

**nu-teck**<sup>®</sup>



**CATALOGUE**

**P O W E R**

**TRANSMISSION**

**PRODUCTS**

[www.nuteckindia.com](http://www.nuteckindia.com) / [www.nuteckgears.com](http://www.nuteckgears.com)

**nu-teck**

## SALIENT FEATURES

The 'Nu-Ratio' gear reducers are designed as per DIN Std. A starting torque equal to two times running torque is considered while designing 'Nu-Ratio' gear reducers.

## GEAR CASES

The gear cases are manufactured in two pieces form graded C. I. castings with rugged design, free from any blow holes. They are corrosion resistant and can absorb shock and vibration. The housing can also be manufactured from M S. fabricated plates, and Stress relieved. Inspection covers are provided for viewing gear contacts. Oil level, dispstick and drain plug are fitted at proper places.

## GEARING

The helical/spiral gears are manufactured from high quality alloy steel, hobbled with protuberance type cutter. The gears are case carburised, hardened and tempered and precisely ground to give high efficiency and quiet running.

## SHAFTS AND BEARINGS

Shafts are from alloy steel forgings or bars heat treated to suitable BHN value. The bearings are antifriction; Taper roller or / and spherical roller type fitted on the ground journal. Low speed shaft can be solid or hollow. The bearing life is 15000 working hours (min).

## SEALING

Suitable spring loaded single lip type seals are used to prevent the leakage of oil and entry of atmospheric dust.

## COOLING

Where the natural cooling from the exposed surface of the gear box is not sufficient, the gear units are provided with on/two cooling fans mounted on high speed shaft. The gear units are also supplied with external forced feed lubrication system where fan cooling is also not sufficient to keep the temperature of the gear units upto optimum.

## OTHERS

The gear units can also be provided with Backstop, baseplate & preheating arrangement.

The tolerance on the nominal transmission ratio is  $\pm 3\%$ .

Following information is to be specified for selection of gear units-

1. Prime-mover
2. Prime mover's power KW/HP
3. Brake horse power
4. Input speed, N1
5. Output Speed, N2
6. Required ratio
7. Application
8. Duty Hours per day
9. Ambient temperature
10. Whether Backstop is required?
11. Hand of assembly as described in the catalogue.
12. Any other information

## EXAMPLE

Selection of 'Nu-Ratio' gear Reducers

DATA GIVEN:

- |                                  |                  |
|----------------------------------|------------------|
| Prime mover                      | - Electric Motor |
| Motor Power                      | - 305 KW (P1)    |
| Input Speed                      | - 1500 RPM (n1)  |
| Output Speed                     | - 115 RPM (n2)   |
| Frequency of starts/hr           | - 1              |
| Brake horse power                | - 305 KW (P2)    |
| Parallel Shaft horizontal offset |                  |
| Application                      | - Plunger pump   |
| Duty                             | - 24 hrs / Day   |
| Ambient temperature              | - 40° C          |

Select the suitable service factors from the tables for the prime mover as electric motor and driving equipment and plunger pump  $f_1 = 1, f_2 = 2$  &  $f_3 = 1$

Calculate the nominal gear unit rating "PN"

$$PN = P_1 \times f_1 \times f_2 \times f_3 = 305 \times 1 \times 2 \times 1 = 610 \text{ KW}$$

$$n = \frac{n_1}{n_2} = \frac{1500}{115} = 13.04$$

Refer the catalogue of two stage gearbox NHB and find that the rating of the gearbox NHB - 360 is suitable for the application at the nearest ratio 12.5:1

Thermal capacity of NHB - 360 is 285 KW without any cooling i.e.  $P_{th} = 285 \text{ KW}$

Select the temperature factor at 40° C ambient temp. as 0.82 100% duty cycle.

The actual thermal capacity of the gearbox at 40°C =  $f_4 \times P_{th} = 0.82 \times 285 \text{ KW} = 233.7 \text{ KW} < 305 \text{ KW}$ .

Therefore additional cooling is required with single fan.

Table 3 Factor for Frequency of starts f3

Starts per Hour	Factor for processing machine f2					
	≥1.0	≥1.2	≥1.4	≥1.6	≥1.8	≥2.0
1-5	1.0	1.0	1.00	1.00	1.00	1.00
6-20	1.2	1.1	1.08	1.07	1.07	1.06
21-40	1.3	1.2	1.17	1.16	1.15	1.08
41-80	1.5	1.4	1.25	1.23	1.18	1.10
81-160	1.6	1.5	1.35	1.30	1.20	1.10
Above 160	2.0	1.8	1.70	1.60	1.30	1.10

Table 4 Factor for Thermal Capacities f4

Ambient Temperature	Duty Cycle				
	100%	80%	60%	40%	20%
20°C	1.0	1.04	1.09	1.16	1.27
30°C	0.9	0.95	1.0	1.07	1.18
40°C	0.82	0.86	0.9	0.98	1.09
50°C	0.73	0.77	0.82	0.89	1.0

**Table 1 Factor for Propulsion Machines f1**

Electric Motors Turbines	Piston Engines 4-6 Cylinders Cycle Variation 1:100 upto 1:200	Piston engines 1-3 Cylinders Cyclic variation upto 1:100
1.0	1.25	1.5

**Table 2 Factor for Propulsion Machines f2**

Processing Machines	Daily Service in Hours			Processing Machines	Daily Service in Hours			Processing Machines	Daily Service in Hours		
	upto 3	3-10	10-24		upto 3	3-10	10-24		upto 3	3-10	10-24
<b>Blowers, Fans</b> Axial blowers, Cooling Towers, Fans, Induced draught blowers, Radial blowers Rotary	1.0	1.25	1.5	Filling Machines	1.0	1.0	1.25	<b>Pumps</b> (Light Liquids)			
Turbo blowers, mixers	1.0	1.0	1.5	Kneading Machines	1.0	1.25	1.5	Centrifugal Pumps (Semi Liquids)	1.0	1.0	1.25
<b>Chemical Industry</b>				Mash Tubs, Crystallizers	1.5	1.75	2.0	Compression Pumps			
Agiatot (Semiliquid material)	1.0	1.0	1.25	Packaging Machines	1.0	1.0	1.25	Piston Pumps	1.5	1.75	2.0
Centrifigures	1.0	1.0	1.25	Sugar beat Cutters	1.0	1.25	1.5	Piston Pumps (UI :100-200)			
Rotary Drying Kilns			1.5	Sugar Cane Cutters			1.5	Piston Pumps (U < 100)			2.0
Condesors Compressors, Rotary Piston Compressors (UI: 100-200) Rotary Piston Compressors (U<100) TurboCompressors	1.5	1.75	2.0	<b>Generators &amp; Transformers</b>				<b>Rolling Mills</b>			
<b>Conveyors</b>				Frequency Transformers / welding generators	1.5	1.75	2.0	Billet Shears			2.0
Apron Conveyors	1.0	1.75	1.5	Generators	1.0	1.0	1.25	Capstan Handles / Chain Transfers / Coiling Machines			1.5
Ballast/ Bucket Elevators	1.0	1.25	1.5	Water Turbines			1.5	Cold Rolling Mills			2.0
Belt Conveyors (bulk material)	1.0	1.0	1.25	<b>Iron &amp; Steel Industry</b>				Continuous Casting Equip.			1.25
Belt Conveyors (piece goods)	1.0	1.25	1.5	Blast urnace Blowers			1.5	Cooling Beds / Cropping Shears Cross Transfers			1.5
Bucket Conveyors	1.5	1.5	1.5	Inclined elevators or blast furnace			2.0	Descaling Machines			2.0
Chain Elevators	1.25	1.5	1.75	Laundry Machines				Draw Benches for wire Drawing			1.5
Circular Conveyors				Rotary Drives / Washing Machines	1.0	1.25	1.5	Fast Rollers			2.0
Drag Chain Conveyors	1.0	1.25	1.5	<b>Metal Working Machines</b>				Fix Transportation (Rope)			1.5
Gravel Conveyors				Bending Machines	1.0	1.25	1.5	Ingot & Blooming Mills / Ingot Handling Machinery / Ingot Pushers			2.0
Haulage Winches	1.25	1.5	1.75	Counter Shafts / Line Shafts	1.0	1.0	1.25	Lift Conveyors			1.75
Hoists			2.0	Forging Presses	1.5	1.75	2.0	Live Roller Type Feeding Tables Manipulators / Revolving Turrets (Continuous Casting)			1.5
Conveyors / lifts	1.0	1.25	1.75	Hammers			2.0	Plate Milts			2.0
Powder elevator	1.0	1.0	1.25	Machine tools, Auxiliary Drives	1.25	1.5	1.75	Rolls Straighteners			1.5
Screw Conveyors	1.0	1.25	1.5	Machine tools, Main drives	1.5	1.75	2.0	Roller Adjustment Devices			2.0
Sinking Machines	1.5	1.75	2.0	Planning Machines /	1.5	1.75	2.0	Roller Tables			2.0
Drag haulers	1.0	1.75	1.5	Presses / Punching Presses / Straightening Machines / Shearing Machines	1.0	1.25	2.0	Roller Tables (Light)			1.5
Steel Belt Conveyors	1.0	1.25	1.5	<b>Mining Stone &amp; Soil workingMachins</b>				Roller Tables(Heavy)			2.0
<b>Crane</b>				Ball Mills / Brick making Presses / Centrifugal grinders			2.0	Roller Transporters / Sheet Rolling Mills			2.0
Derricking job gears	1.0	1.25	1.5	Chain Conveyors			1.5	Shunting Installation / Slow Rollers			1.5
Hoisting gears / luffing gears	1.0	1.0	1.25	Cone Crushers / Crushers, Gyrator, Brakers / Hammer Mills / Impact Pulverizers / JawCrushers, Jaw Brakers			2.0	Tape Spools			1.75
Landing gears	1.5	1.75	2.0	Mine Blowers			1.5	Trimming Shears			1.5
Traversing gears	1.0	1.25	1.5	Ram Moulding Machines			1.75	Tube WeldingMachines			
Winches	1.0	1.25	1.5	Rod Mills			2.0	Winding Machines (Strip & Wire)	1.5	1.75	2.0
<b>Excavators and Stackers</b>				Roll Crushers			1.75	Wire Drawing Machines / Wire Wheels / Wire Rope Winches			1.5
Bucket Conveyor excavation (k.loose)	1.5	1.75	1.75	Rolling Mills			2.5	<b>Rubber &amp; Plastic Machinery</b>			
Bucket Conveyor excavation (K.tight)			2.0	Rotating Cylindrical Kilns			2.0	Calenders			2.0
Bucket Wheels (Overburden / Limestone /Coal)	1.5	1.75	2.0	Sharp Point Brakers / Tube Mills			2.0	Crushing Machines			1.5
Bucket wheels for waste heap	1.4	1.5	1.6	Wagon Pushers			1.5	Extruders	1.5	1.75	2.0
Cutter heads	1.5	1.75	2.0	<b>Oil Industry</b>				Mixers			1.75
Landing gears(Caterpillar) Landing gears(Rails)	1.5	1.75	2.0	Filter Presses / Hydraulic Pumps			1.75	Pug Mills / Rolling Mills			2.0
Maneuvering winches Traversing gear /winche	1.0	1.25	1.5	Pipeline Pumps			1.5	<b>Textile Machinery</b>			
Suction Pumps	1.0	1.75	1.5	Rotary Drilling Equipments	1.5	1.75	2.0	Batchers / Calenders			
<b>Food Industry Machinery</b>				<b>Presses</b>				Looms Printing & Drawing Machines	1.0	1.25	1.5
Cane Crushers			2.0	Bending Presses / Brick Presses / Briquetting Presses / Eccentric Presses / Forging Process	1.5	1.75	2.0	<b>Water Treatment</b>			
Cane Knives			1.5					Aerators			2.0
								Screw Pumps	1.25	1.5	1.75
								<b>Wood Working Machine</b>			
								Barkers / Saw Mills	1.5	1.75	2.0
								Planing Machines	1.0	1.25	1.5
								Wood Working Machines	1.0	1.0	1.25

