



Ushering in Prosperity

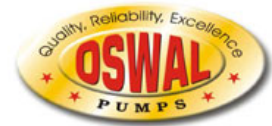
Look At The Range We Have For Energy Saving

STAINLESS STEEL 6" SUBMERSIBLE PUMPS
FOR 4", 6" & 8" MOTOR
OSP - 46/60

OSWAL

S.S. PUMPS





S.S. Pump OSP-46/60

OSWAL submersible pumps & motors are well known for its quality, Reliability & excellent for all type of service purpose. **OSWAL** submersible pumps & motors are manufactured under supervision of highly qualified technical team with a stage wise rigid inspection procedure under TQM concepts.

OSWAL team are well known for their excellent services after sales.

The company has also obtained BIS certificate for ISI mark and through continuous process improvements & streamlining the quality system at par with the international standards has now acquired ISO:9001:2000 certifications.

Application of Bore well submersible pumps are Hospitals, Water circulation systems, Water supply systems of Government, Irrigation, Farms, Drip & sprinkler irrigation, Gardening, Nurseries, Domestic water supply, Multi-storeyed Building & Industrial water supply systems & Hotels.

OSWAL has successfully developed its energy efficient and cost efficient pump manufacturing of fully fabricated S.S.-304 with a quality level as per international standard. The company has offering quality product at a lowest price .the company has exporting pump sets to developed countries and the same quality is supply in domestic market.

OSWAL Submersible Pumpsets of modular design suitable for under-water operation for universal fit, all mounting dimensions of pumps and motors are in accordance with NEMA standards. **OSWAL** submersible pumpset are of completely S.S.-304 construction with fabricated technology, light weight easy for handling, life longivity, pump shaft using Duplex steel for high wear resistance.

OSWAL WATER FILLED AND WATER COOLED SUBMERSIBLE MOTORS confirm to IS : 9283.& Pump set confirm to IS : 8034.

GENERAL DATA

- * Duty Dish : 800 to 1000 LPM.
- * Pumped liquid : Clean water free from solid, Chemically Natural & Close the characteristics of water.
- * Max. liquid temperature : 35°C.
- * Max. Quantity of sand : 40gm/m³.
- * Minimum Suction head required : 1.5 meter.
- * Starts/hours : max. 15 to 20

TYPE		OSP 46	OSP 60
Steel : S.S.-304		+	+
Connection: Rp (Inches)	BSP Thread	4"	4"
	NPT Thread	4"	4"

GENERAL DATA

PUMP MODEL TYPE KEY

EXAMPLE

OSP 6 46 2 B B

- * Model type
- * 6" Motor with 6" pump
- * Nominal flow rate *16.67 lpm
- * Numbers of Impellers
- * First impellers with reduced diameter (A,B,C)
- * Second impellers with reduced diameter (A,B,C)



PUMPED LIQUIDS

- * Clean, thin, non-aggressive liquids without solid particles.

OPERATING CONDITIONS

- * Flow Rate (min. to max.) - 24-72 M³/h
- * Head, H : Maximum 320 m.

Maximum Liquid Temperature:

Motor	Installation		
	Flow velocity- past motor	Vertical	Horizontal
6"	0.15 m/s	40°C	40°C

Operating pressure: Maximum 67 bar.

CURVE CONDITIONS

- * The conditions below apply to the curves shown on the following pages :



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OSPJ-46, OSPJ-60 CURVE

- * **Q/H** : The curves are inclusive of losses such as NRV losses at the actual speed. Operation without non-return valve will increase the actual head at nominal performance by 0.5 to 1.0 m.
- * **Power Curve** : (BPKW) For Particular Stage shows pump power.
- * **Efficiency Curve** : Efficiency shows pump stage efficiency.

FEATURES AND BENEFITS

A Wide Pump Range

- * We offers submersible pumps with energy-efficient duty points ranging from 46 to 60 m³/h. The pump range consist of many pump sizes (Stages) to match any duty point.

High Pumps Efficiency

- * Often pump efficiency is a neglected factor compared to the price variations are without importance of pump and motor efficiencies.

