



NYBORG - MAWENT



CENTRIFUGAL FANS ZWPS

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APPLICATION:

Centrifugal ZWPS fans are intended for pressing of inert gas in general ventilation systems and process lines. Allowable dust content must not exceed 0,3g/m³.

CONSTRUCTION:

Main elements of the set such as: impeller, casing, base frame are made of standard steel of ordinary quality. In corrosion and heat-corrosion resistant executions the impeller and casing are made of steel with increased resistance to corrosion. On client's request other kinds of steel can be used.

DRIVES:

- Direct drive (1) – up to 80°C
- Direct drive-C* (1) – up to 220°C
- Indirect belt drive (2) – up to 350°C
- Indirect coupling drive (4) – up to 350°C

*In case of heat-resistant execution up to 220°C in direct drive (1) please contact our sales department.

PROTECTION AGAINST CORROSION:

- Standard execution - painting with standard set of paints, C3 class, RAL 5009,
- Heat resistant execution - painting with a set of paints resistant to heat up to 350°C

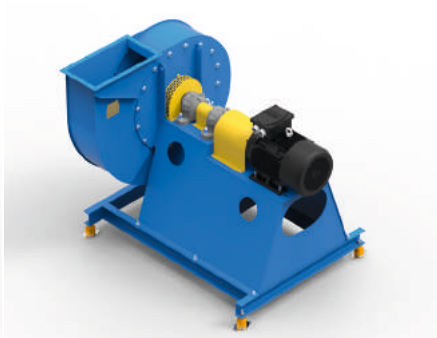
Options: hot deep galvanizing, acid treatment, passivation, glass blasting, chemo-resistant painting and in C4 and C5 classes on Client's request

MOTOR:

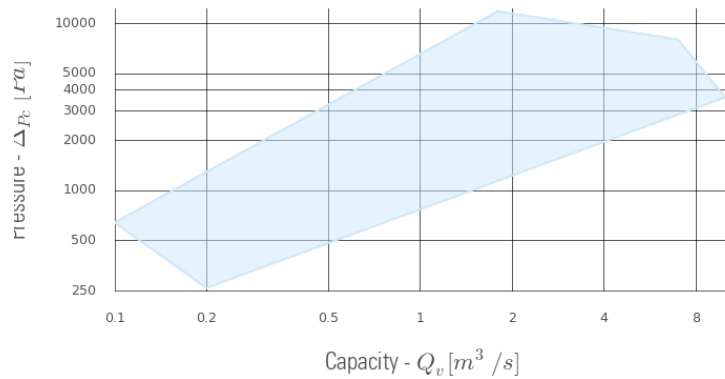
In standard the fans are driven by three-phase electric motors in IP55 execution, insulation class F, from world-renown producers. Ambient temperature must not exceed 40°C.

Motors for special execution available on Client's demand.





WORKING FIELD OF THE FAN:



ATEX:

The explosion-proof fans are meant for operation in potentially explosive areas according to ATEX 94/9/WE directive.

Available executions:

- Zones 2 and 1 for gases (3G/2G)
- Zones 22 and 21 for dusts (3D/2D)

MOUNTING POSITIONS:

Each size of fan is produced with 8 locations of fan's outlet:

- Right: RD0, RD90, RS180, RD270
- Left: LG0, LG90, LG180, LG270

Other mounting positions available after contact with sales department.

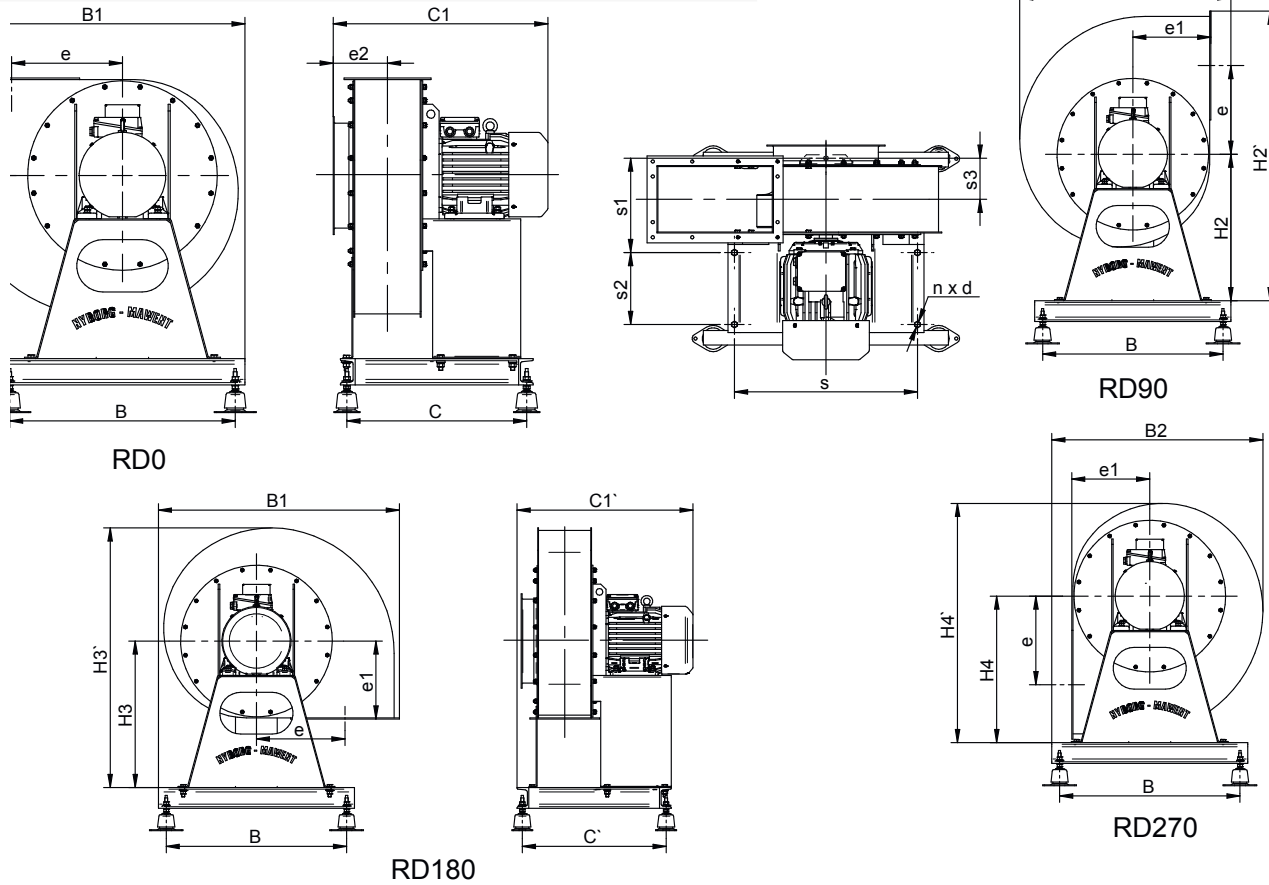
ACCESSORIES:

Available accessories used for our fans are included in Fan's Accessories Catalogue.

The producer reserves the right to implement changes on every production stage.

Due to constant improvement of our products we reserve the possibility of design changes which will increase their advantages and safety. Given dimensions are visual, we reserve the possibility of changes.

