



REGENERATIVE  
**TURBINE PUMP**  
KOTP-FD-150

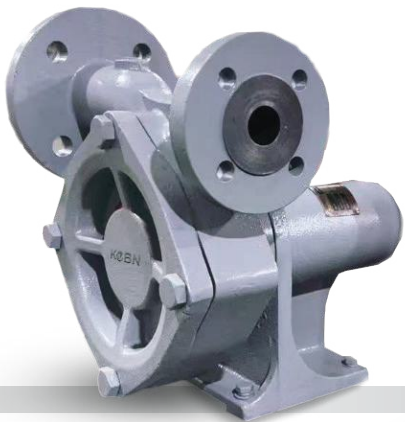


# INTRODUCTION

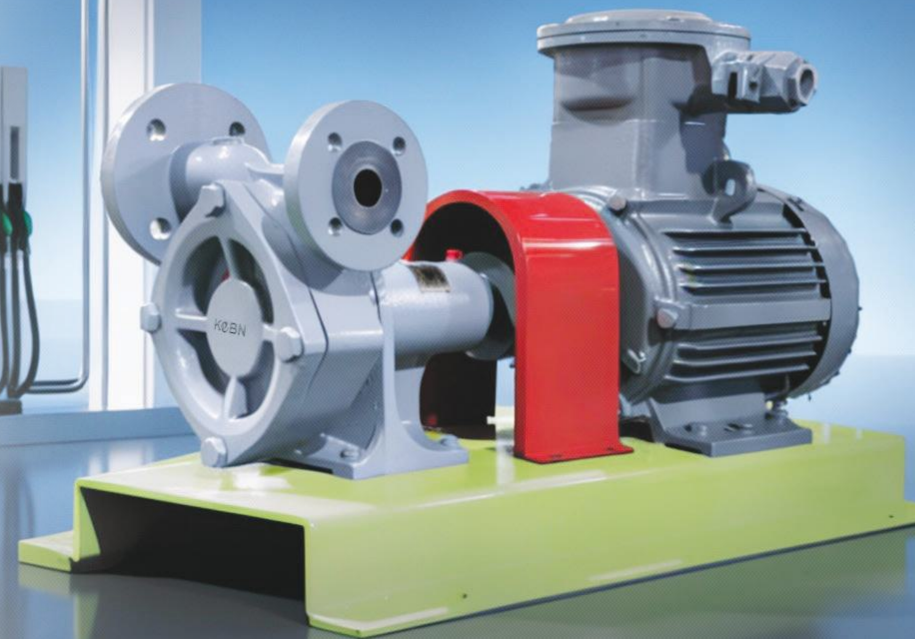
The **KOBN Regenerative Turbine Pump** is precision-engineered to deliver reliable performance in high-pressure, low-flow applications. Designed with advanced regenerative turbine technology, this pump efficiently handles clean liquids by continuously recirculating fluid between the impeller vanes and the surrounding channel.

As the impeller rotates, liquid enters through the inlet port and is accelerated multiple times within the turbine chamber. This regenerative action builds pressure progressively, ensuring smooth, stable, and pulsation-free discharge. The compact and robust design makes it ideal for demanding industrial environments where consistent pressure and performance are critical.

Built with high-quality materials and precision-machined components, KOBN pumps ensure long service life, reduced maintenance, and energy-efficient operation.



## REGENERATIVE **TURBINE PUMP**



# APPLICATIONS.

The **KOBN Regenerative Turbine Pump** is designed for applications requiring high pressure at relatively low flow rates. Its regenerative turbine technology enables smooth, stable, and pulsation-free fluid transfer, making it ideal for processes where consistent pressure and precise liquid handling are critical.

Engineered for reliability and efficiency, KOBN pumps are widely used across industrial, commercial, and process environments where compact design, high head performance, and dependable operation are essential. The pump is suitable for handling clean liquids, light fuels, and compatible chemicals in both continuous and intermittent duty systems.



## RO & WATER TREATMENT PLANTS

Provides steady pressure for filtration, purification, and membrane systems, ensuring smooth and reliable water processing.



## CHEMICAL DOSING & TRANSFER

Accurately transfers chemicals at controlled flow rates, ideal for precision dosing and safe fluid handling.



## AUTOGAS & LPG TRANSFER SYSTEMS

Delivers reliable pressure for LPG and autogas movement in storage and dispensing systems.



