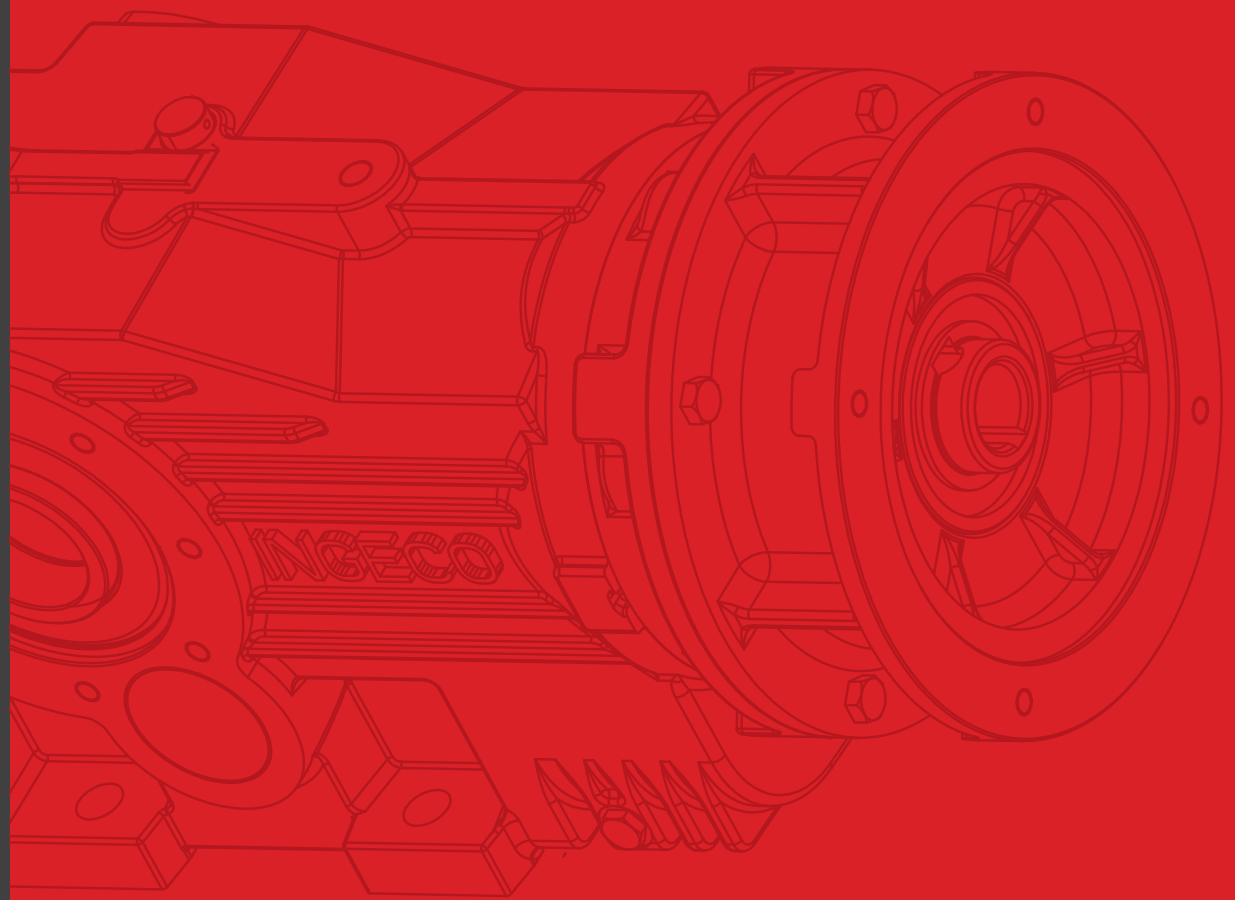




Works & Regd. Office Address

INGECO Gears Pvt. Limited

Plot no 38-43, Gopi Industrial Estate,
Sarkhej-Bavla Highway,
Changodar, Ahmedabad - Gujarat - India - 382 213

