

## DIESEL DRIVEN PUMP SPS TDP 20"



### DESIGN SPECIFICATIONS

Suction Connection	600 mm / 24 inch
Delivery Connection	500 mm / 20 inch
Solid Handling	100 mm / 4 inch
Max. Head / Max. Flow	60 mtr / 3500 m <sup>3</sup> /hr
Engine Bell Housing	SAE3 / SAE1
Max. Impeller Diameter	610 mm
Max. Working Pressure	6 bar
Priming	120 CFM / 800 RPM
Best Efficiency Point	
Head and Flow	40 mtr / 2500 m <sup>3</sup> /hr

### MATERIAL OF CONSTRUCTION

STANDARDS	MATERIAL	STANDARDS	MATERIAL
Impeller	SS 316L	Front Wear Plate	SS 316L
Tee Piece	SG 500/7	Rear Back Plate	SG 500/7
Air & Water Separator	SG 500/7	Pump Shaft	SS 431 / Duplex
Pump Casing (Volute)	SG Iron 500/7	Mechanical Seal	SIC - Viton
Back Plate	SG 500/7	Bearing Housing	FG260
Bell Housing to engine	FG260	Coupling	SAE 1,2,3
Bell Housing to Volute	FG 260	Non Return Valve	Cast Iron



**DIESEL DRIVEN PUMP  
SPS TDP 20”**

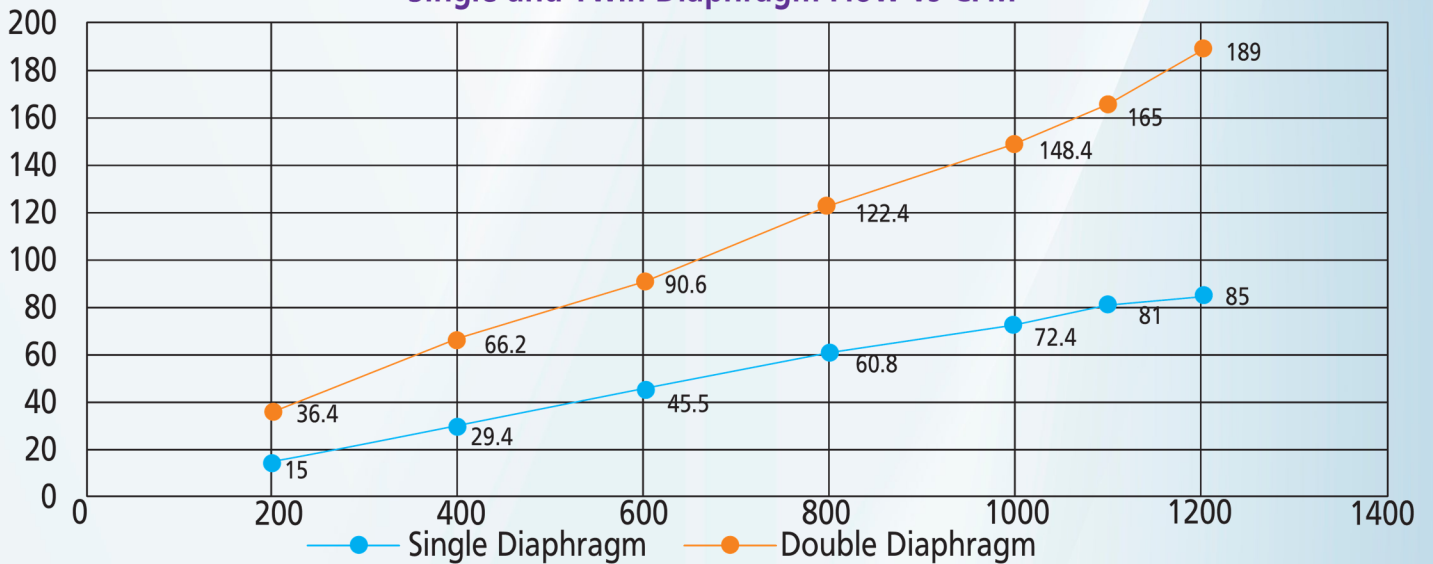


Single Diaphragm



Twin Diaphragm

**Single and Twin Diaphragm Flow vs CFM**



**Priming time 60 cfm**

Pipe internal diameter mm	Area m <sup>2</sup>	60cfm Volume pumps m <sup>3</sup> /sec	Pipe fluid speed m/sec	time for priming in seconds								
				10m	20m	30m	40m	50m	60m	100m	200m	300m
80	0.005029	0.02359	4.691193	2.13	4.26	6.39	8.53	10.66	12.79	21.32	42.63	63.95
100	0.007857	0.02359	3.002364	3.33	6.66	9.99	13.32	16.65	19.98	33.31	66.61	99.92
150	0.017679	0.02359	1.334384	7.49	14.99	22.48	29.98	37.47	44.96	74.94	149.88	224.82
200	0.031429	0.02359	0.750591	13.32	26.65	39.97	53.29	66.61	79.94	133.23	266.46	399.69

**Priming time 120 cfm**

Pipe internal diameter mm	Area m <sup>2</sup>	120cfm Volume pumps m <sup>3</sup> /sec	Pipe fluid speed m/sec	time for priming in seconds								
				10m	20m	30m	40m	50m	60m	100m	200m	300m
80	0.005029	0.04718	9.382386	1.07	2.13	3.20	4.26	5.33	6.39	10.66	21.32	31.97
100	0.007857	0.04718	6.004727	1.67	3.33	5.00	6.66	8.33	9.99	16.65	33.31	49.96
150	0.017679	0.04718	2.668768	3.75	7.49	11.24	14.99	18.74	22.48	37.47	74.94	112.41
200	0.031429	0.04718	1.501182	6.66	13.32	19.98	26.65	33.31	39.97	66.61	133.23	199.84

