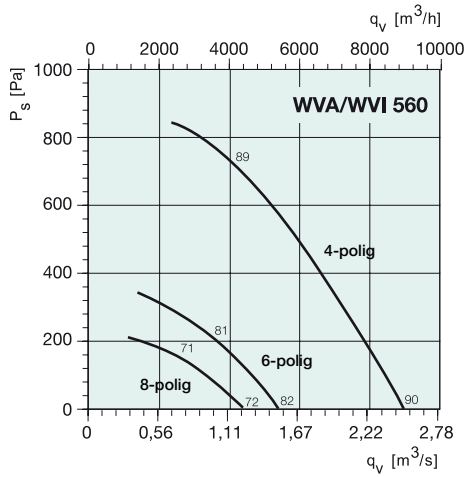
\* for 120 min



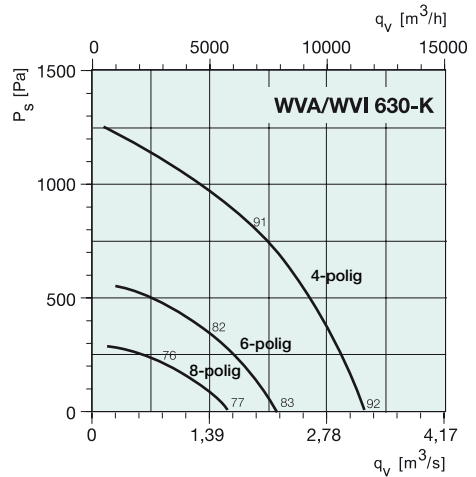
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
<b>4-pole</b>									
L <sub>WA</sub> Inlet	80	41	56	72	76	74	69	69	58
L <sub>WA</sub> Outlet	87	51	66	79	82	81	78	74	64
Measurement point: 1,0 m³/s; 210 Pa									
<b>6-pole</b>									
L <sub>WA</sub> Inlet	70	31	49	63	67	63	58	60	46
L <sub>WA</sub> Outlet	74	39	55	66	69	68	65	62	50
Measurement point: 0,53 m³/s; 150 Pa									
<b>8-pole</b>									
L <sub>WA</sub> Inlet	61	25	42	54	57	54	54	45	32
L <sub>WA</sub> Outlet	68	38	55	61	63	61	60	53	42
Measurement point: 0,4 m³/s; 75 Pa									



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
<b>4-pole</b>									
L <sub>WA</sub> Inlet	84	45	60	76	80	78	73	73	62
L <sub>WA</sub> Outlet	92	56	71	84	87	86	83	79	69
Measurement point: 1,25 m³/s; 400 Pa									
<b>6-pole</b>									
L <sub>WA</sub> Inlet	74	35	53	67	70	67	62	64	50
L <sub>WA</sub> Outlet	79	44	60	71	74	73	70	67	55
Measurement point: 0,8 m³/s; 150 Pa									
<b>8-pole</b>									
L <sub>WA</sub> Inlet	67	31	48	60	63	60	60	51	38
L <sub>WA</sub> Outlet	72	42	59	65	67	65	64	57	46
Measurement point: 0,62 m³/s; 100 Pa									

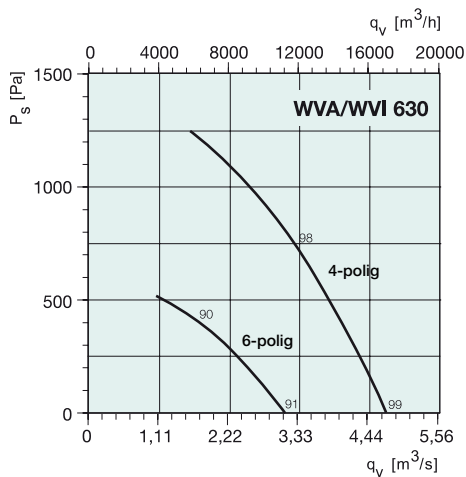


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
<b>4-pole</b>									
L <sub>WA</sub> Inlet	89	50	65	81	85	83	78	78	67
L <sub>WA</sub> Outlet	97	61	76	89	93	90	88	84	74
Measurement point: 1,53 m³/s; 570 Pa									
<b>6-pole</b>									
L <sub>WA</sub> Inlet	81	42	60	74	78	74	69	71	57
L <sub>WA</sub> Outlet	86	51	67	78	81	80	77	74	62
Measurement point: 1 m³/s; 220 Pa									
<b>8-pole</b>									
L <sub>WA</sub> Inlet	71	35	52	64	67	64	64	55	42
L <sub>WA</sub> Outlet	75	45	62	68	70	68	67	60	49
Measurement point: 0,78 m³/s; 130 Pa									