TECHNICAL DATA

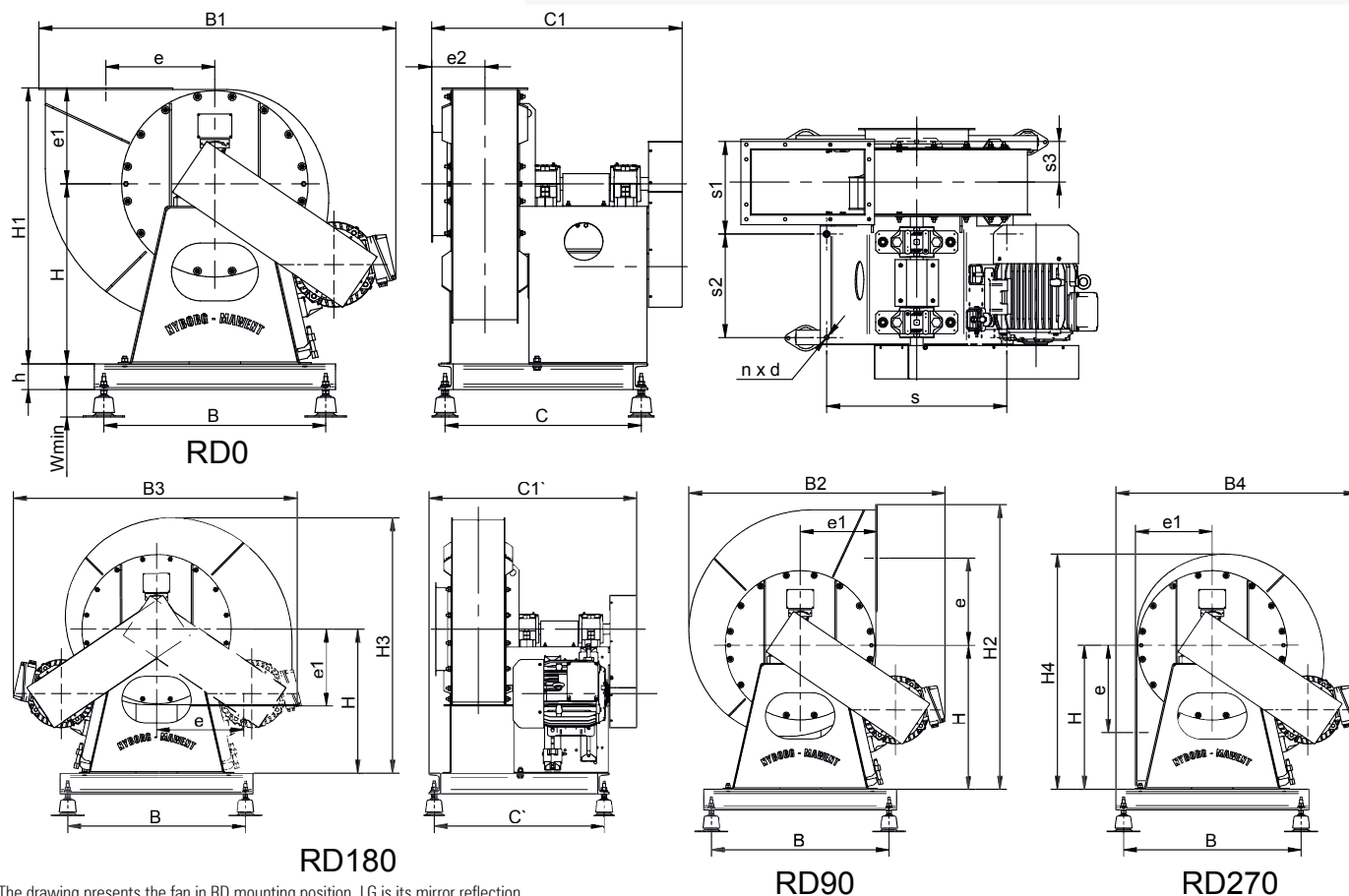


The drawing presents the fan in RD mounting position, LG is its mirror reflection.
Visual drawing. We reserve the right to implement changes.

FAN TYPE ZWPS 20-63 WITH DIRECT DRIVE (NAP.1)

ZWPS	Fan width	Motor power [kW]	Motor Size	e	e1	e2	s	s1	s2	s3	H1	H2	H3	H4	H1'	H2'	H3'	H4'	B	B1	B2	C	C1	C'	C1'	h	Wmin	d	n	Fan weight [kg]
[mm]																														
[sz.]																														
20	1	0.09	63 1-6	217	202	118	350	211	120	88		380			582	754	670	618	690	835	750	500	386	540	386	80	85	14	5	35
		0.09	63 1-6																				450	450	35					
		0.06	56 1-4																				449	449	35					
		0.09	56 2-4																						35					
25	1	0.37	71 1-2	278	251	141	560	238	220	101		500		751	960	861	796	690	835	750	500	503	540	503	80	85	14	5	40	
		0.75	80 2-4																					30						
		1.1	90S-4																					30						
		1.5	90S-2																					30						
28	1	2.2	90L-2	311,5	277	146	470	268	190	116		515		792	1027	916,2	844,1	690	922	808	550	589	590	589	80	85	14	5	91	
		0.12	63 2-6																					110						
		0.37	71 2-4																					110						
		0.75	80 2-4																					110						
31,5	1	3	100L-2	339	299	166	560	288	220	126		560		858	1107	993	914	690	922	808	550	500	500	500	80	85	14	5	120	
		0.75	80 2-4																					120						
		1.5	90L-4																					148						
		2.2	90L-2																					148						
35,5	1	3	100L-2	355	356	148	400	376	270	163		600		956	1176	1059	1000	690	976	815	695	585	590	585	80	85	14	5	148	
		5.5	132S1-2																					165						
		7.5	132S2-2																					170						
		1.1	90S-4																					180						
40	1	2.2	100L1-4	435	392	191	830	339	370	151		750		1142	1468	1323	1219	1040	1268	1123	600	640	650	640	100	85	14	5	180	
		3	100L-2																					200						
		5.5	132S1-2																					200						
		7.5	132S2-2																					200						
40	0,5	1.1	90S-4	435	392	191	830	339	370	151		750		1142	1468	1323	1219	1040	1268	1123	600	640	650	640	100	85	14	5	210	
		2.2	100L1-4																					210						
		5.5	132S-4																					250						
		7.5	132S2-2																					250						
40	0,7	1.1	90S-4	435	392	191	830	339	370	151		750		1142	1468	1323	1219	1040	1268	1123	600	640	650	640	100	85	14	5	210	
		3	100L2-4																					210						
		15	160M2-2																					305						
		0.75	90S-6																					210						
40	0,8	1.1	90S-4	435	392	191	830	339	370	151		750		1142	1468	1323	1219	1040	1268	1123	600	640	650	640	100	85	14	5	210	
		2.2	100L1-4																					210						
		3	100L2-4																					210						
		15	160M2-2																					305						
50	1	2.2	112M1-6	556	485	234	830	425	270	195		900		1385	1789	1610	1482	1040	1482	1259	685	734	734	734	100	85	14	5	270	
		4	112M2-4																					280						
		7.5	132M2-4																					310						
		15	160L-4																					370						
63	1	18,5	160L-2	628	624	411	470	640	300	286	830	730	624	1020	1454	1704	1438	1735	750	1689	1438	990	1140	1045	140	85	19	5	500	
		5.5	160M2-8																					500						
		7.5	160M-6																					500						
		11	160L-6																					510						
70	1	18,5	180M-4	630	626	414	570	640	300	286	830	730	624	1020	1456	1838	1644	1723	850	1723	1440	1046	1229	1045	140	135	19	5	480	
		5.5	132M2-6																					500						
200	1	5.5	160M2-6	628	624	411	470	640	300	286	830	730	624	1020	1454	1704	1438	1735	750	1689	1438	990	1140	1045	140	85	19	5	500	
		7.5	160M-6																					500						
250	1	5.5	160M2-8	628	624	411	470	640	300	286	830	730	624	1020	1454	1704	1438	1735	750	1689	1438	990	1140	1045	140	85	19	5	510	
		11	160L-6																					510						