## FUEL TRANSFER APPLICATIONS

Efficiently handles fuel transfer operations requiring high head and low flow, ensuring safe and continuous performance.



## PRESSURE BOOSTING SYSTEMS

Enhances fluid pressure in industrial and commercial systems where stable, high-pressure output is required.



**REGENERATIVE  
TURBINE PUMP**

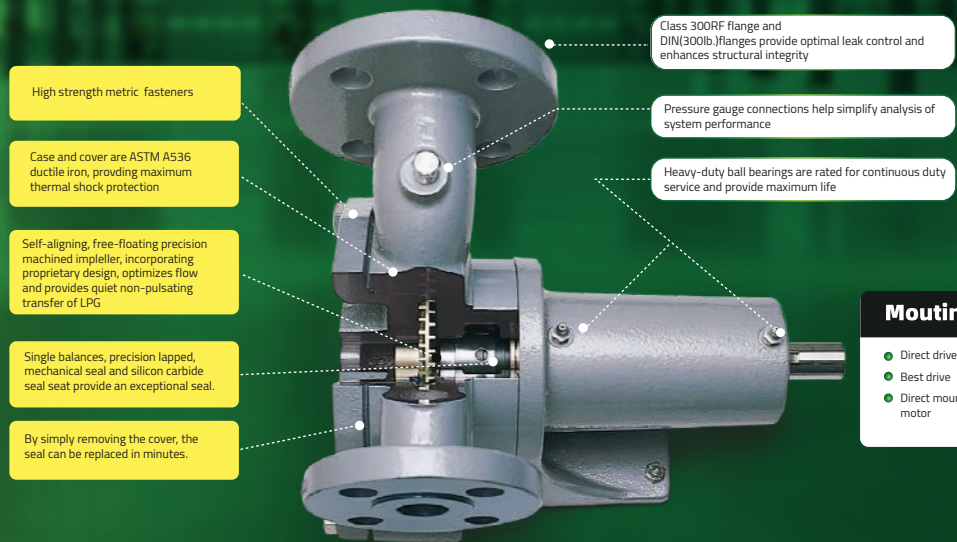


# FEATURES & BENEFITS

|                                        |                                                        |
|----------------------------------------|--------------------------------------------------------|
| Regenerate turbine type                | Able to handle liquefied gases without flashing        |
| High flows & differential pressures    | Ideal for dual hose dispensers and multiple dispensers |
| Heavy duty bearings                    | Long bearing life                                      |
| Single mechanical seal                 | Silicon carbide seal seat requires less maintainance   |
| Floating impeller                      | Minimizes wear and lasts longer                        |
| ASME OR DIN, metric fasteners optional | Usability for US or overseas applications              |
| Runs at 50 or 60 cycle(HZ)             | Usability for US or overseas applications              |
| Motor specification                    | Ex d IIB T4 Gb IP55                                    |
| Two mounting options                   | Installation versatility                               |



## REGENERATIVE TURBINE PUMP



### Mounting Options

- Direct drive with coupling
- Best drive
- Direct mounted with C-face electric motor



# MATERIAL SPECIFICATIONS.

## Part Standard Material

|                  |                        |
|------------------|------------------------|
| Case, cover      | Ductile iron ASTM A536 |
| Impeller         | Copper alloy CA-836    |
| Impeller key     | Steel, zinc plated     |
| Seal seat        | Silicon carbide        |
| Seal rotor       | Carbon                 |
| Seal metal parts | Stainless steel        |
| Seal sleeve      | Stainless steel        |
| Seal housing     | Stainless steel        |
| Shaft            | Steel                  |
| Frame            | Ductile iron ASTM A536 |
| Bearing cap      | Ductile iron ASTM A536 |
| O-rings          | Buna-N                 |
| Retainer rings   | Steel                  |
| Bearings         | Ball                   |

## Operating Specifications

Inlet: 1-1/2" ASME Class 300 RF (DIN optional)

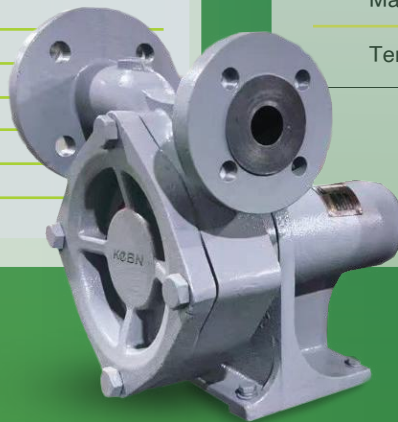
Outlet: 1" ASME Class 300 RF (DIN optional)

