PARAGON PUMP COMPANY, LLC

18102 Courtney Breeze Drive
Tampa, Florida, 33647, USA
Tel : (813) 994 3356 Fax : (813) 994 1237

PARAGON PUMP (ASIA) PTE LTD

37, Kallang Pudding Road, #08-08
Tong Lee Building Block B, Singapore 349315
Tel : 6841 2818 Fax : 6841 5988

BOREHOLE

Cast Stainless Steel Pump

4”- With Glass Filled Polycarbonate Internals
- Complete Stainless Steel Internal (optional)

6”- Complete Stainless Steel Internals

PARAGON is proud to present you a revolutionary and groundbreaking range of deep well submersible pumps and motors. This is made possible due to its commitment in providing customers with products that have differentiated and value added features.

PARAGON SUBMERSIBLE PUMPS

+

MAXIMUM OPTIMUM PERFORMANCE

=

STRENGTH, DURABILITY, RELIABILITY, USER FRIENDLY, LONG LASTING

PARAGON's product differentiation features provide the customers with optimum performance. The following are the three main areas that PARAGON differentiates itself from the competitors.

PRODUCT DIFFERENTIATION VALUES

- Utilization of top class materials. The 6 inch deep well submersible pumps is the perfect example of the company's commitment. It is made completely of casting stainless steel providing maximum strength, durability, wear and tear resistance against sand or other impurities.

- Superior design allows the pumps and motors to be reliable, user friendly, maximum resistance wear and tear, long lasting, ease of assembling and big hydraulic performance.

- State of the art manufacturing process ensures the optimum quality of the products.

- A specialized casting stainless steel process maximizes the toughness of the products.

- Finishing is done with the CNC machines with a high degree tolerance capability of up to 0.05mm. The parts have an excellent alignment when assembled for optimum performance.

The Pump is the deep well submersible multistage certrifugal type suitable for the submerged applications. It is coupled directly to submersible motors, either the **PARAGON** rewindable motors or other makes motors.

APPLICATIONS:

- Water supply systems for industrial, civil and agricultural uses
- Sprinkles and fountain
- Booster system
- Flood type irrigation systems
- Fire fighting installations
- Pressurization systems
- Mining and other applications

GENERAL SPECIFICATIONS:

- Flow range up to 120m3/Hr
- Head up to 450m
- Motors rating up to 110kw
- Standard supply voltage
- Single phase - 1*220V/230V
- Three phase - 3*380V/415V
- Both 50 and 60 Hz
- Vertical and Horizontal applications

Non - Stainless Steel Components

Stainless Steel Components

FOR 4 INCH WELLS APPLICATIONS

THE TOP AND BOTTOM BRACKET ARE MADE OF CASTING STAINLESS STEEL FOR MAXIMUM STRENGTH AND DURABILITY.

SPECIAL GLASS FILLED ENGINEERED COMPOSITES (GLASS FILLED POLYCARBONATE*) IS USED FOR IMPELLER AND DISFFUSER.

- Superior strength for maximum resistance against wear and tear.
- Permanently bonded through a process called sonic welding, which maintains smooth passage and efficient flow through the stages.
- Will not corrode and very resistant to algae and mineral build up.

FLOATING IMPELLER AND FLAT WEAR RING DESIGN OFFER SUPERIOR SAND HANDLING CAPABILITY.