Nominal Transmission Ratio	Nominal Speeds		SIZE OF GEAR UNIT																
			80	90	100	112	125	140	160	180	200	225	250	280	320	360	400	450	500
in	n <sub>1</sub>	n <sub>2</sub>	Nominal Gearbox Rating PN (Kw)																
1.6	1500	940	50	74	97	120	170	230	305	390	550	740	1100	1500	2050	2700	--	--	--
	1000	625	36	53	71	90	130	175	230	290	400	550	800	1100	1450	2100	2790	--	--
	750	470	28	41	56	70	105	140	190	240	310	455	660	900	1180	1560	2280	3450	4340
1.8	1500	835	45	67	91	110	160	210	290	355	500	690	1000	1400	2000	2600	--	--	--
	1000	555	32	48	66	85	120	160	220	265	370	520	750	1020	1400	1800	2620	3860	--
	750	415	25	37	52	66	98	130	180	220	280	425	610	830	1120	1450	2140	3150	4030
2.0	1500	750	38	58	79	105	150	200	270	340	480	630	950	1300	1800	2400	--	--	--
	1000	500	27	43	57	77	110	150	200	250	350	475	700	940	1300	1680	2500	3630	4630
	750	375	21	34	44	60	89	120	165	210	265	390	580	770	1020	1370	1990	2970	3790
2.24	1500	670	37	51	68	95	135	180	250	310	450	600	890	1200	1650	2200	--	--	-
	1000	445	26	36	48	68	100	135	190	235	300	450	650	900	1200	1600	2300	3360	-4250
	750	335	20	28	37	52	82	110	155	190	240	370	530	740	970	1260	1820	2750	3480
2.5	1500	600	30	47	57	78	125	170	230	290	400	550	820	1100	1500	2050	--	--	--
	1000	400	21	33	41	55	95	125	170	220	280	410	620	820	1120	1450	2100	3080	4050
	750	300	17	25	32	43	77	105	140	180	230	335	500	670	900	1180	1720	2520	3310
2.8	1500	535	27	42	48	66	115	160	210	265	370	495	750	1000	1350	1850	--	--	--
	1000	360	19	30	34	46	80	120	160	200	260	375	560	750	1000	1310	1910	2890	3700
	750	270	15	23	27	36	62	93	130	165	210	305	460	610	820	1070	1560	2360	3030
3.15	1500	475	23	34	47	63	91	140	190	240	330	460	680	920	1250	1650	2320	3500	4430
	1000	315	16	24	33	44	62	105	140	180	235	350	510	690	920	1200	1750	2640	3330
	750	235	13	18	26	35	47	82	110	150	190	285	410	570	750	960	1430	2150	2730
3.55	1500	425	20	28	43	59	92	125	185	240	330	460	680	920	1240	1510	2200	3230	4120
	1000	280	14	20	31	41	63	88	130	180	225	350	490	630	900	1140	1660	2430	3100
	750	210	11	16	24	31	47	67	100	150	180	275	380	550	710	930	1350	1990	2530
4.0	1500	375	16	23	35	51	75	105	160	205	310	460	640	850	1230	1350	1990	2930	3620
	1000	250	11	16	25	36	53	75	105	140	215	350	455	600	880	1020	1500	2200	2730
	750	187	8.5	13	19	27	40	56	81	110	170	265	355	490	670	830	1200	1800	2230
4.5	1500	335	14	18	31	37	54	73	140	195	265	375	540	780	1110	1240	1770	2560	3620
	1000	220	10	13	22	26	39	52	97	140	185	255	380	560	820	940	1230	1790	2730
	750	166	7.5	10	17	20	30	40	75	105	145	195	295	430	620	770	950	1400	2230
5.0	1500	300		17	27	33	50	73	125	140	220	375	495	670	1020	1110	1660	2470	3080
	1000	200		12	19	23	36	51	86	98	145	265	340	475	710	840	1250	1750	2320
	750	150		9.5	15	18	28	40	65	77	110	200	260	360	540	690	1020	1350	1750
5.6	1500	270			22	30	41	68	100	130	200	310	415	560	870	1010	1520	2020	2730
	1000	180			15	21	29	48	72	90	140	200	285	405	590	760	1050	1350	1840
	750	134			12	16	22	37	54	70	105	155	215	305	440	610	790	1040	1400
6.3	1500	240				23	41	57	83	120	155	240	345	495	720	940	1210	1840	2160
	1000	160				16	29	41	59	84	110	170	230	350	480	700	830	1240	1450
	750	120				13	22	32	45	63	87	130	175	270	360	530	640	950	1100
			<b>Thermal capacity Pt (kw) for gearboxes without any cooling</b>																
			20	26	32	40	51	64	81	103	130	160	211	270	345	430	530	650	800
			<b>Thermal Capacity Pt (Kw) for gearboxes with one fan cooling</b>																
	750		24	30	37	50	65	80	110	135	182	240	285	360	475	605	765	1000	1260
	1000		31	39	47	65	86	105	144	180	240	316	371	475	616	786	995	1310	1625
	1500		35	42	55	71	92	115	160	192	260	345	408	512	672	860	1085	1415	1780
			<b>Thermal Capacity Pt (Kw) for gearboxes with two fan cooling</b>																
	750		35	43	53	71	92	115	156	192	260	340	405	512	670	856	1080	1415	1782
	1000		45	56	67	92	122	150	205	254	341	450	525	670	870	1111	1410	1853	2300
	1500		50	60	77	100	130	163	330	272	370	490	580	725	950	1220	1530	2000	2520

