

General Data

All the internal and external metal components of the 8" WPS® pumps are constructed of stainless steel AISI 304 - 1.4301 or AISI 316-1.4401 throughout and are being cold pressed from stainless steel sheet. The suction interconnector and discharge chamber are casted.

8" WPS® submersible pumps are suitable for both continuous and intermittent operation for a variety of applications:

- General water supply
- Waterworks and fountains
- Irrigation
- Tank applications
- Pressure boosting
- Heating pumps
- Dewatering, mining and other industrial applications

Note: For other applications, please contact Well Pumps.



Pump and motor range

8" WPS® pump range consists of two flow models: 80 and 100 m³/h.

The pump-end is entirely made out of Stainless Steel DIN 1.4301, AISI 304 or 1.4401, AISI 316.

The pumps are standard equipped with a 6" motor up to 45kW and a 8" submersible motor from 30kW up to 93 kW power.

8" WPS®

Specifications of the pump

The 8" WPS® pump have a capacity up to 120 m³/h and a maximum head of 450m.

The rotation is counter clockwise when looking into the discharge.

Coupling to the motor following NEMA standard.

The 8" WPS® pumps can run continuously in vertical or horizontal position.

Overall diameter of the pump is 189 mm and thus fits into 8" or larger drilled wells.

Pipe connection

All pump types have a treaded pipe connection:

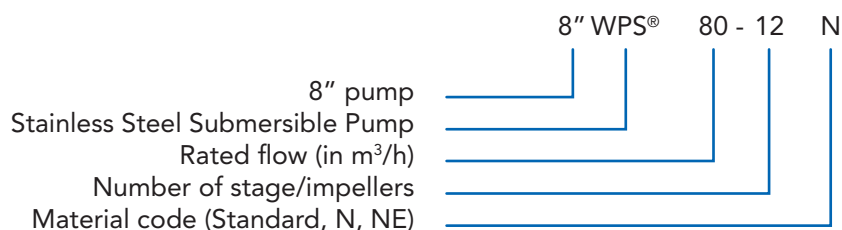
8" WPS® 80: Rp 5"

8" WPS® 100: Rp 5"

A discharge adaptor to Rp 4" or flange adaptors are available on request.

Pump identification code

Example



Pumped liquids

8" WPS® submersible pumps are designed for pumping thin, clean, non-aggressive and non-explosive liquids, not containing solid particles.

8" WPS® pumps are suitable for pumping liquids with a content of sand up to 150 g/m³. A higher content of sand will shorten pump life.

The maximum fluid temperature is 30°C. For higher temperatures, please contact Well Pumps.

Construction features

- Coupling and motor flange of pump-end are suitable for connection to motors in accordance with NEMA standard.
- Jam free spring loaded check valve, built in the discharge chamber, is designed for low loss of head.
- Generously dimensioned intermediate bearing located at each stage of the pump in order to perfectly align the shaft and optimize the lubrication.
- Hydraulic profiles are optimized for the attainment of high efficiencies.
- Resistance to corrosion and abrasion, i.e. the same inherent qualities of stainless steel (AISI 304 - 1.4301 or AISI 316-1.4401).
- Great ease of dismantling and assembly.

