



# Pearl

## 4" Submersible Pumps

### Bombas Sumergibles de 4"

#### Application

Multi purpose applications in the residential, agriculture and industrial markets. Perfect for pressure boosting application, irrigation and water transfer.

#### Performance Range

- Flow from 5 GPM to 80 GPM.
- Head up to 1350 feet.

#### Features

- Continuous duty: PEARL submersible pumps can operate continuously without damage to any component.

- Impeller floating system: designed to guarantee the best

performance and durability for sand handling.

- NEMA Standard motor adapter.

- Shaft for pumps with 19 and fewer stages are supplied with one shaft bearing. Shaft for pumps with more than 19 stages are supplied with 2 shaft bearings.

#### Aplicaciones

Se usan en el mercado residencial, industrial y agricultura. Perfectas para aplicaciones en las cuales se necesita incrementar la presión, sistemas de riego y transferencia de agua.

#### Rango de Operación

- Caudal desde 5 Gpm (19 LPM) hasta 80 GPM (300 LPM).
- Presión hasta 1350 Pies (412 m).

#### Características

- Uso continuo: Las bombas sumergibles PEARL, pueden trabajar continuamente sin dañar ninguno de sus componentes.

- Sistemas de Impulsores Flotantes: Su diseño garantiza el mejor rendimiento y durabilidad aun en presencia de arena.

- Acople Motor-Bomba NEMA.

- El eje de las bombas de 19 etapas o menos viene con un soporte superior. Ejes de las bombas con mas de 19 etapas viene con un soporte superior y un soporte intermedio.



#### Construction Materials

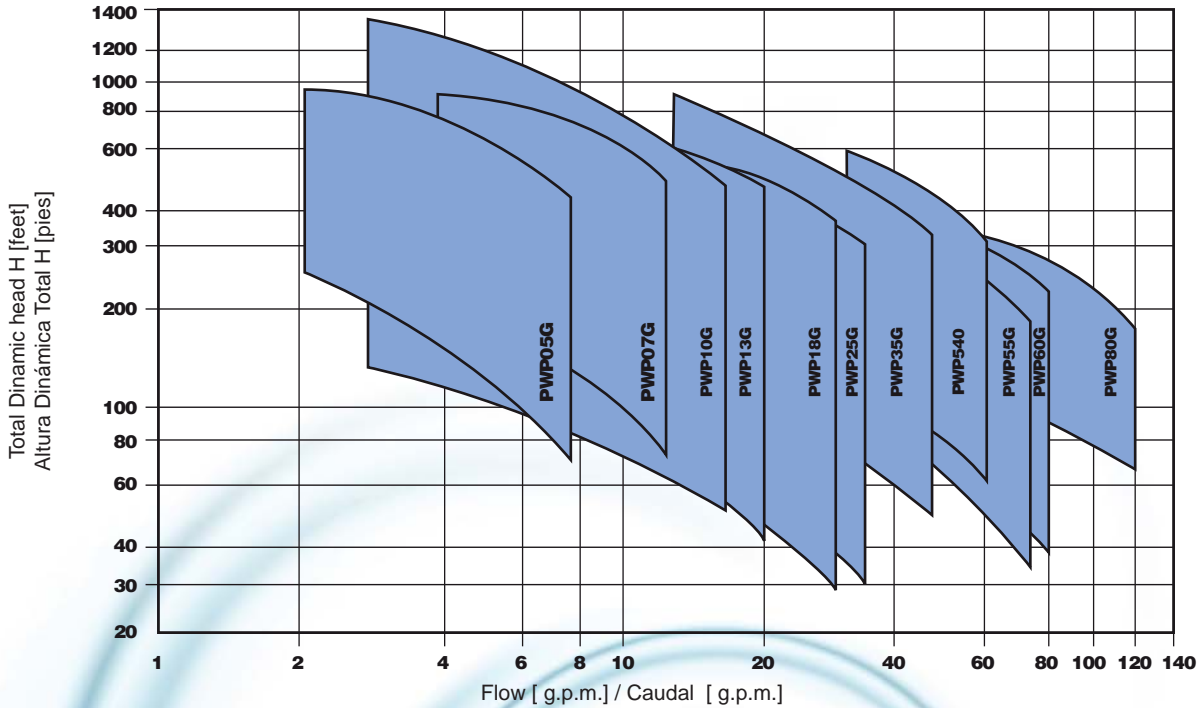
DISCHARGE HEAD	Stainless Steel 304, discharge 1 1/4" up to 25 GPM series and 2" from 35 GPM to 80 GPM series
MOTOR ADAPTER	Stainless Steel 304, NEMA standard
CHECK VALVE	Stainless Steel 304
EXTERNAL SLEEVE	Stainless Steel 304 Polished
IMPELLERS	Floating type impellers in Noryl
DIFFUSERS	Polycarbonate
SHAFT COUPLING	Stainless Steel 304
SHAFT	Stainless Steel 304
CABLE GUARD	Stainless Steel 304

