





## FEATURES & BENEFITS

### 1. SHAFT SLEEVES

**FEATURE:** Replaceable shaft sleeves are available in a wide variety of metallurgies  
**BENEFITS:** Protect the shaft against corrosion and wear

### 2. SHAFT SEALING

**FEATURE:** Pumps are available in a variety of mechanical seals of packing configurations

### 3. IMPELLERS

**FEATURES:** Hydraulically and dynamically balanced double suction Francis Vane type impellers  
**BENEFITS:** The hydraulic matching of casing and impeller reduces turbulence and recirculation, ensuring high efficiency and quiet performance over the entire range of operation

### 4. SUCTION BAFFLES

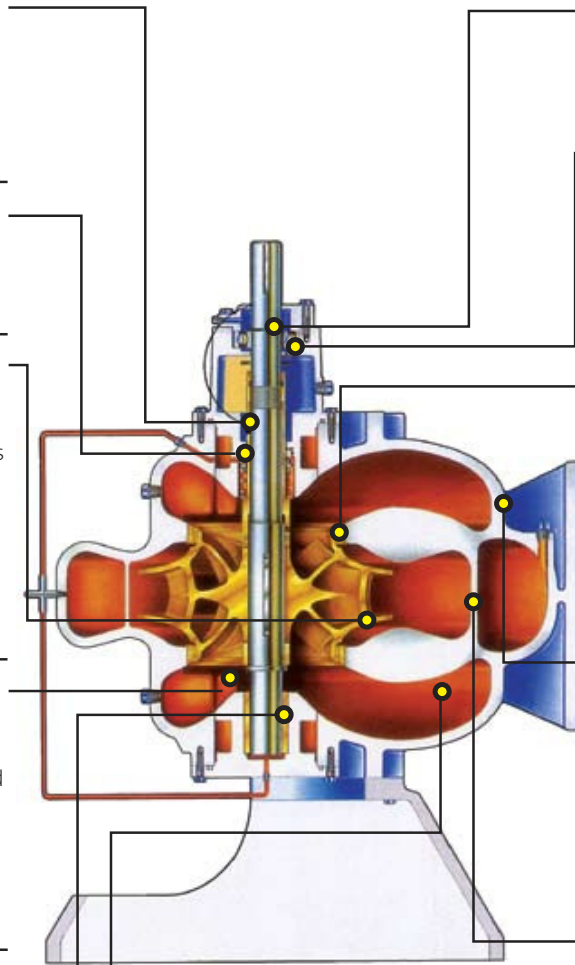
**FEATURES:** Unique integrally cast suction baffles direct flow into the impeller eye. Inlet flow is accelerated gradually, suppressing the tendency toward velocity distortion  
**BENEFITS:** Ensure even suction distribution and insuring quiet vibration-free operation

### 5. BEARING HOUSING

**FEATURE:** Bearing housing designed with Seal-less Internal Lower Water Lubricated Sleeve Bearing  
**BENEFIT:** This ensures no risk of seal leakage at lower shaft end

### 6. SUCTION CHAMBERS

**FEATURES:** Suction inlet configuration incorporates precise geometric design  
**BENEFITS:** Increasing hydraulic efficiency and lowering net positive suction head requirements



### 7. SHAFT

**FEATURE:** Large diameter precision ground shaft  
**BENEFIT:** Minimizes vibration

### 8. BEARINGS

**FEATURE:** High Thrust Bearings are selected in conjunction with shaft bearing span and large diameter shaft  
**BENEFIT:** Provides a minimum of 50,000 hour (B-10) life

### 9. CASE WEAR RINGS

**FEATURES:** Replaceable case wear rings protect pump casing from wear and permit simple maintenance of proper running clearances  
**BENEFITS:** To reduce maintenance costs and maintain high operating efficiency

### 10. CASING

**FEATURE:** Suction and discharge flanges are integrally cast into the lower casing half.  
**BENEFITS:** This allows for removal of the rotating assembly without disturbing connected piping. Casing is foot mounted to reduce vibration

### 11. VOLUTE

**FEATURES:** The compensated dual volute design virtually eliminates radial forces acting against the shaft, exceeding seal and bearing life. Double volute construction is available on selected pumps ranging above 4" discharge  
**BENEFITS:** The double volute design improves efficiency by providing two individual volute passageway to guide the flow in the casing. This casing feature extends seal and bearing life, minimises vibration and provides quiet operation

*PACO's experience, plus their commitment to quality and an aggressive research and development programme, has produced the finest premium efficient pumps in the industry. Using computer aided design technology, PACO has developed pumps producing operating high efficiencies, thereby reducing operating costs and saving money. The innovative impeller and pump design produces a higher operating condition efficiency and provides a wider band of best efficiency. As a result, low operating costs are ensured even during off design operating conditions.*

## HVAC PIPING ACCESSORIES



**PSD (Suction diffuser)**

**Features:**

- > Eliminates need for 90° elbow, stainer, flow stabilizer and reducer
- > Simplifies pump installation
- > Minimizes costs
- > Promotes smooth, even flow profile
- > Stainless-steel strainer
- > Size 2" to 16"
- > 125# ANSI flanges
- > Standard working pressure: 175 psi (non standard psi rating available upon request)



**CBS (Combination valve)**

**Features:**

- > Functions as check valve, shutoff valve and balance valve
- > Simplifies pump installation
- > Minimizes costs
- > Promotes smooth, even flow profile
- > Spring-loaded bronze disc minimizes chatter
- > Vertical or horizontal orientation
- > Size 2" to 12"
- > 125# ANSI flanges
- > Standard working pressure: 175psi (non standard psi rating available upon request)

## AFTER SALES, PARTS AND SERVICE

Grundfos Pumps Sdn Bhd is committed to After Sales Service. Highly trained technicians can assist customers with initial start-up, troubleshooting, service and repair.

Our technicians can evaluate your system's energy usage with the pumping systems assessment tools and provide recommendations for the engineers and facility operators.

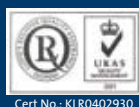
Genuine PACO parts are pre-engineered and pre-packaged to simplify selection, ordering, and stocking. Virtually all required parts for PACO products are available as kits.

\*Optional Offer: Laser Alignment at site by Grundfos Pumps Sdn Bhd



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