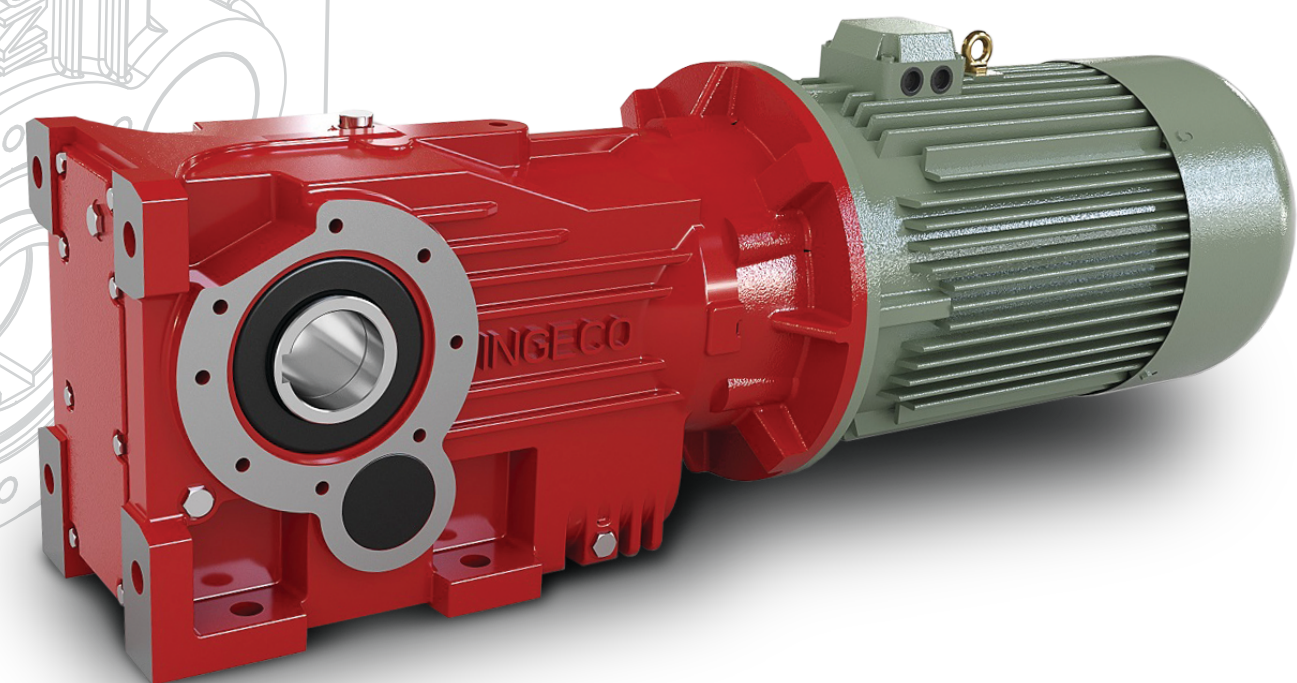
Tel. No. : +91- 76239 77771 / 72
E-mail : info@ingecogears.com / ingeco@ingecogears.com
Web : www.ingecogears.com

 www.youtube.com/ingecogears

While every attempt is made to ensure the product delivered matches with the description in this brochure, we reserve the right to make modifications, without notice, to match available material supply and changes in design in keeping with our policy of continued product development.



IK SERIES HELI BEVEL GEARED MOTORS



www.ingecogears.com

IK SERIES HELI BEVEL GEARED MOTORS

Series IK right angle drive helical bevel geared motors offer ratios from 8 : 1 to 160 : 1 in three stages .Motors are available up to 60kW and output torque capacity up to 10,000Nm. These Geared motors offers unlimited flexibility in terms of mounting.

The Series IK geared motor is designed with integral cast feet for base or end mounting and can be offered with single or double extended output shafts. Units are also available in Hollow shaft mounted or with output flanges and are available for mounting horizontally or vertically.

They are available in 7 sizes viz: IK04, IK06, IK07, IK08, IK09, IK10 and IK12 out of which IK04, IK06, IK07, IK08, and IK09, IK10 are available for upto 45 Kw and the IK12 is under development. These Geared motors are widely used in Conveyors in Mining and quarry plants, road construction machines like Asphalt and cement batching plants, Plastic and Packaging industry etc.

Types: Right Angle Bevel Helical Geared Motor - IK Series

Sizes: Available in 7 Sizes viz.
IK04, IK06, IK07, IK08, IK09, IK10, IK12

Ratios: Available in 3 and 4 stages and for Ratios of upto 4000:1. We can offer ratios from 5:1 to 320:1 in three stages, and 4000:1 in four stages.

