DVV/F

- Smoke extract roof fan
- 400°C/120 min (F400) resp. 600°C/120 min (F600)
- Vertical exhaust
- Suitable for coastal applications
- 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. 340

The DVV/F smoke extract fans are used in case of fire to extract smoke gases from rooms, and also during normal working conditions for standard ventilation.

For installation only over heated rooms. For non-heated buildings flaps FSL for classification snow load SL1000 is available as accessories for sizes 450 up.

The casing is manufactured from seawater resistant aluminium (DVV/F 1000 M and P 4 pole from aluzinc steel sheet). The base frame consists of galvanised steel. The impeller with backward-curved blades is manufactured from galvanised steel (type F400) respectively from stainless steel (type F600). The fan is equipped with IEC standard motors according to the 2009/640/EC guideline and IEC 60034-30, with protection class IP 54 or 55, insulation class F. Motor cooling with fresh air via air duct. Thermal motor protection (PTC or thermal contact built-in) on request, in IE2 motors serial PTC built-in. For frequency controlled single speed units up to 0,55 kW PTC must be ordered (since IE1 motors built-in). For speed control use only combination of frequency inverter and appropriate filter to motor side (sine or du/dt), observing installation conditions (e.g. cable type, lenght). Operating over 50Hz is not allowed. Service switch serial on cooling duct at sizes 800 and 1000. Other sizes equipped with terminal box, service switch on request. In case of fire any speed control, frequency inverter and all motor protective devices must be bridged to guarantee functional capability (connection directly to mains). Frequency controlled units can have additional EMC protection (available on request).

For additional sound reduction an outlet silencer HSDV is available as an accessory for all DVV/F fans. If factory mounted, the item reference is DVVI (sound insulated) fan. FSL is not dimensionally suitable for DVVI.

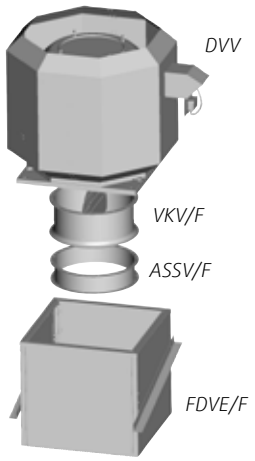
Available also as DVV/120 for continuous exhaust of medium up to 120°C (see online catalogue).

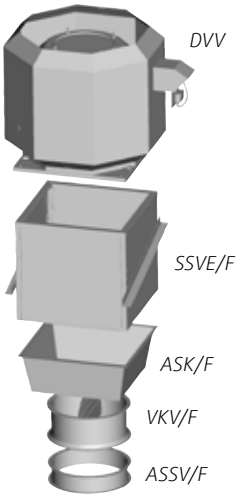
Note: article numbers in tables refer to items without PTC or thermal contact, with exception of items with IE2 motors, where PTC is serial built-in.