Curve Conditions

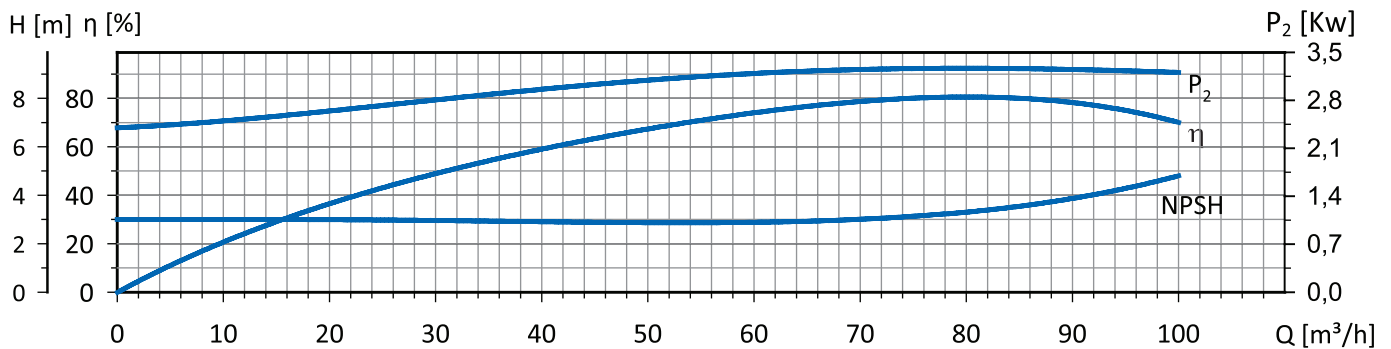
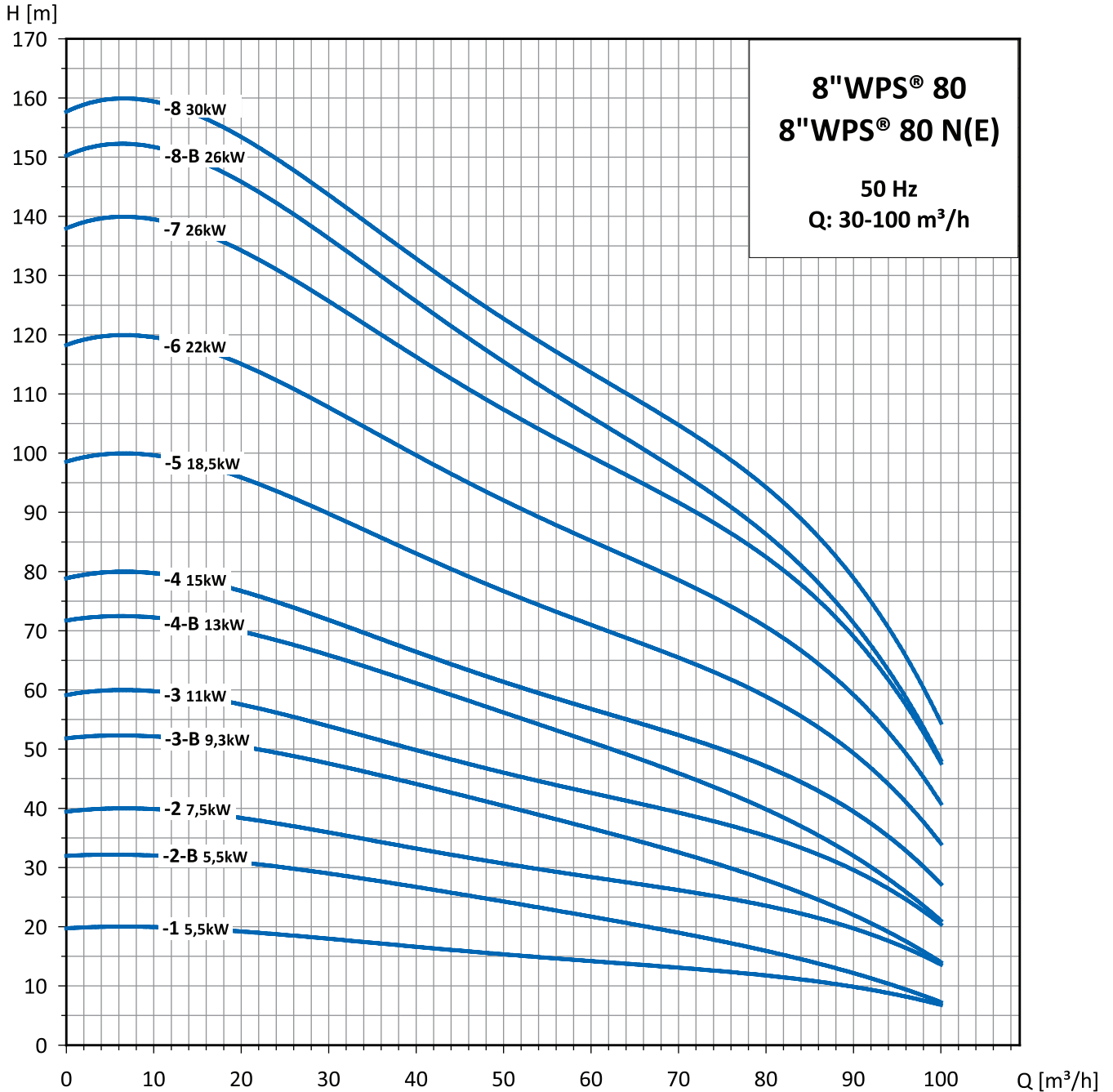
- Curve tolerances according to ISO 9906, 2012 Class 3B.
- The performance curves show pump performance at actual speed of the standard motor range.
- The measurements were made with airless water at a temperature of 20°C and a kinematic viscosity of 1 mm²/s (1 cSt). For pumping liquids with a higher density than clear water, motors must be used with correspondingly higher outputs.
- Q/H: The curves are inclusive of valve and inlet losses at the actual speed.
- Power curve: P₂ shows pump input power at the actual speed for each individual pump size.
- Efficiency curve: η shows pump efficiency.

Service

The pump and motor are very easy to maintain and repair. The modular pump and motor design facilitates installation and service.

