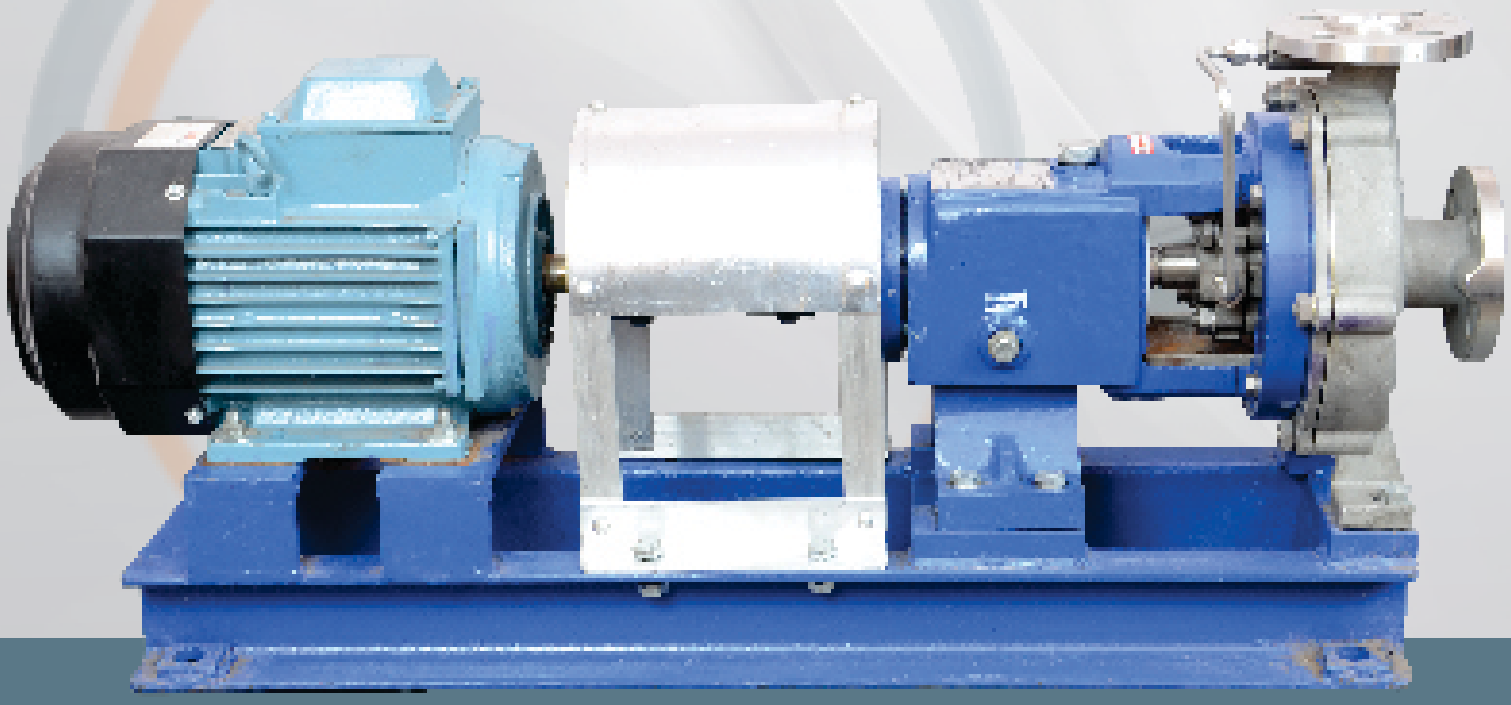
NIRMALA

NON METALLIC CENTRIFUGAL PUMPS
METALLIC CENTRIFUGAL PUMPS
AIR OPERATED DOUBLE DIAPHRAGM PUMPS
PP MOULDED BASKET STRAINER

Metallic Centrifugal Pump

Features:

- Back Pull out design permits quick inspection, repairing of rotary assembly without disturbing the pipeline & motor connections- lower maintenance time.
- Open impeller suitable for handling anything from clear liquid, abrasive, corrosive, slurries to stringy materials.
- Impellers are with back pump out vanes-reduces radial thrust load & seal chamber pressure.
- Maximum interchangeably – minimum spare parts inventory to be maintained.
- Hydraulic Performance maintained by simple external adjustment of impeller wear.
- Casing Corrosion allowance 2-3 mm.
- Mechanical seal option available fromsingle , double, tamndem, balanced, unbalanced, single spring, multi spring, inside & outside.
- Jacketing of casing & stuffing box cooling or heating of working fluid possible
- Serrations on suction & delivery flanges for good sealing.



