

# VERTICAL IN-LINE PUMPS TYPE: PIL

General Data





**PARAGON PUMP (ASIA) PTE LTD**

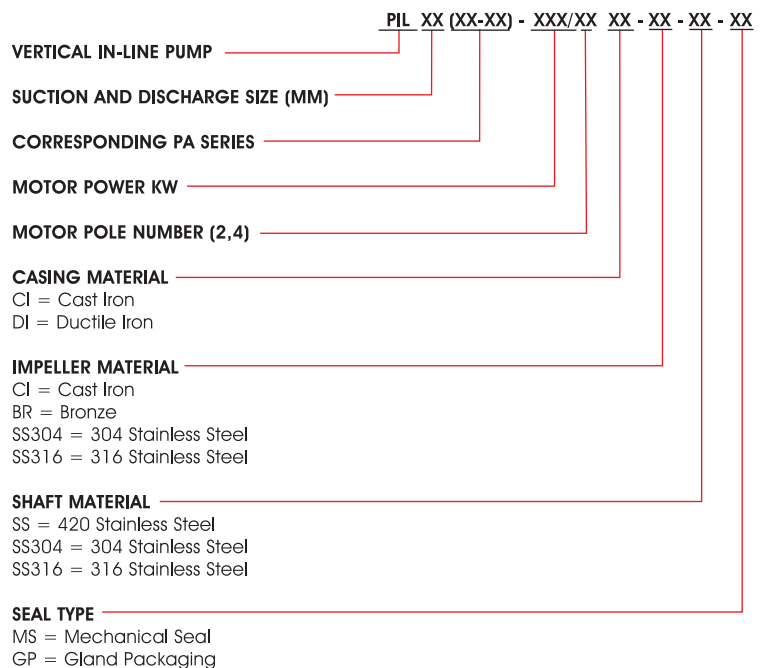
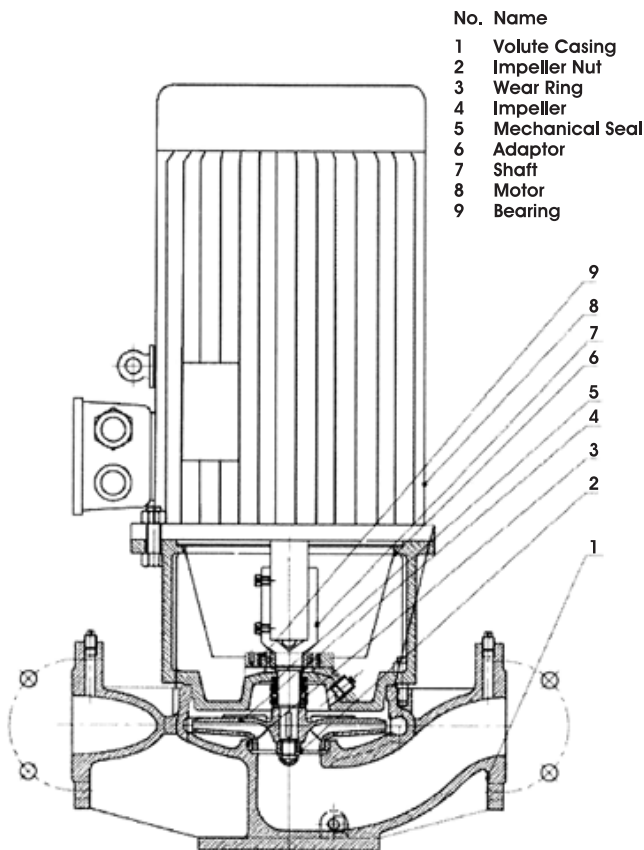
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**PIL PRODUCTS** are a series of vertical in-line pumps on the basis of the European Standard BS EN733 / DIN24255.

As in-line pumps they are used for pumping clean water or liquids with characteristics similar to water, with sorts of applications ranging from plants, mines, city water supplies, air conditioning, to fire fighting system, cooling, environmental machinery, irrigation, and so on.

PIL pumps can be varied in working performance through impeller trimming. Close-coupled mounting makes it possible to assemble the pump without motor. Using of IEC standard electric motors provides a wide range of motors to select from. The extra bearing will keep the pump stable in running and performance.