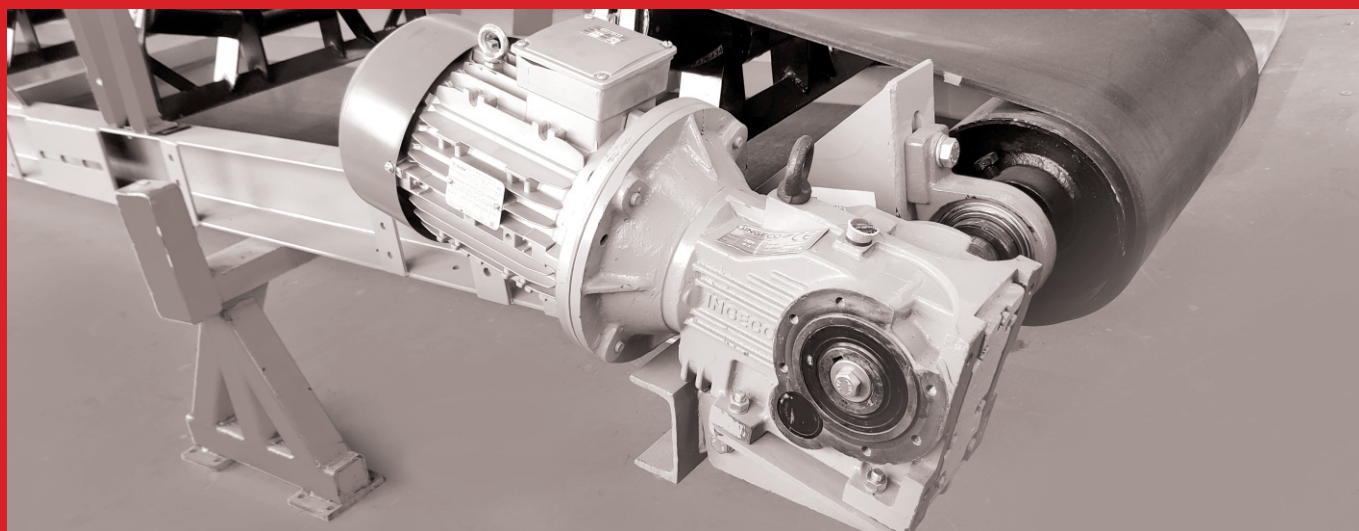
Power: Higher power ratings for maximum torque and Motor Configuration from 0.25 Kw to 100 Kw and upto 10000Nm

Mounts: Vertical, horizontal and direct drive mounting configurations

Motor Sizes: IEC Frames from 63 to 280

Lubrication: Oil splash type lubrication or Grease filled

Housing: Close grain cast iron case construction.



PRODUCT FEATURES

Input Versions: Geared motor, Motor-mount Reducer for IEC Motor and Reducer unit with Solid input shaft.

Output Options: Solid Shaft , Hollow Shaft. & Splined Shafts

Motor Options: Includes motors of types Standard, Brake, Flame-proof, Crane-duty.

Accessories: Backstop, Shrink Disc, Torque Arm.

APPLICATIONS AND INDUSTRIES

- > Conveyors and Feeders in Mining and Quarrying
- > Mixers
- > Cranes
- > Special Purpose machines
- > Pharmaceutical machines
- > Plastic and Printing machines
- > Road construction equipment
- > Rubber and paper industries
- > Ports, Airports, and Terminals
- > Waste water treatment and bio gas plants
- > Steel and Foundry

Motor Options: Includes motors of types Standard, Brake, Flame-proof, Crane-duty.

