



AVS

**Submersible
Axial Flow Pumps**

AVS PUMPS
DRAKOS - POLEMIS S.A

APPLICATIONS

- **Flood control**
- **Irrigation**
- **Land drainage**
- **Pollution control**
- **Industry**
- **Water refineries**
- **Water parks**
- **Design**

OPERATING DATA

- Capacity:up to 25.000 m3/h
- Head:up to 11 m
- Max. water temperature:40°C
- Max. submergence depth:10 m
- PH:5 – 9

MATERIALS OF CONSTRUCTION

- Motor housing:Cast Iron
- Bowl:Cast Iron
- Suction bellmouth:Cast Iron
- Shaft:SS AISI 420
- Propeller hub:.....Cast iron
- Propeller blades:.....Stainless steel or Bronze
- Upper mechanical seal:.....WuC/WuC
- Lower mechanical seal:.....Sic/Sic
- Nuts & Bolts:.....Stainless steel
- O-rings:NBR

* Other materials are also available on request.

FEATURES

Submersible propeller axial flow pumps, are a compact unit comprising of submersible motor and pump, capable to pump large capacities at low manometric heads. AVS pumps are of heavy type construction and their design allows the construction of smaller pumping stations, that are more compact, requiring less civil engineering and construction works.

• **Bowl assembly**

It is consisting of bowl with diffuser and suction beelmouth. The propeller type impeller has adjustable blades and is securely fastened on the motor shaft. Wear Rings available upon request.

• **Electric Motor**

The submersible motor is 3 phases, 400 Volts, 50 Hz squirrel cage induction type, of IP 68 protection, Class F insulation and it is cooled by the pumped water.

The terminal box is water-proofed and the cable inlets are featured with tightening resistance, wrapping resistance and double sealing.

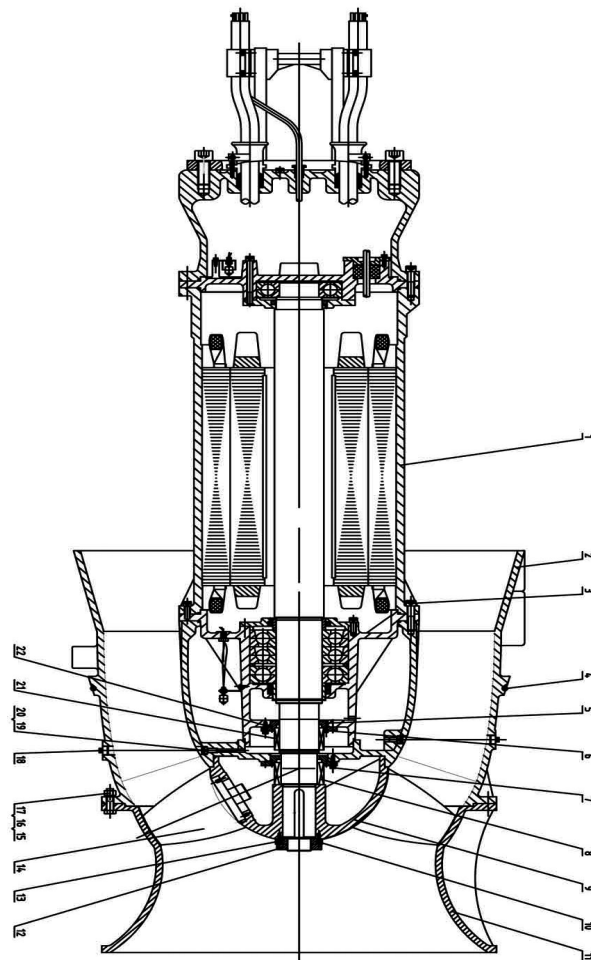
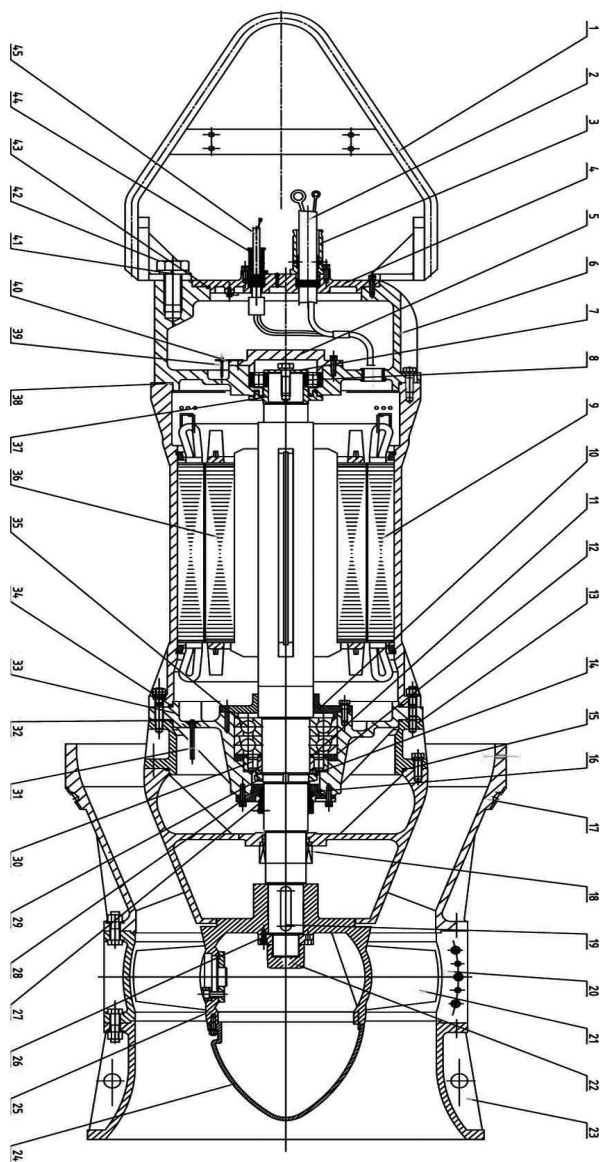
The shaft is mounted on heavy duty ball and roller bearings lubricated for life.

For the motor sealing, two mechanical seals in tandem arrangement are used, they operate independently of each other in an oil bath, in a separate oil chamber.

The following motor protections / monitoring controls are available:

- Thermal sensors embedded in the windings for the motor protection against overheating
- Moisture sensor in the oil chamber
- Moisture sensor in the terminal box
- Bearings temperature sensors

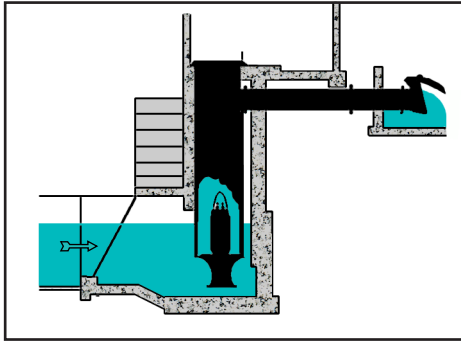
CROSS SECTION DRAWING



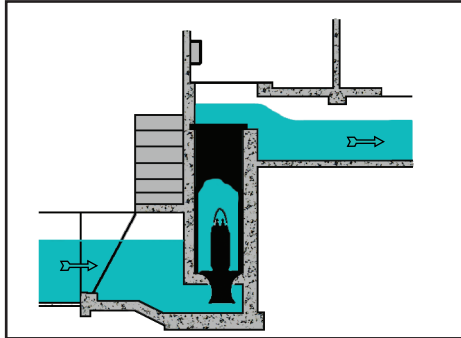
No	Item	No	Item	No	Item
1	Handle	17	Diffuser	33	Bearing lid
2	Cable(2)	18	Mechanical seal	34	O - ring
3	Cable gland (2)	19	Key	35	Bearing
4	Up cover	20	Volute	36	Rotor and shaft
5	Upper bearing cover	21	Impeller	37	Sealing cover
6	Junction chamber	22	Lock nut for impeller	38	O - ring
7	Oil resistance cover	23	Suction bell	39	Leakage sensor
8	Bearing	24	Hub cover	40	Sensor hold
9	Stator	25	Hub	41	Gasket
10	Lower bearing cover	26	Bolt	42	Bolt
11	Bearing washer	27	Mechanical seal	43	O - ring
12	Circlip	28	O - ring	44	Cable gland (2)
13	Oil lid	29	Position nut for bearing	45	Cable (1)
14	Bearing washer	30	Bearing		
15	O - ring	31	Leakage sensor		
16	Mechanical seal hold	32	O - ring		

No	Item	No	Item
1	Motor casing	17	Nut
2	Diffuser	18	Pipe blocking
3	Screw	19	Screw
4	O - ring	20	O - ring
5	Mechanical seal seat	21	Mechanical seal
6	Screw	22	O - ring
7	Screw		
8	Mechanical seal		
9	Impeller hub		
10	Screw		
11	Suction bell		
12	Shaft end nut		
13	Shaft end nut		
14	Impeller vanes		
15	Bolts		
16	Washer		

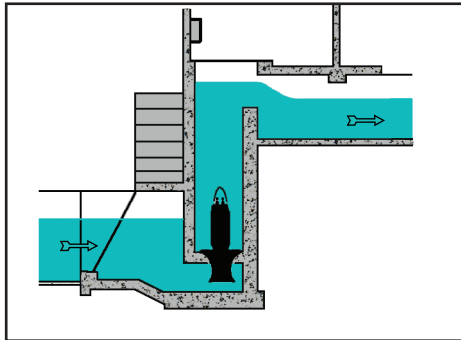
INSTALLATION TYPES



- Steel tubular column with discharge pipe and non - return flap valve.
- Concrete suction chamber with protective screen.

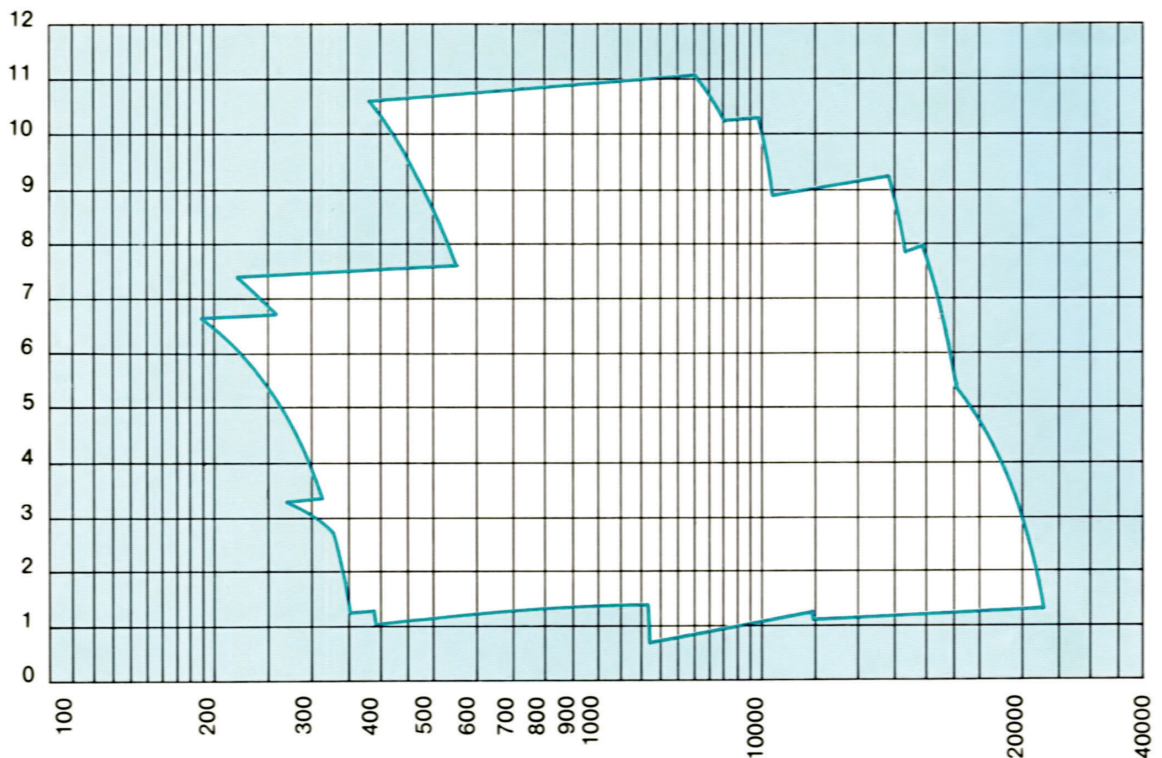


- Overflow steel tubular column and concrete suction chamber with protective screen.



