



Mobile Pump Drive with Diesel Engine

WGDP Series Dry Priming Pumps Drive With Diesel Engine

New-generation mechanical/electrical mobile pump drive with diesel engine from **Wings Pumps** provides high reliability, reduced installation and maintenance costs, with a longer lifetime.

CERTIFIED
ISO 9001
ISO 14001
ISO 45001
ISO 50001



37/1 Soi Tiwanon 48, Tiwanon Rd.,
T.Thasai, A.Muang, Nonthaburi 11000
Tel: +66 2 580 8011 - 4
www.wgflow.com



APPLICATIONS



Storm Water Drainage

Supports structures, channels and pipes that carry stormwater (rain water) to ponds, lakes, streams and rivers.



Irrigation and Aquaculture

Used for irrigation and aquaculture ecosystems. Environmentally-friendly.



Raw Water and Processed Water

Supports raw water intakes and applicable intakes for water treatment plants.



Sewage and Recirculation Sludge

Designed to move the thickest mixtures and pass large pieces of debris without damage or wear on the pump.



Municipality

Well-Integrated with municipality work and projects with high requirements.



Renewable Energy

can be used with solar cells for sustainable energy with smart device that properly manage the process and prevent pump damage.

KEY BENEFITS



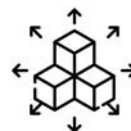
Better Power Consumption

Save more power with Premium Efficiency Motors.



Stability and Reliability

Wings Pumps' advanced engineering provides better stability and reliability.



Wide Range of Operations

Wings Pumps are more versatile and can be used in a wide variety of operations.



High Flexibility in Installations

Wings Pumps can be installed perfectly in various situations and setups.



Flexibility in Material

Customize pumps with various material and composites to better suit your operations.



Internet of things

Product Introduction

Diesel Engine

- Equipped with high-quality engine and high-performance pump body, strong power, high torque, easy maintenance, easy start
- A high-strength cardan coupling is adopted between the engine and the pump body to make the operation more stable
- All movable devices are effectively fixed to further improve the shock absorption
- The radiator and rotating parts of the unit are equipped with protective covers to avoid damage caused by direct contact between man and machine.

Pump

- Customized drainage functions for different flow and head requirements
- With Dry-priming function, suction lift 6–8.5m.
- Pump body disassembly structure: easy to maintain and troubleshoot. Only ordinary tools are needed to quickly complete daily maintenance, saving time and effort
- Open impeller structure non-clogging design, strong passing performance
- Easy to use, just put the suction tube deep below the liquid level to work (Fill with water for the first start).

Trailer

- Equipped with Australia-specific trailer chassis and torsion bridge structure alloy steel rim, automobile vacuum tires
- Equipped with vehicle control connectors it can trailer brake, steering and tail light control when towing the trailer



WGDP Series Vacuum Prime Pump

Design Features

WGDP Pumps presents a range of Vacuum Priming Centrifugal. These pumps are economical & offer trouble-free operation in handling solids laden liquids and slurries. Pump features a large volume design which allows them to re-prime automatically in a completely open system without the need of suction or discharge check valves. And this is workable with the pump only partially filled with liquid and completely dry suction line. Pump can handle up to 3"(76.2mm) spherical solids, depending on pump models. In case pump shafts or bearings need service, the entire rotating assembly can be removed without disturbing pump casing or pipelines.

Key Advantages

- Superior Solid Handling
- Self Priming
- Easy Maintenance

Material Options

- Cast Iron, Ductile Cast Iron, Bronze, SUS304, SUS316,

Available Discharge Sizes

- 2", 3", 4", 6", 8", 10"

Impeller Options

- Two-vane, ductile iron, semi-open solids-handling impeller handles up to 75 mm (3") diameter solids, depending on pump model. Pump out vanes on the impeller shroud reduce foreign material buildup behind the impeller and reduce pressure on seal and bearings.

Cartridge Seal

- Available in Tc/Tc/Viton mechanical seal to handle abrasive liquid and sewage, Industrial waste etc.. Custom designed seal to handle corrosive chemical like Keton, Xylene, Tolulene

Dual Bearing Protection

- An atmospheric barrier along with two lip seals provide additional protection of the pump bearings. This unique design also allows for quick and easy external monitoring of the bearing cavity (not available on 2" models).