CASTING STAINLESS STEEL FOR

- DISCHARGE HEAD - MOTOR ADAPTER

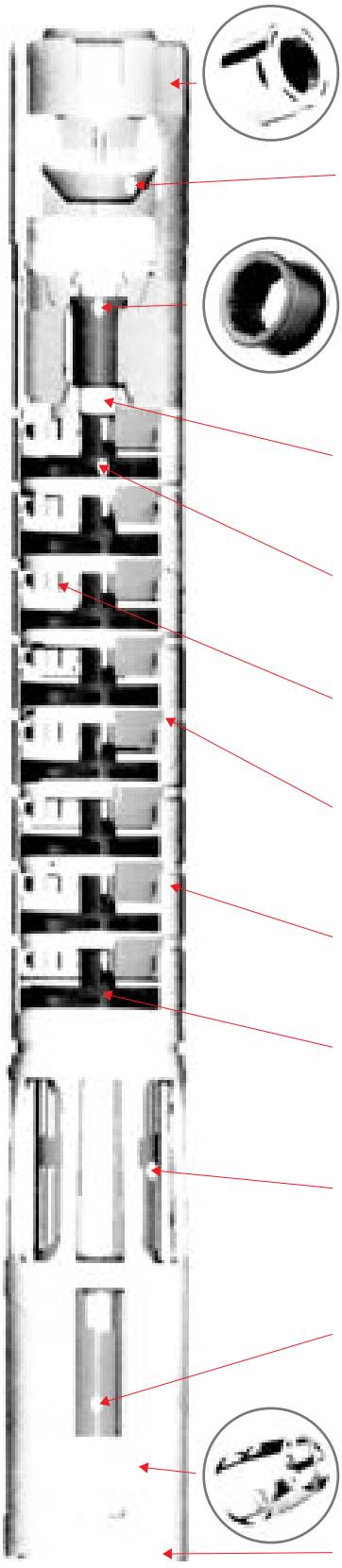
IDENTIFICATION CODES

PBS	Reference to the series of deep well submersible pumps
3	Capacity m3/h
5	Number of Stages

*GLASS FILLED POLYCARBONATE

Glass filled Polycarbonate is a tough, dimensionally stable, thermoplastic that has many applications which demand high performance properties. It is unbreakable and has high abrasive resistance properties. This versatile thermoplastic maintains its properties over a wide range of temperatures, from -5°C to 60°C.

For temperature above 35°C refer to Motor Manufacturer recommendation.



4 Inch Pump Technical Drawing

TOP BRACKET (CASTING STAINLESS STEEL)

Strong, tough and robust.

NON - RETURN VALVE (STAINLESS STEEL)

Prevents the backflow of water providing the smooth and dependable pump operation.

TOP BEARING (POLYURETHANE)

Made of special material, polyurethane, with fluted design providing maximum sand handling and sand resistance capability.

BUSHING (HIGH GRADE STAINLESS STEEL ADDED WITH SPECIAL HARDENING MATERIAL)

Providing maximum resistance against wear and tear.

IMPELLER (NOKYL)

Provides superior strength for maximum resistance against wear and tear of sand and other impurities.

DIFFUSER (SPECIAL GLASS FILLED POLYCARBONATE)

Superior design for high hydraulic performance and greater efficiency.

THICK CASING (STAINLESS STEEL)

Provides strength and is extra finished for an impressive appearance.

BOWL (STAINLESS STEEL)

Offers resistance against abrasive materials and is extra finished for the perfect alignment.

SHAFT (STAINLESS STEEL)

Finished oversized stainless steel shaft with fitted keys gives the perfect alignment for positive impeller drive.

SUCTION STRAINER (STAINLESS STEEL)

Prevent the oversized sediments from entering and jamming the pump.

COUPLING (STAINLESS STEEL)

Facilitates the perfect alignment between the pump and the motor for a longer life span. Designed according to NEMA standard thus it can used with any NEMA motors.

BOTTOM BRACKET (CASTING STAINLESS STEEL)

Strong, tough and robust.

FLOATING IMPELLER AND FLAT WEAR RING DESIGN OFFER SUPERIOR SAND HANDLING CAPABILITY.

FOR 6 INCH WELLS APPLICATIONS

CASTING STAINLESS STEEL PROVIDES MAXIMUM STRENGTH, DURABILITY, WEAR AND TEAR RESISTANCE AGAINST SAND AND OTHER IMPURITIES.

STATE OF THE ART MANUFACTURING PROCESS WITH CNC FINISHING.

- A specialized casting process maximizes the solidarity and toughness of the structure for optimum performance.
- The smooth surfaces of the parts produced provides high hydraulic performance and superior appearance.
- Finishing is done with the CNC machine with a high degree tolerance capability of up to 0.05mm for excellent alignment.

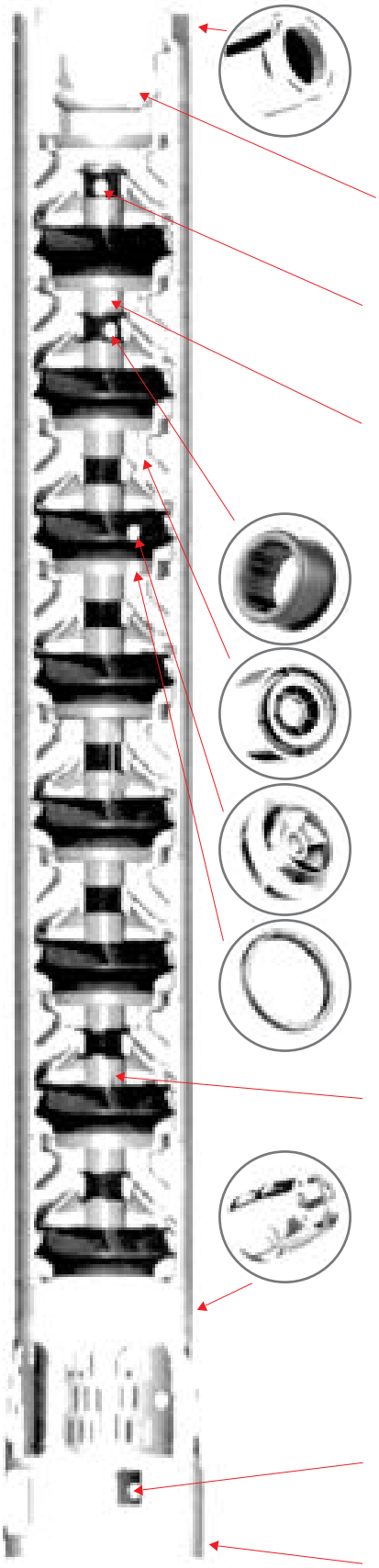
A SPECIAL POLYURETHANE MATERIAL FOR TOP BEARING, INTERMEDIATE BEARING AND NECK RING PROVIDES MAXIMUM SAND HANDLING CAPABILITY.