- Overflow concrete column and concrete suction chamber with protective screen.

PERFORMANCE CHARTS

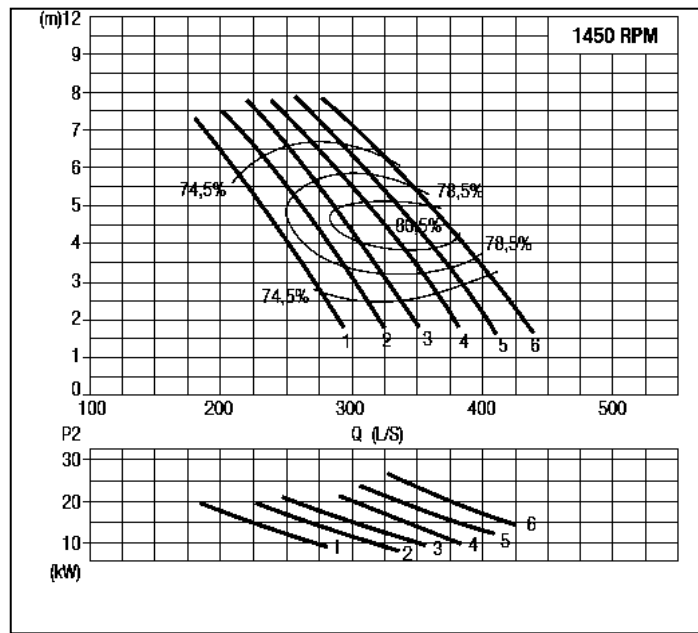
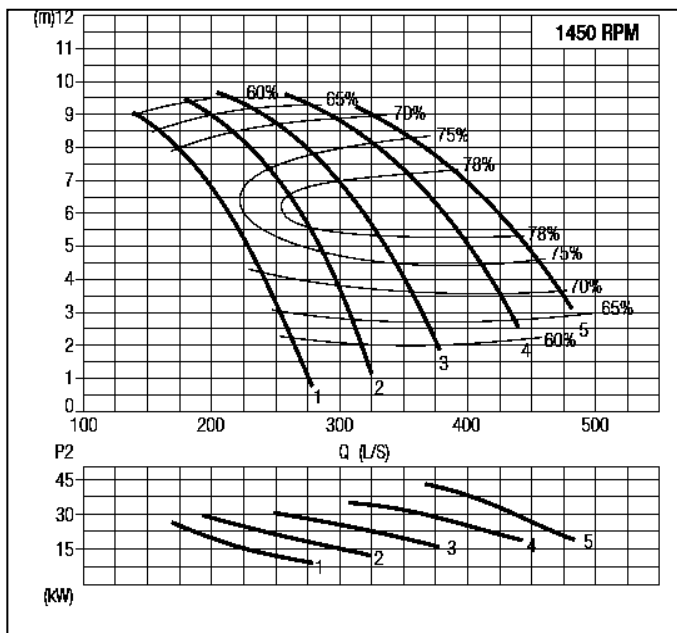


AVS 300-350-I Selection Chart 1450 RPM

Impeller Nr	Flow		Head	Speed Rpm	Eff %	Power (kW)		Impeller Dia	
	m ³ /h	l/s	m			Shaft Power	Motor Power		
1	673	187	7.45	1450	69.5	19.7	22	300	
	828	230	4.77		72.4	14.9			
	900	250	3.42		68	12.3			
2	763	212	8.67		71	25.4			30
	957	266	6.21		79	20.5			
	1090	303	3.59		74	14.4			
3	972	270	8.3		75.7	29.0	40		
	1115	310	6.36		78.5	24.6			
	1250	347	4.52		75	20.5			
4	1170	325	7.8		75.5	32.9			30
	1334	365	6.3		79	28.6			
	1440	400	4.71		75	24.6			
5	1314	365	8.1	74.7	38.8	40			
	1430	397	6.94	75.5	35.8				
	1540	428	5.8	75.8	32.1				

AVS 300-350-II Selection Chart 1450 RPM

Impeller Nr	Flow		Head	Speed Rpm	Eff %	Power (kW)		Impeller Dia		
	m ³ /h	l/s	m			Shaft Power	Motor Power			
1	810	225	5.4	1450	76.5	15.6	22	300		
	900	250	4.03		78.4	12.6				
	972	270	3.2		76.5	11.1				
2	878	244	5.8		76.5	18.1			30	
	1008	280	4.1		79.6	14.1				
	1080	300	3.2		76.5	12.3				
3	954	265	5.83		77.5	19.6				40
	1080	300	4.2		80.2	15.4				
	1188	330	2.9		77.5	12.1				
4	1033	287	6.0		77.5	21.8			30	
	1188	330	4.21		80.5	16.9				
	1285	357	2.89		77.5	13.1				
5	1091	303	6.0		76.7	23.3	40			
	1260	350	4.43		81	18.8				
	1368	380	3.2		76.5	15.6				
6	1170	325	6.4		75.5	27.0			30	
	1350	375	4.45		80.7	20.3				
	1440	400	3.4		76.5	17.4				



No. of vanes	Impeller	Tolerance
4	Ø 300 mm	ISO 9906 Grade 2

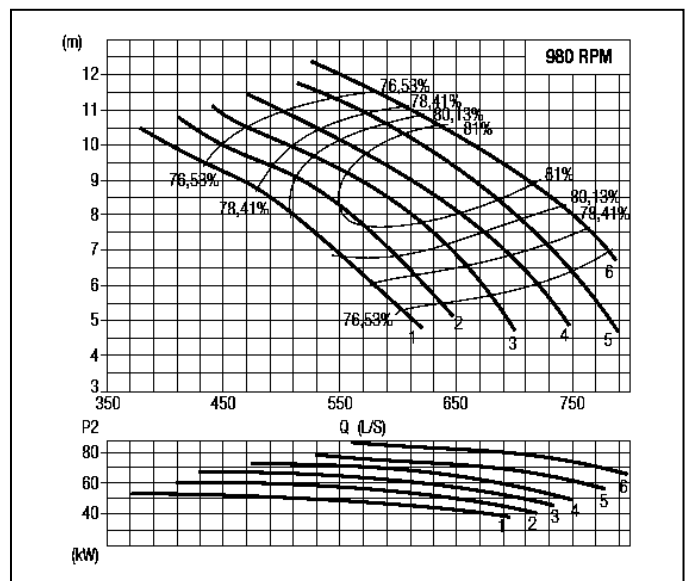
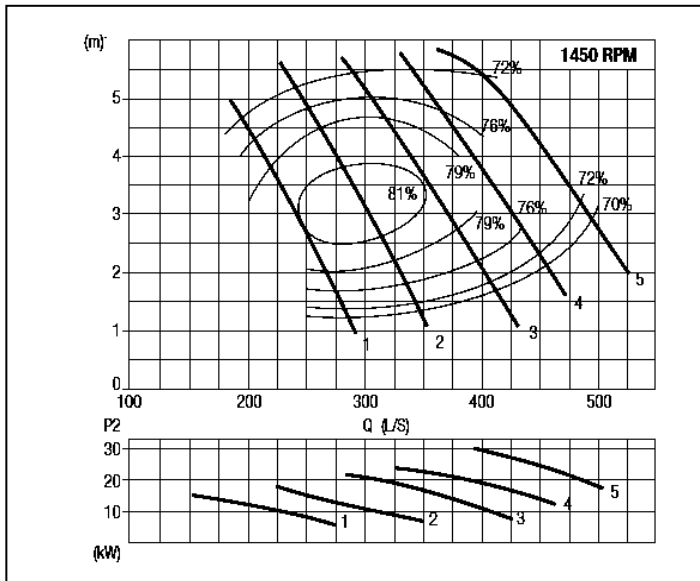
No. of vanes	Impeller	Tolerance
3	Ø 300 mm	ISO 9906 Grade 2

AVS 300-350-III Selection Chart 1450 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia	
	m ³ /h	l/s				Shaft Power	Motor Power		
1	791	220	3.78	1450	79.1	10.3	18.5	300	
	896	249	2.72		81.1	8.2			
	1005	279	1.39		70.2	5.4			
2	923	256	4.66		78	15.0			
	1113	309	2.84		81.7	10.5			
	1262	351	1.18		65.3	6.2			
3	1111	309	5.02		75.6	20.1			22
	1304	362	3.35		80.1	14.9			
	1534	426	1.22		64.6	7.9			
4	1163	323	5.89		70	26.7	37		
	1453	404	3.8		78.6	19.1			
	1649	458	2.05		70.3	13.1			
5	1422	295	5.47		69.4	30.5			
	1651	459	3.91		72.9	24.1			
	1782	495	2.84		70.9	19.5			

AVS 450-500 Selection Chart 980 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	1522	423	9.78	980	75.6	53.7	75	450
	1843	512	8.0		80.2	50.1		
	1981	550	6.85		78.3	47.2		
2	1600	444	10.12		75.6	58.4		
	1987	552	8.25		81	55.1		
	2183	606	6.65		78.3	50.5		
3	1698	472	10.48		75.6	64.1		
	2131	592	8.5		81	60.9		
	2368	658	6.61		78.3	54.5		
4	1801	500	10.82		75.6	70.2		
	2300	639	8.54		81	66.1		
	2536	704	6.67		78.3	58.9		
5	2212	614	10.02		81	74.6	90	
	2430	675	8.7		81.5	70.7		
	2683	745	6.8		78.3	63.5		
6	2170	603	11.06		75.6	86.5		
	2556	710	9.0		81.5	76.9		
	2826	785	7.04		78.3	69.2		



No. of vanes	Impeller	Tolerance
3	Ø 300 mm	ISO 9906 Grade 2

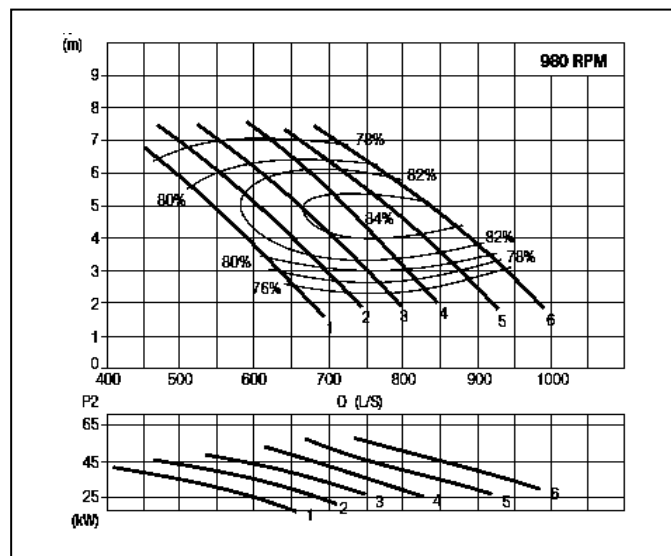
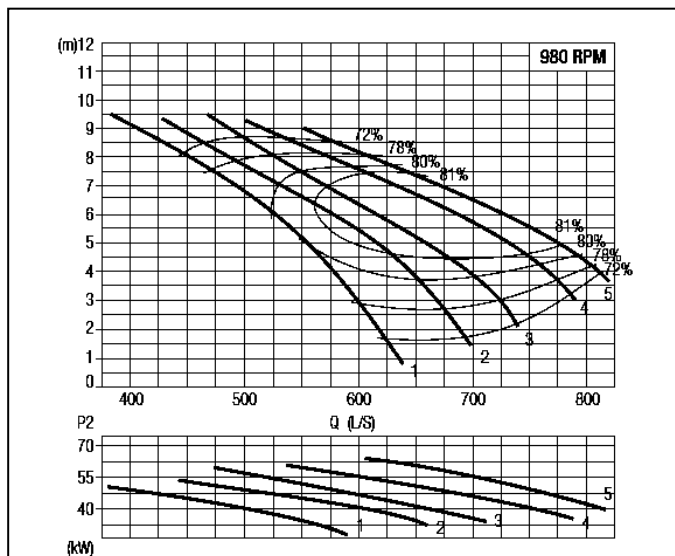
No. of vanes	Impeller	Tolerance
4	Ø 450 mm	ISO 9906 Grade 2