TECHNICAL DATA



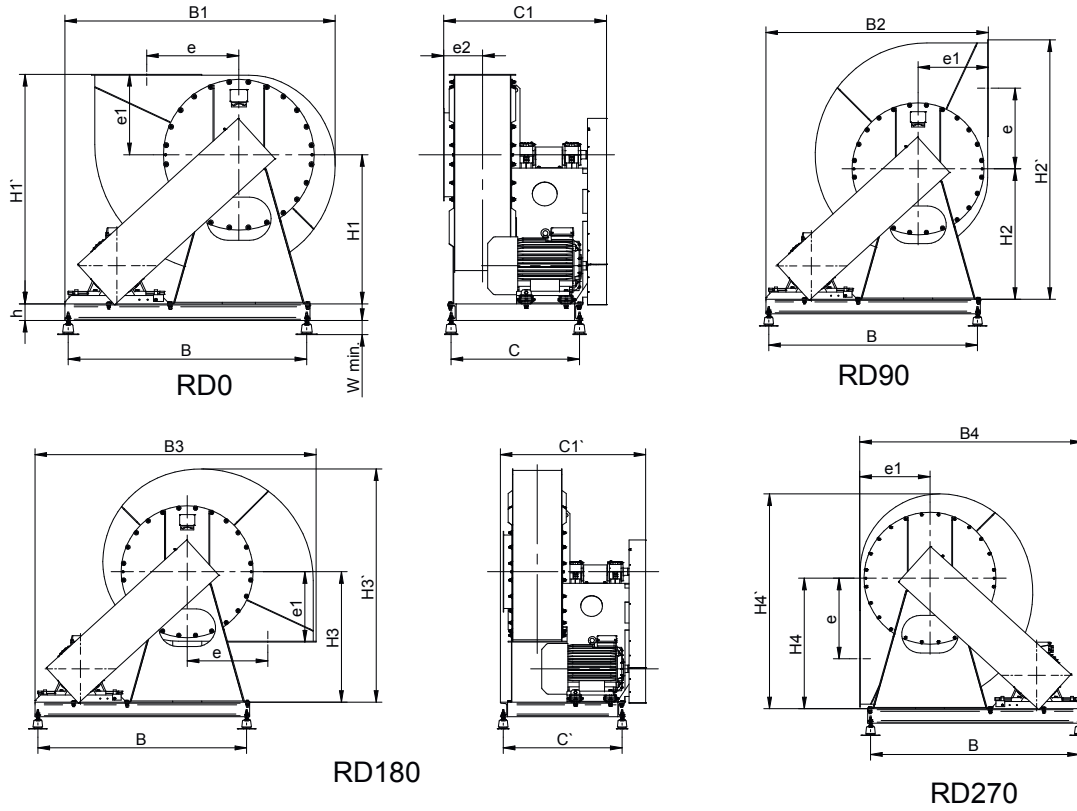
The drawing presents the fan in RD mounting position, LG is its mirror reflection.
Visual drawing. We reserve the right to implement changes.

FAN TYPE ZWPS 25-50 WITH V-BELT DRIVE (NAP.2)

		SILNIK NA PODSTAWIE																												
ZWPS	Fan width	Motor power [kW]	Motor Size	e	e1	e2	s	s1	s2	s3	H	H1	H2	H3	H4	B	B1	B2	B3	B4	C	C1	C'	C1'	h	Wmin	d	n	Fan weight [kg]	
				[mm]																							[szt.]	[kg]		
25	1	0,75	80 2-4	278	251,1	141	560	238	272	101	500	751	960	861	796	690	915	828	835	828	510	654	560	654	80	85	14	5	120	
		1,1	90S-4																										135	
		1,5	90S-2																										135	
		2,2	90L-2																										135	
31,5	1	0,75	80 2-4	339	299	166	560	290	322	126	560	858	1107	993	914	690	1110	996	1103	938	610	780	660	780	80	85	14	5	200	
		1,5	90L-4																										200	
		2,2	90L-2																										210	
		3	100L-2																										210	
		5,5	132S1-2																										220	
		7,5	132S2-2																										225	
		1,1	90S-4																										290	
40	1	2,2	100L1-4	435	392,1	191	830	339	365	151	750	1142	1468	1323	1219	1040	1440	1292	1318	1270	690	894	745	894	100	85	14	5	310	
		5,5	132S-4																										360	
		7,5	132S2-2																										360	
		1,5	90L-4																										300	
	0,5	0,7	2,2	100L1-4	435	392,1	191	830	339	365	151	750	1142	1468	1323	1219	1040	1440	1292	1318	1270	690	894	745	894	100	85	14	5	310
			1,5	90L-4																										300
			3	100L2-4																										300
			0,75	90S-6																										300
	0,8	0,7	1,1	90S-4	435	392,1	191	830	339	365	151	750	1142	1468	1323	1219	1040	1440	1292	1318	1270	690	894	745	894	100	85	14	5	300
			2,2	100L1-4																										310
			3	100L2-4																										330
			2,2	112M-6																										380
50	1	4	112M2-4	556	485	234	830	425	350	195	900	1385	1789	1609	1482	1040	1675	1495	1517	1359	765	985	820	985	100	85	14	5	400	
		7,5	132M2-4																										422	

SILNIK NA RAMIE

TECHNICAL DATA

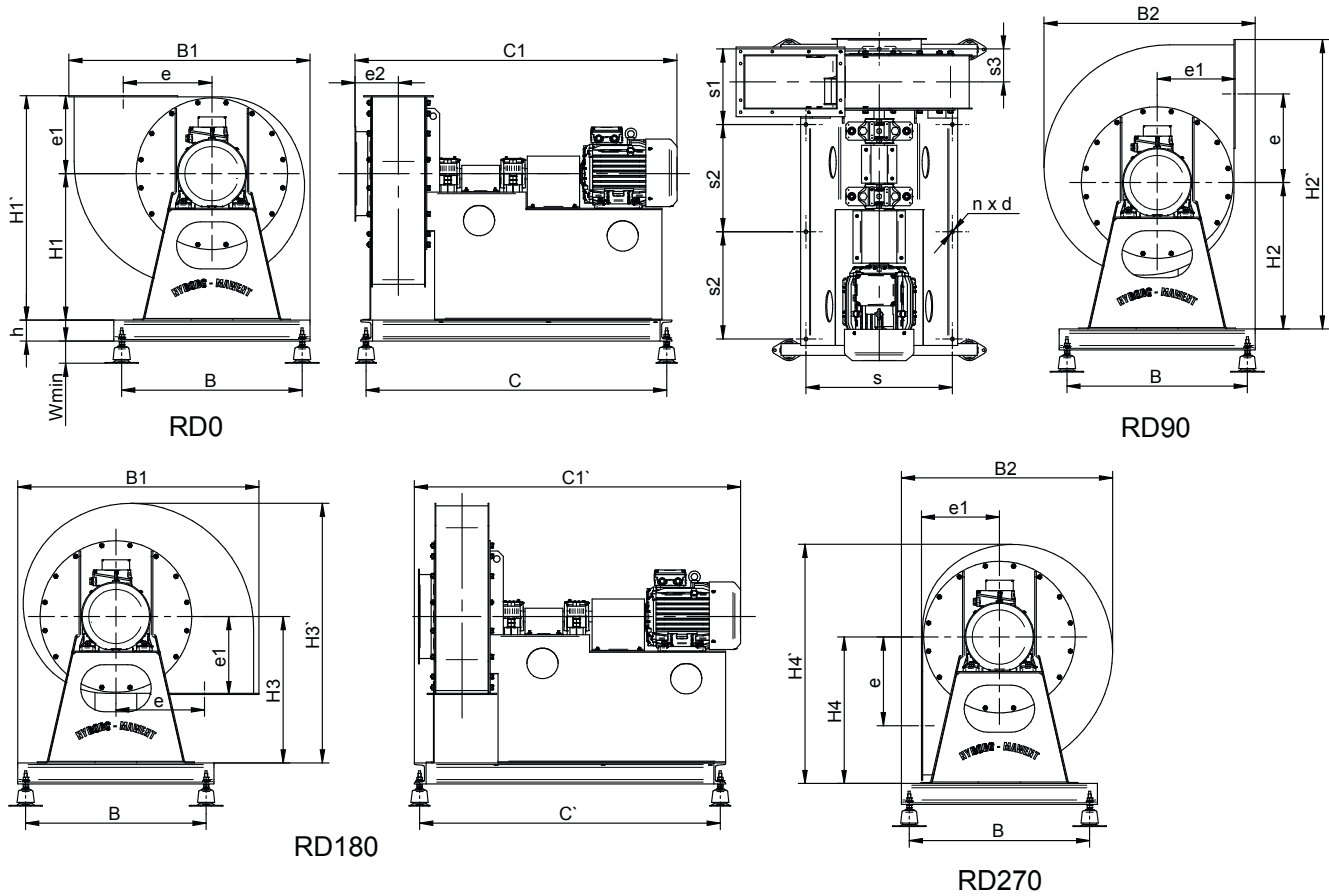


The drawing presents the fan in RD mounting position, LG is its mirror reflection.
Visual drawing. We reserve the right to implement changes.