CASTING STAINLESS STEEL FOR

- IMPELLERS - DISFFUSERS
- DISCHARGED HEAD - MOTOR ADAPTER

IDENTIFICATION CODES

PBS	Reference to the series of deep well submersible pumps	20	Capacity m3/h
		5	Number of Stages



6 Inch Pump Technical Drawing

TOP BRACKET (CASTING STAINLESS STEEL)

Strong, tough and robust.

NON - RETURN VALVE (STAINLESS STEEL)

Prevents the backflow of water providing the smooth and dependable pump operation.

TOP BEARING (POLYURETHANE)

Made of special material, polyurethane, with fluted design providing maximum sand handling and sand resistance capability.

BUSHING (HIGH GRADE STAINLESS STEEL ADDED WITH SPECIAL HARDENING MATERIAL)

Act as protection between the shaft and intermediate bearing for maximum resistance against wear and tear.

INTERMEDIATE BEARING (POLYURETHANCE)

Installed in every stage for the dependable and reliable operation. It provides maximum sand handling capability.

DIFFUSER (CASTING STAINLESS STEEL)

The strength and toughness of casting stainless steel provides maximum wear & tear resistant against sand.

IMPELLER (CASTING STAINLESS STEEL)

The strength and toughness of casting stainless steel provides maximum wear and tear resistant against sand. Superior design for high hydraulic performance and greater efficiency.

NECK RING (POLYURETHANE)

Installed in every diffuser to provide maximum sand handling capability.

SHAFT (STAINLESS STEEL)

Finished oversized stainless steel shaft with fitted keys gives the perfect alignment for positive impeller drive.

BOTTOM BRACKET (CASTING STAINLESS STEEL)

Strong, tough and robust.

SUCTION STRAINER (STAINLESS STEEL)

Prevent the oversized sediments from entering and jamming the pump.

COUPLING (STAINLESS STEEL)

Facilitates the perfect alignment between the pump and the motor for a longer life span. Designed according to NEMA standard thus it can used with any NEMA motors.

Superior and user friendly pump design for easy assembling and disassembling of the pump. No special tool required.

