



DIESEL DRIVEN PUMP SPS TDP 8"



DESIGN SPECIFICATIONS

| | |
|------------------------|---------------------------------|
| Suction Connection | 200 mm / 8 inch |
| Delivery Connection | 200 mm / 8 inch |
| Solid Handling | 75 mm / 3 inch |
| Max. Head / Max. Flow | 55 mtr / 800 m ³ /hr |
| Engine Bell Housing | SAE3 / SAE1 |
| Engine Fly Wheel | 10 inch / 14 inch |
| Shaft Diameter | 70 mm |
| Max. Impeller Diameter | 295 mm |
| Priming | 60 CFM / 800 RPM |
| Best Efficiency Point | |
| Head and Flow | 38 mtr / 550 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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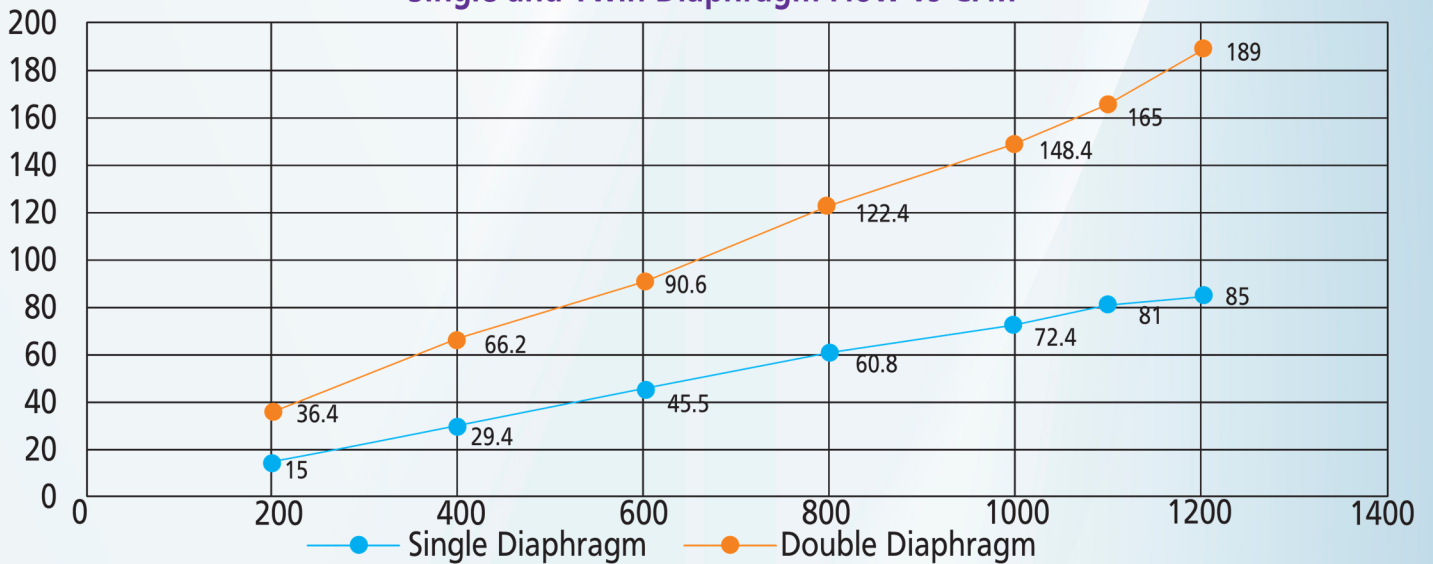


Single Diaphragm



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 |



**DIESEL DRIVEN PUMP
SPS TDP 8"**

LOW HEAD DISCHARGE (DUTY POINT - 38 MTR @ 550 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 8" | Total Head | 55 mtr |
| Type of Impeller | 3 vane semi open impeller | Max Discharge | 800 m ³ /hr |
| Max. Impeller Dia. | 295 mm | Impeller Dia. | 295 mm |
| Delivery Size | 200 mm | Speed Range | 1500 to 2200 rpm |
| Suction Size | 200 mm | Efficiency | 62 % |

PERFORMANCE CURVE