Performance Curves

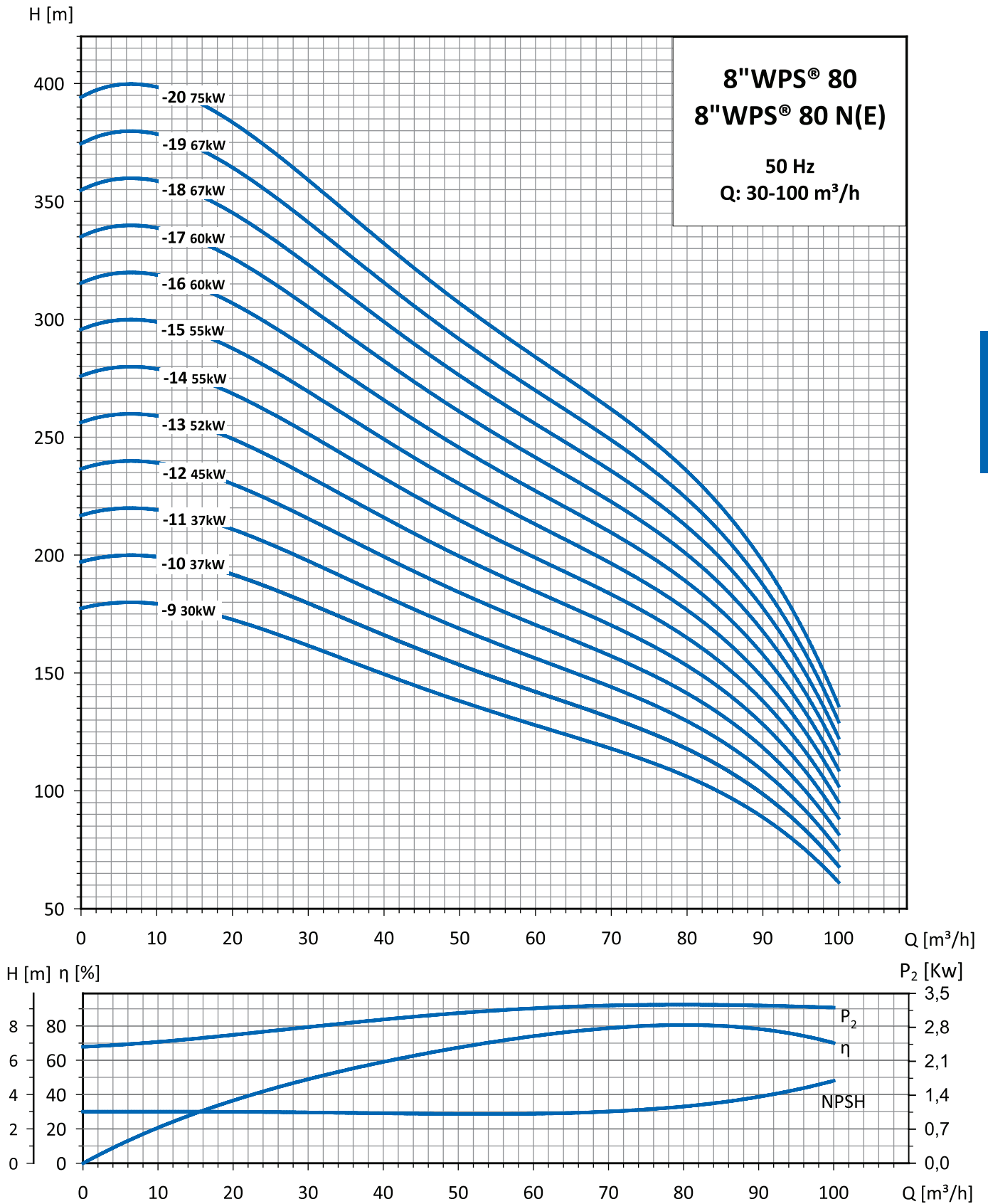
Performance Curves 8" WPS® 80 and 8" WPS® 80 N(E)



Curves Tolerances according to ISO 9906:2012 Grade 3B

8" WPS® 80

Performance Curves 8"WPS® 80 and 8"WPS® 80 N(E)



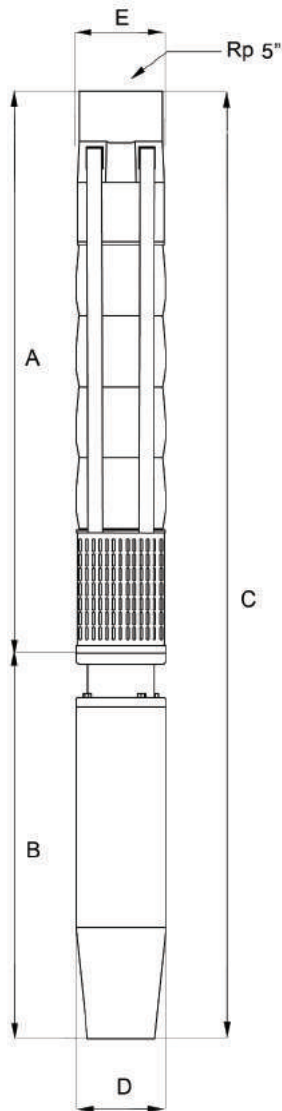
8"WPS®

Technical Data

Selection Chart 8"WPS® 80 and 8"WPS® 80 N(E)

Pump Type	Pump Power P ₂		Flow [m ³ /h]						Full load current
	[kW]	[HP]	0	20	40	60	80	100	3x400V
8"WPS® 80-1	5,5	7,5	20	19	17	14	12	7	9,5
8"WPS® 80-2-B	5,5	7,5	32	31	26	22	16	7	12,5
8"WPS® 80-2	7,5	10,0	40	39	33	28	24	14	15,2
8"WPS® 80-3-B	9,3	12,5	52	51	44	37	28	14	20,3
8"WPS® 80-3	11,0	15,0	59	58	50	43	35	20	23,0
8"WPS® 80-4-B	13,0	17,5	72	70	61	51	40	21	29,6
8"WPS® 80-4	15,0	20,0	79	77	66	57	47	27	29,0
8"WPS® 80-5	18,5	25,0	99	97	83	71	59	34	41,0
8"WPS® 80-6	22,0	30,0	119	116	99	85	71	41	53,0
8"WPS® 80-7	26,0	35,0	139	135	116	99	83	48	35,0
8"WPS® 80-8-B	26,0	35,0	151	146	136	115	85	48	41,0
8"WPS® 80-8	30,0	40,0	158	154	132	114	94	54	53,0
8"WPS® 80-9	30,0	40,0	178	174	149	128	106	61	56,0
8"WPS® 80-10	37,0	50,0	198	193	165	142	118	68	59,0
8"WPS® 80-11	37,0	50,0	218	212	182	156	130	75	63,0
8"WPS® 80-12	45,0	60,0	238	232	198	170	142	82	78,0
8"WPS® 80-13	52,0	70,0	257	251	215	185	153	88	80,0
8"WPS® 80-14	55,0	75,0	277	270	231	199	165	95	90,0
8"WPS® 80-15	55,0	75,0	297	290	248	213	177	102	86,0
8"WPS® 80-16	60,0	85,0	317	309	264	227	189	109	95,0
8"WPS® 80-17	60,0	85,0	337	328	281	241	201	116	115,0
8"WPS® 80-18	67,0	90,0	356	347	297	256	212	122	120,0
8"WPS® 80-19	67,0	90,0	346	367	314	270	224	129	130,0
8"WPS® 80-20	75,0	100,0	369	386	330	284	236	136	135,0