RPM: 3450 @ 60 Hz, 2880 @ 50 Hz

Maximum working pressure: 400 psig (27.6 bar)

Maximum driver: 20 hp (15 kW)

Temperature range: -25° to 225°F (-32° to 107°C)



Advanced **Regenerative**  
Performance

**REGENERATIVE**  
**TURBINE PUMP**



# PERFORMANCE CURVE.

**2880 RPM @ 50 Hz**

**Differential pressure**

10.0 bar

145.0 psi

**Flow**

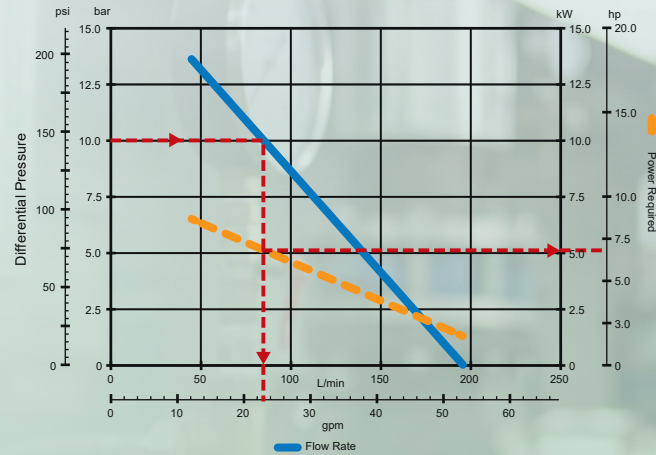
85 L/min

22.5 gpm

**Power required**

5.1 kW

6.8 hp



**3450 RPM @ 60 Hz**

**Differential pressure**

10.0 bar

145.0 psi

**Flow**

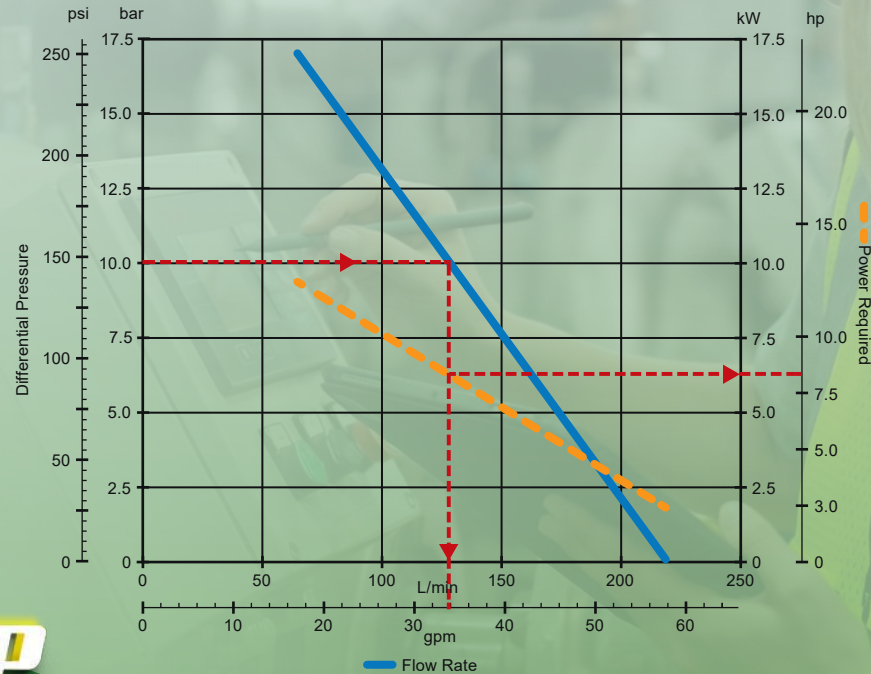
128 L/min

33.8 gpm

**Power required**

6.3 kW

8.4 hp



REGENERATIVE  
**TURBINE PUMP**



Advanced **Regenerative** Performance

**KOBN**  
General Electric Solution



## KOBN General Electric Solution

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