FAN TYPE ZWPS 40-50 WITH V-BELT DRIVE (NAP.2)

		SILNIK NA RAMIE																										
ZWPS	Fan width	Motor power [kW]	Motor Size	e	e1	e2	H1	H2	H3	H4	H1'	H2'	H3'	H4'	B	B1	B2	B3	B4	C	C1	C'	C1'	h	Wmin	Fan weight [kg]		
(mm)																												
40	1	11	160M1-2	435	392,1	191	750	1142,1	1468	1323	1219	1440	1520	1480	1774,6	1629,4	700	892	755	892	100	85					380	
		18,5	160L-2																								400	
	0,5	11	160M1-2																								380	
	0,7	15	160M2-2																								390	
50	1	0,8	15	160M2-2	556	485	234	900	1385	1789	1609	1482	1440	1604	1535	1939	1760	775	983	830	983	100	85					465
		15	160L-4	465																								
		18,5	160L-2	520																								

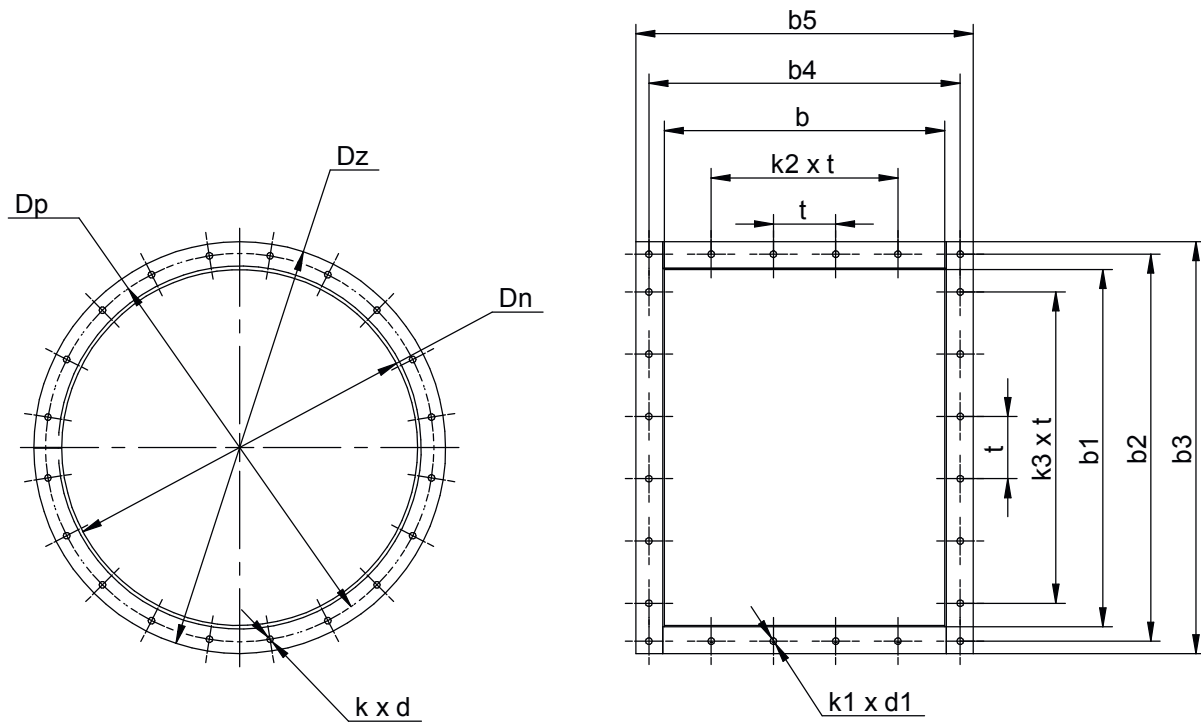
TECHNICAL DATA



FAN TYPE ZWPS 25-50 WITH COUPLING DRIVE (NAP.4)

ZWPS	Fan width	Motor power [kW]	Motor Size	e	e1	e2	s	s1	s2	s3	H1	H2	H3	H4	H1'	H2'	H3'	H4'	B	B1	B2	C	C1	C'	C1'	h	Wmin	d	n	Fan weight [kg]	
				[mm]																								[szt.]	[kg]		
25	1	0,75	80 2-4	278	251	141	560	238	310	101	500	751	960	861	796	690	835	736	900	913	913	80	85	14	7					120	
		1,1	90S-4																	977	940									977	135
		1,5	90S-2																												135
		2,2	90L-2																												135
31,5	1	0,75	80 2-4	339	299	166	560	290	320	126	560	858	1107	993	914	690	922	808	970	1035	1035	80	85	14	7					200	
		1,5	90L-4																												200
		2,2	90L-2																												210
		3	100L-2																												210
		5,5	132S1-2																												220
		7,5	132S2-2																												225
40	1	1,1	90S-4	435	392	191	830	339	410		750	1142	1468	1323	1219	1040	1268	1123	1150	1265	1200	1265	100	85	14	7				290	
		2,2	100L1-4																											310	
		5,5	132S-4																											360	
		7,5	132S2-2																											360	
		11	160M1-2																											400	
		18,5	160L-2																											410	
		1,5	90L-4																											410	
	0,5	0,5	1,1	160M1-2	435	392	191	830	339	510	151	750	1142	1468	1323	1219	1040	1268	1123	1150	1265	1200	1265	100	85	14	7				310
			1,5	90L-4																											300
			3	100L2-4																											300
			15	160M2-2																											300
			0,75	90S-6																											400
			1,1	90S-4																											400
			2,2	100L1-4																											410
0,7	0,7	1,1	160M1-2	435	392	191	830	339	510	151	750	1142	1468	1323	1219	1040	1268	1123	1150	1265	1200	1265	100	85	14	7				380	
		1,5	90L-4																											300	
		3	100L2-4																											300	
		15	160M2-2																											300	
		0,75	90S-6																											400	
		1,1	90S-4																											400	
		2,2	100L1-4																											410	
50	1	2,2	112M-6	556	485	234	830	425	435	195	900	1385	1789	1610	1482	1040	1482	1259	1290	1360	1360	100	85	14	7					380	
		4	112M2-4																												400
		7,5	132M2-4																												422
		15	160L-4																												550
		18,5	160L-2																												600

TECHNICAL DATA

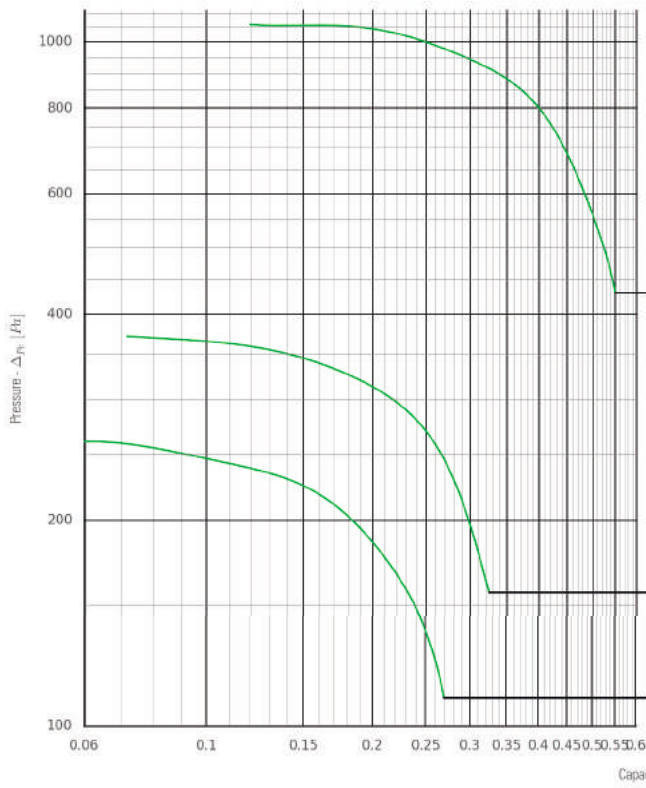


Visual drawing. We reserve the right to implement changes.

