PEC GEAR

Flange Mounted Helical Geared Motor

Flange Mounted Helical Gear Box

Foot Mounted Helical Gear Box

PEC GEAR

Introduction :-
The" PEC" Helical Geared Motor units incorporate the best in modern gear design. Each gear unit is produced using the most precise machinery and production techniques ensuring the highest standards of accuracy and precision.
The entire range is of a modular construction with a high degree of interchangeability of parts and assemblies. This enables a large range of sizes and ratios. Maintenance of the Geared Motor Units was one of the criteria considered at the design stage, and has led to the development of a unit that requires little maintenance but when needed may be worked on without Moving it from its place of installation and ensure the long trouble free life of your unit.

Gear case :-
The reduction gear trains are housed in a sturdy case of one piece construction of cast integral with its pedestal and internal partition wall which serves as both reinforcement and bearing housing. Gear case is manufactured from close grained cast iron and has ample surface areas for heat dissipation.

Gear and pinion :-
All gear components used are helical and manufactured from selected special alloys steel gear are generated on precise hobbing machines, heat treated and ground to achive the best performance and efficiency.

Output shafts:-
Output shafts of both geared motors and gear educers and input shafts of inline gear reducers are manufactured from best quality medium carbon steel for high over hung load carring capacities . for special application these shafts can also be heat treated

Electricals :-
Electric motor provided with geared motor is TEFC squirrel cage Induction motor suitable for operation on 415 V, three phase,50 Hz, AC supply as per IS 325. All motors are provided in IP 55 enclosure and F /H class Insulation Geared motor fitted with electric motor of special design like flame proof, crane duty , extended shaft on NDE (non driving end) , brake etc can also be offered

Manufacturing Standards :-
All output shafts are manufactured as per DIN42948. Tolerance fro shaft diameters may vary as per IS , K6 upto 50 mm, M6 above 50 mm, key ways an keys are DIN 6885 with key way tolerance P9. Keys steel DIN 6880. Threading of output shaft is as per DIN 332 / 1943. Output speed tolerance is ± 3%

Testing :-
All components are thoroughly inspected at various stages and assembled unit is tested on ' Noload " for noise level, oil leakage output speed and temperature rise.

MECHANICAL POWER TRANSMISSION EQUIPMENTS
HELICAL GEARED MOTORS / GEAR BOXES

GENERAL FEATURES

Our Geared Motors are manufactured with output ranging from 0.16 HP to 30 HP capacity and output RPM ranging from 15 RPM to 400 RPM. Units available in standard as well as "Custom Built" in horizontal foot and flange mounted type construction. Low RPM geared motors are also offered on request.

All parts/components are throughly inspected during and after manufacturing process. Quality grade materials procurement, sturdiness, rigid enclosed and oil-tight construction of housing to withstand with the application in the working and for easy maintenance.

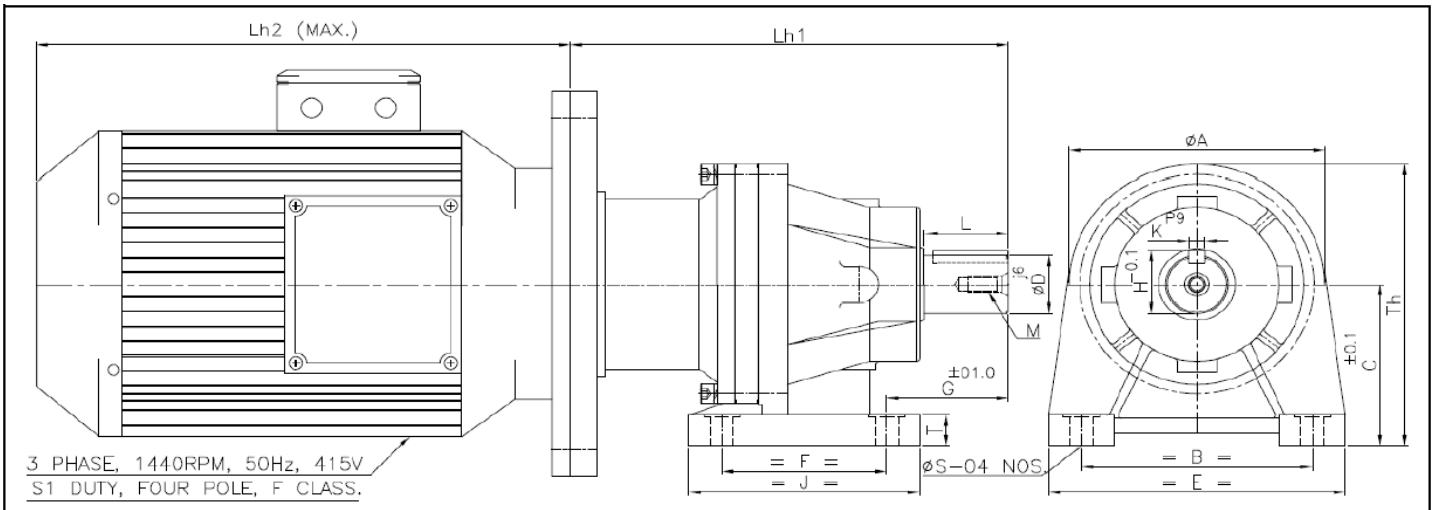
Our Helical Geared Motors are suitable for various application to meet requirement of different industries.

