

Oswal SS Submersible V8

Stainless-steel 8" submersible pumps for 8" motors · OSP 8-77 / OSP 8-95

AT A GLANCE

- Fully fabricated AISI 304 stainless steel
- Flow 30–120 m³/h (500–2,000 L/min)
- Head up to 440 m
- 7.5–125 HP (5.5–93 kW) · 5" outlet
- Stop ring against up-thrust
- Built-in non-return valve



V8

Look at the range we have for energy saving

8" pumps for 8" motors · 55 ratings

77 · 95

m³/h nominal duty

30–120 m³/h

flow range

440 m

max. head

5.5–93 kW

7.5–125 HP

MANUFACTURED BY

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ISO 9001:2015

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SS PUMP OSP 8-77 / 95

Energy-efficient 8" stainless-steel submersibles

Oswal submersible pumps and motors are well known for their quality, reliability and excellence in every type of service. They are manufactured under the supervision of a highly qualified technical team, with stage-wise rigorous inspection under TQM concepts, and are backed by excellent after-sales service.

Applications include hospitals, water-circulation systems, government water-supply schemes, irrigation, farms, drip and sprinkler irrigation, gardening, nurseries, domestic water supply, multi-storeyed buildings, industrial water-supply systems and hotels.

Oswal has developed energy-efficient, cost-effective pumps of fully fabricated AISI 304 stainless steel to international quality levels, and exports pump sets to developed countries. The pump sets are of modular design for under-water operation and universal fit; all mounting dimensions of pumps and motors follow NEMA standards. Fabricated construction keeps them light and easy to handle and gives a long service life.

Oswal water-filled and 8" water-cooled submersible motors conform to **IS 9283**; pump sets conform to **IS 8034**.

General data

Operating range	1,200–1,600 L/min (72–96 m ³ /h)
Flow rate Q	30–120 m ³ /h
Max. head (H)	440 m
Pumped liquid	Clean, thin, non-aggressive water, free from solids, chemically neutral
Max. liquid temperature	35 °C (see note)
Max. sand content	40 g/m ³
Min. suction head required	1.5 m
Starts per hour	15–20 max.
Operating pressure	67 bar max.

Construction & connection

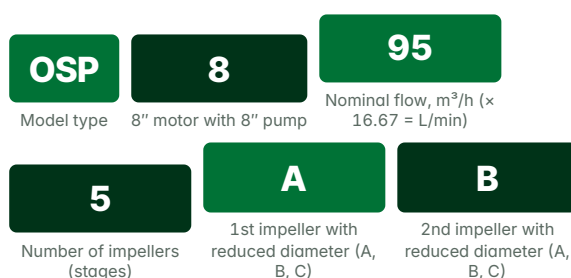
Type	OSP 77	OSP 95
Steel	AISI 304	AISI 304
Connection Rp · BSP thread	5"	5"
Connection Rp · NPT thread	5"	5"
Flange connection	5"	5"

Max. liquid temperature by installation

Motor	Flow velocity past motor	Vertical	Horizontal
8"	0.15 m/s	40 °C	40 °C

Note: General data gives 35 °C; this table gives 40 °C at ≥ 0.15 m/s cooling flow past the motor. Both shown as printed.

Model type key — example OSP 8 95 5 A B



FABRICATED AISI 304 STAINLESS-STEEL COMPONENTS

FEATURES AND BENEFITS

Built for duty, designed for efficiency

A wide pump range

Energy-efficient duty points from 48 to 120 m³/h, with many pump sizes (stages and impeller trims) to match any duty point.

Low installation cost

Low weight eases handling and cuts equipment cost, installation and service time; high wear resistance means pumps are as good as new after service.

High pump efficiency

Pump and motor efficiency is often neglected in favour of purchase price — yet it decides the running cost for the life of the pump.

Bearings with sand channels

All bearings are water-lubricated and have an octagonal shape with channels that let sand particles pass.