AVS 450-500-I Selection Chart 980 RPM

Impeller Nr	Flow		Head m	Speed rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	1370	381	9.44	980	70	50.3	55	450
	1760	489	7.0		79.6	42.2		
	2050	569	4.35		78.5	31.0		
2	1720	478	8.2		74.5	51.6		
	2010	558	6.43		80	44.0		
	2250	625	4.9		73.5	40.9		
3	2099	583	7.0		79.9	50.1		
	2160	600	6.3		81.2	45.7		
	2510	697	3.9		77	34.6		
4	2340	650	6.6		81.5	51.6		
	2560	711	5.6		82	47.6		
	2660	739	4.67		81.5	41.5		
5	2556	710	6.2		82.2	52.5		
	2700	750	5.6		83	49.6		
	2858	794	4.4		79	43.4		

AVS 450-500-II Selection Chart 980 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	1764	490	6.05	980	79.7	36.5	55	450
	2160	600	3.7		82.0	26.6		
	2275	632	2.9		79.7	22.6		
2	1980	550	6.0		81.6	39.7		
	2340	650	4.0		84.3	30.3		
	2466	685	3.15		81.6	25.9		
3	2160	600	6.18		81.6	44.6		
	2513	698	4.2		85.2	33.8		
	2700	750	3.1		81.6	28.0		
4	2322	645	6.4		81.6	49.6		
	2700	750	4.3		85.2	37.1		
	2916	810	3.05		81.6	29.7		
5	2498	694	6.4		81.6	53.4		
	2844	790	4.68		85.2	42.6		
	3114	865	3.25		81.6	33.8		
6	2736	760	6.2		81.6	56.6		
	2995	832	5.0		85.2	47.9		
	3276	910	3.6		81.6	39.4		

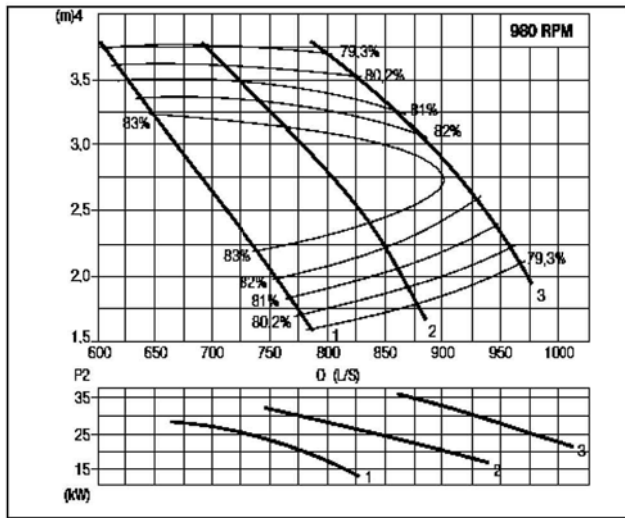


No. of vanes	Impeller	Tolerance
4	Ø 450 mm	ISO 9906 Grade 2

No. of vanes	Impeller	Tolerance
3	Ø 450 mm	ISO 9906 Grade 2

AVS 450-500-IV Selection Chart 980 RPM

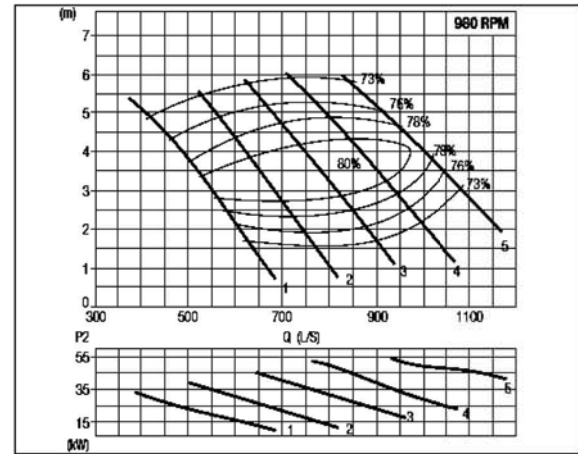
Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia	
	m ³ /h	l/s				Shaft Power	Motor Power		
1	2192	609	3.72	980	79.3	28.0	37	450	
	2545	707	2.56		84.2	21.1			
	2804	779	1.71		79.3	16.5			
2	2569	714	3.57		79.3	31.5			
	2956	821	2.57		84.2	24.6			
	3158	877	1.79		79.3	19.4			
3	2898	830	3.41		79.3	35.0			45
	3194	887	3.02		82.0	32.1			
	3474	965	2.13		80.2	25.1			



No. of vanes	Impeller	Tolerance
3	Ø 450 mm	ISO 9906 Grade 2

AVS 450-500-III Selection Chart 980 RPM

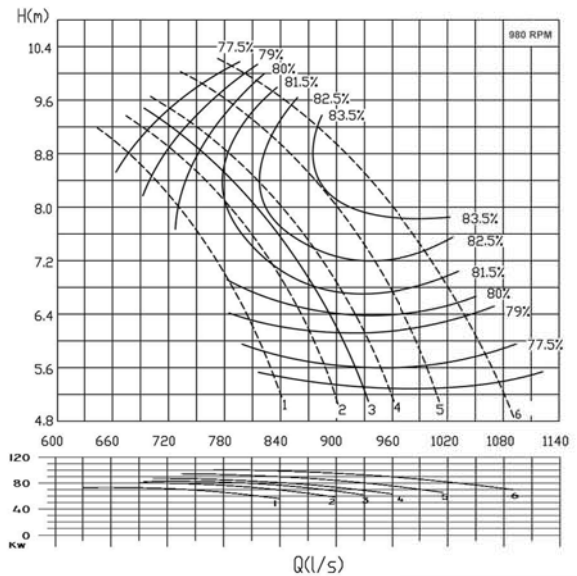
Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	1620	450	4.55	980	75.0	26.8	30	450
	1692	545	3.2		80.5	21.3		
	2196	610	2.0		75.0	16.0		
2	2070	575	4.75		78.0	34.4	37	
	2394	665	3.3		81.5	26.4		
	2700	750	1.9		75.0	18.6		
3	2484	690	4.8		78.5	41.4	45	
	2844	790	3.5		82.5	32.9		
	3204	890	2.0		73.5	23.8		
4	2808	780	5.1	76.5	51.0	55		
	3240	900	3.6	82.0	38.8			
	3510	975	2.5	75.0	31.9			
5	3366	935	4.4	78.6	51.3	55		
	3834	1065	3.6	79.5	49.9			



No. of vanes	Impeller	Tolerance
3	Ø 450 mm	ISO 9906 Grade 2

AVS 450-500-V Selection Chart 980 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia	
	m ³ /h	l/s				Shaft Power	Motor Power		
1	2268	630	9.2	980	77.2	73.6	90	450	
	2700	750	7.6		80.3	69.6			
	3024	840	5.2		76.3	56.2			
2	2484	690	9.2		77.2	80.7			90
	2916	810	7.6		81.7	73.9			
	3240	900	5.05		76.3	58.4			
3	2502	695	9.4		77.3	82.9			90
	3024	840	7.6		81.3	77.1			
	3348	930	5.2		76.5	62.0			
4	2538	705	9.6	75.8	87.6	90			
	2700	870	7.45	81.5	67.2				
	3456	960	5.1	75.6	63.5				
5	2646	735	10.0	76.0	94.8	110			
	3240	900	8.0	83.4	84.6				
	3654	1015	5.0	75.5	65.9				
6	2772	770	10.2	76.2	101.1	110			
	3456	960	8.0	83.6	90.1				
	3924	1090	4.9	74.6	70.2				



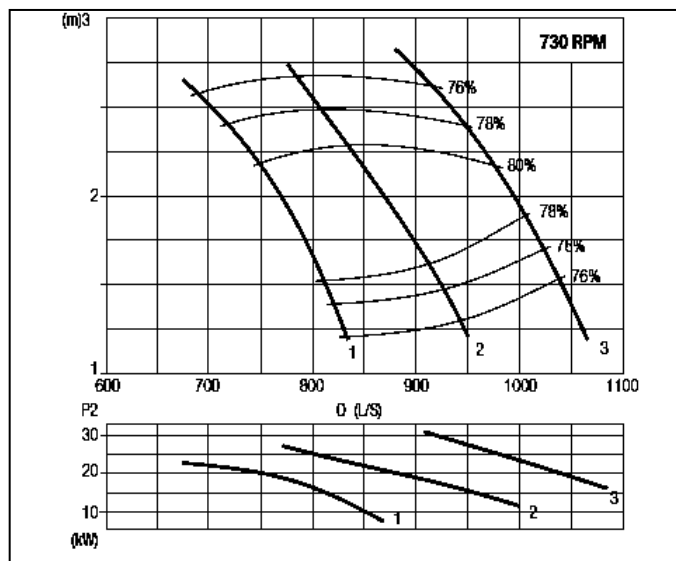
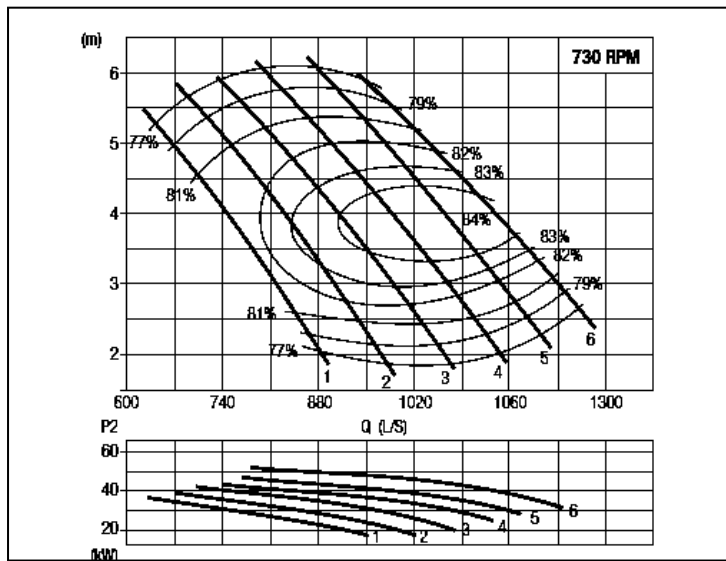
No. of vanes	Impeller	Tolerance
3	Ø 450 mm	ISO 9906 Grade 2

AVS 550-600-I Selection Chart 730 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	2556	710	4.45	730	81.1	38.2	45	550
	2808	780	3.49		81.6	32.7		
	3132	870	2.43		77.0	26.9		
2	3024	840	4.0		83.1	39.7		
	3132	870	3.54		83.4	36.2		
	3348	930	2.66		81.3	29.8		
3	3132	870	4.45		83.0	45.8	55	
	3420	950	3.49		84.0	38.7		
	3672	1020	2.52		81.2	31.1		
4	3348	930	4.47		82.7	49.3		
	3672	1020	3.59		84.2	42.7		
	3852	1070	2.95		83.0	37.3		
5	3924	1090	3.73		84.0	47.5	55	
	4104	1140	3.37		84.2	44.8		
	4176	1160	2.90		81.7	40.4		
6	4176	1160	3.79		84.2	51.2		
	4284	1190	3.41		83.3	47.8		
	4482	1245	3.0		81.0	45.2		

AVS 550-600-II Selection Chart 730 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	2520	700	2.5	730	77	22.29	30	550
	2700	750	2.2		80	20.23		
	2916	810	1.5		78	15.27		
2	2880	800	2.5		78	25.15		
	3240	900	1.75		79	14.55		
	3384	940	1.1		76	13.34		
3	3348	950	2.35		78	27.48	37	
	3528	980	2.2		80	26.43		
	3744	1040	1.5		76	20.13		