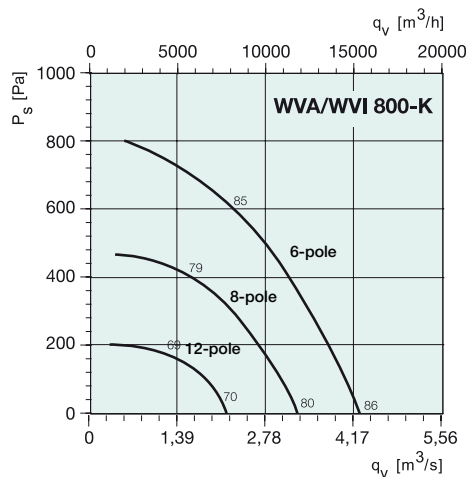


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
<b>4-pole</b>									
L <sub>WA</sub> Inlet	91	57	75	85	86	83	83	81	62
L <sub>WA</sub> Outlet	98	68	88	92	91	93	88	87	71
Measurement point: 2,0 m³/s; 750 Pa									
<b>6-pole</b>									
L <sub>WA</sub> Inlet	82	49	66	77	77	74	73	71	52
L <sub>WA</sub> Outlet	89	60	79	83	83	82	78	77	61
Measurement point: 1,34 m³/s; 330 Pa									
<b>8-pole</b>									
L <sub>WA</sub> Inlet	76	47	62	70	71	68	69	63	46
L <sub>WA</sub> Outlet	82	60	71	77	76	75	72	67	53
Measurement point: 1,0 m³/s; 185 Pa									

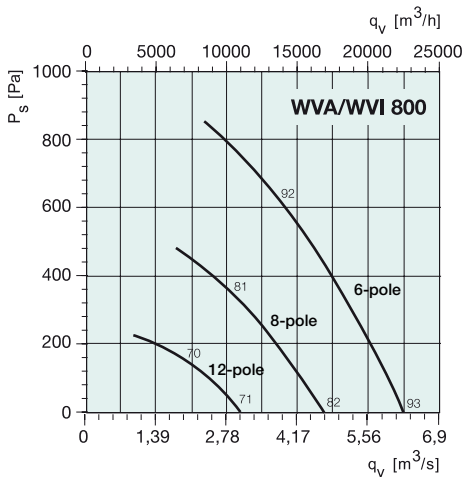
# Smoke extract centrifugal fans



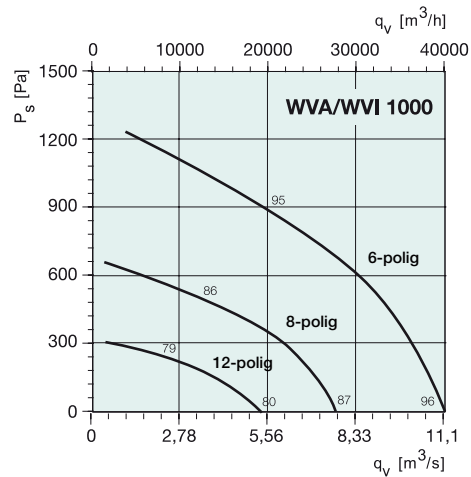
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
<b>4-pole</b>									
L <sub>WA</sub> Inlet	97	59	74	89	93	92	87	87	76
L <sub>WA</sub> Outlet	102	68	83	94	98	96	95	91	81
Measurement point: 3,45 m³/s; 700 Pa									
<b>6-pole</b>									
L <sub>WA</sub> Inlet	90	51	69	83	87	83	78	80	66
L <sub>WA</sub> Outlet	95	60	76	87	90	89	86	83	71
Measurement point: 2,22 m³/s; 300 Pa									



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
<b>6-pole</b>									
L <sub>WA</sub> Inlet	85	52	69	80	80	77	76	74	55
L <sub>WA</sub> Outlet	94	65	84	87	88	88	83	82	66
Measurement point: 3,3 m³/s; 350 Pa									
<b>8-pole</b>									
L <sub>WA</sub> Inlet	79	50	65	73	74	71	72	66	49
L <sub>WA</sub> Outlet	85	63	74	79	79	78	75	70	56
Measurement point: 2,23 m³/s; 300 Pa									
<b>12-pole</b>									
L <sub>WA</sub> Inlet	69	43	52	63	64	61	61	55	40
L <sub>WA</sub> Outlet	75	55	62	68	69	70	66	56	53
Measurement point: 1,4 m³/s; 140 Pa									



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
<b>6-pole</b>									
L <sub>WA</sub> Inlet	92	53	71	85	89	85	80	82	68
L <sub>WA</sub> Outlet	98	63	79	90	93	92	89	86	74
Measurement point: 4,28 m³/s; 550 Pa									
<b>8-pole</b>									
L <sub>WA</sub> Inlet	81	45	62	74	77	74	74	65	52
L <sub>WA</sub> Outlet	88	58	75	81	83	81	80	73	62
Measurement point: 3,26 m³/s; 310 Pa									
<b>12-pole</b>									
L <sub>WA</sub> Inlet	70	40	53	63	64	59	67	57	36
L <sub>WA</sub> Outlet	77	49	61	68	71	72	70	64	47
Measurement point: 2,13 m³/s; 140 Pa									



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
<b>6-pole</b>									
L <sub>WA</sub> Inlet	95	62	79	90	90	87	86	84	65
L <sub>WA</sub> Outlet	103	74	93	96	97	96	92	91	75
Measurement point: 8,0 m³/s; 600 Pa									
<b>8-pole</b>									
L <sub>WA</sub> Inlet	86	57	72	80	81	78	79	73	56
L <sub>WA</sub> Outlet	95	73	84	90	89	88	85	80	66
Measurement point: 5,6 m³/s; 370 Pa									
<b>12-pole</b>									
L <sub>WA</sub> Inlet	79	53	62	73	74	71	71	65	50
L <sub>WA</sub> Outlet	87	67	74	80	81	82	78	68	65
Measurement point: 3,9 m³/s; 150 Pa									

Smoke extract fans