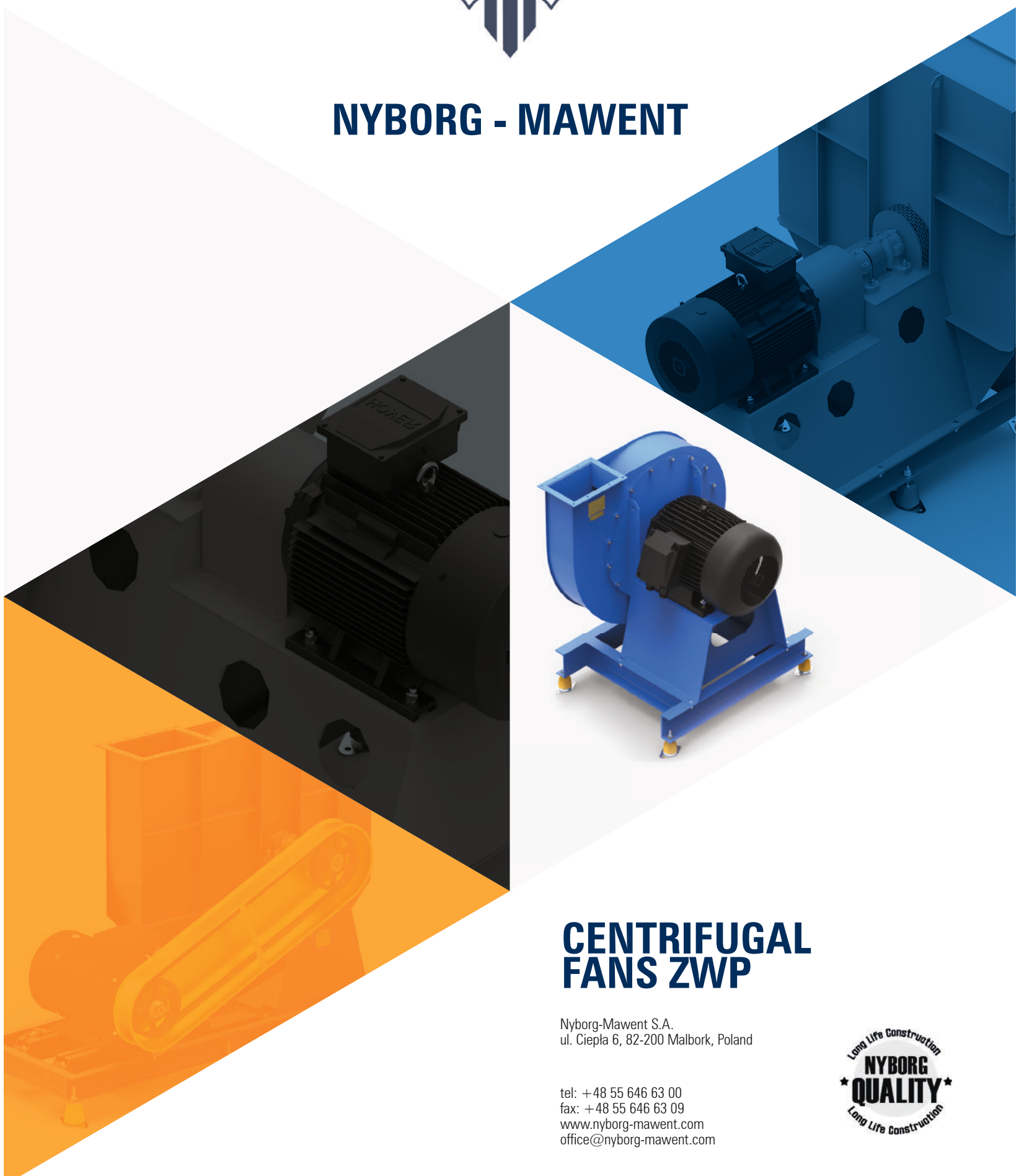




NYBORG - MAWENT



CENTRIFUGAL FANS ZWP

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APPLICATION:

Centrifugal ZWP 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 180°C
- Indirect belt drive (2) – up to 250°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:

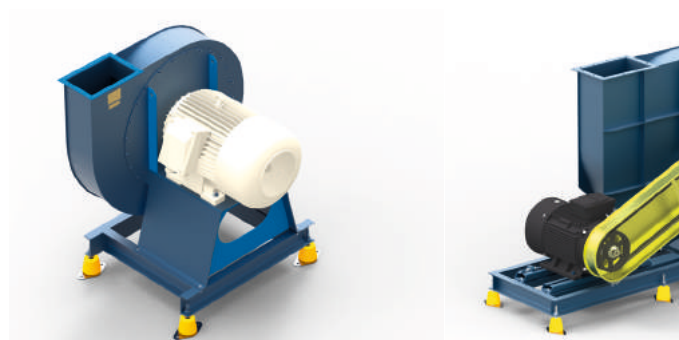
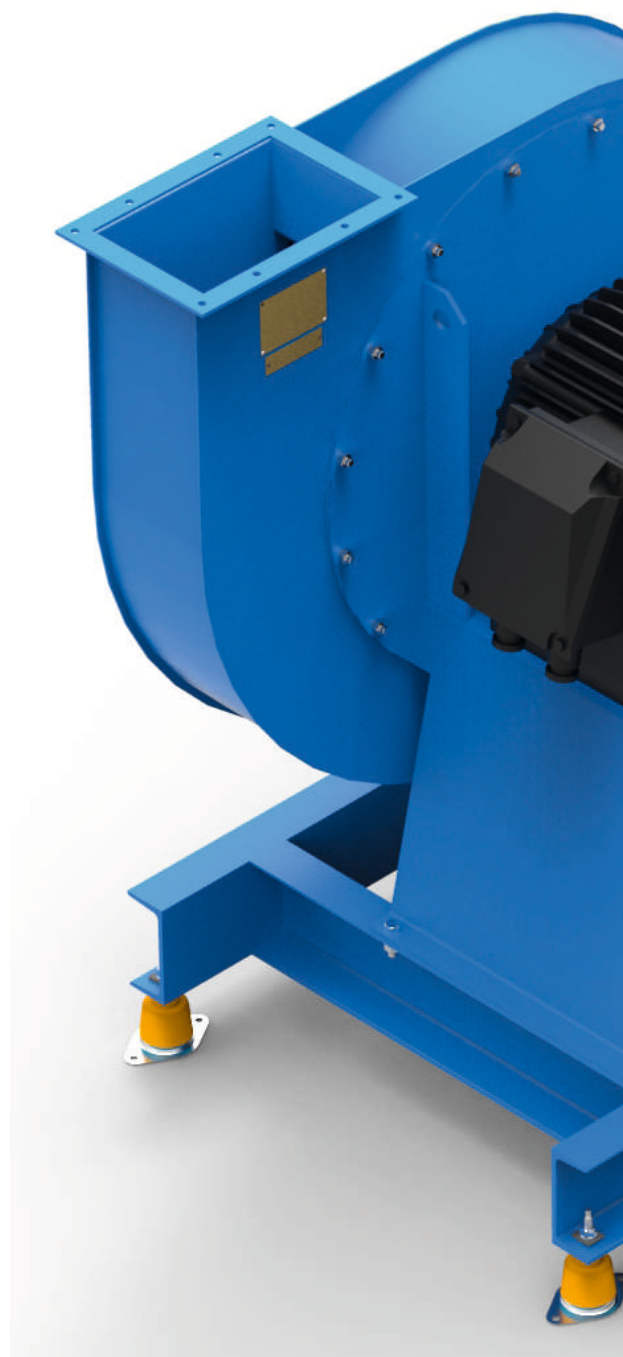
- Standard execution - painting with standard set of paints, C3 class, RAL 5009,
- Heat resistant execution - painting with a set of paints resistant to heat up to 350°C

Options: Hot deep galvanizing, Acid treatment, Passivation, Glass blasting, Chemo-resistant painting and in C4 and C5 classes on Client's request.

MOTOR:

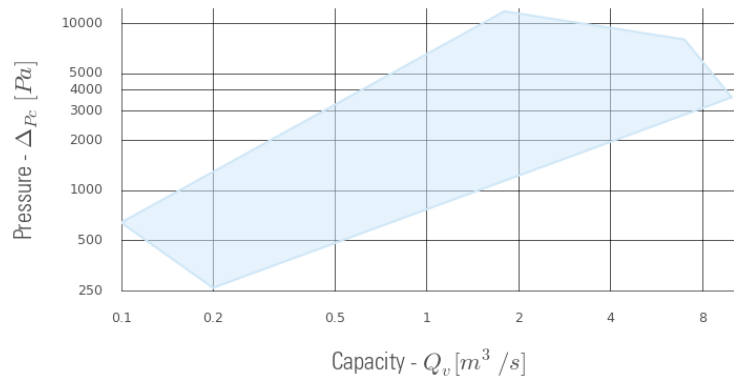
In standard the fans are driven by three-phase electric motors in IP55 execution, insulation class F, from world-renown producers. Ambient temperature must not exceed 40°C.

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:

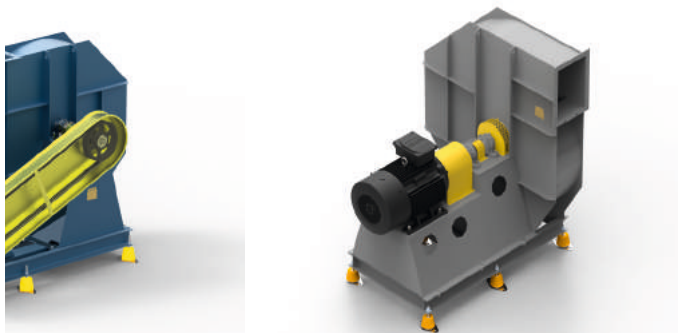
- Right: RDO, RD90, RS180, RD270
- Left: LGO, LG90, LG180, LG270

Other mounting positions available after contact with sales department.