No. of vanes	Impeller	Tolerance
3	Ø 550 mm	ISO 9906 Grade 2

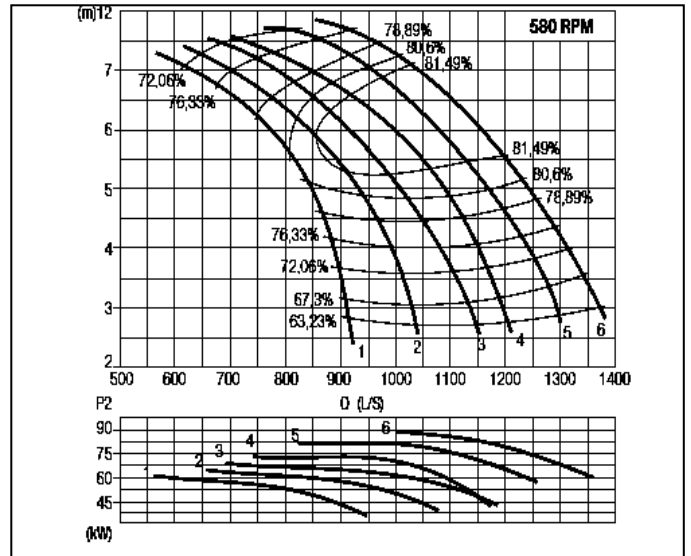
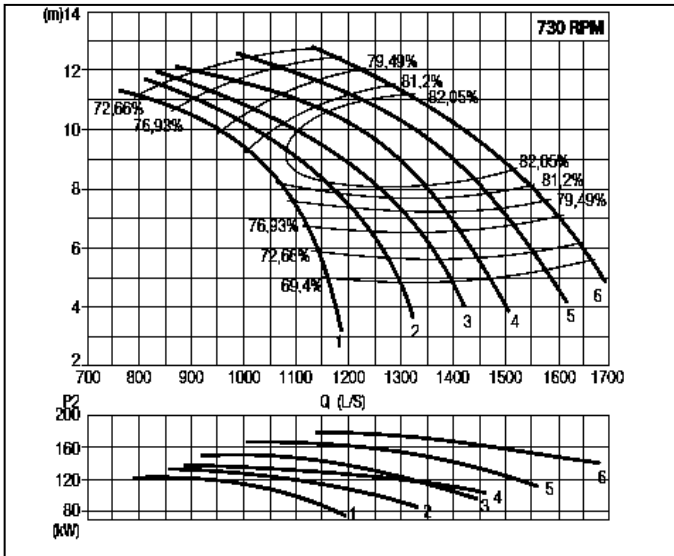
No. of vanes	Impeller	Tolerance
3	Ø 550 mm	ISO 9906 Grade 2

AVS 600-700 Selection Chart 730 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia	
	m ³ /h	l/s				Shaft Power	Motor Power		
1	2827	785	11.07	730	72.7	117.4	132	600	
	3715	1032	8.75		81.5	108.7			
	4135	1149	4.24		65.0	73.5			
2	3893	1081	9.39		82.0	121.5			
	4010	1114	9.00		82.1	119.8			
	4698	1305	5.60		72.7	98.6			
3	3103	862	11.70		72.7	136.1	160		
	4334	1204	9.00		82.5	128.8			
	5112	1420	5.25		70.0	104.5			
4	3436	954	11.32		76.9	137.8			185
	4653	1293	9.24		82.1	142.7			
	5191	1442	4.81		72.7	93.6			
5	3879	1078	12.05		76.9	165.6	185		
	4896	1360	9.50		83.0	152.7			
	5738	1594	5.85		72.7	125.8			
6	4749	1319	11.07		82.0	174.7			185
	5162	1434	9.75		83.0	165.2			
	6017	1671	6.14		72.7	138.5			

AVS 600-700-I Selection Chart 580 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia	
	m ³ /h	l/s				Shaft Power	Motor Power		
1	2246	624	6.99	590	71.9	59.5	75	600	
	2952	820	5.52		80.9	54.9			
	3285	913	2.68		64.0	37.5			
2	3093	859	5.93		81.4	61.4			90
	3186	885	5.68		81.8	60.3			
	3733	1037	3.54		71.9	50.1			
3	2465	685	7.39		71.9	69.0	90		
	3444	957	5.68		81.9	65.1			
	4062	1128	3.31		70.0	52.3			
4	2730	758	7.15		76.2	69.8			110
	3697	1027	5.83		81.5	72.1			
	4124	1146	3.04		71.9	47.5			
5	3082	856	7.61		76.2	83.9	110		
	2890	1081	6.00		82.4	77.2			
	4559	1266	3.69		71.9	63.8			
6	3773	1048	6.99		81.4	88.3			110
	4102	1139	6.15		82.4	83.4			
	4781	1328	3.88		71.9	70.3			



No. of vanes	Impeller	Tolerance
5	Ø 600 mm	ISO 9906 Grade 2

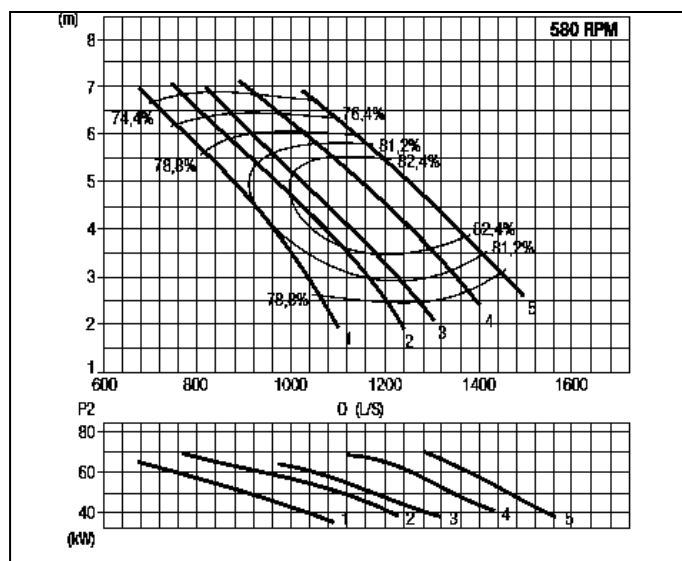
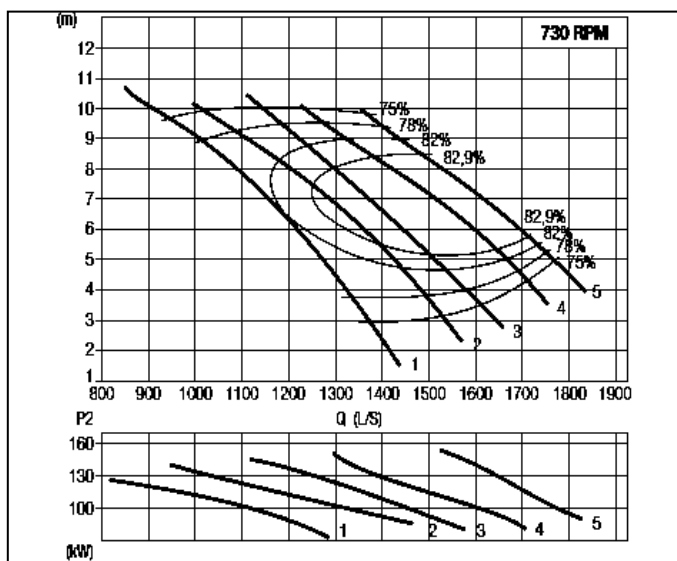
No. of vanes	Impeller	Tolerance
4	Ø 600 mm	ISO 9906 Grade 2

AVS 650-700-I Selection Chart 730 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	3038	844	10.80	730	72.1	124	160	650
	3908	1086	8.04		82.0	104.4		
	4563	1268	4.99		81.0	76.6		
2	3828	1063	9.41		76.5	128.3		
	4467	1241	7.58		81.4	113.4		
	4995	1388	5.63		75.4	101.6		
3	4595	1276	8.04		81.3	123.8		
	4795	1332	7.25		82.5	114.8		
	5562	1545	4.48		78.6	86.4		
4	5195	1443	7.58		82.6	129.9		
	5682	1578	6.31		83.5	117.0		
	5922	1645	5.36		82.8	104.5		
5	5760	1600	7.20		83.2	135.8		
	5994	1665	6.43		84.2	124.7		
	6340	1761	5.05		80.3	108.7		

AVS 650-700-II Selection Chart 580 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	2410	669	6.96	590	70.5	64.8	80	650
	3110	864	5.17		80.0	54.8		
	3660	1017	3.20		78.8	40.5		
2	2786	774	6.75		75.0	68.3		
	3557	988	4.74		80.5	57.1		
	3974	1104	3.61		75.9	51.5		
3	3506	974	5.44		79.4	65.5		
	3820	1061	4.66		81.5	59.5		
	4446	1235	2.85		77.4	44.6		
4	4060	1128	5.417		81.8	69.9		
	4529	1258	4.00		82.3	60.0		
	4720	1311	3.44		81.8	54.1		
5	4658	1294	4.60		83.3	70.1		
	4975	1382	3.69		82.8	60.4		
	5120	1422	3.20		79.3	56.3		



No. of vanes	Impeller	Tolerance
4	Ø 650 mm	ISO 9906 Grade 2

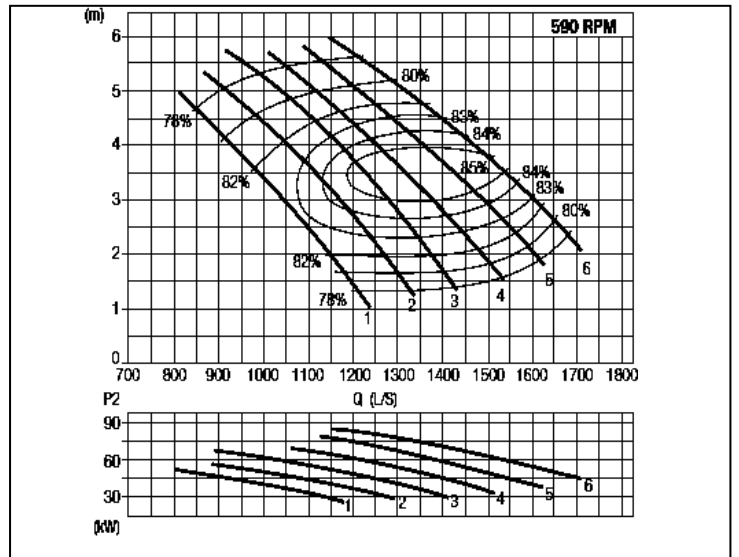
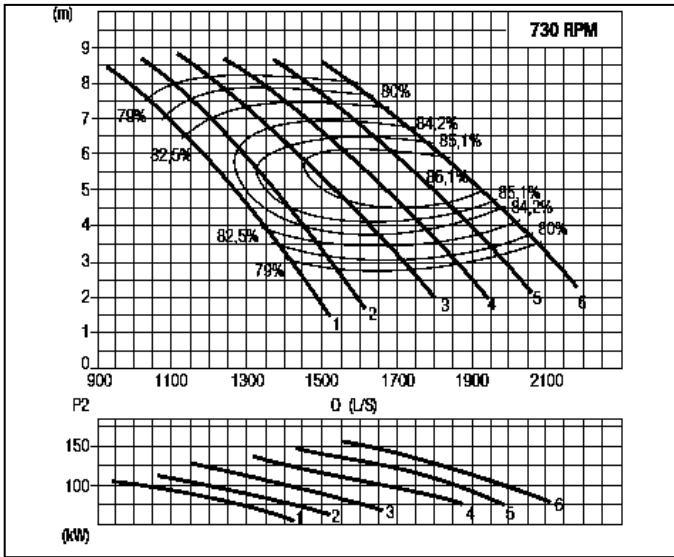
No. of vanes	Impeller	Tolerance
4	Ø 650 mm	ISO 9906 Grade 2

AVS 650-700-III Selection Chart 730 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	3888	1080	7.00	730	79.0	93.9	110	650
	4572	1270	5.00		81.0	76.9		
	5040	1400	3.30		79.0	57.4		
2	4176	1160	7.20		79.0	103.7	132	
	4860	1350	5.30		82.5	85.1		
	5472	1520	3.00		79.0	56.6		
3	4572	1270	7.50		79.0	118.3	132	
	5329	1480	5.50		83.0	96.2		
	5976	1660	3.35		79.0	69.1		
4	4968	1380	7.60		79.0	130.2	160	
	5850	1625	5.50		83.4	105.1		
	6516	1810	3.45		79.0	77.5		
5	5400	1500	7.65		79.0	142.5	185	
	6300	1750	5.50		83.4	113.2		
	6948	1930	3.55		79.0	85.1		
6	5760	1600	7.60		79.0	151.0	185	
	6660	1850	5.70		83.4	124.0		
	7380	2060	3.70		79.0	94.2		

