

# CENTRIFUGAL

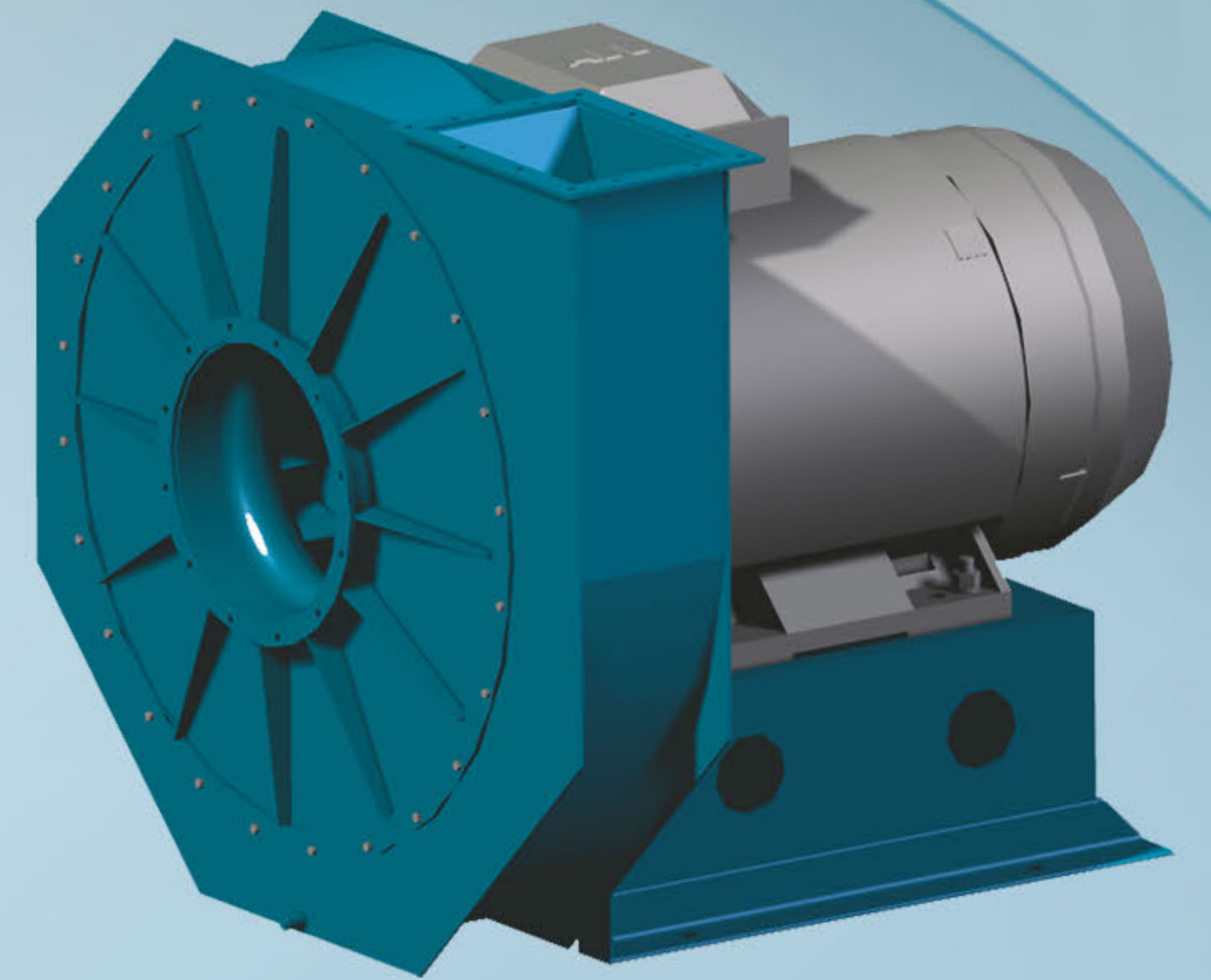
## ZWPW - 28/14, 28/22,4 and 40/66 FANS

### APPLICATION

Fan sets ZWPW in standard version find their application in industry and construction and are meant for movement of inert gas in ventilation system and process lines of air blow and for pneumatic transport if forced agent does not pass through fan impeller. They are designed to reach high pressures at low capacities of forced agent.