Dimensions and Weights 8"WPS® 80 and 8"WPS® 80 N(E)

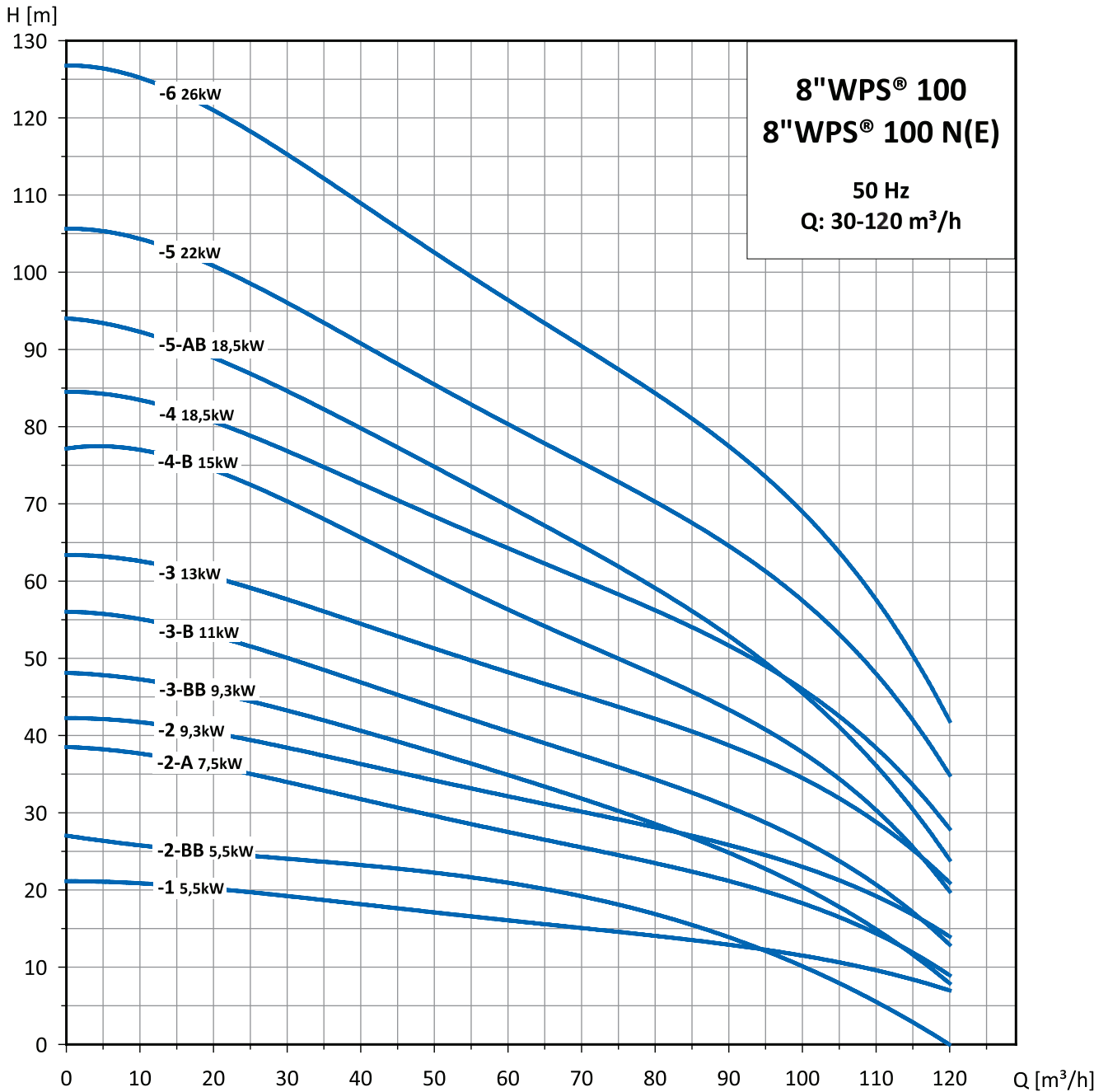


Pump Type	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	E* [mm]	Motor Type	Weight [kg]	
								Pump end	Electro-pump
8"WPS® 80-1	618	614	1232	137	178	186	6"	25,0	66,9
8"WPS® 80-2-B	746	614	1360	137	178	186	6"	29,0	70,9
8"WPS® 80-2	746	646	1392	137	178	186	6"	29,0	75,0
8"WPS® 80-3-B	874	679	1553	137	178	186	6"	32,0	80,3
8"WPS® 80-3	874	711	1585	137	178	186	6"	32,0	83,7
8"WPS® 80-4-B	1003	809	1812	145	178	186	6"R**	36,0	92,0
8"WPS® 80-4	1003	776	1779	137	178	186	6"	36,0	93,5
8"WPS® 80-5	1131	842	1973	137	178	186	6"	36,0	100,1
8"WPS® 80-6	1259	907	2166	137	178	186	6"	43,0	113,1
8"WPS® 80-7	1387	1094	2481	145	178	186	6"R**	47,0	132,0
8"WPS® 80-8-B	1515	1094	2609	145	178	186	6"R**	50,0	135,0
8"WPS® 80-8	1515	1037	2552	137	178	186	6"	50,0	134,7
8"WPS® 80-8	1515	925	2440	189	178	186	8"R**	50,0	190,0
8"WPS® 80-9	1644	1037	2681	137	178	186	6"	54,0	138,7