#### Materiales de Construcción

DESCARGA	Acero inoxidable 304, diametro de la descarga 1 1/4" en modelos hasta 25 GPM y 2" para modelos desde 35 gpm hasta 80 GPM
ADAPTADOR DE MOTOR	NEMA estándar en acero inoxidable 304
VALVULA CHECK	Acero inoxidable 304
CAMISA EXTERNA	Acero inoxidable 304 Pulido
IMPULSORES	Tipo flotante en Noryl
DIFUSORES	Tecnopolímero
ACOPLE DEL MOTOR	Acero inoxidable 304
EJE	Acero inoxidable 304
GUARDA CABLE	Acero inoxidable 304

# Range of Performance and Nomenclature Information Rango de Operación e Información de la Nomenclatura

## Performance Curves at 3450 r.p.m / Curvas de rendimiento a 3450 r.p.m



## Reading the Pump Data in the Label / Lectura de la información de la bomba en la etiqueta

Example / Ejemplo:

Model | Modelo

HP

Model: 4PWP10G HP: 2

Pump shut off | Altura máxima total H. max: 640 feet RPM: 3450 Motor RPM | RPM del motor

Pump head at designed flow | Presión en caudal nominal H: 485 feet Q: 10 GPM Designed pump range | Caudal nominal

Pump serial number | Número de serie de la bomba S/N: T11010240001\_001

Data Code DC 11A Production data code | Fecha de producción

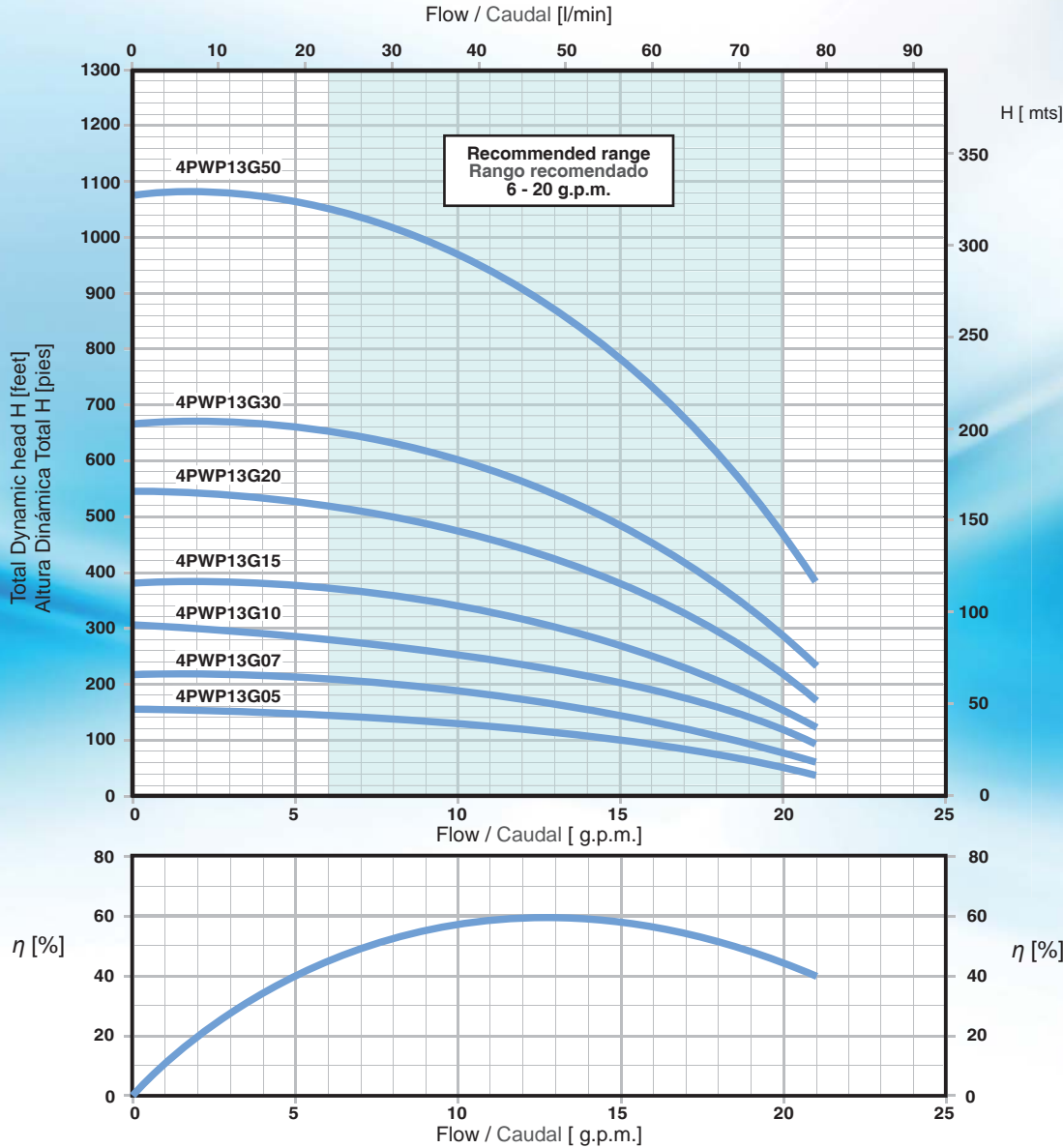
Model Number/  
Modelo:

4	PWP	18G	10
<b>WELL DIAMETER</b> Diametro del pozo 4 = 4 inches / plg 6 = 6 inches / plg	<b>TYPE</b> Tipo PWP = Plastic Impeller Impulsor plástico PWS = 100% Stainless Steel Acero inoxidable	<b>SERIES</b> 05G = 5GPM 07G = 7GPM 10G = 10GPM 13G = 13GPM 18G = 18GPM 25G = 25GPM 35G = 35GPM 40G = 40GPM 55G = 55GPM 60G = 60GPM 80G = 80GPM	<b>HP</b> 05 = 1/2 Hp 07 = 3/4 Hp 10 = 1 Hp 15 = 1.5 Hp 20 = 2 Hp 30 = 3 Hp 50 = 5 Hp 75 = 7.5 Hp 100 = 10 Hp

# Pearl 4PWP13

Performance Curves at 3450 r.p.m. / Curvas de rendimiento a 3450 r.p.m.

1 1/4"  
DISCHARGE  
DESCARGA



## Selection Chart / Tabla de Selección

MODEL MODELO	STAGES / ETAPAS	MOTOR		Q = FLOW / CAUDAL																				PUMP END HIDRAULICA							
				l/min		10		15		20		25		30		35		40		50		60				70		80			
		gpm	0	2.6	4.0	5.3	6.6	7.9	9.3	10.6	13.2	15.9	18.5	21.2	H = TOTAL HEAD IN METERS / FEET   ALTURA DINAMICA TOTAL EN METROS / PIES																LENGTH ALTURA
KW	HP	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	mm	in	kgs	lbs		
4PWP13G05	5	0.37	0.5	47	154	46	151	45	148	44	144	43	141	42	138	40	131	39	128	34	112	28	92	21	69	12	39	236	9.3	2.5	5.5
4PWP13G07	7	0.55	0.75	67	220	66	216	65	213	64	210	62	203	61	200	59	194	57	187	50	164	41	134	31	102	19	62	271	10.7	2.8	6.2
4PWP13G10	10	0.75	1	94	308	93	305	91	298	89	292	87	285	85	279	81	266	78	256	69	226	58	190	45	148	28	92	324	12.8	3.2	7.1
4PWP13G15	12	1.1	1.5	116	380	115	377	114	374	113	371	111	364	109	358	106	348	102	335	91	298	78	256	60	197	38	125	359	14.1	3.5	7.7
4PWP13G20	17	1.5	2	165	541	164	538	163	535	160	525	156	512	154	505	148	485	143	469	128	420	109	358	83	272	53	174	447	17.6	4.3	9.5
4PWP13G30	21	2.2	3	204	669	203	666	202	663	199	653	195	640	193	633	187	613	180	590	162	531	139	456	110	361	72	236	519	20.4	5.0	11.1
4PWP13G50	35	3.7	5	327	1073	325	1066	323	1059	320	1050	316	1036	312	1023	304	997	292	958	264	866	223	731	175	574	117	384	803	31.6	7.6	17