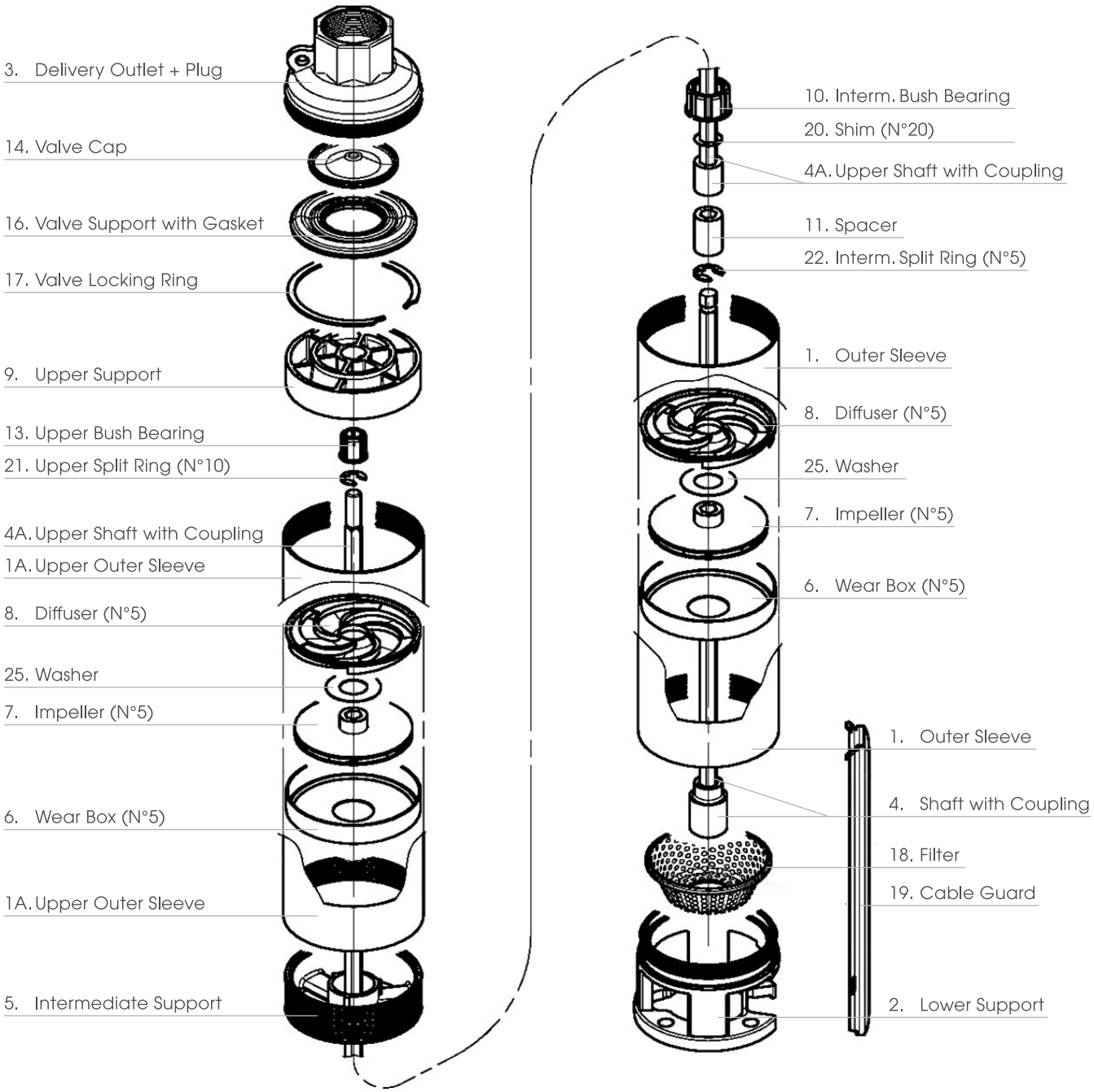
- 4 inch Oil Filled Rewindable Motor
- Stainless Steel Submersible Electric Motor

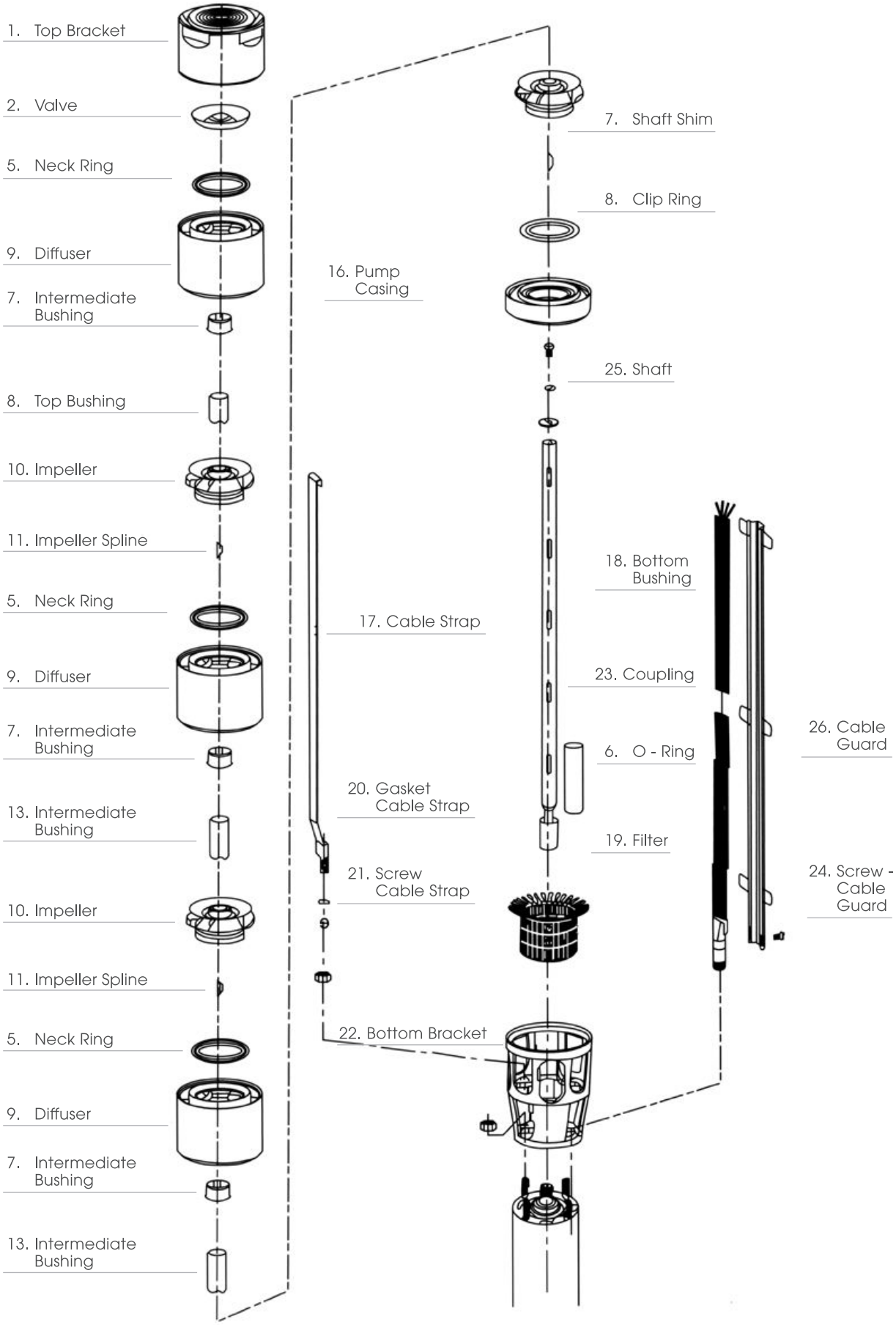
- 6 inch Water Filled Rewindable Motor
- Complete Stainless Steel Construction Available Upon Request