AVS 650-700-IV Selection Chart 580 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	3021	839	4.76	590	78.0	50.2	55	650
	3693	1026	3.20		82.0	39.3		
	4166	1157	1.89		78.0	27.5		
2	3230	897	5.13		80.0	56.4	75	
	4172	1159	3.14		84.0	42.5		
	4345	1207	1.98		78.0	30.1		
3	3368	936	5.60		78.0	65.9	75	
	4506	1252	3.17		85.0	45.8		
	4979	1383	1.94		80.0	32.9		
4	3981	1106	5.09		80.0	69.0	90	
	4875	1354	3.20		85.0	50.0		
	5363	1490	2.02		80.0	36.9		
5	4173	1159	5.34		78.0	77.9	110	
	5171	1436	3.40		85.0	56.4		
	5769	1603	2.03		78.0	40.9		
6	4196	1166	5.88		78.0	86.2	110	
	5540	1539	3.40		85.0	60.4		
	6079	1689	2.29		78.0	48.6		



No. of vanes	Impeller	Tolerance
5	Ø 650 mm	ISO 9906 Grade 2

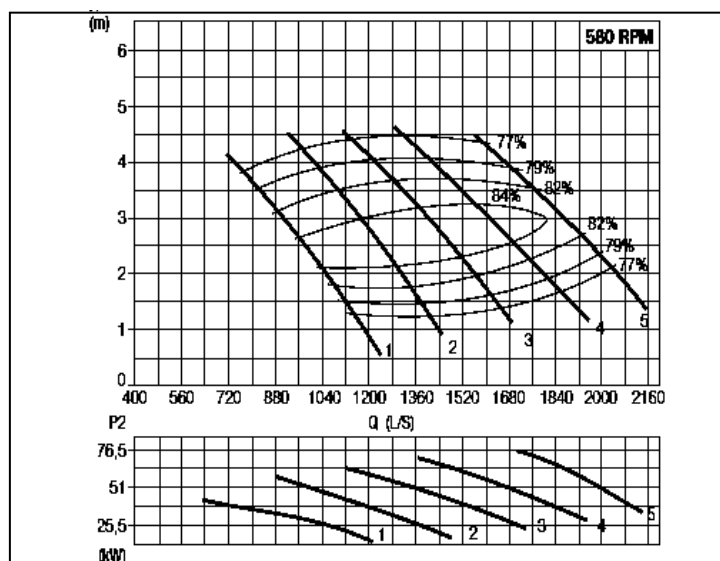
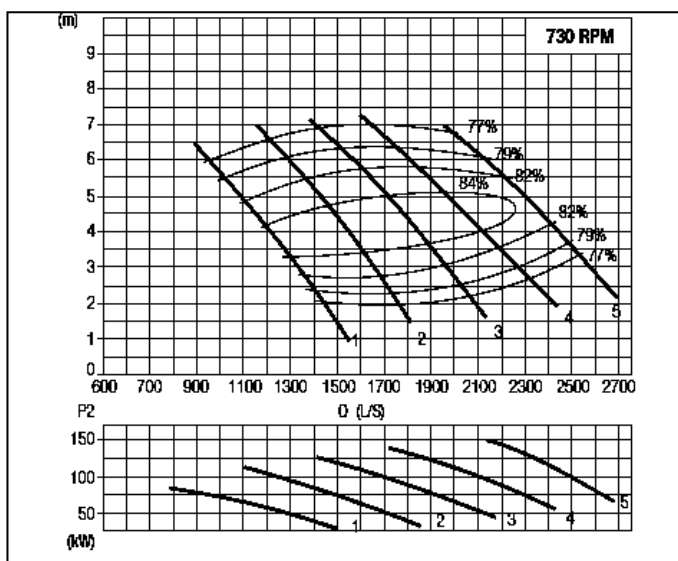
No. of vanes	Impeller	Tolerance
3	Ø 650 mm	ISO 9906 Grade 2

AVS 650-700-V Selection Chart 730 RPM

Impeller Nr	Flow		Head	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m3/h	l/s	m			Shaft Power	Motor Power	
1	3398	944	6.10	730	77.0	73.4	90	650
	4572	1270	3.61		84.0	53.5		
	5141	1428	2.12		78.0	38.1		
2	4799	1333	5.80		79.0	96.0	110	
	5533	1537	4.05		82.5	74.0		
	6048	1680	2.57		79.0	53.6		
3	5825	1618	5.67		81.0	111.1	132	
	6635	1843	4.05		82.5	88.8		
	7222	2006	2.70		79.0	67.3		
4	6487	1802	6.08		79.0	136.0	160	
	7441	2067	4.32		82.5	106.2		
	7956	2210	3.24		79.0	88.9		
5	8352	2320	4.81		83.0	131.9	160	
	8402	2334	4.17		82.0	116.4		
	8910	2475	3.73		79.0	114.6		

AVS 650-700 Selection Chart 580 RPM

Impeller Nr	Flow		Head	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m3/h	l/s	m			Shaft Power	Motor Power	
1	2725	757	3.92	580	76.0	38.3	45	650
	3668	1019	2.32		83.3	27.8		
	4104	1140	1.36		77.2	19.7		
2	3636	1010	3.98		78.5	50.2	55	
	4511	1253	2.40		83.8	35.2		
	5051	1403	1.24		75.5	22.6		
3	4392	1220	4.00		79.5	60.2	75	
	5314	1476	2.57		83.8	44.4		
	5922	1645	1.51		76.5	31.9		
4	5069	1408	4.04		79.0	70.6	90	
	5951	1653	2.74		83.3	53.3		
	6400	1778	2.02		80.0	44.0		
5	5995	1665	4.00		78.8	82.9	90	
	6682	1856	3.10		82.5	68.4		
	6732	1870	3.03		82.5	67.4		



No. of vanes	Impeller	Tolerance
3	Ø 650 mm	ISO 9906 Grade 2

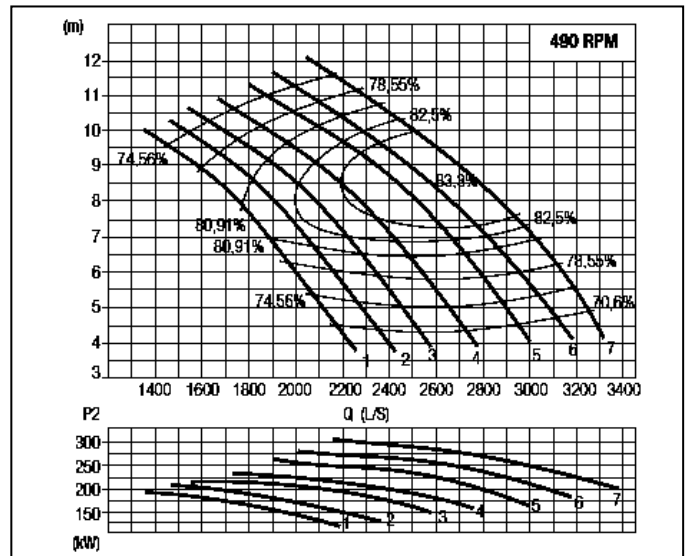
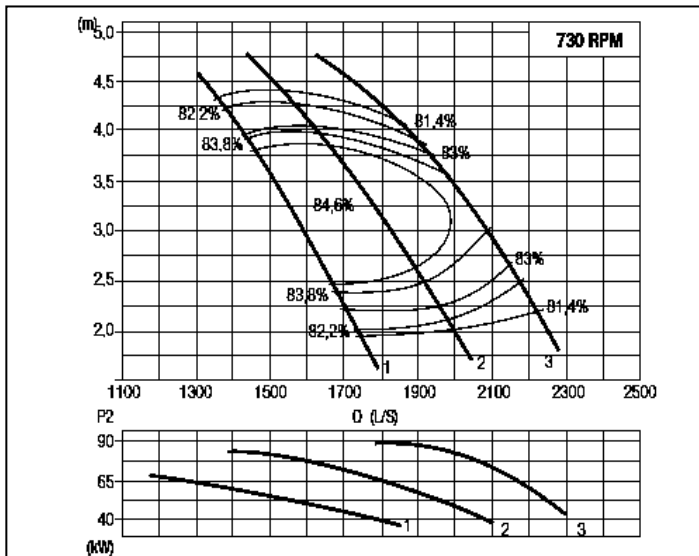
No. of vanes	Impeller	Tolerance
3	Ø 650 mm	ISO 9906 Grade 2

AVS 650-700-A Selection Chart 730 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	4922	1367	4.30	730	81.4	70.9	90	650
	5715	1588	2.96		85.0	54.2		
	6295	1749	1.98		81.4	41.7		
2	5766	1602	4.13		81.4	79.7		
	6637	1844	2.97		85.6	62.8		
	7086	1968	2.07		81.4	49.1		
3	6710	1864	3.95		81.4	88.7	110	
	7171	1992	3.50		83.8	81.6		
	7798	2166	2.46		82.2	63.6		

AVS 850-900-I Selection Chart 490 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	5161	1434	9.65	490	74.6	181.9	220	850
	6472	1798	7.82		81.0	170.3		
	7596	2110	4.58		70.6	134.3		
2	5669	1572	9.77		75.0	200.9		
	7139	1983	7.82		82.8	183.7		
	8578	2383	3.83		66.6	134.4		
3	5638	1566	10.31		74.6	212.3		
	7761	2156	8.06		84.0	202.9		
	9187	2552	4.37		70.6	155.0		
4	6558	1822	10.24		78.5	233.1	250	
	7995	2221	8.3		84.0	215.3		
	10038	2788	3.91		67.0	159.6		
5	7457	2071	10.19		80.9	256.0	280	
	8882	2467	8.34		84.2	239.7		
	10571	2936	4.42		70.6	180.3		
6	7402	2056	10.9		78.5	280.1	315	
	9350	2597	8.55		84.0	259.3		
	11357	3155	4.02		66.6	186.8		
7	7859	2183	11.2		78.5	305.5	355	
	9830	2731	8.79		84.0	280.3		
	11774	3271	4.88		70.6	221.8		



No. of vanes	Impeller	Tolerance
4	Ø 650 mm	ISO 9906 Grade 2

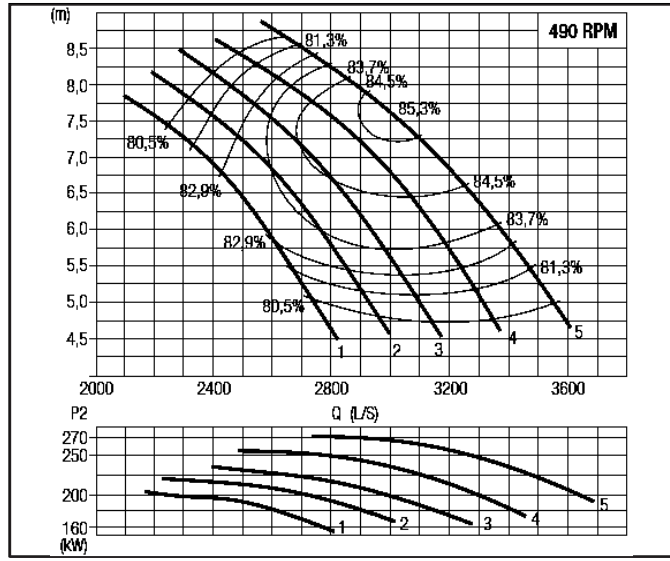
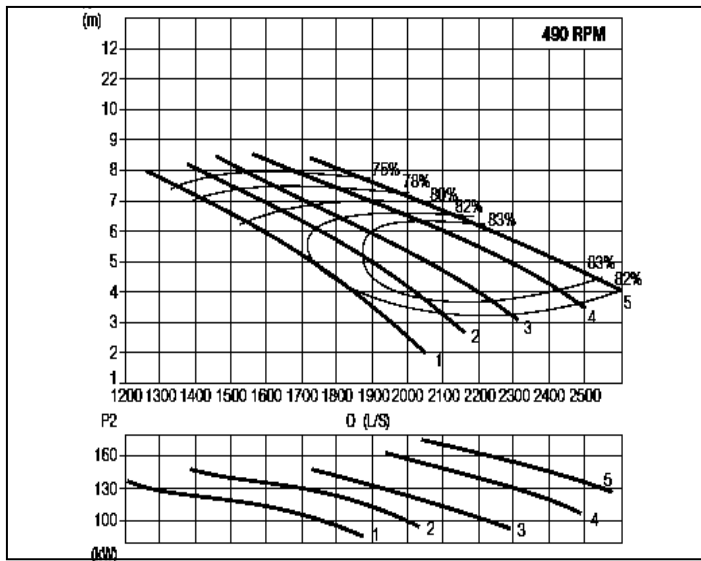
No. of vanes	Impeller	Tolerance
5	Ø 850 mm	ISO 9906 Grade 2

