

Mech-flow

P U M P S



Mech-Flow Pumps
Manufacturing of Industrial Pump

🌐 www.mechflowpumps.com

ABOUT MECHFLOW PUMPS

Reliable Industrial Pump Solutions, Engineered for Performance

Established with a vision to deliver dependable and efficient fluid-handling solutions, Mechflow Pumps is a trusted manufacturer and supplier of industrial pumping systems in India. We specialize in designing and delivering pumps that meet the demanding requirements of modern industries, ensuring consistent performance, durability, and operational efficiency.

With a strong focus on engineering excellence, quality manufacturing, and customer satisfaction, Mechflow Pumps offers a comprehensive range of pumping solutions for chemical, pharmaceutical, food processing, water treatment, oil & gas, and industrial applications. Our products are manufactured using high-grade materials, precision processes, and stringent quality checks to ensure long service life and reliable operation.

Backed by a skilled technical team and a customer-centric approach, we continuously innovate to meet evolving industry needs. Today, Mechflow Pumps is recognized as a dependable partner for industries seeking efficient, safe, and cost-effective pumping solutions.



Our Mission

To deliver high-performance, energy-efficient, and technically advanced pumping solutions that enhance productivity, safety, and operational reliability for industrial clients across diverse sectors.

Our Vision

To become a leading and trusted name in the industrial pump industry by continuously improving technology, expanding our product portfolio, and setting new benchmarks in quality, reliability, and customer satisfaction.



Industries Served

Phosphorus
& Sulphuric
Acid plants

Solvent
Transfer
Applications

Chemicals,
Dyes &
Pigments
Industries

Paper &
Pulp
Industries

Organic/
Inorganic
Chemical
Industries

Caustic Soda
&
Chlorine Plants

Petrochemicals

Cooling
Tower &
Chiller Plants

Fertilizer &
Agro -
Chemical
Plants

Pharmaceutical
Industries

Textile,
Cement &
Steel Plants

For Scrubbers,
Filter press,
Ejector
systems etc.

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APPLICATION

- ◆ All clear liquids without solid suspensions like diesel, petrol, LPG, oil, solvents, syrup, dm water, chemicals, steam boiler feeding, evacuation of condensate water, boosting or pressure, as a drum/ barrel pump.



FEATURES

- ◆ All wetted parts of pumps are made from lost wax process (investment casting) so surface finish is excellent. Smooth flow path/hydraulic passage and no casting defects like blow holes, cracks etc. are present
- ◆ Centripetal/regenerative impeller for better suction.
- ◆ Pumps will be normally available in CF-8m/CM-8(Gun metal, Alloy-20) and also in other material as per customer's requirements. Single/multistage pumps to handle crystal clear liquids for high pressure duties
- ◆ Very Quick priming & no need of foot valves.
- ◆ Very high suction capacity up to 8 meters without much noise
- ◆ Various types of sealing arrangements as per customer's liquid's characteristics,
- ◆ Normally fitted with carbon/ceramic seal faces with teflon cup and viton rubber.
- ◆ Pumps are available in monobloc and in bare type also with flameproof motor. All motor are of "TEFC" type
- ◆ Pump can be offered with extra polishing for some special requirements. Trolley mount available.
- ◆ Also available with 120 volt/60Hz. Custom built pumps are available.

WATER RATING CHART

MODEL			HEAD IN METERS												
			5	10	15	20	25	35	35	40	45	50	60	65	70
SP-1	0.5 X 2900	25 X 25	38	30	22	18	12	DISCHARGE IN							
SP-2	0.5 X 2900	25 X 25	30	26	22	15	10					LITRE			
SP-3.	1 X 2900	25 X 25	50	44	40	36	22	15	10	5		PER MINUTE			
SP-5	1 X 1450	25 X 25	62	55	50	40	35	28	20	-					
SP-6 2 (STAGE)	2 X 1450	25 X 25	80	68	62	58	52	50	42	40	36	25	18	10	

Performance are at 2900/1450 rpm, 50 Hz and tested with clear water.
Due to constant R & activity, detail's are subject to change without prior notice

APPLICATION

- ◆ Milk, Cream, Butter Milk, Condensed Milk
- ◆ Fruit Juice, Beer, Wine, Sugar Syrup
- ◆ Vitamin Solutions, Sugar & Syrup
- ◆ Vitamin Solutions, Sugar & Confectionery.
- ◆ RO Water, DM Water, Pure Water. Water for Injection (WFI)
- ◆ Vegetable Oil, Mineral Oil etc.
- ◆ Alkaline Solution / Drinks.
- ◆ Acids, Fine Chemicals
- ◆ Botting Plants, Soft Drinks & Distillery
- ◆ Food Processing / Liquid Food Stuffs
- ◆ Colour dyes and Pigments / Paints
- ◆ Descaling Applications, Ppaper & Cement Industries
- ◆ Water Treatment Plants
- ◆ Textile Sizing, Dyeing & Finishing Systems
- ◆ Natural Cellulose Fiber / Synthetic Fiber System
- ◆ Hot & Cold Water Pumping



FEATURES

- ◆ As all pumps are made from Investment Casting properties are far superior than cast material. Pore free, non-adhering smoother surface, so lesser fuction losses, and lesser service corrosion.
- ◆ Super finished surface also ensures no ingress or emission of germs or impurities during pumping or idling which is a basic requirment of sterile / hygienic application.
- ◆ Pump can handle liquids having viscosities up to 1500 centipoise.
- ◆ Pumps are highly energy efficient and requiries lesser NPSH to function without cavitation.
- ◆ The pumps can work under a vacuum of 720 mm of hg, suitable for vacuum evaporators.
- ◆ Pumps are available with closed semi open impellers resistance for high temperatures and chemicals.
- ◆ Minimum working/rotating parts.
- ◆ Safe and quiet operation levels.
- ◆ Gentle Product handling with lower maintenance and downtime cost.
- ◆ Dynamic combinations of seal facesas as per customer's requirement (single seal/double seal, seal external cooling)
- ◆ Suitable for stdard motor or flange type or foot cum flange type motor enging.
- ◆ Monoblock or bare pumps or with trolley.
- ◆ Also with flame proof motors.
- ◆ Various types of connection like-tri clove joints SMS, flanges or threaded nipple / coupling.
- ◆ Pumps with adjustable legs, available on request.
- ◆ Special bearing for hot water application available on request.