Example

- * Pumping water-46m³/h with a head of 60 meter.
- * When choosen stainless steel energy efficient pump, be saved (than other pumps) 4unit (kwh) per hour.
- * It save Rs. 4,60,000 in 10 year for 8 hours / day running)

Applications

- * We offers a complete range of pumps and motors with as a standard are made completely as stainless steel - 304. This provides for good wear resistance and a reduced risk of corrosion when pumping ordinary cold water with a minor content of chloride.

Low Installation Cost

- * These pumps have low weight facilitating the handling of pumps and resulting in low equipment costs and reduced installation and service time. In addition pumps will be as new after service due to the high wear resistance of stainless steel.

Bearing with Sand Channels

- * All bearing are water-Lubricated and have a octagone shape enabling sand particles.



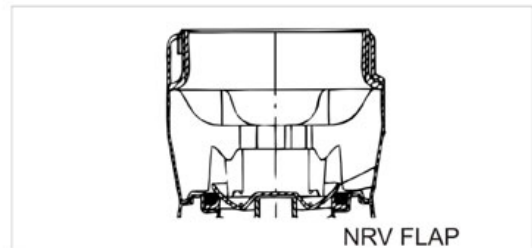
Inlet Strainer

- * The inlet strainer prevents particles over a certain size from entering the pump.



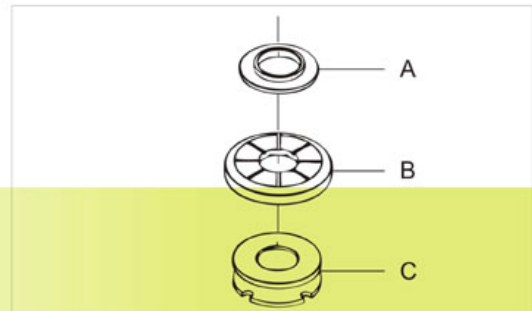
Non-Return Valve

- * All pumps are equipped with a non-return valve in the valve casing preventing back flow in connection with pump stoppage.
- * Furthermore, the short closing time of the non-return valve means that the risk of destructive water hammer is reduced to the minimum.
- * The valve casing is designed for optimum hydraulic properties, to minimize the pressure loss across the valve and thus contributes to the high efficiency of the pump.



Stop Ring

- * The stop ring prevents damage to the pump during transport and in case of up-thrust in connection with start-up.
- * The stop ring, which is designed as a thrust bearing limits axial movements of the pump shaft.
- * Example : OSP - 46
- * The stationary part of the stop ring (A) is secured in the top bowl (Upper intermediate chamber).
- * The rotating part (B) is fitted above the collet [split cone(C)].