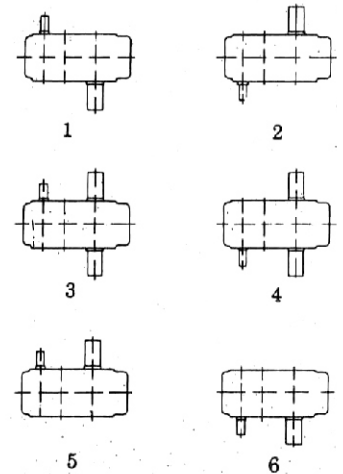


Nominal Transmission Ratio	Nominal Speeds		SIZE OF GEAR UNIT													
			112	125	140	160	180	200	225	250	280	320	360	400	450	500
in	n <sub>1</sub>	n <sub>2</sub>	Nominal Gearbox Rating PN (Kw)													
6.3	1500	240	38	50	70	105	145	205	285	370	530	796	1060	1450	2020	3740
	1000	160	24	34	47	71	100	145	215	280	400	564	800	1100	1520	2650
	750	120	18	25	36	54	74	110	170	230	310	429	600	900	1200	1990
7.1	1500	210	38	48	66	100	140	195	280	380	490	748	1000	1350	1900	3400
	1000	140	26	32	44	65	93	135	200	255	365	598	720	1000	1400	2330
	750	105	20	24	33	50	70	100	150	210	275	375	510	790	1050	1760
8	1500	188	34	44	62	91	125	180	255	350	450	668	920	100	1750	3070
	1000	125	25	30	41	60	85	125	180	245	335	450	680	950	1270	2120
	750	94	19	22	31	46	65	92	135	190	350	340	520	710	950	1590
9	1500	167	33	40	56	83	130	185	225	320	450	596	820	1100	1500	2740
	1000	111	22	27	38	56	86	125	160	215	300	400	620	800	1120	1890
	750	83	18	20	28	43	67	95	125	170	235	300	500	650	900	1470
10	1500	150	28	35	50	74	100	150	210	280	390	520	760	1050	1420	2540
	1000	100	19	24	33	49	68	95	145	195	265	350	540	750	1000	1700
	750	75	14	18	25	37	50	80	110	155	210	260	420	600	800	1320
11.2	1500	134	24	32	45	66	95	140	180	250	330	470	680	900	1250	2270
	1000	89	18	21	30	45	65	95	130	175	245	320	500	680	940	1530
	750	67	13	16	22	35	49	72	95	130	185	240	400	500	720	1180
12.5	1500	120	22	29	40	55	80	110	170	225	320	480	640	850	1200	2020
	1000	80	14	19	27	37	52	77	115	165	220	270	450	600	850	1390
	750	60	13	15	20	28	42	58	88	125	165	204	330	450	640	1050
14	1500	107	21	26	35	48	68	100	150	205	280	385	550	710	950	1790
	1000	71	15	17	24	32	46	70	105	145	195	260	400	520	710	1240
	750	53	11	13	18	24	35	52	78	110	145	195	290	420	560	930
16	1500	94	15	22	30	43	60	90	135	185	250	342	490	650	860	1590
	1000	62	10	15	20	29	40	62	92	130	175	230	350	490	650	1100
	750	47	8	11	15	22	30	47	69	97	130	175	270	370	500	820
18	1500	83	13	19	27	37	55	73	120	140	250	310	430	550	740	1470
	1000	56	9	14	19	25	39	51	80	98	145	230	320	410	540	970
	750	41	7	10	15	19	30	40	62	77	110	180	250	340	440	770
20	1500	75	11.5	17	24	35	49	70	110	140	210	295	410	520	700	1320
	1000	50	7.6	12	17	23	33	49	74	98	140	198	280	380	500	880
	750	38	5.75	9	12	18	25	38	58	77	110	148	230	310	400	700
22.4	1500	67	11	15	21	30	41	65	99	135	185	250	390	490	660	1180
	1000	45	7	10	14	20	27	44	66	92	125	170	260	350	460	790
	750	33	5.5	7.5	11	16	21	34	52	70	98	130	200	280	370	620
25	1500	60	9.5	14	19	27	38	54	76	108	152	216	304	432	610	900
	1000	40	6.5	9	13	18	26	37	52	73	104	146	208	292	420	615
	750	30	5	7	10	14	19	27	38	54	76	108	152	216	305	460
			<b>Thermal capacity Pt (kw) for gearboxes without cooling</b>													
			23	32	40	53	67	90	110	142	180	230	285	370	465	610
			<b>Thermal Capacity Pt (Kw) for gearboxes with one fan cooling</b>													
750						60	78	100	128	158	208	275	365	435	560	701
1000						66	85	120	136	170	220	290	390	460	595	745
1500						85	110	141	180	225	295	401	520	620	800	1000
			<b>Thermal Capacity Pt (Kw) for gearboxes with two fan cooling</b>													
750						85	111	142	182	225	395	400	520	616	800	995
1000						95	120	172	195	240	315	415	535	655	845	1055
1500						120	160	200	254	322	422	571	738	880	1140	1420

### NHB



Hand of Assembly

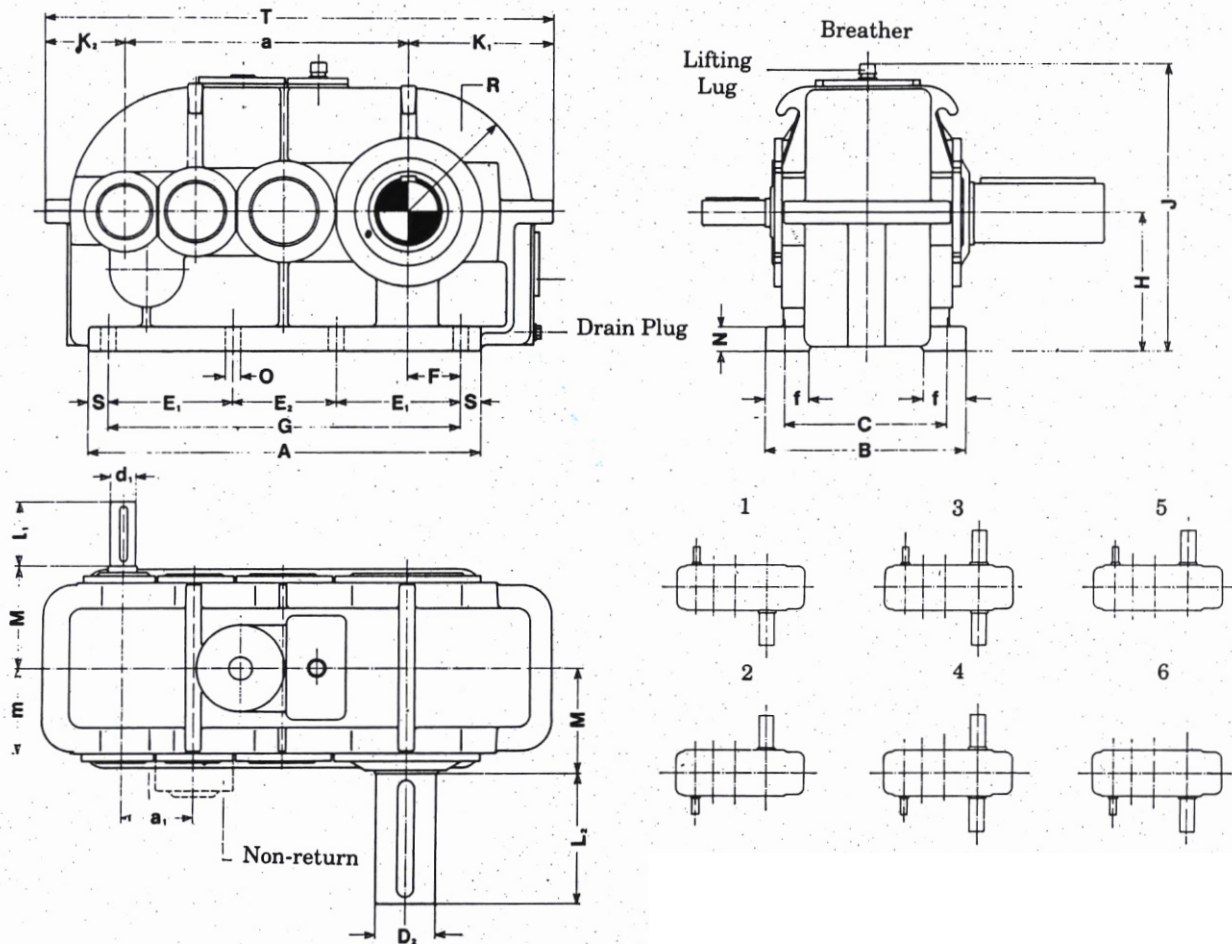


Note : 1) Tolerance for Input & Output Coupling End  
 Shaft Diameter - upto  $\phi$  50:k6  
 above  $\phi$  50:m6  
 Key Way Dimension as per IS 2048