50HZ		4" SINGLE PHASE MOTOR - 50HZ -											
		THRUST LOAD	WEIGHT	H	KW	HP	IN	ISTART	RPM	COS	TS / TN	EFF%	Fμ
		N	KG	MM			AMP						
SINGLE PHASE 220 / 230V 50HZ	PRS	1500	7.0	325	0.37	0.5	3.4/3.6	10.2	2860	0.94	0.75	53	20
	PRS		7.6		0.55	0.75	4.2/4.5	13.6	2855	0.94	0.63	61	25
	PRS		8.7	350	0.75	1.0	5.8/6	18.5	2855	0.96	0.62	63	35
	PRS		10.3	385	1.1	1.5	8/8.2	26.0	2855	0.97	0.62	67	40
	PRS		12.0	420	1.5	2.0	10.8/11	34.0	2855	0.98	0.62	65	60
	PRS	1500	14.2	470	2.2	3.0	14.6/14.8	48.0	2820	0.96	0.64	68	80

50HZ		4" THREE PHASE MOTOR - 50HZ -										
		THRUST LOAD	WEIGHT	H	KW	HP	IN	ISTART	RPM	COS	TS / TN	EFF%
		N	KG	MM			AMP					
380 / 400V 50HZ THREE PHASE	PTR	1500	6.5	325	0.37	0.5	1.4/1.6	5	2840	0.72	2.8	58
	PTR		7.0		0.55	0.75	1.9/2.0	7	2830	0.75	3.1	62
	PTR		7.6		0.75	1	2.4/2.6	10	2830	0.74	3.3	67
	PTR		8.7	350	1.1	1.5	3.2/3.4	14	2820	0.74	3.2	67
	PTR		10.4	385	1.5	2	4.4/4.6	17	2820	0.72	3.4	68
	PTR	1500	12.0	420	2.2	3.0	6.0/6.2	24	2820	0.76	3.1	74
	PTRM	2500	14.2	470			6.0/6.2	24	2820	0.76	3.1	74
	PTR	2500	11.9	418	3.0	4.0	7.7/7.8	30	2860	0.80	2.8	78
	PTRM	4400	19.0	550			7.9/8	34	2860	0.78	3.5	75
	PTR	2500	13.4	468	4.0	5.5	9.7/9.8	45	2825	0.82	3.0	78
	PTRM	4400	20.5	580			10/10.2	47	2840	0.78	3.5	75
	PTR	2500	15.5	538	5.5	7.5	13.5/13.8	55	2820	0.83	3.0	78
	PTRM	4400	22.4	650			14/14.4	58	2830	0.79	3.5	76
	PTRM	4400	27.0	810	7.5	10	19/19.5	72	2820	0.78	3.2	76

