

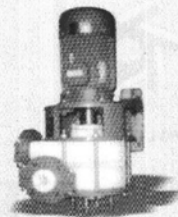
# VERTICAL GLANDLESS PUMP

Ultra High Molecular Weight High Density Polyethylene (U.H.M.W.PE)

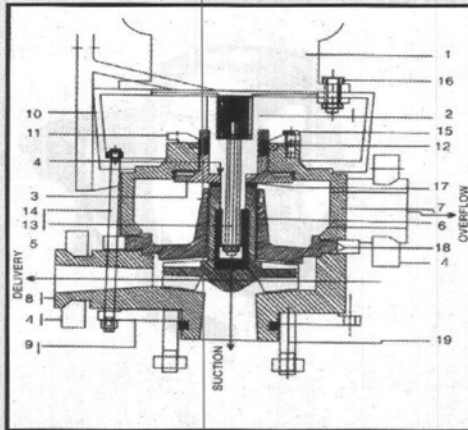
## SPECIAL FEATURES :

Vertical Glandless Pump similar in Hydraulic Design to any conventional Centrifugal Pump . It differs so far as it is always mounted out side the Suction Tank Vertical position and is not submerged type. Zero maintenance Pump Eliminates the need for Gland Packing and Seal. And can run dry without Damage of rotating parts, Design to handle corrosive Liquids & Slurries.

IDEALY SUITED FOR CHEMICAL FACTORY ,PAPER MILL, CEMENT FACTORY,FUMES SCRUBBING SYSTEM ,E.T.P. PLANT AND FOR EJECTOR.



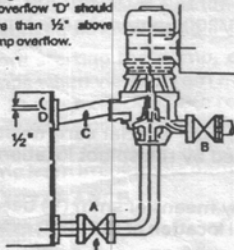
## SECTIONAL VIEW



ITEM	NO..OFF	MATL	DESCRIPTION
1	1		ELECTRIC MOTOR
2	1	SS-316/A	SHAFT EXTENSION
3	1	U.H.M.W.PE	VANED THROWER
4	2	M.S	DELIVERY FLANGE
5	1	DO	UPPER CASING COVER
6	1	DO	IMPELLER
7	1	DO	UPPER BODY
8	1	DO	LOWER BODY
9	1	M.S.	CLAMP PLATE
10	1	C.I.	MOUNTING BRACKET
11	1	UHMWPE	VAPOUR SEAL COVER PLATE
12	1	PTFE-GLAN	VAPOUR SEAL
13	1	S.S-316.	CLAMP BOLT C/W NUT AND WASHER
14	7	S.S-316.	CLAMP C/W 2 NUTS PER BOLT
15	2	S.S-316	BOLTS C/W WASHER
16	4	M.S.	NUTS C/W WASHERS TO SUIT STD SIZE
17	1		1mm JOINT RING
18	2		1mm JOINT RING
19	4	S.S.-316	CLAMPING STUD AND WASHER

## INSTALLATION

Tank overflow 'D' is to prevent liquid level rising in pump body and damaging the motor. The lower lip of overflow 'D' should not be more than 1/2" above centre of pump overflow.

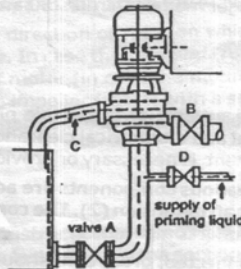


Isolation valve for scalling the tank during maintenance not essential for efficient working of the pump.

### INSTALLATION 1

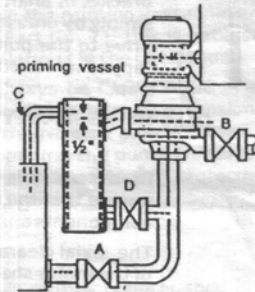
1. fully open valve 'A'
2. allow level of liquid to rise in supply tank up to overflow 'D' level
3. close valve 'B'
4. start pump
5. open valve 'B' gradually for required flow

A vertical suction pipe with non-return valve entering top of tank may be used when liquid is free from suspended solids



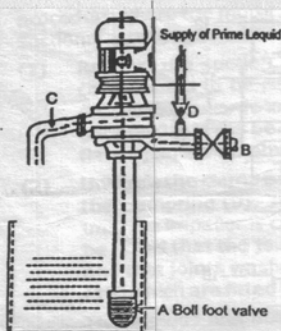
### INSTALLATION 2

1. close valves 'A' and 'B'
2. open valve 'D' and leave running until liquid flows of 'C'
3. start pump and immediately open valve 'A' fully
4. close valve 'D'
5. open valve 'B' gradually for required flow



### INSTALLATION 3

1. close valves 'A' and 'B' open valve 'D'
2. fill priming vessel to overflow 'C'
3. start pump
4. open valve 'A'
5. close valve 'D' and open valve 'B' for flow required

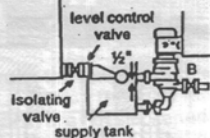


### INSTALLATION 4

1. Close valve 'B'
2. Open valve 'D' and leave running until liquid flows of 'C'
3. Start pump immediately close valve 'D'
4. Open valve 'B' gradually for required flow

### Prime Vessel

Deep storage tanks or liquors at elevated temperatures



### INSTALLATION 5

This installation is basically scheme 1 but level in supply tank is regulated by a mechanical or electrical flow control valve. Installation for deep variable head storage tanks or where suction lifts must be kept to a minimum.