AODD Pumps

WHY AOD PUMPS…

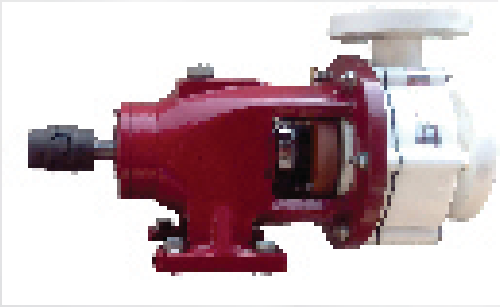
- They can run dry without any damage to pump.
- No mechanical seals or gland packing involved.
- No electric motors, hence non sparking.
- Self priming capacity with negative suction upto 6 mtrs.
- Very good handling of thick and abrasive slurries used in dyes industries.
- Gentle non-shearing action.
- Smaller pumps light weight and portable, hence can be used as barrel pumps.

MODEL	ASSEMBLY	SUCTION/ DELIVERY	DIAPHRAGM	NRV Ball	MAX. FLOW RATE	MAX. SUCTION LIFT
AOD-15 PRR	CLAMPED	1/2"	NEOPRENE	NEOPRENE	23 Lpm	4.5 ft
AOD-15 PRT	CLAMPED	1/2"	NEOPRENE	TEFLON	23 Lpm	4.5 ft
AOD-15 PTT	CLAMPED	1/2"	TEFLON	TEFLON	18 Lpm	1.5 ft
AOD-40 PRR	CLAMPED	1.5"	NEOPRENE	NEOPRENE	270 Lpm	15 ft
AOD-40 PRT	CLAMPED	1.5"	NEOPRENE	TEFLON	270 Lpm	15 ft
AOD-40 PTT	CLAMPED	1.5"	TEFLON	TEFLON	210 Lpm	10 ft
AOD-50 PRR	CLAMPED	2"	NEOPRENE	NEOPRENE	580 Lpm	15 ft
AOD-50 PRT	CLAMPED	1.5"	NEOPRENE	TEFLON	580 Lpm	15 ft
AOD-50 PTT	CLAMPED	1.5"	TEFLON	TEFLON	460 Lpm	10 ft
AOD-150 PRR	BOLTED	1/2"	NEOPRENE	NEOPRENE	23 Lpm	4.5 ft
AOD-150 PRT	BOLTED	1/2"	NEOPRENE	TEFLON	23 Lpm	4.5 ft
AOD-150 PTT	BOLTED	1/2"	TEFLON	TEFLON	18 Lpm	1.5 ft
AOD-300 PRR	BOLTED	1"	NEOPRENE	NEOPRENE	135 Lpm	10 ft
AOD-300 PRT	BOLTED	1"	NEOPRENE	TEFLON	135 Lpm	10 ft
AOD-300 PTT	BOLTED	1"	TEFLON	TEFLON	105 Lpm	7 ft
AOD-400 PRR	BOLTED	1.5"	NEOPRENE	NEOPRENE	270 Lpm	15 ft
AOD-400 PRT	BOLTED	1.5"	NEOPRENE	TEFLON	270 Lpm	15 ft
AOD-400 PTT	BOLTED	1.5"	TEFLON	TEFLON	210 Lpm	10 ft
AOD-500 PRR	BOLTED	2"	NEOPRENE	NEOPRENE	580 Lpm	15 ft
AOD-500 PRT	BOLTED	2"	NEOPRENE	TEFLON	460 Lpm	15 ft
AOD-500 PTT	BOLTED	2"	TEFLON	TEFLON	460 Lpm	10 ft
AOD-800 PRR	BOLTED	3"	NEOPRENE	NEOPRENE	900 Lpm	20 ft
AOD-800 PRT	BOLTED	3"	NEOPRENE	TEFLON	700 Lpm	20 ft
AOD-800 PTT	BOLTED	3"	TEFLON	TEFLON	700 Lpm	10 ft