50HZ		THREE PHASE 6" MOTOR - 50HZ -									
		THRUST LOAD	WEIGHT	H	KW	HP	IN	RPM	COS	TS / TN	EFF%
		N	KG	MM			AMP				
380 / 400V 50HZ THREE PHASE	XY	10,000	32	540	4.0	5.5	8.8	2860	0.82	2.4	76
	XY	10,000	40	570	5.5	7.5	12.5	2860	0.82	3.0	78
	XY	10,000	42	600	7.5	10.0	16.9	2860	0.82	2.5	77
	XY	10,000	45	600	9.3	12.5	21.5	2860	0.81	2.4	80
	XY	10,000	48	700	11.0	15.0	23.7	2860	0.83	2.4	83
	XY	10,000	50	700	12.8	17.5	27.8	2850	0.84	2.4	82
	XY	10,000	54	760	15.0	20.0	30.4	2840	0.85	2.5	82
	XY	10,000	65	830	18.5	25.0	38.8	2850	0.85	2.1	82
	XY	10,000	70	890	22.0	30.0	44.0	2850	0.86	2.0	83
	XY	20,000	90	1030	30.0	40.0	62.0	2860	0.86	2.0	86


3. Delivery Outlet + Plug
14. Valve Cap
16. Valve Support with Gasket
17. Valve Locking Ring
9. Upper Support
13. Upper Bush Bearing
21. Upper Split Ring (N°10)
4A. Upper Shaft with Coupling
1A. Upper Outer Sleeve
8. Diffuser (N°5)
25. Washer
7. Impeller (N°5)
6. Wear Box (N°5)
1A. Upper Outer Sleeve
5. Intermediate Support
10. Interm. Bush Bearing
20. Shim (N°20)
4A. Upper Shaft with Coupling
11. Spacer
22. Interm. Split Ring (N°5)
1. Outer Sleeve
8. Diffuser (N°5)
25. Washer
7. Impeller (N°5)
6. Wear Box (N°5)
1. Outer Sleeve
4. Shaft with Coupling
18. Filter
19. Cable Guard
2. Lower Support

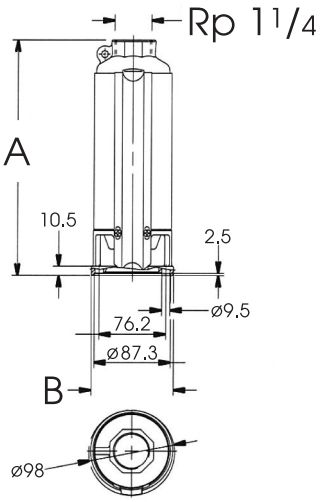

1. Top Bracket
2. Valve
5. Neck Ring
9. Diffuser
7. Intermediate Bushing
8. Top Bushing
10. Impeller
11. Impeller Spline
5. Neck Ring
9. Diffuser
7. Intermediate Bushing
13. Intermediate Bushing
10. Impeller
11. Impeller Spline
5. Neck Ring
9. Diffuser
7. Intermediate Bushing
13. Intermediate Bushing
16. Pump Casing
17. Cable Strap
20. Gasket Cable Strap
21. Screw Cable Strap
22. Bottom Bracket
7. Shaft Shim
8. Clip Ring
25. Shaft
18. Bottom Bushing
23. Coupling
6. O - Ring
19. Filter
26. Cable Guard
24. Screw - Cable Guard

PBS 1 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 1 - 8	PRS	0.37	0.50	298	94	3.10
PBS 1 - 12	PRS/PRT	0.37	0.50	369	94	3.90
PBS 1 - 18	PRS/PRT	0.55	0.75	472	94	4.90
PBS 1 - 24	PRS/PRT	0.75	1.00	578	94	5.80
PBS 1 - 35	PRS/PRT	1.10	1.50	824	94	8.70
PBS 1 - 49	PRS/PRT	1.50	2.00	1068	94	11.80

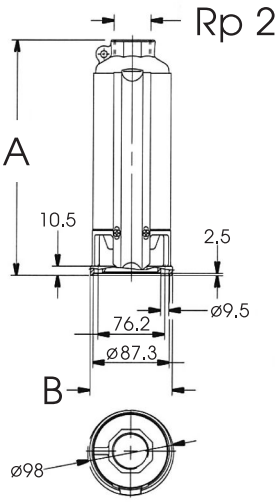
PBS 2 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 2 - 5	PRS	0.37	0.50	245	94	2.60
PBS 2 - 7	PRS/PRT	0.37	0.50	280	94	2.90
PBS 2 - 10	PRS/PRT	0.55	0.75	332	94	3.50
PBS 2 - 14	PRS/PRT	0.75	1.00	402	94	4.20
PBS 2 - 20	PRS/PRT	1.10	1.50	507	94	5.30
PBS 2 - 28	PRS/PRT	1.50	2.00	680	94	7.10
PBS 2 - 40	PRS/PRT	2.20	3.00	914	94	10.10
PBS 2 - 52	PRT	3.00	4.00	1120	94	12.20