Size of Gear Unit	Avg. Wt. Kg.	Oil Qty. Ltrs.	GEAR HOUSING DIMENSIONS																	Mounting Hole	INPUT SHAFT						Output Shaft	
			A	B	C	E	E <sub>1</sub>	F	G	H	J	K <sub>1</sub>	K <sub>2</sub>	M	N	S	a/T	f	in Upto 9:1		in Above 9:1		in Above 14:1		D <sub>2</sub>	L <sub>2</sub>		
			O	d <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	l <sub>2</sub>	D <sub>2</sub>	L <sub>2</sub>																	
112	56	3.5	379	236	200	160	-	90	315	132	300	87	144	120	22	32	192/420	40	6xM12	32	80	28	60	24	50	55	110	
125	78	4.5	427	256	220	180	-	100	355	140	319	102	162	130	25	36	215/475	46	6xM12	35	80	32	80	28	60	60	140	
140	106	7	480	275	240	200	-	112	400	160	362	112	176	140	28	40	240/526	48	6xM12	40	110	35	80	32	80	70	140	
160	150	9.5	532	295	255	225	-	125	450	180	407	120	192	150	32	41	272/584	52	6xM16	45	110	40	110	35	80	80	170	
180	210	14	584	325	285	250	-	140	500	200	449	125	210	165	35	42	305/679	52	6xM16	50	110	45	110	40	110	90	170	
200	290	19	652	365	320	280	-	160	560	225	497	135	235	185	40	46	340/708	62	6xM20	55	110	50	110	45	110	100	210	
225	400	26	730	395	350	315	-	180	630	250	550	145	260	200	45	50	385/790	70	6xM20	65	140	55	110	50	110	110	210	
250	530	36	822	440	380	355	-	200	710	280	610	171	285	220	50	55	430/885	70	6xM24	70	140	65	140	55	110	120	210	
280	730	50	926	500	440	400	-	225	800	315	672	190	320	250	55	63	480/995	80	6xM24	80	170	70	140	60	140	140	250	
320	1000	70	1044	560	480	450	-	250	900	355	752	210	355	275	65	72	545/1120	85	6xM30	90	170	80	170	70	140	160	300	
360	1400	100	1164	610	530	500	-	280	1000	400	840	230	400	300	70	82	610/1250	90	6xM30	100	210	90	170	80	170	180	300	
400	2000	140	1290	690	600	560	-	315	1120	450	930	250	440	335	80	85	680/1385	95	6xM36	110	210	100	210	90	170	200	350	
450	2700	200	1430	760	670	500	900	355	1250	500	1026	255	485	375	90	90	770/1525	100	6xM36	120	210	110	210	100	210	220	350	
500	3600	280	1600	890	790	560	1000	400	1400	560	1136	280	540	430	100	100	860/1690	105	6xM42	140	250	120	210	110	210	260	410	

Nominal Transmission Ratio	Nominal Speeds		SIZE OF GEAR UNIT												
			125	140	160	180	200	225	250	280	320	360	400	450	500
in	n <sub>1</sub>	n <sub>2</sub>	Nominal Gearbox Rating PN (Kw)												
14	1500	107			50	70	105	140	200	280	380	500	660	930	1810
	1000	71			34	47	73	95	135	190	270	390	500	700	1250
	750	53			26	36	55	74	105	150	215	300	390	580	940
16	1500	94			46	65	95	130	180	260	350	460	600	860	1610
	1000	62			32	44	66	88	120	170	250	350	460	640	1120
	750	47			24	33	50	68	95	135	200	270	360	530	830
18	1500	83			42	62	85	120	160	230	320	420	550	800	1490
	1000	56			30	42	60	80	105	150	220	320	420	590	1000
	750	41			22	32	45	62	85	120	170	250	330	480	780
20	1500	75			39	59	73	105	145	205	295	385	500	740	1320
	1000	50			27	39	54	70	98	140	200	290	380	550	880
	750	38			20	30	43	55	77	110	160	240	305	445	690
22.5	1500	67			35	52	66	93	130	185	270	350	480	700	1170
	1000	45			24	35	50	65	91	130	190	265	345	520	780
	750	33			18	26	38	49	69	96	140	215	275	400	620
25	1500	60			30	44	62	83	115	160	235	330	450	660	1030
	1000	40			20	30	42	57	80	110	165	255	315	460	730
	750	30			15	22	31	43	60	85	125	195	240	350	550
28	1500	54	13.5	19	27	40	56	75	105	145	215	310	405	590	910
	1000	36	9.1	13	18	27	38	52	72	100	150	230	285	420	640
	750	27	6.8	9.6	14	20	28	39	54	77	115	165	215	315	490
31.5	1500	48	12	7	24	33	48	69	95	130	200	290	385	560	820
	1000	32	8.1	11.5	16	22	33	46	63	87	130	200	255	370	580
	750	24	6.1	8.6	13	17	25	34	49	65	100	150	190	280	440
35.5	1500	42	11	15.5	22	32	46	62	87	120	180	280	345	500	770
	1000	28	7.2	10	15	22	30	41	58	82	120	185	230	340	510
	750	21	5.4	7.7	11	16	23	31	43	61	90	140	175	250	385
40	1500	38	9.7	13.5	20	30	43	56	78	110	160	240	310	450	700
	1000	25	6.5	9.1	14	21	28	37	52	72	105	165	205	300	465
	750	19	4.8	6.8	10	15	22	29	41	56	82	125	155	230	350
45	1500	34	8.6	12.1	17	26	36	50	69	97	145	220	275	400	620
	1000	22	5.8	8.1	12	17	25	33	46	64	95	150	180	265	455
	750	17	4.3	6.1	9	13	18	26	36	50	74	115	140	205	320
50	1500	30	7.7	11	15	23	32	44	62	87	130	200	245	360	550
	1000	20	5.1	7.2	11	15	22	31	43	60	87	135	165	240	365
	750	15	3.8	5.4	8	12	16	23	32	44	65	100	120	180	290
56	1500	27	6.8	9.7	14	20	28	39	55	77	115	175	220	320	500
	1000	18	4.6	6.4	10	14	19	27	38	53	77	120	145	215	340
	750	14	3.4	4.8	7	10	15	21	28	40	59	91	110	165	255
63	1500	24	6.1	8.6	11	17	23	35	45	63	100	150	195	285	440
	1000	16	4.1	5.8	8	11	16	24	30	43	69	105	130	190	300
	750	12	3.1	4.3	6	9	12	18	23	32	52	78	98	145	230
71	1500	21	5.4	7.7	10	15	21	31	40	56	90	135	175	250	395
	1000	14	3.6	5.1	7	10	14	22	27	39	61	92	115	170	270
	750	11	2.7	3.8	5	8	11	16	20	29	46	69	86	125	200
80	1500	19	4.8	6.8	9	14	19	29	36	51	82	120	155	230	350
	1000	13	3.2	4.6	6	9	13	19	24	34	54	82	100	150	240
	750	10	2.4	3.4	5	7	10	14	19	27	40	63	76	110	180
90	1500	17	4.3	6.1	8	12	17	26	32	46	74	110	140	205	320
	1000	11	2.9	4.1	6	8	11	17	22	31	49	74	92	135	210
	750	8	2.2	3.1	4	7	9	13	17	24	37	57	69	100	160
100	1500	15	3.8	5.4		10	16	24	30	44	60	95	130	175	290
	1000	10	2.6	3.6		7	11	16	21	30	40	63	86	115	190
	750	8	1.9	2.7		5	8	12	16	22	30	47	65	87	145
112	1500	13	3.4	4.8			15	21	29	40	53	84	115	155	255
	1000	10	2.3	3.2			10	14	19	27	36	57	78	105	170
	750	7	1.7	2.4			8	11	15	20	27	43	58	78	130
<b>Thermal capacity Pt for gearboxes without cooling</b>															
					33	44	54	75	90	118	152	195	242	312	388
<b>Thermal Capacity Pt for gearboxes with one fan cooling</b>															
	750				40	50	68	85	105	125	160	208	258	320	398
	1000				43	55	73	92	110	135	170	220	278	340	425
	1500				56	72	100	122	148	180	230	298	366	450	570
<b>Thermal Capacity Pt for gearboxes with two fan cooling</b>															
	750				56	72	100	122	145	180	230	295	369	452	563
	1000				61	80	105	130	160	191	240	315	395	480	600
	1500				80	102	142	175	211	257	328	425	520	640	810

