

Thermic Fluid Pumps

for High Temperature Applications

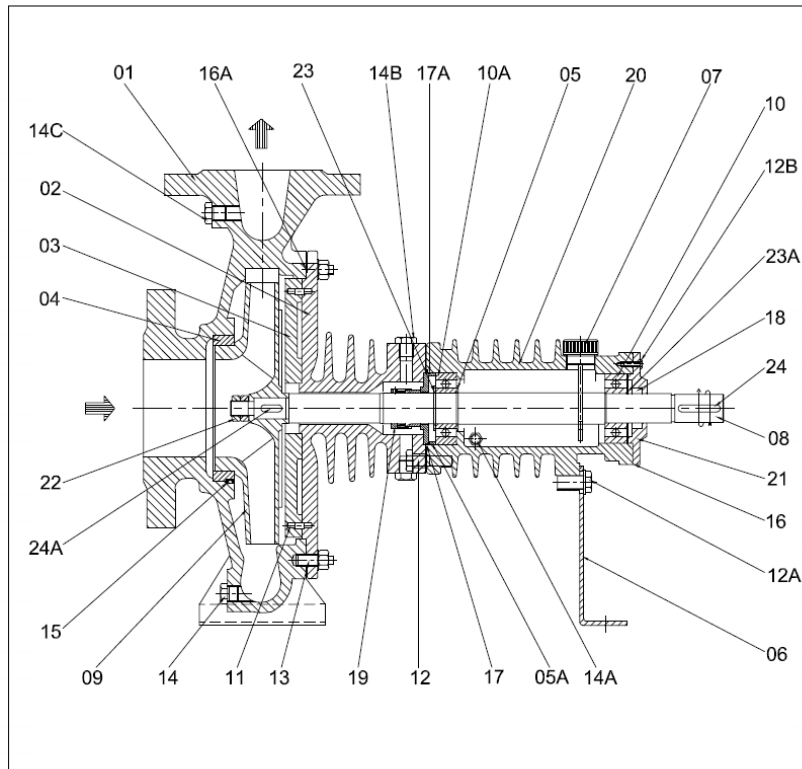


**ORBIT PUMPS & SYSTEMS
PVT LTD**

**PLOT NO:E-15/2, MIDC, MURBAD, DIST. THANE -
421401, MAHARASHTRA**

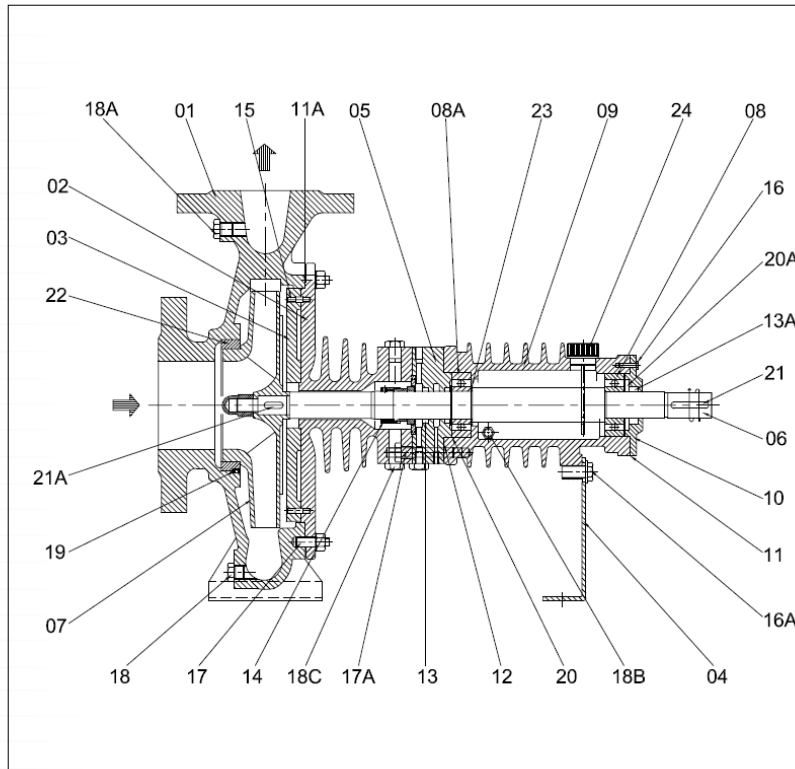
**e-mail : orbitpumps@yahoo.co.in,
web : www.orbitpumpsandsystems.com**