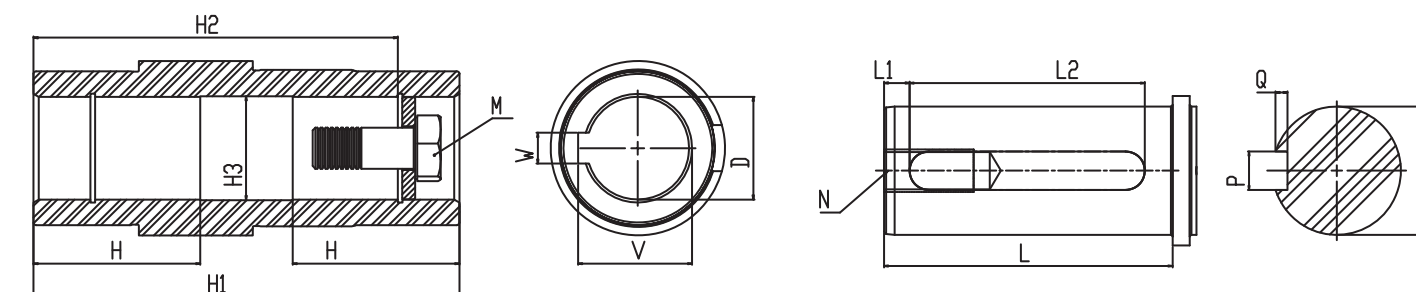
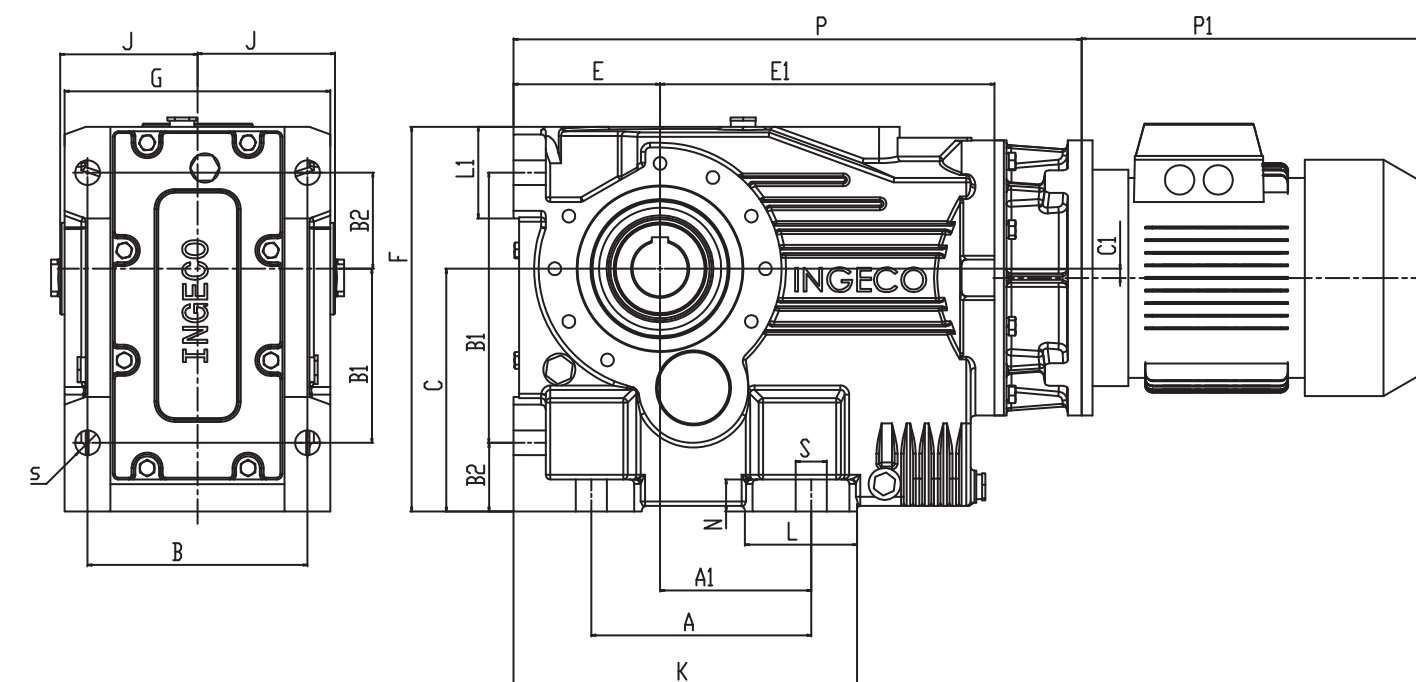
Accessories: Backstop, Shrink Disc, Torque Arm.

As improvements in design are being made continually this specification is not to be regarded as binding in detail and drawings and capacities are subject to alteration without notice. Certified drawings will be sent on request

INGECO

The Complete Drive Technology

DIMENSIONAL DETAILS



Model Performance Metrics - Q1 2024																Regional Sales Data - Q1 2024										
Model	A	A1	B	B1	B2	C	C1	E	E1	F	G	J	K	L	L1	Regional Sales Data - Q1 2024										
IK- 04	130	95	120	130	37	112	13	71	180	187	145	75	190	47	40	P1	P3	P	P	P	P					
IK- 06	120	90	140	160	45	140	13	90	230	233	173	90	213	65	48	63	183	283	340							
IK- 07	150	110	165	200	55	180	25	112	265	288	190	105	250	60	55	71	210	297	340							
IK- 08	180	125	190	233	70	212	15	132	330	340	230	120	305	85	75	80	242	297	353	415	488	580				
IK- 09	240	165	240	295	75	265	10	160	365	420	290	150	374	120	100	90S	269	297	353	415	488	580				
IK- 10	280	185	270	360	100	320	41	200	370	515	340	155	442	125	98	90L	294	297	353	415	488	580				
																100L	314	307	390	425	502	580				
																112M	338	307	390	425	502	580				
																132S	371		400	432	515	595	667			
																132M	409		400	432	515	595	667			
																160M	479					547	620	709		
																160L	523					547	620	709		
																180M	545						620	709		
																180L	583						620	709		
																200L	650						620	709		
																225S	695						660	740		
																223M	695						660	740		