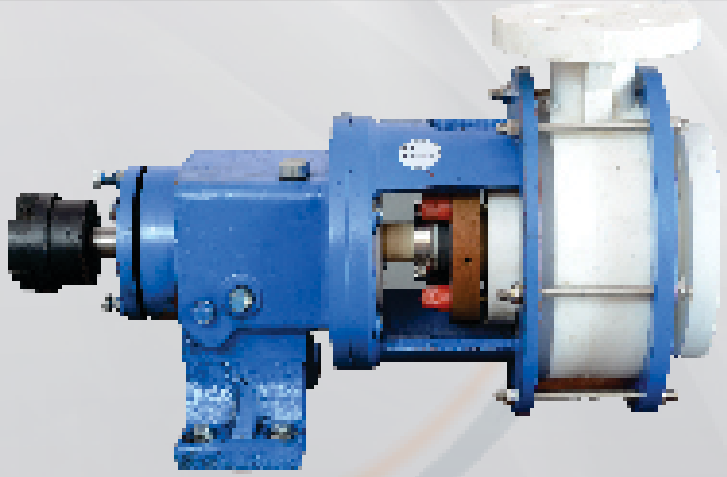
Non Metallic Centrifugal Pump

Standard Process Pump

MODEL	SUCTION (mm)	DELIVERY (mm)	IMPELLER DIA (in mm)	HP	RPM	CAPACITY(in m^3/hr.) Vs. Head(in mtrs.)					
ASH 100	25	25	100	1	2900	13/04	11/06	08/07	05/09	02/10	0/11.5
ASH 120	40	40	120	2	2900	22/05	19/07	13/11	10/13	05/15	00/17
ASH 130	40	40	135	3	2900	25/08	20/10	15/15	10/18	05/20	00/23
ASH 130	40	40	145	3	2900	26/09	21/14	16/17	10/21	05/25	00/27



MODEL	SUCTION (mm)	DELIVERY (mm)	IMPELLER DIA (in mm)	HP	RPM	CAPACITY(in m^3/hr.) Vs. Head(in mtrs.)					
ASH 160R	40	40	142	3	2900	25/10	20/15	10/20	05/21	02/23	00/24
ASH 160	75	40	157	5	2900	35/10	30/15	20/20	10/25	05/27	00/29
ASH 170	75	50	160	7.5	2900	56/10	45/15	40/20	30/25	10/30	00/33
ASH 40	75	40	190	12.5	2900	40/25	35/30	30/35	25/40	10/45	00/50
ASH 50R	40	40	190	2	1440	24/08	20/8.5	15/09	10/10	5/10.5	00/11
ASH 50	75	40	205	3	1440	32/10	25/11	15/12	5/13	2/13.5	00/14
ASH 55	75	50	212	5	1440	50/06	45/10	35/12	16/14	05/15	0/15.5



High Capacity Pump

MODEL	SUCTION (mm)	DELIVERY (mm)	IMPELLER DIA (in mm)	HP	RPM	CAPACITY(in m^3/hr.) / Head(in mtrs.)					
PPCL 50	50	50	210	15	2900	60/47	55/52	50/54	40/58	30/60	00/68
PPCL 50	50	50	220	15	1440	51/4.5	45/6	35/10	25/13	15/15	00/17.5
PPCL 75	75	50	185	20	2900	110/30	95/35	80/40	60/43	25/45	00/46
PPCL 100	100	75	265	20	1440	150/18	137/19	120/20	100/22	50/24	00/25
PPCL 100R	75	50	255	12.5	1440	115/21	100/22	85/23	70/23.5	25/24	00/24.2
PPCL 150	150	100	320	50	1440	295/29	280/30	250/31	200/32	150/33	00/33.7
PPCL 150R	100	75	320	40	1440	150/28	120/30	100/32	80/33	60/34	00/35

APPLICATION

Sulphuric Acid Plants:

Sulphuric Acid is reckoned among the most basic substances of chemical technology. Sulphuric acid is produced by thermal dissociation of waste acids, by suitable reconditioning of sulphur containing waste gases or by use of sulphur containing minerals. **NIRMALA** pumps are used for diluted, concentrated acids & for SO, 2 SO scrubber applications.

Chlor-Alkali Plants:

Chlor-Alkali electrolysis is one of the most important processes in the chemical industry and provides the basic, chlorine, caustic soda and hydrogen. **NIRMALA** pumps are successfully used for Brine, Sulphuric Acid, Sodium Hypochlorite and Caustic Soda applications.

Chemicals and Fine Chemicals Processing:

Nowadays fine chemicals are increasingly gaining importance. This sector of the chemical industry comprises the pharmaceutical, biochemistry, biotechnology and many other chemical processing industries. **NIRMALA** pumps fitted with the latest shaft sealing technologies have surpassed all customer expectations in handling. Volatile Hazardous Air Pollutants.

Gas Scrubbers:

Gas scrubbers are designed for applications requiring the removal of various types of contaminants from gas streams. Typical applications for contaminant removal include noxious or toxic fumes from chemical processes. **NIRMALA** pumps have been recommended extensively for fibreglass re-in forced gas scrubbers. Particulate removal from gas streams is accomplished with the use of venture scrubbers where **NIRMALA** pumps have proven track record.