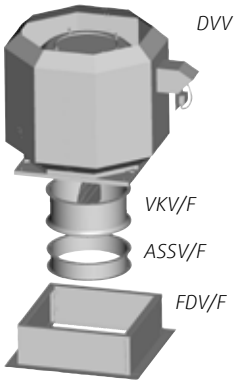
TECHNICAL DATA

DVV/F		400D4	400D4-6	450D4 IE2	450D4-6	560D4 IE2	560D6 IE2	560D4-6	630D4-K IE2	630D6-K IE2	630D4-8-K
Art no. F400		3501	3505	95176	3529	95178	95180	3553	95182	95186	3589
Art no. F600		3500	3504	95175	3528	95177	95179	3552	95181	95185	3588
Voltage/Frequency	V/50 Hz	400 3~	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	1.1	1.1/0.370	1.5	0.75	1.7/1.2	3.0	1.1	3.6/0.9
Current	A	1.6	1.7/0.8	2.6	3/1.4	3.5	2	4.6/3.7	6.6	2.9	8.0/3.2
Starting current	A	6.6	6.8/2.4	12.5	10.8/5.9	20.3	5.8	23.9/13.3	36.7	10.8	44/10
Max air flow	m^3/s	1.17	1.17/0.78	2.01	2.01/1.35	2.64	1.81	2.64/1.81	3.5	2.28	3.5/1.72
R.p.m.	min^{-1}	1390	1420/940	1435	1420/950	1420	880	1450/940	1400	910	1430/710
Max. temp. of transp. air	°C	55	55	55	55	55	55	55	55	55	55
Max. temp. of transp. air for 120 min	°C	400/600	400/600	400/600	400/600	400/600	400/600	400/600	400/600	400/600	400/600
Sound pressure level at 4 m	dB(A)	62	62/53	66	66/55	69	60	69/60	71	61	71/55
Sound pressure level at 10 m	dB(A)	52	52/43	56	56/46	59	52	59/52	63	53	63/47
Weight	kg	49	49	69	72	78	78	84	129	121	138
Enclosure class, motor efficiency		IP 54	IP 54	IP 54 IE2	IP 54	IP 54 IE2	IP 54 IE2	IP 54	IP 54 IE2	IP 54 IE2	IP 54
Thermal prot. PTC serial built-in		-	-	yes	-	yes	yes	-	yes	yes	-
Wiring diagram p. 391-400		15b	15a	15c	15a	15c	15c	15a	15c	15c	14a

Installation examples DVV fans







DVV/F		630D4 IE2	630D6 IE2	630D4-6	800D4-K	800D4-8-K	800D6-K IE2	800D6 IE2
Art no. F400		95184	95188	3585	95199	30064	95190	95192
Art no. F600		95183	95187	3584	95200	30065	95189	95191
Voltage/Frequency	V/50 Hz	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~
Power at shaft	kW	5.5	2.2	5.5/1.7	9.5	9.0/2.4	2.2	5.5
Current	A	11.6	5.5	12/4.5	18	18.5/5.6	5.5	12.6
Starting current	A	95	25.3	81.6/20.3	121	114/24	25.3	76
Max air flow	m^3/s	5.36	3.36	5.36/3.36	7.08	7.08/3.92	5.0	7.08
R.p.m.	min-1	1455	935	1460/970	1445	1420/720	935	950
Max. temp. of transp. air	°C	55	55	55	55	55	55	55
Max. temp. of transp. air for 120 min	°C	400/600	400/600	400/600	400/600	400/600	400/600	400/600
Sound pressure level at 4 m	dB(A)	75	64	75/64	76	76/55	66	72
Sound pressure level at 10 m	dB(A)	69	58	69/58	70	70/48	60	64
Weight	kg	144	134	154	262	281	189	213
Enclosure class, motor efficiency		IP 54 IE2	IP 54 IE2	IP 55	IP 54	IP 55	IP 54 IE2	IP 54 IE2
Thermal prot. PTC serial built-in		yes	yes	-	-	-	yes	-
Wiring diagram p. 391-400		13b D	15c	15a	13b D	14a	15c	13b D

DVV/F		800D6-8	800D4-M IE2	800D4-8-M	800D6-M IE2	800D4-P IE2	800D4-8-P	1000D6 IE2	1000D6-8	1000D6-12
Art no. F400		3643	95195	30045	95209	95197	30057	95194	3766	3768
Art no. F600		3642	95196	30046	95210	95198	30058	95193	3765	3767
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	5.7/2.4	15	16.2/3.7	4.0	18.5	18.5/4.5	11.0	11.0/5.0	12.0/2.4
Current	A	12.3/6.2	29.8	36/13	9	35	40/15	22	22/15	23/7.5
Starting current	A	62.8/21.7	265	290/64	48.6	280	335/75	156	154/82.5	140/23.3
Max air flow	m^3/s	7.08/5.28	9.58	9.58/4.79	6.22	10.8	10.8/5.42	12.4	12.4/9.44	12.4/6.67
R.p.m.	min-1	960/720	1470	1470/735	955	1465	1470/735	955	970/730	960/480
Max. temp. of transp. air	°C	55	55	55	55	55	55	55	55	55
Max. temp. of transp. air for 120 min	°C	400/600	400/600	400/600	400/600	400/600	400/600	400/600	400/600	400/600
Sound pressure level at 4 m	dB(A)	72/66	80	80/65	70	83	83/65	74	74/66	74/63
Sound pressure level at 10 m	dB(A)	64/57	72	72/57	62	75	75/57	66	66/58	66/54
Weight	kg	224	309	399	209	397	413	378	445	445
Enclosure class, motor efficiency		IP 54	IP 55 IE2	IP 55	IP 55 IE2	IP 55 IE2	IP 55	IP 55 IE2	IP 55	IP 55
Thermal prot. PTC serial built-in		-	yes	-	yes	yes	-	yes	-	-
Wiring diagram p. 391-400		15a	13b D	14a	13b D	13b D	14a	13b D	15a	14a

