



APEC-SUN

Auto Prime Engine Pump



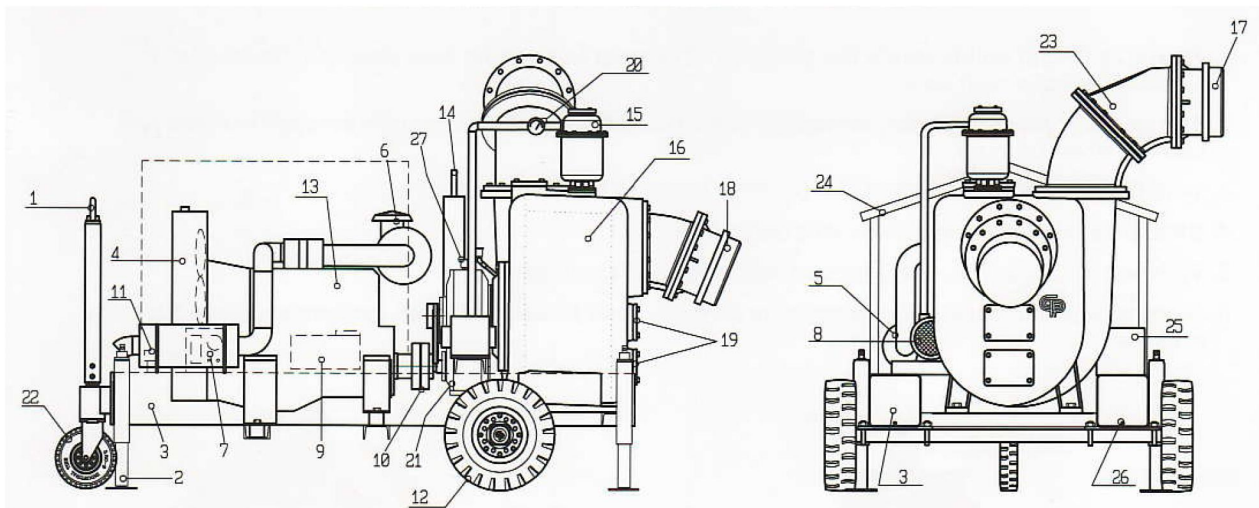
APPLICATIONS:

- The groundwater control or the basement de-water.
- The sewage water drainage.
- Flood waters drainage promptly.
- Drains off water for shops.
- Drain off water in the remote suburb.
- Water control for aqua farm.
- Draining water at basement.

FEATURES:

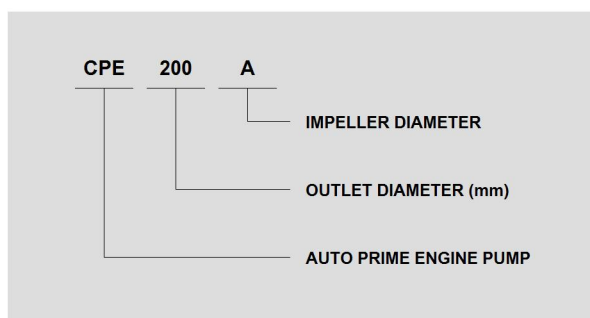
- Auto prime pumps have a special design vacuum that can detect water automatically, under no water condition.
- The special design chamber can separate water and air. The pump will fill water in few minutes automatically.
- The non clog design impeller can pass large solid. The pump has clean hole for cleaning sediment.
- An engine speed adjustment tool allows you control the rotational speed.
- Many types of advanced control system for your choice for warning and protection.
- The better aluminum-made quick connection joint is easy to operate. The rubber water pipe can match the connecting joint firmly and closely.
- Light weight and small size is easy to setup and moveable. This pump is available for draining water at the basement.