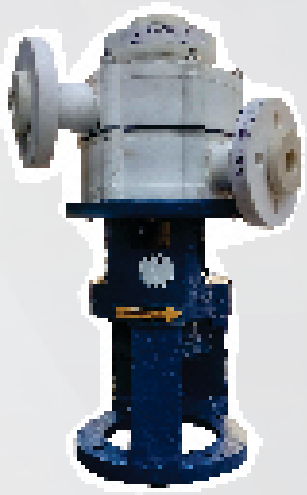
Waste Water Treatment:

Effluent of chemical processing plants treated with caustic thus neutralizing the effluent. Effluent treatment facilities have ion exchange resins to remove ions from aqueous solutions. Hydrochloric acid is used to rinse the captions from the resin s thus producing dematerialized water. NIRMALA pumps have become standard equipment for acid, caustic & DM water applications amongst water treatment industry.

Vertical Glandless Pump

MODEL	SUCTION (mm)	DELIVERY (mm)	IMPELLER DIA (in mm)	HP	RPM	CAPACITY(in m^3/hr.) Vs. Head(in mtrs.)					
VGP 100	25	25	100	1	2900	15/04	10/07	00/12			
VGP 120	40	25	120	2	2900	15/10	10/12	00/16			
VGP 130	40	40	150	3	2900	20/16	15/19	10/21	00/24		
VGP 160	65	40	157	5	2900	35/10	25/17	20/20	15/24	10/26	00/30
VGP 160R	40	40	142	3	2900	25/10	20/15	10/20	05/21	02/23	00/24
VGP 170	75	50	160	7.5	2900	56/10	45/15	40/20	30/25	10/30	00/33

Introduction



PP Vertical Glandless Pump

Backed by modern manufacturing base and highly experienced team, our organization is known as reliable manufacturer and supplier of an impeccable range of **PP Vertical Glandless Pump**. Find usage in different industrial applications, these pumps are widely demanded by gas washing plants, rayon plants, phosphoric acid plants and caustic soda plants. We procure tested quality materials from authentic vendors for manufacturing of **PP Vertical Glandless Pump** in accordance with industrial standards.

Features

- No maintenance required
- Can withstand corrosion
- Easy operation

SALIENT FEATURES OF VERTICAL GLANDLESS PUMP : -

- No maintenance since the pump can even run dry indefinitely as there are no packing, bushes or internal bearings
- All the wet - end parts are in solid moulded construction to with stand corrosion and erosion.
- Reduction of downtime production losses in view of above features.
- The impeller are semi-open type used in our all vertical pumps to suit both clear and polluted fluids.
- Pump mounted outside the suction tank and is not submerged type..

APPLICATION: -

- Phosphoric Acid Plants.
- Gas Washing Plants.
- Rayon Plants.
- Caustic Soda Plants.

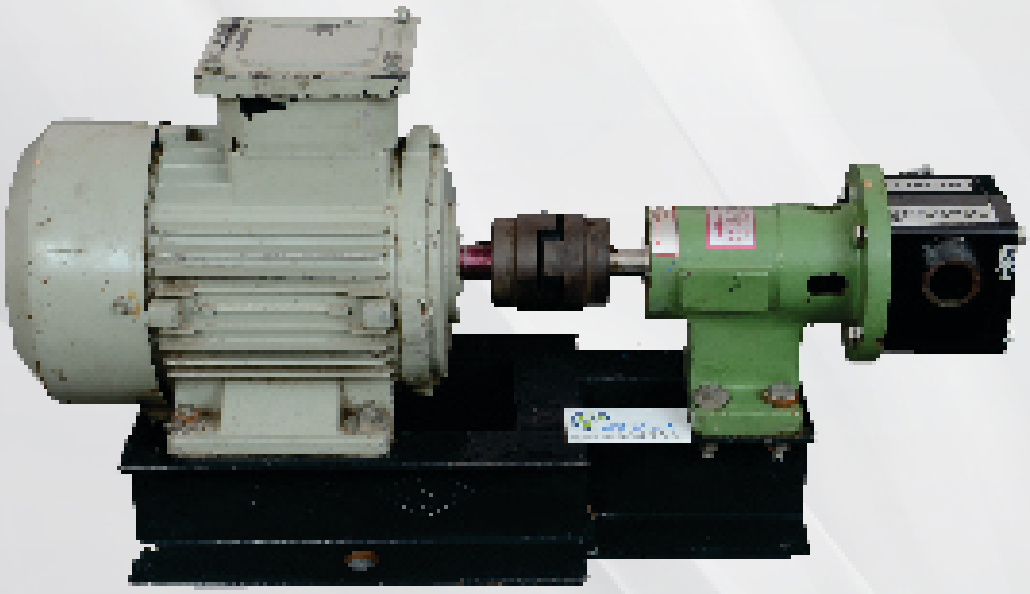
OPERATION ADVANTAGES OF GLANDLESS PUMP:-