With a vertical structure the PIL pump is simple in view, compact in size, less room-required for installation while in no need of complex maintenance.



### DESIGN

Vertical, Single-Stage, Volute Casing, Centrifugal Pump, referring to performance standard from BS EN733 / DIN24255

### STRUCTURE

In-line, IEC standard electric motors

### FLANGE

DIN2332 PN10RF, optional ANSI B16.5 Class300lb

### DIRECTION OF ROTATION

Clockwise viewing from the drive side

### MATERIAL

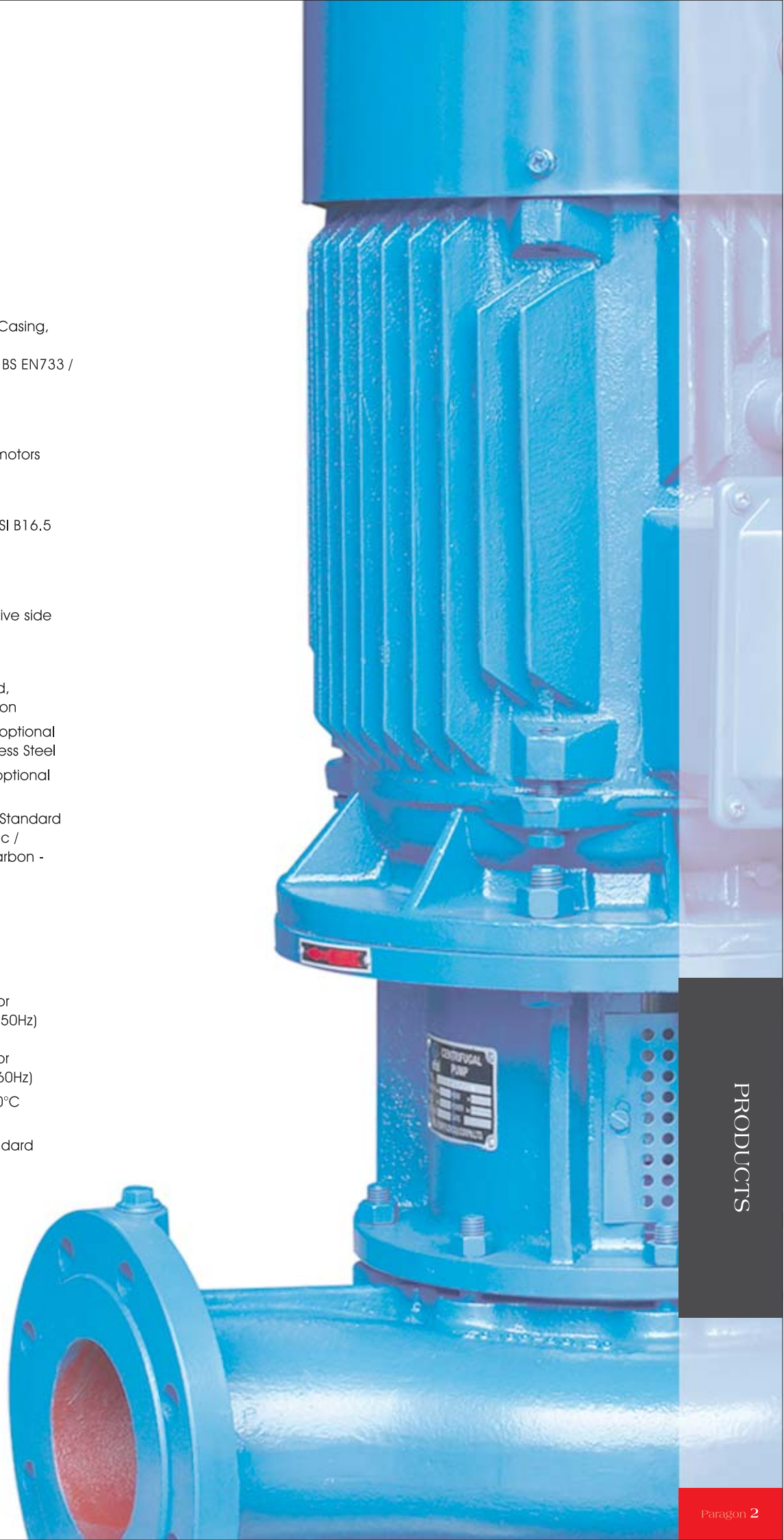
- Casing - Cast Iron standard, optional Ductile Iron
- Impeller - Bronze standard, optional Cast Iron or Stainless Steel
- Shaft - SS420 standard, optional SS304 or SS316
- Shaft Seal - Mechanical Seal Standard (Carbon - Ceramic / Viton, optional Carbon - Silicon / Viton)