RANGE

Size	25 MM TO 80 MM
Head	03 Meters to 76 Meters
Capacity	20 Lpm To 2000 Lpm

MATERIA OF CONSTRCUTION

SS 316 / SS 316L
Seal silicon carbide Or as per Customer's requirement.

WATER RATING CHART

MODEL	HP	SIZE	(HEAD IN METERS) DISCHARGE IN LPM AT 2900 RPM													
			4	6	8	10	12	14	16	18	20	22	24	26	28	30
CF-1	0.25	25 X 25	25	26	17	14	-	-	-	-	-	-	-	-	-	-
CF-2	0.5	25 X 25	-	-	112	108	80	70	50	-	-	-	-	-	-	-
CF-3	1	25 X 25	-	-	-	160	140	130	122	100	95	80	70	30	-	-
CF-5A	2	50 X 40	-	-	-	-	-	-	-	-	230	200	186	130	100	50
CF-5B	2	50 X 50	-	-	-	-	325	290	245	180	120	100	-	-	-	-

MODEL	HP	SIZE	(HEAD IN METERS) DISCHARGE IN LPM AT 2900 RPM													
			6	8	12	16	20	24	28	32	36	40	45	48	54	56
CF-6A	3	50 X 40	-	-	-	-	230	200	180	150	75	-	-	-	54	56
CF-6B	3	65 X 50	-	-	575	520	265	225	150	-	-	-	-	-	-	-
CF-7A	5	50 X 40	-	-	-	-	-	-	-	260	230	190	145	90	-	-
CF-7B	5	65 X 50	-	-	-	650	280	520	300	210	150	-	-	-	-	-
CF-7E	5	65 X 65	-	-	-	750	650	556	345	-	-	-	-	-	-	-
CF-8A	7.5	50 X 40	-	-	-	-	-	-	-	290	280	250	225	190	120	60
CF-8B	7.5	65 X 50	-	-	-	-	-	700	640	575	470	270	-	-	-	-

MODEL	HP	SIZE	(HEAD IN METERS) DISCHARGE IN LPM AT 2900 RPM													
			10	12	16	20	24	28	32	36	40	45	48	54	57	60
CF-8E	7.5	80 X 65	-	-	1025	918	810	700	-	-	-	-	-	-	-	-
CF-9A	10	50 X 40	-	-	-	-	500	480	470	450	430	390	340	260	-	-
CF-9B	10	65 X 40	-	-	-	-	-	-	700	650	590	490	390	-	-	-
CF-9C	10	80 X 65	1270	1242	1180	1080	1026	918	810	700	486	-	-	-	-	-



WATER RATING CHART

MODEL	HP	SIZE	(HEAD IN METERS) DISCHARGE IN LPM AT 2900 RPM													
			3	5	7	10	12	15	17	20	22	25	27	30	35	40
CFS-1	0.25	12 X 12	40	32	-	-	-	-	-	-	-	-	-	-	-	-
CFS-2	0.5	25 X 25	-	100	45	-	-	-	-	-	-	-	-	-	-	-
CFS-3	1	25 X 25	-	-	140	120	70	35	-	-	-	-	-	-	-	-
CFS-3A	1	38 X 38	-	-	181	95	50	-	-	-	-	-	-	-	-	-
CFS-5A	2	38 X 38	-	-	-	-	225	190	155	105	78	40	-	-	-	-
CFS-5B	2	50 X 50	-	-	330	250	160	80	-	-	-	-	-	-	-	-
CFS-6A	3	50 X 38	-	-	-	-	-	-	250	180	180	135	108	50	-	-
CFS-6B	3	50 X 50	-	-	-	-	-	330	300	225	225	150	85	-	-	-

MODEL	HP	SIZE	(HEAD IN METERS) DISCHARGE IN LPM AT 2900 RPM								
			16	20	24	28	32	36	40	44	48
CFS-7A	5	50 X 38	-	-	260	230	190	145	90	-	-
CFS-7B	5	60 X 50	400	370	300	230	180	-	-	-	-



FEATURES

1. Seal Less
2. Self Priming
3. Portable & Light Weight
4. Easy Maintenance
5. High Performance
6. controls Spillage & Save time in the operation controls
7. All Components are interchangeable

APPLICATION

1). STAINLESS STEEL

- | | | | |
|--------------------|--------------|---------------------|-----------------------------|
| • Solvents | • Acids | • Varnished | • Turpentine |
| • Paints | • Gasoline | • HSD | • Chloroform |
| • Degreasing Agent | • IPA | • LDO | • Water Treatment Chemicals |
| • Nitric Acid | • Phosphoric | • Petroleum Product | • Thermic Fluid |
| • Phenol | | | |

2). POYPROPYLENE / PVDF

- Toxic Chemicals
- Photographics Developers
- Pesticides Intermediates & Highly Corrosive liquids Like Cons. HCl, Dil H₂SO₄, HF, NaOH,

Barrel Pumps is useful for safe and efficient handling of highly corrosive chemicals.



HAND OPERATED BARREL PUMPS

BRAND MAKE	MECH-FLOW
MODEL NO	MBP-25 SS316/SS304/PP
SIZE - SUC. X DEL	25 MM
FLOW MAX	350 ML PER ROTATION
HEAD	01 FEET
MAX HEAD	18 FEET
SUCTION PIPE DEPTH	1050 MM

MATERIAL OF CONSTRUCTION

PUMP BODY	SS316/SS304/PP
BACK COVER	SS316/SS304/PP
FRONT COVER	SS316/SS304/PP
ROTOR	SS316/SS304/PP
HANDLE	SS316/SS304/PP
FASTNERS	SS316/SS304/PP
ROTOR BLADE	TEFLON
SUCTION PIPE	SS316/SS304/PP
DELIVER PIPE	SS316/SS304/PP

OUR USP: SUCTION PIPE IN 3 PCS SO YOU CAN USED FOR FALL SMALL BARREL

PACKING DIMESNSION

M.O.C	SS-316	SS-304	PP
LXBXH PACKING (INCH)	16X9X6.5	16X9X6.5	-
WEIGHT PUMP TOTAL	4.75 KG	4.75 KG	-
WEIGHT WITH PACKING	5.5 KG	5.5 KG	-



A) M.O.C IN SS - 316 PUMP :

Inner and outer pipes are of seamless SS-316. All wetted parts are made from investment castings. The drive shaft is made of SS-316 bright bar. Impeller is made of investment casting in CF8M. The shaft sleeve and lip seal are made of PTFE.