Removable Rotating Assembly

- The entire rotating assembly can be removed without disturbing the pump volute or piping. Pusher bolt holes are provided to assist with removal. This allows for quick and easy installation of a spare rotating assembly, resulting in less downtime.

Drive Options

- Can be coupled with standard NEMA & IEC motors. No special motor required. Also can be coupled with diesel engine.

Coupling Options

- Direct Coupled
- Belt – Pulley Driven

Model Code

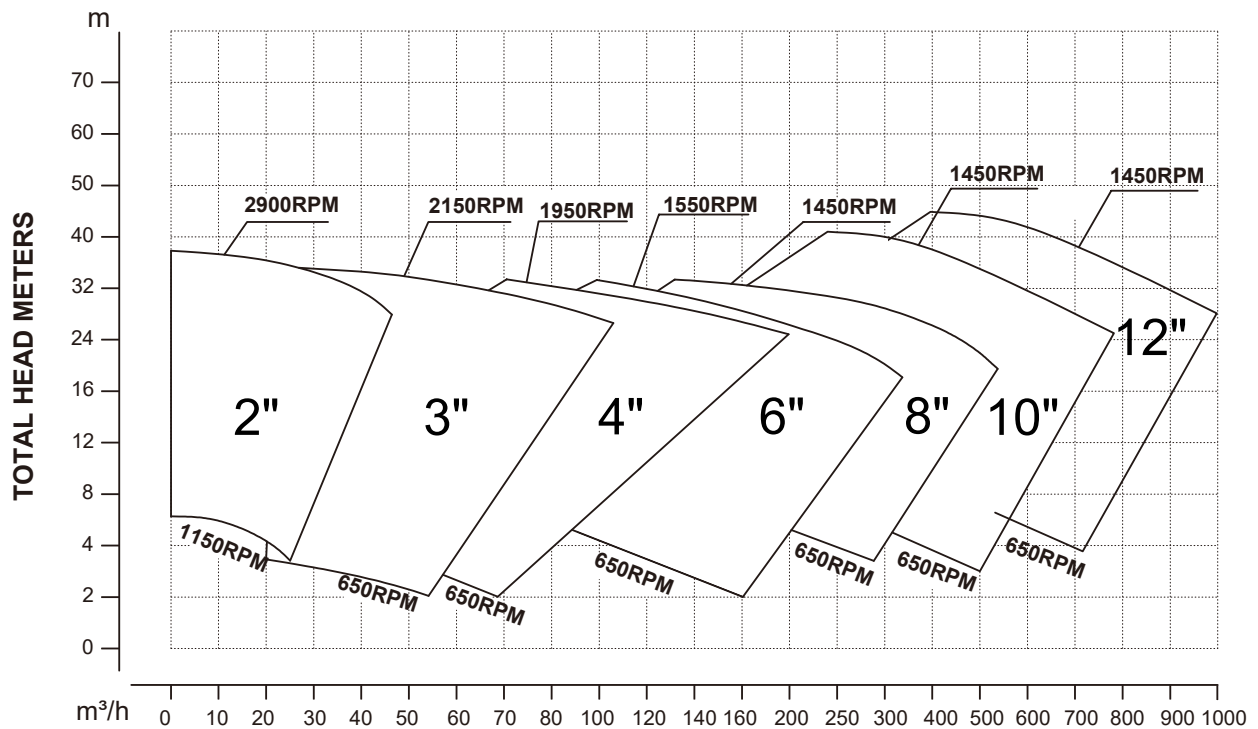
WGDP- 100

Inlet and outlet: 4"(100mm)