Sectional Drawing for General Thermic Fluid Pumps



24	Key-Wey	SS316		
23	Circlip	Steel		
22	Locking nut	Steel		
21	Bearing cover	Ductile Iron		
20	Bearing frame	Ductile Iron / Cast Iron		
19	Mechanical seal	Lecrolloy / Carbon		
18	Radial seal ring	Viton		
17	O-Ring	Viton		
16	Gasket	Paper Gasket		
15	Grub screw	SS202	SS304	SS316
14	Plug	SS202	SS304	SS316
13	Stud	SS202	SS304	SS316
12	Screw	SS202	SS304	SS316
11	Screw	SS202	SS304	SS316
10	Ball bearing	Steel		
09	Impeller	Ductile Iron	WCB	SS316
08	Shaft	SS316		
07	Oil dipstick	Steel		
06	Support foot	Ductile Iron		
05	Spacer ring	Steel		
04	Wear ring	Bronze	CC50	
03	Cooling plate	Ductile Iron	WCB	SS316
02	Casing cover	Ductile Iron	WCB	SS316
01	Suction casing	Ductile Iron	WCB	SS316
Part No.	DESCRIPTION	MOC		

Sectional Drawing for Vegetable Oil Pumps



24	Oil dipstick	Steel		
23	Spacer ring	Steel		
22	Wear ring	Bronze	CC50	
21	Key	SS316		
20	Grub screw	Steel		
19	Grub screw	SS202	SS304	SS316
18	Plug	SS202	SS304	SS316
17	Stud	SS202	SS304	SS316
16	Screw	SS202	SS304	SS316
15	Screw	SS202	SS304	SS316
14	Mechanical seal	SIC-Car.		
13	Radial seal ring	Viton		
12	O-Ring	Viton		
11	Gasket	Paper Gasket		
10	Bearing cover	Ductile Iron		
09	Bearing frame	Ductile Iron / Cast Iron		
08	Ball bearing	Steel		
07	Impeller	SS316		
06	Shaft	SS316		
05	Extension flange	WCB	SS316	
04	Support foot	Ductile Iron		
03	Cooling plate	WCB	SS316	
02	Casing cover	WCB	SS316	
01	Suction casing	WCB	SS316	
Part No.	DESCRIPTION	MOC		

Technical Features of Thermic Fluid Pumps

- Pump Dimensions comply to ISO 2858/5199 with Flange STD ASA 150.
- Available in Closed Impeller Construction for Higher Efficiencies.
- Wide Range of Models and MOCs available (Ductile Iron, Cast Steel & Stainless Steel) covering the Maximum Duty Conditions.

Salient Features for Thermic Fluid Pumps:

- Two Intrinsic Designs covering wide range of High Temperature Fluids and other Vegetable Oil Applications.
- Maximum Temperature handling up to 350° C.
- Back Ribs on Impeller.
- Heat Barrier plate for better heat dissipation.
- Cooling Fins (Air-Cooled) are provided to eliminate use of External Cooling Systems.
- Oil Lubricated Bearing Housing Only, with Ball Bearings provided on the Product Side as well as the Drive Side to ensure Ease of Maintenance & Better Service Life.
- Intermediate element Provided for Vegetable Oil Applications Under Vacuum, eliminating use of Expensive Double or Metal Bellow Seals.