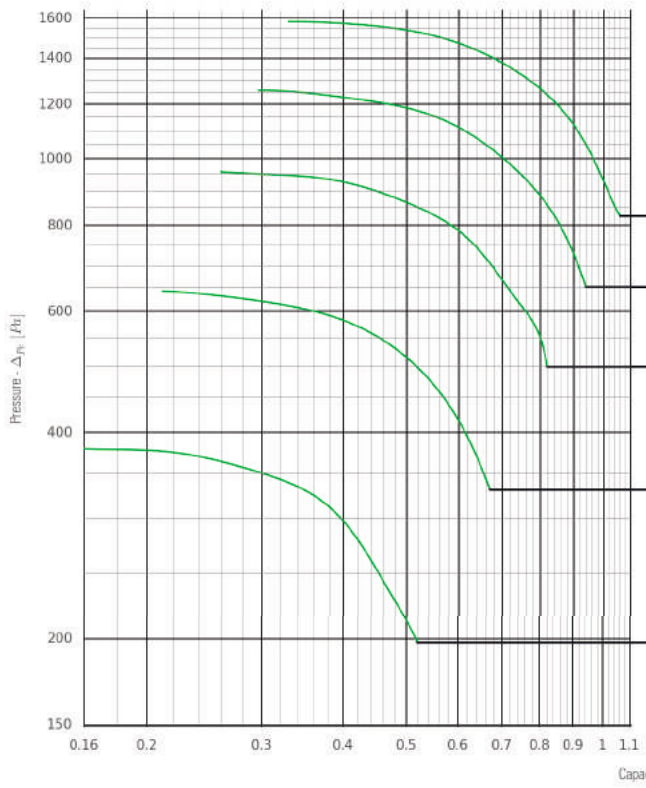
FLEXIBLE CONNECTIONS

ZWPS	Dn	Dp	Dz	b	b1	b2	[mm]			t	d	d1	[szt.]				
							b3	b4	b5				k	k1	k2	k3	
20	200	224	244	125	250	284	314	159	189	140	7	10	8	8	-		
25	250	274	294	152	300	332	364	184	218				12				12
28	280	304	324	180	355	371	401	216	246		10	10	12	16	3	-	
31,5	315	339	361	200	350	382	416	232	266		15	15	16	20			
35,5	355	401	435	280	355	399	441	324	366		10	10	12	18	2	3	
40	400	432	456	250	500	532	566	282	316				12				12
50	500	532	556	335	600	632	666	367	401		10	10	12	18	2	3	
63	70	630	703	756	500	630	700	756	570		628	10	10	12	18	2	3
	150		662	696	494	626	662	692	532		560						
	200																
	250																

FLOW CHARACTERISTICS

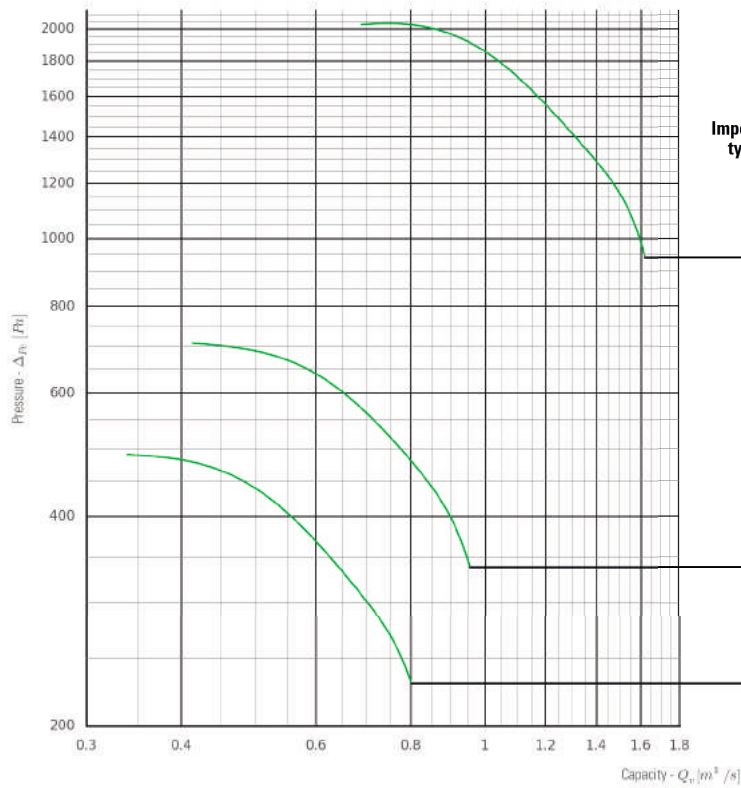


ZWPS-20					
Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
	2950	0,32	85	71 1-2	0,37
	1750	0,07	74	56 2-4	0,09
	1480	0,038	68	56 1-4	0,06

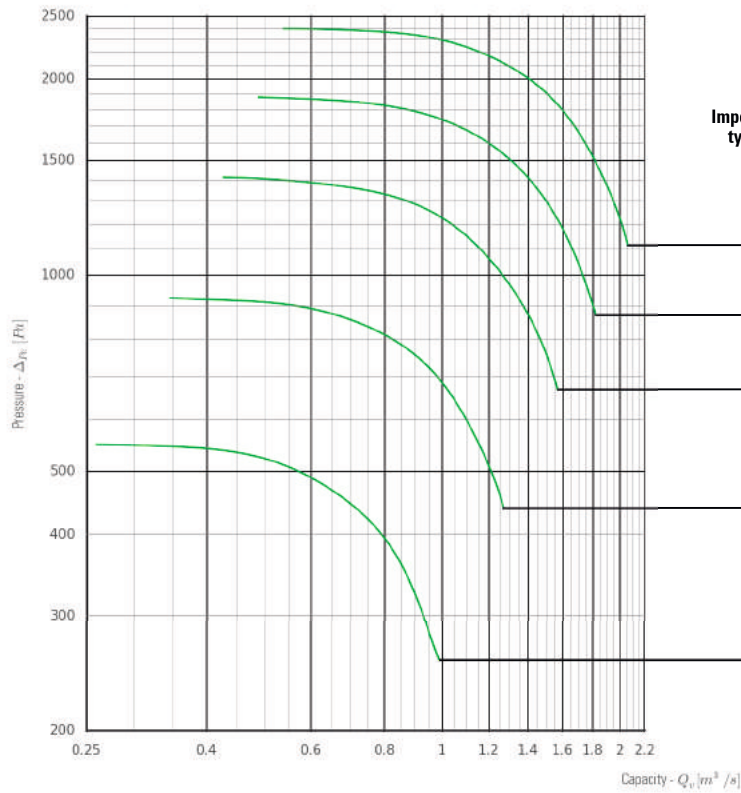


ZWPS-25					
Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
	2860	1,6	90	90L-2	2,2
	2540	1,1	85	90S-2	1,5
	2220	0,85	83	90S-2	1,5
	1811	0,45	79	90S-4	1,1
	1400	0,25	76	80 2-4	0,75

FLOW CHARACTERISTICS

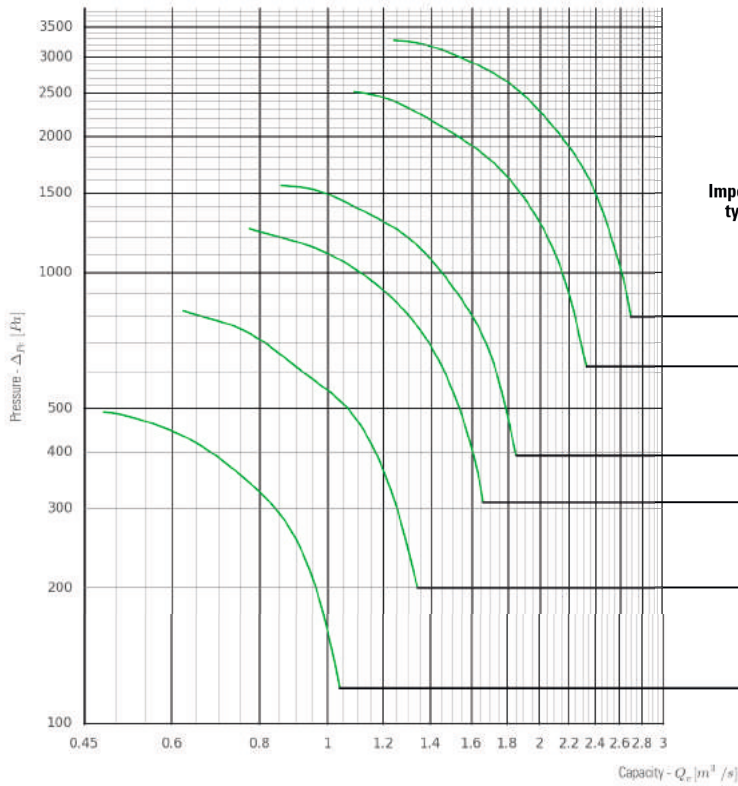


ZWPS-28					
Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
	2950	2,5	89	100L-2	3
	1750	0,6	85	80 2-4	0,75
	1450	0,3	77	71 2-4	0,37