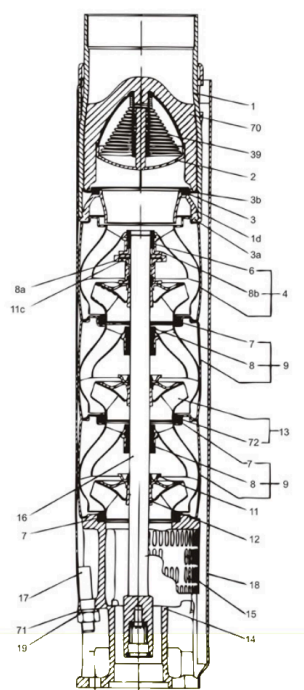
Stainless steel throughout

All wetted parts in AISI 304 for good wear resistance and a reduced risk of corrosion with ordinary cold water containing a little chloride.

Stop ring

Designed as a thrust bearing, the stop ring limits axial shaft movement and protects the pump against up-thrust at start-up and during transport. Stationary part (A) sits in the top bowl; rotating part (B) above the split cone (C).

Example: pumping 77 m³/h against 60 m head, a stainless-steel energy-efficient pump saves about 4 kWh every hour compared with other pumps — around **₹4,60,000 in 10 years** at 8 hours' running a day.



SECTIONAL DRAWING · OSP 8

Material specification OSP 8-77 / 95

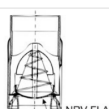
No.	Component	Material	Grade
1	Valve casing	Stainless steel	304
2	O-ring	NBR	
3	Valve cup	Stainless steel	304
4	Valve seat	Stainless steel	304
5	Lower valve-seat retainer	Stainless steel	304
6	Upper valve-seat retainer	Stainless steel	304
7	Top chamber	Stainless steel	304
8	Upper bearing	Stainless steel + NBR	304
9	Neck ring	NBR / SS 304 ring	
10	Bearing	NBR	
11	Washer for stop ring	Carbon/graphite HY22 in PTFE mass	
12	Stop ring	Stainless steel	304
13	Chamber	Stainless steel	304
14	Split-cone nut	Stainless steel	304
15	Nut for stop ring	Stainless steel	304
16	Split cone	Stainless steel	304
17	Impeller	Stainless steel	304
18	Suction interconnector	Stainless steel	304
19	Strainer	Stainless steel	304
20	Shaft, complete	Stainless steel	Duplex
21	Strap	Stainless steel	304
22	Cable guard	Stainless steel	304
23	Nut for strap	Stainless steel	304
24	Spring for valve cup	Stainless steel	304
25	Valve guide	Stainless steel	304
26	Washer	Stainless steel	304
27	Wear ring	Stainless steel	304



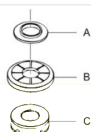
BEARING WITH SAND CHANNELS



INLET STRAINER



NON-RETURN VALVE



STOP RING A · B · C

Note: drawing call-outs use the factory part numbers and do not follow the 1–27 numbering of the material table (as in the source).