AVS 850-900-II Selection Chart 490 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	4500	1250	8.06	490	74.0	133.6	160	850
	5800	1611			82.3			
	6770	1881			81.4			
2	5190	1442	7.82	77.5	142.7			
	6620	1839	5.49	82.7	119.8			
	7410	2058	4.19	77.0	109.9			
3	6510	1808	6.41	81.8	139.0	185		
	7200	2000	5.40	83.6	126.7			
	8250	2292	3.33	80.1	93.5			
4	7560	2100	6.05	84.0	146.9	185		
	8420	2339	4.70	84.4	127.8			
	8790	2442	4.00	84.0	114.1			
5	7740	2150	6.82	84.2	170.1	185		
	8650	2403	5.60	85.3	154.7			
	9300	2583	4.27	84.8	127.6			

AVS 850-900 Selection Chart 490 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	8748	2430	6.80	490	83.0	195.3	220	850
	9288	2580			83.0			
	9839	2733			80.5			
2	8350	2319	7.73	80.5	218.5	250		
	9648	2680	6.50	83.8	203.9			
	10620	2950	4.87	80.5	175.1			
3	8640	2400	8.17	80.5	238.9	280		
	10080	2800	6.70	84.5	217.8			
	11268	3130	4.77	80.5	181.9			
4	8964	2490	8.40	80.5	254.9	280		
	10656	2960	7.00	84.5	240.5			
	11988	3330	4.77	80.5	193.6			
5	9576	2660	8.25	82.9	259.6	315		
	11340	3150	6.52	84.5	238.4			
	12420	3450	4.82	80.5	202.6			
6	9720	2700	8.50	82.1	274.2	315		
	11124	3090	7.33	85.3	260.5			
	12816	3560	4.93	80.5	213.9			



No. of vanes	Impeller	Tolerance
4	Ø 850 mm	ISO 9906 Grade 2

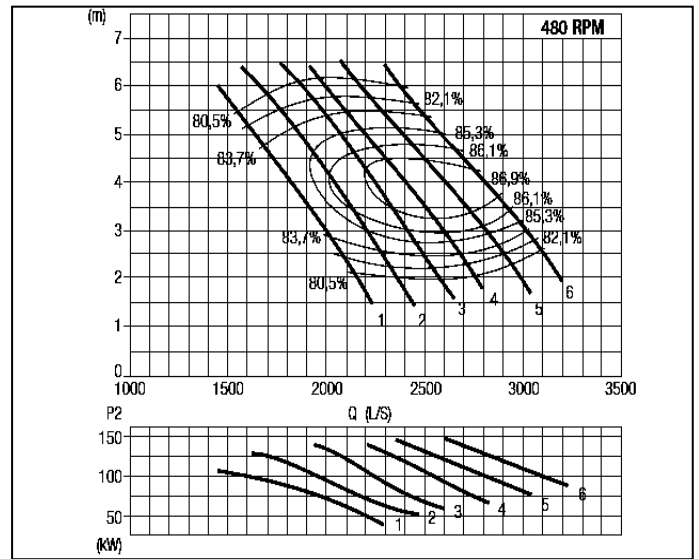
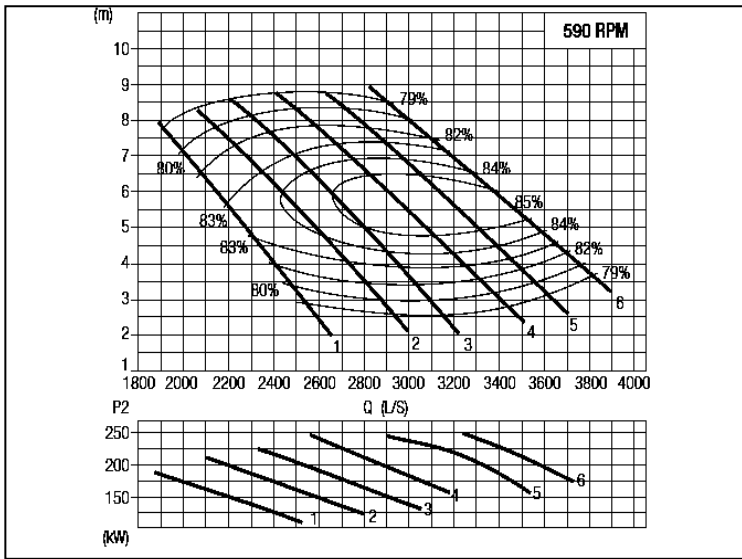
No. of vanes	Impeller	Tolerance
5	Ø 850 mm	ISO 9906 Grade 2

AVS 850-900-III Selection Chart 590 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	7416	2060	6.75	590	81.5	167.4	220	850
	8316	2310	5.50		84.0	148.4		
	8856	2460	4.00		82.0	117.7		
2	8208	2280	7.00		83.0	188.6		
	9306	2585	5.50		84.5	165.1		
	9792	2720	4.00		81.5	131.0		
3	8686	2413	7.50		82.5	215.2	250	
	9576	2710	5.75		85.0	179.8		
	10650	2958	4.00		82.0	141.6		
4	9720	2700	7.25		83.5	230.0		
	10728	2980	5.50		85.0	189.2		
	11448	3180	4.50		83.5	168.1		
5	10818	3005	6.80	84.5	237.2			
	11412	3170	5.75	85.0	210.4			
	12168	3380	4.50	83.5	178.7			
6	12168	3380	5.90	85.0	230.2			
	12870	3575	4.80	83.5	201.6			
	13835	3843	3.50	82.0	160.9			

AVS 850-900-IV Selection Chart 480 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	5868	1630	5.00	480	80.0	99.9	132	850
	6894	1915	3.50		82.5	79.7		
	7569	2110	2.25		79.0	59.0		
2	6660	1850	5.00		80.5	112.7		
	7488	2080	3.75		84.0	91.1		
	8388	2330	2.25		80.0	64.3		
3	7578	2105	4.60		83.5	113.8	160	
	8028	2230	3.90		85.0	100.4		
	9072	2520	2.25		80.0	69.5		
4	7560	2100	5.50		80.5	140.8		
	8658	2405	4.00		85.0	111.0		
	9684	2690	2.50		80.9	81.5		
5	8460	2350	5.20	82.0	146.2			
	9378	2605	4.00	85.0	120.3			
	10244	2846	2.80	81.5	95.9			
6	9468	2630	4.75	84.0	145.9			
	10080	2800	4.00	85.0	129.3			
	10818	3005	3.00	81.8	108.1			



No. of vanes	Impeller	Tolerance
3	Ø 850 mm	ISO 9906 Grade 2

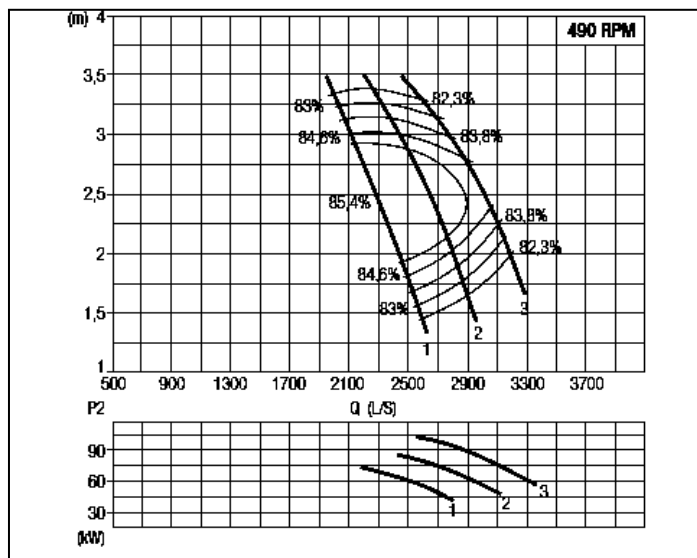
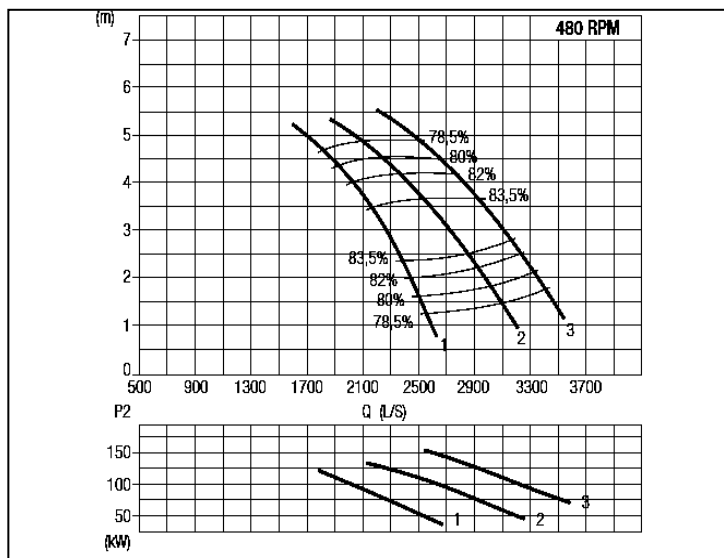
No. of vanes	Impeller	Tolerance
3	Ø 850 mm	ISO 9906 Grade 2

AVS 850-900-V Selection Chart 480 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	7056	1960	4.30	490	80.0	103.3	115	850
	8136	2260	3.00		83.5	79.7		
	8892	2470	1.90		80.0	57.5		
2	8568	2380	4.20		82.0	119.6	132	
	9756	2710	3.00		83.5	95.5		
	10620	2950	2.00		80.0	72.3		
3	9540	2650	4.50		80.0	146.2	132	
	10944	3040	3.20		83.5	114.3		
	11700	3250	2.40		80.0	95.6		

AVS 850-900-A Selection Chart 490 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	7315	2032	3.25	490	82.3	78.7	90	850
	8492	2359	2.24		85.7	60.5		
	9234	2565	1.57		83.0	47.6		
2	8568	2380	3.12		82.3	88.5	110	
	9850	2736	2.25		86.5	69.8		
	10476	2910	1.63		83.0	56.1		
3	9968	2769	3.00		82.3	99.0	132	
	10656	2960	2.64		84.5	90.7		
	11462	3184	2.01		83.0	75.6		



No. of vanes	Impeller	Tolerance
3	Ø 850 mm	ISO 9906 Grade 2

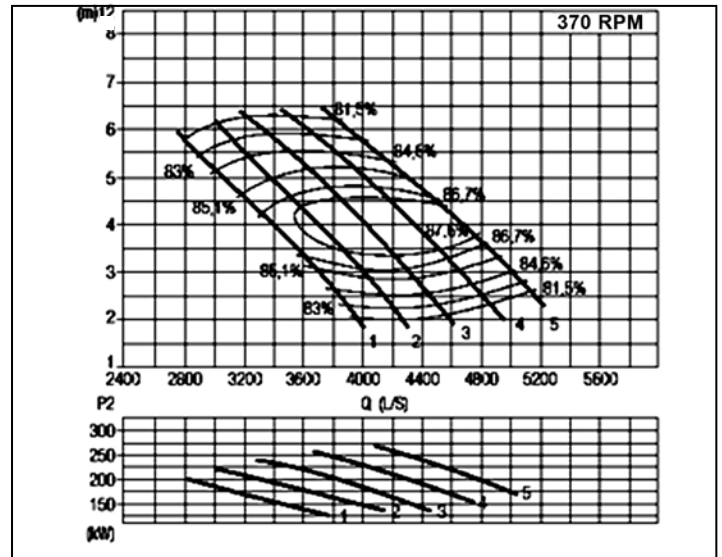
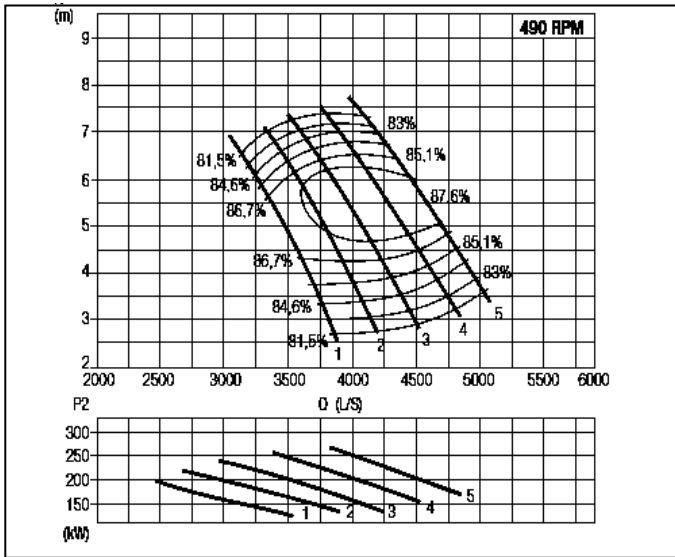
No. of vanes	Impeller	Tolerance
3	Ø 850 mm	ISO 9906 Grade 2