B) M.O.C IN POLYPROPYLENE / PP / PVDF :

Outer and inner pipes and all wetted parts are made of polypropylene. The shaft is made of Hastalloy B / SS-316 for highly corrosive liquids. The impeller is made of PP/PTFE. The shaft sleeve is of PTFE.

MOTOR SPECIFICATION :

Flameproof & Weatherproof, TEFC Electric Motor (Yellow)

PHASE : SINGLE

VOLTS : 230V

CYCLE : 50Hz

H.P. : 1 (0.75KW)

SPEED : 18000 R.P.M

TYPE : AC / DC TYPE UNIVERSAL

Suitable for Explosive atmosphere of Gas Group I, II-A & II-B. (Non Certified)

MOTOR SPECIFICATION :

Non Flameproof Electric Motor (Red)

PHASE : SINGLE

VOLTS : 230V

CYCLE : 50Hz

H.P. : 1 (0.75KW)

SPEED : 18000 R.P.M

TYPE : AC / DC TYPE UNIVERSAL

Size Available :

- 1150 mm for standard 200 / 250 Ltrs. Barrels & shallow containers

OPERATING DATA :

Capacity : 100 LPM Maximum

Head : 18 Meter Maximum

Temperature: 80°C for PP Pump / 120°C for PVDF
120°C for SS Pump

Discharge : 1" Nozzle



A) M.O.C IN SS - 316 PUMP:

Inner and outer pipes are of seamless SS-316. All wetted parts are made from investment castings. The drive shaft is made of SS-316 bright bar. Impeller is made of investment casting in CF8M. The shaft sleeve and lip seal are made of PTFE.

Stainless Steel Pneumatic Transfer Pump for Food syrups, Flammable Media, Chemicals, Paint, Liquid Media with Fillers, Fuel

SIMPLE PNEUMATIC BARREL PUMP

MOC	: SS-316
INLET DIA	: 40 MM
OUTER DIA	: 32 MM
MAX. AIR PRESSURE	4KG
PUMP LENGTH	: 1.12 MTR.

AIR MOTORIZED BARREL PUMP

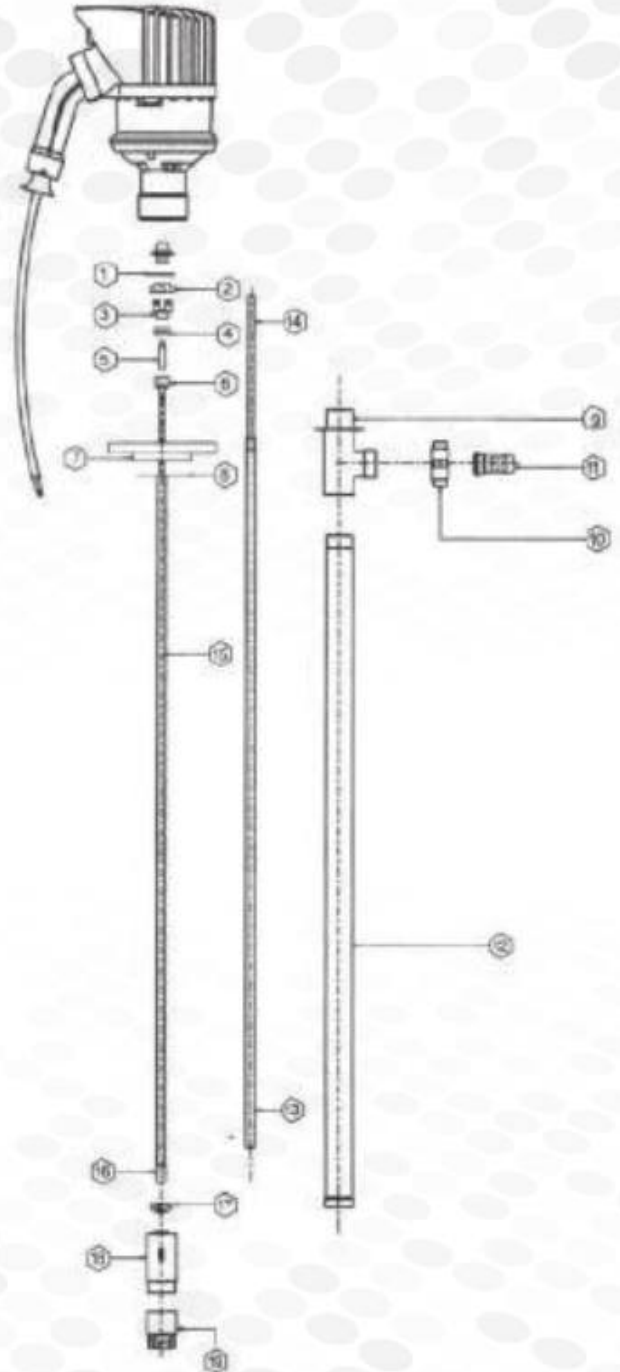
MOC	: SS-316 / PP / PVDF
INLET DIA	: 42 MM
OUTER DIA	: 25 MM
MAX. AIR PRESSURE	8KG
PUMP LENGTH	: 1 MTR.
AIR MOTOR RPM	: 21000 RPM

OPERATING DATA :

Capacity	: 100 LPM Maximum
Head	: 18 Meter Maximum
Temperature	: 80°C for PP Pump 120°C for SS Pump
Discharge	: 1" Nozzle



SR. NO.	DESCRIPTION	MATERIAL OF CONSTRUCTION	QTY.
1.	SNAP RING (SMALL)	SPRING STEEL	1
2.	COUPLING CROSS	CF8M/PP	1
3.	COUPLING HOUSING	CF8M 99	1
4.	BEARING	STEEL	1
5.	BEARING SHAFT	S.S.	1
6.	LIP SEAL	PTFE/VITON	1
7.	HAND WHEEL	ALLUMINIUM	1
8.	SNAP RING (BIG)	SPRING STEEL	1
9.	DISCHARGE TEE	CF 8M/PP	1
10.	WING NUT	CF 8M/PP	1
11.	NOZZLE	SS-316/PP	1
12.	OUTER PIPE	SS-316/PP	1
13.	INNER PIPE	PTFE/SS-316	1
14.	GUIDE SLEEVE	PTFE	1
15.	DRIVE SHAFT	SS-316/HAST ALLOY-B	1
16.	BUSH BEARING	TEFLON	1
17.	IMPELLER	CF 8M/PP	1
18.	PUMPING CHAMBER	CF 8M/PP	1
19.	PUMP BASE	CF 8M/PP	1