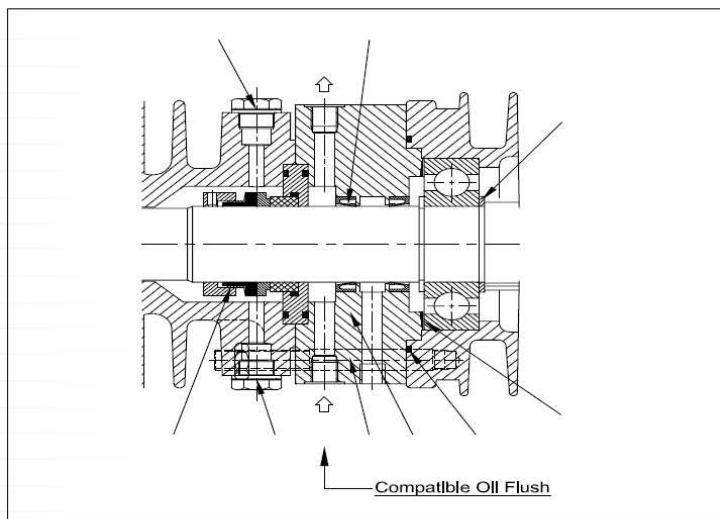
Closed Impeller



Back Ribs
On Impeller

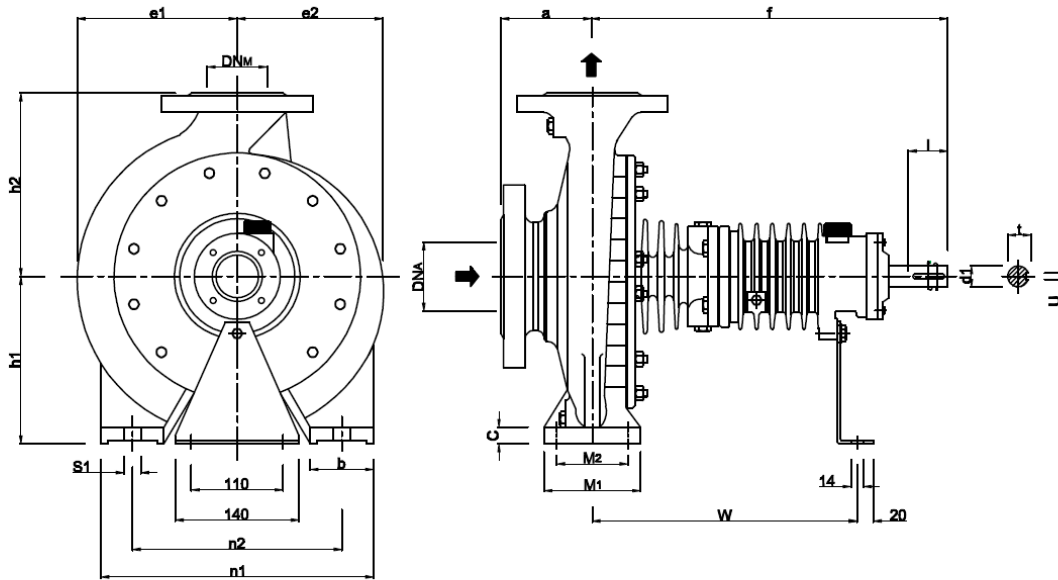


Heat Barrier Plate



Cooling Fins

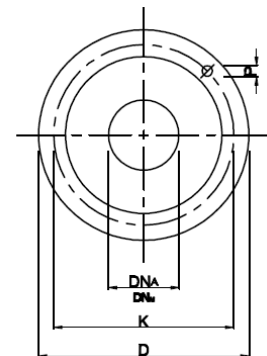
Dimensions



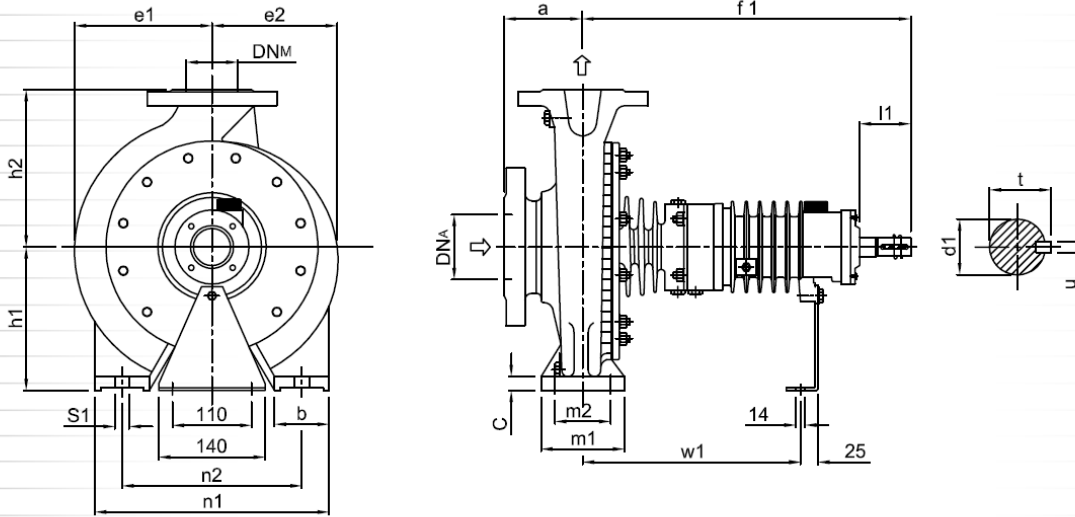
Pump type	Dimensions for BARESHAFT Construction																				weight
	DN _A	DN _M	a	f	h ₁	h ₂	b	c	m ₁	m ₂	n ₁	n ₂	s ₁	w	d ₁	l	t	u	e ₁	e	
25-125	40	25	80	385	112	140	50	15	100	70	190	140	14	285	24	50	27	8	95	90	23
25-160	40	25	80	385	132	160	50	16	100	70	240	190	14	285	24	50	27	8	110	108	30
25-200	40	25	80	385	160	180	50	16	100	70	240	190	14	285	24	50	27	8	133	128	34
32-125	50	32	80	385	112	140	50	15	100	70	190	140	14	285	24	50	27	8	105	91	25
32-160	50	32	80	385	132	160	50	16	100	70	240	190	14	285	24	50	27	8	125	110	26
32-200	50	32	80	385	160	180	50	16	100	70	240	190	14	285	24	50	27	8	140	130	37
40-125	65	40	80	385	112	140	50	15	100	70	210	160	14	285	24	50	27	8	115	100	27
40-160	65	40	80	385	132	160	50	16	100	70	240	190	14	285	24	50	27	8	130	115	32
40-200	65	40	100	385	160	180	50	16	100	70	260	212	14	285	24	50	27	8	146	135	36