### INSTALLATION & OPERATION

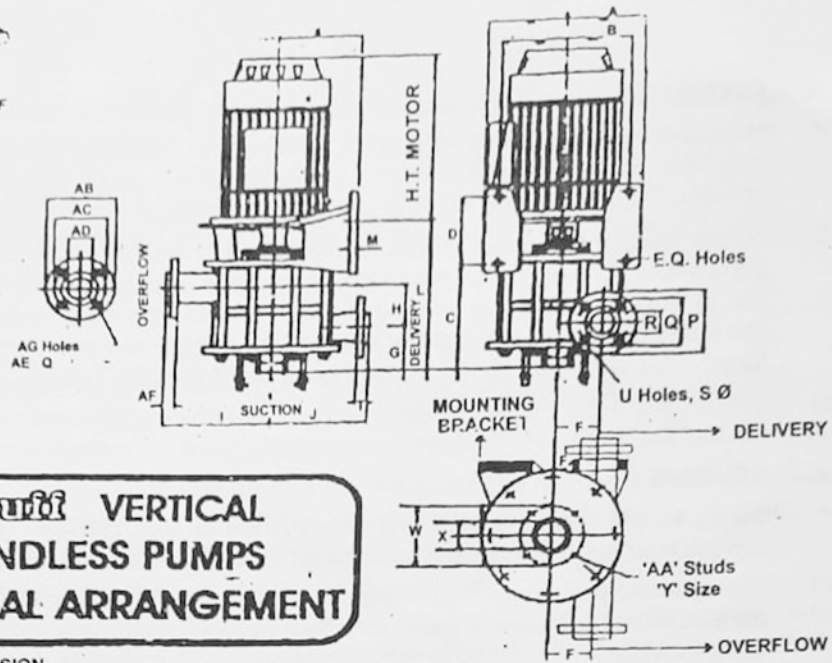
- 1 Where Low Level Priming is not required.
- 2 Where Low Level Priming is required.
- 3 Where priming at all levels is required.
- 4 Where priming at all levels is required without recirculation.
- 5 For deep variable head storage tanks, or where suction lifts must be kept to a minimum.

All installations must have the overflow from the pump to supply or priming vessel :-

- a straight
- b have no restriction (valves etc.)
- c slope down - 1 in 20 or more.
- d preferably 12" long maximum.
- e valves 'A' to be of the free flow type



# POLYTUFF



## Polytuff VERTICAL GLANDLESS PUMPS GENERAL ARRANGEMENT

FLANGE DIMENSION

Pump Model	DELIVERY						SUCTION				OVERFLOW					
	P	Q	R	S	T	U	W	X	Y	AA	AB	AC	AD	AE	AF	AG
DK/25/100																
DK/25/130	130	90	25	14	30	4	110	40	M12	4	130	90	25	14	30	4
DK/32/130	150	110	32	14	30	4	125	50	M12	4	130	90	32	14	30	4
DK/32/160	150	110	32	16	30	4	125	50	M14	4	150	110	32	16	30	4
DK/40/160	150	125	40	16	30	4	145	65	M14	4	150	110	32	16	30	4
DK/40/200	150	125	40	16	30	4	145	65	M14	4	150	125	40	16	30	4
DK/50/200	165	125	50	16	35	4	160	80	M16	4	165	125	50	16	35	4
DK/65/200	185	145	65	16	35	4	180	100	M16	4	185	145	65	16	35	4
DK/65/250	185	145	65	18	35	4	180	100	M16	4	185	145	65	18	35	4
DK/80/250	185	160	80	18	35	4	180	100	M16	4	185	160	80	18	35	4

## PUMP DIMENSION (APPROX)

MODEL	MOUNTING DIMS. MM					GENERAL DIMS. MM								WEIGHT EXCL. Motors Kgs.
	A	B	C	D	E	F	G	H	I	J	L	M	N	
DK/25/100														
DK/25/130	250	200	165	130	13	70	75	75	175	175	240	20	140	
DK/32/130	250	200	165	130	13	70	75	75	175	175	240	20	140	
DK/32/160	290	230	175	176	17	82	75	75	185	185	295	24	180	
DK/40/160	290	230	175	176	17	82	75	75	185	185	295	24	180	
DK/40/200	325	240	215	178	17	82	80	100	195	195	335	24	195	
DK/50/200	355	290	220	180	19	100	90	115	230	230	345	24	215	
DK/65/200	355	290	220	180	19	100	90	115	230	230	345	24	215	
DK/65/250	465	365	290	190	24	150	90	115	300	300	345	28	280	
DK/80/250	465	365	290	190	24	150	115	146	300	300	427	28	280	