### NHC

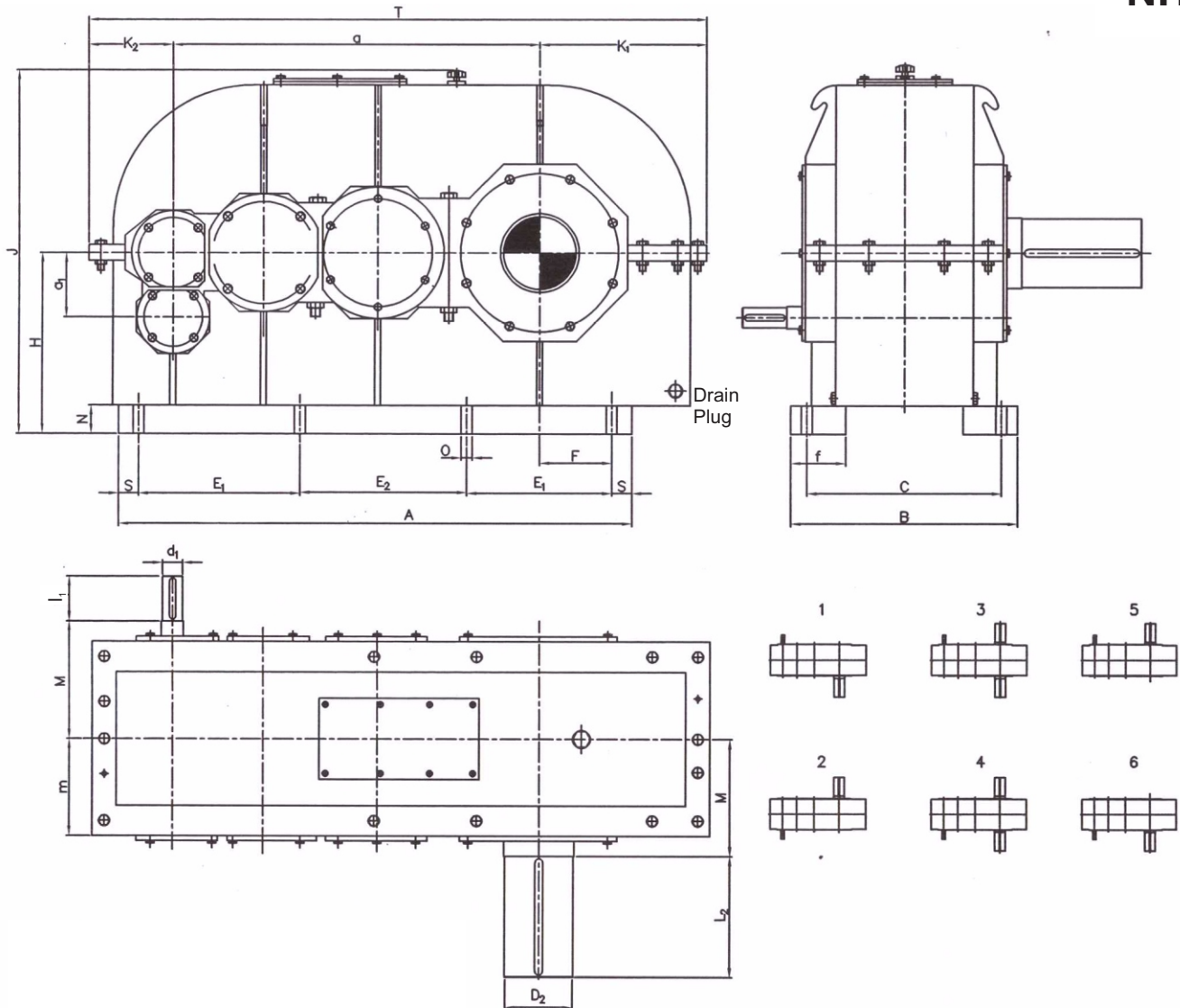


Note : 1) Tolerance for Input & Output Coupling End  
 Shaft Diameter - upto  $\phi$  50:k6  
 above  $\phi$  50:m6  
 Key Way Dimension as per IS 2048

Size of Gear Unit	Avg. Wt. Kg.	Oil Qty. Ltrs.	GEAR HOUSING DIMENSIONS																				Input Shaft				Output Shaft			
			A	B	C	E <sub>1</sub>	E <sub>2</sub>	F	G	H	J	K <sub>1</sub>	K <sub>2</sub>	M	N	O	T	R	S	f	a	a <sub>1</sub>	m	o	in<50		in>50		D <sub>2</sub>	L <sub>2</sub>
			d <sub>1</sub>	l <sub>1</sub>	d <sub>1</sub>	l <sub>1</sub>	d <sub>1</sub>	l <sub>1</sub>	d <sub>1</sub>	l <sub>1</sub>																				
125	100	5	440	240	190	190	--	65	380	140	320	153	90	125	20	18	538	125	30	65	278	80	101	1	25	60	20	50	65	140
140	150	7	460	250	200	200	--	70	400	160	360	170	100	130	25	18	600	140	30	65	311	90	108	1	30	80	25	60	70	140
160	190	9	510	270	220	225	--	80	450	180	400	190	110	140	30	18	672	160	30	65	352	100	116	2	30	80	25	60	80	170
180	250	14	570	300	240	250	--	85	500	200	440	215	120	155	35	23	740	180	35	70	395	100	122	3	35	80	30	80	90	170
200	340	18	630	320	260	280	--	90	560	225	490	235	125	165	40	23	812	200	35	70	440	112	137	4	40	110	35	80	100	210
225	460	28	700	350	290	315	--	100	630	250	540	260	135	180	45	23	905	220	35	70	497	125	152	5	45	110	40	110	110	210
250	610	36	790	390	320	355	--	110	710	280	590	280	140	200	50	27	990	240	40	85	555	140	171	6	50	110	40	110	120	210
280	820	50	880	420	350	400	--	125	800	320	660	310	150	220	55	27	1100	270	40	85	620	160	190	7	55	110	45	110	130	250
320	1100	63	980	460	390	450	--	140	900	360	730	340	160	240	60	27	1225	300	40	90	705	180	210	8	60	140	50	110	140	250
360	1500	80	1100	510	430	500	--	160	1000	400	810	385	185	265	65	33	1380	340	50	95	790	200	235	9	65	140	55	110	160	300
400	2000	125	1220	560	480	560	--	180	1120	450	900	425	200	290	70	33	1530	380	50	100	880	225	259	10	70	140	60	140	170	300
450	2500	160	1350	620	530	600	450	200	1250	500	990	470	320	320	75	33	1720	420	50	110	995	250	285	11	80	170	65	140	190	350
500	3400	200	1500	680	590	650	500	225	1400	500	1040	520	240	350	80	33	1900	470	50	110	1110	280	310	12	90	170	70	140	210	350

Nominal Transmission Ratio	Nominal Speeds		SIZE OF GEAR UNIT								
			225	250	280	320	360	400	450	500	
in	n <sub>1</sub>	n <sub>2</sub>	Nominal Gearbox Rating PN (Kw)								
112	1500	13.4	20	29	40	59	91	110	160	255	
	1000	8.9	14	20	27	39	59	70	105	170	
	750	6.7	10	15	20	29	43	53	83	130	
125	1500	12	18	26	36	52	81	97	145	230	
	1000	8	12	17	23	34	53	64	95	155	
	750	6	9	13	18	26	40	48	71	115	
140	1500	10.7	16	23	32	46	72	87	130	205	
	1000	7.15	11	16	21	31	47	58	85	135	
	750	5.4	8	12	16	23	36	44	65	100	
160	1500	9.35	14	20	28	41	63	76	115	180	
	1000	6.25	10	14	18	27	42	51	75	120	
	750	4.08	8	10	14	21	32	39	58	91	
180	1500	8.34	13	19	25	37	57	69	100	160	
	1000	5.56	9	12	17	25	38	46	68	105	
	750	4.17	7	10	13	18	29	35	51	81	
200	1500	7.5	12	15	22	33	51	62	92	145	
	1000	5	8	10	14	22	34	41	61	96	
	750	3.75	6	8	11	17	26	30	44	72	
224	1500	6.7	10	14	19	29	45	55	82	130	
	1000	4.47	7	9	13	20	30	37	54	86	
	750	3.35	5	7	10	15	23	28	41	65	
250	1500	6	10	12	17	26	40	48	71	115	
	1000	4	6	9	12	17	27	32	48	77	
	750	3	5	7	9	13	20	24	36	58	
280	1500	5.35	8	11	15	23	36	44	65	100	
	1000	3.57	6	8	10	15	24	29	43	67	
	750	2.67	4	6	8	12	18	22	32	50	
315	1500	4.76	8	10	13	21	32	39	58	91	
	1000	3.17	5	7	9	14	21	25	37	60	
	750	2.38	4	5	7	10	16	20	29	46	
355	1500	4.23	7	9	12	18	29	35	51	82	
	1000	2.82	5	6	9	12	19	23	34	53	
	750	2.12	3	5	7	10	14	17	25	41	
400	1500	3.75	6	8	11	16	26	31	45	71	
	1000	2.5	4	5	8	11	17	20	30	48	
	750	1.88	3	4	6	8	13	15	23	35	
450	1500	3.33	5	8	10	13	21	29	39	65	
	1000	2.22	4	5	7	9	14	19	26	43	
	750	1.66	3	4	5	7	11	14	19	32	
500	1500	3		7	9	12	19	26	35	58	
	1000	2		5	6	8	13	17	23	38	
	750	1.6		3	5	6	10	13	17	29	
560	1500	2.68			8	11	17	23	30	50	
	1000	1.78			6	7	11	16	21	35	
	750	1.34			4	6	9	12	16	26	
630	1500	2.38				10	15	21	28	46	
	1000	1.59				7	10	14	18	30	
	750	1.19				5	8	10	14	23	
<b>Thermal capacity Pt (kw) for gearboxes without any cooling</b>			38	50	66	90	105	135	170	210	