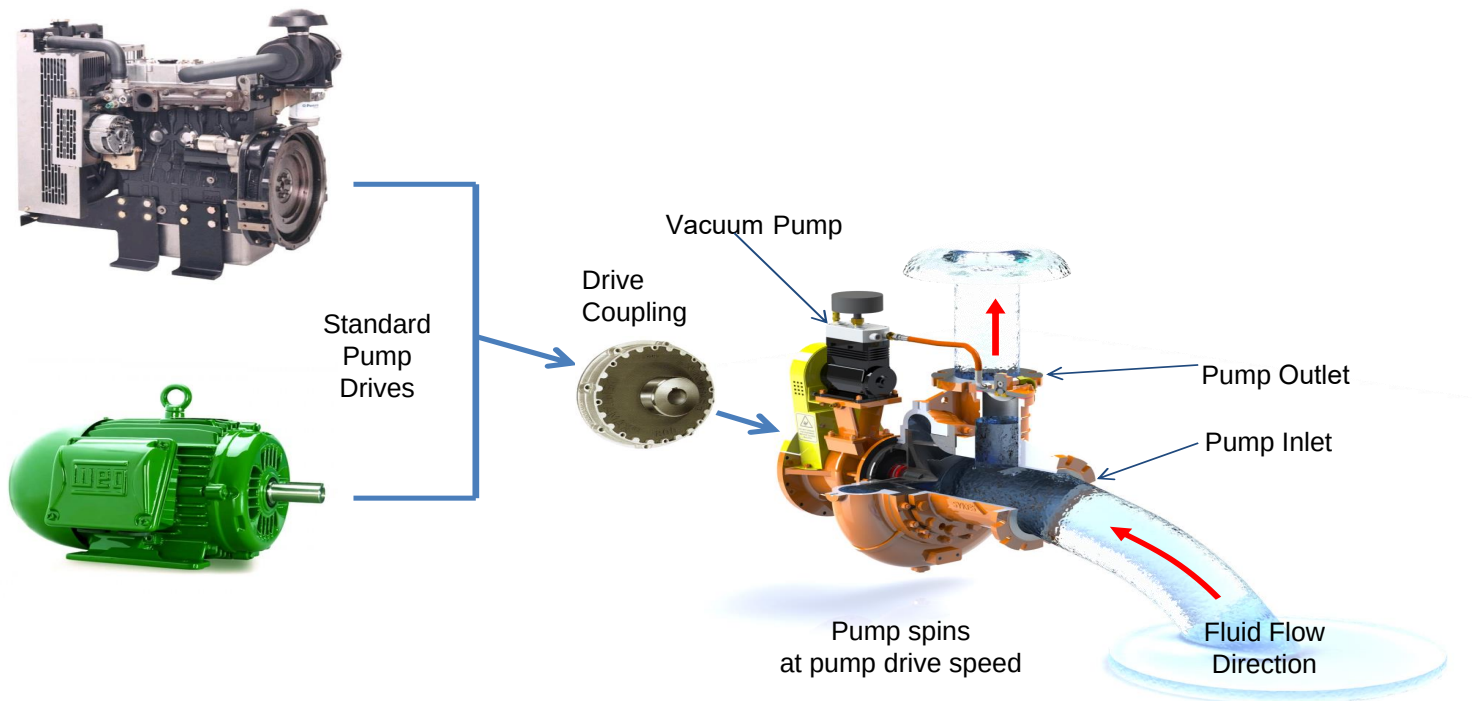
Dry-priming pump drive with diesel engine