PBS 4 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 4 - 4	PRS/PRT	0.37	0.50	245	94	2.50
PBS 4 - 7	PRS/PRT	0.55	0.75	309	94	3.10
PBS 4 - 9	PRS/PRT	0.75	1.00	352	94	3.50
PBS 4 - 14	PRS/PRT	1.10	1.50	460	94	4.60
PBS 4 - 19	PRS/PRT	1.50	2.00	568	94	5.70
PBS 4 - 27	PRS/PRT	2.20	3.00	770	94	7.60
PBS 4 - 35	PRT	3.00	4.00	967	94	9.60
PBS 4 - 48	PRT	4.00	5.50	1248	94	12.80

PBS 6 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 6 - 5	PRS/PRT	0.55	0.75	329	94	3.50
PBS 6 - 7	PRS/PRT	0.75	1.00	390	94	4.20
PBS 6 - 10	PRS/PRT	1.10	1.50	485	94	5.10
PBS 6 - 14	PRS/PRT	1.50	2.00	645	94	6.80
PBS 6 - 21	PRS/PRT	2.20	3.00	862	94	9.10
PBS 6 - 29	PRT	3.00	4.00	1127	94	11.80
PBS 6 - 38	PRT	4.00	5.50	1406	94	14.70
PBS 6 - 52	PRT	5.50	7.50	1840	94	19.30



4 Inch Technical Data
Pbs 1, 2, 4, 6



4 Inch Technical Data
Pbs 8, 12, 16

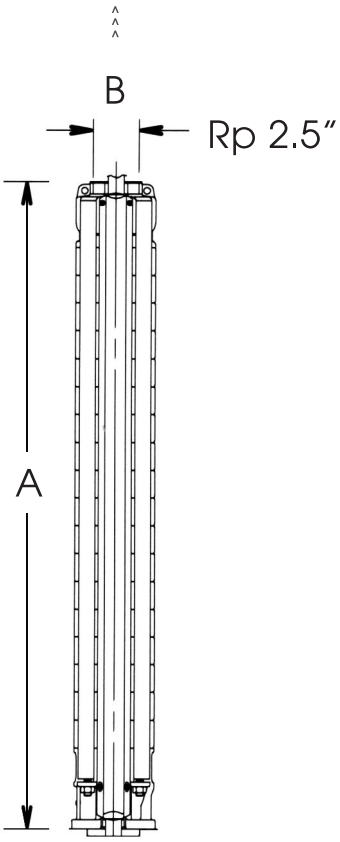
PBS 8 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 8 - 4	PRS/PRT	0.75	1.00	299	94	3.20
PBS 8 - 6	PRS/PRT	1.10	1.50	361	94	3.80
PBS 8 - 8	PRS/PRT	1.50	2.00	423	94	4.50
PBS 8 - 13	PRS/PRT	2.20	3.00	580	94	6.00
PBS 8 - 17	PRT	3.00	4.00	740	94	7.80
PBS 8 - 23	PRT	4.00	5.50	926	94	9.60
PBS 8 - 32	PRT	5.50	7.50	1224	94	12.80
PBS 8 - 43	PRT	7.50	10.00	1563	94	16.20

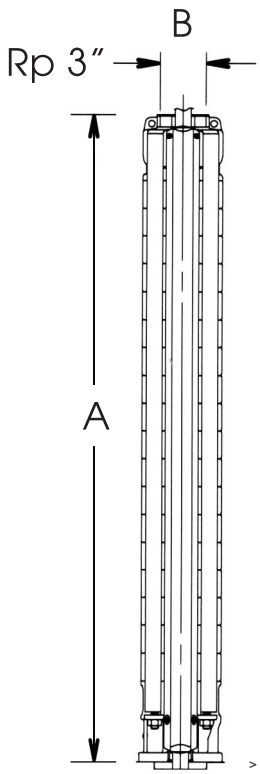
PBS 12 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 12 - 7	PRS/PRT	1.50	2.00	539	94	5.20
PBS 12 - 11	PRS/PRT	2.20	3.00	785	94	7.90
PBS 12 - 15	PRT	3.00	4.00	992	94	10.00
PBS 12 - 20	PRT	4.00	5.50	1252	94	12.60
PBS 12 - 27	PRT	5.50	7.50	1634	94	16.80
PBS 12 - 35	PRT	7.50	10.00	2049	94	20.90