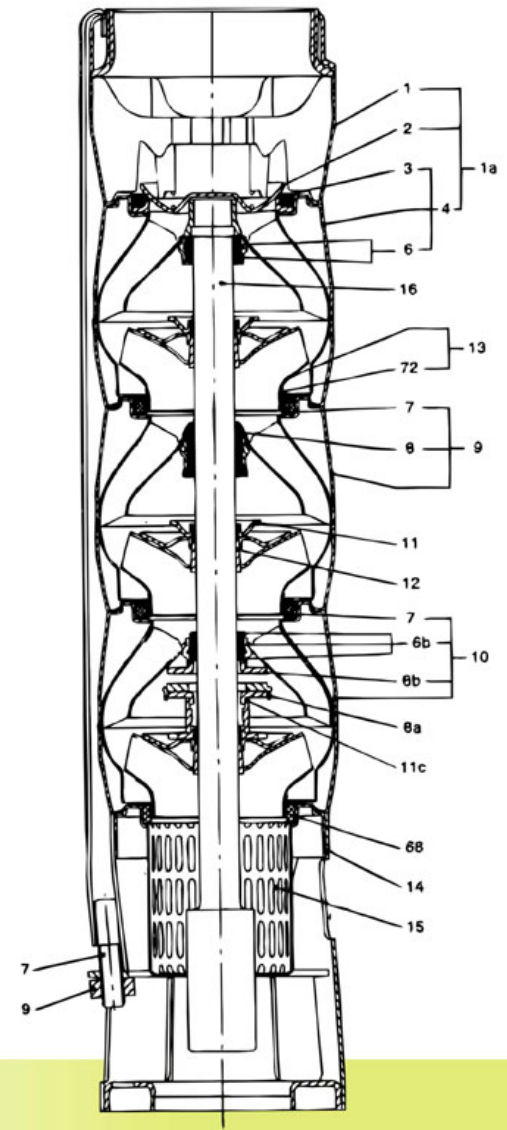
S.S. Pump OSP-46/60

GENERAL

- * Curve tolerance according to ISO 9906, Annex A&B.
- * The performance curves show pump performance at actual speed of standard motor range.
- * The speed of the motors is approximately:
6" motors : $n=2850 \text{ min}^{-1}$
- * The measurements were made with airless water at a temperature of 20°C. The curves apply to a kinematic viscosity of $1 \text{ mm}^2/\text{s}$.
When pumping liquids with a density higher than that a water, motors with correspondingly higher outputs must be used.
- * The bold curves indicate the performance range.

MATERIAL SPECIFICATION - OSP -46/60

S.No.	Components	Material	Standard
1	Valve casing	Stainless steel	304
1a	Discharge chamber complete	Stainless steel	304
2	Valve cup	Stainless steel	304
3	Valve seat	Stainless steel + NBR	
4	Top chamber	Stainless steel	304
6	Upper bearing	NBR	
	Cap	Stainless steel	304
6b	Lower bearing	NBR	
	Cap	Stainless steel	304
7	Neck ring	NBR/Stainless steel	
8	Bearing	NBR	
8a	Washer for stop ring	Cabron/graphite hy 22 in ptfe mass	
8b	Stop ring	Stainless steel	304
9	Inter meditate Chamber	Stainless steel	304
10	Bottom chamber complete	Stainless steel	304
11	Split cone nut	Stainless steel	304
11c	Nut for stop ring	Stainless steel	304
12	Split cone	Stainless steel	304
13	Impeller	Stainless steel	304
14	Suction interconnector	Stainless steel	304
15	Strainer	Stainless steel	316
16	Pump shaft	Stainless steel	304
17	Strap	Stainless steel	304
18	Cable guard	Stainless steel	304
18a	Cheese-screw for cable guard	Stainless steel	304
19	Nut	Stainless steel	304
19a	Nut	Stainless steel	304
23	Rubber guard	Rubber	
68	Bottom neck ring	NBR/Stainless steel	
72	Wear ring	Stainless steel	304
78	Nameplate	Stainless steel	304



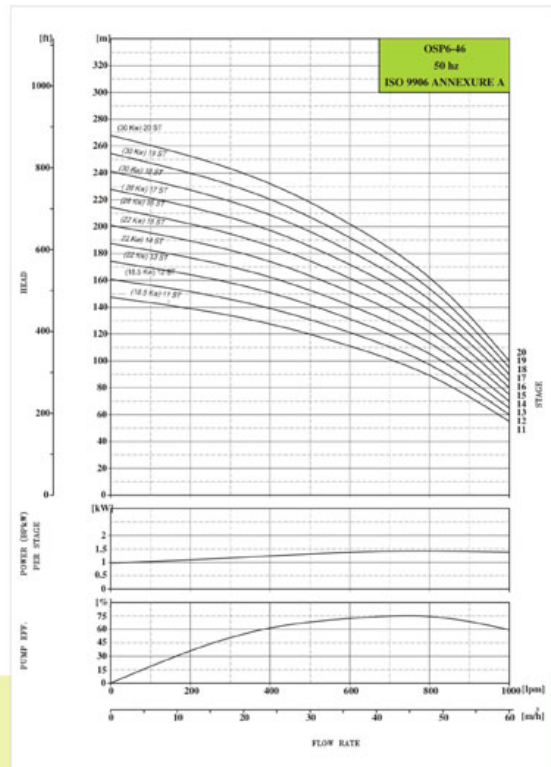
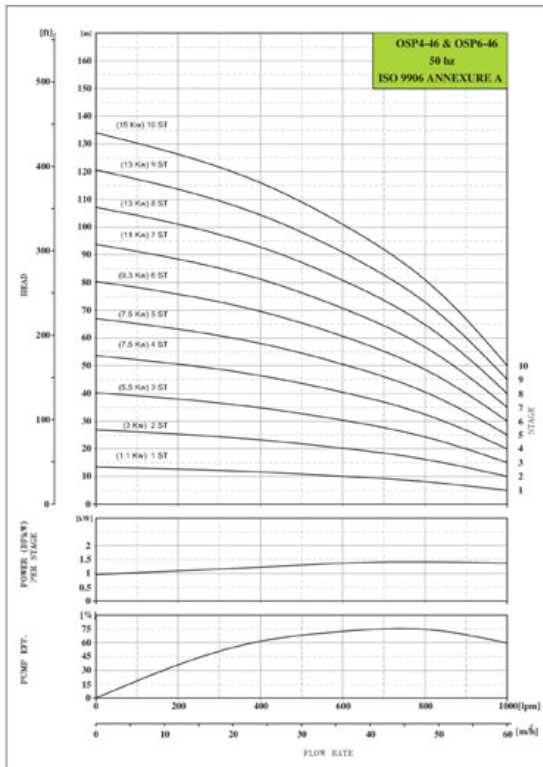