- The recognizable leading improvement is the deletion of problems gets to your feet from the use of powered seal, insulation box and inside bearing.
- The aptitude of pump to run dry eliminates single reason of interruption which is regularly attributable to the human component this feature is very convenient in process needing continuous transference of a corrosive fluid with a high gradation of reliability e.g. Disposal of acid effluent.
- The glandless pumps lend itself to process incorporating automatic control of a pump discharge valve. The "controlled leakage" acts as an integral by-pass. The pump suffers no ill effects if the discharge valve is partially or fully closed.
- The maximum main improvements to be derivative from the use of glandless pump are in the province of maintenance and following reduction in down time invention victims. Normal maintenance on the glandless pump is confined to lubrication of the driving.

FLEXO PUMPS

Flexible Impeller Self Priming Pumps in SS 316 & Phenilic Resin.

- Efficient & Dependable For:
  - Plating Solution
  - Detergent And Soap Solution
  - Acids / Alkalies
  - Oils
  - Chemical Effluent
  - Inks, Dyes And Paint
  - Latex
  - Adhesives
- Features:
  - Self Priming Up to 3.5 Metres
  - Impeller And Seal Options
  - Handles Viscous Liquid
  - Handles soft/hard solids without Damage or clogging
  - Allows flow to be regulated by varying pump peed
- Impeller Options:
  - Neoprene
  - Nitrile
  - EPDM
  - Viton
- Seal Options:
  - Carbon v/s Ceramic
  - Carbon v/s Silicon
  - Carbide Silicon Carbide v/s Silicon Carbide



Pump Range					
Model	**Suction**	**Max Flow**	**Max Head**	**Motor RPM**	**Motor HP**
FLEXO 25	1"	70 ltr / min	20 mtr	1440	1 (0.75 kw)
FLEXO 40	1.5"	180 ltr/min	35 mtr	1440	3 (2.75 kw)
FLEXO 50	2"	380 ltr/min	35 mtr	1440	5 (3.75 kw)

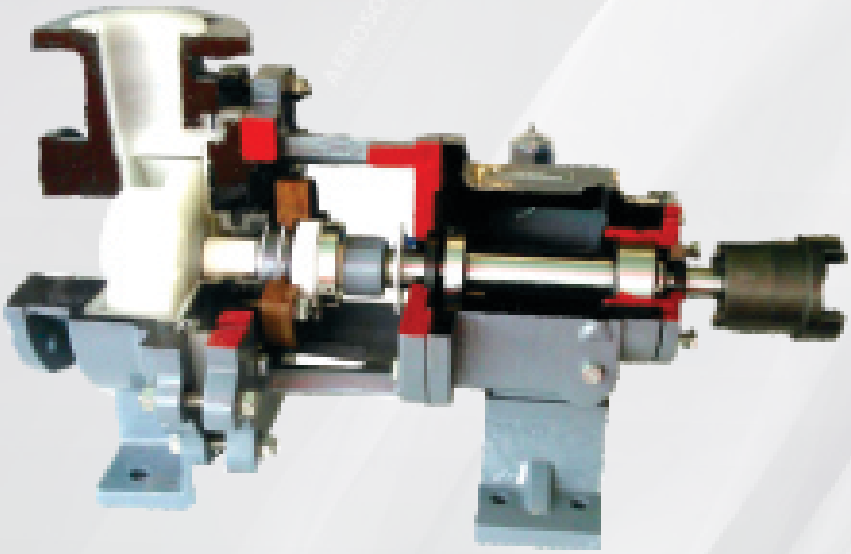
Introduction of PVDF

The fluorinated polymers are widely appreciated for their remarkable chemical inertness and their excellent resistance to aging.

Polyvinylidene fluoride (PVDF) offer the specific advantages of ease processing in accordance with all the convention methods use in a plastic industry.PVDF; Polymerized, according to its own special process , offer a high degree of crystallinity to the that by other processes, resulting among other things in superior thermo-mechanical properties.

The intrinsic technical superiority is one of the reasons for the success of which PVDF has achieved on the world marker for more than 20 years.