Properties of forced agent for standard versions:

- the forced agent must not include any caustic and explosive components,
- allowable dust content must not exceed– 0,1 g/m<sup>3</sup>,
- temperature of the forced agent must not exceed:
  - 313 K (40°C) for the fans with direct drive (NAP1).
  - 353 K (80°C) for the fans with indirect drive (NAP4)



### CONSTRUCTION

Fan set ZWPW consists of WPW fan, three-phase electric motor, and steel base frame seated on vibration-dampers. Fan sets ZWP are produced in three sizes: 28/14, 28/22 and 40/66. Each size of fan is produced in eight locations of fan's outlet: RD0, RD90, RD180, RD270, LG0, LG90, LG180 and LG270. Left figures (LG) are mirror reflection of right (RD) figures of fans presented in corresponding drawings.

The main elements such as: impeller, casing, base frame under drive unit are made of standard steel of standard quality. In the corrosion resistant and in heat-corrosion resistant version, impeller and casing are made of stainless steel.

### ORDER CONDITIONS

Following shall be given when ordering:

- type and size of fan unit , location of outlet hole, fan rotational speed, version of execution,
- volumetric capacity and total pressure, voltage and type of electric motor.

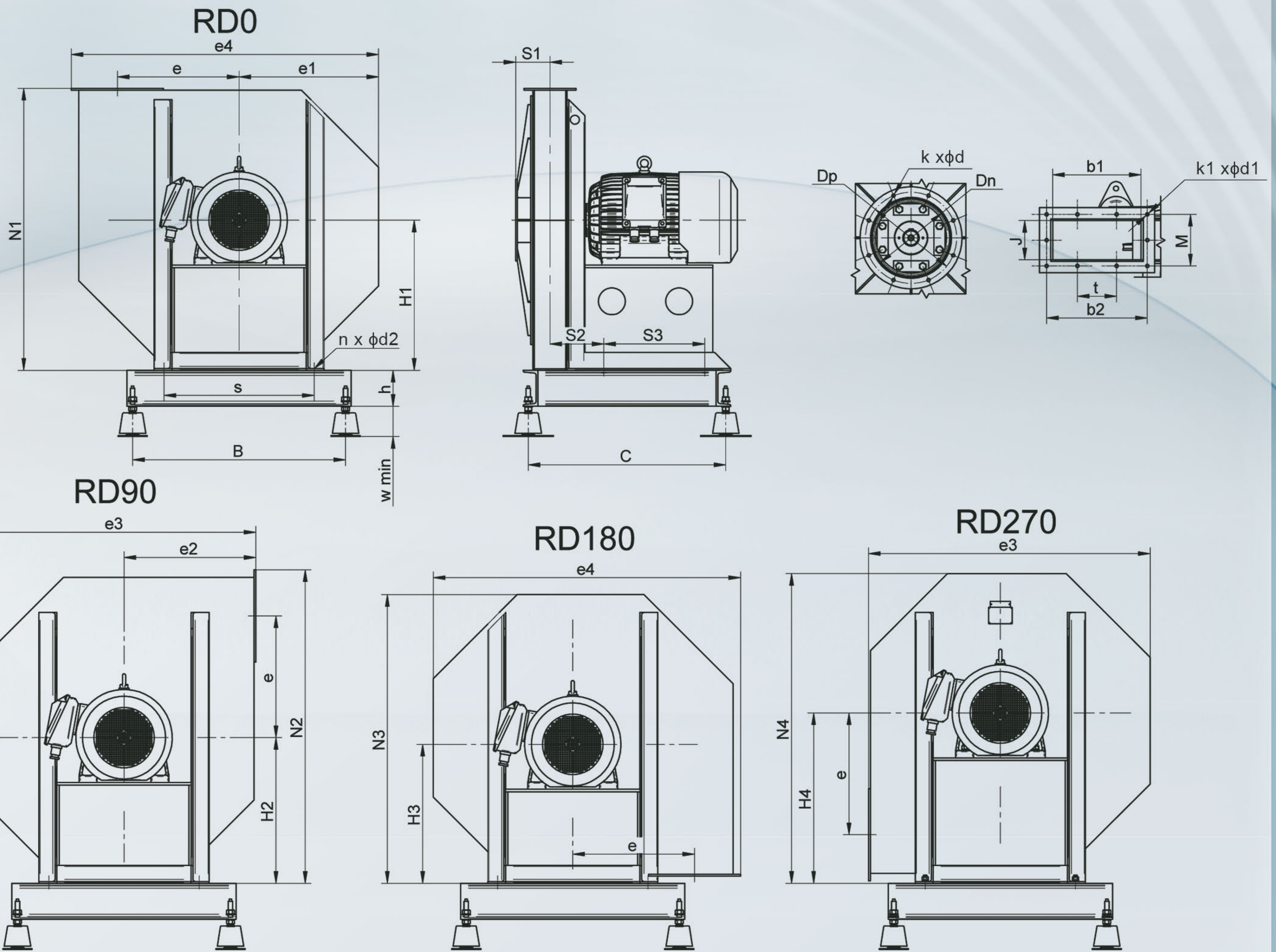


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# TECHNICAL SPECIFICATION OF ZWPW FANS WITH DIRECT DRIVE (NO. 1)



LEFT (LG) FIGURES ARE MIRROR REFLECTIONS OF RIGHT (RD) FIGURES.

ZWPW	Motor power	Dn	Dp	b1	b2	d	d1	d2	e	e1	e2	e3	e4	S	S1	S2	S3	H1	H2	H3
	[kW]	[mm]																		
28/14	55	280	326	315	359	12	12	19	543	622	588	1256	1371	670	150	240	450	670	650	620
	75	280	326	315	359	12	12	19	543	622	588	1256	1371	670	160	250	450	670	650	620
28/22	90	280	326	315	359	12	12	19	543	622	588	1256	1371	670	160	250	450	670	650	620
	132	400	446	355	399	12	12	26	523	622	588	1256	1370	750	194	295	600	670	650	620
40/66	160	400	446	355	399	12	12	26	523	622	588	1256	1370	750	194	295	600	670	650	620