## HP Range / Rango HP: 1/2 - 5 HP

## Recommended Flow Range / Rango de Operación Recomendado: 6 - 20 g.p.m.

MODEL/ MODELO	HP	PSI	DEPTH TO WATER IN FEET / FLOW IN GPM   PROFUNDIDAD DEL AGUA EN PIES / CAUDAL EN GPM																								
			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	340	380	420	460	500	540	580	620	660	700
4PWP13G05	0.5	0			19.3	17	15	6																			
		20		16.5	13	9.5	6																				
		30	16	12	10																						
		40	13.5	10																							
		Shut-off PSI Presión máx.PSI	66	57	48	39	30	21	12																		
4PWP13G07	0.7	0				20	18.5	17	15	13.5	11																
		20			18	17.5	15	13.5	10	7																	
		30		18	16	13.5	12.5	9.5	6																		
		40	18	16	13.5	12.5	9.5	6																			
		50	16	13.5	12.5	9	6																				
		60	13.5	12.5	9	6																					
Shut-off PSI Presión máx.PSI	95	86	77	68	59	50	41	32	23	14																	
4PWP13G10	1	0					20	19	18	16.5	15	13.2	11.5														
		20					19	17.7	16.3	15	13	11.5	8.8	5.8													
		30				18.5	17.3	15.8	14	12.5	10	7.5	4														
		40			18.5	17.3	15.8	14	12	10	7	4															
		50		18.5	17.3	15.8	14	12	10	6	4																
		60	18	16.5	15	13.2	11.5	9	6																		
Shut-off PSI Presión máx.PSI	132	123	114	105	96	87	78	69	60	51	42	33	24														
4PWP13G15	1.5	0						20.5	19.7	19	18.3	17.2	16.5	15.5	14.2	13	9.8	4									
		20					19.7	19	18.3	17.2	16.5	15.5	14.2	12.8	11.4	9.8	4										
		30				19.7	19	18	17	16	15	13.5	12	10.2	8.5	6											
		40			19.7	19	18	17	16	15	14	12	10	9	6												
		50		19.5	19	18	17	16	15	14	12	10.7	9	4													
		60	19.7	19	18.3	17.2	16.5	15.5	14.2	13	11.4	9.8	7														
Shut-off PSI Presión máx.PSI	163	154	145	136	127	118	109	100	91	82	73	64	55	46	37	28											
4PWP13G20	2	0							20.5	20	19.6	19	18.4	17.8	16.7	15	13	11	8	3							
		20							20	19.5	19	18.3	17.8	17.2	16.5	15	13	11	8	4							
		30								19.7	19.2	18.7	18	17.2	16.8	16	15.2	13.5	11.5	9	4						
		40								19.5	19	18.5	18	17.5	17	16	15	13.5	11.5	10	6						
		50								19.6	19.2	18.7	18	17.3	17	16	15	13.5	11.5	11	8						
		60					20	19.5	19	18.5	18	17.5	17	16	15	13	12	9.5									
Shut-off PSI Presión máx.PSI	233	224	215	206	197	188	179	170	161	152	143	134	125	116	107	98	81	64	47	30							
4PWP13G30	3	0													19.7	19	15	16.5	15.8	14.4	13	11					
		20													19.5	19	15	16	15	14.4	13	11	8				
		30													19.5	18.7	18.2	17.2	16	15	13.2	11.3	8.5	6			
		40													19.2	18.7	18.2	17.2	16	15	14	12.5	10.5	7.5			
		50													19.5	19.2	18.5	18	17	16	15	14	12.5	10	9		
		60										19.5	19	18.5	18	17	16	15	14	12.5	9	7.5					
Shut-off PSI Presión máx.PSI	288	279	270	261	252	243	234	225	216	207	198	189	180	171	162	153	136	119	102	85	68	51	34				
4PWP13G50	5	0													19.6	19	18.2	17.2	16.5	15.5	14.4	13.5	12.1	10.5	8.5	6	
		20													20	19.5	19	18	17	16.5	15.5	14.4	13.5	12.1	10.5	8.5	6
		30													20	19.5	18.7	18	17	16.2	15	14	13	11.8	10	8	
		40													20.1	19.8	19.2	18.3	17.3	16.7	15.7	14.8	13.6	12.2	11	8.6	
		50													20.6	19.9	19.5	18.6	18	16.8	16	15.2	14.2	13.2	12	10	
		60													20.1	19.8	19.2	18.3	17.3	16.7	15.7	14.8	13.6	12.2	11		
		Shut-off PSI Presión máx.PSI	461	452	443	434	425	416	394	372	350	328	306	284	262	240	218	196	174	152	130	108	86	64	42	20	-2

\* Friction losses in pipe have not been calculated / Las pérdidas por fricción en la tubería no han sido consideradas.