EXTERNALITY CONSTRUCTION:

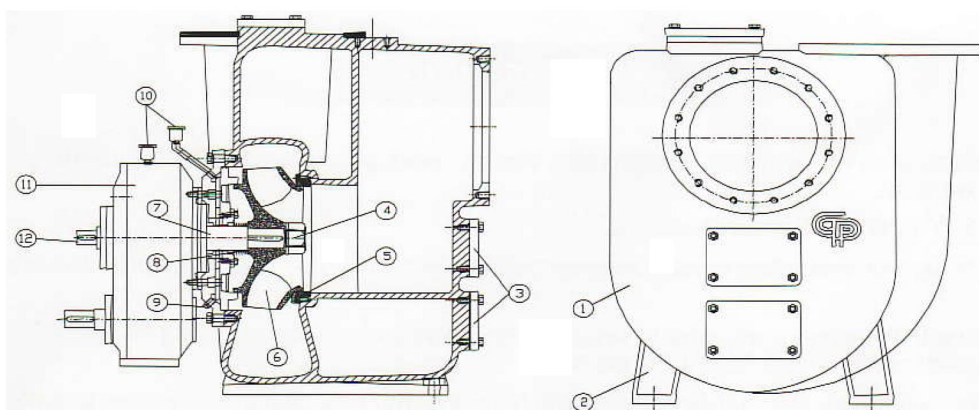


- | | | | |
|--------------------|-------------------|---------------------|-----------------------|
| 1. Drag Rod | 8. Vacuum Pump | 15. Vacuum Chamber | 22. Steering Wheel |
| 2. Adjustable Rack | 9. Battery | 16. Self Prime Pump | 23. Check Valve |
| 3. Fuel Tank | 10. Coupling | 17. Inlet | 24. Protective Shield |
| 4. Radiator | 11. Fuelling Hole | 18. Outlet | 25. Lube Tank |
| 5. Exhaust Pipe | 12. Rubber Wheel | 19. Cleaning Hole | 26. Leak Plug |
| 6. Air Cleaner | 13. Engine | 20. Vacuum Gauge | 27. Filler Hole |
| 7. Control Panel | 14. Lift Rack | 21. Gear Box | |

TYPE DESCRIPTION:



CONSTRUCTIONS:



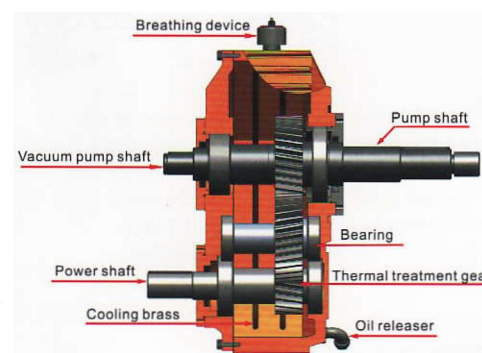
| NO. | NAME | MATERIAL |
|-----|-----------------|----------|
| 1 | Pump Body | FC250 |
| 2 | Foot | FC250 |
| 3 | Cleaning hole | FC250 |
| 4 | Impeller Nut | SS41 |
| 5 | Impeller Sleeve | FC250 |
| 6 | Impeller | FC250 |

| NO. | NAME | MATERIAL |
|-----|--------------------|----------|
| 7 | Shaft | SUS410 |
| 8 | Seal | SIC/TC |
| 9 | Oil Drain Off Plug | - |
| 10 | Oil Cup | SUS410 |
| 11 | Gear Box | FC250 |
| 15 | Vacuum Pump Shaft | SUS410 |

ACCESSORIES:

GEAR BOX

1. Heat Exchanger builds inside the gear box. The gear box can be operated under a long term situation without over heat.
2. The gears process precisely according to AGMA and have been thermal treated. It is silent and smooth when running.
3. With the best quality seal and ball bearing, the gear box can run in long life.
4. Efficiency of gear transmission can reach 95%.
5. With two output shafts, the gear box offers various application.
6. Dimensionally accurater and compact in size, our gear boxes offer high performance free from any problem.