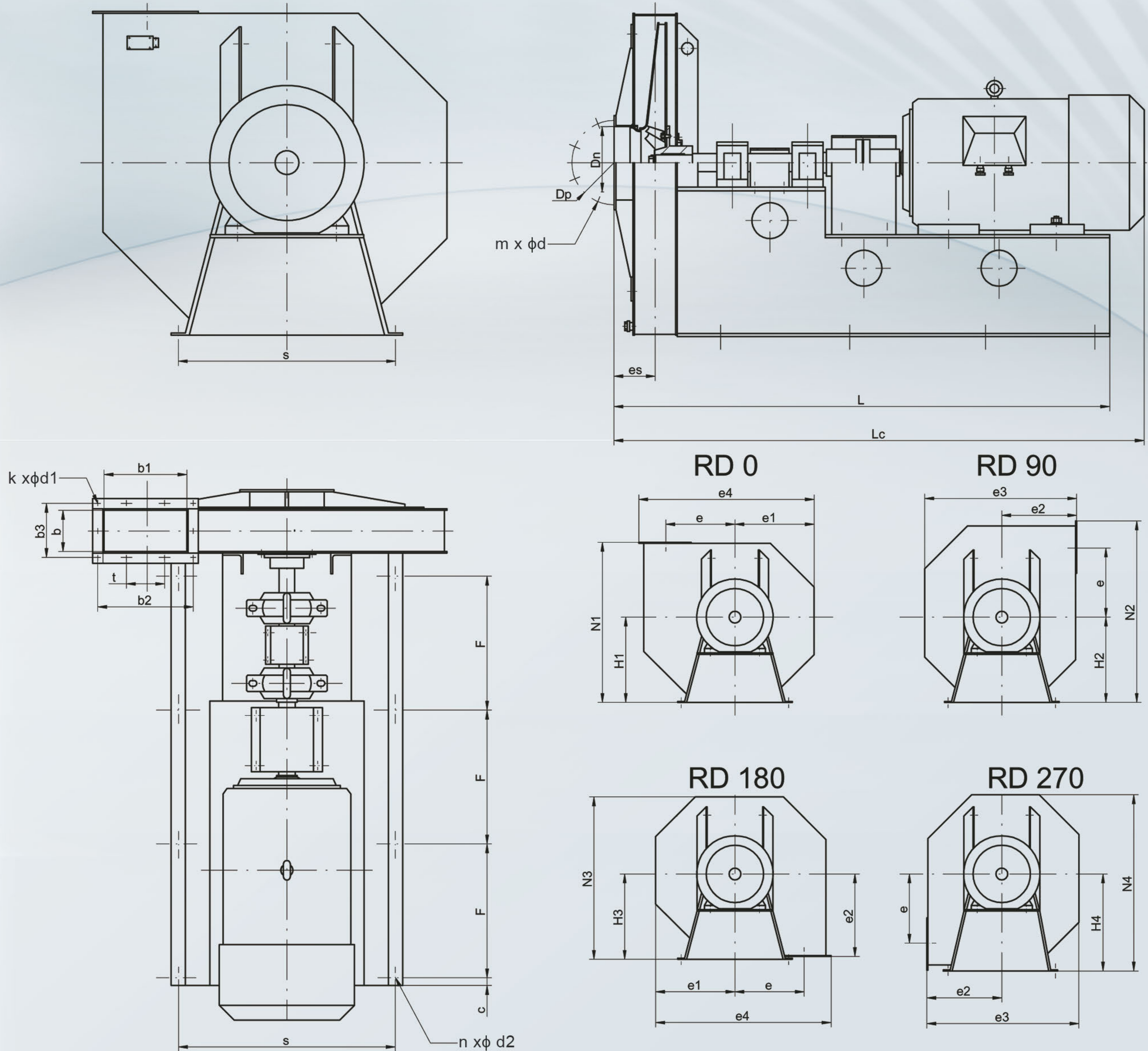
ZWPW	Motor power	H4	h	N1	N2	N3	N4	w <sub>min</sub>	B	C	M	J	t	n	k	k1	Impeller flywheel effect GD <sup>2</sup>	Fan weight
	[kW]	[mm]														[pcs.]	[Nm <sup>2</sup> ]	[kg]
28/14	55	760	160	1258	1400	1288	1428	135	950	881	184	140	140	4	8	10	352	947
	75	760	160	1258	1400	1288	1428	135	950	881	204	160	140	4	8	10	352	1103
28/22	90	760	160	1258	1400	1288	1428	135	950	881	204	160	140	4	8	10	352	1173
40/66	132	760	220	1258	1400	1288	1382	135	1050	1271	294	250	140	4	12	12	370,4	1412
	160	760	220	1258	1400	1288	1382	135	1050	1271	294	250	140	4	12	12	370,4	1477



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# TECHNICAL SPECIFICATION OF ZWPW FANS WITH COUPLING DRIVE (NO. 4)



LEFT (LG) FIGURES ARE MIRROR REFLECTIONS OF RIGHT (RD) FIGURES.