# Pearl

## Weight and Dimensions with Pearl 4" Motors Pesos y Dimensiones con Motor Pearl 4"



**PEARL POWER 4**

MODEL MODELO	HP	KW	PUMP END H1 HIDRAULICA H1				1 PH MOTOR - 3W / MOTOR 1F - 3 HILOS						1 PH MOTOR - 2W / MOTOR 1F - 2 HILOS						3 PH MOTOR - 3W / MOTOR 3F - 3 HILOS					
			HEIGHT ALTURA		WEIGHT PESO		MOTOR H2		PUMP + MOTOR BOMBA + MOTOR				MOTOR H2		PUMP + MOTOR BOMBA + MOTOR				MOTOR H2		PUMP + MOTOR BOMBA + MOTOR			
			inches plg	cm	lbs	kg	inches plg	cm	inches plg	cm	lbs	kg	inches plg	cm	inches plg	cm	lbs	kg	inches plg	cm	inches plg	cm	lbs	kg
4PWP05G05	0.5	0.37	12.0	30.6	6.9	3.1	8.5	21.6	20.6	52.2	21.7	9.8	15.9	40.5	28.0	71.1	23.0	10.4	8.5	21.6	13.2	33.6	20.1	9.1
4PWP05G05H	0.5	0.37	14.1	35.9	8.0	3.6	8.5	21.6	20.6	52.2	22.8	10.3	15.9	40.5	28.0	71.1	24.1	10.9	8.5	21.6	22.6	57.5	21.2	9.6
4PWP05G07	0.75	0.55	16.2	41.1	9.1	4.1	10.5	26.6	26.7	67.7	26.7	12.1	17.1	43.5	25.5	64.7	27.8	12.6	10.5	26.6	26.7	67.7	23.9	10.8
4PWP05G10	1.0	0.75	19.6	49.9	10.8	4.9	11.3	28.6	30.9	78.5	30.7	13.9	17.9	45.5	37.6	95.4	31.4	14.2	10.5	26.6	30.1	76.5	28.5	12.9
4PWP05G15	1.5	1.1	25.3	64.2	12.8	5.8	13.0	33.1	38.3	97.3	37.1	16.8	19.7	50.0	45.0	114.2	37.8	17.1	11.3	28.6	36.5	92.8	32.7	14.8
4PWP05G20	2	1.5	29.8	75.7	16.1	7.3	15.5	39.3	45.3	115.0	44.9	20.3							13.7	34.8	43.5	110.5	40.4	18.3
4PWP07G05	0.5	0.37	10.8	27.5	6.0	2.7	8.5	21.6	19.3	49.1	20.8	9.4	15.9	40.5	26.8	68.0	22.1	10	8.5	21.6	19.3	49.1	19.2	8.7
4PWP07G05H	0.5	0.37	13.0	33.0	7.3	3.3	8.5	21.6	21.5	54.6	22.1	10	15.9	40.5	28.9	73.5	23.4	10.6	8.5	21.6	21.5	54.6	20.6	9.3
4PWP07G07	0.7	0.55	15.2	38.5	8.4	3.8	10.5	26.6	25.6	65.1	26.0	11.8	17.1	43.5	32.3	82.0	27.2	12.3	10.5	26.6	25.6	65.1	23.2	10.5
4PWP07G10	1.0	0.75	17.9	45.5	9.9	4.5	11.3	28.6	29.2	74.1	29.8	13.5	17.9	45.5	35.8	91.0	30.5	13.8	10.5	26.6	28.4	72.1	27.6	12.5
4PWP07G15	1.5	1.1	21.5	54.5	11.9	5.4	13.0	33.1	34.5	87.6	36.2	16.4	19.7	50	41.1	104.5	36.9	16.7	11.3	28.6	32.7	83.1	31.8	14.4
4PWP07G20	2	1.5	26.6	67.5	14.6	6.6	15.5	39.3	42.0	106.8	43.3	19.6							13.7	34.8	40.3	102.3	38.9	17.6
4PWP07G30	3	2.2	31.3	79.5	18.3	8.3	16.3	41.3	47.6	120.8	48.8	22.1							15.5	39.3	46.8	118.8	47.1	21.3
4PWP10G05	0.5	0.37	9.3	23.6	5.5	2.5	8.5	21.6	19.2	48.7	20.3	9.2	15.9	40.5	26.6	67.6	21.7	9.8	8.5	21.6	17.8	45.2	18.8	8.5
4PWP10G05H	0.5	0.37	10.7	27.1	6.2	2.8	8.5	21.6	19.2	48.7	21.0	9.5	15.9	40.5	26.6	67.6	22.3	10.1	8.5	21.6	19.2	48.7	19.4	8.8