AVS 1000-1200-I Selection Chart 480 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	11304	3140	6.43	490	84.7	233.8	280	1000
	13460	3739	5.00		85.4	214.7		
	13644	3790	3.17		81.7	144.3		
2	11952	3320	6.84		84.7	263.0		
	13460	3739	5.11		86.2	217.4		
	14904	4140	3.07		81.7	152.6		
3	13865	3851	6.00		86.1	263.3	315	
	14565	4046	5.11		86.2	235.3		
	16020	4450	3.23		81.7	172.6		
4	13824	3840	7.21		84.7	320.7	355	
	15448	4291	5.43		86.2	265.2		
	17028	4730	3.53		81.7	200.5		
5	15624	4340	6.45		85.4	321.6		
	16552	4598	5.42		86.2	283.6		
	17964	4990	3.89		81.7	233.1		

AVS 1100-1200-I Selection Chart 370 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	10584	2940	5.40	370	83.0	187.6	250	1100
	12312	3420	4.00		86.9	154.4		
	13752	3820	2.60		84.7	115.0		
2	11340	3150	5.70		83.0	212.2		
	14220	3950	4.00		87.6	177.0		
	14940	4150	2.58		84.6	124.2		
3	11808	3280	6.10		81.5	240.8	280	
	14400	4000	4.15		87.6	185.9		
	16056	4460	2.58		84.6	133.5		
4	13176	3660	5.90		82.2	257.7	315	
	15840	4400	3.87		87.6	190.7		
	17100	4750	2.75		84.6	151.5		
5	14688	4080	5.60		83.0	269.9		
	16848	4680	4.00		87.6	209.6		
	18000	5000	3.00		84.6	174.0		



No. of vanes	Impeller	Tolerance
3	Ø 1000 mm	ISO 9906 Grade 2

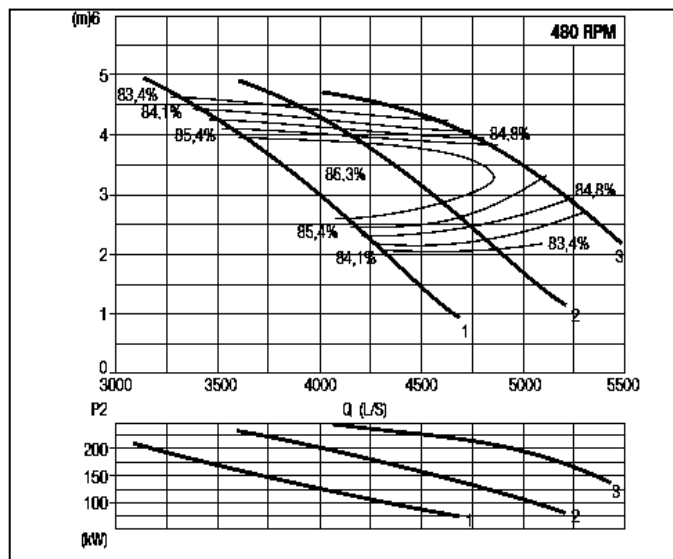
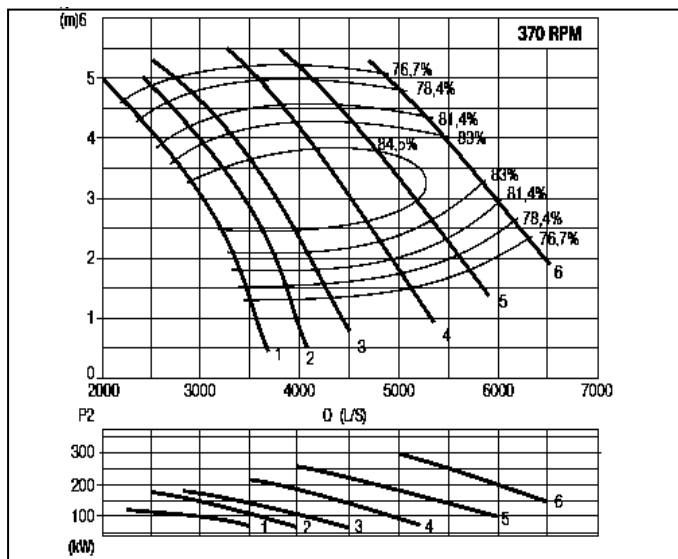
No. of vanes	Impeller	Tolerance
3	Ø 1100 mm	ISO 9906 Grade 2

AVS I 100-1200-II Selection Chart 370 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	8820	2450	4.20	370	79.9	126.3	155	1100
	11160	3100	2.80		84.6	100.7		
	12240	3400	1.66		79.9	69.3		
2	12240	3400	4.62		79.9	192.9	250	
	13788	3830	2.80		84.6	124.4		
	15300	4250	1.60		79.9	83.5		
3	13176	3660	4.80		79.9	215.7	280	
	16200	4500	3.00		84.6	156.6		
	18000	5000	1.85		79.9	113.6		
4	15228	4230	4.80		79.9	249.3	355	
	18000	5000	3.30		84.6	191.4		
	19800	5500	2.20		79.9	148.6		
5	18360	5100	4.66		79.9	291.8	355	
	21096	5860	3.16		83.1	218.7		
	22320	6200	2.48		78.4	192.4		

AVS I 000-1200-II Selection Chart 480 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	12031	3342	4.59	480	83.4	180.4	200	1000
	13968	3880	3.29		86.6	144.6		
	15386	4274	2.11		83.4	106.1		
2	14440	4011	4.26		84.1	199.3	220	
	16222	4506	3.17		86.6	161.8		
	17323	4812	2.21		83.4	125.1		
3	16402	4556	4.21		83.4	225.6	250	
	18112	5031	3.43		85.6	197.8		
	19058	5294	2.63		84.1	162.4		



No. of vanes	Impeller	Tolerance
3	Ø 1100 mm	ISO 9906 Grade 2

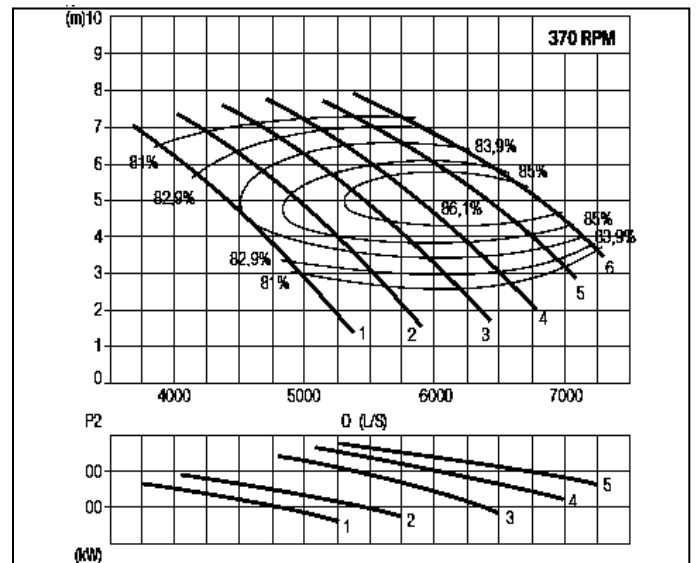
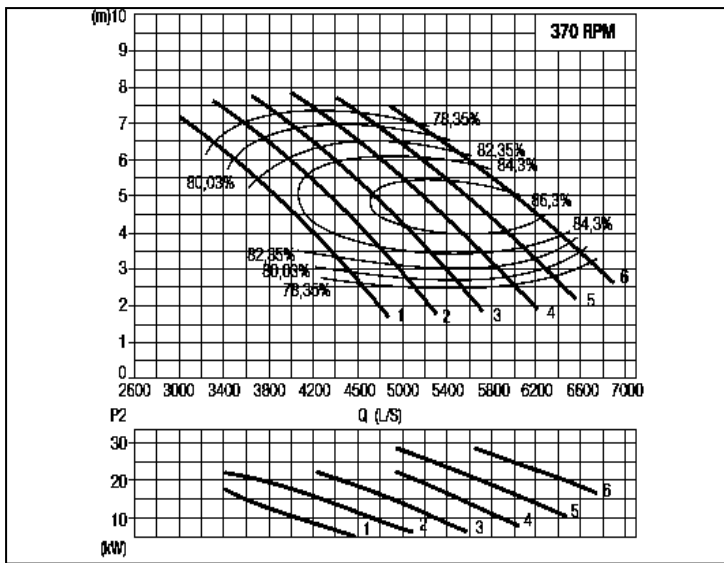
No. of vanes	Impeller	Tolerance
3	Ø 1000 mm	ISO 9906 Grade 2

AVS I200-I400-I Selection Chart 370 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	12630	3510	6.04	370	80.3	259.0	1200	
	14688	4080	4.20		84.3			
	16560	4600	2.60		78.3			
2	14976	4160	5.51		84.3	266.7		
	16776	4660	4.04		85.3			
	18180	5050	2.71		80.3			
3	15300	4250	6.34		82.3	321.2		
	17064	4740	5.00		86.3			
	19800	5500	2.64		80.3			
4	17714	4921	5.71		82.3	334.9		
	19440	5400	4.40		86.3			
	21600	6000	2.50		78.3			
5	17784	4940	6.56		82.3	386.3		
	21384	5940	4.07		86.3			
	22968	6380	2.77		78.3			
6	20340	5650	5.85		84.3	384.6		
	22428	6230	4.41		86.3			
	24192	6720	3.13		78.3			

AVS I250-I400 Selection Chart 370 RPM

Impeller Nr	Flow		Head m	Speed Rpm	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s				Shaft Power	Motor Power	
1	14627	4063	5.85	370	82.5	282.6	1250	
	15889	4414	4.87		84.0			
	17696	4916	3.23		81.8			
2	15746	4374	6.11		82.5	317.8		
	17496	4860	4.75		85.3			
	19302	5362	3.23		82.8			
3	17352	4820	6.17		84.0	347.3		
	19216	5338	4.91		86.2			
	21195	5888	3.23		83.2			
4	18671	5186	6.46		84.3	389.9		
	20880	5800	5.06		86.3			
	23031	6397	3.36		83.2			
5	19962	5545	6.59		83.7	428.3		
	22257	6183	5.34		86.8			
	24551	6820	3.07		80.5			
6	21367	5935	6.59		83.0	426.3		
	23748	6597	5.19		86.3			
	26043	7234	3.66		82.5			