### OPERATION RANGE

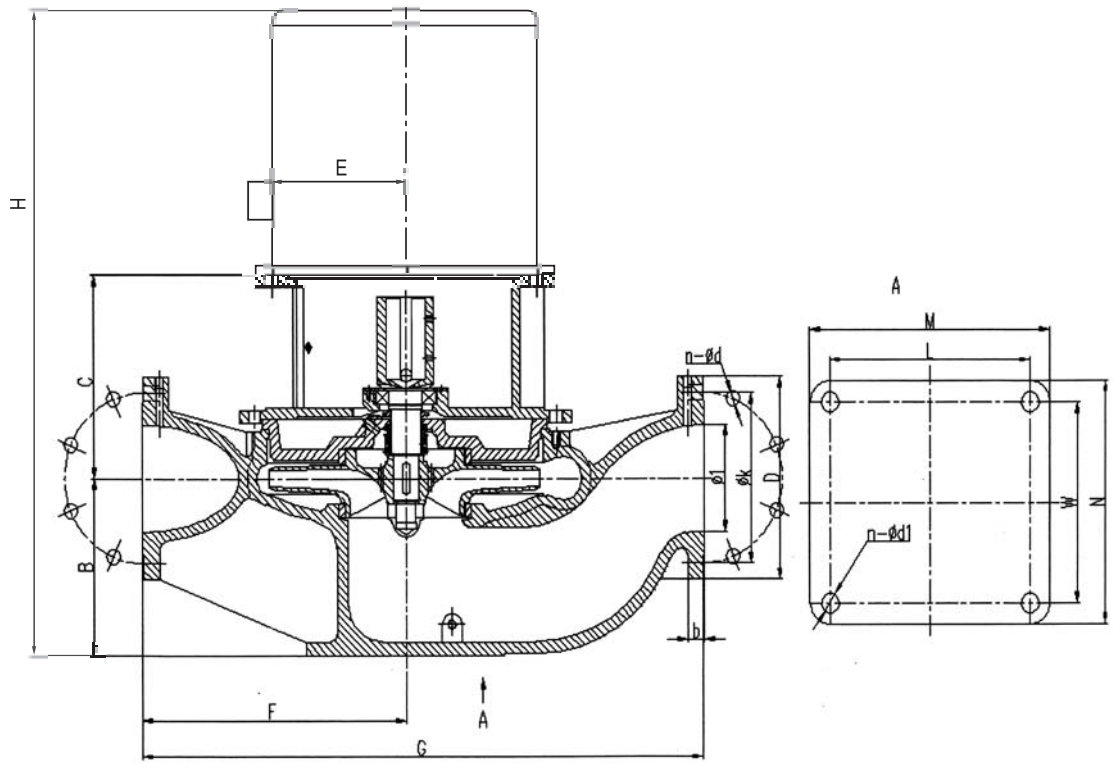
- Flow Rate(Q) : 2-450m<sup>3</sup>/h
- Head (H) : 2-150m
- Speed : 1450 rpm or 2900 rpm (50Hz)
- : 1750 rpm or 3500 rpm(60Hz)
- Temperature : -10°C to 80°C standard
- Working Pressure : 10 Bar standard

