



Enriching Lives

# KIRLOSKAR PROCESS PUMP - GK(P)

ISO 2858 / DIN EN 22858 / ISO 5199

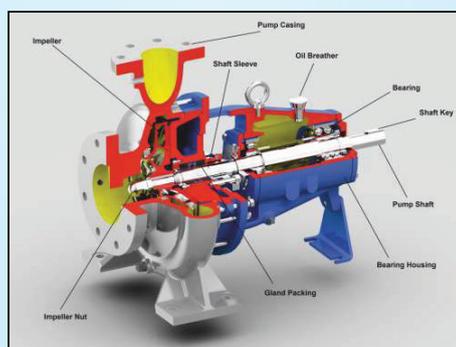


## Performance Range:

- Discharge capacity (Q) : Up to 500 m<sup>3</sup>/hr (at 1450 rpm)
- Delivery head (H) : Up to 150 m
- Available nominal speeds (n) : 2900, 1450, 980 rpm at 50 Hz & 3500, 1750, 1150 rpm at 60 Hz
- Max. operating pressure (P) : 16 bar (Suction pressure 5 bar)
- Temperature range (t) : (-)50 °C up to (+)350 °C
- Pump Sizes (DN) : 25 mm to 150 mm

## Applications:

- GK(P) pumps are used for handling various types of chemical liquids from various process industries.
- GK(P) pump is End suction centrifugal Process pump.
- Pump dimensions are fully confirming to ISO 2858/DIN EN 22858 and technically meeting requirements of ISO 5199



## Constructional Features:

- Design is in compliance to ISO 5199.
- Wide range of hydraulics to meet the customer's requirements
- Back pullout design for ease and quicker maintenance.
- Enclosed impeller having smooth hydraulic passages for better efficiency.
- Modular design concept for maximum interchangeability of components among different pump models.
- Heavy duty construction for continuous operation.
- Available in variety of material of constructions for the liquid to be pumped.
- Availability of cooling jackets to cool stuffing box for liquids having temperature more than 105°C.
- Angular contact ball bearings to take Axial thrust.
- Roller bearing to take care Radial load.
- Positive locking of impeller on shaft with the help of impeller nut and helicoil insert.
- Labyrinth type metallic liquid deflector to protect bearings from ingress of process liquid, dust at non-driving end.
- Optional provision of bearing isolators at driving end and non driving end bearings.
- Available in soft gland packing as well as mechanical seal version in standard stuffing box bore and optional taper (conical) bore construction.
- Top centerline discharge with foot mounted as well as centerline mounted volute casing.
- Pump can be offered with all API seal flushing plans of mechanical seal flushing and pump cooling water pipings
- Flange drilling : As per ASME B16.5 class 150 FF optional class 300 and PN 16 and PN 25 as per DIN standard (Optional).

## Components:

### Casing:

The casing has axial suction and top centre line delivery with self venting design. Smooth hydraulic passage ensures high efficiency. Delivery flanges and supporting feet are integrally cast with casting.

### Impeller:

The impellers are of enclosed type. Hydraulic balancing of impellers is achieved by balancing holes or back vanes depending upon magnitude of axial thrust. The impellers are statically and dynamically balanced.

### Shaft:

Shaft is supported between antifriction ball bearings. The shaft is critically machined and ground to maintain geometrical accuracies.

### Wear Rings:

Replaceable wear rings are provided on Casing and Impeller.

### Impeller Nut:

Impeller nut is positively locked on shaft with the help of Helicoil insert.

### Bearing Housing:

Bearing housing supports shaft. Antifriction Ball and Roller Bearings are used to support the shaft in bearing housing.

### Direction of Rotation:

Clockwise when viewed from driving end.

### Drive:

Pumps can be driven by an electric motor or an engine.