But nothing is possible without a genuine quality assurance policy which **Nirmala pumps & Equipments** Follows with their efforts for total quality management over their products & services.



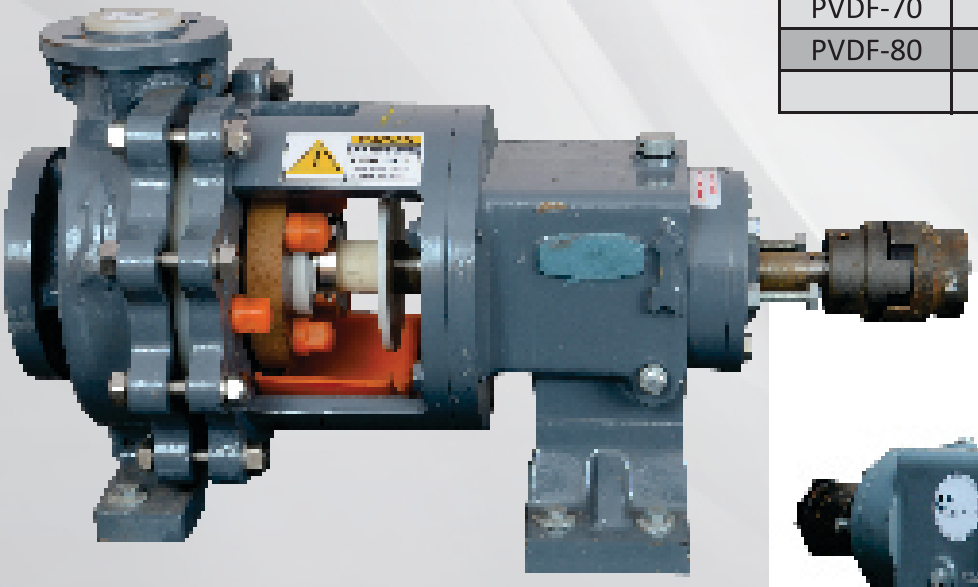
Special Properties of PVDF

- Resistance to most chemicals & solvents
- High thermal stability
- Mechanical strength at elevated temperature
- High purity
- High abrasion resistance
- Resistance to sunlight
- Resistance to nuclear radiation
- Low flame & smoke characteristics
- Resistance to fungus
- Low permeability to most gases & liquids
- Readily processible, formable & weld able.

Advantages:

- Tried & tested chemical process pump design for rough condition.
- Thick walled vacuum PVDF housing in one piece.
- Therefore no additional sealing points in the pump housing.
- PVDF casing liner completely encapsulated in strong cast iron casing armour
- Replaceable PVDF Casing liner-reduces the maintenance cost.
- Pipe-line forces are absorbed by cast iron armour.
- Also suitable for high system pressure .
- Flange with through holes meeting the requirement of the chemical industries.
- Semi-open PVDF impeller reinforced by large metal insert Smooth running & long service life of Mechanical seals, thanks to the particularly heavy duty bearing pedestal.
- Modular system ensuring economical parts stocking .
- Available in 1440 as well 2900 rpm.
- Flow rate up to 400 m3/hr. Head upto-100mts.
- Back pull out design ease of maintenance.
- A performance test report is submitted with each pump.
- Consulting & servicing by specialists.

MODEL	SUCTION	DELIVERY	IMPELLR DIA
PVDF-20	25	25	125
PVDF-25	40	25	150
PVDF-40	50	40	160
PVDF-45	50	40	195
PVDF-50	80	50	160
PVDF-60	80	50	195
PVDF-70	80	50	265
PVDF-80	100	80	200



Mechanical seals

Seal Type 71 Mechanical Seals are Specially Designed for using Extremely Corrosive Duties. All Metal Components are including springs are Isolated from the Sealed, Aggressive Medium. These Seal Design Faces are moulded with Glass Filled PTFE with Highly Flexible PTFE Bellow. Simple checkout method function and cleaning possibility as this Mechanical Seal located easily accessible outside the pump.