4PWP10G07	0.75	0.55	12.8	32.4	7.3	3.3	10.5	26.6	23.2	59.0	25.0	11.3	17.1	43.5	22.0	56.0	26.1	11.8	10.5	26.6	23.2	59.0	22.1	10.0
4PWP10G10	1.0	0.75	14.1	35.9	8.0	3.6	11.3	28.6	25.4	64.5	27.8	12.6	17.9	45.5	32.0	81.4	28.5	12.9	10.5	26.6	24.6	62.5	25.6	11.6
4PWP10G15	1.5	1.1	17.6	44.7	9.7	4.4	13.0	33.1	30.6	77.8	34.0	15.4	19.7	50.0	37.3	94.7	34.7	15.7	11.3	28.6	28.9	73.3	29.6	13.4
4PWP10G20	2	1.5	19.6	49.9	10.8	4.9	15.5	39.3	35.1	89.2	39.6	17.9							13.7	34.8	33.3	84.7	35.1	15.9
4PWP10G30	3	2.2	26.0	66.0	13.3	6.0	16.3	41.3	42.2	107.3	43.8	19.8							15.5	39.3	41.5	105.3	42.0	19.0
4PWP10G50	5	3.7	29.8	75.8	19.4	8.8	26.9	68.3	56.7	144	78.0	35.3							24.2	61.4	54.0	137.2	70.3	31.8
4PWP13G05	0.5	0.37	9.3	23.6	5.5	2.5	8.5	21.6	17.8	45.2	20.3	9.2	15.9	40.5	25.2	64.1	21.7	9.8	8.5	21.6	17.8	45.2	18.8	8.5
4PWP13G07	0.75	0.55	10.7	27.1	6.2	2.8	10.5	26.6	21.1	53.7	23.9	10.8	17.1	43.5	20.0	50.7	25.0	11.3	10.5	26.6	21.1	53.7	21.0	9.5
4PWP13G10	1.0	0.75	12.8	32.4	7.1	3.2	11.3	28.6	24.0	61.0	27.0	12.2	17.9	45.5	30.7	77.9	27.6	12.5	10.5	26.6	23.2	59.0	24.8	11.2
4PWP13G15	1.5	1.1	14.1	35.9	7.7	3.5	13.0	33.1	27.2	69.0	32.0	14.5	19.7	50.0	33.8	85.9	32.7	14.8	11.3	28.6	25.4	64.5	27.6	12.5
4PWP13G20	2	1.5	17.6	44.7	9.5	4.3	15.5	39.3	33.1	84.0	38.2	17.3							13.7	34.8	31.3	79.5	33.8	15.3
4PWP13G30	3	2.2	20.4	51.9	11.1	5.0	16.3	41.3	36.7	93.2	41.5	18.8							15.5	39.3	35.9	91.2	39.8	18.0
4PWP13G50	5	3.7	31.6	80.3	16.8	7.6	26.9	68.4	58.5	148.7	75.4	34.1							24.2	61.4	55.8	141.7	67.6	30.6
4PWP18G05	0.5	0.37	10.1	25.7	6.0	2.7	8.5	21.6	18.6	47.3	20.8	9.4	15.9	40.5	26.1	66.2	22.1	10.0	8.5	21.6	18.6	47.3	19.2	8.7
4PWP18G07	0.75	0.55	11.0	27.9	6.2	2.8	10.5	26.6	21.5	54.5	23.9	10.8	17.1	43.5	20.3	51.5	25.0	11.3	10.5	26.6	21.5	54.5	21.0	9.5
4PWP18G10	1.0	0.75	12.7	32.2	6.9	3.1	11.3	28.6	23.9	60.8	26.7	12.1	17.9	45.5	30.6	77.7	27.4	12.4	10.5	26.6	23.1	58.8	24.5	11.1
4PWP18G15	1.5	1.1	15.2	38.7	8.0	3.6	13.0	33.1	28.3	71.8	32.3	14.6	19.7	50.0	34.9	88.7	32.9	14.9	11.3	28.6	26.5	67.3	27.8	12.6
4PWP18G20	2	1.5	17.8	45.2	9.1	4.1	15.5	39.3	33.3	84.5	37.8	17.1							13.7	34.8	31.5	80.0	33.4	15.1
4PWP18G30	2.2	3	22.0	56.0	10.8	4.9	16.3	41.3	38.3	97.3	41.3	18.7							15.5	39.3	37.5	95.3	39.6	17.9
4PWP18G50	5	3.7	32.6	82.7	15.7	7.1	26.9	68.4	59.5	151.1	74.3	33.6							24.2	61.4	56.7	144.1	66.5	30.1