40-250	65	40	100	500	180	225	65	18	125	95	320	250	14	370	32	80	35	10	176	163	62
50-125	80	50	100	385	132	160	50	16	100	70	240	190	14	285	24	50	27	8	130	110	29
50-160	80	50	100	385	160	180	50	16	100	70	265	212	14	285	24	50	27	8	147	125	35
50-200	80	50	100	385	160	200	50	16	100	70	260	212	14	285	24	50	27	8	161	146	39
50-250	80	50	125	500	180	225	65	18	125	95	320	250	14	370	32	80	35	10	183	169	66
65-125	100	65	100	385	160	180	65	16	125	95	280	212	14	285	24	50	27	8	145	117	54
65-160	100	65	100	395	160	200	65	16	125	95	280	212	14	295	24	48	27	8	160	130	57
65-200	100	65	100	500	180	225	65	18	125	95	320	250	14	370	32	80	35	10	174	152	62
65-250	100	65	125	500	200	250	80	20	160	120	360	280	18	370	32	80	35	10	195	175	75
80-160	125	80	125	395	180	225	65	16	125	95	320	250	14	295	24	48	27	8	186	142	62
80-200	125	80	125	500	180	250	65	18	125	95	345	280	14	370	32	80	35	10	188	158	63
80-250	125	80	125	500	225	280	80	20	160	120	400	315	18	370	32	80	35	10	225	185	82
100-200	125	80	125	500	200	280	80	20	160	120	360	280	18	370	32	80	35	10	211	170	78