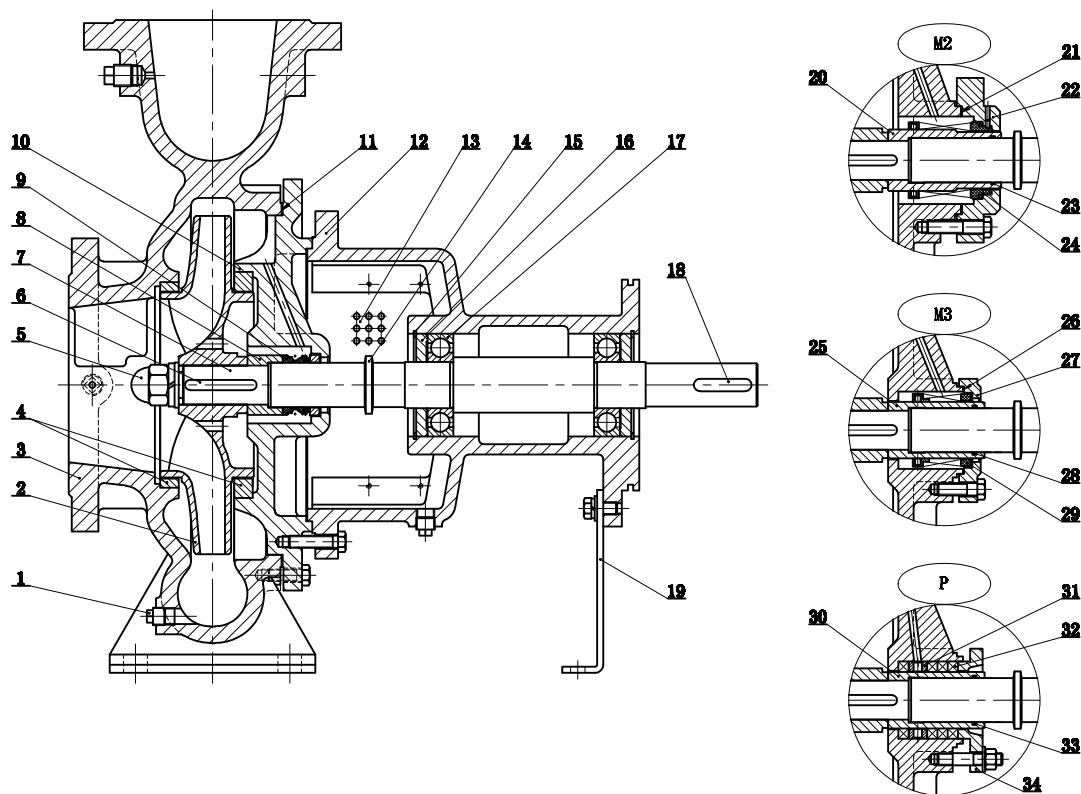
Performance Charts



Design Features/Advantages



Section End-Suction Centrifugal Pump



- | | | |
|-----------------------------|------------------------------------|------------------------------------|
| 1. Screw plug | 12. Bearing bracket | 23. O-ring |
| 2. Impeller | 13. Protection cover | 24. Mechanical seal(M2 type) |
| 3. Pump housing | 14. Thrower | 25. Shaft sleeve(M3 type) |
| 4. Wear ring | 15. Lock ring | 26. Gasket |
| 5. Impeller nut | 16. Cover(bearing) | 27. Mechanical seal cover(M3 type) |
| 6. Key for impeller | 17. Bearing | 28. O-ring |
| 7. Shaft | 18. Coupling key | 29. Mechanical seal(M3 type) |
| 8. Distance ring | 19. Pump foot | 30. Shaft sleeve(P type) |
| 9. Mechanical seal(M1 type) | 20. Shaft sleeve(M2 type) | 31. Gland ring |
| 10. Pressure cover | 21. Gasket | 32. Gland packing |
| 11. Housing seal | 22. Mechanical seal cover(M2 type) | 33. O-ring |

Material

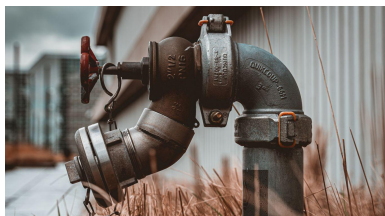
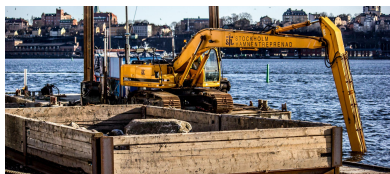
Standard material list for main components