8" · Mixed flow

OSP 8-77

Performance · 8" motor

NOMINAL
77 m³/hFLOW
30–96 m³/hMAX. HEAD
440 mPOWER
5.5–93 kWOUTLET
5"RATINGS
28

PUMP & MOTOR

TOTAL HEAD (M) AT FLOW RATE Q

Stages	HP	kW	0 m ³ /h	30	48	60	72	84	96
			0 L/min	500	800	1000	1200	1400	1600
1	7.5	5.5	20	18	16	14	12.5	10.5	8
2-B	7.5	5.5	33	29	25	22	19	15	9
2	10	7.5	40	37	32	29	26	22	16
3-BB	10	7.5	46	40	34	29	25	18	9
3-B	12.5	9.3	53	48	41	36.5	32	26	16
3	15	11	60	55	48	43	38	32	23
4-BB	15	11	66	59	50	44	38	29	18
4-B	17.5	13	73	66	57	50.5	44	36	23
4	20	15	80	73	64	58	51	43	31
5	25	18.5	100	92	80	72	64	54	39
6	30	22	120	110	95	86	77	65	47
7	35	26	140	128	111	101	90	76	55
8-B	35	26	153	139	120	108.5	96	80	55
8	40	30	160	146	127	115	102	86	62
9	40	30	180	165	143	130	115	97	70
10	50	37	200	183	159	144	128	108	78
11	50	37	220	201	175	158	141	119	86
12	60	45	240	220	191	173	154	130	94
13	75	55	260	238	207	187	166	140	101
14	75	55	280	256	223	202	179	151	109
15	75	55	300	275	239	216	192	162	117
16	85	63	320	293	254	230	205	173	125
17	85	63	340	311	270	245	218	184	133
18	85	63	360	329	286	259	230	194	140
19	100	75	380	348	302	274	243	205	148
20	100	75	400	366	318	288	256	216	156
21	100	75	420	384	334	302	269	227	164
22	125	93	440	403	350	317	282	238	172

Heads in metres at the flow rates shown. Speed approx. 2850 min⁻¹; tolerances ISO 9906 Annex A. Motor kW as printed (16–18 stages: 85 HP / 63 kW).

Curve conditions

- **Q/H:** curves include losses such as non-return-valve losses at actual speed. Operation without the NRV raises the actual head at nominal performance by 0.5–1.0 m.
- **Power curve:** shaft power (BkW) per stage.
- **Efficiency curve:** pump-stage efficiency.
- Curve tolerances to **ISO 9906, Annex A**. Curves show performance at the actual speed of the standard motor range (approx. 2850 min⁻¹).
- Measured with airless water at 20 °C, kinematic viscosity 1 mm²/s. For liquids denser than water, use motors with correspondingly higher output.
- Bold curves indicate the recommended performance range.

8" · Mixed flow

OSP 8-95

Performance · 8" motor

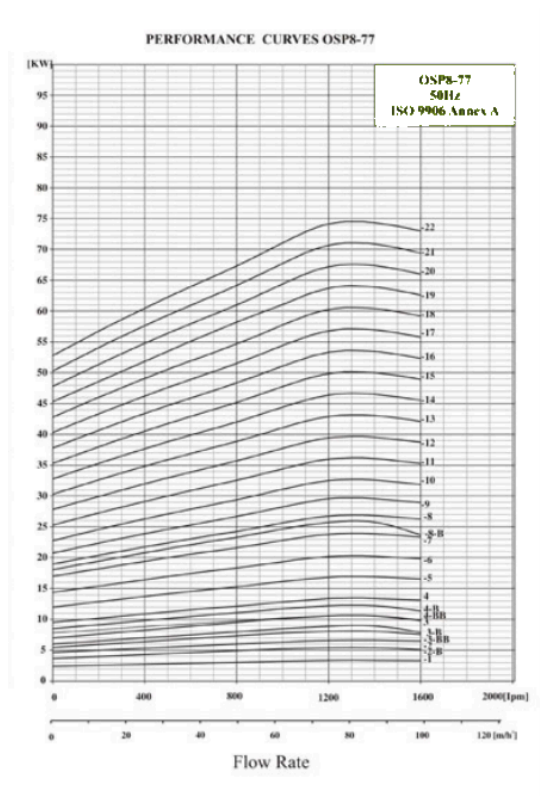
NOMINAL
95 m³/hFLOW
48–120 m³/hMAX. HEAD
428 mPOWER
5.5–93 kWOUTLET
5"RATINGS
27**PUMP & MOTOR****TOTAL HEAD (M) AT FLOW RATE Q**