VENTILATION ACCESSORIES


ASFV p. 384


ASK/F p. 380


ASSV/F p. 383


FDV/F p. 381

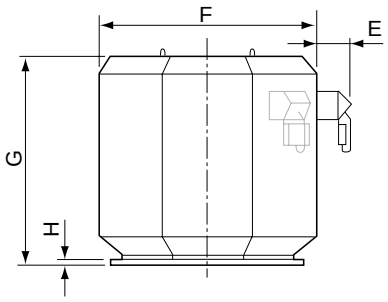

FDVE/F p. 382


FSL-DVV p. 379

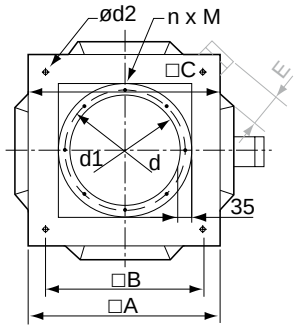

VKV/F p. 383


VKVE/F p. 383

DIMENSIONS



Shadowed area only for size DVV/F 400-560



DVV/F	□A	□B	□C	ød	ød1	ød2	E	F	G	H	nxM
400	560	460	557	315	356	14	250	635	630	40	8xM8
450	710	600	706	355	395	14	270	808	700	20	8xM8
560	710	600	706	400	438	14	270	808	750	20	12xM8
630	995	880	990	500	541	18	225	1100	958	40	12xM8
800	995	880	990	630	674	18	310	1272	1165	40	16xM10
800-M, P	995	880	990	630	674	18	280	1350	1280	40	16xM10
1000	1160	1040	1154	710	751	18	325	1500	1350	70	16xM10
1000D6-M, P	1160	1040	1154	710	751	18	325	1500	1350	70	16xM10
1000D4-M	1160	1040	1154	710	751	18	394	1500	1479	70	16xM10
1000D4-P	1160	1040	1154	710	751	18	394	1500	1479	70	16xM10