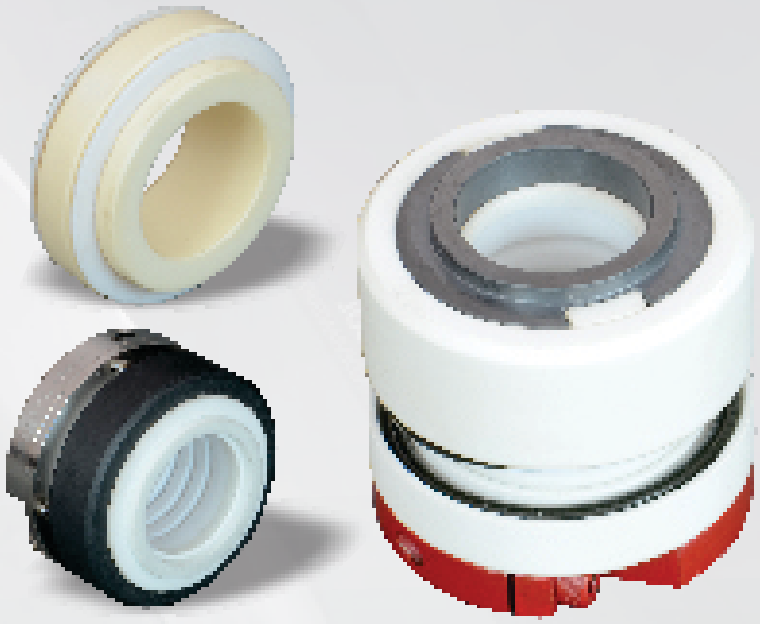
Features:

Teflon Bellow Mechanical Seal.
Dual Directional Seal.
Outside Mounted Seal.
Hydraulically Balanced Teflon Bellow Mechanical Seal

Material:

Seal Ring Faces: GFT, Carbon and Sic
Seat Faces: Ceramic and Sic
Elastomers: Teflon and GFT
MOC: SS 316, Hast -C and Alloy 20
Bellow MOC: Teflon + GFT Composite

Operating Capabilities:
Pressure: Up to 5 bar
Temperature: -30oC to 110oC
Speed : 3000 RPM.



Seal Type 74 Mechanical Seal are Externally Mounted Reverse Balanced Design Seal having 'O' Ring as a Secondary Sealing member. Secondary Sealing member can be changed as per Chemical Compatibility. All metal components including springs are Isolated from the Sealed, Aggressive Medium. Simple checkout method function and cleaning possibility as this Mechanical Seal located easily access outside the pump. Especially design Clamp Ring eliminate Slipping on Shaft..

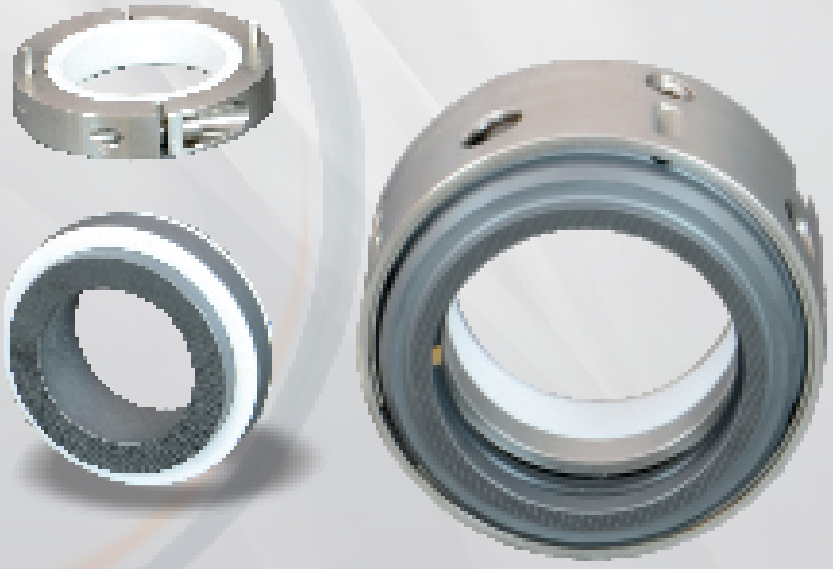
Features:

Single Acting Mechanical Seal.
Dual Directional Mechanical Seal.
Outside Mounted Mechanical Seal.
Reverse Balanced Design.
Multi-Spring Design Mechanical Seal.

Material:

Seal Ring Faces: Carbon and Sic
Seat Faces: Ceramic and Sic
Elastomers: Viton, EPDM, TTV, FEP and FFKM
MOC: SS 316, Hast -C and Alloy 20

Operating Capabilities:
Pressure: Up to 8 bar
Temperature: Up to 120oC
Speed : 3000 RPM



PP basket strainer

DESCRIPTION:

In many corrosive or sensitive process media straining applications, plastic is the preferred material of construction for a basket strainer. Moulded basket strainers are resistant to a wide variety of corrosive acids and other aggressive materials. They will work in applications that may require a much more expensive exotic alloy – if one were easily available. Their plastic constructions ensure that they will not contaminate sensitive process media such as photographic chemicals and de-ionized water.