### APPLICATIONS

- City water supply
- Air-conditioning
- Fire-fighting system
- Industry







TYPE	IMPELLER mm	SPEED rpm	B	C	E	H	ø1	F	G	L x W	N x M	n - ø1	D	øK	n - ød	b
PI 40 (32-13) - 1,5 / 2	120	2900	113	152	155	535	40	150	310	170x200	200x230	4 - ø12	150	110	4 - ø18	18
PI 40 (32-13) - 2,2 / 2	139	2900	113	152	155	560	40	150	310	170x200	200x230	4 - ø12	150	110	4 - ø18	18
PI 50 (32-16) - 2,2 / 2	145	2900	118	152	155	565	50	160	320	170x200	200x230	4 - ø12	165	125	4 - ø18	20
PI 50 (32-16) - 3,0 / 2	155	2900	118	164	180	607	50	160	320	170x200	200x230	4 - ø12	165	125	4 - ø18	20
PI 50 (32-16) - 4,0 / 2	164	2900	118	164	190	622	50	160	320	170x200	200x230	4 - ø12	165	125	4 - ø18	20
PI 50 (32-16) - 5,5 / 2	174	2900	118	187	210	695	50	160	320	170x200	200x230	4 - ø12	165	125	4 - ø18	20
PI 50 (32-20) - 5,5 / 2	195	2900	118	186	210	694	50	210	420	170x200	200x230	4 - ø12	165	125	4 - ø18	20
PI 50 (32-20) - 7,5 / 2	204	2900	118	186	210	694	50	210	420	170x200	200x230	4 - ø12	165	125	4 - ø18	20
PI 50 (32-20) - 11 / 2	214	2900	118	218	255	841	50	210	420	170x200	200x230	4 - ø12	165	125	4 - ø18	20
PI 50 (32-26) - 15 / 2	254	2900	118	228	255	851	50	230	470	170x200	200x230	4 - ø14	165	125	4 - ø18	20
PI 50 (32-26) - 18,5 / 2	264	2900	118	228	255	906	50	230	470	170x200	200x230	4 - ø14	165	125	4 - ø18	20
PI 65 (40-13) - 2,2 / 2	110	2900	128	152	155	575	65	175	360	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (40-13) - 3,0 / 2	120	2900	128	164	180	617	65	175	360	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (40-13) - 4,0 / 2	139	2900	128	164	190	632	65	175	360	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (40-16) - 4,0 / 2	155	2900	138	164	190	642	65	195	370	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (40-16) - 5,5 / 2	164	2900	138	187	210	715	65	195	370	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (40-16) - 7,5 / 2	174	2900	138	187	210	715	65	195	370	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (40-20) - 5,5 / 2	175	2900	138	186	210	714	65	240	480	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (40-20) - 7,5 / 2	185	2900	138	186	210	714	65	240	480	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (40-20) - 11 / 2	214	2900	138	218	255	861	65	240	480	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (40-26) - 18,5 / 2	254	2900	138	228	255	926	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (40-26) - 22 / 2	264	2900	138	228	280	956	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (50-13) - 4,0 / 2	125	2900	155	164	190	659	65	200	410	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (50-13) - 5,5 / 2	130	2900	155	187	210	732	65	200	410	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (50-13) - 7,5 / 2	139	2900	155	187	210	732	65	200	410	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (50-16) - 7,5 / 2	160	2900	138	187	210	715	65	220	440	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (50-16) - 11 / 2	174	2900	138	220	255	863	65	220	440	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PI 