8"WPS® 80-9	1644	925	2569	189	178	186	8"R**	54,0	194,0
8"WPS® 80-10	1772	1274	3046	145	178	186	6"R**	57,0	159,0
8"WPS® 80-10	1772	1000	2772	189	178	186	8"R**	57,0	197,0
8"WPS® 80-11	1900	1274	3174	145	178	186	6"R**	61,0	163,0
8"WPS® 80-11	1900	1000	2900	189	178	186	8"R**	61,0	201,0
8"WPS® 80-12	2039	1629	3668	137	178	186	6"	66,0	217,0
8"WPS® 80-12	2039	1077	3116	189	178	186	8"R**	66,0	222,0
8"WPS® 80-13	2168	1077	3245	189	178	186	8"R**	70,0	249,0
8"WPS® 80-14	2296	1204	3500	189	178	186	8"R**	74,0	253,0
8"WPS® 80-15	2424	1204	3628	189	178	186	8"R**	77,0	256,0
8"WPS® 80-16	2552	1470	4022	189	178	186	8"R**	80,0	278,0
8"WPS® 80-17	2681	1470	4151	189	178	186	8"R**	84,0	282,0
8"WPS® 80-18	2809	1470	4279	189	178	186	8"R**	88,0	286,0
8"WPS® 80-19	2937	1394	4331	189	178	186	8"R**	92,0	290,0
8"WPS® 80-20	3065	1394	4459	189	178	186	8"R**	95,0	310,0

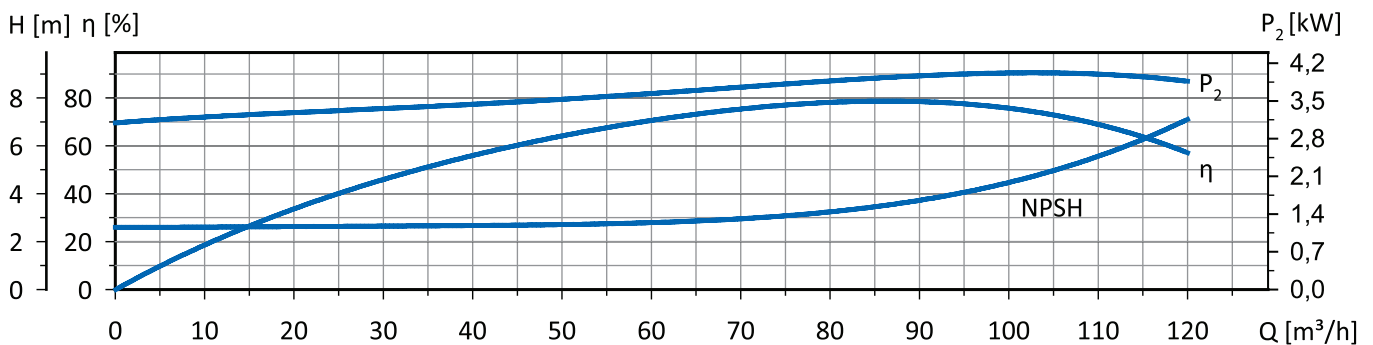
* With 2 cable guards
 ** Rewindable

Performance Curves

Performance Curves 8"WPS® 100 and 8"WPS® 100 N(E)