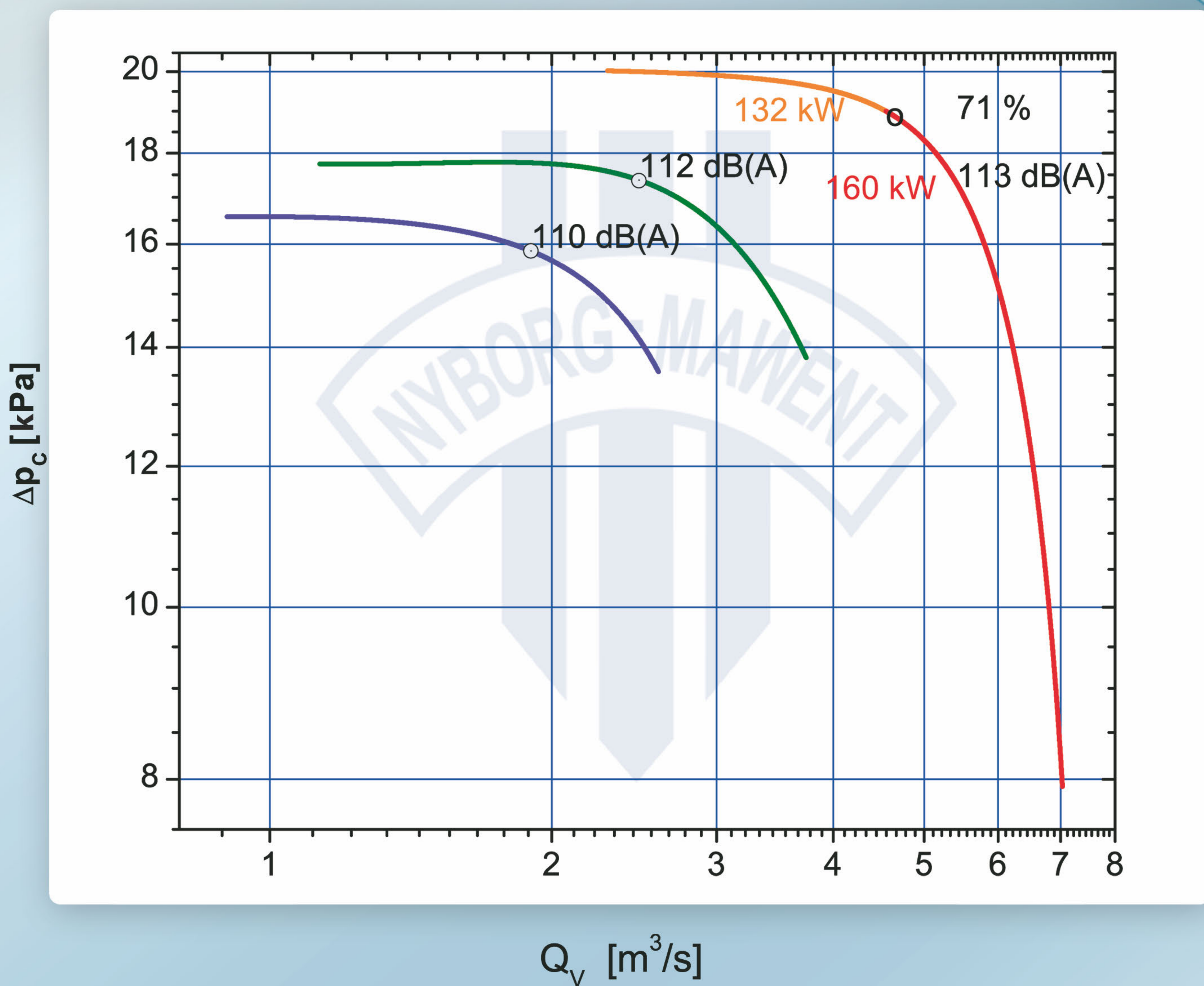
ZWPW	Motor power	Dn	Dp	b	b1	b2	b3	d	d1	d2	e	e1	e2	e3	e4	es	S	L	LC	H1
	kW																			
28/22	75	280	326	160	315	359	204	12	12	19	543	622	588	1256	1371	160	840	1926	2060	670
	90																			

ZWPW	Motor power	H2	H3	H4	N1	N2	N3	N4	C	F	k	m	n	Impeller flywheel effect GD <sup>2</sup>	Fan weight fig. RD, LG0
	kW														
28/22	75	650	620	760	1258	1400	1288	1428	30	520	10	8	8	352	1170
	90														1240