APPLICATION

- ◆ Water treatment Plant
- ◆ Effluent Treatment
- ◆ Filter Press for dyes and chemicals
- ◆ Fertilizer Plants Thermal and atomic power plants
- ◆ Drugs & Pharmaceutical Industries
- ◆ Descaling of Tubes
- ◆ Scrubbing of corrosive gases like Cl_2 , Br_2 , I_2 , SO_2 , NH_3 , F_2 , Etc.
- ◆ Excellent for vacuum ejectors
- ◆ Transferring of concentrated HCL from road tankers
- ◆ Paper & Pulp Industries
- ◆ Pickling in steel rolling mills
- ◆ **Caustic Soda plants:**
Chlorinated brine, conc. HCL, H_2SO_4 , etc. Other application are in metal refineries, pickling Installations, paper and fertilizer plants-in fact all chemical process industries.
- ◆ **Phosphoric Acid Plants :**
 H_3PO_4 , H_2SO_4 , HF and their mixtures with or without solid (gypsum) up to 40% conc.
- ◆ **Gas Washing Plants:**
Scrubbed liquids containing F, CL, SO_2
Ammonia gases etc. With solids replace hast alloy.
- ◆ **Rayon Plants:**
Spin bath solution (H_2SO_4 , $ZnSO_4$, NASO, etc.)



MATERIAL OF CONSTRUCTION

CASING:

- ◆ Top centerling discharge and Integrated flange, Single Piece, joint less casing formed out of Injection molded polypropylene / PVDF
- ◆ Hydraulically balanced and accurately matched to casing profile the semi open type impeller with particle shroud and glass finished smooth flow passage ensure high efficeency low NPSH Performance Impeller made from compressor molded polypropylene / PVDF

SHAFT:

The Shaft is made from EN 8 / SS316 protected by shaf sleeve of alloy -20 or alumina field Teflon or Ceramic.

BEARING HOUSING:

Made from heavy duty graded casting.

BEARING:

Reputed Ball Bearing

MECHANICAL SEAL :

Rotary Part of seal is made from glass field Teflon & stationery part of seal is made from high alumina field ceramic.

DISTANCE PIECE :

Heavy Duty One Piece Injection Molded Poly Propylene.

RANGE

- Head Up To : 60 mtrs
- Pump Size : 25 mm to 75 mm
- Capacity : 100 M3/hr
- Speed : 1440/2880 50 Hz
- Temperature: Up to 130°C



WATER RATING CHART

MODEL	SUCTION (MM)	DELIVERY (MM)	IMPELLER (MM)	HP	RPM	Capacity in m3/Hr.						Head in mtr.
PP - 100	25	25	100	01	2900	13 04	11 06	08 07	05 09	02 10	0 11.5	
PP - 120	40	32	120	02	2900	22 05	19 07	13 11	10 13	05 15	0 11.7	
PP - 130	40	40	135	03	2900	25 08	20 10	15 15	10 18	05 20	0 23	
PP - 160R	40	40	142	3	2900	25 10	20 15	10 20	05 21	02 23	00 24	
PP - 160	75	40	157	5	2900	35 10	30 15	20 20	10 25	05 27	00 29	
PP - 170	75	50	160	7.5	2900	55 10	45 15	40 20	30 25	10 30	00 33	
PP - 170R	50	50	160	7.5	2900	55 10	45 15	40 20	30 25	10 30	00 35	
PP - 40	50	40	190	12.5	2900	40 25	35 30	30 35	25 40	10 45	00 50	
PP - 50R	40	40	190	02	1440	24 08	20 8.5	15 09	10 10	0.5 10.5	00 11	
PP - 50	75	40	205	03	1440	32 10	25 11	15 12	0.5 13	0 14	00 00	
PP - 55	75	50	212	05	1440	50 06	45 10	35 12	16 14	0.5 15	00 15.5	
PP - 55R	50	50	212	05	1440	50 06	45 10	35 12	16 14	10 18	00 25	

HIGH SPEED PUMPS



Sr No.	NAME OF PART	MATERIAL OF CONSTRUCTION
1	VOLUTE CASING	POLYPROPYLENE CO-POLYMER
2	BACK PLATE / ST. BOX	POLYPROPYLENE CO-POLYMER
3	IMPELLER	POLYPROPYLENE CO-POLYMER
4	MECHANICAL SEAL (STATIONERY UNIT)	HI-ALLUMINA CERAMIC
5	MECHANICAL SEAL (ROTORY UNIT)	GLASS FILLED P.T.F.E. BELOW
6	SLEEVE	HI-ALLUMINA CERAMIC
7	ADOPTER BLOCK	GRADED CAST IRON
8	BEARING HOUSING	GRADED CAST IRON
9	BEARING NDE	STANDARD 3306
10	BEARING DE	STANDARD 6207
11	SHAFT	EN-8 / SS-316

JUST LEAVE THE CORROSIVE PUMPING TO US.



APPLICATION

- ◆ Water treatment Plant
- ◆ Effluent Treatment
- ◆ Filter Press for dyes and chemicals
- ◆ Fertilizer Plants Thermal and atomic power plants
- ◆ Drugs & Pharmaceutical Industries
- ◆ Descaling of Tubes
- ◆ Scrubbing of corrosive gases like Cl_2 , Br , I , SO_2 , NH_3 , F_2 , Etc.
- ◆ Excellent for vacuum ejectors
- ◆ Transferring of concentrated HCL from road tankers
- ◆ Paper & Pulp Industries
- ◆ Pickling in steel rolling mills
- ◆ **Caustic Soda plants:**
Chlorinated brine, conc. HCL, H_2SO_4 , etc. Other application are in metal refineries, pickling Installations, paper and fertilizer plants-in fact all chemical process industries.
- ◆ **Phosphoric Acid Plants:**
 H_3PO_4 , H_2SO_4 , HF and their mixtures with or without solid (gypsum) up to 40% conc.
- ◆ **Gas Washing Plants:**
Scrubbed liquids containing F, CL, SO_2
Ammonia gases etc. With solids replace hast alloy.
- ◆ **Rayon Plants:**
Spin bath solution (H_2SO_4 , $ZNSO_4$, $NASO_4$, etc.)