VENTILATION ACCESSORIES

HSDV p. 379

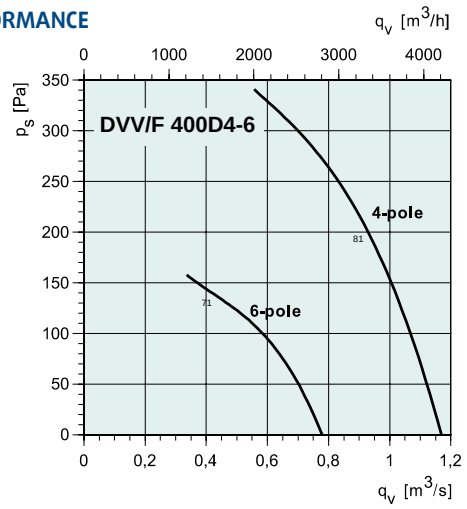
ESDV p. 384

SSV/F p. 382

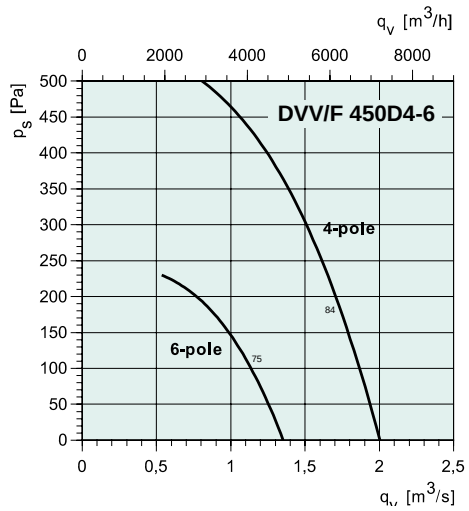
SSVE/F p. 377

DVV/F		1000D8	1000D4-M IE2	1000D6-M IE2	1000D4-8-M	1000D4-P IE2	1000D4-8-P	1000D6-P IE2
Art no. F400		3668	95205	95207	33126	95203	31270	95201
Art no. F600		3667	95206	95208	33127	95204	31271	95213
Voltage/Frequency	V/50 Hz	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~
Power at shaft	kW	5.5	22.0	7.5	22.0/5.5	28	28.0/7.0	8.5
Current	A	12.5	42	15.7	45/17	56	51/20	18
Starting current	A	63.8	340	112	338/85	420	400/80	126
Max air flow	m^3/s	9.44	14.2	9.42	14.2/7.08	15.2	15.2/7.56	10.1
R.p.m.	min-1	710	1470	970	1470/730	1470	1470/730	965
Max. temp. of transp. air	°C	55	55	55	55	55	55	55
Max. temp. of transp. air for 120 min	°C	400/600	400/600	400/600	400/600	400/600	400/600	400/600
Sound pressure level at 4 m	dB(A)	66	89	77	89/70	90	90/71	78
Sound pressure level at 10 m	dB(A)	58	79	67	79/60	79	79/60	67
Weight	kg	355	539	358	575	565	590	358
Enclosure class, motor efficiency		IP 55	IP 55 IE2	IP 55 IE2	IP 55	IP 55 IE2	IP 55	IP 55 IE2
Thermal prot. PTC serial built-in		-	yes	yes	-	yes	-	yes
Wiring diagram p. 391-400		13a D	13b D	13b D	14a	13b D	14a	13b D

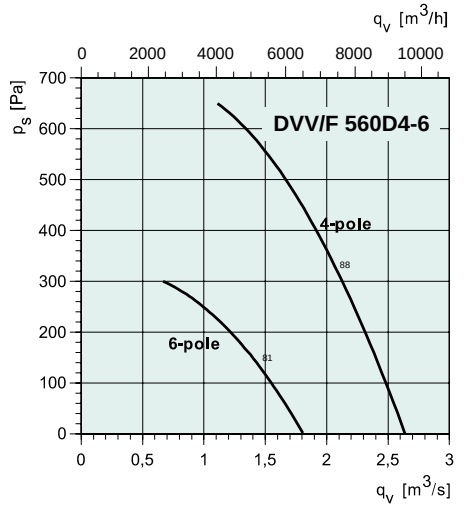
PERFORMANCE



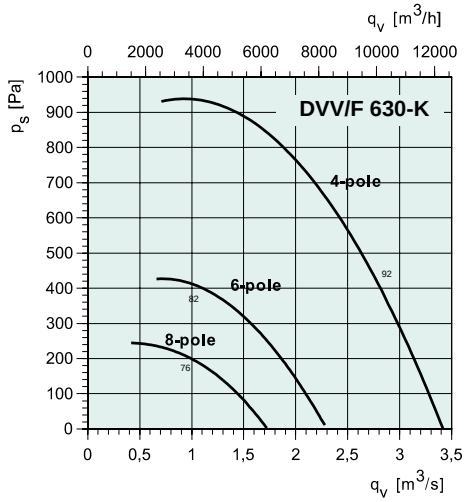
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	81	54	66	74	75	74	72	69	61
L_{wA} Surrounding	83	56	68	76	77	76	74	71	63
Measurement point: 0,9 m³/s; 200 Pa									
6-pole									
L_{wA} Inlet	71	48	57	63	67	62	60	58	46
L_{wA} Surrounding	73	50	59	65	69	64	62	60	48
Measurement point: 0,4 m³/s; 140 Pa									



