



DIESEL DRIVEN PUMP SPS TDP 4"



DESIGN SPECIFICATIONS

Suction Connection	150 mm / 6 inch
Delivery Connection	100 mm / 4 inch
Solid Handling	75 mm / 3 inch
Max. Head / Max. Flow	52 mtr / 250 m ³ /hr
Engine Bell Housing	SAE3 / SAE1
Engine Fly Wheel	10 inch / 14 inch
Shaft Diameter	50 mm
Max. Impeller Diameter	275 mm
Priming	60 CFM / 800 RPM
Best Efficiency Point	
Head and Flow	40 mtr / 165 m ³ /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



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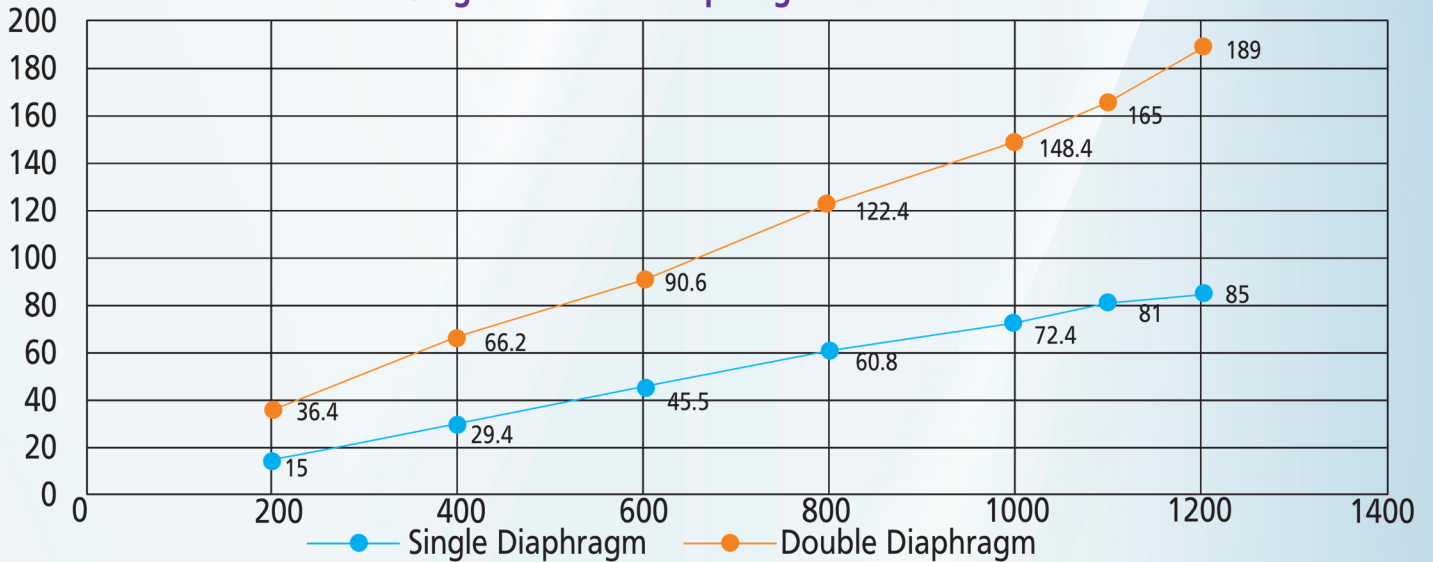


Single Diaphragm



Twin Diaphragm

Single and Twin Diaphragm Flow vs CFM



Priming time 60 cfm

Pipe internal diameter mm	Area m ²	60cfm Volume pumps m ³ /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 ²	120cfm Volume pumps m ³ /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



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LOW HEAD DISCHARGE (DUTY POINT - 40 MTR @ 165 M3/HR)

Pump Type	Dewatering (Surface)	No. of Stages in Pump	1
Engine Rating	45 Kw	Max. Solid Handling	75 mm / 3"
Speed	2200 rpm	Method of Coupling	SAE 3/10
Model	SPS TDP 4"	Total Head	52 mtr
Type of Impeller	3 vane semi open impeller	Max Discharge	250 m ³ /hr
Max. Impeller Dia.	275 mm	Impeller Dia.	275 mm
Delivery Size	100 mm	Speed Range	1500 to 2200 rpm
Suction Size	150 mm	Efficiency	58 %

PERFORMANCE CURVE