SALIENT FEATURES

- ◆ No mechanical seal, stuffing box and internal bearings is needed
- ◆ No maintenance since the pump can even run dry indefinitely as there is no packing, bushes or internal Bearings.
- ◆ Reduction of downtime production losses in view of above features. All the wet-end parts are in solid molded construction to with stand corrosion and erosion.
- ◆ The impeller is semi-open type and used in our all-vertical pumps to suit both clear and polluted fluids.
- ◆ Pump mounted outside the suction tank and is not submerged type.
- ◆ Polypropylene is manufactured by solid injection molding process with high pressure hence.



MATERIAL OF CONSTRUCTION

CASSING:

Top centerline discharge and integrated flanges, single piece, joint less casing formed out of Injection moulded Polypropylene.

IMPELLER :

Hydraulically balanced and accurately matched to casing profile, the semi open type impeller with practical shroud and glass finished smooth flow passage ensure high efficiency low NPSH performance Impeller made from compressor moulded U.H.M.W

EXPLORER:

Made form U.H.M.W

OVER FLOW BODY:

Heavy duty, onw piece, joint less design made from compressor moulded U.H.M.W

SHAFT:

The shaft is made from SS 316 Protected by shaft sleeve of U.H.M.W

In a seal-less magnetic drive centrifugal pump, the external magnet connected directly to the motor shaft and it transmits the torque to the internal magnet. The magnetic field created produces a rotation without physical contact between the parts so the impeller spins and moves the fluid. the rear casing is placed between the two magnet joints and it hermetically closes the hydraulic part from the motor.

WATER RATING CHART

PUMP DATA						ELECTRIC MOTOR DATA		
MODEL	HOUSE CONNECTION	THREAD CONNECTION	FLOW LPM	HEAD METERS	HP	WATTS	PHASE	AMPS
PMD 15	14X14 MM		15	2.5	0.1	75	SINGLE THREE	04
PMD 30	18X18 MM		30	4	0.16	120	SINGLE THREE	0.64 0.32
PMD 50	20X20 MM	1/2" X 1/2"	50	45	0.25	186	SINGLE THREE	1 0.32
PMD 85	26X26 MM	1" X 1" BSP	85	9	0.50.75	370	SINGLE THREE	3 1
PMD 125	26X26 MM	1" X 1" BSP	125	12	1	530	SINGLE THREE	4 13
PMD 170		1" X 1" BSP	170	14	1.5	745	SINGLE THREE	5 1.8
PMD 300		1 1/2" X 1 1/2" FLANGE	270	18	2	1100	SINGLE THREE	8 2.4
PMD 400		1 1/2" X 1 1/2" FLANGE	350	21	3	1500	SINGLE THREE	10 3.1
PMD 500		2" X 1 1/2" FLANGE	450	27	5	2730	THREE	4.6
PMD 650		2" X 1 1/2" FLANGE	600	32	-	3720	THREE	7.3

FEATURES

- ◆ A range of High Quality Hygienic Stainless Steel Positive Displacement Pumps for use the food Process Industries
- ◆ These Pumps are meant for high Mechanical Efficiency means less energy Consumption, Lower Cost Smaller Motors, Lower Drive Costs.
- ◆ Easy-Clean Pump of head which is ideal for In place cleaning or can be rapidly, Stripped for manual cleaning, without disconnection the Pipe Work.
- ◆ Positive, Uninterrupted Displacement by specially designed rotors creates a steady, gentle pumping action which does not shear, agitate or aerate the product.
- ◆ Pumping chambers are without pockets or crevices to harbor bacteria or contaminants. No Contact between moving parts and no internal bearings in the pump head.
- ◆ Solid stainless steel, ASI 316 quality, pump head, rotors and shafts. Food quality rubber covered and plastic rotors are also available.
- ◆ Robust, Cast Iron gear case enclosing oil Lubricated rolling bearings are precision timing gears.
- ◆ Generous distance separating the pump head from the gear case.
- ◆ End connection / Port Flanged / Threaded-Customized.

TYPICAL APPLICATION FOR POSITIVE DISPLACEMENT

- ◆ **Dairy:**
Cream, Milk, Cheese, Cird & Whey, Cottage, Cheese, Yogurt, Margarine Butter
- ◆ **Bakery:**
Batters, Flavorings, Frostings, Fruit Fillings, Fat & Oils, Sweeteners, Yeast Slurry Dough.
- ◆ **Meat Packing:**
Meat-Emulsions, Ground Meat, Pet Foods, Extracts, Minced Meat, Sausage Meat
- ◆ **Beverage:**
Beer, Wort, Yeast, Alcohols & Wines soft Drinks, Fruit Concentrates, Fruit Drinks, Essences.
- ◆ **Pharmaceutical:**
Pill Pastes, Syrup, Slurries, Extracts, Latex Emulsion.
- ◆ **Canning:**
Tomato Paste, Fruit Past, Cream Style, Vegetables, Slurries, Puddings, Jams, Jellies, Salads Dressings, Mayonnaise, Baby Foods, Soupes, Stews.
- ◆ **Confectionery :**
Syrups, Cream Fillings, Chocolates, Coffee Carme.
- ◆ **Cosmetics:**
Heand & Face Creams, Lotion Shampoos, Dyes, Alcohols, Essential Oils

