



DIESEL DRIVEN PUMP SPS TDP 10"



DESIGN SPECIFICATIONS

Suction Connection	250 mm / 10 inch
Delivery Connection	250 mm / 10 inch
Solid Handling	75 mm / 3 inch
Max. Head / Max. Flow	55 mtr / 850 m ³ /hr
Engine Bell Housing	SAE3 / SAE1
Engine Fly Wheel	10 inch / 14 inch
Max. Impeller Diameter	295 mm
Priming	60 - 120 CFM / 800 RPM
Best Efficiency Point	
Head and Flow	30 mtr / 620 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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SPS TDP 10"**

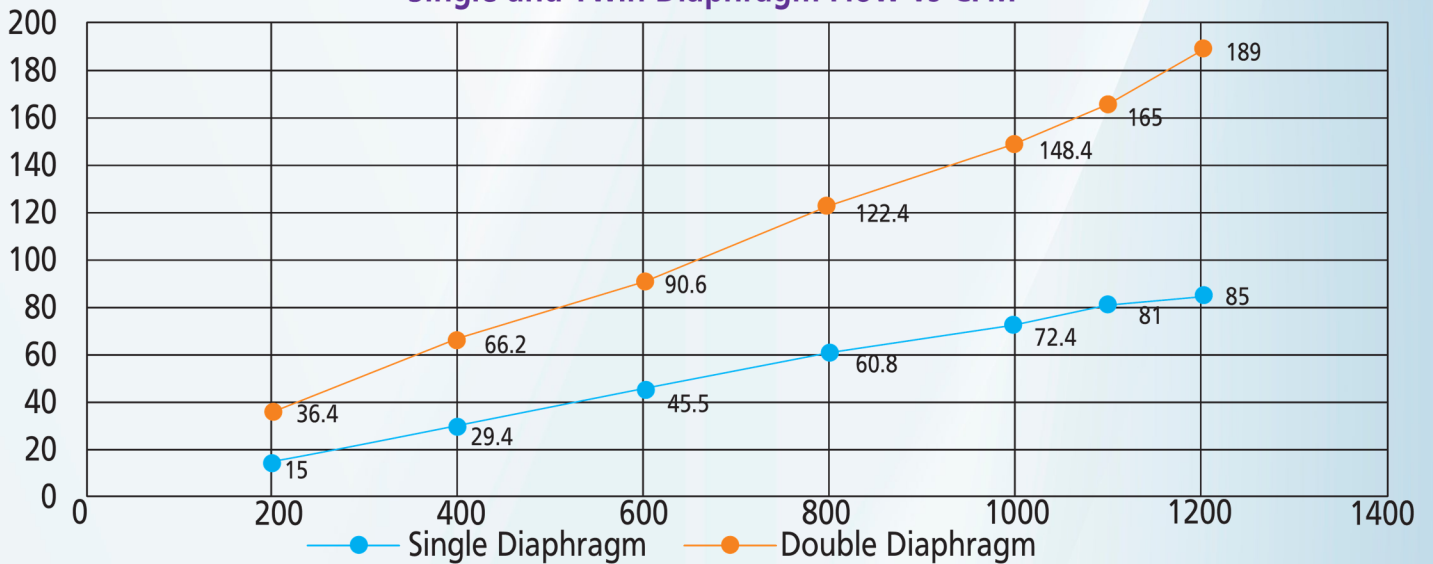


Single Diaphragm



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 - 30 MTR @ 620 M3/HR)

Pump Type	Dewatering (Surface)	No. of Stages in Pump	1
Engine Rating	110 Kw	Max. Solid Handling	75 mm / 3''
Speed	2200 rpm	Method of Coupling	SAE 3/10
Model	SPS TDP 10''	Total Head	55 mtr
Type of Impeller	Closed	Max Discharge	850 m ³ /hr
Max. Impeller Dia.	295 mm	Impeller Dia.	295 mm
Delivery Size	250 mm	Speed Range	1500 to 2200 rpm
Suction Size	250 mm	Efficiency	65 %