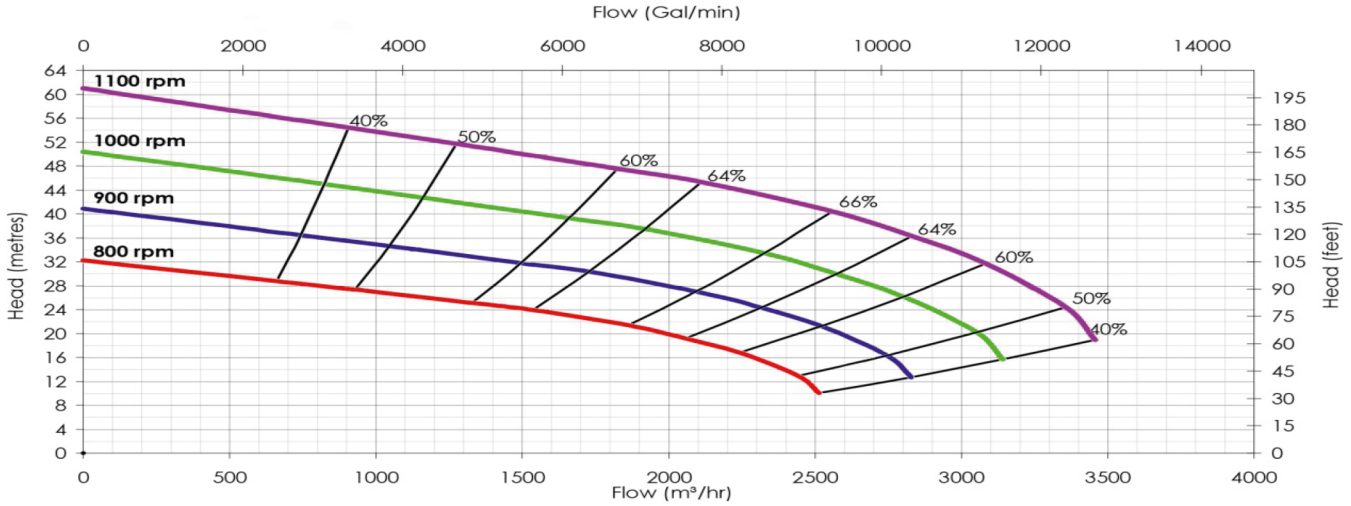


## DIESEL DRIVEN PUMP SPS TDP 20''

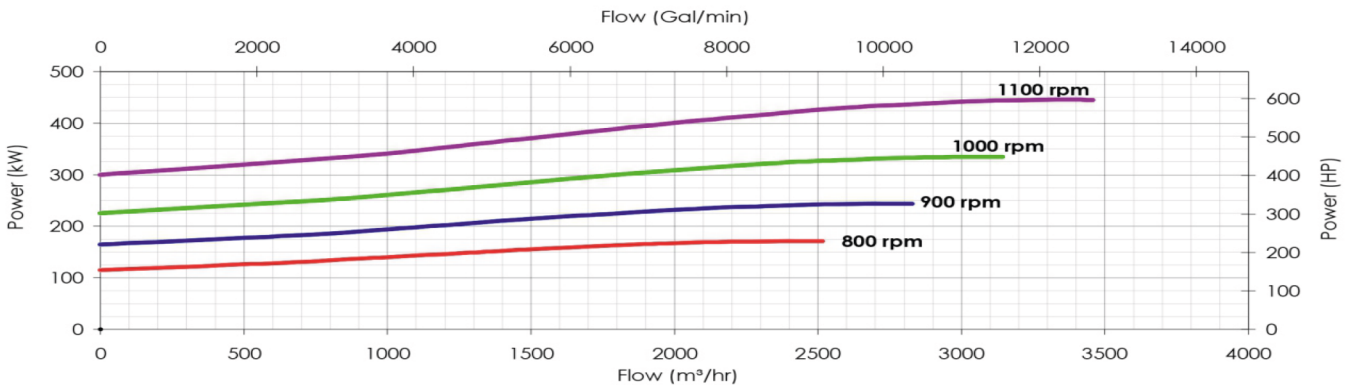
**LOW HEAD DISCHARGE ( DUTY POINT - 40 MTR @ 2500 M3/HR)**

<b>Pump Type</b>	Dewatering (Surface)	<b>No. of Stages in Pump</b>	1
<b>Engine Rating</b>	475 Kw	<b>Max. Solid Handling</b>	100 mm / 4''
<b>Speed</b>	1100 rpm	<b>Method of Coupling</b>	SAE 3/10
<b>Model</b>	SPS TDP 20''	<b>Total Head</b>	60 mtr
<b>Type of Impeller</b>	Closed	<b>Max Discharge</b>	3500 m <sup>3</sup> /hr
<b>Max. Impeller Dia.</b>	610 mm	<b>Impeller Dia.</b>	610 mm
<b>Delivery Size</b>	500 mm	<b>Speed Range</b>	800 to 1100 rpm
<b>Suction Size</b>	600 mm	<b>Efficiency</b>	66 %

### Performance Curve



### Power



### NPSH