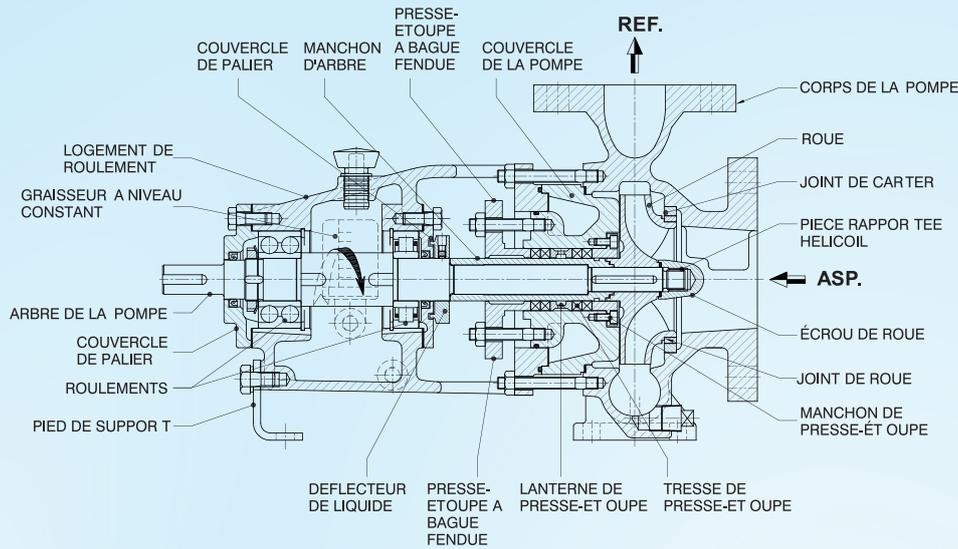


**KIRLOSKAR BROTHERS LIMITED**

Established 1888

A Kirloskar Group Company

# Cross-Section With Major Components

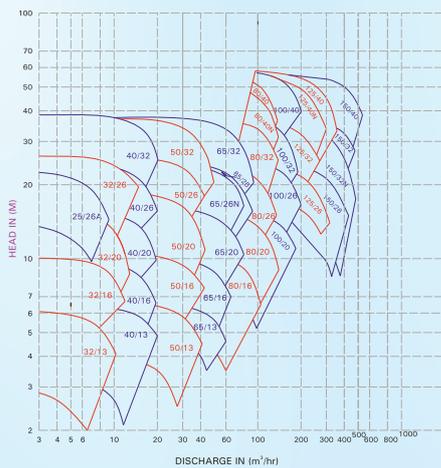


## Material Of Construction:

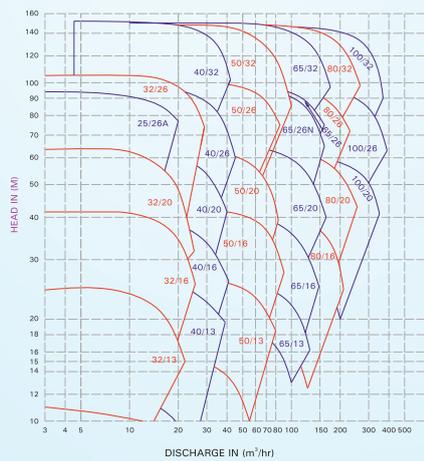
Component Description	Standard MOC	Option 1	Option 2	Option 3	Option 4	Option 5
Pump Casing	Cast Iron - IS 210-FG 260	Duplex ASTM A240M -UNS S31803	ASTMA890/ 890MCE3MN- 5A Super Duplex (UNS 32760)	Alloy 20 ASTM B473 UNS8020-ALLOY20	ASTM A494 - Hastelloy B	ASTM A494 - Hastelloy C
Casing Cover	Cast Iron - IS 210-FG 260					
Pump Shaft	Stainless Steel ASTM A276 Type 316 and 316L	Duplex ASTM A240M -UNS S31803	ASTM-A276 UNS 32760 ( UNS 32760	Alloy 20 ASTM B473 UNS8020-	MONEL BS3076-NA18 ( K-Monel 500)	
Bearing Housing	Cast Iron - IS 210-FG 260					

## Family Curves:

GK(P) Pumps Family Curve At 1450 RPM



GK(P) Pumps Family Curve At 2900 RPM



## KIRLOSKAR BROTHERS LIMITED

Established 1888

A Kirloskar Group Company

## OUR COMPANIES



## REGISTERED OFFICE & GLOBAL HEADQUARTERS

"Yamuna", S. No. 98/(3-7), Plot No. 3, Baner, Pune - 411 045, Maharashtra, India.

Toll Free: 1800-123-4443 | Phone: +91 (20) 67214444

Email: marketing@kbl.co.in | Fax No. 020 67211060

Website: www.kirloskarpumps.com | CIN No. L29113PN1920PLC000670

Kirloskar Brothers Limited reserve the right to make alteration from time to time and such our products / equipments may differ from that detail in this publication. For latest information you may get in touch with our Regional Sales Offices.