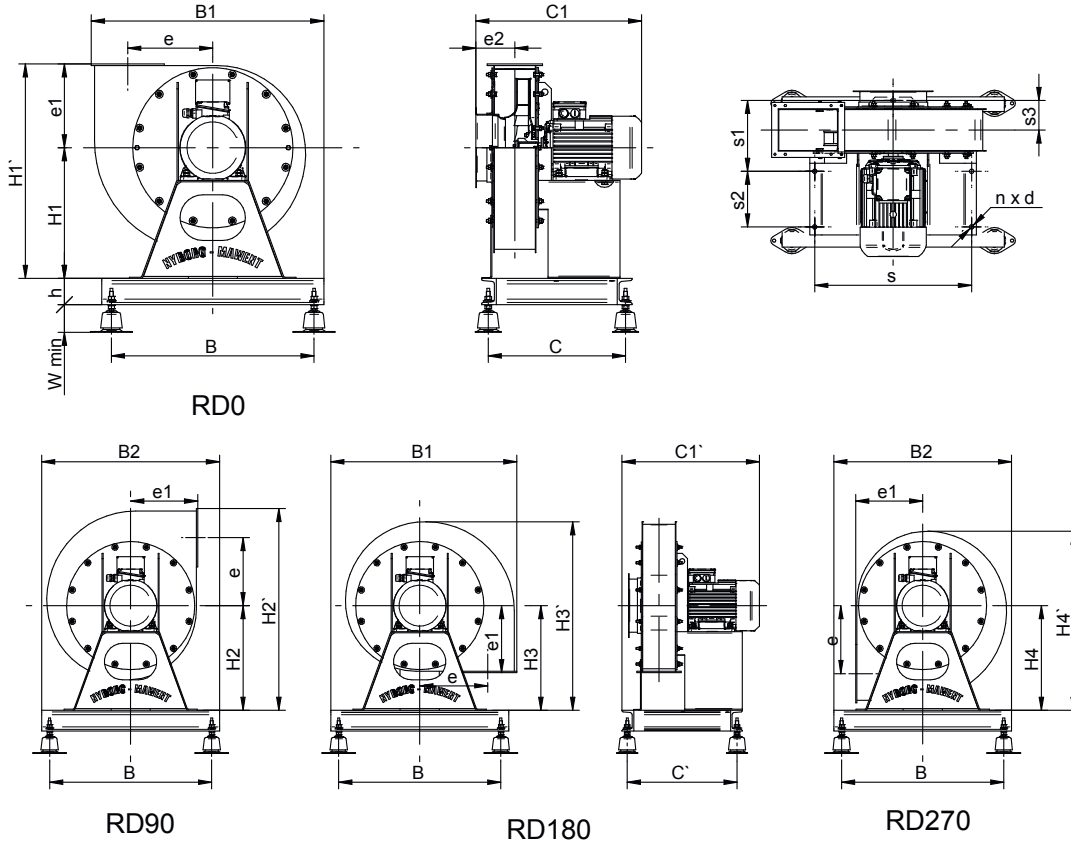
ACCESSORIES:

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

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

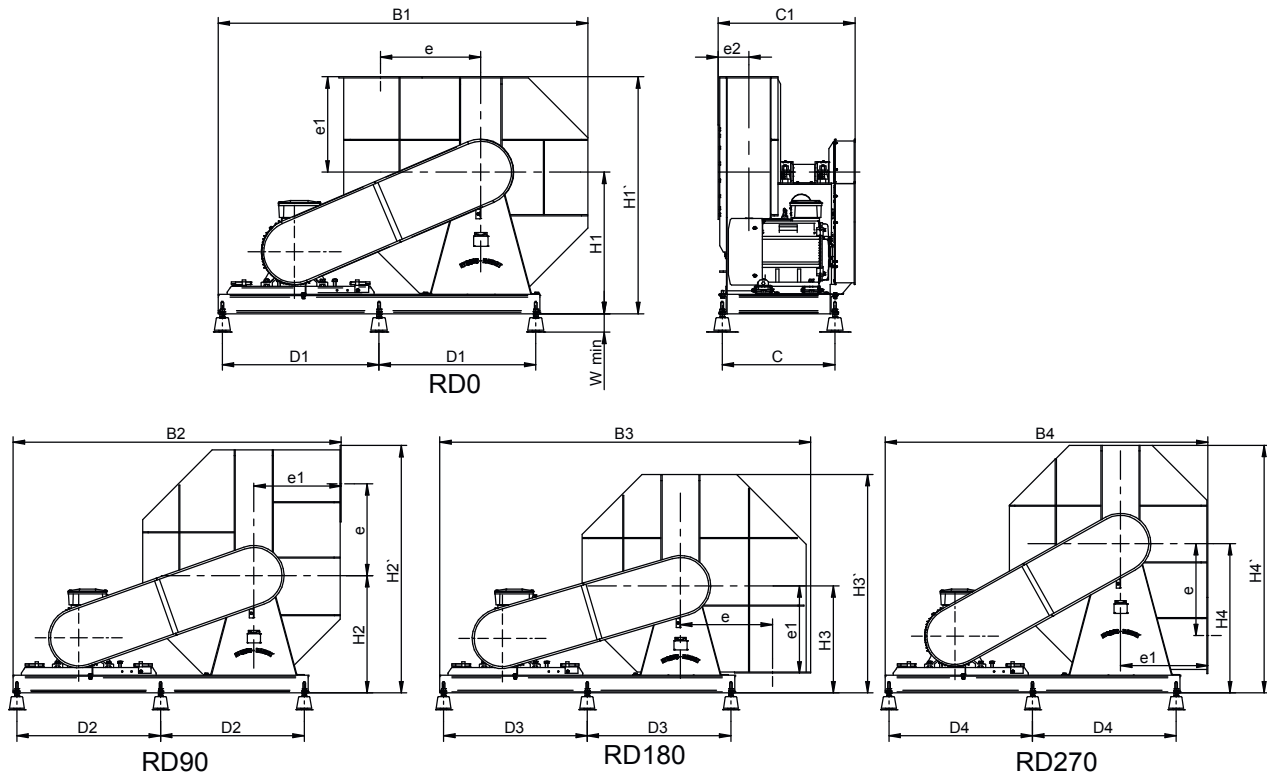


The drawing presents the fan in RD mounting position, LG is its mirror reflection.
Visual drawing. We reserve the right to implement changes.

FAN TYPE ZWP 20-56 WITH DIRECT DRIVE (NAP.1)

ZWP	Motor power [kW]	e	e1	e2	s	s1	s2	s3	H1	H2	H3	H4	H1'	H2'	H3'	H4'	h	W	B	B1	B2	C	C1	C'	C1'	d	n	Impeller flywheel effect GD2 [Nm2]	Fan weight [kg]		
																														[mm]	[szt.]
20	0,55	260	256	116	480	210	170	91	400	656	772	721	684	80	85	620	712	680	420	435	496	467	491	552	532	591	13,8	76			
	2,2																												535	591	82
	3,0																												483	539	90
	1,1																												548	604	102
22,4	3,0	290	284	123	480	226	220	95	450	734	861	809	765	80	85	620	751	699	490	548	532	588	604	588	557	111	111				
	4,0																											580	636	138	
	5,5																											501	557	111	
	1,1																											584	640	157	
25	5,5	324	317	123	560	228	220	96	500	817	969	898	851	80	85	690	844	773	490	584	622	546	640	578	557	111	157				
	7,5																											622	578	168	
	11																											590	703	203	
	0,75																											510	476	532	
28	2,2	366	353	133	560	249	220	106	560	913	1083	1005	953	80	85	690	898	820	510	476	537	543	532	593	219	226					
	11																										610	723	662		
	15																										628	168			
	1,5																										530	587	564		
31,5	2,2	411	395	166	650	267	220	115	600	995	1183	1100	1041	80	85	920	1073	990	630	809	684	809	809	887	936	178	279				
	3,0																											720	858	835	
	4,0																											720	858	835	
	18,5																											720	858	835	
	22																											720	858	835	
	30																											720	858	835	
	2,2																											613	661	231	
	4,0																											672	578	236	
35,5	5,5	460	443	180	750	292	250	128	670	1113	1321	1236	1164	100	85	940	1151	1006	530	672	740	578	720	788	258	269					
	7,5																										760	933	799		
	30																										830	1129	869		
	37																										830	1129	869		
	55																										830	1129	869		
	2,2																										632	680	272		
	3,0																										575	691	624		
	7,5																										759	807	291		
40	11	522	496	187	830	316	270	140	750	1246	1483	1380	1307	100	85	1040	1283	1180	675	810	724	858	1196	344	729						
	55																									850	1148	900			
	75																									910	1208	960			
	90																									910	1208	960			
	135																									910	1208	960			
	140																									910	1208	960			
56	30	730	693	220	920	505	505	192	890	790	710	1045	1583	1825	1595	1825	140	135	914	1813	1576	1008	1042	1087	1157	1161					
	45																										1148	1282	839		
	55																										1148	1282	990		
	75																										1148	1282	1161		
	18																										1148	1282	1161		

TECHNICAL DATA

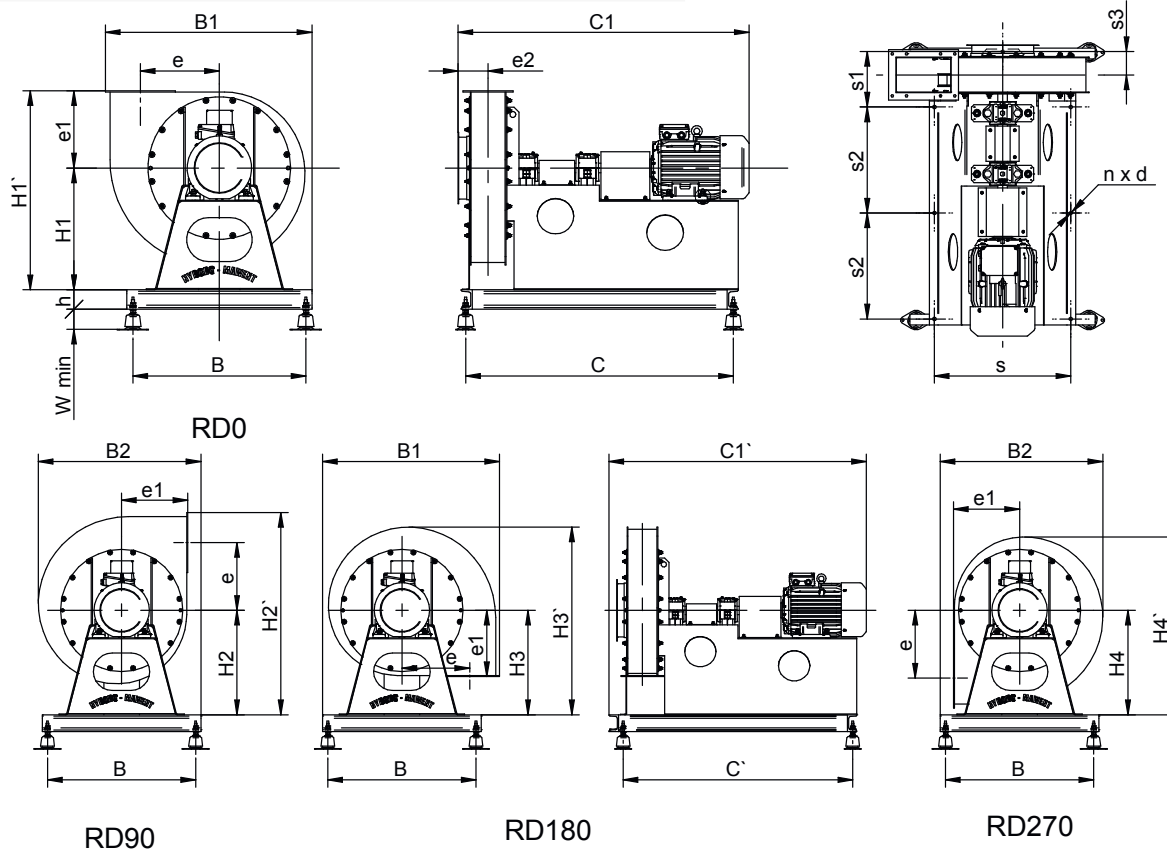


The drawing presents the fan in RD mounting position, LG is its mirror reflection.
Visual drawing. We reserve the right to implement changes.