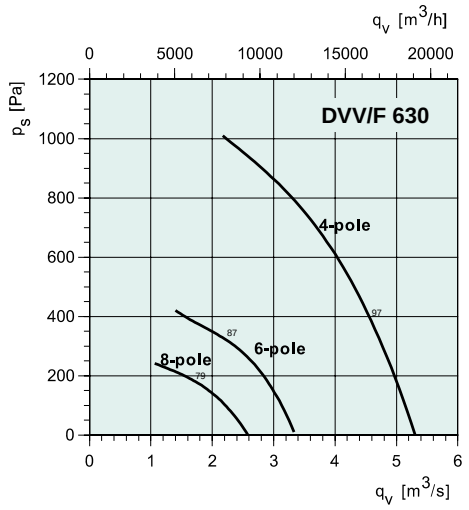
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	84	57	69	77	78	77	75	72	64
L_{wA} Surrounding	86	59	71	79	80	79	77	74	66
Measurement point: 1,7 m³/s; 200 Pa									
6-pole									
L_{wA} Inlet	75	52	61	67	71	66	64	62	50
L_{wA} Surrounding	76	53	62	68	72	67	65	63	51
Measurement point: 1,15 m³/s; 100 Pa									



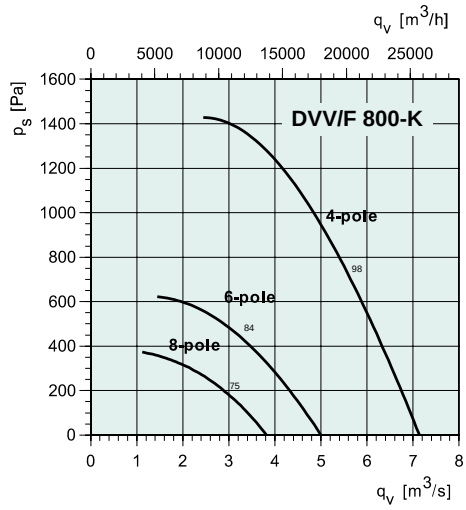
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	88	61	73	81	82	81	79	76	68
L_{wA} Surrounding	90	63	75	83	84	83	81	78	70
Measurement point: 2,1 m³/s; 310 Pa									
6-pole									
L_{wA} Inlet	81	58	67	73	77	72	70	68	56
L_{wA} Surrounding	83	60	69	75	79	74	72	70	58
Measurement point: 1,5 m³/s; 125 Pa									



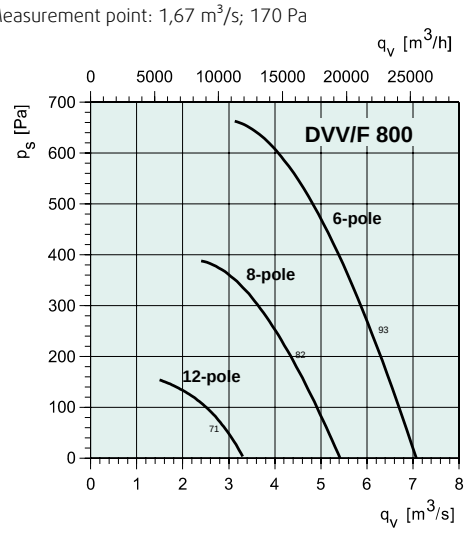
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	92	65	77	85	86	85	83	80	72
L_{wA} Surrounding	94	67	79	87	88	87	85	82	74
Measurement point: 2,8 m³/s; 400 Pa									
6-pole									
L_{wA} Inlet	82	58	69	71	78	73	72	68	55
L_{wA} Surrounding	84	60	71	73	80	75	74	70	57
Measurement point: 1,0 m³/s; 350 Pa									
8-pole									
L_{wA} Inlet	76	59	65	67	71	69	69	61	50
L_{wA} Surrounding	78	61	67	69	73	71	71	63	52
Measurement point: 0,98 m³/s; 200 Pa									



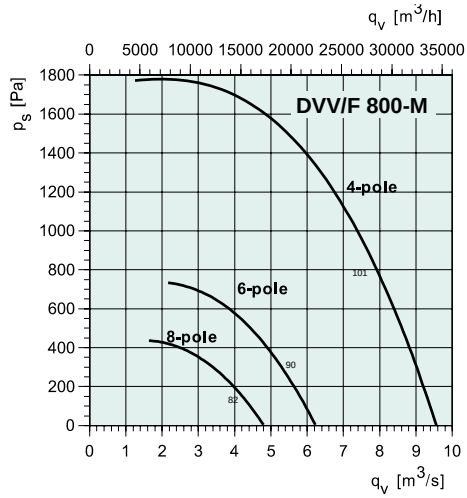
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	97	68	79	91	90	92	87	81	72
L_{wA} Surrounding	98	68	87	88	91	91	91	89	79
Measurement point: 4,58 m³/s; 370 Pa									
6-pole									
L_{wA} Inlet	87	64	73	79	83	78	76	74	62
L_{wA} Surrounding	88	65	74	80	84	79	77	75	63
Measurement point: 2,3 m³/s; 290 Pa									
8-pole									
L_{wA} Inlet	79	61	67	70	74	71	71	66	55
L_{wA} Surrounding	81	63	69	72	76	73	73	68	57
Measurement point: 1,67 m³/s; 170 Pa									