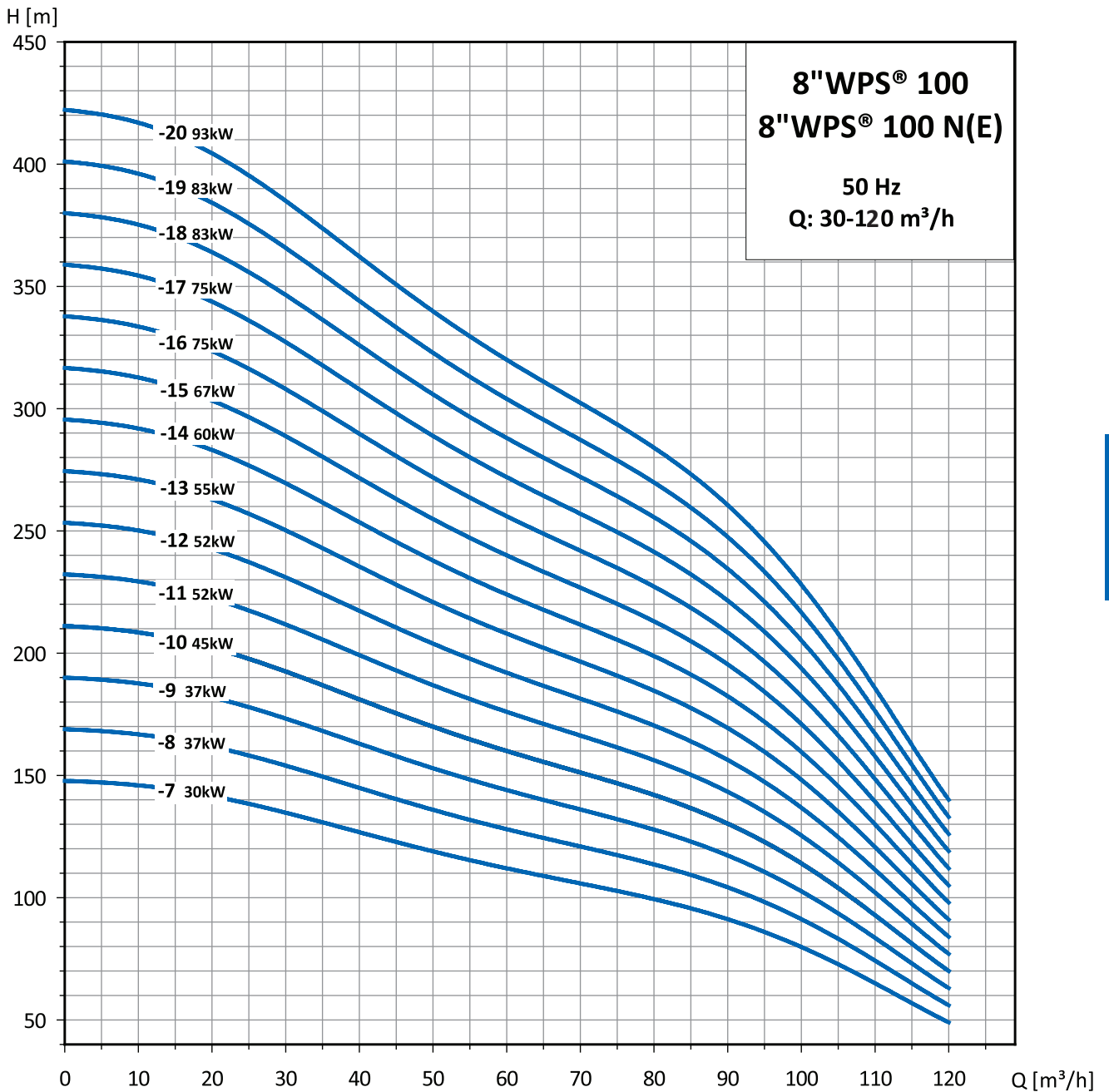


8"WPS®

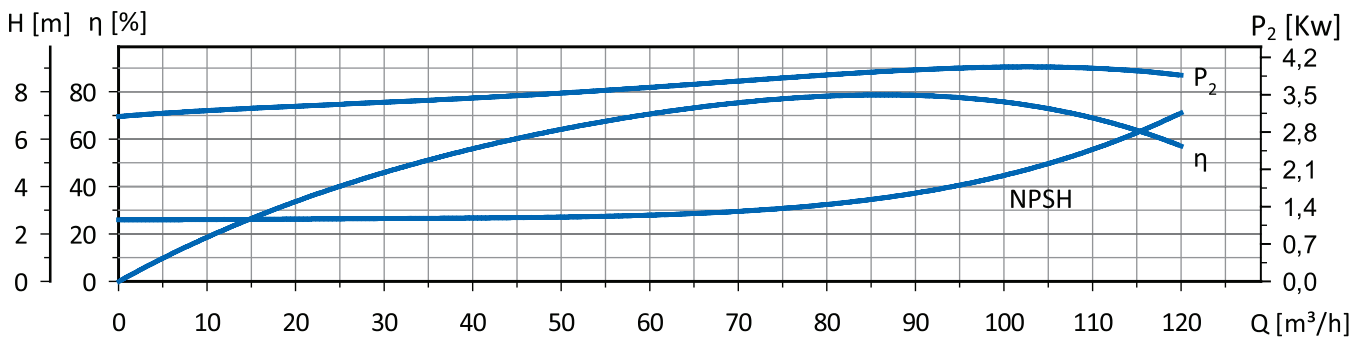


Curves Tolerances according to ISO 9906:2012 Grade 3B

Performance Curves 8"WPS® 100 and 8"WPS® 100 N(E)



8"WPS®



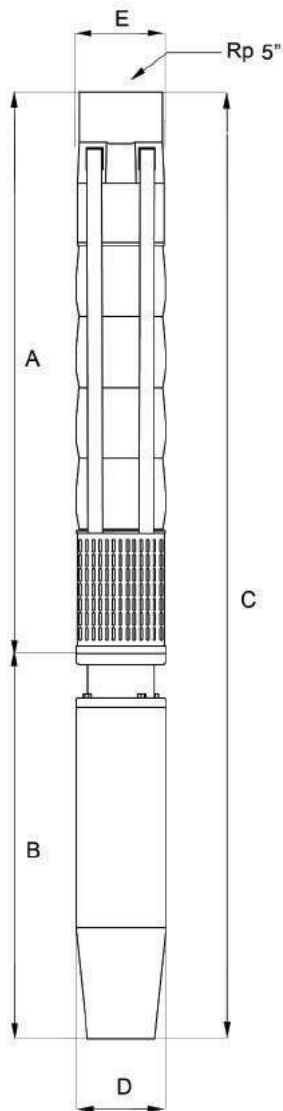
Technical Data

Selection Chart 8"WPS® 100 and 8"WPS® 100 N(E)