FAN TYPE ZWP-56 WITH V-BELT DRIVE (NAP.2)

ZWP	Motor power [kW]	e	e1	e2	H1	H2	H3	H4	H1'	H2'	H3'	H4'	W	B1	B2	B3	B4	C	C1	D1	D2	D3	D4	Impeller flywheel effect GD2 [Nm ²]	Fan weight [kg]
56	30	730	693	220	890	790	710	1045	1723	1965	1735	1965	135	2340	2195	2570	2145	820	1010	965	935	945	910	680	990
	45													2380	2235	2605	2195			985	955	963	935		1066
	56													2690	2590	2745	2410			1140	1133	1033	1043		1203

TECHNICAL DATA

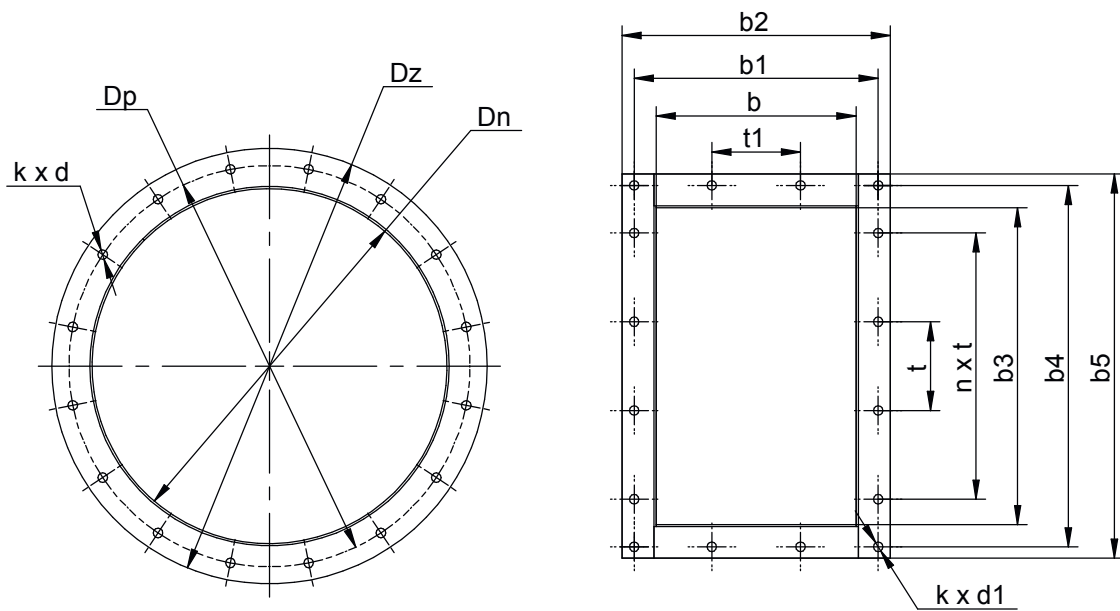


The drawing presents the fan in RD mounting position, LG is its mirror reflection.
Visual drawing. We reserve the right to implement changes.

FAN TYPE ZWP 20-56 WITH COUPLING DRIVE (NAP.4)

ZWP	Motor power [kW]	e	e1	e2	s	s1	s2	s3	H1	H2	H3	H4	H1'	H2'	H3'	H4'	h	W	B	B1	B2	C	C1	C'	C1'	d	n	Impeller flywheel effect GD2 [Nm2]	Fan weight [kg]				
																														[mm]			
20	0,55	260	256	116	480	210	320	88	400	656	772	721	684	80	85	620	712	660	849	876	940	901	992	12	7,85	116							
	2,2																										986	1038	132				
	3,0																													894	997	941	1044
1,1	291	284	123	480	226	380	95	450	734	861	809	765	80	620	751	690	983	1069	1076	1036	1122	158											
3,0																							1020	1156	1066	1202	170						
4,0																												896	1000	946	1050	164	
5,5	324	317	123	560	228	435	96	500	817	969	898	851	80	710	849	778	778	1097	1158	1149	1210	20,6	193										
1,1																								1196	1248	230							
5,5																											715	852	781	1198	1307	1201	212
7,5	365	353	135	560	249	475	106	560	913	1083	1005	953	80	710	903	825	1028	1090	1160	1079	1211	31,4	219										
2,2																								1160	1211	1211	158						
11																												715	906	828	1236	1937	1289
15	411	395	168	650	277	510	115	600	995	1183	1100	1041	100	85	785	1001	918	1047	1203	1102	1258	62,8	306										
1,5																								1211	1266	1540	406						
2,2																												1295	1484	1352	1590	468	
3,0	920	1073	990	1352	1582	1402	1632	100	670	1113	1321	1236	1164	100	940	1151	1066	1280	1367	1337	1424	102	306										
4,0																								1450	1507	1542	468						
5,5																												1497	1738	1567	1788	425	
30	522	496	187	830	316	660	140	750	1246	1483	1380	1307	140	1040	1283	1180	1430	1615	1484	1670	2015	156	481										
2,2																								1387	1442	1520	509						
3,0																												1305	1466	1361	1560	535	
7,5	730	693	220	920	505	540	140	890	790	710	1045	1853	1823	1595	1825	140	135	914	1813	1576	1620	1795	1877	1945	18	8	680						1008
11																												1731	2045	1781	2095	1087	
55																																	
75	1710	1945	1710	1945	1410																												

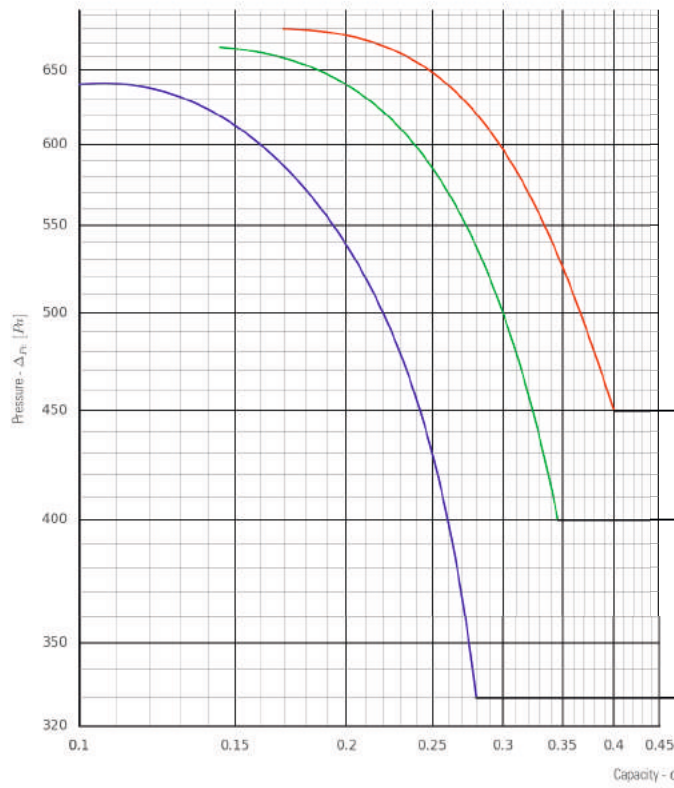
TECHNICAL DATA



Visual drawing. We reserve the right to implement changes.

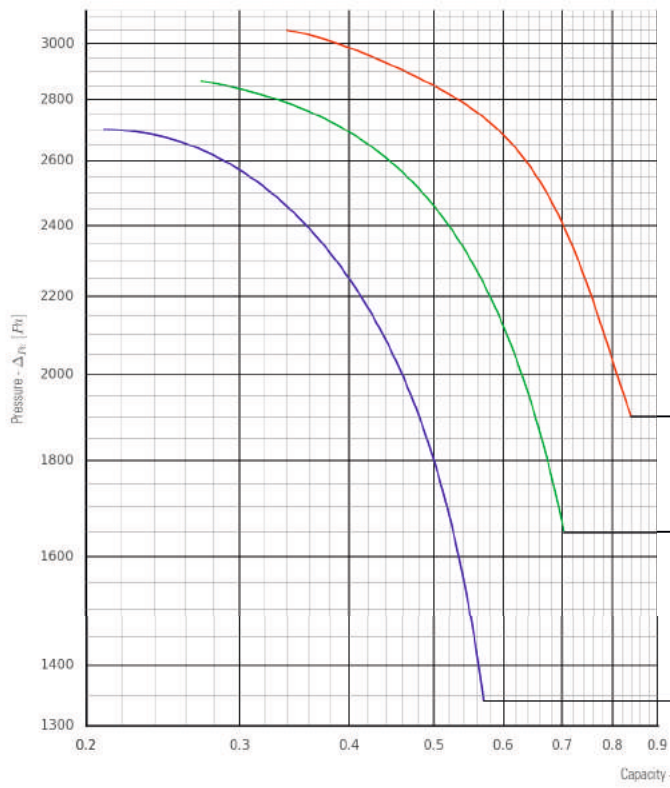
FLEXIBLE CONNECTIONS																				
ZWP	Motor power [kW]	Dn	Dp	Dz	b	b1	b2	b3	b4	b5	t	t1	d	d1	k	n				
		[mm]														[szt.]				
20	0,55	200	224	244	118	149	169	180	204	223	140									
	2,2																			
	3,0																			
22,4	1,1	224	248	268	140	164	186	200	224	243							7			
	3,0																			
	4,0																			
25	5,5	250	274	294	140	172	206	223	256	287								8		
	1,1																			
	5,5																			
28	7,5	280	304	324	160	192	226	247	282	313									-	
	11																			
	15																			
31,5	1,5	315	339	361	178	212	246	280	312	343										10
	2,2																			
	3,0																			
	4,0																			
	18,5																			
	22																			
35,5	30	355	387	411	200	232	268	321	347	381	12									
	2,2																			
	4,0																			
	5,5																			
	7,5																			
	30																			
40	37	400	432	456	224	256	292	355	387	421		140								
	55																			
	2,2																			
	3,0																			
	7,5																			
	11																			
56	55	560	633	687	315	385	423	500	570	606			15							
	30																			
	45																			
	75																			

FLOW CHARACTERISTICS



ZWP-20/1,25

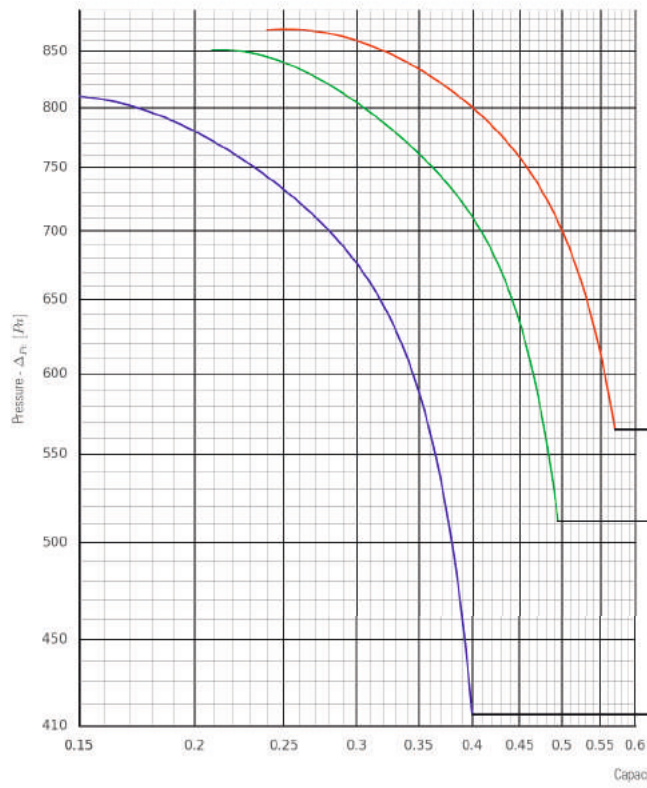
Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	1390	0,3	75	80-4A	0,55
1,00	1390	0,2	71	80-4A	0,55
0,75	1390	0,2	68	80-4A	0,55