S.S. Pump OSP-46/60

PERFORMANCE TABLE OSP4-46									
MODEL	HP	STAGE	MOTOR POWER (KW)	DISCHARGE					
				M/H (L.P.M.)	0	24	36	48	60
OSP4-46	3	1	2.2	HEAD (METERS)	13.4	11.6	10	8.1	5
OSP4-46	3	2-BB	2.2		19	16	13.5	8.5	1
OSP4-46	4	2	3		27	23	20	16	10
OSP4-46	5	3C	3.7		35.5	30	26	19	10
OSP4-46	6	3	4.5		38	33	29	23	14

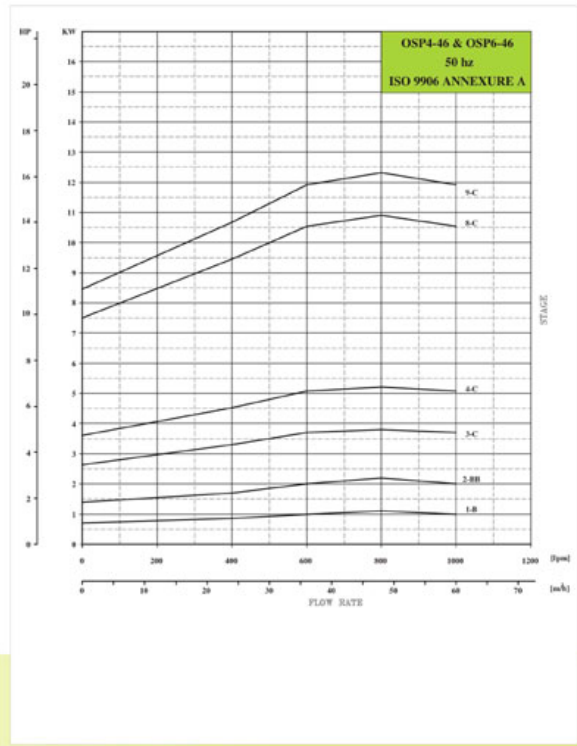
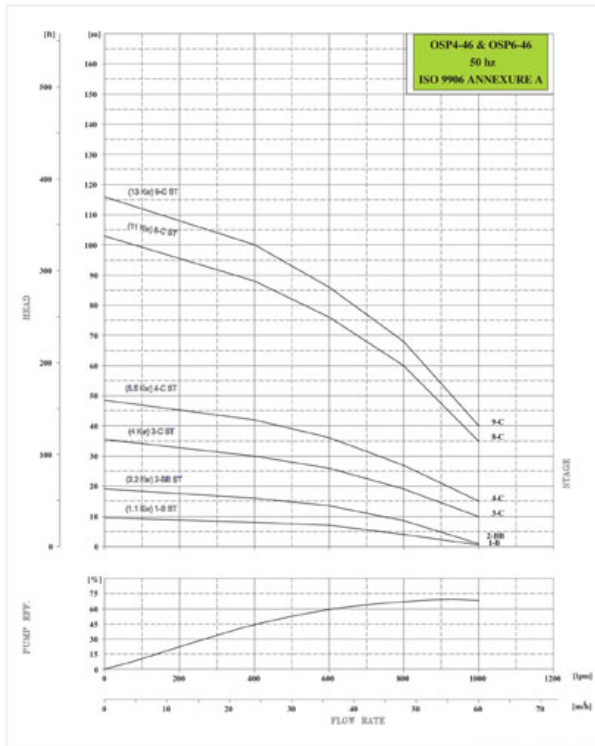