### NHD



Note : 1) Tolerance for Input & Output Coupling End  
 Shaft Diameter - upto  $\phi$  50:k6  
 above  $\phi$  50:m6  
 Key Way Dimension as per IS 2048

Size of Gear Unit	Avg. Wt. Kg.	Oil Qty. Ltrs.	GEAR HOUSING DIMENSIONS																			Input Shaft		Output Shaft				
			A	B	C	E <sub>1</sub>	E <sub>2</sub>	F	G	H	J	K <sub>1</sub>	K <sub>2</sub>	M	N	O	T	R	S	f	a	a <sub>1</sub>	m	o	d <sub>1</sub>	l <sub>1</sub>	D <sub>2</sub>	L <sub>2</sub>
225	480	28	700	350	290	315	--	100	630	250	540	260	135	180	45	23	905	220	35	70	497	80	152	5	35	80	110	210
250	630	36	790	390	320	355	--	110	710	280	590	280	140	200	50	27	990	240	40	85	555	90	171	6	35	80	120	210
280	840	50	880	420	350	400	--	125	800	320	660	310	150	220	55	27	1100	270	40	85	620	100	190	7	40	110	130	250
320	1120	63	980	460	390	450	--	140	900	380	730	340	160	240	60	27	1225	300	40	90	705	112	210	8	40	110	140	250
360	1480	80	1100	510	430	500	--	160	1000	400	810	385	185	265	65	33	1380	340	50	95	790	125	235	9	45	110	160	300
400	2100	125	1220	560	480	560	--	180	1120	450	900	425	200	290	70	33	1530	380	50	100	880	140	259	10	50	110	170	300
450	2600	160	1350	620	530	620	450	200	1250	500	990	470	230	320	75	33	1720	420	50	110	995	160	285	11	55	110	190	350
500	3500	200	1500	680	590	450	600	225	1400	500	1040	520	240	350	80	33	1900	470	50	110	1110	180	310	12	60	140	210	350

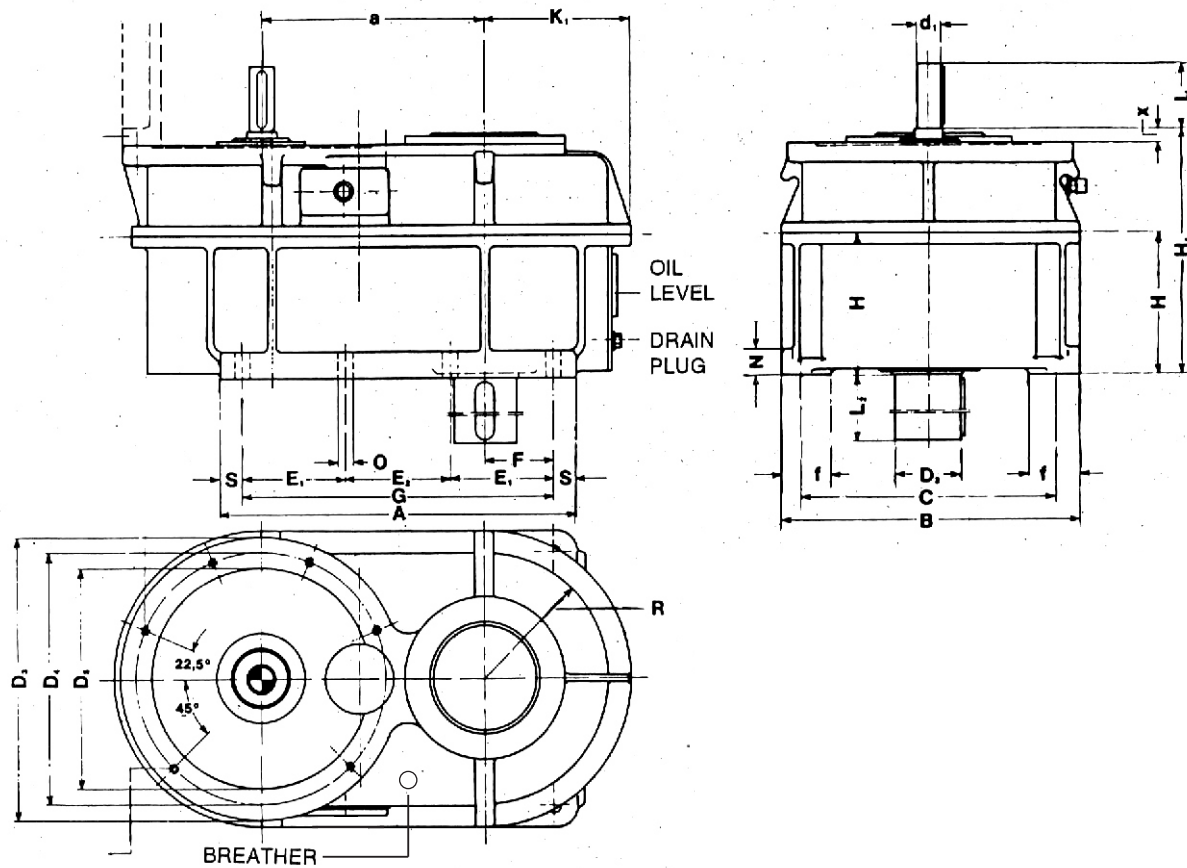
Nominal Transmission Ratio	Nominal Speeds		SIZE OF GEAR UNIT												
			125	140	160	180	200	225	250	280	320	360	400	450	500
in	n <sub>1</sub>	n <sub>2</sub>	Nominal Gearbox Rating PN (Kw)												
6.3	1500	236	40	56	84	116	164	228	296	424	632	848	1160	1616	2960
	1000	160	29	38	57	80	116	172	224	320	448	640	880	1216	2080
	750	118	22	29	44	60	88	136	184	248	340	480	720	960	1520
7.1	1500	212	39	53	80	112	156	224	312	432	584	792	1080	1520	2720
	1000	140	26	36	53	75	108	160	208	292	400	576	800	1120	1840
	750	106	20	27	40	57	80	120	168	220	304	440	632	840	1360
8.0	1500	190	36	50	74	104	144	204	280	392	528	736	1040	1400	2400
	1000	125	24	33	49	70	100	144	196	268	372	544	760	1016	1680
	750	95	18	25	37	52	74	108	152	200	272	416	568	760	1200
9.0	1500	170	32	45	67	104	148	180	256	360	464	656	880	1240	2160
	1000	112	22	31	45	69	100	128	172	240	344	496	640	896	1440
	750	85	16	23	35	54	76	100	136	188	272	400	520	720	1120
10.0	1500	150	28	40	60	80	120	168	224	312	432	608	840	1136	2000
	1000	100	20	27	40	55	76	116	156	212	288	432	600	800	1280
	750	75	15	20	30	40	64	88	124	168	236	336	480	640	1040
11.2	1500	132	26	36	53	76	112	144	200	272	384	544	720	1000	1760
	1000	90	17	24	36	52	76	104	140	196	288	400	544	752	1200
	750	67	13	18	28	40	58	76	104	148	216	320	400	576	896
12.5	1500	118	24	32	45	64	88	136	180	256	344	512	680	960	1600
	1000	80	16	22	30	42	62	92	132	176	240	360	480	680	1040
	750	60	12	16	23	34	47	71	100	132	180	264	360	512	800
14.0	1500	106	21	28	39	55	80	120	164	224	304	440	568	776	1360
	1000	71	14	20	26	37	56	84	116	156	212	320	416	568	960
	750	53	11	15	20	28	42	63	88	116	160	232	336	448	744
16.0	1500	95	18	24	35	48	72	108	148	200	272	392	520	688	1120
	1000	63	12	16	24	32	50	74	104	140	188	280	392	520	760
	750	47.5	9	12	18	26	38	56	78	104	140	216	296	400	600
18.0	1500	85	16	22	30	44	59	96	120	176	248	344	440	632	1040
	1000	56	12	16	20	32	41	64	80	116	184	256	328	432	680
	750	42.5	8	12	16	24	32	50	63	88	144	200	272	352	560
20.0	1500	75	14	20	28	40	59	88	112	168	224	328	416	560	880
	1000	50	10	14	19	27	40	60	79	112	152	224	304	400	616
	750	37.5	8	10	15	20	31	47	62	88	116	184	248	320	492
22.4	1500	67	12	17	24	33	52	80	108	148	200	312	392	528	800
	1000	45	8	12	16	22	36	53	74	100	136	208	280	368	560
	750	33.5	6	9	13	17	28	42	56	79	104	160	224	296	456
25.0	1500	60	12	16	22	31	44	61	87	122	173	244	346	488	720
	1000	40	8	11	15	21	30	42	59	84	117	167	234	336	492
	750	30	6	8	12	16	22	31	44	61	87	122	173	244	368

