



DIESEL DRIVEN PUMP SPS TDP 16"



DESIGN SPECIFICATIONS

Suction Connection	450 mm / 18 inch
Delivery Connection	400 mm / 16 inch
Solid Handling	125 mm / 5 inch
Max. Head / Max. Flow	44 mtr / 2200 m ³ /hr
Engine Bell Housing	SAE3 / SAE1
Max. Impeller Diameter	500 mm
Max. Working Pressure	5 bar
Priming	120 CFM / 800 RPM
Best Efficiency Point	
Head and Flow	28 mtr / 1500 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



**DIESEL DRIVEN PUMP
SPS TDP 16”**

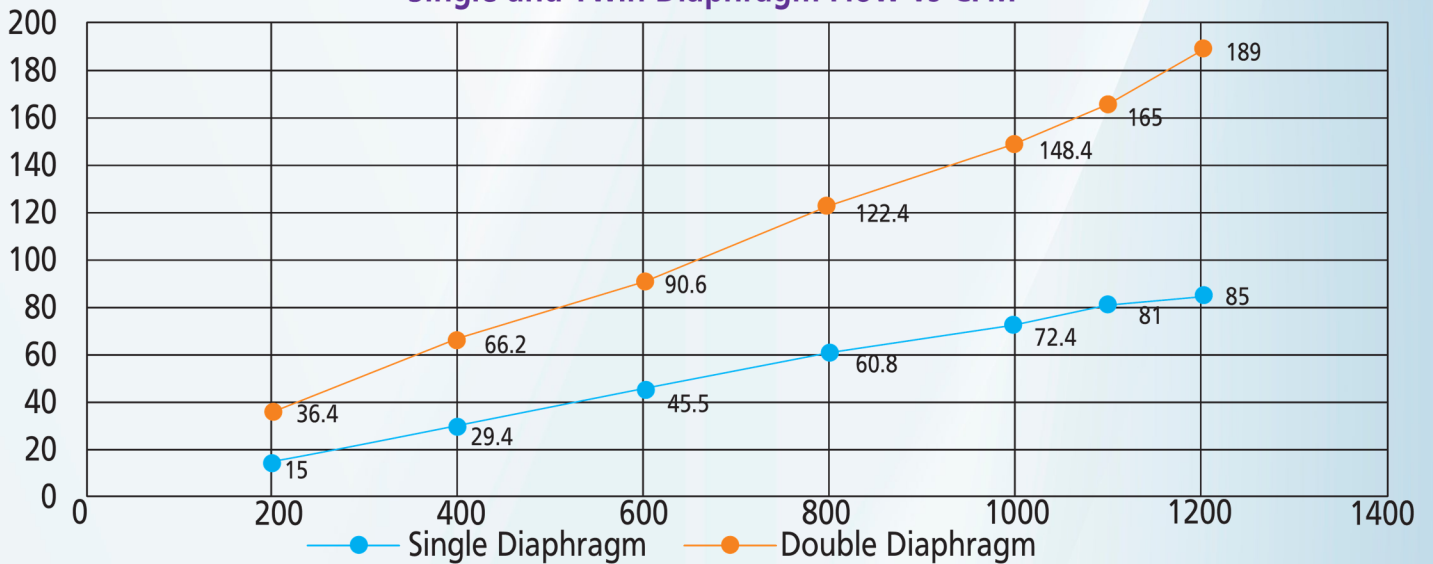


Single Diaphragm



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