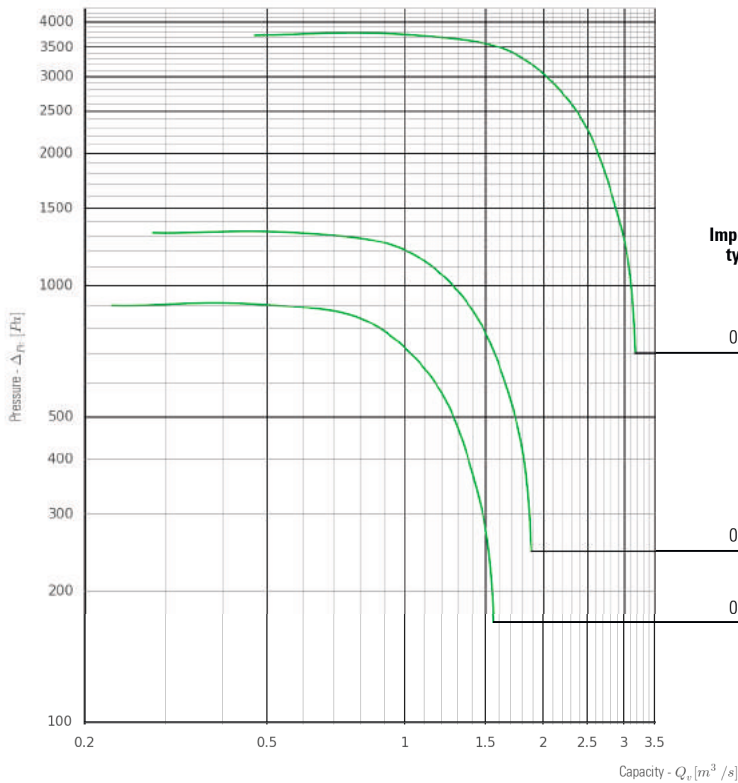
ZWPS-31,5					
Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
	2920	4,8	98	132S1-2	5,5
	2580	3,0	95	112M1-2	3
	2234	2,1	91	100L-2	2,2
	1811	1,1	87	90L-4	1,5
	1400	0,5	80	80 2-4	0,75

FLOW CHARACTERISTICS



ZWPS-35,5

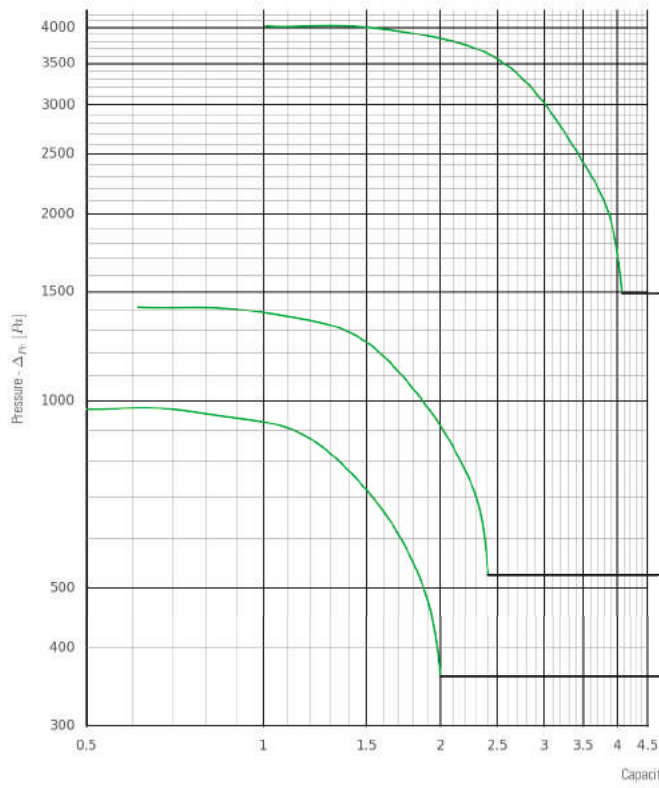
Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
	2940	7,01	94	132S2-2	7,5
	2555	4,61	91	132S1-2	5,5
	2033	2,35	85	100L-2	3
	1820	1,67	83	100L1-4	2,2
	1460	0,86	81	90S-4	1,1
	1140	0,41	75	90S-4	1,1



ZWPS-40/0,5

Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]	
	0,5	2950	7,7	89	160M1-2	11
	0,5	1750	1,7	79	100L1-4	2,2
	0,5	1450	1	75	90L-4	1,5

FLOW CHARACTERISTICS

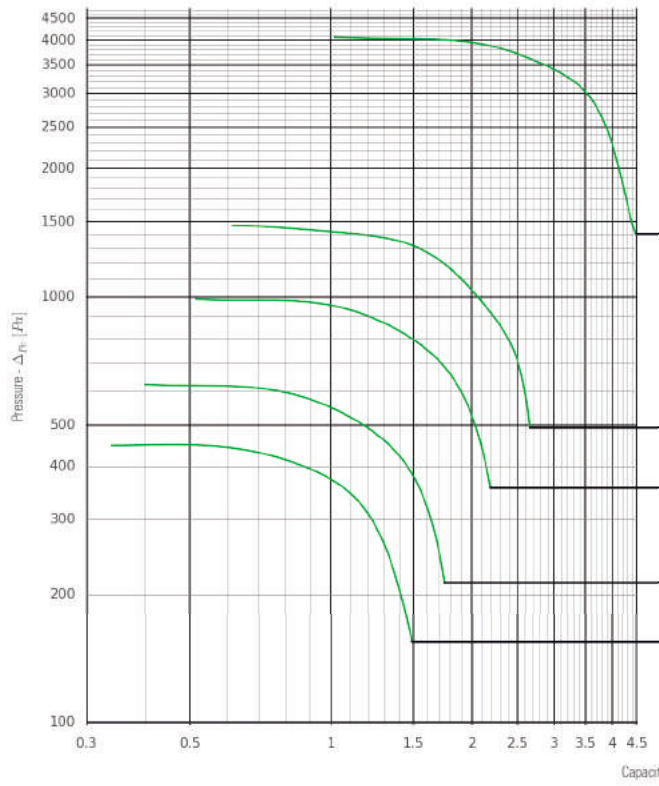


ZWPS-40/0,7

Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
0,7	2950	11,1	90	160M2-2	15

0,7	1750	2,4	80	100L2-4	3
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0,7	1450	1,4	77	90L-4	1,5
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ZWPS-40/0,8

Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
0,8	2950	12,3	97	160M2-2	15