OPTIONS

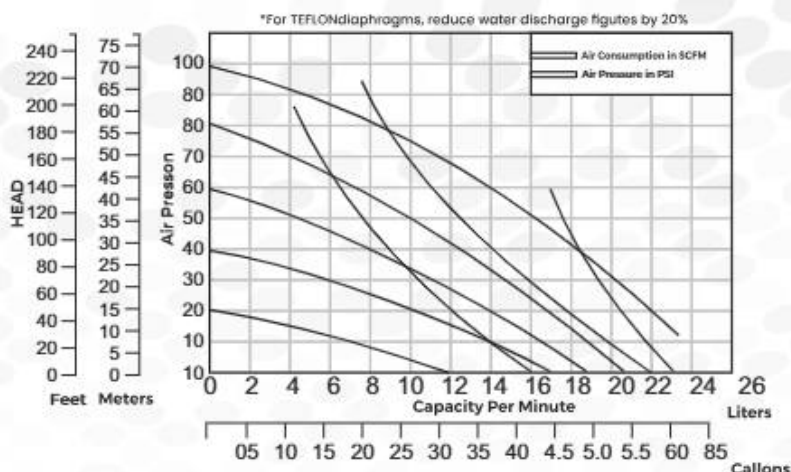
- Manual Control By-pass
- Relief Valve
- Jacked Rotor Case
- Electric Heating Tapes
- Trolley

MODEL	PORT CONNECTION	MAXIMUM HEAD		RPM	PUMP MAX CAPACITY	
		BAR	PSI		LPM	IGPM
LOBE-100	25MM (1")	7	100	960	50	22
LOBE-150	25MM (1 1/2")	7	100	960	100	35
LOBE-200	50MM (2")	7	100	720	300	67
LOBE-250	65MM (2 1/2")	6	87	720	450	100
LOBE-300	80MM (3")	7.6	87	600	480	110
LOBE-400	100MM (4")	5	72	600	750	168



AODD-150 (1/2")

Technical Data	
Max Flow Rate	30 LPM
Max Suction Lift-Dry Condition	1.45m (Rubber Diaphragm)
	0.50m (PTFE Diaphragm)
Max Suction Lift-Wet Condition	2.83m (Rubber Diaphragm)
	0.90m (PTFE Diaphragm)
Max Particle Size	2.0mm
Air Inlet Pressure	2-6 kg/cm ²
Suction Port	(12.07mm) 1/2" BSP Threaded
Discharge Port	(12.07mm) 1/2" BSP Threaded
Air Inlet Port	3/8" BSP Threaded
Air Exhaust	1/2" BSP Threaded

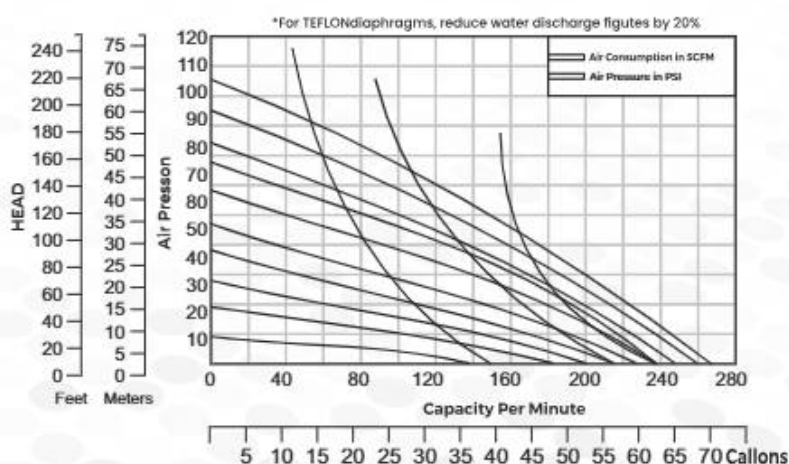


Notes :-

The above data refer to a positive suction head operating with water at room temperature.
All the information indicated may vary without notice.

AODD-300 (1")

Technical Data	
Max Flow Rate	130 LPM
Max Suction Lift-Dry Condition	3.05m (Rubber Diaphragm)
	2.14m (PTFE Diaphragm)
Max Suction Lift-Wet Condition	4.89m (Rubber Diaphragm)
	3.98m (PTFE Diaphragm)
Max Particle Size	3.17mm
Air Inlet Pressure	2-6 kg/cm ²
Suction Port	(38.0mm) 1" BSP Threaded
Discharge Port	(38.0mm) 1" BSP Threaded
Air Inlet Port	3/8" BSP Threaded
Air Exhaust	1/2" BSP Threaded

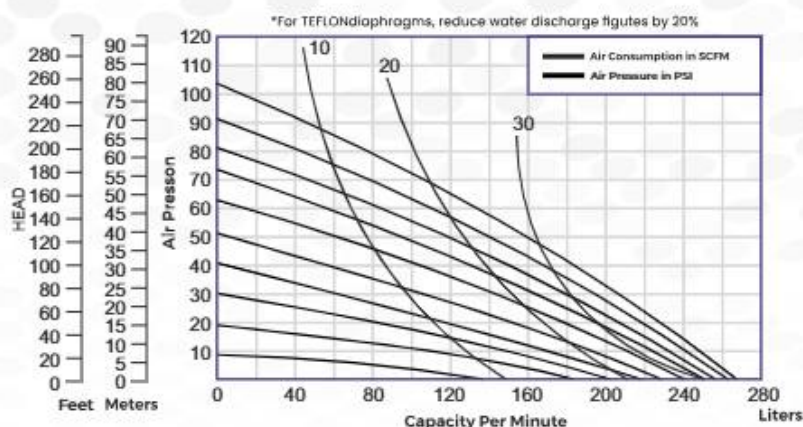


Notes :-

The above data refer to a positive suction head operating with water at room temperature.
All the information indicated may vary without notice.

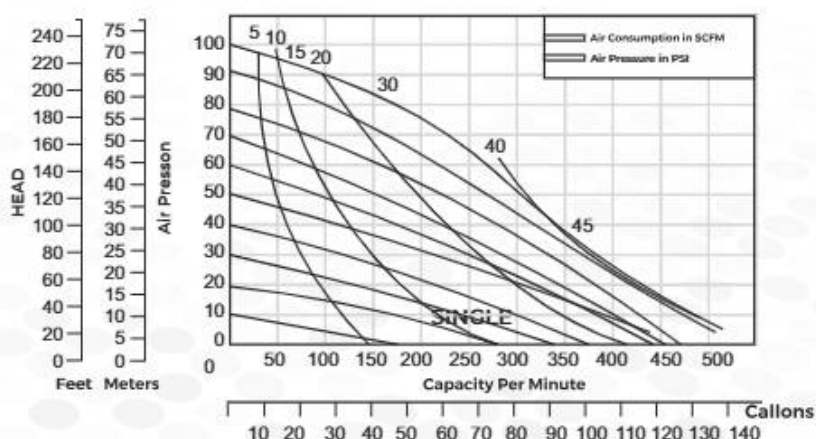
AODD-400 (1 1/2")