ZWP-20/1,25

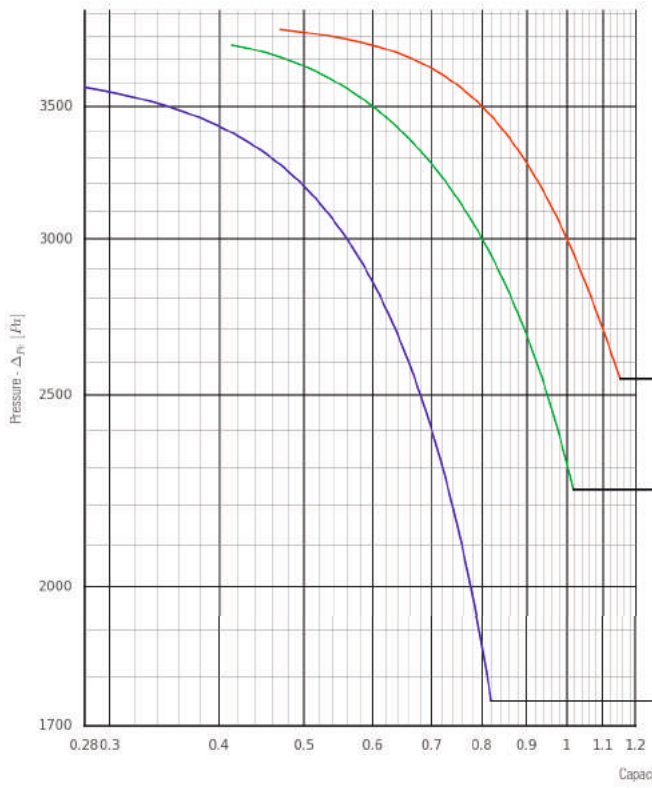
Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	2895	2,2	89	100L-2	3,0
1,00	2845	1,8	87	90L-2	2,2
0,75	2845	1,4	83	90L-2	2,2

FLOW CHARACTERISTICS



ZWP-22.4/1,25

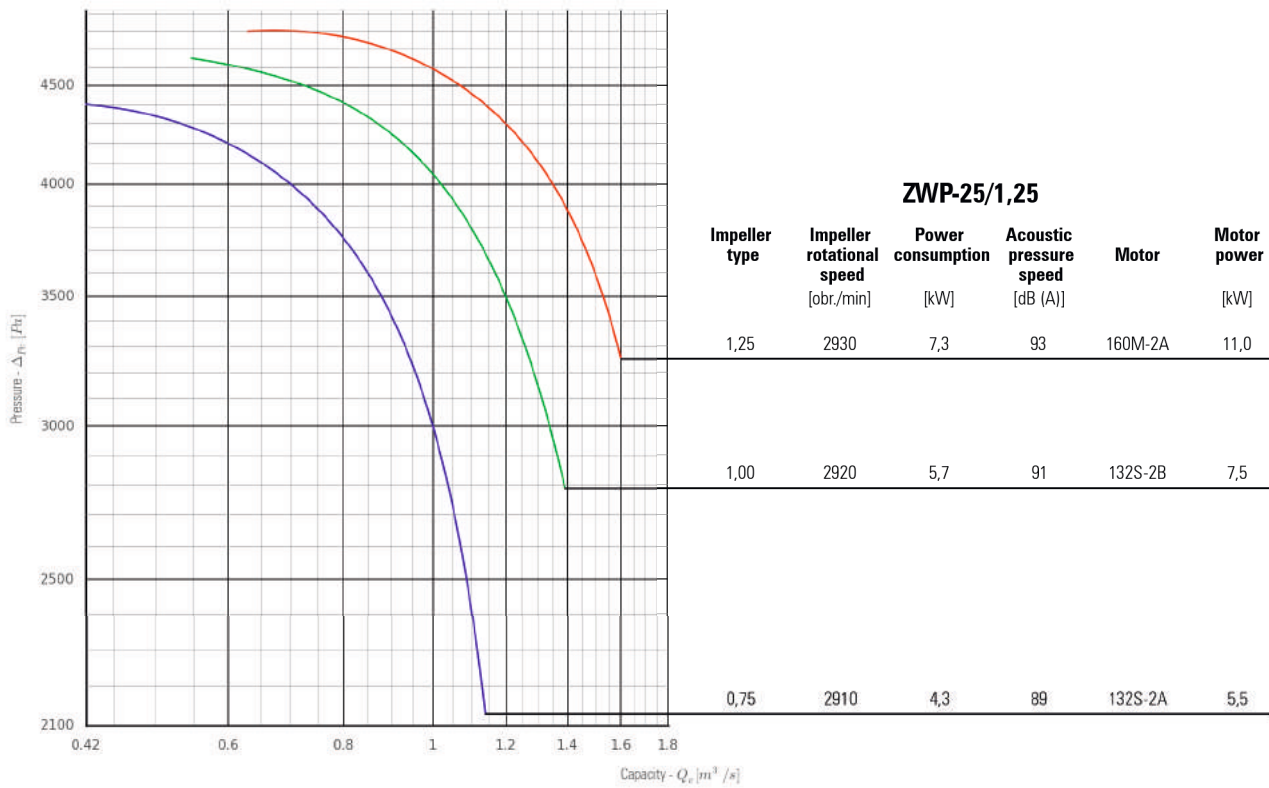
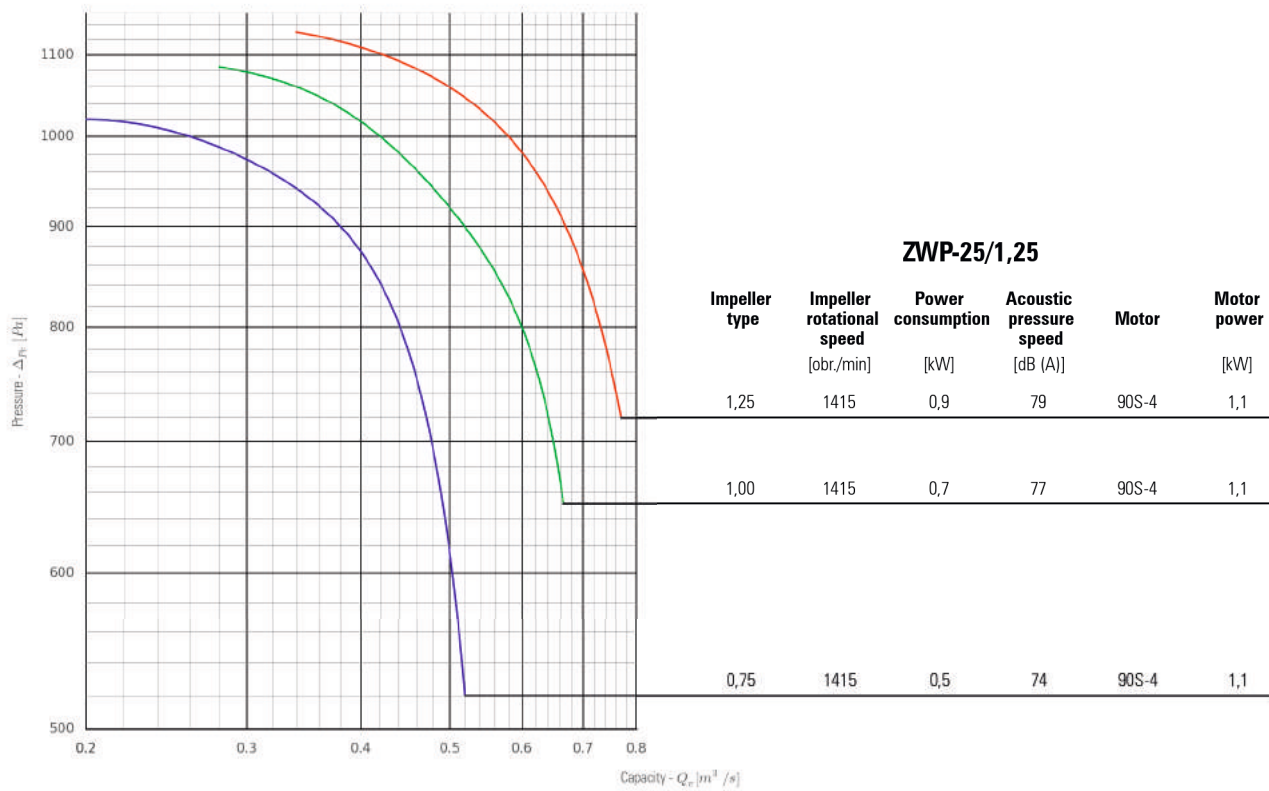
Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	1415	0,5	78	90S-4	1,1
1,00	1415	0,4	75	90S-4	1,1
0,75	1415	0,3	73	90S-4	1,1



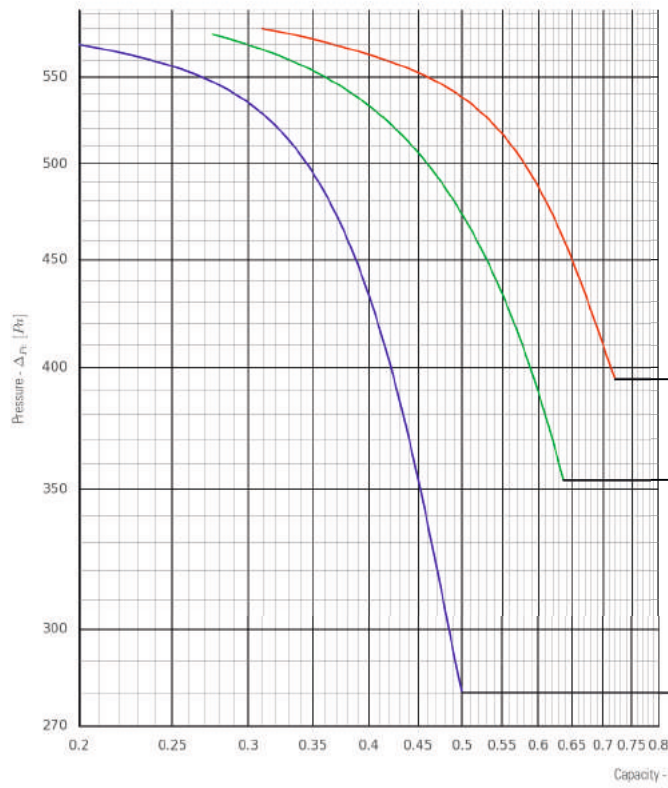
ZWP-22.4/1,25

Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	2910	4,1	91	132S-2A	5,5
1,00	2915	3,2	88	112M-2	4,0
0,75	2895	2,4	86	100L-2	3,0