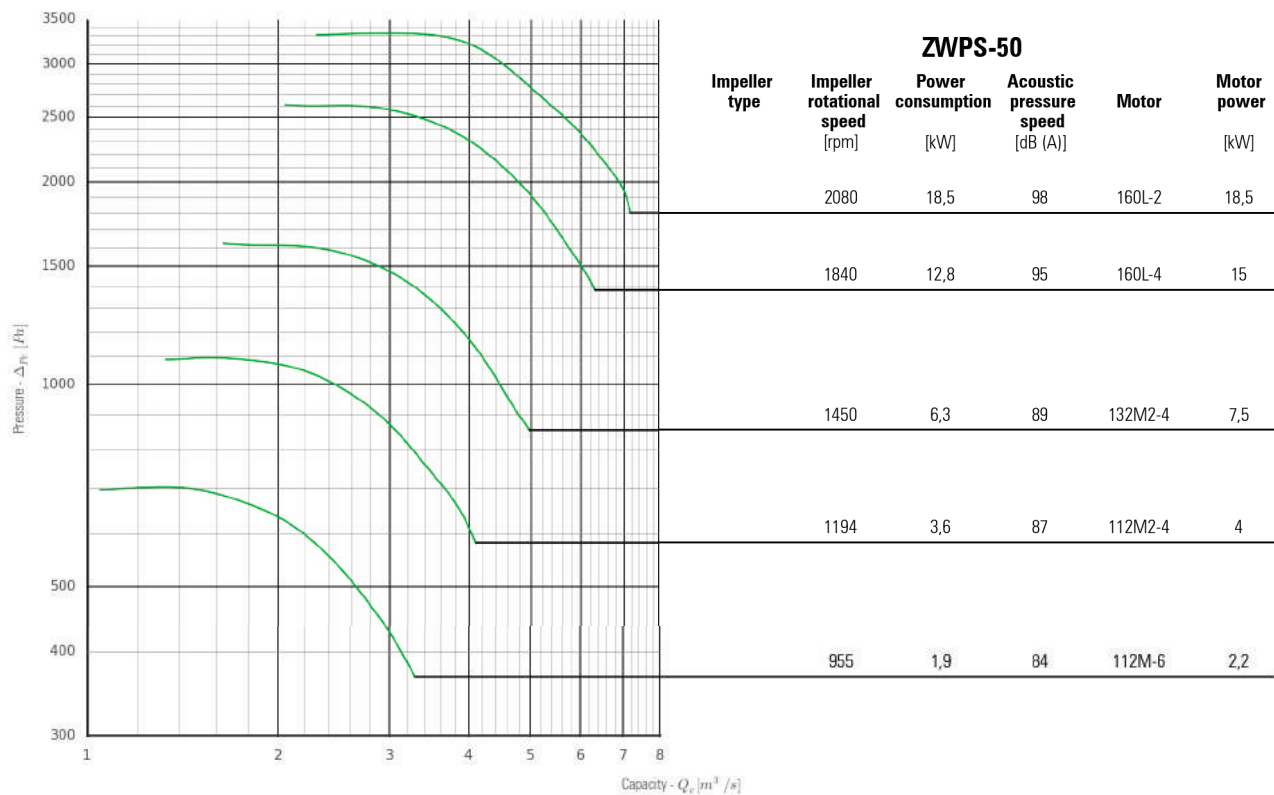
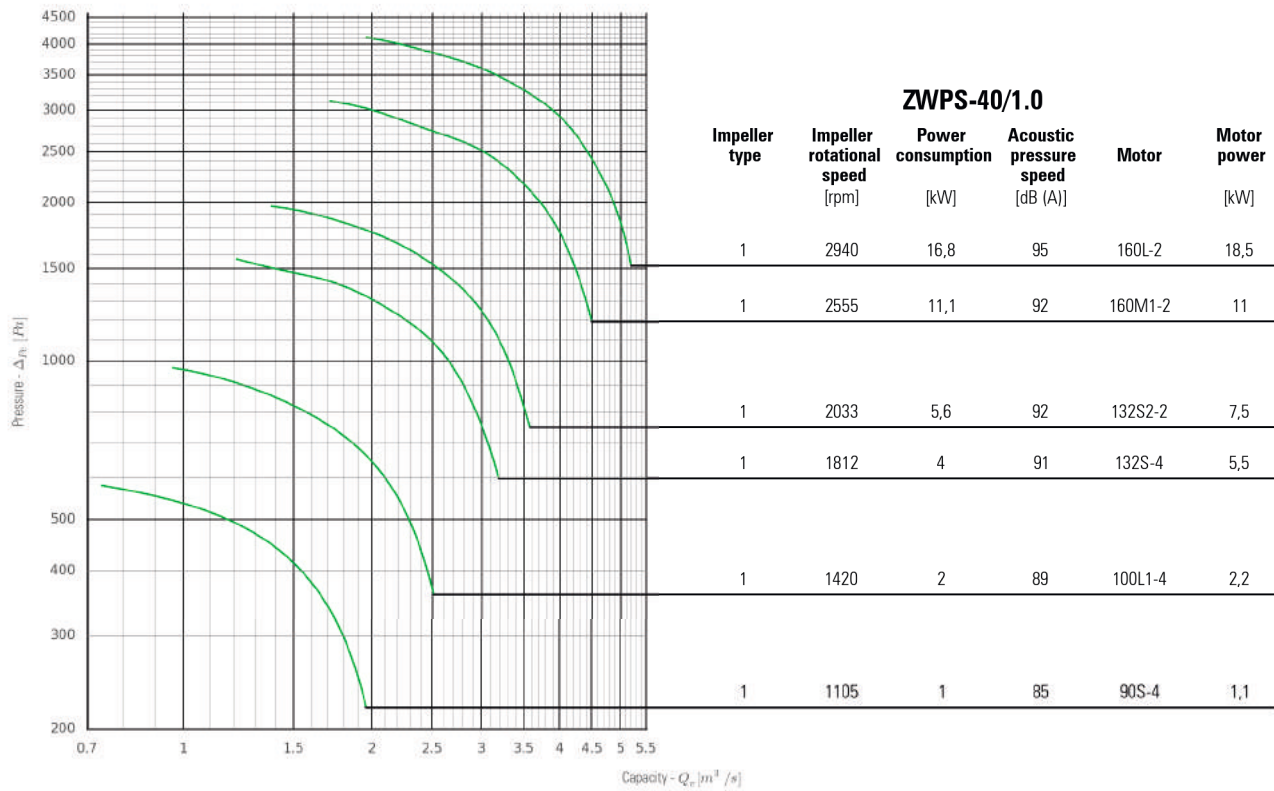
0,8	1750	2,6	80	100L2-4	3
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0,8	1450	1,5	77	100L1-4	2,2
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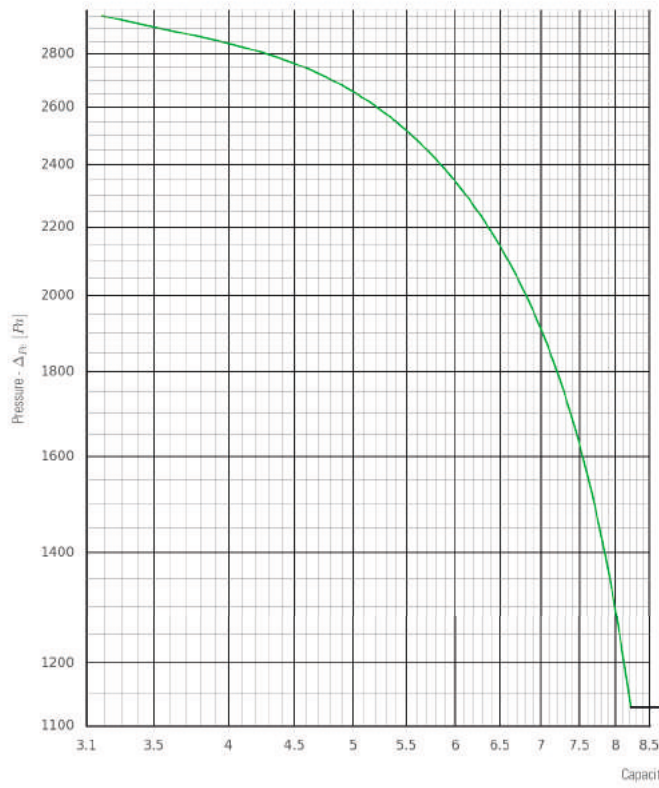
0,8	1150	0,8	76	90S-4	1,1
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0,8	980	0,5	75	90S-6	0,75
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FLOW CHARACTERISTICS