FEATURES:

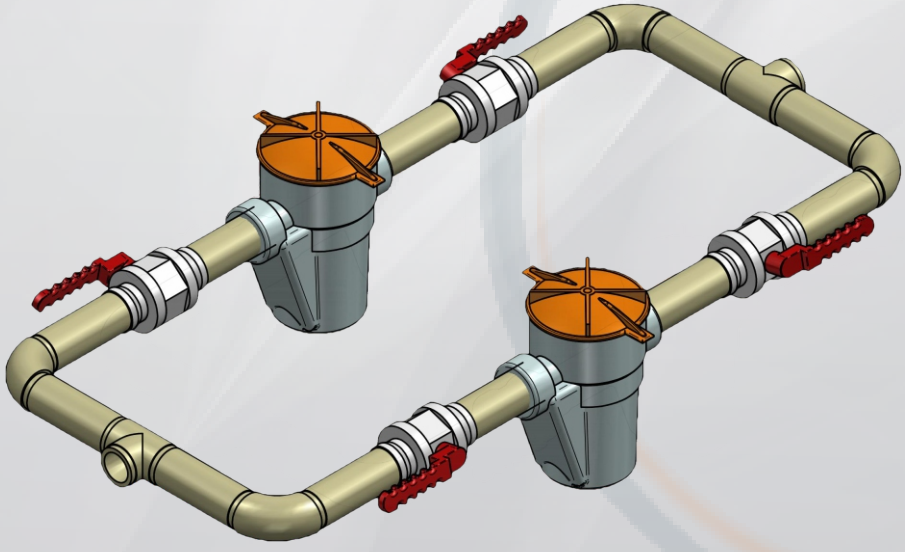
- Available in screwed as well as flanged connection
- Hydraulically tested to 5 Kg/cm²
- Excellent corrosion resistance
- No process media contamination
- Hand removable cover till size 100 mm
- In line design
- Optional threaded drain
- No painting or coating required to survive a difficult environment

SIZE AVAILABLITY:

Size: 3/4" , 1", 1.5", 2", 3", 4", 6", 8" & 10".

MATERIAL SPECIFICATION:

Sr.no	Part Name	Standard Material
1	Body	Isotactic PP
2	Cover	Isotactic PP
3	Element	PP
4	Sealing	Neoprene



Contact us

Industry Served			
Chemical	Sulphuric Acid	Brine	Nitric Acid
	Sodium Hydroxide	Chlorosulphonic Acid	Maleic Acid
	Hydrochloric Acid	Ethanol	Citric Acid
	Acetic Acid	Phosphoric Acid	Sodium Chloride
	Ammonium Chloride	Oleum	Vinyl Acetate
Petrochemical	Butadiene	Vinyl Chloride	Formaldehyde
	Benzene	Ethylene Glycol	Phenol
	Toluene	Maleic Anhydride	Styrene
	Ammonia	Acrylonitrile	Ethylene Oxide
	Methanol	Urea	Xylene
Pulp & Paper	Shower Water	Sodium Hypochlorite	Green Liquor
	White Water	Freah Liquor	Dregs Washer
	Chlorine Dioxide	Black Liquor	White Liquor
Brewing	Storage Water	Reclaim Water	Alcohol Transfer
	Hot/Cold Water	MASH	Yeast Brink
	Chilled Water	Blow Black Beer	Sulphuric Acid
	Beer	Spent Grain Liquor	Caustic
Primary Metal	Copper Cyanide	Sodium Sulphate	Copper Sulphate
	Sodium Cyanide	Ferric Chloride	Ammonium Sulphate
	Chromic Acid	Ferrous Suphate	Silver Cyanide
General	Condensate	Hot Oil	River Water
	Deionized Water	Wine	Pond Water
	Shower Water	Sugar Cane Jiuce	Cooling Tower Water

Factory Address :

Plot No. 2810, Nr. Ramol Police Chowky,
Phase - IV, Vatva G.I.D.C., Vatva, Ahmedabad
Ph. No. : 079 - 40088651 (M) 09924926767

Office Address :

F/401, Indraprasth -III, Nr. Radio Mirchi Tower,
Shyamal Cross Road, Satellite, Ahmedabad
Ph. No. : 079 - 26750183 (M) 09824543405

Branch Address :

Plot No. D-2/E/181-182, Phase - II,
GIDC Dahej, Dist - Bharuch,
Ph. No. : 7046463444.