## Weight and Dimensions with Franklin Electric Motors Pesos y Dimensiones con Motor Franklin Electric



MODEL MODELO	HP	KW	PUMP END H1 HIDRAULICA H1				1 PH MOTOR - 3W / MOTOR 1F - 3 HILOS						1 PH MOTOR - 2W / MOTOR 1F - 2 HILOS						3 PH MOTOR - 3W / MOTOR 3F - 3 HILOS					
			HEIGHT ALTURA		WEIGHT PESO		MOTOR H2		PUMP + MOTOR BOMBA + MOTOR				MOTOR H2		PUMP + MOTOR BOMBA + MOTOR				MOTOR H2		PUMP + MOTOR BOMBA + MOTOR			
			inches plg	cm	lbs	kg	inches plg	cm	inches plg	cm	lbs	kg	inches plg	cm	inches plg	cm	lbs	kg	inches plg	cm	inches plg	cm	lbs	kg
4PWP05G05	0.5	0.37	12.0	30.6	6.9	3.1	9.5	24.2	21.6	54.8	25.9	11.7	9.5	24.2	21.6	54.8	25.0	11.3	9.5	21.6	13.2	33.6	25.0	11.3
4PWP05G05H	0.5	0.37	14.1	35.9	8.0	3.6	9.5	24.2	23.6	60.1	27.0	12.2	9.5	24.2	23.6	60.1	26.1	11.8	9.5	21.6	22.6	57.5	26.1	11.8
4PWP05G7	0.75	0.55	16.2	41.1	9.1	4.1	10.6	27.0	26.8	68.1	30.1	13.6	10.6	27.0	26.8	68.1	30.1	13.6	10.6	26.6	26.7	67.7	30.1	13.6
4PWP05G10	1.0	0.75	19.6	49.9	10.8	4.9	11.7	29.8	31.4	79.7	34.9	15.8	11.7	29.8	31.4	79.7	34.9	15.8	11.7	26.6	30.1	76.5	34.9	15.8
4PWP05G15	1.5	1.1	25.3	64.2	12.8	5.8	13.6	34.5	38.9	98.7	40.9	18.5	15.1	38.4	40.4	102.6	44.0	19.9	11.7	28.6	36.5	92.8	36.9	16.7
4PWP05G20	2	1.5	29.8	75.7	16.1	7.3	15.1	38.4	44.9	114.1	49.3	22.3							13.6	34.8	43.5	110.5	44.2	20.0
4PWP07G05	0.5	0.37	10.8	27.5	6.0	2.7	9.5	24.2	20.4	51.7	25.0	11.3	15.9	40.5	26.8	68.0	24.0	10.9	8.5	21.6	19.3	49.1	24.1	10.9
4PWP07G05H	0.5	0.37	13.0	33.0	7.3	3.3	9.5	24.2	22.5	57.2	26.3	11.9	15.9	40.5	28.9	73.5	25.4	11.5	8.5	21.6	21.5	54.6	25.4	11.5
4PWP07G7	0.7	0.55	15.2	38.5	8.4	3.8	10.6	27	25.8	65.5	29.4	13.3	17.1	43.5	32.3	82.0	29.4	13.3	10.5	26.6	25.6	65.1	29.4	13.3
4PWP07G10	1.0	0.75	17.9	45.5	9.9	4.5	11.7	29.8	29.6	75.3	34.0	15.4	17.9	45.5	35.8	91.0	34.0	15.4	10.5	26.6	28.4	72.1	34.0	15.4
4PWP07G15	1.5	1.1	21.5	54.5	11.9	5.4	13.6	34.5	35.0	89.0	40.0	18.1	19.7	50	41.1	104.5	43.0	19.5	11.3	28.6	32.7	83.1	36.0	16.3
4PWP07G20	2	1.5	26.6	67.5	14.6	6.6	15.1	38.4	41.7	105.9	47.7	21.6							13.7	34.8	40.3	102.3	42.7	19.3
4PWP07G30	3	2.2	31.3	79.5	18.3	8.3	19.1	48.4	50.4	127.9	59.5	26.9							15.5	39.3	46.8	118.8	53.5	24.2
4PWP10G05	0.5	0.37	9.3	23.6	5.5	2.5	9.5	24.2	18.8	47.8	24.5	11.1	9.5	24.2	18.8	47.8	23.6	10.7	9.5	21.6	17.8	45.2	23.6	10.7
4PWP10G05H	0.5	0.37	10.7	27.1	6.2	2.8	9.5	24.2	20.2	51.3	25.2	11.4	9.5	24.2	20.2	51.3	24.3	11.0	9.5	21.6	19.2	48.7	24.3	11.0