Pump Type	Pump Power P ₂		Flow [m ³ /h]							Full load current
	[kW]	[HP]	0	20	40	60	80	100	120	3x400V
8"WPS® 100-1	5,5	7,5	21	20	18	16	14	11	7	10,2
8"WPS® 100-2-BB	5,5	7,5	27	25	23	21	17	10	0	12,5
8"WPS® 100-2-A	7,5	10,0	39	36	32	27	24	18	9	15,3
8"WPS® 100-2	9,3	12,5	42	40	36	32	28	23	14	19,8
8"WPS® 100-3-BB	9,3	12,5	48	46	40	35	29	20	8	20,7
8"WPS® 100-3-B	11,0	15,0	56	53	47	40	35	26	13	22,0
8"WPS® 100-3	13,0	17,5	63	61	54	48	43	34	21	28,5
8"WPS® 100-4-B	15,0	20,0	77	75	65	56	49	37	20	31,0
8"WPS® 100-4	18,5	25,0	84	81	72	64	57	46	28	33,0
8"WPS® 100-5-AB	18,5	25,0	94	89	80	69	60	45	24	38,5
8"WPS® 100-5	22,0	30,0	106	101	91	80	71	57	35	43,0
8"WPS® 100-6	26,0	35,0	127	121	109	96	85	68	42	56,7
8"WPS® 100-7	30,0	40,0	148	142	127	112	99	80	49	60,0
8"WPS® 100-8	37,0	50,0	169	162	145	128	114	91	56	75,0
8"WPS® 100-9	37,0	50,0	190	182	163	144	128	103	63	81,5
8"WPS® 100-10	45,0	60,0	211	202	181	160	142	114	70	92,0
8"WPS® 100-11	52,0	70,0	232	222	199	176	156	125	77	89,0
8"WPS® 100-12	52,0	70,0	253	243	217	192	170	137	84	101,0
8"WPS® 100-13	55,0	75,0	274	263	235	208	185	148	91	110,0
8"WPS® 100-14	60,0	80,0	296	283	254	224	199	160	98	116,0
8"WPS® 100-15	67,0	90,0	317	303	272	240	213	171	105	125,0
8"WPS® 100-16	75,0	100,0	338	324	290	256	227	182	112	135,0
8"WPS® 100-17	75,0	100,0	359	344	308	272	241	194	119	143,0
8"WPS® 100-18	83,0	111,0	380	364	326	288	256	205	126	145,0
8"WPS® 100-19	83,0	111,0	401	384	344	304	270	217	133	155,0
8"WPS® 100-20	93,0	125,0	422	404	362	320	284	228	140	184,0

8"WPS®

Dimensions and Weights 8"WPS® 100 and 8"WPS® 100 N(E)



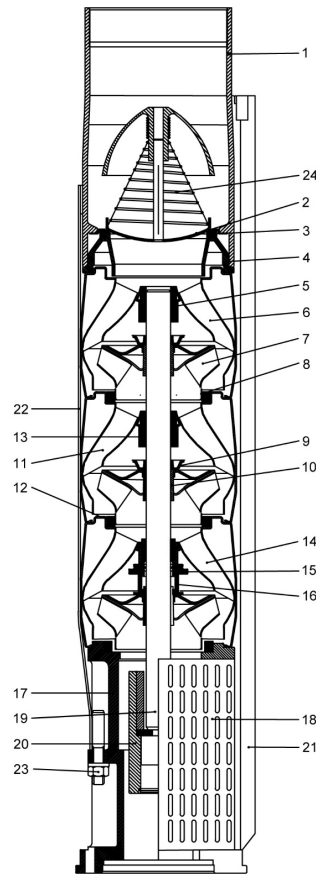
Pump Type	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	E* [mm]	Motor Type	Weight [kg]	
								Pump end	Electro-pump
8"WPS® 100-1	618	614	1232	137	178	186	6"	25,0	66,9
8"WPS® 100-2-BB	746	614	1360	137	178	186	6"	29,0	70,9
8"WPS® 100-2-A	746	646	1392	137	178	186	6"	29,0	75,0
8"WPS® 100-2	746	679	1425	137	178	186	6"	29,0	77,3
8"WPS® 100-3-BB	874	679	1553	137	178	186	6"	32,0	80,3
8"WPS® 100-3-B	874	711	1585	137	178	186	6"	32,0	83,7
8"WPS® 100-3	874	809	1683	144	178	186	6"R**	32,0	88,0
8"WPS® 100-4-B	1003	776	1779	137	178	186	6"	36,0	93,5
8"WPS® 100-4	1003	842	1845	137	178	186	6"	36,0	100,1
8"WPS® 100-5-AB	1131	842	1973	137	178	186	6"	40,0	104,1
8"WPS® 100-5	1131	907	2038	137	178	186	6"	40,0	110,1
8"WPS® 100-6	1259	1094	2353	144	178	186	6"R**	43,0	128,0
8"WPS® 100-7	1387	1037	2424	137	178	186	6"	47,0	131,7
8"WPS® 100-7	1387	1140	2527	189	178	186	8"R**	47,0	187,0
8"WPS® 100-8	1515	1274	2789	137	178	186	6"	50,0	152,0
8"WPS® 100-8	1515	1140	2655	189	178	186	8"R**	50,0	190,0
8"WPS® 100-9	1644	1274	2918	144	178	186	6"R**	54,0	156,0
8"WPS® 100-9	1783	1629	3412	189	178	186	8"R**	59,0	210,0
8"WPS® 100-10	1783	1230	3013	137	178	186	6"	59,0	215,0
8"WPS® 100-10	1911	1340	3251	189	178	186	8"R**	62,0	241,0
8"WPS® 100-11	2039	1340	3379	189	178	186	8"R**	66,0	245,0
8"WPS® 100-12	2168	1340	3508	189	178	186	8"R**	70,0	249,0
8"WPS® 100-13	2296	1470	3766	189	178	186	8"R**	73,0	271,0
8"WPS® 100-14	2424	1470	3894	189	178	186	8"R**	77,0	275,0
8"WPS® 100-15	2424	1470	3894	189	178	186	8"R**	77,0	275,0
8"WPS® 100-16	2039	1560	3599	189	178	186	8"R**	81,0	296,0
8"WPS® 100-17	2680	1560	4240	189	178	186	8"R**	84,0	299,0
8"WPS® 100-18	2809	1740	4549	189	178	186	8"R**	88,0	335,0
8"WPS® 100-19	2937	1740	4677	189	178	186	8"R**	92,0	339,0
8"WPS® 100-20	3065	1740	4805	189	178	186	8"R**	95,0	342,0