### Thermal Capacities (kw)

#### Unit Size

Nominal Ratio	Input Speed RPM	Unit without fan												
		125	140	160	180	200	225	250	280	320	360	400	450	500
	1500	36	45	55	70	85	110	140	180	220	275	360	450	550
	1000	34	42	53	65	84	105	135	165	205	260	330	420	530
	750	32	40	50	63	80	100	125	160	200	245	320	400	500
	1500	56	72	88	110	144	180	220	280	355	445	550	700	890
	1000	50	64	78	100	125	160	200	245	315	400	548	620	800
	750	55	55	70	85	110	140	180	220	280	355	450	550	700

### NVB



Note : 1) Tolerance for Input & Output Coupling End  
 Shaft Diameter - upto  $\phi$  50:k6  
 above  $\phi$  50:m6  
 Key Way Dimension as per IS 2048

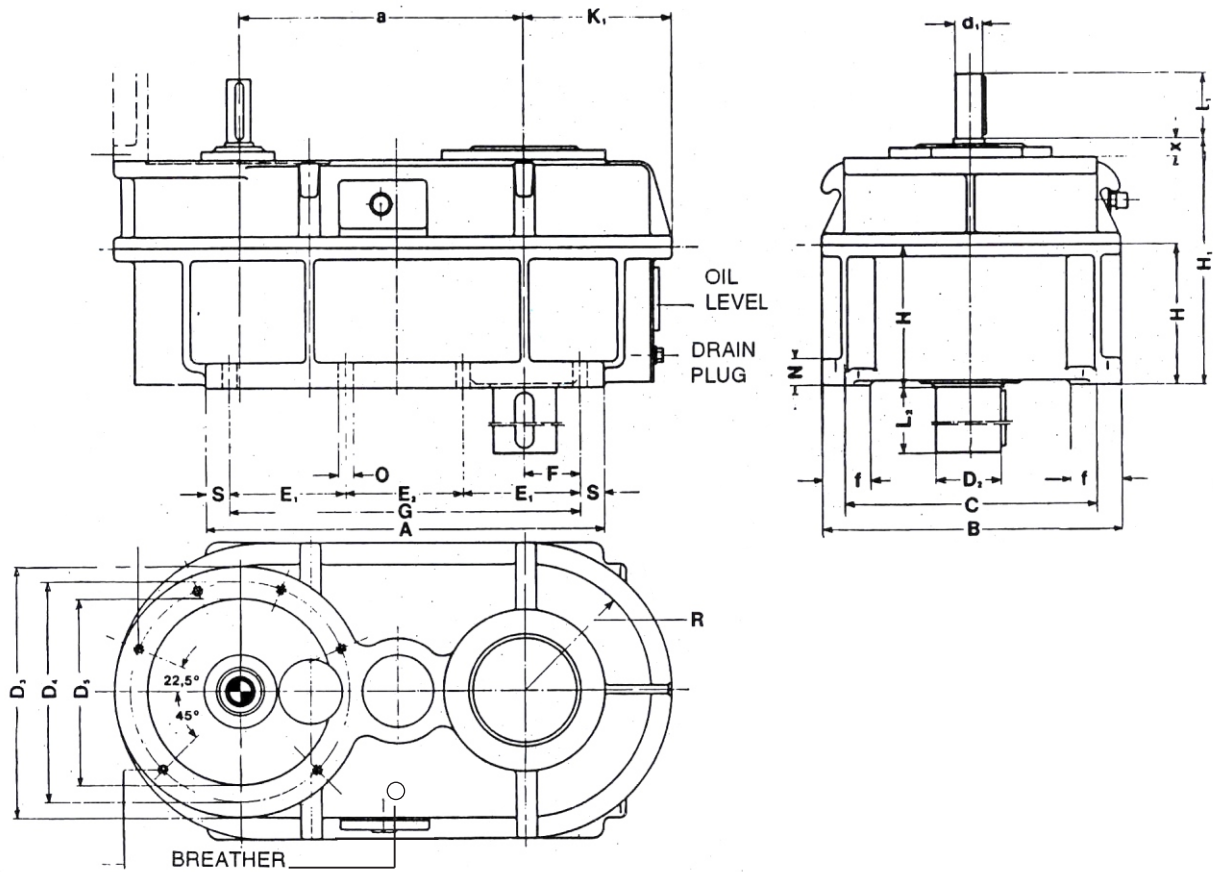
Size of Gear Unit	Avg. Wt. Kg.	Oil Qty. Ltrs.	GEAR HOUSING DIMENSIONS																	Input Shaft				Output Shaft		
			A	B	C	E	E	F	G	H	H <sub>1</sub>	K <sub>1</sub>	N	O	R	S	f	a	X	D <sub>3</sub>	in upto 10		in above 10		D <sub>2</sub>	L <sub>2</sub>
																					d <sub>1</sub>	l <sub>1</sub>	d <sub>1</sub>	l <sub>1</sub>		
125	100	4	400	300	250	170	-	80	340	140	265	153	20	18	125	30	70	225	20	300	35	80	30	80	60	140
140	135	5.5	430	330	280	185	-	85	370	160	290	170	25	18	140	30	75	252	22	350	40	110	35	80	65	140
160	175	8	470	370	320	205	-	90	410	180	320	190	30	18	160	30	75	285	24	400	45	110	40	110	70	140
180	225	11	520	430	360	225	-	100	450	200	355	215	35	23	180	35	80	320	33	450	50	110	40	110	80	170
200	300	15	570	470	400	250	-	110	500	225	390	235	40	23	200	35	80	350	25	450	55	110	45	110	90	170
225	380	18	630	520	450	280	-	125	560	250	430	260	45	23	220	35	80	405	28	550	60	140	50	110	100	210
250	500	25	710	570	500	315	-	140	630	280	480	280	50	27	240	40	90	450	29	550	65	140	55	110	110	210
280	655	36	790	630	560	355	-	160	710	320	540	310	55	27	270	40	90	505	30	660	70	140	60	140	120	210
320	880	50	880	700	630	400	-	170	800	360	600	340	60	27	300	40	90	570	30	660	80	170	65	140	130	250
360	1120	68	960	790	710	430	-	180	860	400	665	385	65	33	340	50	110	640			90	170	70	140	140	250
400	1500	100	1050	880	800	320	310	200	950	450	740	425	70	33	380	50	110	720			100	210	80	170	160	300
450	1950	140	1150	990	900	350	350	225	1050	500	820	470	75	33	420	50	110	810			110	210	90	170	170	300
500	2400	170	1250	1090	1000	400	350	250	1150	500	850	520	80	33	470	50	110	900			120	210	100	210	180	300