4PWP10G7	0.75	0.55	12.8	32.4	7.3	3.3	10.6	27.0	23.4	59.4	28.3	12.8	10.6	27.0	23.4	59.4	28.3	12.8	10.6	26.6	23.2	59.0	28.3	12.8
4PWP10G10	1.0	0.75	14.1	35.9	8.0	3.6	11.7	29.8	25.9	65.7	32.0	14.5	11.7	29.8	25.9	65.7	32.0	14.5	11.7	26.6	24.6	62.5	32.0	14.5
4PWP10G15	1.5	1.1	17.6	44.7	9.7	4.4	13.6	34.5	31.2	79.2	37.8	17.1	15.1	38.4	32.7	83.1	40.9	18.5	11.7	28.6	28.9	73.3	33.8	15.3
4PWP10G20	2	1.5	19.6	49.9	10.8	4.9	15.1	38.4	34.7	88.3	44.0	19.9							13.6	34.8	33.3	84.7	38.9	17.6
4PWP10G30	3	2.2	26.0	66.0	13.3	6.0	19.0	48.4	45.0	114.4	54.4	24.6							16.0	39.3	41.5	105.3	48.4	21.9
4PWP10G50	5	3.7	29.8	75.8	19.4	8.8	29.2	74.1	59.0	149.9	90.6	41.0							23.2	61.4	54.0	137.2	75.6	34.2
4PWP13G05	0.5	0.37	9.3	23.6	5.5	2.5	9.5	24.2	18.8	47.8	24.5	11.1	9.5	24.2	18.8	47.8	23.6	10.7	9.5	21.6	17.8	45.2	23.6	10.7
4PWP13G7	0.75	0.55	10.7	27.1	6.2	2.8	10.6	27.0	21.3	54.1	27.2	12.3	10.6	27.0	21.3	54.1	27.2	12.3	10.6	26.6	21.1	53.7	27.2	12.3
4PWP13G10	1.0	0.75	12.8	32.4	7.1	3.2	11.7	29.8	24.5	62.2	31.2	14.1	11.7	29.8	24.5	62.2	31.2	14.1	11.7	26.6	23.2	59.0	31.2	14.1
4PWP13G15	1.5	1.1	14.1	35.9	7.7	3.5	13.6	34.5	27.7	70.4	35.8	16.2	15.1	38.4	29.2	74.3	38.9	17.6	11.7	28.6	25.4	64.5	31.8	14.4
4PWP13G20	2	1.5	17.6	44.7	9.5	4.3	15.1	38.4	32.7	83.1	42.7	19.3							13.6	34.8	31.3	79.5	37.6	17.0
4PWP13G30	3	2.2	20.4	51.9	11.1	5.0	19.0	48.4	39.5	100.3	52.2	23.6							16.0	39.3	35.9	91.2	46.2	20.9
4PWP13G50	5	3.7	31.6	80.3	16.8	7.6	29.2	74.1	60.8	154.4	88.0	39.8							23.2	61.4	55.8	141.7	72.9	33.0
4PWP18G05	0.5	0.37	10.1	25.7	6.0	2.7	9.5	24.2	19.6	49.9	25.0	11.3	9.5	24.2	19.6	49.9	24.1	10.9	9.5	21.6	18.6	47.3	24.1	10.9
4PWP18G7	0.75	0.55	11.0	27.9	6.2	2.8	10.6	27.0	21.6	54.9	27.2	12.3	10.6	27.0	21.6	54.9	27.2	12.3	10.6	26.6	21.5	54.5	27.2	12.3
4PWP18G10	1.0	0.75	12.7	32.2	6.9	3.1	11.7	29.8	24.4	62.0	30.9	14.0	11.7	29.8	24.4	62.0	30.9	14.0	11.7	26.6	23.1	58.8	30.9	14.0
4PWP18G15	1.5	1.1	15.2	38.7	8.0	3.6	13.6	34.5	28.8	73.2	36.0	16.3	15.1	38.4	30.3	77.1	39.1	17.7	11.7	28.6	26.5	67.3	32.0	14.5
4PWP18G20	2	1.5	17.8	45.2	9.1	4.1	15.1	38.4	32.9	83.6	42.2	19.1							13.6	34.8	31.5	80.0	37.1	16.8
4PWP18G30	2.2	3	22.0	56.0	10.8	4.9	19.0	48.4	41.1	104.4	51.9	23.5							16.0	39.3	37.5	95.3	46.0	20.8
4PWP18G50	5	3.7	32.6	82.7	15.7	7.1	29.2	74.1	61.7	156.8	86.9	39.3							23.2	61.4	56.7	144.1	71.8	32.5