Model	D [H7] [MAX]	W	V	H	H1	H2	H3	M	Model	D [H6] [MAX]	P	Q	L	L1	L2	N
IK- 04	40	12	43.3	60	150	133	40.5	M12X60	IK- 04	40	12	5	56	3	50	M12x28
IK- 06	50	14	53.8	80	180	156	50.5	M16x70	IK- 06	50	14	5.5	76	3	70	M16x36
IK- 07	60	18	64.4	90	210	183	60.5	M16x75	IK- 07	60	18	7	95	3	80	M16x36
IK- 08	70	20	74.9	100	240	210	70.5	M20X80	IK- 08	70	20	7.5	114	3	100	M20x42
IK- 09	75	20	79.9	120	300	270	75.5	M20X80	IK- 09	75	20	7.5	13	3	110	M20x42
IK- 10	90	25	95.4	130	310	280	91	M20X80	IK- 10	90	25	9	172	3	140	M20x42

SELECTION TABLES

For 1 HP (0.75Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
10:1	144	3.8	IK043	6000	75
20:1	72	3.5	IK043	6000	100
25:1	56	3	IK043	6000	122
30:1	48	2.6	IK043	6000	154
40:1	36	2.15	IK043	6000	201
50:1	28	1.8	IK043	6000	241
58:1	25	1.6	IK043	6000	280
70:1	20	2.3	IK063	8000	340
80:1	18	2	IK063	8000	382
95:1	15	1.7	IK063	8000	468
106:1	13	1.6	IK063	8000	520
120:1	12	2.4	IK073	15000	600

For 1.5 HP(1.1Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
10:1	144	3.6	IK043	6000	75
20:1	72	2.4	IK043	6000	140
25:1	56	2.1	IK043	6000	175
30:1	48	1.85	IK043	6000	220
40:1	36	1.5	IK043	6000	280
50:1	28	2.3	IK063	8000	347
58:1	25	1.9	IK063	8000	425
70:1	20	1.6	IK063	8000	500
80:1	18	1.4	IK063	8000	557
95:1	15	2.45	IK073	15000	690
100:1	14	2.3	IK073	15000	710
120:1	12	1.8	IK073	15000	850

For 2.0 HP(1.5Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
10:1	144	2.7	IK043	6000	100
20:1	72	1.8	IK043	6000	197
25:1	56	1.5	IK043	6000	245
30:1	48	2.7	IK063	8000	300
40:1	36	2.1	IK063	8000	390
50:1	28	1.65	IK063	8000	485
60:1	24	1.4	IK063	8000	588
70:1	20	2.3	IK073	15000	710
80:1	18	2.1	IK073	15000	785
95:1	15	1.8	IK073	15000	950
100:1	14	1.7	IK073	15000	960
115:1	12	1.4	IK073	15000	1100

For 3.0 HP(2.2Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
10:1	144	1.85	IK043	5200	150
15:1	96	1.5	IK043	5300	198
20:1	72	1.25	IK043	5500	280
25:1	58	2.25	IK063	7900	335
32:1	48	1.7	IK063	8000	450
39:1	36	1.45	IK063	8000	540
50:1	28	2.4	IK073	14300	675
60:1	24	1.9	IK073	14300	875
75:1	19	1.5	IK073	15000	1050
80:1	18	1.45	IK073	15000	1140
95:1	15	2	IK083	15700	1360
100:1	14	1.8	IK083	15700	1380
125:1	11	1.5	IK083	15700	1750

For 5.0 HP (3.7 Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
8:1	179	1.35	IK043	4100	190
8:1	179	3	IK063	6400	188
15:1	110	2.05	IK063	6600	320
20:1	72	1.6	IK063	6700	470
20:1	72	2.85	IK073	10700	515
25:1	58	1.3	IK063	6500	615
25:1	58	2.4	IK073	11400	620
30:1	48	2.2	IK073	11500	690
40:1	36	1.65	IK073	11600	970
50:1	29	2.25	IK083	15300	1200
90:1	16	1.25	IK083	15700	2050

For 7.5 HP (5.5 Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
8:1	179	2	IK063	5000	280
13:1	110	2.3	IK073	9500	480
15:1	96	2.25	IK073	9700	516
20:1	72	1.82	IK073	10000	770
25:1	58	1.6	IK073	10100	920
30:1	48	1.5	IK073	10100	1025
40:1	36	1.9	IK083	13800	1400
50:1	29	1.5	IK083	13800	1820
60:1	24	1.3	IK083	13800	2100

For 10 HP (7.5 Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
13:1	110	1.7	IK073	8500	660
15:1	96	1.7	IK073	8500	730
20:1	72	1.47	IK073	8500	950
25:1	58	2	IK083	11800	1235
30:1	48	1.85	IK083	11800	1400
40:1	36	1.4	IK083	11800	1980
50:1	29	1.8	IK093	35500	2400