SPECIAL FEATURES : GEARED MOTORS

We supply geared motors as per customer's specific requirements such as Dual speed, Electromagnetic Brake Geared Motor, Flame Proof, High Torque Characteristics, Frequent start/stop operations, Agitator duty units.

The table shows the maximum uniform power and torque that may be transmitted continuously for 8 to 10 hours per day. It is based on wear and strength of the gearing and the working life and antifriction bearings. The ratings are based on a service factor of 1.00. This factor does however only effect the gear size but not motor size and rated capacity combining different gear boxes with the motor size provides a higher safety factors.

H.P / RPM	15	20	25	30	40	50	62	84	102	125	150	192	280	315
0.25 TORQUE in kg.mt		P2-71 8	P1-71 6.5	P1-63 5	P1-63 3.5	P1-63 2	P1-63 2	P1-63 1.8	P1-63 1.6	P1-63 1.3	P1-63 1.08	P1-63 0.8	P1-63 0.6	P1-63 0.52
0.5	P3-90 22	P3-80 16	P3-80 12	P2-71 10	P2-71 8	P2-71 6.5	P1-71 5.2	P1-71 5.2	P1-71 3.8	P1-71 3	P1-71 2.5	P1-71 1.7	P1-71 1.2	P1-71 1
0.75	P4-90 32	P3-90 24	P3-90 18	P3-80 16	P3-80 12	P3-80 10	P2-80 7.8	P2-80 5.8	P2-80 4.5	P2-80 3.8	P2-80 3.2	P2-80 2.5	P2-80 2.3	P2-80 2
1	P4-100 44	P4-90 33	P4-90 25	P3-80 22	P3-80 16	P3-80 12.5	P3-80 10.5	P2-80 7.5	P2-80 6	P2-80 5	P2-80 4.3	P2-80 3.4	P2-80 2.3	P2-80 2
1.5	P4-100 65	P4-90 48	P4-90 38	P4-90 32	P3-90 24	P3-90 19.5	P3-90 15	P3-90 11.5	P3-90 9	P3-90 7.5	P3-90 6	P3-90 5	P3-90 3.5	P3-90 3
2	P5-112 86	P5-100 64.5	P4-100 52	P4-90 43	P4-90 32.5	P3-90 26	P3-90 20	P3-90 15	P3-90 12.5	P3-90 10	P3-90 8.5	P3-90 6.5	P3-90 4.5	P3-90 4
3	P6-132 128	P5-112 97	P5-112 77	P5-100 64	P4-100 48.5	P4-100 38	P4-100 31	P4-100 23	P4-100 19	P4-100 15.5	P3-100 12.5	P3-100 10	P3-100 7	P3-100 6
5	P6-160 205	P5-132 162	P5-132 130	P5-112 108	P5-112 80	P5-112 64	P5-112 52	P5-112 38	P5-112 31.5	P4-112 25	P4-112 21	P4-112 16.5	P3-112 11.5	P3-112 10
7.5	P7-160 320	P6-132 240	P6-132 184	P6-132 160	P6-132 120	P5-132 97	P5-132 78	P5-132 57	P5-132 47	P5-132 38.5	P4-132 32	P4-132 25	P4-132 18	P4-132 15
10.00			P7-160 250	P6-132 219	P6-132 164	P5-132 125	P5-132 109	P5-132 80	P5-132 68	P5-132 58	P5-132 48	P4-132 38	P4-132 26	P4-132 23
15.00					P7-160 267	P6-160 200	P6-160 170	P6-160 125	P6-160 105	P6-160 80	P6-160 70	P6-160 50	P6-160 37	P6-160 31
20.00					P7-160 365	P7-160 280	P7-160 220	P6-160 155	P6-160 130	P6-160 105	P6-160 87	P6-160 64	P6-160 46	P6-160 42
25.00					P7-180 434	P7-180 330	P7-180 290	P7-180 188	P7-180 157	P6-180 130	P6-180 105	P6-180 78	P6-180 57	P6-180 52
30.00					P8-180 530	P8-180 410	P8-180 321	P8-180 250	P7-180 215	P7-180 171	P7-180 140	P7-180 105	P7-180 77	P7-180 62