FLOW CHARACTERISTICS

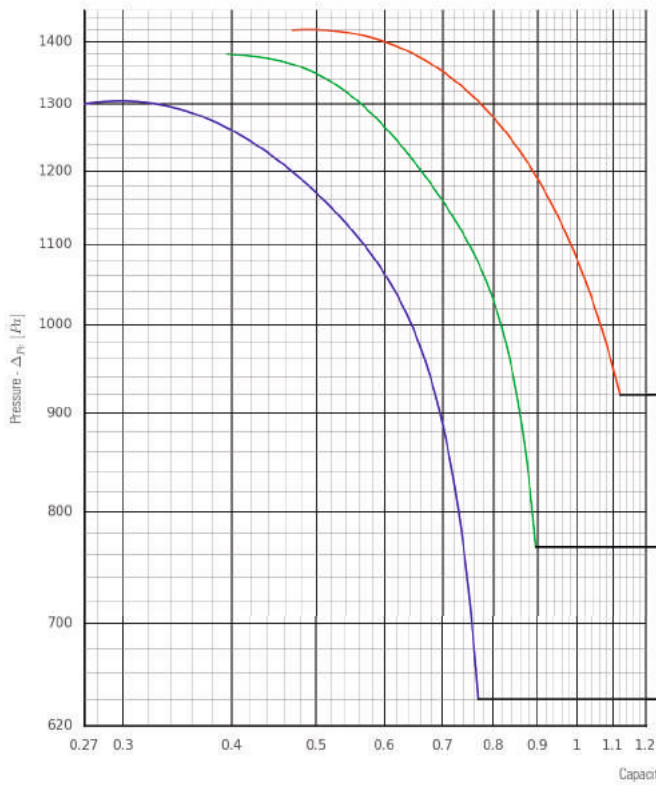


FLOW CHARACTERISTICS



ZWP-28/1,25

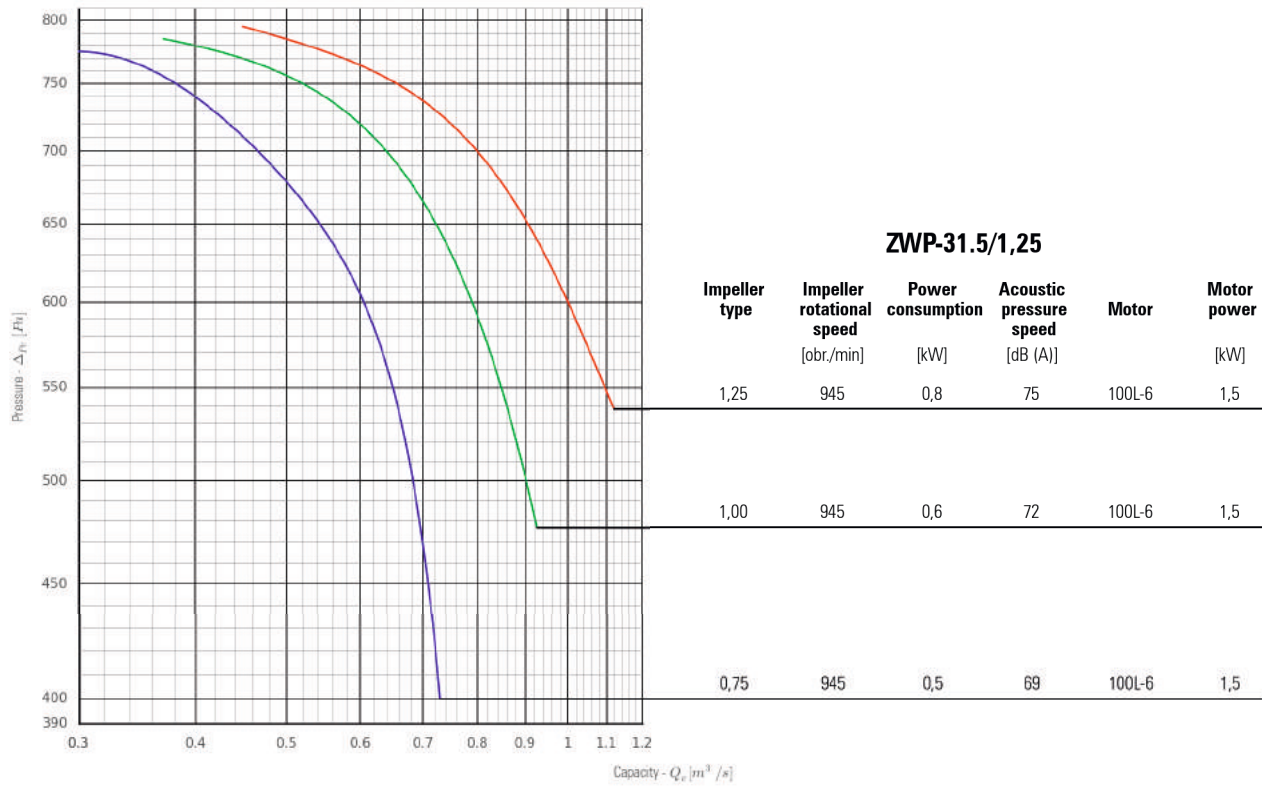
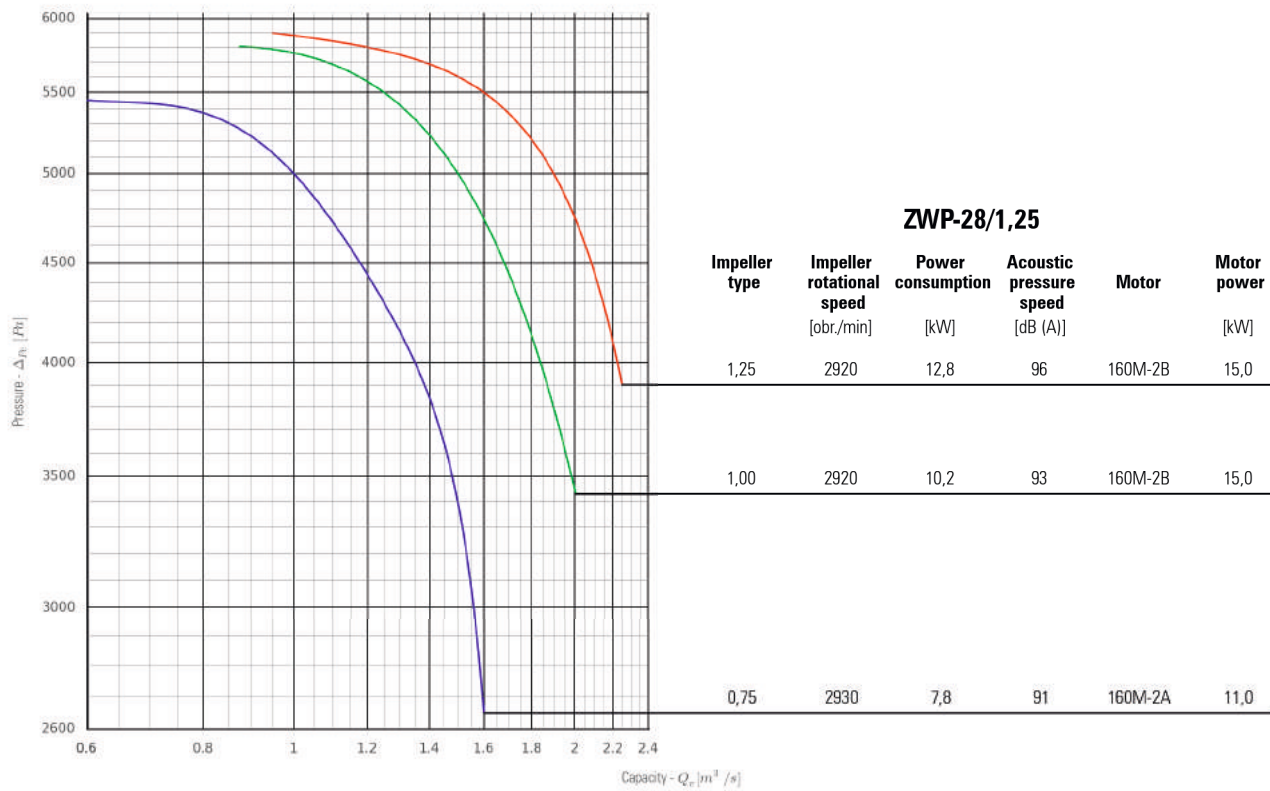
Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	920	0,5	71	90S-6	0,75
1,00	920	0,4	68	90S-6	0,75
0,75	920	0,3	66	90S-6	0,75



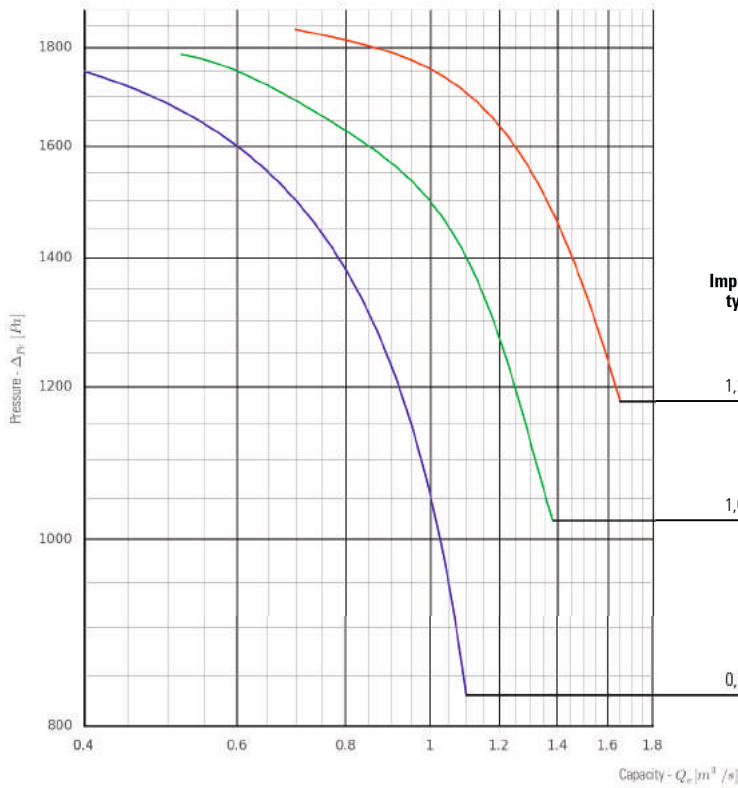
ZWP-28/1,25

Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	1420	1,5	81	100L-4A	2,2
1,00	1420	1,2	78	100L-4A	2,2
0,75	1420	0,9	75	90L-4	1,5