For 12.5 HP (9.2 Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
13:1	110	2.1	IK083	9000	800
15:1	96	2	IK083	9000	810
20:1	72	1.8	IK083	9000	1200
25:1	58	1.5	IK083	9000	1310
30:1	48	1.9	IK093	23000	1600

For 15 HP (11 Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
13:1	110	1.9	IK083	9800	930
15:1	96	1.8	IK083	9800	992
20:1	72	1.64	IK083	9800	1450
25:1	58	1.4	IK083	8800	1800
28:1	51	1.27	IK083	8800	2000
35:1	72	1.7	IK093	35500	1480
25:1	58	2.51	IK093	35500	1760
40:1	36	1.6	IK093	35500	2800
50:1	29	2	IK103	43000	3511
60:1	24	1.7	IK103	43000	4150
70:1	20	1.45	IK103	43000	5770

For 20 HP (15 Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
13:1	110	1.35	IK083	8220	1216
13:1	110	2.6	IK093	35500	1175
15:1	96	1.4	IK083	8070	1350
15:1	96	2.4	IK093	35500	1322
20:1	72	1.2	IK083	7070	1963
20:1	72	1.93	IK093	35500	1900
25:1	58	1.59	IK093	35500	2375
35:1	41	1.33	IK093	35500	3380
40:1	36	1.95	IK103	43100	3850
50:1	29	1.5	IK103	43100	4780
60:1	24	1.25	IK103	43100	5660

For 25 HP (18.5 Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
11:1	130	2.35	IK093	34400	1290
15:1	96	2	IK093	34450	1680
20:1	72	1.54	IK093	35500	2330
25:1	58	1.3	IK093	35500	2920
25:1	58	2.4	IK103	43100	2997
30:1	48	2.1	IK103	43100	3400
35:1	40	1.8	IK103	43100	4300
40:1	35	1.6	IK103	43100	4800
50:1	29	1.25	IK103	43100	5890

RIGHT ANGLE BEVEL
HELICAL GEARED MOTOR - IK SERIES

INGECO Geared Motors are extremely efficient gear units which are compact and sturdy and capable of transmitting power with utmost efficiency. It can deliver torque upto 10,000 Nm with various possible ratios.

INGECO Geared Motors are aesthetically designed with various mounting options. The robust Monobloc housing is made of GG22 iron and is machined under state of art standards. The geared motors are perfectly adapted to applications requiring a high torque transmission and harsh environment. The units configuration also makes the mounting and maintenance easier with a large range of option and technical features Each gear is calculated, designed and ground to provide a noiseless working of the final gearbox. The IK series gear units are available with output shaft, hollow shaft, double output shaft and various other flange options.

They are having a wide application in core industries like Cement, Power, Mining and other infrastructure related machineries. Designed to work under heavy loads and in hard conditions, the Bevel-Helical IK series is perfectly adapted to a wide range of application. The Helical and Bevel gears are made of 16MnCr5 steel and match the 57Hrc standards hence each gear is heat treated and controlled to make sure that it match the highest standards.

DESIGN FEATURES INCLUDE

Ability to fit double oil seals, on output shaft or reducer input shaft as required. All units are dimensionally interchangeable with other major European manufacturers. Units are manufactured and assembled from a family of modular kits for distributor friendliness minimising inventory and maximising availability.

For 30 HP (22 Kw), 1440 rpm, 4 pole

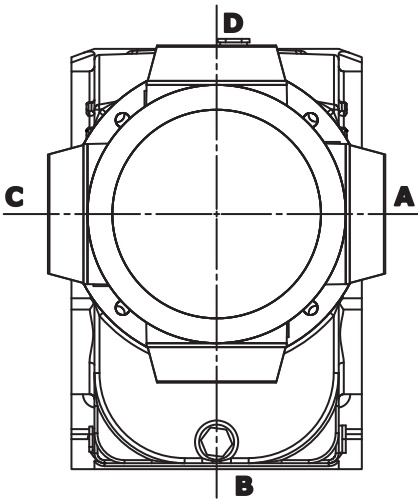
Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
11:1	130	1.9	IK093	32600	1530
13:1	110	1.8	IK093	32400	1750
20:1	72	1.3	IK093	33800	2775
20:1	72	2.5	IK103	43100	2774
25:1	58	2	IK103	43100	3565
30:1	48	1.7	IK103	43100	4045
35:1	40	1.4	IK103	43100	4580
40:1	35	1.25	IK103	43100	5750