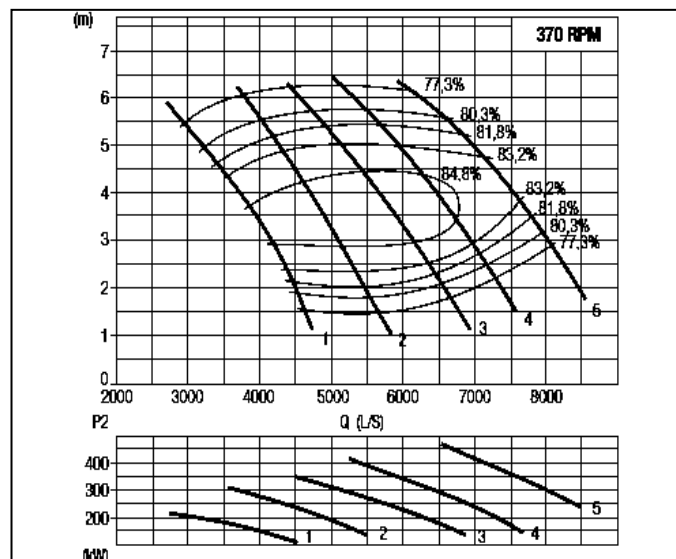


No. of vanes	Impeller	Tolerance
3	Ø 1200 mm	ISO 9906 Grade 2

No. of vanes	Impeller	Tolerance
3	Ø 1250 mm	ISO 9906 Grade 2

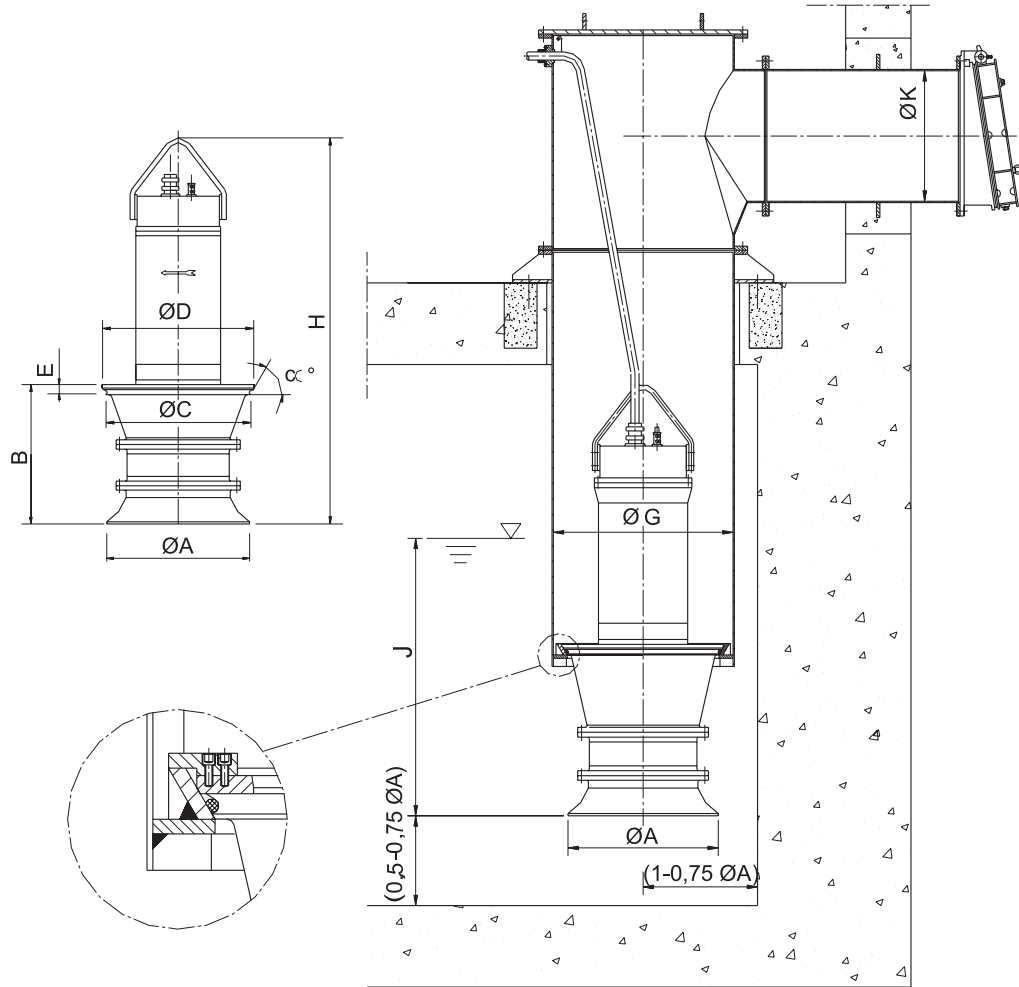
AVS I200-I400-II Selection Chart 370 RPM

Impeller Nr	Flow		Head	Speed	Eff %	Power (kW)		Impeller Dia
	m ³ /h	l/s	m	Rpm		Shaft Power	Motor Power	
1	11448	3180	5.00	370	80.3	194.3	315	1200
	14400	4000	3.40		84.5	157.9		
	16200	4500	1.90		80.3	104.5		
2	14400	4000	5.60		80.3	273.7		
	18000	5000	3.20		84.8	185.1		
	19800	5500	1.90		80.3	127.7		
3	17100	4750	5.70		80.3	330.8	400	
	20520	5700	3.90		84.8	257.2		
	23400	6500	2.20		80.3	174.7		
4	19800	5500	5.70		80.3	383.0	500	
	23400	6500	3.90		84.8	293.3		
	25776	7160	2.50		80.3	218.7		
5	24732	6870	5.15		81.8	424.3		
	27000	7500	4.05		83.7	356.0		
	28440	7900	3.20		80.3	308.8		



No. of vanes	Impeller	Tolerance
3	Ø 1200 mm	ISO 9906 Grade 2

DIMENSIONS



TYPE	$\varnothing A$	B	$\varnothing D$	E	A	$\varnothing G$	H	J	K	KG
AVS 300-350-I	420	457	520	43	75	600	1635	800	400	500
AVS 300-350-II	420	457	520	43	75	600	1635	800	400	500
AVS 300-350-III	420	457	520	43	75	600	1635	800	400	500
AVS 450-500	620	645	710	80	60	800	2048	1000	600	1100
AVS 450-500-I	700	615	770	46	60	850	1920	1000	600	1100
AVS 450-500-II	620	645	710	80	60	800	1997	1000	600	1100
AVS 450-500-III	700	615	770	46	60	850	1912	1000	600	1100
AVS 450-500-IV	700	615	770	46	60	850	3637	1000	600	1100
AVS 550-600-I	700	772	770	55	60	850	2069	1000	600	1100
AVS 550-600-II	700	772	770	55	60	850	2062	1000	600	1100
AVS 600-700	920	942	980	65	60	1100	2649	1700	800	2500
AVS 600-700-I	920	942	980	65	60	1100	2649	1700	800	2500
AVS 650-700-I	920	898	980	65	60	1100	2570	1700	800	2500
AVS 650-700-II	920	898	980	65	60	1100	2570	1700	800	2500
AVS 650-700-III	920	898	980	65	60	1100	2489	1700	800	2500
AVS 650-700-IV	920	898	980	65	60	1100	2489	1700	800	2500
AVS 650-700-V	920	898	980	65	60	1100	2589	1700	800	2500
AVS 650-700	920	898	980	65	60	1100	2589	1700	800	2500
AVS 650-700-A	920	998	980	65	60	1100	2589	1700	800	2500
AVS 850-900-I	1080	1256	1200	69	60	1380	3704	1250	1200	4500
AVS 850-900-II	1200	1260	1270	62	60	1380	3637	1250	1200	4500
AVS 850-900	1200	1260	1270	62	60	1380	3637	1250	1200	4500
AVS 850-900-III	1200	1276	1360	165	60	1380	3660	2300	1200	5100
AVS 850-900-IV	1200	1276	1360	165	60	1380	3660	2300	1200	5100
AVS 850-900-V	1200	1276	1360	165	60	1400	3660	2500	1200	5100
AVS 850-900-A	1200	1276	1360	165	60	1400	3660	2500	1200	5100
AVS 1000-1200-I	1200	1364	1580	51	60	1600	3749	2500	1400	6000
AVS 1100-1200-I	1200	1364	1580	51	60	1600	3749	2500	1400	6000
AVS 1000-1200-II	1420	1304	1580	52	60	1600	3671	2500	1400	6000
AVS 1200-1400-I	1360	1780	1700	390	60	1800	3491	3360	1800	8600
AVS 1250-1400	1360	1780	1700	390	60	1800	3491	3360	1800	8600
AVS 1200-1400-II	1830	1780	1990	390	60	2000	4000	3360	1800	8600

ELECTRICAL DATA

POWER		RPM	VOLTAGE	CURRENT	NO LOAD CURR.	EFF.	COS φ	Tmax/tn	Ts/tn	Is/In
KW	HP									
7,5	10	980	380	16,99	8,16	87,79	0,7831	2,373	2,3811	5,7489
11	15	980	380	24,63	11,26	88,88	0,7891	2,3152	2,4717	5,8667
15	20	980	380	33,2	15,42	89,08	0,7862	2,3044	2,257	5,5044
18,5	25	1450	380	36,3	14,5	89,98	0,8662	3,3377	2,3641	6,8297
22	30	1450	380	43,1	16,1	90,5	0,8723	3,2807	2,3702	6,7828
30	40	1450	380	58,7	22,4	91,16	0,8696	3,3994	2,3822	6,7598
37	50	1450	380	71,8	25,9	91,41	0,8775	3,3263	2,3291	6,6685
30	40	980	380	60,3	21,2	91,65	0,8495	2,3649	2,3735	6,3048
37	50	980	380	74	24,6	91,4	0,8541	2,2826	2,3623	6,3048
45	60	980	380	89,9	32,7	92,26	0,8445	2,4267	2,1745	6,3048
55	75	980	380	109,3	39	92,44	0,8463	2,3854	2,1953	6,3048
75	100	980	380	148,8	53,6	92,67	0,8435	2,337	2,3261	6,3048
30	40	730	380	64,9	30,2	91,47	0,7878	-	2,3458	5,3596
37	50	730	380	80,7	38,7	91,86	0,78	2,5488	2,2945	5,304
45	60	730	380	97,6	48,3	92,13	0,7714	2,7009	2,5126	5,6202
90	125	980	380	170,1	46,5	92,89	0,8855	2,3137	2,2614	6,0823
110	150	980	380	207	61,6	93,25	0,8807	2,4679	2,6123	6,6517
132	180	980	380	247,9	71,1	93,49	0,8837	2,4415	2,6266	6,6513
90	125	730	380	179,3	63,1	93,55	0,8415	2,2893	1,4795	4,9113
110	150	730	380	221,8	84,7	93,52	0,8295	2,3764	1,5378	4,9012
132	180	730	380	265,9	93	93,6	0,8379	2,194	1,4268	4,5867
160	220	730	380	332	125,4	93,84	0,8244	2,3383	1,5265	4,7228
180	250	730	380	371,1	149	94,01	0,8213	2,3996	1,6118	4,8807
75	100	590	380	163	82,9	93,28	0,7729	3,0702	1,6607	5,999
90	125	590	380	195,1	97,8	93,57	0,7759	3,0911	1,6927	6,0874
110	150	590	380	237,7	116,1	93,58	0,7755	2,8788	1,4002	5,1949
132	180	590	380	280,7	140	93,66	0,7766	2,8031	1,4078	5,1314
160	220	590	380	339,5	146,8	93,71	0,7994	2,4401	1,2173	4,5952
160	220	590	380	327,4	138,2	93,37	0,8104	2,2953	1,6174	5,0241
185	250	590	380	377,8	159,6	93,76	0,8085	2,2933	1,617	5,0135
200	270	590	380	407,6	174,7	94,07	0,8082	2,3937	1,6931	5,2311
220	300	590	380	448,3	174,9	93,92	0,8179	2,1692	1,5316	4,7975
250	340	590	380	507,8	219,5	94,14	0,8064	2,3967	1,8083	5,3428
280	380	590	380	564,7	227,2	93,74	0,8198	2,3161	1,3641	4,7747
315	430	590	380	635,3	250,7	93,87	0,821	2,2752	1,3503	4,7085
132	180	490	380	290,7	141,4	92,79	0,7612	2,1771	1,4365	4,3537
160	220	490	380	346,6	153,7	92,79	0,7755	1,9601	1,2995	4,0001
185	250	490	380	399,8	176,9	92,9	0,7754	1,943	1,3357	4,0177
200	270	490	380	429,9	209,7	93,22	0,7616	2,1165	1,512	4,3601
220	300	490	380	472,9	219,9	93,36	0,7709	2,1346	1,167	3,9539
250	340	490	380	530,4	221,6	93,04	0,7846	1,8665	1,0167	3,5174
280	380	490	380	594,1	251,6	93,24	0,7825	1,8992	1,04	3,5784
315	430	490	380	668,3	307,9	93,46	0,7731	2,0673	1,1717	3,9232

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