Technical Data	
Max Flow Rate	230 LPM
Max Suction Lift-Dry Condition	4.57m (Rubber Diaphragm) 3.05m (PTFE Diaphragm)
Max Suction Lift-Wet Condition	7.62m (Rubber Diaphragm) 6.09m (PTFE Diaphragm)
Max Particle Size	4.76mm
Air Inlet Pressure	2-6 kg/cm ²
Suction Port	(38.0mm) 1.5" BSP Threaded
Discharge Port	(38.0mm) 1.5" BSP Threaded
Air Inlet Port	3/8" BSP Threaded
Air Exhaust	3/4" BSP Threaded



AODD-500 (2")

Technical Data	
Max Flow Rate	350 LPM
Max Suction Lift-Dry Condition	4.57m (Rubber Diaphragm) 3.05m (PTFE Diaphragm)
Max Suction Lift-Wet Condition	7.62m (Rubber Diaphragm) 6.09m (PTFE Diaphragm)
Max Particle Size	6.35mm
Air Inlet Pressure	2-6 kg/cm ²
Suction Port	(50.80mm) 2" BSP Threaded
Discharge Port	(50.80mm) 2" BSP Threaded
Air Inlet Port	3/8" BSP Threaded
Air Exhaust	3/4" BSP Threaded



Notes :-

The above data refer to a positive suction head operating with water at room temperature. All the information indicated may vary without notice.

WETTED PARTS M.O.C

Model	Body	Diaphragm	Ball Valve	Valve Seat	O-Ring	Air-Distribution System	Bolted/Clamp
POLYPROPYLENE							
PTT	Polypropylene	PTFE + Santorence	PTFE+Santorence	Polypropylene	PTFE/VITON	NSV/PFF	Bolted
PST/PSS	Polypropylene	Santorence	Santorence	Polypropylene	Neoprene	NSV/PFF	Bolted
PRR	Polypropylene	RUBBER	RUBBER	Polypropylene	Neoprene	NSV/PFF	Bolted
STAINLESS STEEL							
STT	Stainless Steel	PTFE + Santorence	PTFE	Stainless Steel	PTFE	NSV/PFF	Bolted
SST	Stainless Steel	Santorence	PTFB	Stainless Steel	PTFE	NSV/PFF	Bolted
ALLUMINIUM							
ATT	Aluminium	PTFE + Santorence	PTFE	Aluminium	PTFE	NSV/PFF	Bolted
AST/ASS	Aluminium	Santorence	PTFE + Santorence	Aluminium	Neoprene	NSV/PFF	Bolted
ARP	Aluminium	RUBBER	RUBBER	Aluminium	Neoprene	NSV/PFF	Bolted
PVDF							
PVTT	PVDF	PTFE + Santoprene	PTFE	PVDF	PTFE	NSV/PFE	Bolted



APPLICATION

Public utilities:

- ◆ For pumping muddy water, sewage, polluted liquids, solid and in swimming pool.
- ◆ Dewatering Basements, Trenches, Construction sites.
- ◆ Onboard shift, as bilge, deck wash & Engine cooling
- ◆ Tiles & Marble factories, effluent plants.

Mobile Machinery:

- ◆ Cooling water for marine engines and Solvents.
- ◆ Any application where priming is to be avoided.

Industry:

- ◆ Transfer of clean or dirty neutral, acid or alkali liquids containing sand, mud or solids in suspension; clean or dirty low viscosity petroleum product or solvents; milk of lime or lime, caustic soda, washing cooling, circulation; smoke scrubbing emergency duty.

Civil engineering:

- ◆ Flood drainage, sewage pumping fire fighting, recovery of dangerous liquids.

Naval Duty:

- ◆ Loading and unloading bilge pumping washing, fire fighting, stripping sanitary duty and circulation.

Waste treatment:

- ◆ Pumping polluted, hot or corrosive waste water containing sand, mud or solids in suspension dosing neutralizing liquids pumping out settled sludge.

Construction industry:

- ◆ Dewatering excavation, canals or ponds, ground water dewatering with well point system or drains, water supply from or canals, hosing down concrete casting

Agriculture:

- ◆ Surface liquid manure oxygenation transfer and spraying liquid manure of fertilizers, distribution of liquid animal feed, transfer or must washing



TYPICAL APPLICATION

- ◆ Liquid containing sand mud or solids in suspension with PH from 5-13, smoke scrubbing, water emulsion for machine tools or grinders, cutting or quenching fluid circulation, cooling water circulation in steel mills or drawing neutralizing liquid dosage pumping out settled sludge, sump pumping liquid manure transfer and circulation.
- ◆ water circulation in paint spray booths, stripping fuel tanks circulation Recovery of dirty solvents.
- ◆ Transfer of light petroleum product such as diesel fuel, paraffin, kerosene and petrol (gasoline)
- ◆ Liquid fertilizer transfer, circulation and spraying brackish or sea water containing sand.
- ◆ Brackish or sea water washing cooling or fire fighting in ports auxiliary duties on board.
- ◆ Marine duty, brine sea intake and circulation of sea water in swimming pools
- ◆ Pumping out acid waste, transfer, of dilute acids, fruit juice or fluid food products.
- ◆ Recovery of spills from chemical plant, transfer or circulation of caustic or potash.
- ◆ At drilling Rigs.



FEATURES

- ♦ Excellent, quick, automatic without foot valve up to 4 mtrs.
- ♦ Automatic air release during priming.
- ♦ Back pull out design, so easy maintenance can be done without disturbing pipe lines.
- ♦ Dynamically balanced rotating parts ensure lesser vibrations.
- ♦ Better efficiency because of good hydraulic design.
- ♦ Minimum parts & fast repairing at low cost, pump is also available at economical rate.
- ♦ Available in Bare, Coupled, Monoblockm Belt driven & Engine Driven Version.
- ♦ Also offered pump with trolley / trailer to move it from one place to another.
- ♦ Monoblock pumps can withstand with wide voltage fluctuations.
- ♦ Less expensive & easily available spares.
- ♦ Pumps simple construction with only two moving parts.
- ♦ Easy inspection of impeller
- ♦ Large diameter solids handled. (up to 60 mm)
- ♦ High resistance. to abrasive liquids. Wear plates are easily replaced and impellers are also available with ceramic coating

Easy to install:

Only the suction hose is immersed in the Liquid. The pump can be set up high and dry in the most convenient position for inspection and maintenance.