65 (50-20) - 11 / 2	192	2900	138	221	255	864	65	240	480	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (50-20) - 15 / 2	205	2900	138	221	255	864	65	240	480	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (50-20) - 18,5 / 2	214	2900	138	221	255	919	65	240	480	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (50-26) - 2,2 / 2	230	2900	138	229	280	957	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (50-26) - 3,0 / 2	255	2900	138	232	305	1030	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 65 (50-26) - 3,7 / 2	264	2900	138	232	305	1030	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PI 80 (65-13) - 5,5 / 2	120	2900	160	187	210	737	80	220	460	170x200	200x230	4 - ø12	200	160	8 - ø18	25
PI 80 (65-13) - 7,5 / 2	130	2900	160	187	210	737	80	220	460	170x200	200x230	4 - ø12	200	160	8 - ø18	25
PI 80 (65-13) - 11 / 2	139	2900	160	220	255	885	80	220	460	170x200	200x230	4 - ø12	200	160	8 - ø18	25
PI 80 (65-16) - 11 / 2	155	2900	158	220	255	883	80	220	480	170x200	200x230	4 - ø12	200	160	8 - ø18	22
PI 80 (65-16) - 15 / 2	164	2900	158	220	255	883	80	220	480	170x200	200x230	4 - ø12	200	160	8 - ø18	22
PI 80 (65-16) - 18,5 / 2	174	2900	158	220	255	938	80	220	480	170x200	200x230	4 - ø12	200	160	8 - ø18	22
PI 80 (65-20) - 15 / 2	175	2900	150	218	255	873	80	260	540	170x200	200x230	4 - ø14	200	160	8 - ø18	25
PI 80 (65-20) - 18,5 / 2	190	2900	150	218	255	928	80	260	540	170x200	200x230	4 - ø14	200	160	8 - ø18	25
PI 80 (65-20) - 22 / 2	202	2900	150	218	280	958	80	260	540	170x200	200x230	4 - ø14	200	160	8 - ø18	25
PI 80 (65-20) - 30 / 2	214	2900	150	221	305	1031	80	260	540	170x200	200x230	4 - ø14	200	160	8 - ø18	25
PI 100 (80-16) - 15 / 2	145	2900	188	220	255	913	100	260	540	170x200	200x230	4 - ø12	220	180	8 - ø18	24
PI 100 (80-16) - 18,5 / 2	157	2900	188	220	255	968	100	260	540	170x200	200x230	4 - ø12	220	180	8 - ø18	24
PI 100 (80-16) - 22 / 2	164	2900	188	220	280	998	100	260	540	170x200	200x230	4 - ø12	220	180	8 - ø18	24
PI 100 (80-16) - 30 / 2	174	2900	188	222	305	1068	100	260	540	170x200	200x230	4 - ø12	220	180	8 - ø18	24
PI 100 (80-20) - 15 / 2	155	2900	188	234	255	927	100	290	600	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PI 100 (80-20) - 18,5 / 2	160	2900	188	234	255	982	100	290	600	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PI 100 (80-20) - 22 / 2	175	2900	188	234	280	1012	100	290	600	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PI 100 (80-20) - 30 / 2	190	2900	188	237	305	1085	100	290	600	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PI 100 (80-20) - 37 / 2	205	2900	188	237	305	1085	100	290	600	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PI 100 (80-20) - 45 / 2	214	2900	188	237	335	1130	100	290	600	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PI 125 (100-16) - 30 / 2	174	2900	220	237	305	1117	125	330	690	260x260	300x300	4 - ø14	250	210	8 - ø18	26
PI 125 (100-20) - 22 / 2	155	2900	220	234	280	1044	125	330	680	200x250	250x300	4 - ø18	250	210	8 - ø18	26