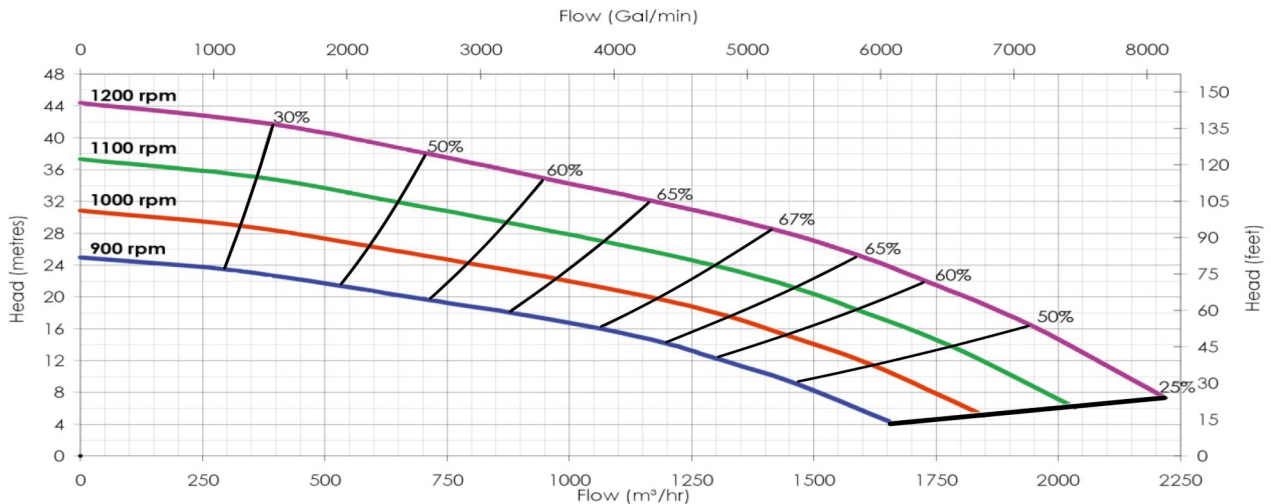


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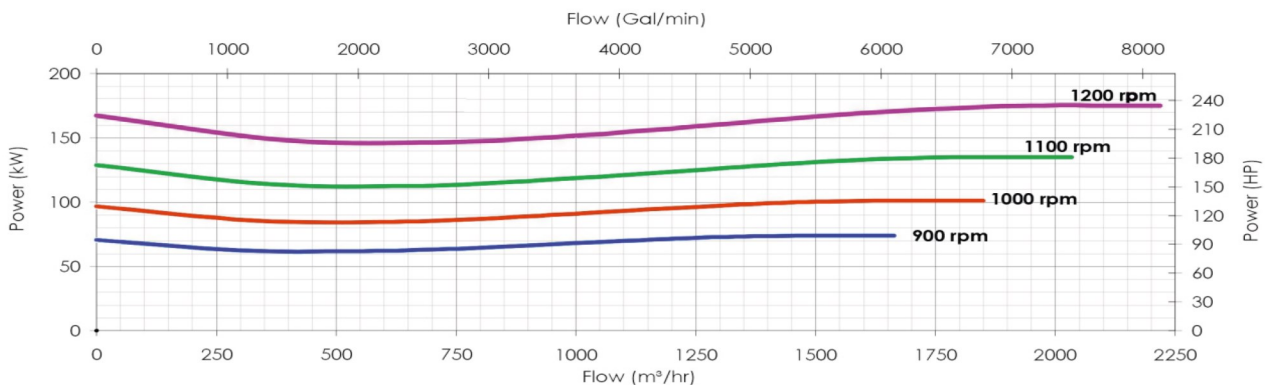
LOW HEAD DISCHARGE (DUTY POINT - 28 MTR @ 1500 M3/HR)

Pump Type	Dewatering (Surface)	No. of Stages in Pump	1
Engine Rating	205 Kw	Max. Solid Handling	125 mm / 5''
Speed	1200 rpm	Method of Coupling	SAE 3/10
Model	SPS TDP 16''	Total Head	44 mtr
Type of Impeller	Closed	Max Discharge	2200 m ³ /hr
Max. Impeller Dia.	500 mm	Impeller Dia.	500 mm
Delivery Size	400 mm	Speed Range	900 to 1200 rpm
Suction Size	450 mm	Efficiency	67 %

Performance Curve



Power



NPISH