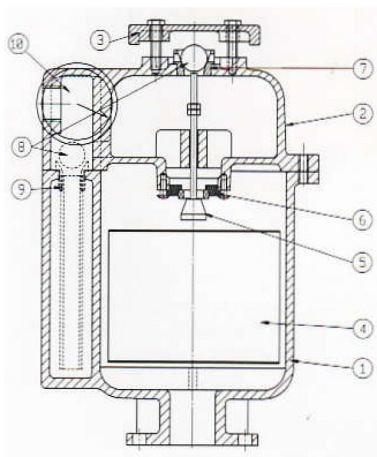


VACUUM PUMP

1. The vacuum pump with a special design rotor, that can work 24 hours continuous operating without overheat.
2. Smooth and quiet continuous operation.
3. Highly efficient oil circulation system ensures perfect lubrication and sealing in all critical areas of pumps.
4. Equipped with the vacuum adjuster to setup the rated vacuum pressure and the wil gas collector that reduced loss of oil less than 0.7% per hour.
5. Automatic clutch is an optional device that will reduce power loss and synchronizes with the pump when water discharge or not.

VACUUM CHAMBER

1. The vacuum chamber is patent certificated in Taiwan, and it's special design for the auto prime pump.
2. Vacuum chamber is made of aluminum, and compact design reduced weight of the pump.
3. Equipped with a vacuum gauge, it is easy to observe pressure of the pump.
4. automatic design will adjust vacuum suction between vacuum pump and pump body. After vacuum pump exhausts, vacuum chamber will be relief pressure automatically that makes no water into the vacuum pump.



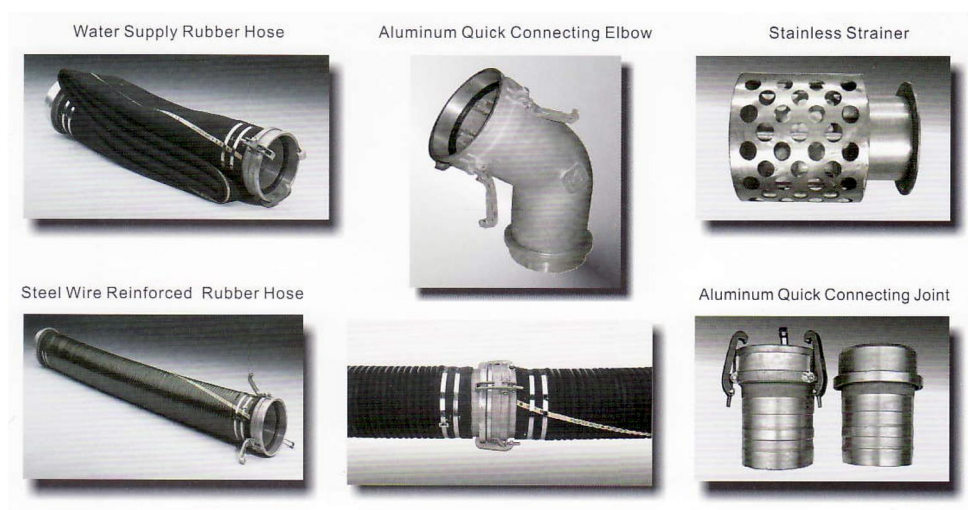
| NO. | NAME | MATERIAL |
|-----|-------------------|-----------------|
| 1 | Casing | Alumnus |
| 2 | Separator | Alumnus |
| 3 | Valve Cap | Alumnus |
| 4 | Floating Ball | Styrofoam |
| 5 | Valve Plug | Plastic |
| 6 | Valve Plug | Plastic |
| 7 | Valve Plug | Plastic |
| 8 | Ball Valve | Rubber |
| 9 | Suction Valve Set | Plastic |
| 10 | Gauge | Stainless Steel |

CONTROL PANEL

1. LED type control panel is suitable in the wet environments.
2. LED type control panel is easier to operate and observe.
3. Control panel is made of stainless steel that can be used in raining day.
4. Digital screen control panel could store 2,000 information.
5. Board is cover by waterproof design to prevent humidity.
6. Digital screen control panel could extend function of GPRS communication to control the engine.