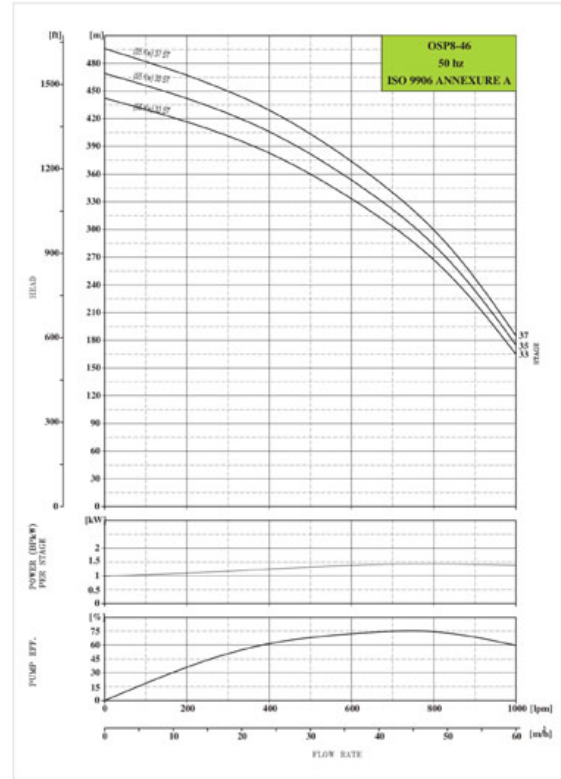
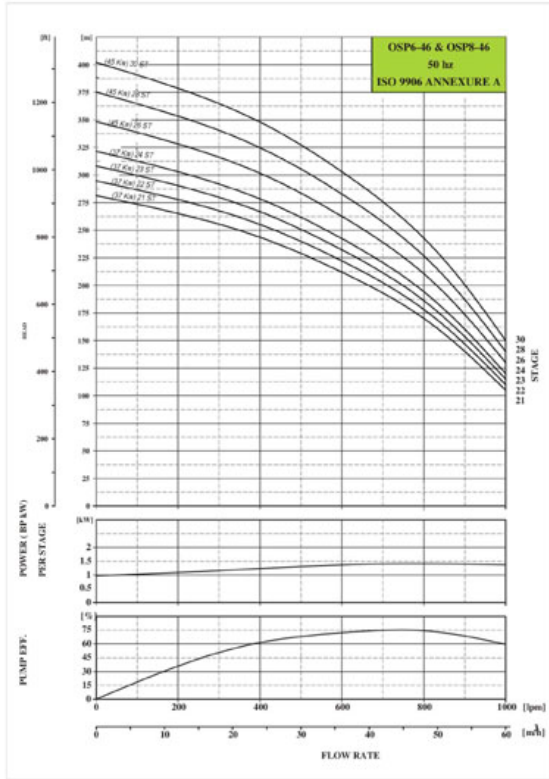
PERFORMANCE TABLE OSP8-46									
MODEL	HP	STAGE	MOTOR POWER (KW)	DISCHARGE					
				M/H (L.P.M.)	0	24	36	48	60
OSP8-46	60	26	45	HEAD (METERS)	348	302	260	211	130
OSP8-46	60	28	45		375	325	280	227	140
OSP8-46	60	30	45		402	348	300	243	150
OSP8-46	75	33	55		442	383	330	267	165
OSP8-46	75	35	55		469	406	350	284	175
OSP8-46	75	37	55		496	429	370	300	185