For 40 HP (30 Kw), 1440 rpm, 4 pole

Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
11:1	130	1.4	IK093	29700	2085
13:1	110	1.3	IK093	29500	2340
20:1	72	1.9	IK103	43100	3780
25:1	58	1.6	IK103	43100	4860
30:1	48	1.3	IK103	43100	5510

For 50 HP (37 Kw), 1440 rpm, 4 pole

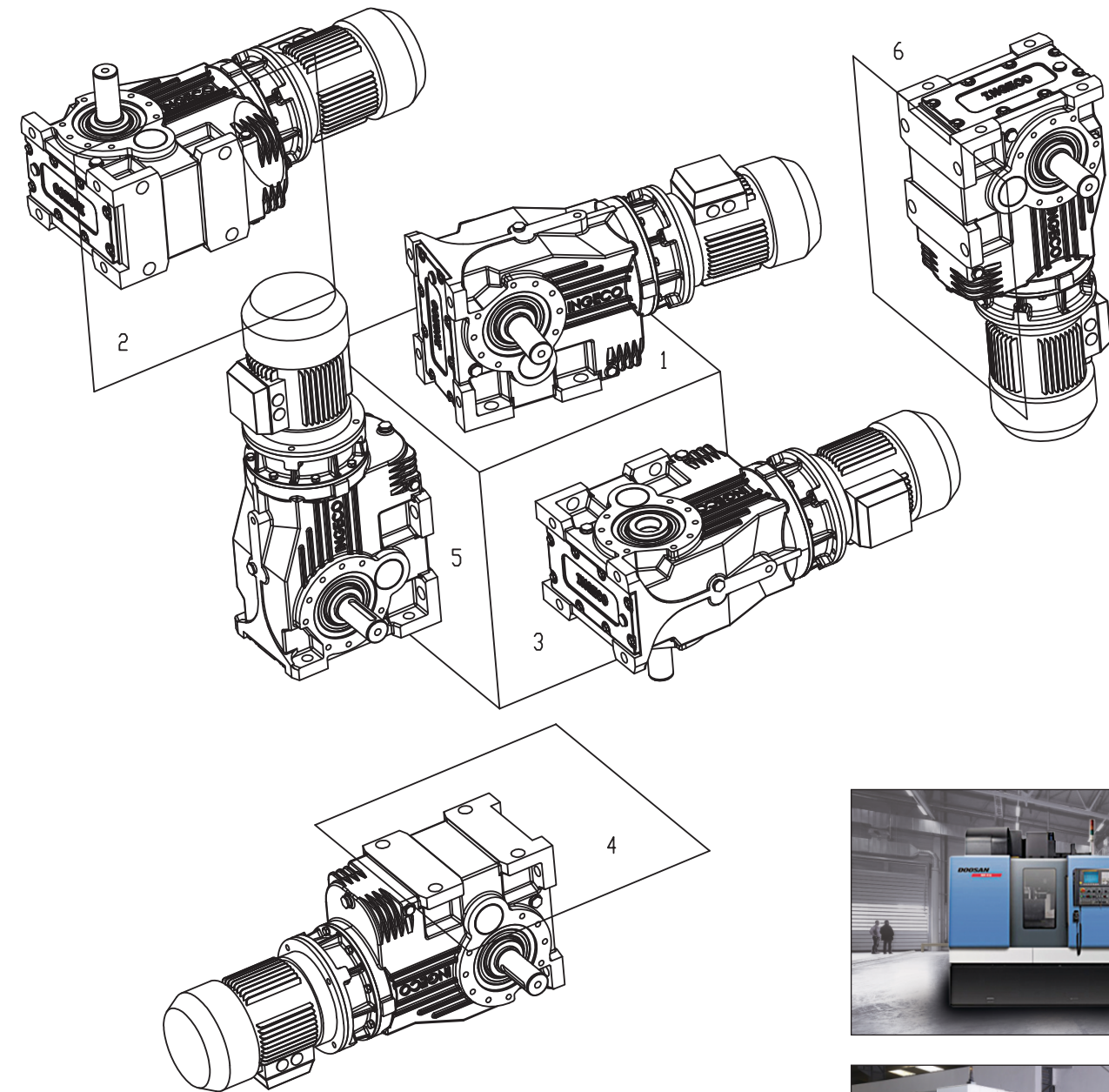
Ratio	O/p RPM	Service Factor	Model	Overhung Load (N)	Torque (Nm)
11:1	130	2.1	IK103	43100	2685
13:1	110	1.97	IK103	43100	3320
20:1	72	1.5	IK103	43100	4665
25:1	58	1.2	IK103	43100	5994