FLOW CHARACTERISTICS

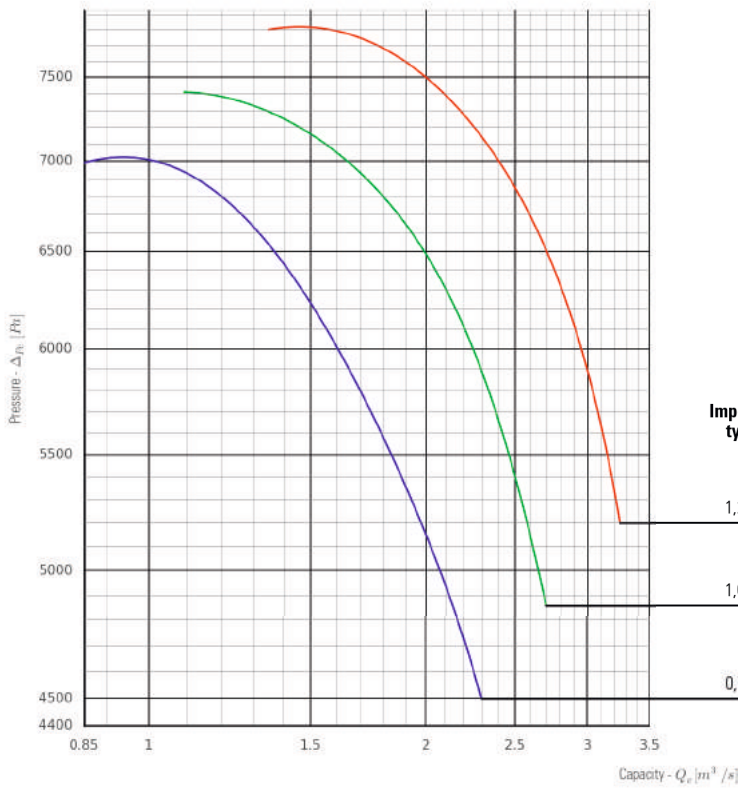


FLOW CHARACTERISTICS



ZWP-31.5/1,25

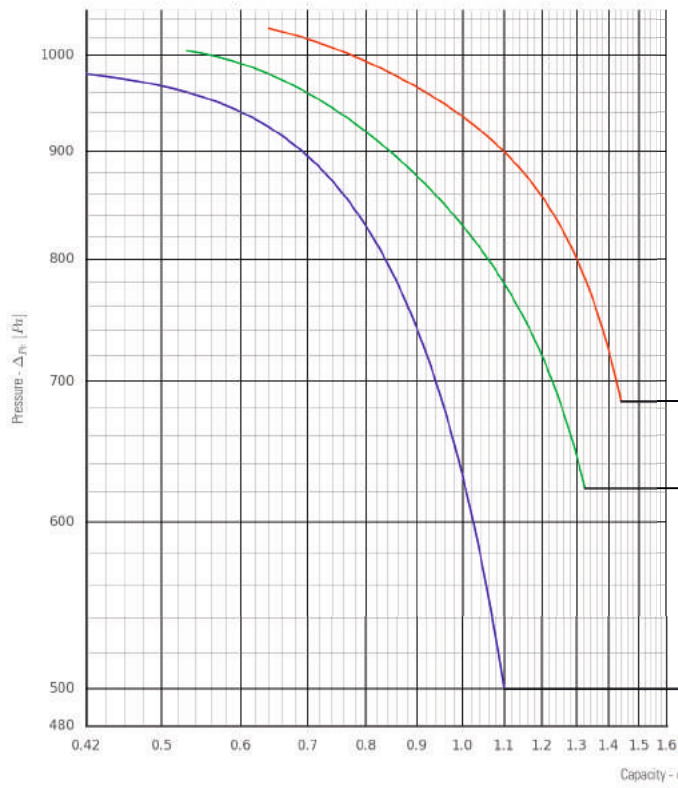
Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	1445	2,7	86	112M-4	4,0
1,00	1445	2,2	82	100L-4B	3,0
0,75	1420	1,6	77	100L-4A	2,2



ZWP-31.5/1,25

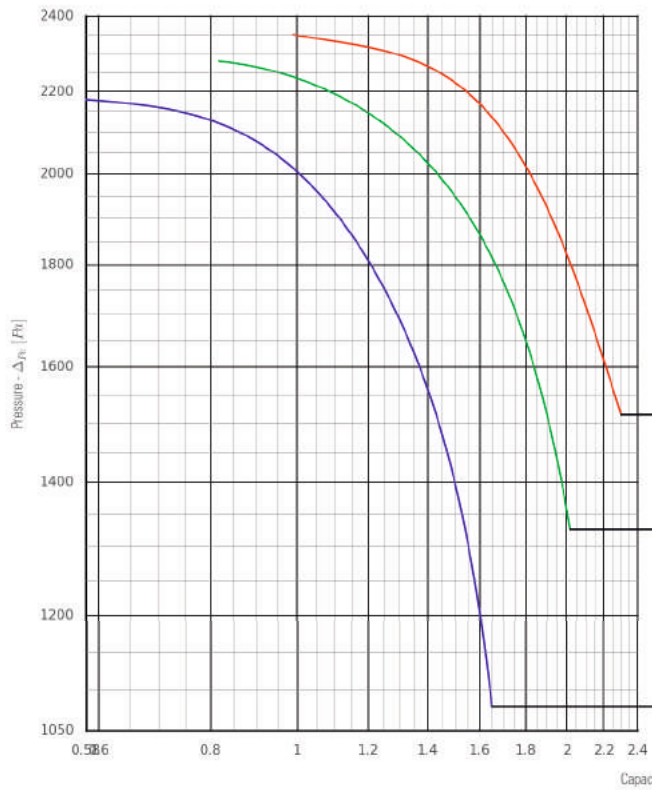
Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	2960	23,5	99	200L-2A	30,0
1,00	2920	18,6	97	180M-2	22,0
0,75	2930	14	95	160L-2	18,5

FLOW CHARACTERISTICS



ZWP-35.5/1,25

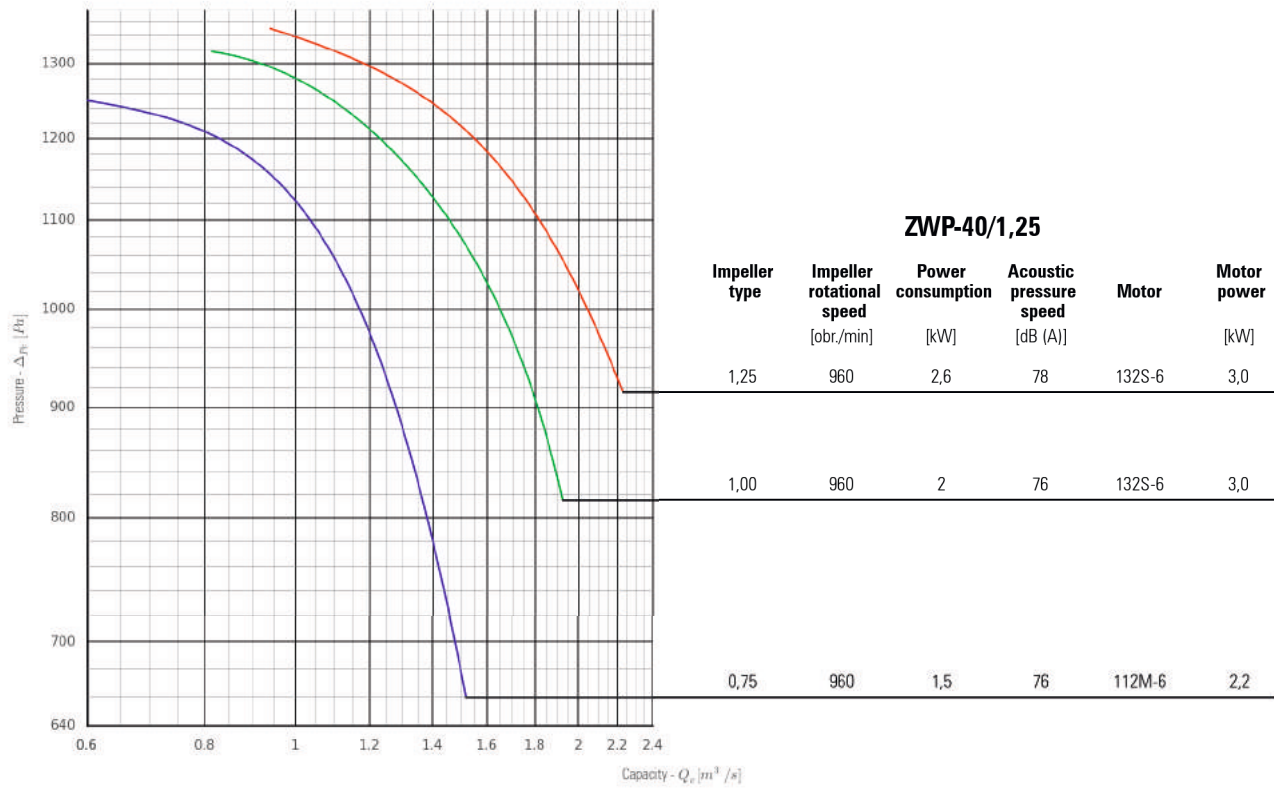
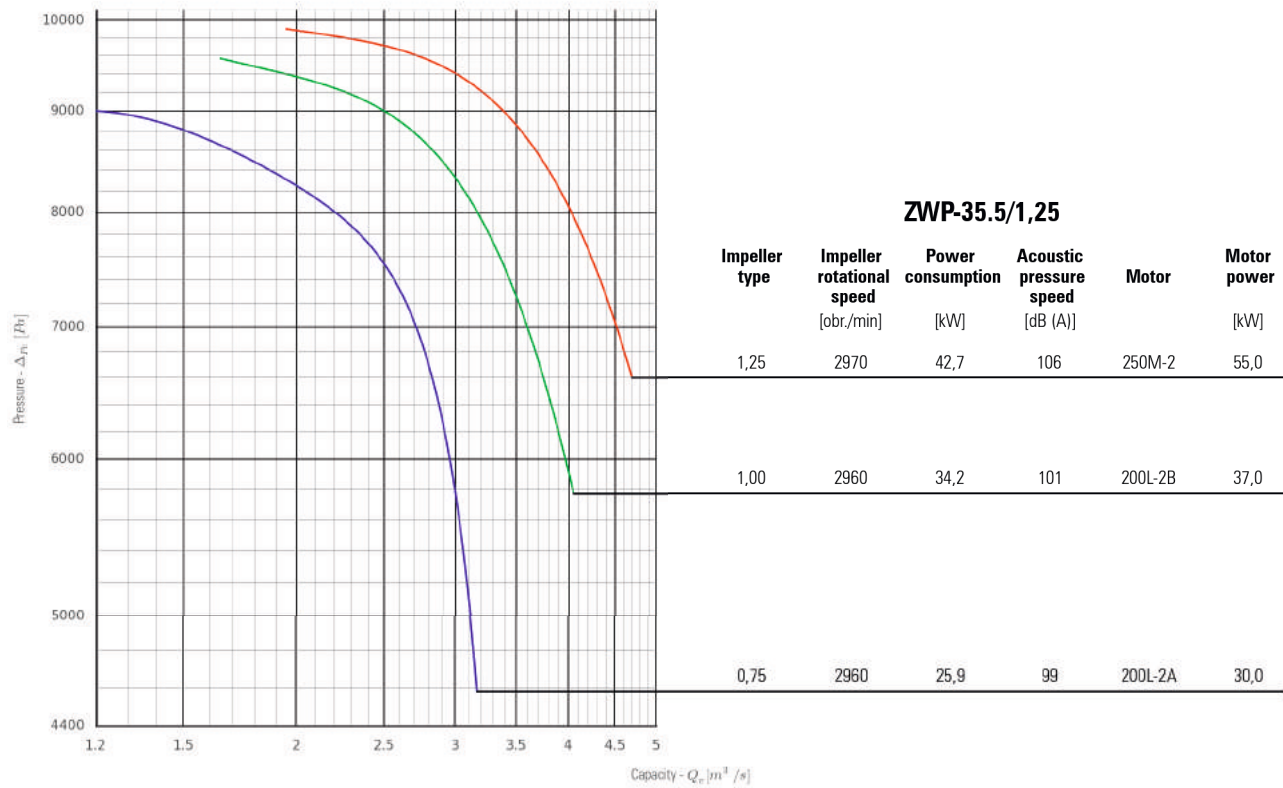
Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	955	1,5	77	112M-6	2,2
1,00	955	1,2	75	112M-6	2,2
0,75	955	0,9	71	112M-6	2,2