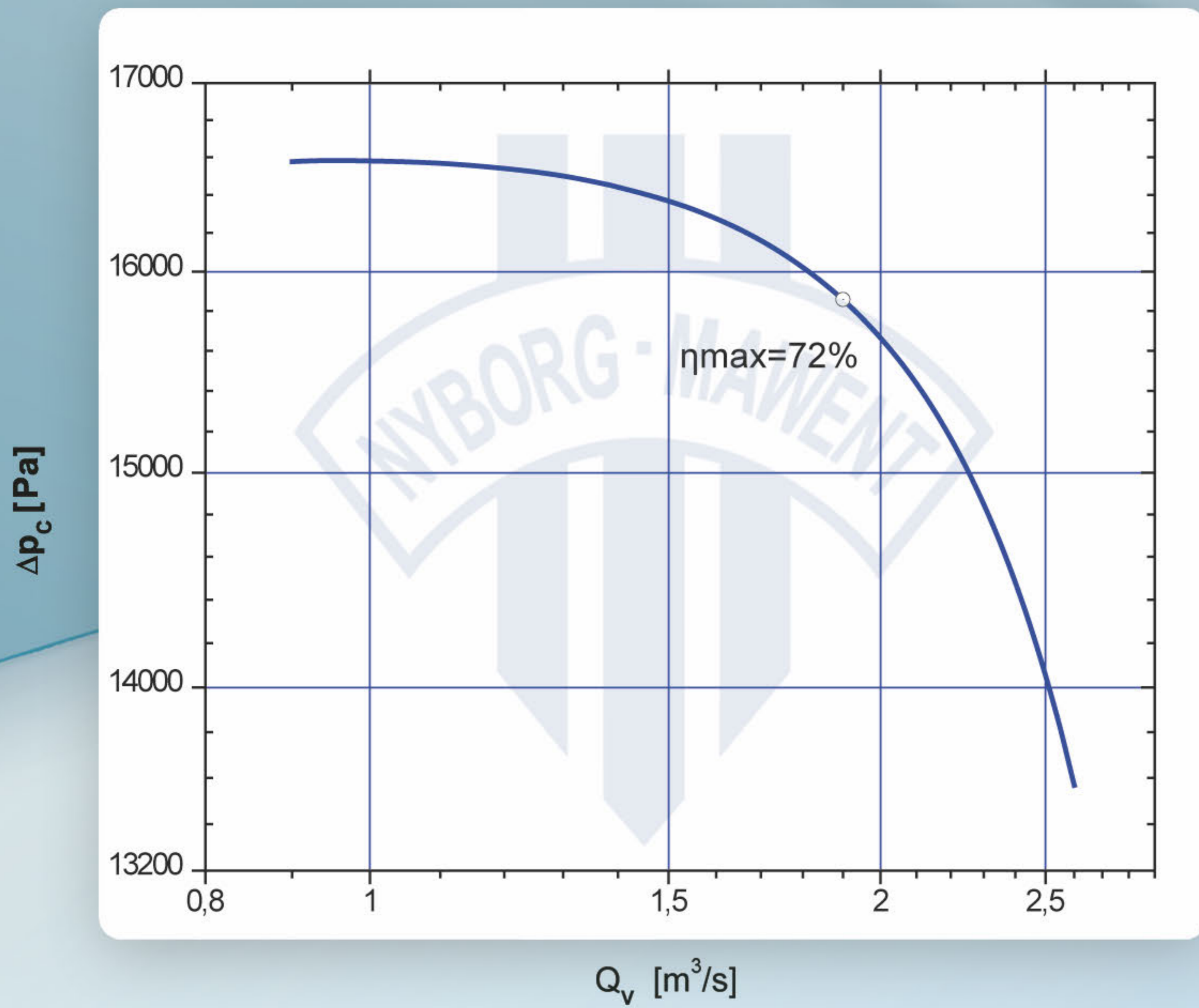


## SUMMARY CHARACTERISTIC OF ZWPW FANS

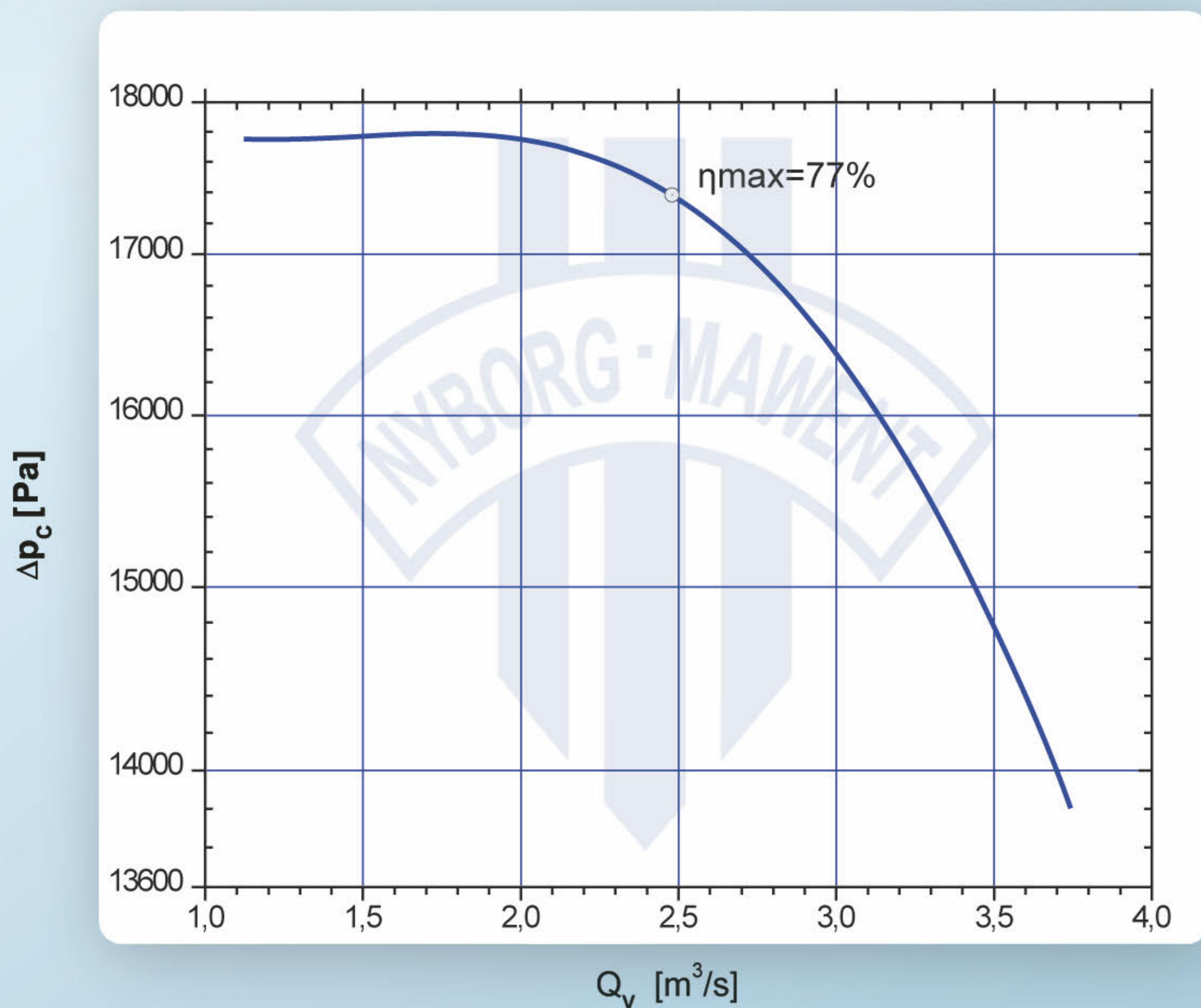
Flow characteristics present static pressures in function of volumetric capacity for given size and rotational speed of fan and agent density of 1,2 kg/m<sup>3</sup>.