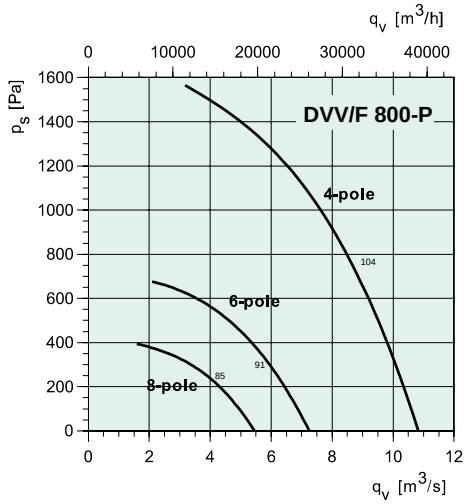
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	98	71	83	91	92	91	89	86	78
L_{wA} Surrounding	99	72	84	92	93	92	90	87	79
Measurement point: 5,6 m³/s; 700 Pa									
6-pole									
L_{wA} Inlet	84	60	71	73	80	75	74	70	57
L_{wA} Surrounding	86	62	73	75	82	77	76	72	59
Measurement point: 4,0 m³/s; 280 Pa									
8-pole									
L_{wA} Inlet	75	58	64	66	70	68	68	60	49
L_{wA} Surrounding	77	60	66	68	72	70	70	62	51
Measurement point: 3,1 m³/s; 150 Pa									



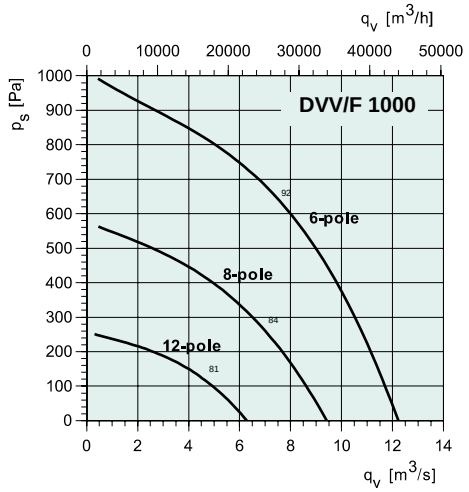
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
6-pole									
L_{wA} Inlet	93	70	79	85	89	84	82	80	68
L_{wA} Surrounding	95	72	81	87	91	86	84	82	70
Measurement point: 6,1 m³/s; 250 Pa									
8-pole									
L_{wA} Inlet	82	64	70	73	77	74	74	69	58
L_{wA} Surrounding	84	66	72	75	79	76	76	71	60
Measurement point: 4,3 m³/s; 200 Pa									
12-pole									
L_{wA} Inlet	71	53	59	62	66	63	63	58	47
L_{wA} Surrounding	73	55	61	64	68	65	65	60	49
Measurement point: 2,8 m³/s; 70 Pa									