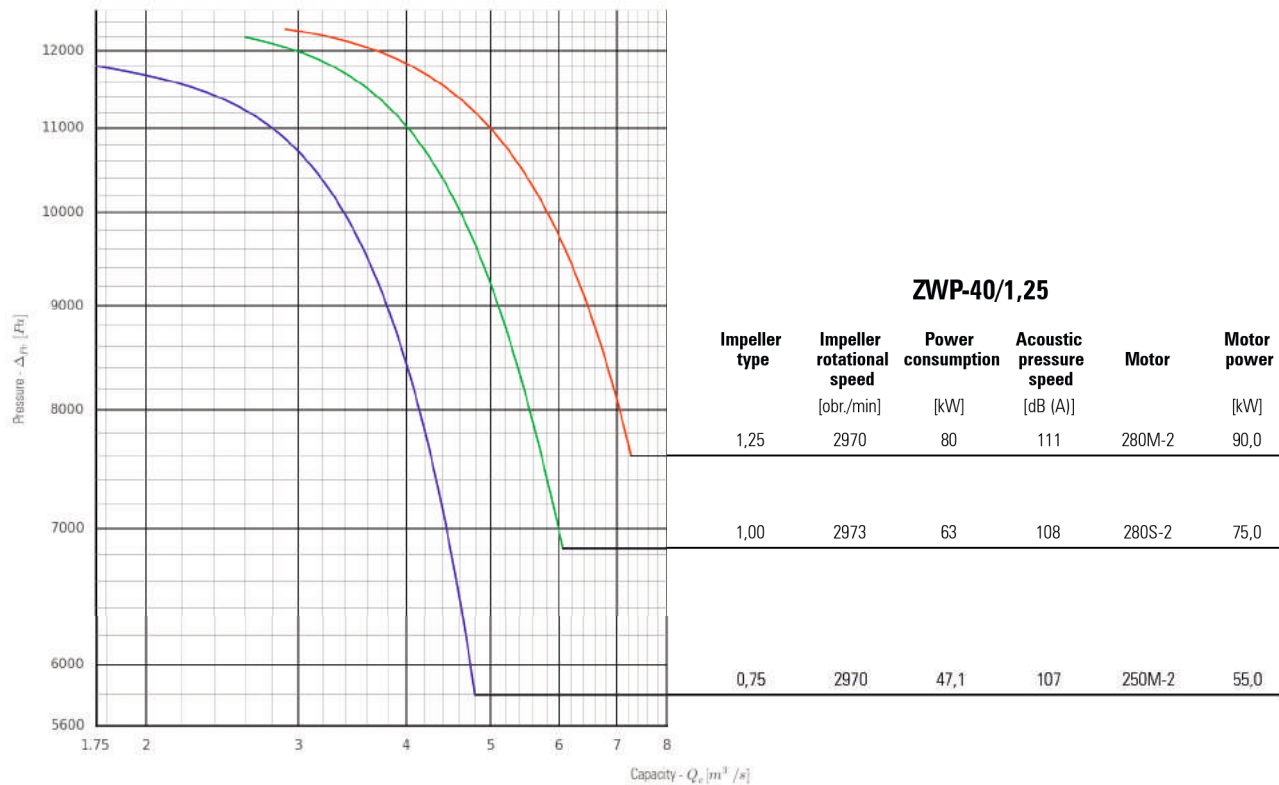
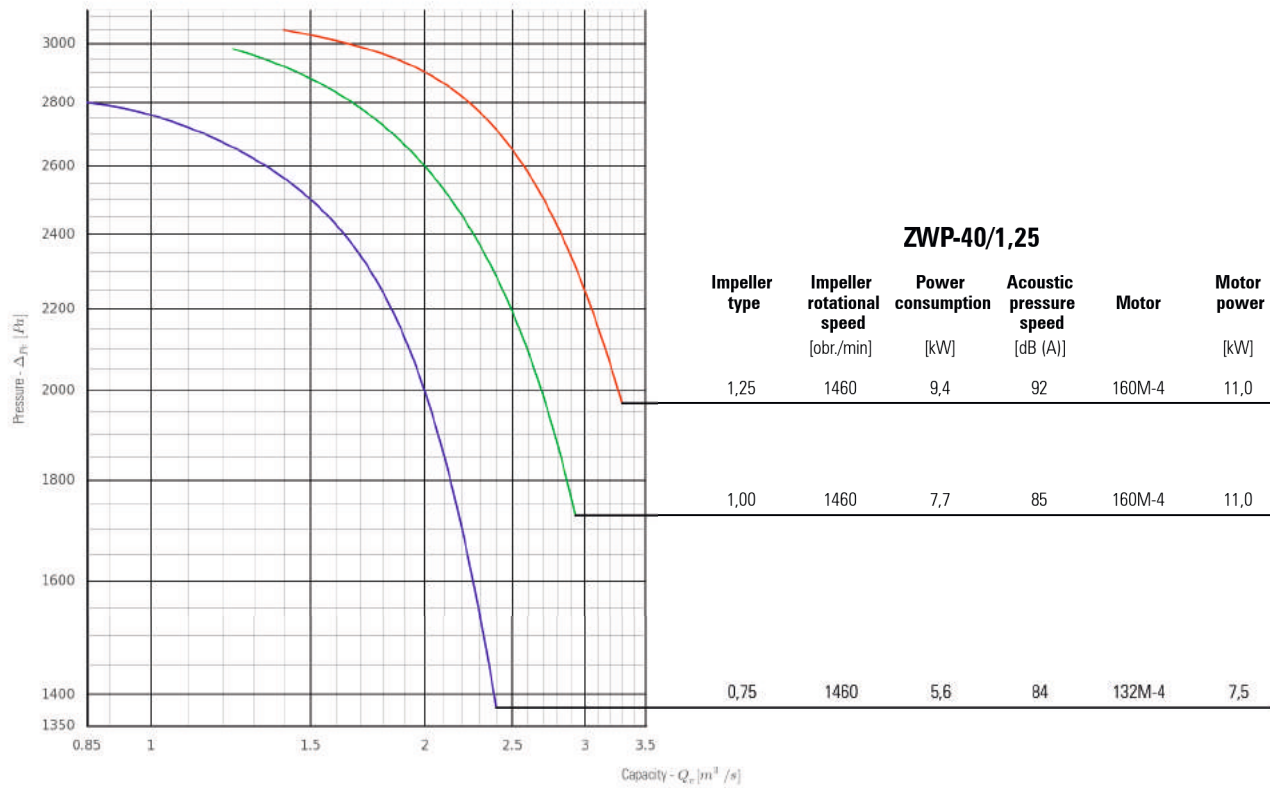
ZWP-35.5/1,25

Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	1450	5,1	89	132M-4	7,5
1,00	1450	4,2	84	132S-4	5,5
0,75	1450	2,9	79	112M-4	4,0

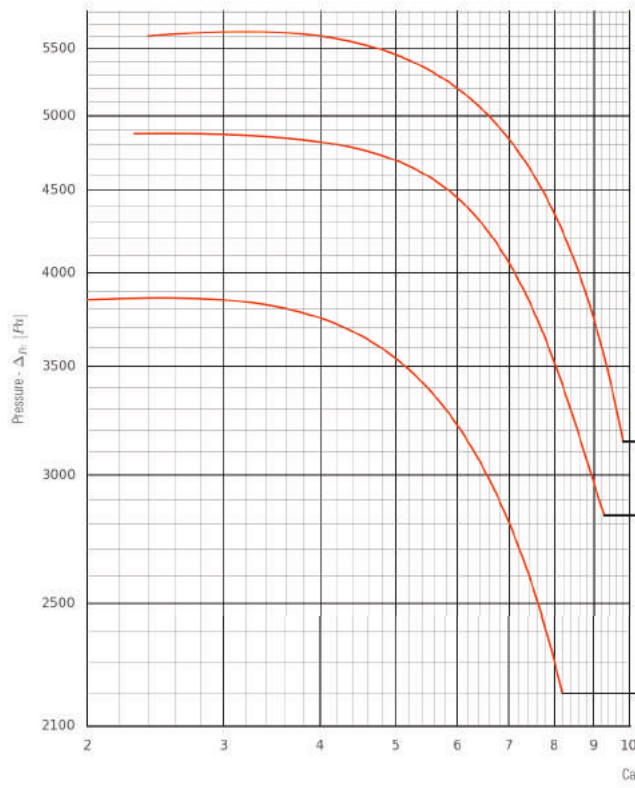
FLOW CHARACTERISTICS



FLOW CHARACTERISTICS

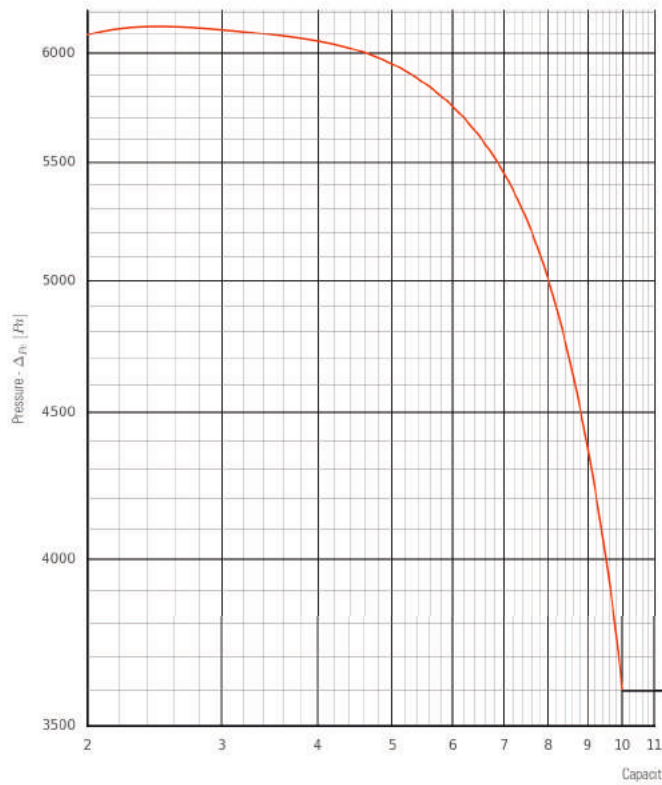


FLOW CHARACTERISTICS



ZWP-56/1,25

Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	1430	52	99	250M-4	55,0
1,25	1330	42	96	225M-4	45,0
1,25	1184	30	92	200L-4	30,0



ZWP-56/1,25

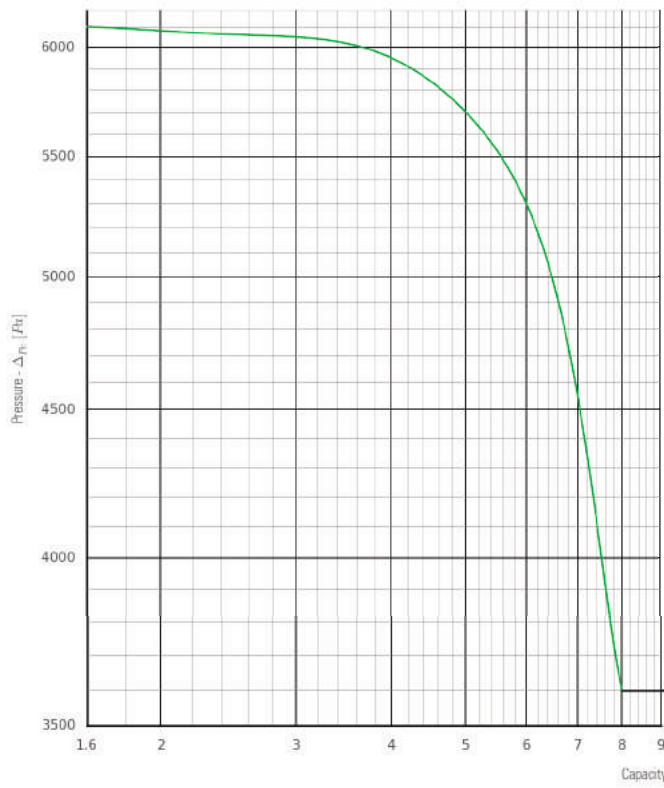
Impeller type	Impeller rotational speed [obr./min]	Power consumption [kW]	Acoustic pressure speed [dB (A)]	Motor	Motor power [kW]
1,25	1480	61		280S-4	75,0