8"WPS®

* With 2 cable guards
 ** Rewindable

Technical Data

Material specification



8"WPS® 80
8"WPS® 100

8"WPS®

Pos.	Component	Material	8"WPS® Material Code	8"WPS®N Material Code	8"WPS®NE Material Code
1	Discharge Chamber	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
2	Valve Cone	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
3	Valve Seat	Stainless Steel/Rubber	AISI 316 -1.4401 / NBR	AISI 316 -1.4401 / NBR	PTFE
4	Valve seat Retainer	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
5	Top Bearing	Rubber	NBR	NBR	PTFE
6	Top Diffuser	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
7	Impeller	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
8	Wear Ring Impeller	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
9	Nut for Conical Bush	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
10	Conical Bush	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
11	Diffuser	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
12	Neck Ring	Stainless Steel/Rubber	AISI 316 -1.4401 / NBR	AISI 316 -1.4401 / NBR	PTFE
13	Intermediate Bearing	Rubber	NBR	NBR	PTFE
14	Bottom Diffuser	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
15	Uptrust Washer	Teflon	PTFE	PTFE	PTFE
16	Nut Conical Bush for first Impeller	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
17	Suction Interconnector	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
18	Strainer	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
19	Shaft	Stainless Steel	AISI 431 - 1.4057	AISI 316 - 1.4401	AISI 316 - 1.4401
20	Coupling	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
21	Cable Guard	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
22	Strap	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401
23	Nut	Stainless Steel	AISI 316 - 1.4401	AISI 316 - 1.4401	AISI 316 - 1.4401
24	Spring	Stainless Steel	AISI 304 - 1.4301	AISI 316 - 1.4401	AISI 316 - 1.4401

Cooling Shrouds

The cooling shrouds are designed to ensure a sufficient flow velocity past the motor in order to provide sufficient cooling. For the following cases a cooling shroud is recommended:

- horizontal or vertical installation in a tank
- installation of the pump in the screen from the well
- installation in big sized well not ensuring enough cooling velocity. See table.

Minimum flow required for motor cooling in water up to 20°C.		
Casing or sleeve I.D. [mm (inches)]	6" motor, cooling flow 16cm/sec [m ³ /h]	8" motor, cooling flow 25cm/sec [m ³ /h]
203 (8")	10,2	3,9
254 (10")	20,4	20,0
305 (12")	31,8	40,5
355 (14")	48,6	63,8

To the shroud itself, a screen can be added. In case of horizontal installation a set of supports are available.

Fits to pump type	Description	Material	Motor Size	Reference
8"WPS® 80-1 upto 3	Shroud Ø210 (230) x 800	1.4301 - AISI 304	6" up to 11 kW	78010
8"WPS® 100-1 upto 3-B				
8"WPS® 80-4B	Shroud Ø210 (230) x 1000	1.4301 - AISI 304	6" Rew. of 13 kW	78020
8"WPS® 100-3				
8"WPS® 80-4 upto 6	Shroud Ø210 (230) x 1000	1.4301 - AISI 304	6" up to 22 kW	78030
8"WPS® 100-4-B upto 5				
8"WPS® 80-7 upto 8-B	Shroud Ø210 (230) x 1250	1.4301 - AISI 304	6" Rew. of 26 kW	78040
8"WPS® 100-6				
8"WPS® 80-8 upto 9	Shroud Ø210 (230) x 1250	1.4301 - AISI 304	6" up to 30 kW	78050
8"WPS® 100-7				
8"WPS® 80-10 upto 11	Shroud Ø210 (230) x 1500	1.4301 - AISI 304	6" Rew. of 37 kW	78060
8"WPS® 100-8 upto 9				
8"WPS® 80-12	Shroud Ø210 (230) x 1800	1.4301 - AISI 304	6" Enc. of 45 kW	78070
8"WPS® 100-10				
8"WPS® 80-8 upto 12	Shroud Ø256 (270) x 1250	1.4301 - AISI 304	8" up to 45 kW	78080
8"WPS® 100-7 upto 10				
8"WPS® 80-13 upto 19	Shroud Ø256 (270) x 1500	1.4301 - AISI 304	8" up to 67 kW	78090
8"WPS® 100-11 upto 15				
8"WPS® 80-4 upto 6	Shroud Ø256 (270) x 1800	1.4301 - AISI 304	8" up to 93 kW	78100
8"WPS® 100-20				
Screen Ø210 x 192	1.4301 - AISI 304	Screen for shroud Ø210 mm		78300
Screen Ø256 x 325	1.4301 - AISI 304	Screen for shroud Ø256 mm		78310

Set of 2 supports for shroud Ø210 mm	1.4301 - AISI 304	78400
Set of 3 supports for shroud Ø210 mm	1.4301 - AISI 304	78410
Set of 2 supports for shroud Ø256 mm	1.4301 - AISI 304	78420
Set of 3 supports for shroud Ø256 mm	1.4301 - AISI 304	78430

Cooling schrouds in material 1.4401 - AISI 316 are available upon request