Nominal Transmission Ratio	Nominal Speeds		SIZE OF GEAR UNIT												
			125	140	160	180	200	225	250	280	320	360	400	450	500
in	n <sub>1</sub>	n <sub>2</sub>	Nominal Gearbox Rating PN (Kw)												
28	1500	53	13.5	19	27.5	40	56	75	105	145	215	300	400	560	790
	1000	35.5	9.1	13	18.2	27	38	52	72	100	150	220	285	390	530
	750	26.5	6.8	9.6	14	20	28	39	54	77	115	165	215	300	430
31.5	1500	47.5	12	17	24	34	49	69	95	130	200	280	380	510	700
	1000	31.5	8.1	11.5	16	23	33	46	65	91	130	200	255	360	490
	750	23.6	6.1	8.6	13	17	25	35	49	68	100	150	190	270	380
35.5	1500	42.5	11	15.5	22	32	46	62	87	120	180	250	340	450	630
	1000	28	7.2	10	15	22	30	41	58	82	120	180	230	320	460
	750	21.2	5.4	7.7	11	16	23	31	43	61	90	130	175	240	340
40	1500	37.5	9.7	13.5	20	30	43	56	78	110	160	225	310	410	560
	1000	25	6.5	9.1	14	21	28	37	52	72	105	160	205	285	410
	750	19	4.8	6.8	10	15	22	29	41	56	82	125	155	215	300
45	1500	33.5	8.6	12.1	17	26	36	50	69	97	145	200	275	380	500
	1000	22.4	5.8	8.1	12	17	25	33	46	65	95	140	180	255	360
	750	17	4.3	6.1	8.6	13	18	26	36	50	74	110	140	190	270
50	1500	30	7.7	11	15.5	23	32	44	62	87	130	180	245	340	480
	1000	20	5.1	7.2	11	15	22	31	43	60	87	125	165	230	320
	750	15	3.8	5.4	8	12	16	23	32	44	65	90	120	170	240
56	1500	26.5	6.8	9.7	14	20	28	39	55	77	115	150	220	310	430
	1000	18	4.6	6.4	9.5	14	19	27	38	53	77	100	145	205	285
	750	13.2	3.4	4.8	7	10	15	21	28	40	59	77	110	150	215
63	1500	23.6	6.1	8.6	12.1	17.2	24	35	48	68	100	145	195	275	380
	1000	16	4.1	5.8	8.1	11.5	16	24	32	46	69	98	130	185	255
	750	11.8	3.1	4.3	6.1	8.6	12	18	24	34	52	75	98	140	190
71	1500	21.2	5.4	7.7	11	15.5	21.5	31	43	61	90	130	175	245	340
	1000	14	3.6	5.1	7.2	10	14.5	22	29	41	61	90	115	165	230
	750	10.6	2.7	3.8	5.4	7.7	11	16	21.5	31	46	65	86	125	170
80	1500	19	4.8	6.8	9.7	14	19	29	38	54	82	120	155	220	300
	1000	12.5	3.2	4.6	6.5	9.1	13	19	25.5	36	54	80	100	145	205
	750	9.5	2.4	3.4	4.8	7	9.6	14	19	27	40	63	77	110	150
90	1500	17	4.3	6.1	8.6	12	17	26	34	48	74	105	140	200	270
	1000	11.2	2.9	4.1	5.8	8.1	11.5	17	23	32	49	72	92	130	180
	750	8.5	2.2	3.1	4.3	6.5	9	13	17	24	37	56	69	100	135
100	1500	15	3.8	5.4	7.7	11	16	24	31	44	61	95	130	175	240
	1000	10	2.6	3.6	5.1	7.2	11	16	21	30	41	60	86	115	160
	750	7.5	1.9	2.7	3.8	5.4	8	12	16	22	31	45	65	87	120
112	1500	13.2	3.4	4.8	6.8	9.6	15	21	29	40	58	82	115	155	215
	1000	9	2.3	3.2	4.6	6.5	10	14	19	27	36	56	78	105	145
	750	6.7	1.7	2.4	3.4	4.8	7.5	11	15	20	27	42	58	78	110
125	1500	11.8	301	4.3	6.1	8.6	12	17	24	34	48	68	96	135	190
	1000	8	2.0	2.9	4.1	5.8	8.1	11.5	16	23	32	46	65	91	130
	750	6	1.5	2.2	3.01	4.3	6.1	8.6	12	17	24	34	48	68	96

**Thermal Capacities (kw)**  
Unit Size

Nominal Ratio	Input Speed RPM	Unit without fan												
		125	140	160	180	200	225	250	280	320	360	400	450	500
	1500	-	-	-	46	58	75	93	118	150	186	238	298	377
	1000	-	-	-	-	-	71	88	110	143	178	222	282	356
	750	-	-	-	-	-	-	-	-	134	167	210	265	336
	1500	-	-	-	-	-	-	-	178	222	282	356	444	564
	1000	-	-	-	-	-	-	-	-	200	250	316	397	500
	750	-	-	-	-	-	-	-	-	-	-	265	337	420

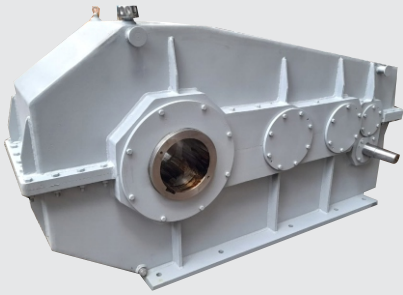
### NVC



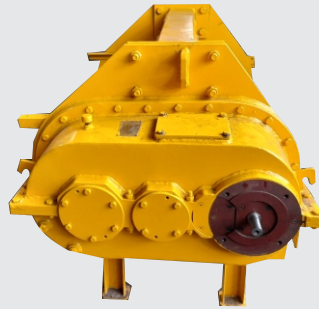
Note : 1) Tolerance for Input & Output Coupling End  
 Shaft Diameter - upto  $\phi 50:k6$   
 above  $\phi 50:m6$   
 Key Way Dimension as per IS 2048

Size of Gear Unit	Avg. Wt. Kg.	Oil Qty. Ltrs.	GEAR HOUSING DIMENSIONS																	Input Shaft				Output Shaft		
			A	B	C	E <sub>1</sub>	E <sub>2</sub>	F	G	H	H <sub>1</sub>	K <sub>1</sub>	N	O	R	S	f	a	X	D <sub>3</sub>	in upto 50		in above 50		D <sub>2</sub>	L <sub>2</sub>
																					d <sub>1</sub>	l <sub>1</sub>	d <sub>1</sub>	l <sub>1</sub>		
125	120	5	400	300	250	170	-	80	340	140	265	153	20	18	125	30	70	295	24	250	25	60	20	50	65	140
140	150	7	430	330	280	185	-	85	370	160	290	170	25	18	140	30	75	330	22	300	30	80	25	60	70	140
160	190	9	470	370	320	205	-	90	410	180	320	190	30	18	160	30	75	372	24	350	30	80	25	60	80	170
180	250	14	520	430	360	225	-	100	450	200	355	215	35	23	180	35	80	405	35	350	35	80	30	80	90	170
200	340	18	570	470	400	250	-	110	500	225	390	235	40	23	200	35	80	452	29	400	40	110	35	80	100	210
225	450	28	630	520	450	280	-	125	560	250	430	260	45	23	220	35	80	510	28	450	45	110	40	110	110	210
250	600	36	710	570	500	315	-	140	630	280	480	280	50	27	240	40	90	570	28	550	50	110	40	110	120	210
280	800	50	790	630	560	355	-	160	710	320	540	310	55	27	270	40	90	640	30	550	55	110	45	110	130	250
320	1100	63	880	700	630	400	-	170	800	360	600	340	60	27	300	40	90	725	30	660	60	140	50	110	140	250
360	1500	80	960	790	710	430	-	180	860	400	665	385	65	33	340	50	110	810	30	660	65	140	55	110	160	300
400	2000	125	1050	880	800	320	310	200	950	450	740	425	70	33	380	50	110	905	31	660	70	140	60	140	170	300
450	2500	160	1150	990	900	350	350	225	1050	500	820	470	75	33	420	50	110	1020			80	170	65	140	190	350
500	3500	200	1250	1090	1000	400	350	250	1150	500	850	520	80	33	470	50	110	1140			90	170	70	140	210	350

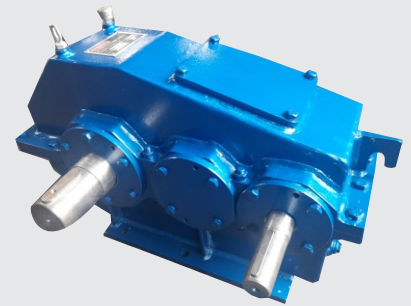
Since Research & Development is an on-going activity, specifications are subject to change without notice.



**HOLLOW OUTPUT SHAFT**



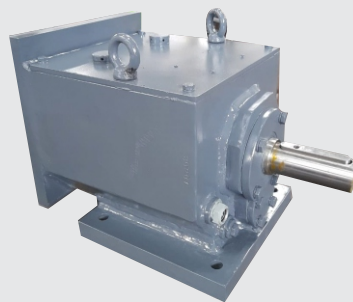
**MODULAR**



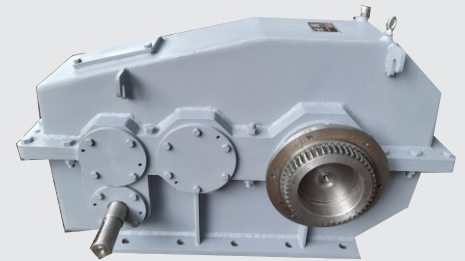
**HORIZONTAL**



**VERTICAL**



**CO-AXIAL**



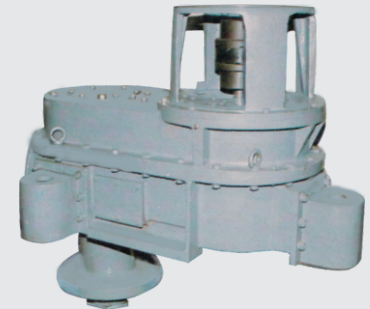
**GEARED OUTPUT SHAFT**



**AERATOR**



**COOLING FAN**



**AERATOR**



**TWIN SCREW**



**TURBINE**



**HARDENED & GROUND**