TERMINAL BOX POSITION

A	0
B	90
C	180
D	270
REDUCER OR NO MOTOR FITTED	

MOUNTING POSITIONS



LUBRICANT QUANTITIES [LITERS]

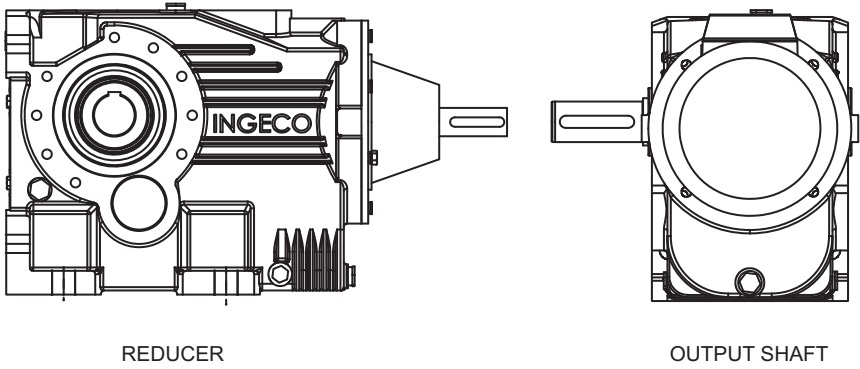
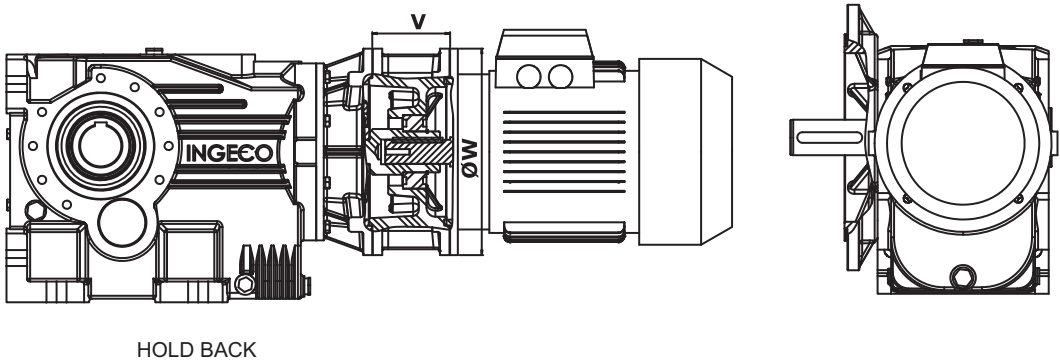
TRIPLE REDUCTION						
MODEL	IK-04	IK-06	IK-07	IK-08	IK-09	IK-10
MOUNTING POSITION	1	0.9	1.7	2.9	4.6	9.5
	2	1.2	1.6	3.8	3.9	8.5
	3	1.1	3	4.2	7.8	18.2
	4	1.5	2.9	4.7	7.7	17.2
	5	1.9	3.8	5.9	9.8	21.2
	6	1.4	2.8	4.7	7.8	16.2



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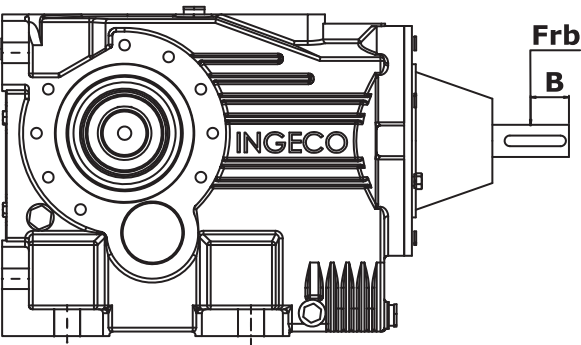
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OPTIONAL ACCESSORIES



FRAME SIZE	ØW	V
100	250	68
112	250	68
132	300	105
160	350	130
180	350	130
200	400	130

OVERHUNG & AXIAL LOADS ON SHAFTS



OVERHUNG MEMBER	K (FACTOR)
CHAIN SPROCKET	1
SPUR OR HELICAL PINION	1.25
VEE BELT SHEAVE	1.50
FLATE BELY PULLY	2

INPUT SHAFT OVERHUNG LOADS, Frb (kN) 1450 rpm

	IK-04	IK-06	IK-07	IK-08	IK-09	IK-10
3 STAGE	1.50	1.05	2.1	3.1	3.5	4.5

DISTANCE MIDWAY ALONG THE SHAFT EXTENSION

MODEL	DIMENSION A (mm)	DIMENSION B (mm)
IK- 04	28	20
IK- 06	38	20
IK- 07	47.5	25
IK- 08	50	30
IK- 09	55	40
IK- 10	70	55