FLANGES DIMENSIONS				
DN _A	D	K	P	N°
25	115	85	14	4
32	140	100	18	4
40	150	110	18	4
50	165	125	18	4
65	185	145	18	4
80	200	160	18	8
100	220	180	18	8
125	250	210	18	8

FLANGES:-
Dimension to
uni 2223-2229 np16
standards



Dimensions



PUMP TYPE	Dimensions for BARESHAFT Construction																				
	DN _A	DN _M	a	F ₁	h ₁	h ₂	b	c	m ₁	m ₂	n ₁	n ₂	s ₁	w ₁	d ₁	l ₁	t	u	e ₁	e ₂	Weight
25-125	40	25	80	406	112	140	50	15	100	70	190	140	14	285	24	48	27	8	95	90	30
25-160	40	25	80	406	132	160	50	16	100	70	240	190	14	285	24	48	27	8	110	108	37
25-200	40	25	80	406	160	180	50	16	100	70	240	190	14	285	24	48	27	8	133	127	41
32-125	50	32	80	406	112	140	50	15	100	70	190	140	14	285	24	48	27	8	105	91	32
32-160	50	32	80	406	132	160	50	16	100	70	240	190	14	285	24	48	27	8	125	110	35
32-200	50	32	80	406	160	180	50	16	100	70	240	190	14	285	24	48	27	8	140	130	44
40-125	65	40	80	406	112	140	50	15	100	70	210	160	14	285	24	48	27	8	115	100	34
40-160	65	40	80	406	132	160	50	16	100	70	240	190	14	285	24	48	27	8	130	115	39
40-200	65	40	100	406	160	180	50	16	100	70	265	212	14	285	24	48	27	8	146	135	43
40-250	65	40	100	536	180	225	65	18	125	95	320	250	14	372	32	78	35	10	176	163	70
50-125	80	50	100	406	132	160	50	16	100	70	240	190	14	285	24	48	27	8	130	110	36
50-160	80	50	100	406	160	180	50	16	100	70	265	212	14	285	24	48	27	8	147	125	42
50-200	80	50	100	406	160	200	50	16	100	70	265	212	14	285	24	48	27	8	161	146	46
50-250	80	50	125	536	180	225	65	18	125	95	320	250	14	372	32	78	35	10	183	169	74
65-125	100	65	100	406	160	180	65	16	125	95	280	212	14	285	24	48	27	8	145	117	61
65-160	100	65	100	418	160	200	65	16	125	95	280	212	14	296	24	48	27	8	160	130	64
65-200	100	65	100	536	180	225	65	18	125	95	320	250	14	372	32	78	35	10	174	152	70
65-250	100	65	125	536	200	250	80	20	160	120	360	280	18	372	32	78	35	10	195	175	83
80-160	125	80	125	418	180	225	65	16	125	95	320	250	14	296	24	48	27	8	186	142	69
80-200	125	80	125	536	180	250	65	18	125	95	345	280	14	372	32	78	35	10	188	158	71
80-250	125	80	125	536	225	280	80	20	160	120	400	315	18	372	32	78	35	10	225	185	90
100-200	125	100	125	536	200	280	80	20	160	120	360	280	18	372	32	78	35	10	211	170	86

FLANGES DIMENSIONS				
DN _A	D	K	P	N°
25	115	85	14	4
32	140	100	18	4
40	150	110	18	4
50	165	125	18	4
65	185	145	18	4
80	200	160	18	8
100	220	180	18	8
125	250	210	18	8

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Dimension to
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