FLOW CHARACTERISTICS



ZWP-56/1,10

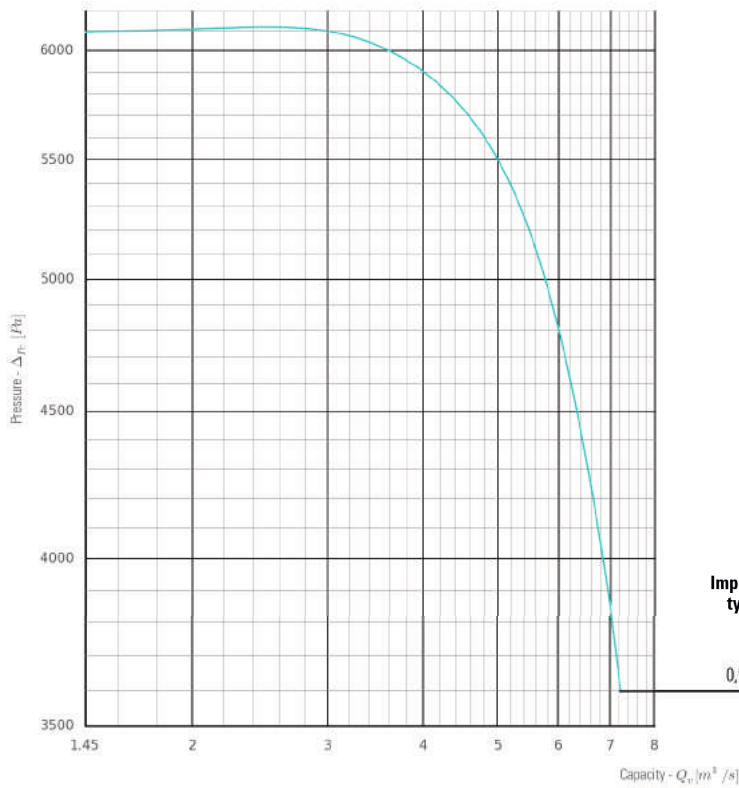
Impeller type	Impeller rotational speed	Power consumption	Acoustic pressure speed	Motor	Motor power
1,10	[obr./min] 1480	[kW] 54	[dB (A)]	250M-4	[kW] 55,0



ZWP-56/1,00

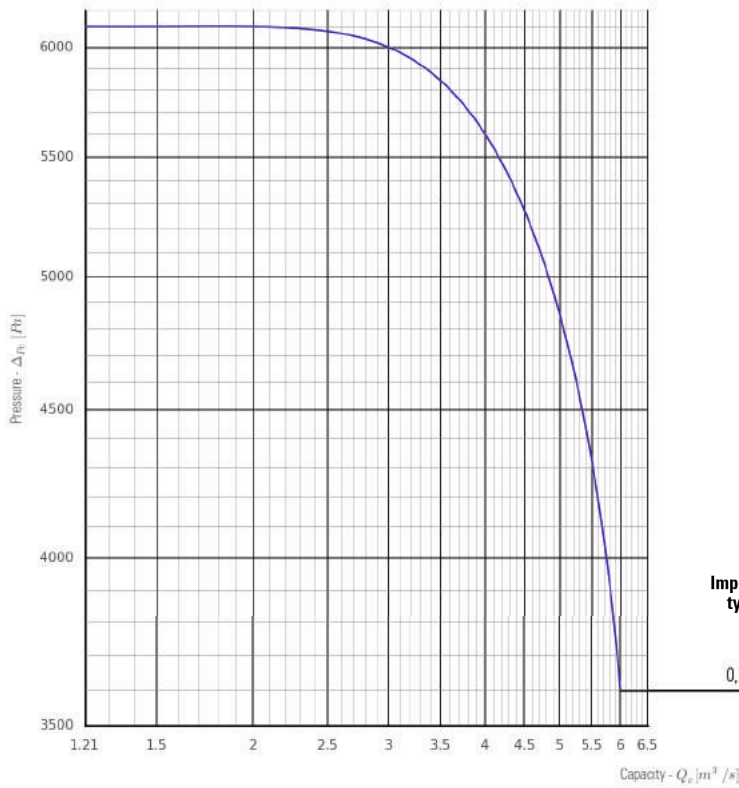
Impeller type	Impeller rotational speed	Power consumption	Acoustic pressure speed	Motor	Motor power
1,00	[obr./min] 1480	[kW] 49	[dB (A)]	250M-4	[kW] 55,0

FLOW CHARACTERISTICS



ZWP-56/0,90

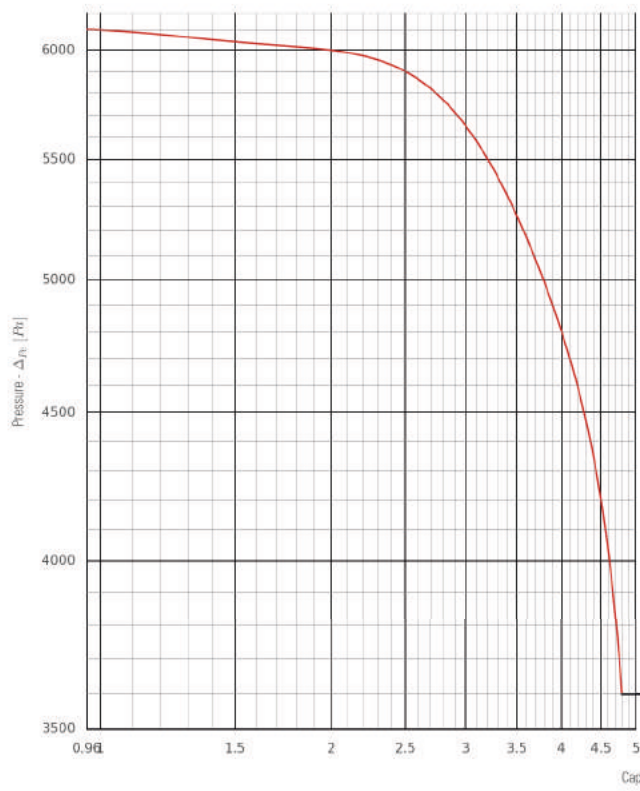
Impeller type	Impeller rotational speed	Power consumption	Acoustic pressure speed	Motor	Motor power
0,90	[obr./min] 1480	[kW] 44	[dB (A)]	225M-4	[kW] 45,0



ZWP-56/0,75

Impeller type	Impeller rotational speed	Power consumption	Acoustic pressure speed	Motor	Motor power
0,75	[obr./min] 1480	[kW] 36	[dB (A)]	225S-4	[kW] 37,0

FLOW CHARACTERISTICS



ZWP-56/0,60

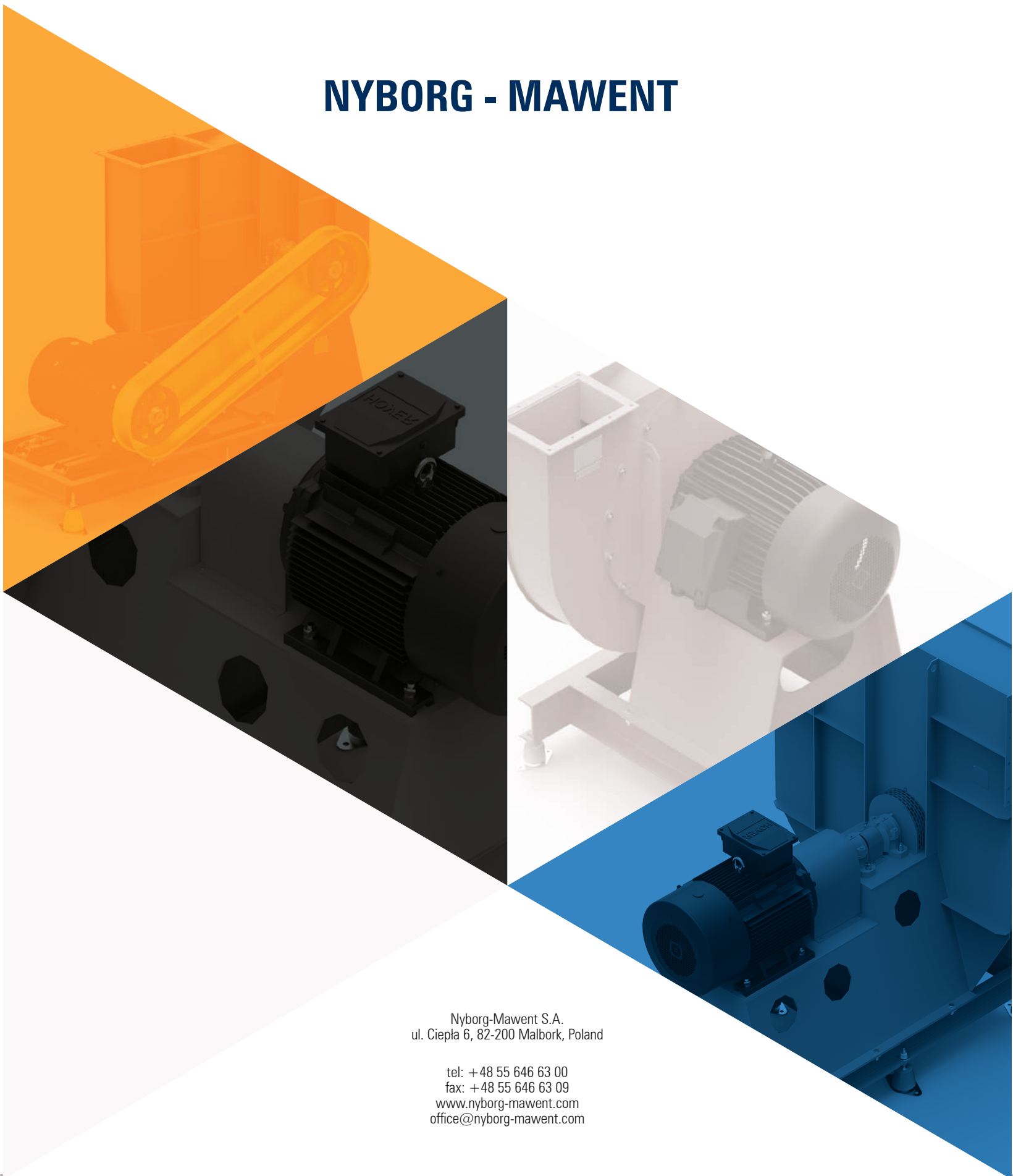
Impeller type	Impeller rotational speed	Power consumption	Acoustic pressure speed	Motor	Motor power
	[obr./min]	[kW]	[dB (A)]		[kW]
0,60	1480	29		200L-4	30,0







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