DIMENSIONS OF HECAL GEARED MOTOR FOOT MOUNTED

MODEL	OUTPUT SHAFT					FOOT MOUNTING									OTHERS	
	D j6	L	H	K p9	M	B	E	T	C	F	J	G	S	Th	A	Lh1
P1-63	19	30	21.5	6	M6	95	120	14	80	75	100	45	9	127.5	95	183
P2-71X	24	38	27.0	8	M6	110	140	16	90	85	115	55	11	145	110	220
P2-71	28	40	31.0	8	M8	120	160	18	100	90	130	60	12	167.5	135	265
P2-80	28	40	31.0	8	M8	120	160	18	100	90	130	60	12	167.5	135	275
P4-90	38	50	41.0	10	M10	140	180	20	105	100	140	73	14	182.5	155	300
P5-100	50	75	53.5	14	M12	180	220	22	120	110	160	98	14	212.5	185	380
P5-132	60	90	64.0	18	M16	210	270	26	150	140	190	118	18	267.5	235	440
P6-132	70	90	74.5	20	M16	240	290	28	160	160	210	118	18	292.5	265	560
P7-132	80	110	85.5	22	M16	270	330	30	170	170	230	143	18	315	290	610
P1-71	19	30	21.5	6	M6	95	120	14	80	75	100	45	9	127.5	95	240
P2-80X	24	38	27.0	8	M6	110	140	16	90	85	115	55	11	145	110	250
P3-80	28	40	31.0	8	M8	120	160	18	100	90	130	60	12	167.5	135	260
P3-90	28	40	31.0	8	M8	120	160	18	100	90	130	60	12	167.5	135	260
P4-100	38	50	41.0	10	M10	140	180	20	105	100	140	73	14	182.5	155	340
P4-112	38	50	41.0	10	M10	140	180	20	105	100	140	73	14	182.5	155	340
P5-112	50	75	53.5	14	M12	180	220	22	120	110	160	98	14	212.5	185	425
P6-160	70	90	74.5	20	M16	240	290	28	160	160	210	118	18	292.5	265	560
P7-160	80	110	85.5	22	M16	270	330	30	170	170	230	143	18	315	290	610

MOTOR 1440 RPM		
F.S.	**H.P.**	**Lh2**
71	0.5	210
80	0.75/1.0	262
90	1.5/2.0	324
100	3.0	325
112	5.0	373
132	7.5/10.0	428
160	12.5/15.0/20.0	523