PBS 16 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 16 - 9	PRS/PRT	2.20	3.00	749	94	7.70
PBS 16 - 12	PRT	3.00	4.00	953	94	9.70
PBS 16 - 16	PRT	4.00	5.50	1224	94	12.40
PBS 16 - 21	PRT	5.50	7.50	1620	94	16.50
PBS 16 - 28	PRT	7.50	10.00	2096	94	21.20

PBS 20 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 20 - 5	PRTM	3.00	4.00	548	132	13.50
PBS 20 - 7	PRTM	4.00	5.50	665	132	17.00
PBS 20 - 10	PRTM	5.50	7.50	853	132	22.50
PBS 20 - 13	XY	7.50	10.00	1032	132	30.00
PBS 20 - 14	XY	9.30	12.50	1092	132	32.50
PBS 20 - 17	XY	9.30	12.50	1272	132	39.00
PBS 20 - 20	XY	11.00	15.00	1452	132	44.50
PBS 20 - 22	XY	15.00	20.00	1572	132	48.50
PBS 20 - 26	XY	15.00	20.00	1812	132	55.50
PBS 20 - 28	XY	18.50	25.00	1932	132	59.50
PBS 20 - 33	XY	18.50	25.00	2232	132	69.50
PBS 20 - 35	XY	22.00	30.00	2352	132	73.00
PBS 20 - 40	XY	22.00	30.00	2655	132	82.00

* PRTM - 4" Three Phase Motor, Maximum Thrust, 380 - 400V
XY - 6" Three Phase Motor, 380V - 415V





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PBS 30 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 30 - 3	PRTM	3.00	4.00	511	133	12.00
PBS 30 - 4	PRTM	4.00	5.50	595	133	14.50
PBS 30 - 6	PRTM	5.50	7.50	765	133	20.00
PBS 30 - 8	XY	7.50	10.00	930	133	26.50
PBS 30 - 10	XY	9.30	12.50	1098	133	32.00
PBS 30 - 13	XY	11.00	15.00	1348	133	40.00
PBS 30 - 14	XY	15.00	20.00	1430	133	43.00
PBS 30 - 17	XY	15.00	20.00	1680	133	51.00
PBS 30 - 18	XY	18.50	25.00	1763	133	53.50
PBS 30 - 21	XY	18.50	25.00	2012	133	61.50
PBS 30 - 23	XY	22.00	30.00	2178	133	66.50
PBS 30 - 26	XY	22.00	30.00	2427	133	74.50
PBS 30 - 29	XY	30.00	40.00	2676	133	82.50
PBS 30 - 34	XY	30.00	40.00	3091	133	96.00

PBS 46 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 46 - 5	XY	7.50	10.00	745	144	22.00
PBS 46 - 6	XY	9.30	12.50	839	144	25.50
PBS 46 - 7	XY	11.00	15.00	932	144	28.50
PBS 46 - 9	XY	15.00	20.00	1122	144	35.00
PBS 46 - 12	XY	18.50	25.00	1404	144	45.00
PBS 46 - 15	XY	22.00	30.00	1686	144	55.00
PBS 46 - 16	XY	30.00	40.00	1780	144	58.00
PBS 46 - 20	XY	30.00	40.00	2156	144	71.00
PBS 46 - 23	XY	37.00	50.00	2440	144	81.00

PBS 60 PUMP TYPE	MOTOR			DIMENSION (MM)		NET WEIGHT (KG)
	TYPE	POWER		PUMP		PUMP
		KW	HP	A	B	
PBS 60 - 4	XY	7.50	10.00	655	144	19.00
PBS 60 - 5	XY	9.30	12.50	745	144	22.00
PBS 60 - 6	XY	11.00	15.00	839	144	25.50
PBS 60 - 8	XY	15.00	20.00	1030	144	33.00
PBS 60 - 10	XY	18.50	25.00	1218	144	39.00
PBS 60 - 12	XY	22.00	30.00	1404	144	46.00
PBS 60 - 14	XY	30.00	40.00	1592	144	54.00
PBS 60 - 16	XY	30.00	40.00	1780	144	60.50
PBS 60 - 18	XY	37.00	50.00	1968	144	67.00
PBS 60 - 20	XY	37.00	50.00	2156	144	72.00

* PRTM - 4" Three Phase Motor, Maximum Thrust, 380 - 400V
XY - 6" Three Phase Motor, 380V - 415V