TYPE	IMPELLER	SPEED	B	C	E	H	ø1	F	G	L x W	N x M	n - ø1	D	ø2	n - ød	b
	mm	rpm														
PIL 40 (32-13) - 0.55 / 4	139	1450	113	152	145	520	40	150	310	170x200	200x230	4 - ø12	150	110	4 - ø18	18
PIL 50 (32-16) - 0.55 / 4	174	1450	118	152	145	525	50	160	320	170x200	200x230	4 - ø12	165	125	4 - ø18	20
PIL 50 (32-20) - 1.1 / 4	214	1450	118	151	155	539	50	210	420	170x200	200x230	4 - ø12	165	125	4 - ø18	20
PIL 50 (32-26) - 2.2 / 4	255	1450	118	173	180	616	50	230	470	170x200	200x230	4 - ø14	165	125	4 - ø18	20
PIL 50 (32-26) - 3.0 / 4	264	1450	118	173	180	616	50	230	470	170x200	200x230	4 - ø14	165	125	4 - ø18	20
PIL 65 (40-13) - 0.55 / 4	130	1450	128	152	145	535	65	175	360	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PIL 65 (40-13) - 0.75 / 4	139	1450	128	152	145	535	65	175	360	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PIL 65 (40-16) - 1.1 / 4	174	1450	138	152	155	560	65	195	370	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PIL 65 (40-20) - 1.5 / 4	214	1450	138	151	155	584	65	240	480	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (40-26) - 3.0 / 4	264	1450	138	173	180	636	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (40-32) - 3.0 / 4	280	1450	138	179	180	642	65	290	580	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (40-32) - 4.0 / 4	295	1450	138	179	190	657	65	290	580	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (40-32) - 5.5 / 4	329	1450	138	201	210	729	65	290	580	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (50-13) - 0.55 / 4	125	1450	155	152	145	562	65	200	410	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PIL 65 (50-13) - 0.75 / 4	130	1450	155	152	145	562	65	200	410	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PIL 65 (50-13) - 1.1 / 4	139	1450	155	152	225	577	65	200	410	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PIL 65 (50-16) - 1.5 / 4	174	1450	138	152	155	585	65	220	440	170x200	200x230	4 - ø12	185	145	4 - ø18	20
PIL 65 (50-20) - 2.2 / 4	214	1450	138	166	180	629	65	240	480	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (50-26) - 2.2 / 4	214	1450	138	174	180	637	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (50-26) - 3.0 / 4	240	1450	138	174	180	637	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (50-26) - 4.0 / 4	255	1450	138	174	190	652	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (50-26) - 5.5 / 4	264	1450	138	179	210	725	65	260	520	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (50-32) - 4.0 / 4	270	1450	155	179	190	674	65	290	580	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (50-32) - 5.5 / 4	290	1450	155	201	210	746	65	290	580	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (50-32) - 7.5 / 4	315	1450	155	201	210	781	65	290	580	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 65 (50-32) - 11 / 4	329	1450	155	235	255	891	65	290	580	170x200	200x230	4 - ø14	185	145	4 - ø18	20
PIL 80 (65-13) - 1.1 / 4	130	1450	160	152	155	582	80	220	460	170x200	200x230	4 - ø12	200	160	8 - ø18	25
PIL 80 (65-13) - 1.5 / 4	139	1450	160	152	155	607	80	220	460	170x200	200x230	4 - ø12	200	160	8 - ø18	25
PIL 80 (65-16) - 2.2 / 4	174	1450	158	164	180	647	80	220	480	170x200	200x230	4 - ø12	200	160	8 - ø18	22
PIL 80 (65-16) - 4.0 / 4	214	1450	150	163	190	653	80	260	540	170x200	200x230	4 - ø14	200	160	8 - ø18	25
PIL 80 (65-26) - 4.0 / 4	215	1450	168	179	190	687	80	290	590	170x200	200x230	4 - ø14	200	160	8 - ø18	22
PIL 80 (65-26) - 5.5 / 4	250	1450	168	202	210	760	80	290	590	170x200	200x230	4 - ø14	200	160	8 - ø18	22
PIL 80 (65-26) - 7.5 / 4	264	1450	168	202	210	800	80	290	590	170x200	200x230	4 - ø14	200	160	8 - ø18	22
PIL 80 (65-32) - 7.5 / 4	285	1450	175	201	210	806	80	310	640	200x250	250x300	4 - ø18	200	160	8 - ø18	22
PIL 80 (65-32) - 11 / 4	315	1450	175	235	255	915	80	310	640	200x250	250x300	4 - ø18	200	160	8 - ø18	22
PIL 80 (65-32) - 15 / 4	329	1450	175	235	255	970	80	310	640	200x250	250x300	4 - ø18	200	160	8 - ø18	22