PERFORMANCE PARAMETERS:

| PUMP MODEL | SPEED | CAPACITY | HEAD | DIA | | SOLID PASSAGE | AIR DISPLACEMENT |
|------------|---------|-----------------------|------|------|------|---------------|------------------|
| | (r/min) | (m ³ /min) | (m) | (mm) | (in) | (mm) | (l/min) |
| CPE10 | 3600 | 2 | 24 | 100 | 4 | 20 | - |
| CPE15 | 1500 | 5 | 22 | 150 | 6 | 40 | 300 |
| CPE20A | 1800 | 10 | 30 | 200 | 8 | 45 | 700 |
| CPE20B | 1400 | 10 | 16 | 200 | 8 | 45 | 700 |
| CPE25A | 1800 | 14 | 35 | 250 | 10 | 60 | 700 |
| CPE25B | 1500 | 14 | 25 | 250 | 10 | 75 | 700 |
| CPE30A | 1200 | 21 | 30 | 300 | 12 | 65 | 800 |
| CPE30B | 1000 | 21 | 20 | 300 | 12 | 75 | 800 |
| CPE40A | 1000 | 35 | 25 | 400 | 16 | 85 | 1000 |
| CPE40B | 800 | 35 | 16 | 400 | 16 | 100 | 1000 |



WATER SUPPLY RUBBER HOSE PARAMETERS

| ITEM | DIA | | THICKNESS | | THICKNESS | | WORKING PRESSURE | MAXIMUM PRESSURE |
|------|------|------|-----------|------|-----------|------|-----------------------|-----------------------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (kg/cm ²) | (kg/cm ²) |
| 1 | 100 | 4 | 2.3 | 0.09 | 2.0 | 0.9 | 3 | 6 |
| 2 | 150 | 6 | 3.0 | 0.12 | 3.6 | 2.4 | 3 | 6 |
| 3 | 200 | 8 | 4.0 | 0.16 | 5.0 | 3.4 | 3 | 6 |
| 4 | 250 | 10 | 5.0 | 0.20 | 6.0 | 4.0 | 3 | 6 |
| 5 | 300 | 12 | 6.0 | 0.24 | 8.0 | 5.3 | 3 | 6 |
| 6 | 400 | 16 | 8.0 | 0.32 | 12.0 | 8.1 | 3 | 6 |

STEEL WIRE REINFORCED RUBBER HOSE PARAMETERS

| ITEM | DIA | | THICKNESS | | LENGTH | WEIGHT | | BENDING RADIUS | | WORKING PRESSURE | MAXIMUM PRESSURE |
|------|------|------|-----------|------|--------|--------|---------|----------------|-------|-----------------------|-----------------------|
| | (mm) | (in) | (mm) | (in) | | (kg/m) | (lb/ft) | (mm) | (in) | (kg/cm ²) | (kg/cm ²) |
| 1 | 100 | 4 | 6 | 0.24 | 1-15 | 4 | 2.7 | 600 | 23.6 | 5 | 10 |
| 2 | 150 | 6 | 7 | 0.28 | 1-15 | 7 | 4.7 | 900 | 35.4 | 5 | 10 |
| 3 | 200 | 8 | 8 | 0.31 | 1-15 | 10 | 6.7 | 1200 | 47.2 | 5 | 10 |
| 4 | 250 | 10 | 9 | 0.35 | 1-12 | 15 | 10.1 | 1500 | 59.1 | 5 | 10 |
| 5 | 300 | 12 | 10 | 0.39 | 1-12 | 18 | 14.8 | 1800 | 70.9 | 5 | 10 |
| 6 | 400 | 16 | 14 | 0.55 | 1-10 | 42 | 28.3 | 3000 | 118.1 | 5 | 10 |