ALL DIMENSIONS
ARE IN MM

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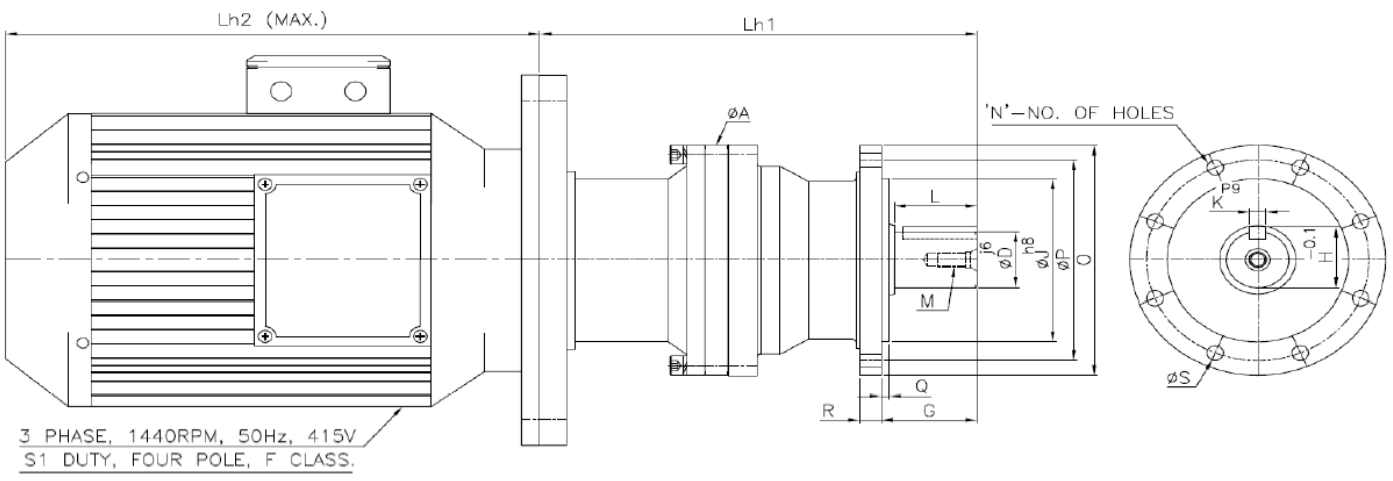

DIMENSIONS OF HELICAL GEARED MOTOR FLANGE MOUNTED

MODEL	OUTPUT SHAFT					FLANGE MOUNTING								OTHERS	
	D j6	L	H	K p9	M	J	O	Q	R	P	G	S	N	A	Lh1
P1-63	19	30	21.5	6	M6	60	95	3	10	80	35	9	4	95	183
P2-71X	24	38	27.0	8	M6	80	120	3	11	100	43	11	4	110	**220**
P2-71	28	40	31.0	8	M8	90	140	4	12	120	47	11	4	135	236
P4-90	38	50	41.0	10	M10	110	155	5	13	135	58	10	8	155	265
P5-100	50	75	53.5	14	M12	130	185	8	15	165	86	12	8	185	325
P5-132	60	90	64.0	18	M16	160	235	10	18	200	103	14	8	235	397
P6-132	70	90	74.5	20	M16	180	260	10	20	225	103	14	8	265	425
P7-160	80	110	85.5	22	M16	200	290	10	23	250	123	14	8	290	459
P8-160	90	120	95	25	M16	210	310	10	22	260	143.5	14	12	315	516

MODEL	OUTPUT SHAFT					FLANGE MOUNTING								OTHERS	
	D j6	L	H	K p9	M	J	O	Q	R	P	G	S	N	A	Lh1
P1-71	19	30	21.5	6	M6	60	95	3	10	80	35	9	4	95	240
P2-80X	24	38	27.0	8	M6	80	120	3	11	100	43	11	4	110	**250**
P2-80	28	40	31.0	8	M8	90	140	4	12	120	47	11	4	135	270
P4-112	38	50	41.0	10	M10	110	155	5	13	135	58	10	8	155	340
P5-112	50	75	53.5	14	M12	130	185	8	15	165	86	12	8	185	400
P6-132	70	90	74.5	20	M16	180	260	10	20	225	103	14	8	265	510
P7-132	80	110	85.5	22	M16	200	290	10	23	250	123	14	8	290	580

MODEL	OUTPUT SHAFT					FLANGE MOUNTING								OTHERS	
	D j6	L	H	K p9	M	J	O	Q	R	P	G	S	N	A	Lh1
P3-90	28	40	31.0	8	M8	90	140	4	12	120	47	11	4	135	276
P6-160	70	90	74.5	20	M16	180	260	10	20	225	103	14	8	265	526
P9-180	90	120	95	25	M16	210	310	10	22	260	143.5	14	12	315	630

MOTOR 1440 RPM		
F.S.	H.P.	Lh2
71	0.5	210
90	1.5/2.0	324
100	3.0	325
112	5.0	373
160	2.5/15.0/20	523
180	25.0/30.0	583
200	40.0	650

ALL DIMENSIONS ARE IN MM

Worm Helical Gear Box
Foot Mounted Hollow Output

Bevel Helical Gear Box
Foot Mounted

Crystliser Sugar Gear Box

Worm Helical Geared
Flange Mounted Downward Type

Helical Gear Box Fitted
With HYD Motor

Helical Gear Box Foot
Mounted Hollow Input

Heavy Duty Helical Geared
Motor Foot Mounted

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