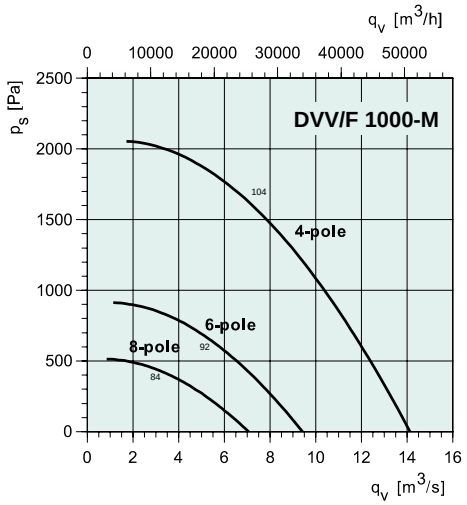
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	101	74	86	94	95	94	92	89	81
L_{wA} Surrounding	103	76	88	96	97	96	94	91	83
Measurement point: 7,2 m³/s; 740 Pa									
6-pole									
L_{wA} Inlet	90	67	78	80	87	82	81	77	64
L_{wA} Surrounding	92	69	80	82	89	84	83	79	66
Measurement point: 5,2 m³/s; 250 Pa									
8-pole									
L_{wA} Inlet	82	65	71	73	77	75	75	67	56
L_{wA} Surrounding	84	67	73	75	79	77	77	69	58
Measurement point: 4 m³/s; 150 Pa									



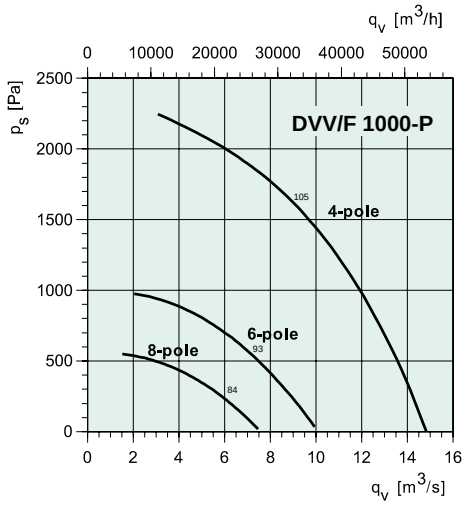
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	104	77	89	97	98	97	95	92	84
L_{wA} Surrounding	106	79	91	99	100	99	97	94	86
Measurement point: 8,6 m³/s; 740 Pa									
6-pole									
L_{wA} Inlet	91	67	78	80	87	82	81	77	64
L_{wA} Surrounding	93	69	80	82	89	84	83	79	66
Measurement point: 5,6 m³/s; 330 Pa									
8-pole									
L_{wA} Inlet	85	68	74	76	80	78	78	70	59
L_{wA} Surrounding	87	70	76	78	82	80	80	72	61
Measurement point: 4,3 m³/s; 200 Pa									



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
6-pole									
L_{wA} Inlet	92	69	78	84	88	83	81	79	67
L_{wA} Surrounding	94	71	80	86	90	85	83	81	69
Measurement point: 6,94 m³/s; 650 Pa									
8-pole									
L_{wA} Inlet	84	66	72	75	79	76	76	71	60
L_{wA} Surrounding	86	68	74	77	81	78	78	73	62
Measurement point: 6,11 m³/s; 310 Pa									
12-pole									
L_{wA} Inlet	81	63	69	72	76	73	73	68	57
L_{wA} Surrounding	83	65	71	74	78	75	75	70	59
Measurement point: 5,36 m³/s; 85 Pa									



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	104	82	91	97	100	96	94	92	80
L_{wA} Surrounding	109	87	96	102	105	101	99	97	85
Measurement point: 7,3 m³/s; 1600 Pa									
6-pole									
L_{wA} Inlet	92	75	81	83	87	85	85	80	69
L_{wA} Surrounding	97	80	86	88	92	90	90	85	74
Measurement point: 4,8 m³/s; 700 Pa									
8-pole									
L_{wA} Inlet	84	66	72	75	79	76	76	71	60
L_{wA} Surrounding	91	73	79	82	86	83	83	78	67
Measurement point: 3,1 m³/s; 430 Pa									



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
4-pole									
L_{wA} Inlet	105	82	91	97	101	96	94	92	80
L_{wA} Surrounding	110	87	96	102	106	101	99	97	85
Measurement point: 9,2 m³/s; 1580 Pa									
6-pole									
L_{wA} Inlet	93	75	81	84	88	85	85	80	69
L_{wA} Surrounding	98	80	86	89	93	90	90	85	74
Measurement point: 7,1 m³/s; 560 Pa									
8-pole									
L_{wA} Inlet	84	66	72	75	79	76	76	71	60
L_{wA} Surrounding	91	73	79	82	86	83	83	78	67
Measurement point: 6,1 m³/s; 220 Pa									