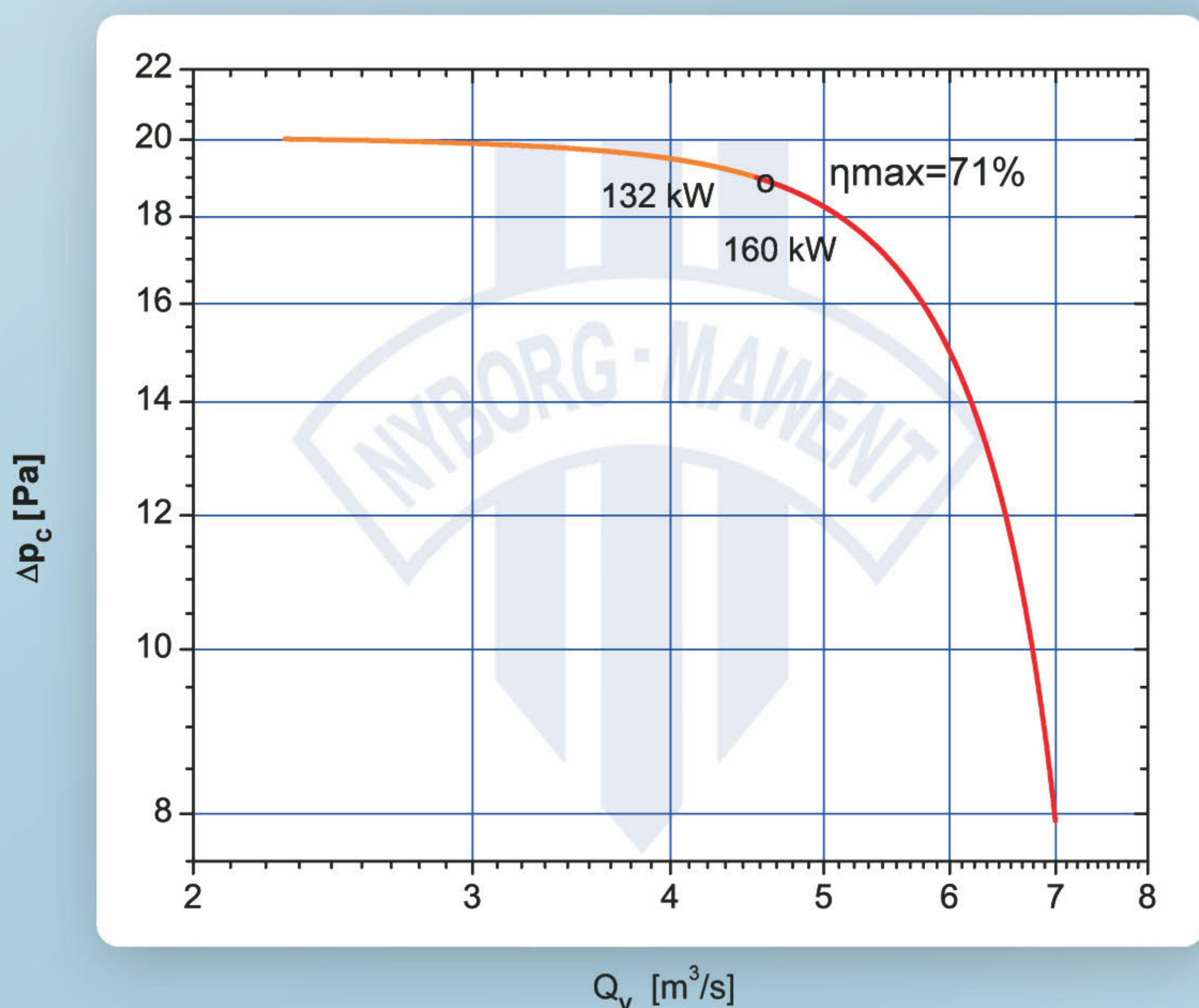
# CHARACTERISTICS OF ZWPW FANS



ZWPW-28/14			
Impeller rotational speed	Acoustic pressure level	Motor	Motor power
[rpm]	[dB (A)]		[kW]
2970	110	250M2	55



ZWPW-28/22			
Impeller rotational speed	Acoustic pressure level	Motor	Motor power
[rpm]	[dB (A)]		[kW]
2970	112	280S-2	75
2970	112	280M-2	90



ZWPW-40/66			
Impeller rotational speed	Acoustic pressure level	Motor	Motor power
[rpm]	[dB (A)]		[kW]
2975	113	315M-2A	132
2970	113	315M-2B	160