Stages	HP	kW	0 m³/h	48	72	96	108	120
			0 L/min	800	1200	1600	1800	2000
1	7.5	5.5	21	17	15	12	10	7
2-BB	7.5	5.5	27	22	19	12	6	2
2-A	10	7.5	38.5	29	25	20	15	9
2	12.5	9.3	43	35	30	24	19	13
3-BB	12.5	9.3	48	39	34	24	16	7
3-B	15	11	56.5	46	39.5	30	22	13
3	17.5	13	64	52	44	35	29	20
3	20	15	67	54	47	37	31	21
4-B	20	15	77.5	63	53.5	41	32	20
4	25	18.5	86	69	59	47	39	27
5-AB	25	18.5	95	75	64	49	37	20
5	30	22	107	87	74	59	49	34
6	35	26	128	104	89	71	58	40
7	40	30	150	121	104	82	68	47
8	50	37	171	138	118	94	78	54
9	50	37	193	156	133	106	87	60
10	60	45	214	173	148	118	97	67
11	75	55	235	190	163	129	107	74
12	75	55	257	208	178	141	116	80
13	75	55	278	225	192	153	126	87
14	85	63	300	242	207	165	136	94
15	100	75	321	260	222	176	146	101
16	100	75	342	277	237	188	155	107
17	100	75	364	294	252	200	165	114
18	125	93	385	311	266	212	175	121
19	125	93	407	329	281	224	184	127
20	125	93	428	346	296	235	194	134

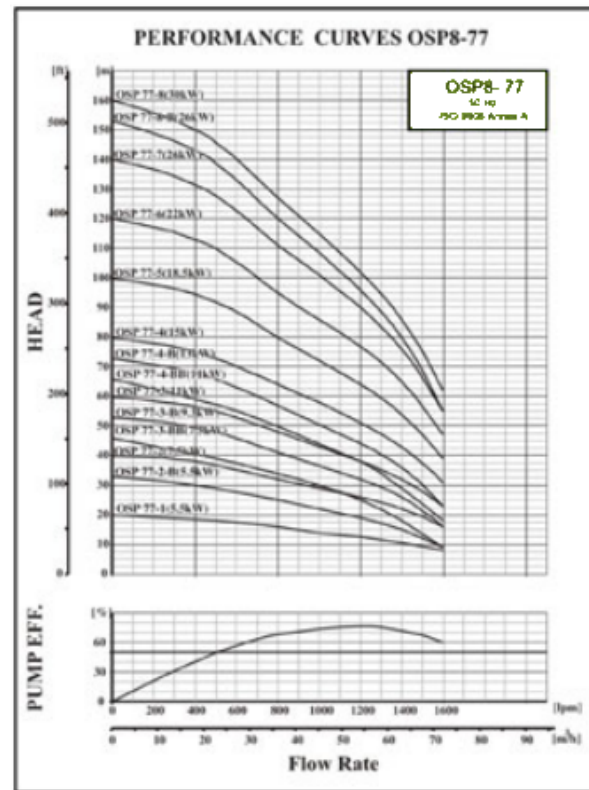
Heads in metres at the flow rates shown. Speed approx. 2850 min⁻¹; tolerances ISO 9906 Annex A.**Corrected value (red):** stage 7 head at 48 m³/h printed as 212 m (digits transposed; higher than shut-off head 150 m) → 121 m. **Flagged:** stage 3 is listed twice (17.5 HP / 13 kW and 20 HP / 15 kW) with different heads — kept as printed, confirm with factory.**Warranty:** 12 months as per our standard terms and conditions mentioned in the quotation / offer. The manufacturer reserves the right to change the design and specification without prior notice.