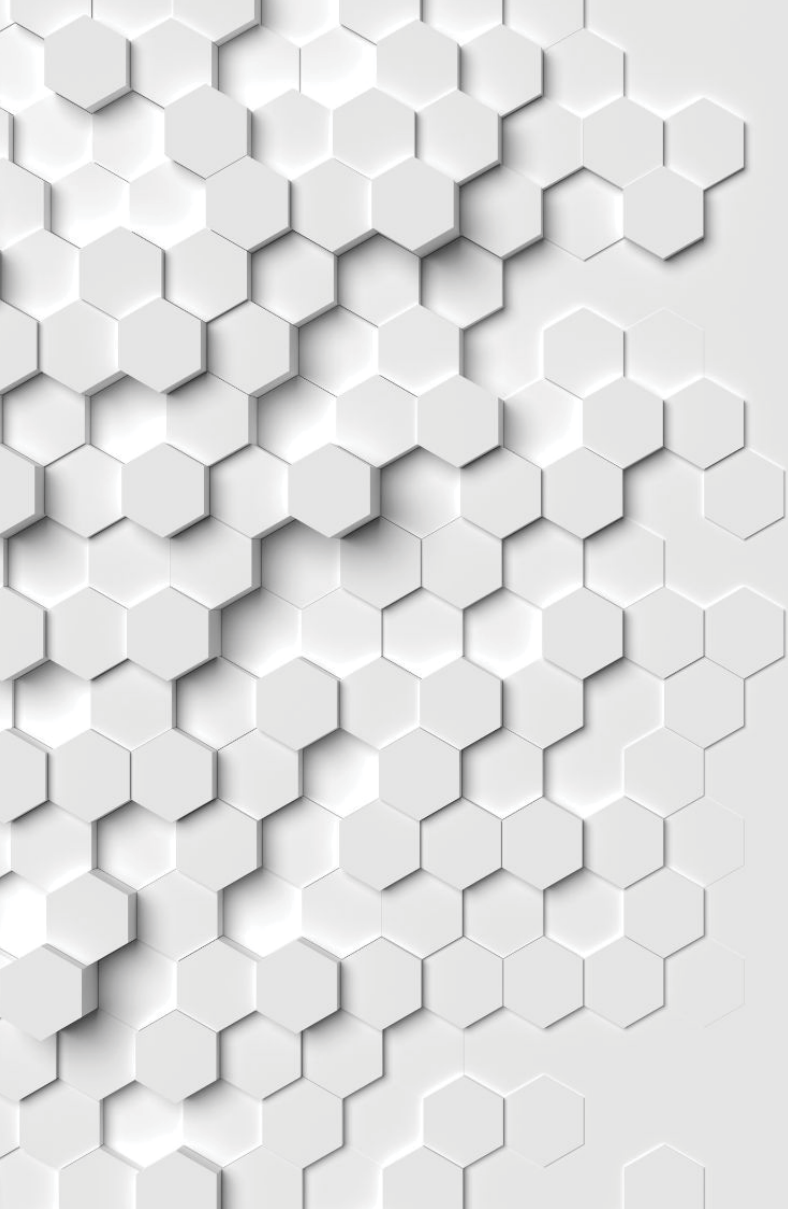
Component	Material	Specification	Component	Material	Specification
Stainless steel	Grey cast iron	FC250	Impeller Suction ring	Grey cast iron	FC250
	Ductile cast	FCD400-18		Ductile cast	FCD400-18
		FCD450-10			FCD450-10
		FCD500-7			FCD500-7
	Cast steel	ZG230-450		Cast steel	ZG230-450
		ZG270-500			ZG270-500
	Cast steel	CF8(304)		Cast steel	CF8(304)
		CF3(304L)			CF3(304L)
		CF8M(316)			CF8M(316)
		CF3M(316L)			CF3M(316L)
		2205、2507			2205、2507
	Cast copper	ZCuAl10Fe3		Cast copper	ZCuAl10Fe3
		ZCuSn5Pb5Zn5			ZCuSn5Pb5Zn5
Shaft	Carbon steel	Alloy steek 45 40Cr	Shaft sleeve Mechanical Seal location base	Stainless steel	SUS 420
	Stainless steel	SUS 420			SUS 431
		SUS 431			SUS 304
		SUS 304			SUS 304L
		SUS 304L			SUS 316
		SUS 316			SUS 316L
		SUS 316L			S31803
		S 31803			S32750
		S 32750			

APPLICATIONS

WGDP diesel engine driven water pumps are used in a wide range of locations and operating conditions, making them highly popular with customers in many industries.

- Construction Industry
- Building and Construction Works - Port Industry
- Chemical Industry
- Paper Industry
- Mining Industry
- Fire Protection
- Environmental Protection





wings
PUMPS

CERTIFIED

ISO 9001
ISO 14001
ISO 45001
ISO 50001



37/1 Soi Tiwanon 48, Tiwanon Rd.,
T.Thasai, A.Muang, Nonthaburi 11000
Tel: +66 2 580 8011 - 4
www.wgflow.com