PIL 100 (80-16) - 2.2 / 4	150	1450	188	164	180	677	100	260	540	170x200	200x230	4 - ø12	220	180	8 - ø18	24
PIL 100 (80-16) - 3.0 / 4	174	1450	188	164	180	677	100	260	540	170x200	200x230	4 - ø12	220	180	8 - ø18	24
PIL 100 (80-20) - 4.0 / 4	185	1450	188	179	190	707	100	290	600	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PIL 100 (80-20) - 5.5 / 4	200	1450	188	202	210	780	100	290	600	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PIL 100 (80-20) - 7.5 / 4	214	1450	188	202	210	820	100	290	600	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PIL 100 (80-26) - 5.5 / 4	220	1450	188	202	210	780	100	310	630	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PIL 100 (80-26) - 7.5 / 4	250	1450	188	202	210	820	100	310	630	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PIL 100 (80-26) - 11 / 4	264	1450	188	234	255	927	100	310	630	170x200	200x230	4 - ø14	220	180	8 - ø18	24
PIL 100 (80-32) - 11 / 4	295	1450	186	235	255	926	100	340	700	200x250	250x300	4 - ø18	220	180	8 - ø18	24
PIL 100 (80-32) - 15 / 4	315	1450	186	235	255	981	100	340	700	200x250	250x300	4 - ø18	220	180	8 - ø18	24
PIL 100 (80-32) - 18.5 / 4	329	1450	186	235	280	1011	100	340	700	200x250	250x300	4 - ø18	220	180	8 - ø18	24
PIL 100 (80-40) - 22 / 4	365	1450	220	249	280	1099	100	400	800	310x310	370x370	4 - ø18	220	180	8 - ø18	24
PIL 100 (80-40) - 30 / 4	409	1450	220	249	305	1129	100	400	800	310x310	370x370	4 - ø18	220	180	8 - ø18	24
PIL 125 (100-16) - 5.5 / 4	174	1450	220	202	210	812	125	330	690	260x260	300x300	4 - ø14	250	210	8 - ø18	26
PIL 125 (100-20) - 4.0 / 4	175	1450	220	179	190	739	125	330	680	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-20) - 5.5 / 4	185	1450	220	202	210	812	125	330	680	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-20) - 7.5 / 4	214	1450	220	202	210	852	125	330	680	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-26) - 7.5 / 4	220	1450	220	206	210	856	125	340	700	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-26) - 11 / 4	240	1450	220	238	255	963	125	340	700	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-26) - 15 / 4	264	1450	220	235	255	1018	125	340	700	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-32) - 15 / 4	292	1450	240	235	255	1035	125	360	740	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-32) - 18.5 / 4	300	1450	240	235	280	1065	125	360	740	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-32) - 22 / 4	329	1450	240	235	280	1105	125	360	740	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-40) - 30 / 4	365	1450	240	249	305	1149	125	380	810	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-40) - 37 / 4	395	1450	240	284	335	1204	125	380	810	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 125 (100-40) - 45 / 4	409	1450	240	284	335	1229	125	380	810	200x250	250x300	4 - ø18	250	210	8 - ø18	26
PIL 150 (125-20) - 11 / 4	214	1450	260	234	255	999	150	360	740	200x250	250x300	4 - ø18	285	240	8 - ø22	26
PIL 150 (125-26) - 15 / 4	240	1450	260	238	255	1058	150	360	760	200x250	250x300	4 - ø18	285	240	8 - ø22	26
PIL 150 (125-26) - 18.5 / 4	255	1450	260	238	280	1088	150	360	760	200x250	250x300	4 - ø18	285	240	8 - ø22	26
PIL 150 (125-26) - 22 / 4	264	1450	260	238	280	1128	150	360	760	200x250	250x300	4 - ø18	285	240	8 - ø22	26
PIL 150 (125-32) - 15 / 4	270	1450	260	249	255	1069	150	400	895	340x340	420x420	4 - ø18	285	240	8 - ø22	26
PIL 150 (125-32) - 18.5 / 4	285	1450	260	249	280	1099	150	400	895	340x340	420x420	4 - ø18	285	240	8 - ø22	26
PIL 150 (125-32) - 22 / 4	300	1450	260	249	280	1139	150	400	895	340x340	420x420	4 - ø18	285	240	8 - ø22	26
PIL 150 (125-32) - 30 / 4	329	1450	260	249	305	1169	150	400	895	340x340	420x420	4 - ø18	285	240	8 - ø22	26
PIL 150 (125-40) - 37 / 4	350	1450	250	284	335	1214	150	400	850	250x300	300x350	4 - ø18	285	240	8 - ø22	26
PIL 150 (125-40) - 45 / 4	365	145														