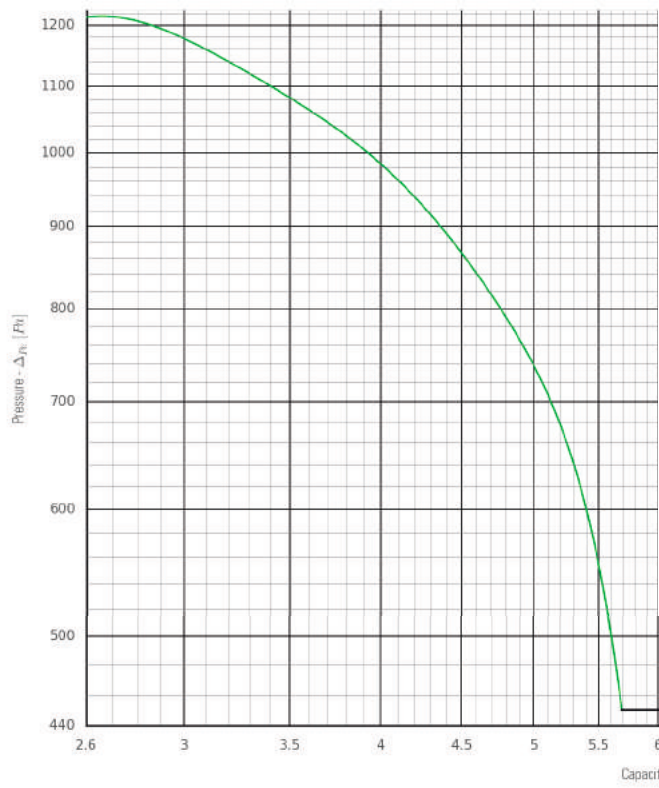


FLOW CHARACTERISTICS



ZWPS-63/70

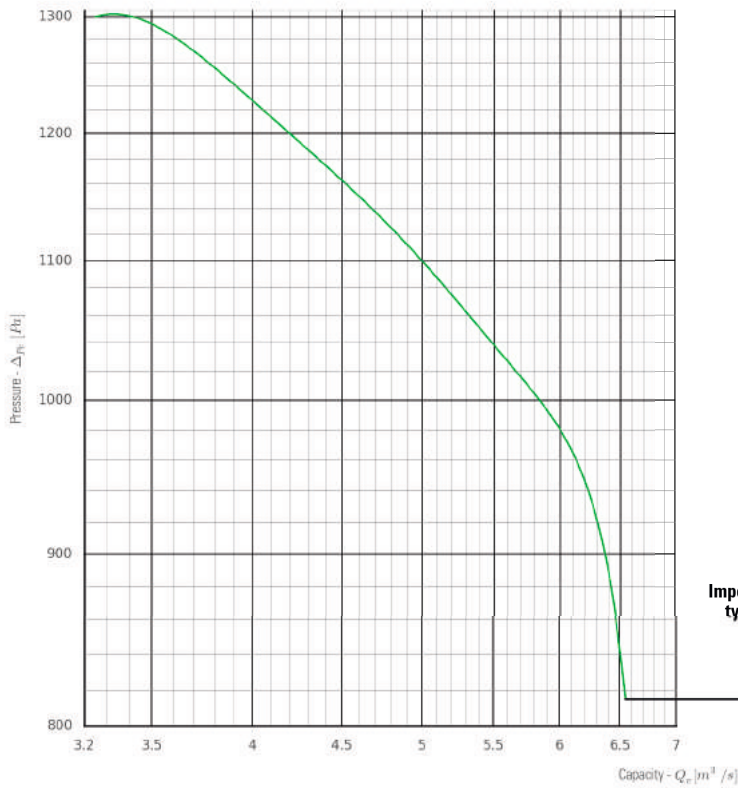
Impeller type	Impeller rotational speed	Power consumption	Acoustic pressure speed	Motor	Motor power
	[rpm]	[kW]	[dB (A)]		[kW]
	1460	17,3	90	180M-4	18,5



ZWPS-63/150

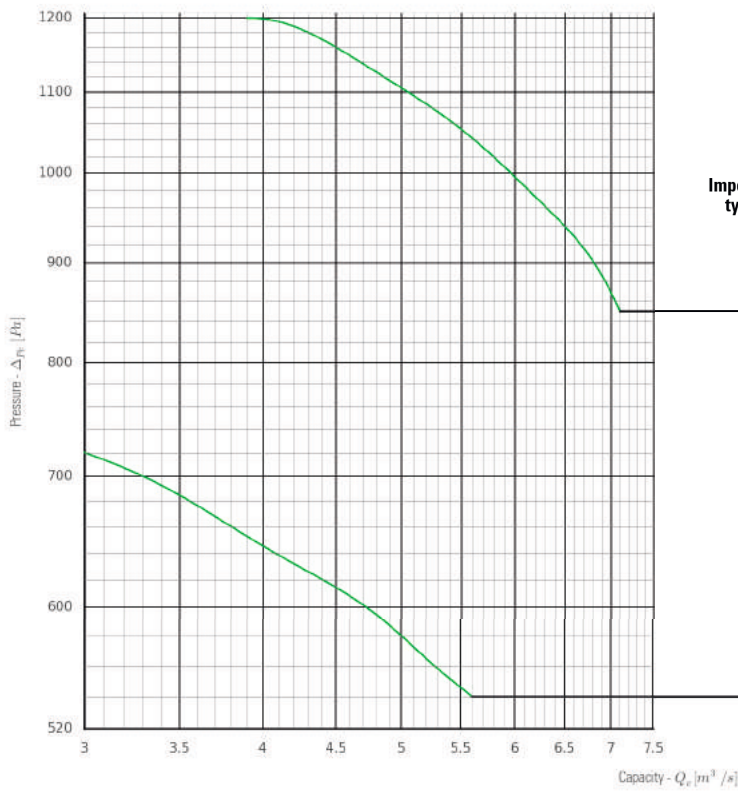
Impeller type	Impeller rotational speed	Power consumption	Acoustic pressure speed	Motor	Motor power
	[rpm]	[kW]	[dB (A)]		[kW]
	950	5,1	92	132M-6B	5,5

FLOW CHARACTERISTICS



ZWPS-63/200

Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
	960	7,3	87	160M-6	7,5

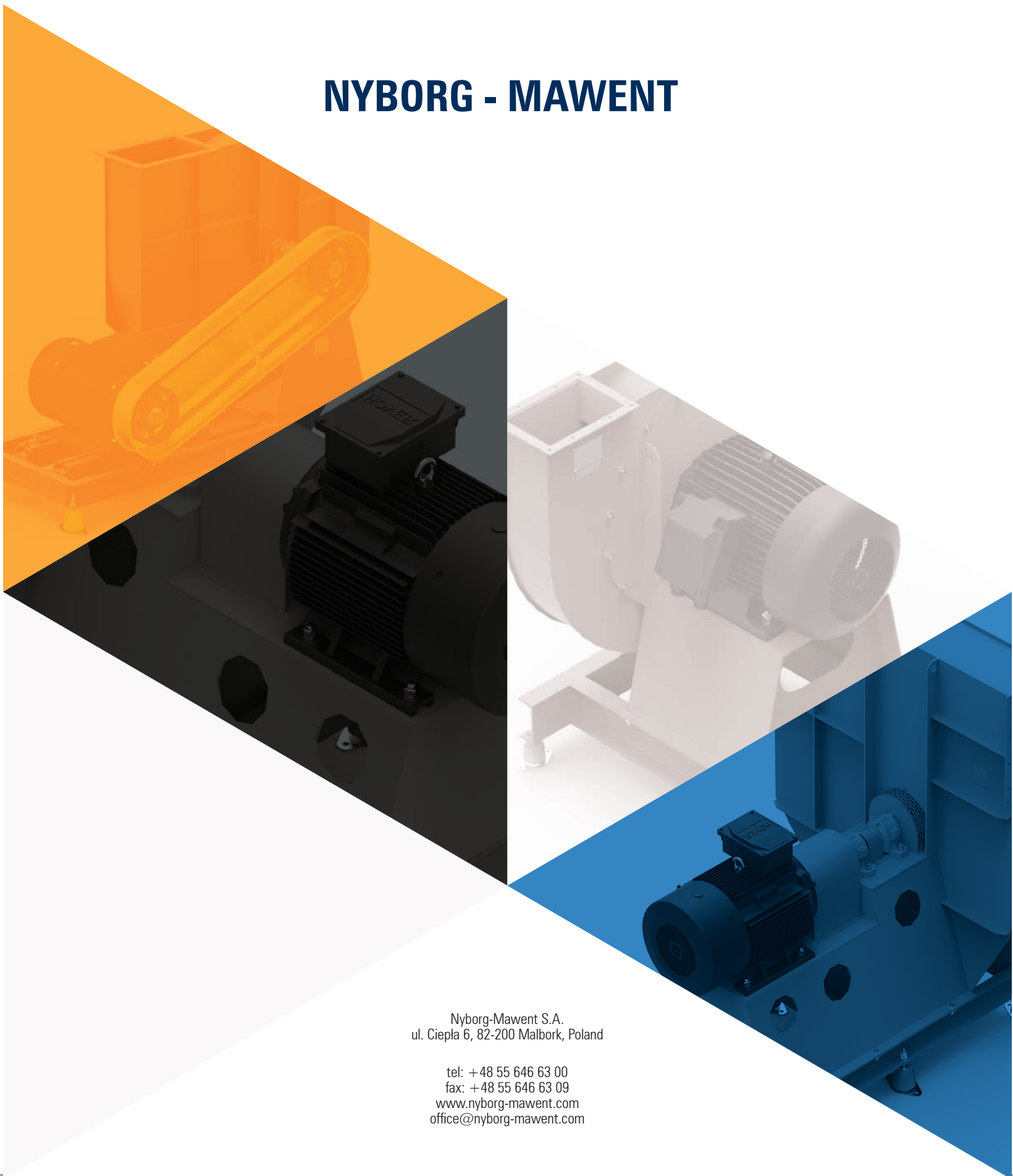


ZWPS-63/250

Impeller type	Impeller rotational speed [rpm]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
	960	8,3	90	160L-6	11

	710	3,37	81	160M-8B	5,5
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