PERFORMANCE TABLE OSP6-46									
MODEL	HP	STAGE	MOTOR POWER (KW)	DISCHARGE					
				M/H (L.P.M.)	0	24	36	48	60
OSP6-46	3	1	2.2	HEAD (METERS)	13.4	11.6	10	8.1	5
OSP6-46	3	2-BB	2.2		19	16	13.5	8.5	1
OSP6-46	4	2	3.0		27	23	20	16	10
OSP6-46	5	3-C	3.7		36	30	26	19	10
OSP6-46	6	3	4.5		38	33	29	23	14
OSP6-46	7.5	3	5.5		40	35	30	24	15
OSP6-46	7.5	4-C	5.5		48.5	42	36	27	15
OSP6-46	10	4	7.5		54	46	40	32	20
OSP6-46	10	5	7.5		67	58	50	41	25
OSP6-46	12.5	6	9.3		80	70	60	49	30
OSP6-46	15	7	11		94	81	70	57	35
OSP6-46	15	8-C	11		103	88	76	60	35
OSP6-46	17.5	8	13		107	93	80	65	40
OSP6-46	17.5	9-C	13		116	100	86	68	40
OSP6-46	20	10	15		134	116	100	81	50
OSP6-46	25	11	18.5		147	128	110	89	55
OSP6-46	25	12	18.5		161	139	120	97	60
OSP6-46	30	13	22		174	151	130	105	65
OSP6-46	30	14	22		188	162	140	113	70
OSP6-46	30	15	22		201	174	150	122	75
OSP6-46	35	16	26		214	186	160	130	80
OSP6-46	35	17	26		228	197	170	138	85
OSP6-46	40	18	30		241	209	180	146	90
OSP6-46	40	19	30		255	220	190	154	95
OSP6-46	40	20	30		268	232	200	162	100
OSP6-46	50	21	37		281	244	210	170	105
OSP6-46	50	22	37		295	255	220	178	110
OSP6-46	50	23	37		308	267	230	186	115
OSP6-46	50	24	37		322	278	240	194	120





S.S. Pump OSP-46/60



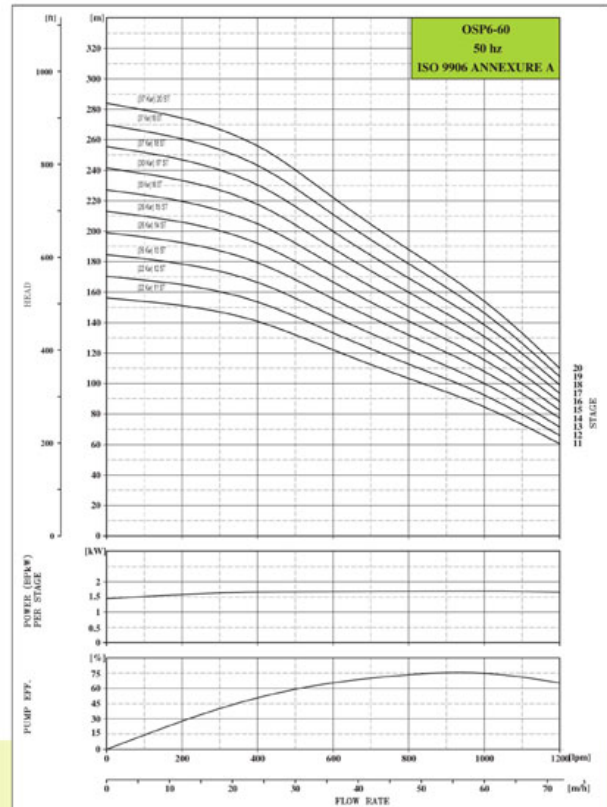
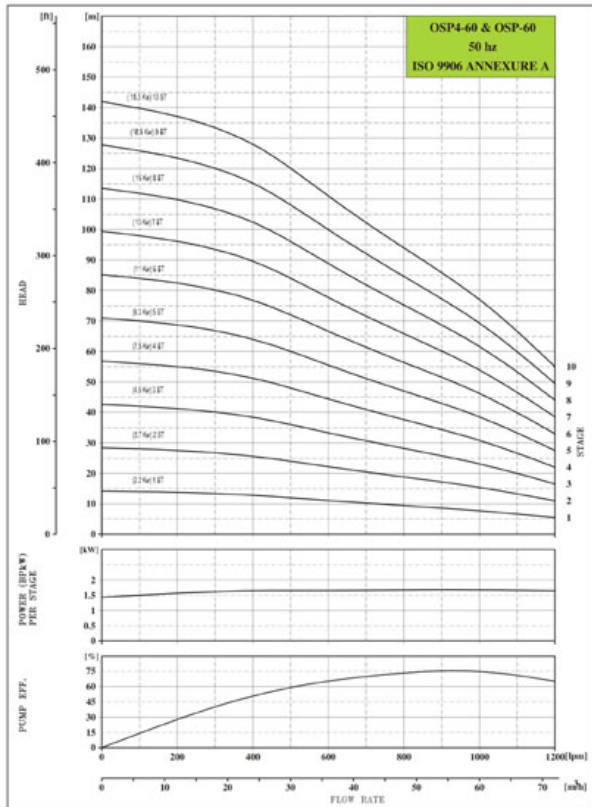