OSP 8-77

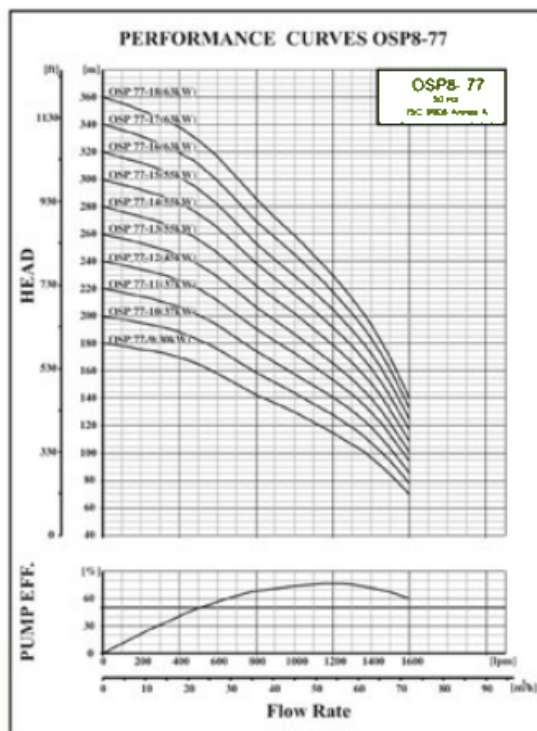
— Power by stage, head and pump efficiency · 50 Hz · ISO 9906 Annex A