Long Life :

The Parts subject to wear can be easily replaced one or more times to restore the original performance.

WATER RATING CHART

MODEL	MOTOR KW/HP	PIPE SIZE IN MM SUC. DEL	SPEED D IN R.P.M	TOTAL HEAD IN METERS																SOLID HEAD LING SIZE MM
				6	8	10	12	14	15	16	18	19	20	24	25	26	30	32	34	
				DISCHARGE IN LITTER PER SECOND																
MP-0.5	0.5	40 X 40	2850	2.5	2.2	2	0	-	-	-	-	-	-	-	-	-	-	-	-	5.0
MP-0	0.75/1.00	40 X 40	2850	4.5	4.0	3.5	2.6	1.4	0.5	-	-	-	-	-	-	-	-	-	-	7.0
MP-1	1.5/200	40 X 40	2850	-	-	6.0	5.5	4.8	4.0	3.9	2.7	1.8	0.8	-	-	-	-	-	-	8.5
MP-2	2.20/3.00	50 X 50	2900	-	-	9.2	8.4	8.0	7.7	7.2	6.4	5.9	5.3	2.5	1.4	-	-	-	-	10.5
MP-3A	3.70/5.00	80 X 80	2900	-	-	-	-	-	-	-	-	-	10.0	8.1	7.4	3.7	5.1	1.8	-	7.0



APPLICATION

- ◆ "Mech-Flow" Rotary gear pumps are useful for handling following Viscous and semi viscous liquid.
- ◆ Clean lube oil, castor oil, Coconut Oil, Ground nut oil, Cotton seed oil and Hydraulic Oil.
- ◆ All kind of vegetable oils.
- ◆ Paints & Varnish, Viscous Chemical, Printing Ink.
- ◆ All Kind of Fish and animal Oils.
- ◆ Soap Solutions, Glycerin, Glycol and Glue
- ◆ Sugar molasses and syrups.
- ◆ Rotary gear pumps are widely used in paper mills, refineries,
- ◆ Steel mills and textile Industries.



FEATURES

- ◆ All Positive displacement rotary gear pumps are self priming pumps with suction lift of 5 meters at normal viscosity and speed 1400 rpm
- ◆ The MEG series of Mech-Flow Pump has a modified profile of teeth to give accurate discharge within the pressure range.
- ◆ The helical gear design delivers constant volume without any pulsation. It also reduces internal slippage and gives high volumetric efficiency.
- ◆ Compact in size and highly economical
- ◆ All these are self lubricated pumps recommended for use where the liquid to be transferred has lubrication properties hence the bearing is lubricated by the pumping fluid and do not need any external lubrication.
- ◆ Easy maintenance due to availability and interchangeability of spares. tolerances to reduce the mechanical losses, thus it consumes lesser power and operates at higher efficiency

RANGE

Pressure	Up to 10 kg/cm ²
Discharge	10 LPM to 500LPM
Pipe Size	1/4" BSP to 3" BSP

CAST IRON CONSTRUCTION		TAINLESS STEEL CONSTRCUTION	
Pump Body	CL.Gr. FG 200	Pump Body	CF-8M (SS-316)
Back/RV Cover	CL.Gr. FG 200	Cover	CF-8M (SS-316)
Gears	EN-8	Gears	SS-316 Nitrided Super type
Gear Design	Single Helix	Gears	Single Helix
Shaft	EN-8 H & G	Gear Design	SS-316 Nitrided
Shaft seal	Oil Seal	Shaft	PTFE Gland Packing/Mechanical
PRV	STD Steel In Built	Shaft seal	seal (C/TC/or C/SC)
Temperature	80 C		Cast Iron L-Type
Bush Bearings	Self-Lubricated Sintered	Mounting bracket	150 C
Special Note	In Built Relief valves provided in all models	Temperature Limit	PTFE Coated DU/PTFE Coated
		Bush Bearings	DU/Bronze CFT -PTFE

WATER RATING CHART

MODEL	SUC DEL MM	CAPACITY		PRESSURE IN KG/CM ²										NET WEIGHT KGS CI	NET WEIGHT KGS SS
		LPM	M ³ /H R	1	2	3	4	5	6	7	8	9	10		
				MOTOR REQUIRED IN HP (SPEED 1440 RPM)											
MEG-15	15 X 15	20	1.2	0.50	0.50	0.50	0.50	0.75	0.75	0.75	0.75	1.00	1.00	2.800	3.800
MEG-20	20 X 20	30	1.8	0.50	0.50	0.75	0.75	0.75	1.00	1.00	1.00	1.50	1.50	5.000	-
MEG-25	25 X 25	50	3	0.75	0.75	0.75	0.75	1.00	1.50	1.50	1.50	2.00	2.00	6.000	6.000
MEG-32	32 X 32	75	4.5	1.50	1.5	1.50	2.50	2.00	2.00	3.00	3.00	3.00	3.00	8.000	11.000
MEG-40	40 X 40	110	6.6	3	2.00	3	3	3.00	3.00	5.00	2.0	5.00	5.00	11.000	15.000
MEG-50	50 X 50	225	13.5	5	3.00	5	5	5.00	5.00	7.50	7.50	7.50	12.50	18.50	21.000
MEG-65	65 X 65	350	21	7.5	7.50	7.50	10.00	10.00	10.00	12.50	12.50	15.00	15.00	29.000	-
MEG-80	80 X 80	500	30	10	10.00	10	12.50	12.5	15.00	15.00	20.00	20.00	20.00	45.000	-

VISCOSITY	SPEED	CAPACITY
UP TO 500 CST	1500 RPM	100 %
500-1500 CST	1000 RPM	66 %
15000 CST	750 RPM	50 %
5000-15000	500 RPM	33 %
15000-30000	380 RPM	25 %
30000-50000	300 RPM	20 %
50000-100000	200 RPM	13 %
100000-200000	150 RPM	10 %





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