S.S. Pump OSP-46/60

PERFORMANCE TABLE OSP4-60									
MODEL	HP	STAGE	MOTOR POWER (KW)	DISCHARGE					
				M ³ /H (L.P.M.)	0	24	36	48	60
OSP4-60	2	1-A	1.5	11	9	7	6	4	0
OSP4-60	3	1	2.2	14.2	12.8	11	9.4	7.7	5.5
OSP4-60	4	2-B	3.0	20.5	19.5	16	13.5	10	5.5
OSP4-60	5	2	3.7	28	26	22	19	15	11
OSP4-60	6	2	4.5	29	27	23	20	16	12

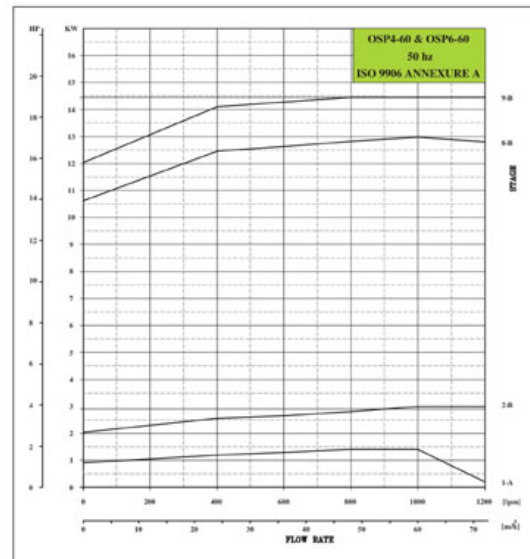
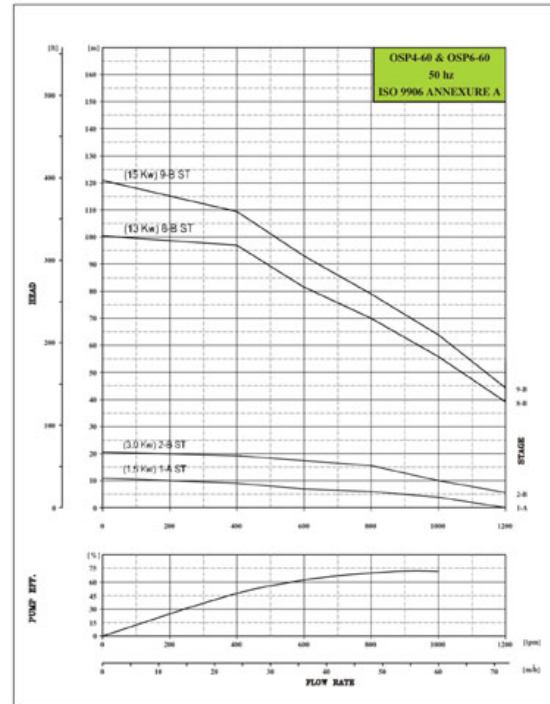
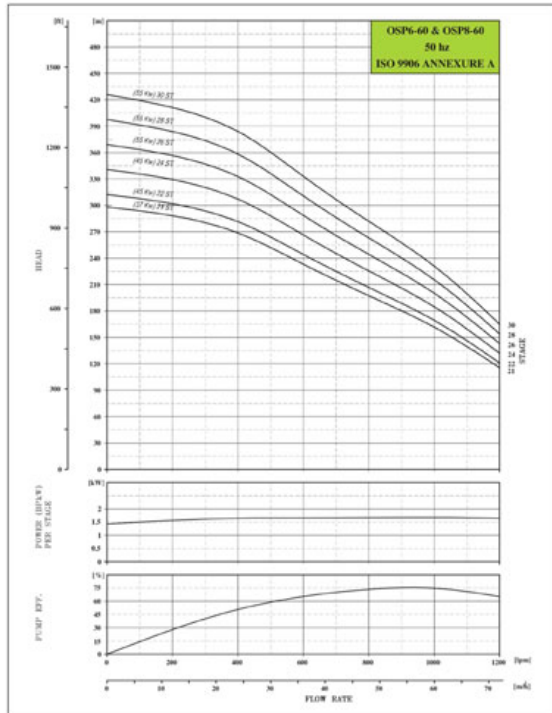
PERFORMANCE TABLE OSP8-60									
MODEL	HP	STAGE	MOTOR POWER (KW)	DISCHARGE					
				M ³ /H (L.P.M.)	0	24	36	48	60
OSP8-60	60	22	45	312	282	242	207	169	121
OSP8-60	60	24	45	341	307	264	226	185	132
OSP8-60	60	26	55	269	333	286	244	200	143
OSP8-60	75	28	55	398	358	308	263	216	154
OSP8-60	75	30	55	426	384	330	282	231	165