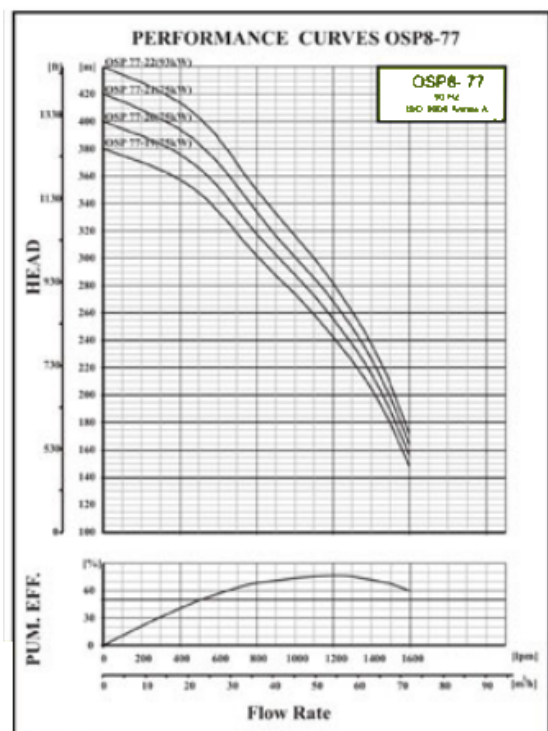
POWER CURVE



HEAD / EFFICIENCY · LOW STAGES



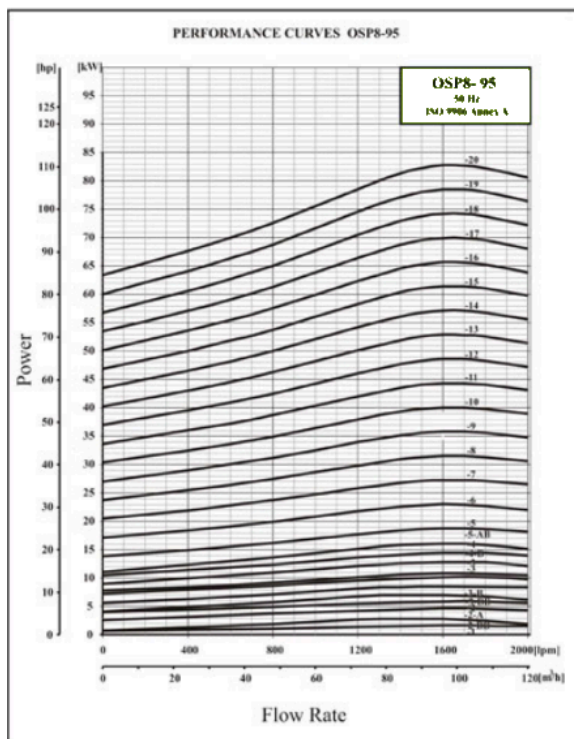
HEAD / EFFICIENCY · MID STAGES



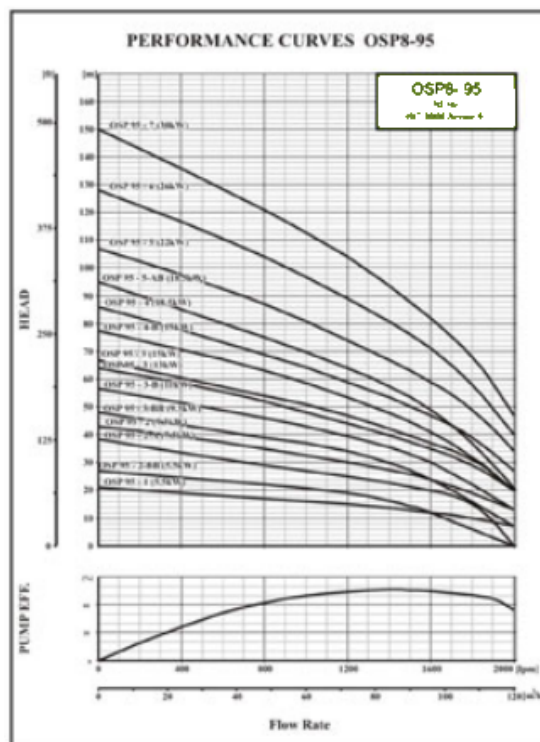
HEAD / EFFICIENCY · HIGH STAGES

OSP 8-95

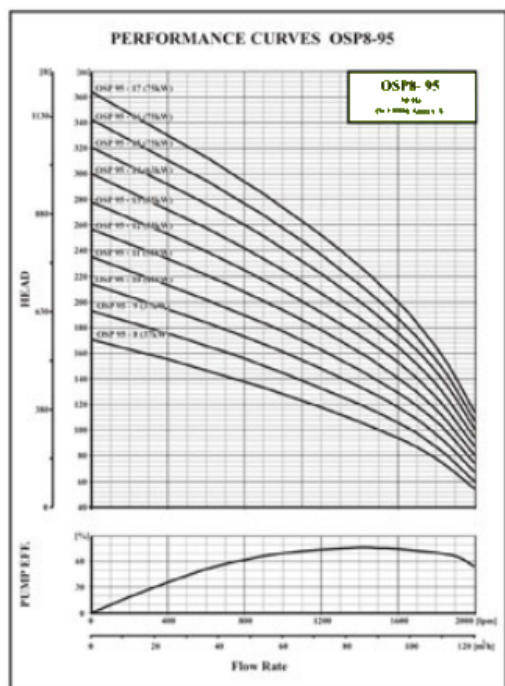
— Power by stage, head and pump efficiency · 50 Hz · ISO 9906 Annex A



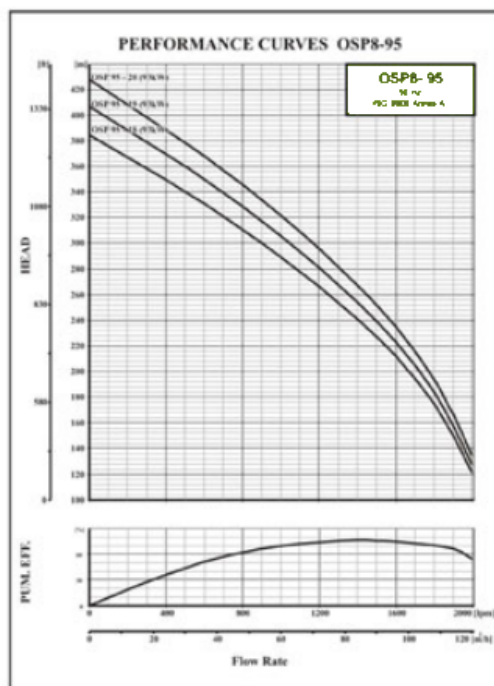
POWER CURVE



HEAD / EFFICIENCY · LOW STAGES



HEAD / EFFICIENCY · MID STAGES



HEAD / EFFICIENCY · HIGH STAGES