PERFORMANCE TABLE OSP6-60									
MODEL	HP	STAGE	MOTOR POWER (KW)	DISCHARGE					
				M ³ /H (L.P.M.)	0	24	36	48	60
OSP6-60	3	1	2.2	14.2	12.8	11	9.4	7.7	5.5
OSP6-60	4	2B	3.0	20.5	19.5	16	13.5	10	5.5
OSP6-60	5	2	3.7	28	26	22	19	15	11
OSP6-60	6	2	4.5	29	27	23	20	16	12
OSP6-60	7.5	3	5.5	43	38	33	28	23	17
OSP6-60	10	4	7.5	57	51	44	38	31	22
OSP6-60	12.5	5	9.3	71	64	55	47	39	28
OSP6-60	15	6	11.0	85	77	66	56	46	33
OSP6-60	17.5	7	13.0	99	90	77	66	54	39
OSP6-60	17.5	8-B	13.0	106	97	82	70	56	39
OSP6-60	20	8	15	114	102	88	75	62	44
OSP6-60	20	9-B	15	121	109	93	79	64	44
OSP6-60	25	9	18.5	128	115	99	85	69	50
OSP6-60	25	10	18.5	142	128	110	94	77	55
OSP6-60	30	11	22	156	141	121	103	85	61
OSP6-60	30	12	22	170	154	132	113	92	66
OSP6-60	35	13	26	185	166	143	122	100	72
OSP6-60	35	14	26	199	179	154	132	108	77
OSP6-60	35	15	26	213	192	165	141	116	83
OSP6-60	40	16	30	227	205	176	150	123	88
OSP6-60	40	17	30	241	218	187	160	131	94
OSP6-60	50	18	37	256	230	198	169	139	99
OSP6-60	50	19	37	270	243	209	179	146	105
OSP6-60	50	20	37	284	256	220	188	154	110
OSP6-60	50	21	37	298	269	231	197	162	116





S.S. Pump OSP-46/60



Warranty : We provide warranty for a period of 12 months as per our standard terms and conditions mention in quotation/offer.
 * The manufacturer reserve the right to change the design, specification without prior notice.

Exclusively manufactured by :
Oswal Pumps Ltd.

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OTHER RANGES :

