

**GAEYAH WORM WITH HELICAL &  
VARIATOR GHWM & GVWM**

## About Us.

Gaeyah Transmission, an Indian company manufacturing efficient power transmission products to meet the growing aspirations of Indian customers. Gaeyah is mentored by an experienced team of transmission engineers having decades of expertise in various applications and solutions. We promise to deliver, right combination of efficient affordable, and quality products for the light duty industry segment.

## Our Vision.

'Gaeyah's vision is to offer affordable power transmission solutions, empowering customers to improve their product performance'

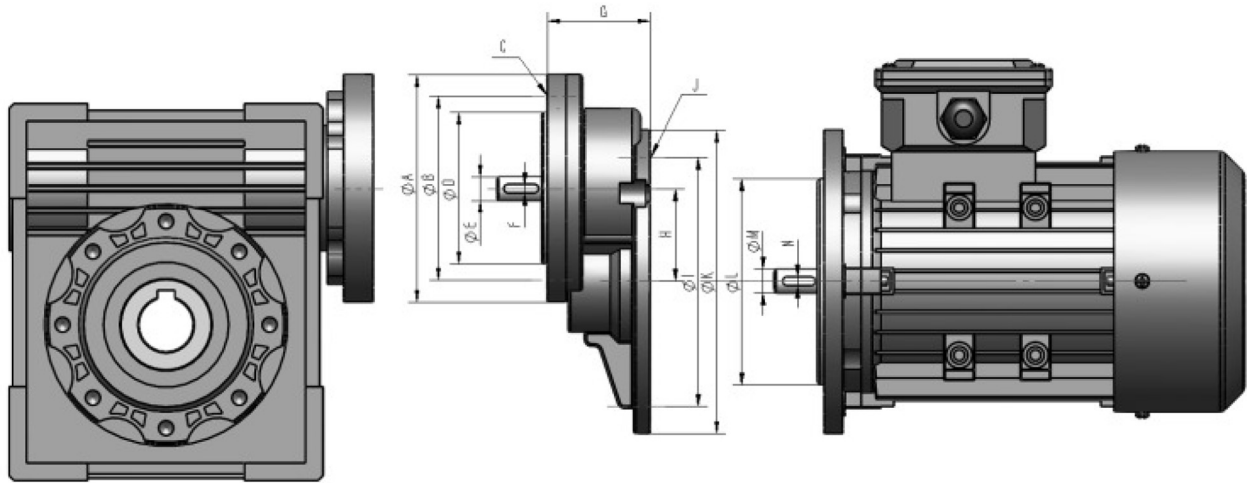
## Our Values.

Our work will be guided and informed by our beliefs and commitments to:

- Inclusiveness** - Respect all Living Being.
- Honesty** - Upright & Fair.
- Commitment** - Promise to Persevere.
- Innovate** - Contemporary Solution.
- Passion** - Empathize & Listen.



## HELI WORM- GHWM (GEM+GH+GWM)



Size	Output shaft								G	H	Input shaft					
	Flange	A	B	C	D	E	F	Flange e			I	J	K	L	M	N
<b>GH63</b>	71B14	105	85	M6	70	11	4	47	43	63B5	115	Ø9	140	95	11	4
<b>GH71</b>	80B14	120	100	M6	80	14	5	57	54	71B5	130	Ø9	160	110	14	5
<b>GHB0</b>	100B14	160	130	MB	110	19	6	74	66	80B5	165	Ø11	200	130	19	6
<b>GH90</b>	100B14	160	130	MB	110	24	8	74	66	90B5	165	Ø11	200	130	24	8

**GH                      S                      063                      3.0**

**GH** : GAEYAH HELICAL

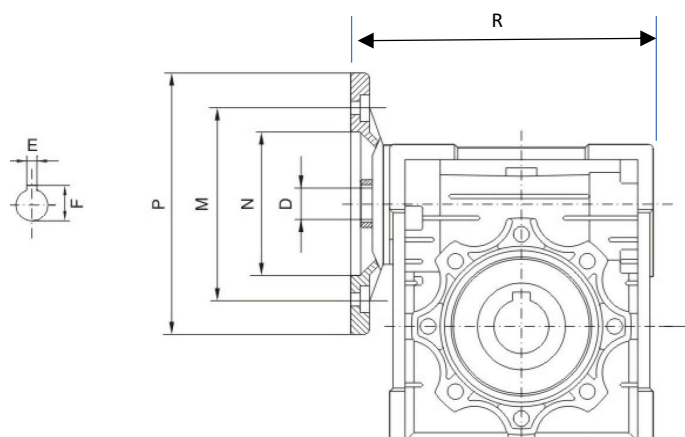
**S** : SINGLE STAGE

**063** : MOTOR FRAME

**3.0** : RATIO OF THE UNIT



## WORM- GWM DIMENSIONS



MODEL	Motor Flange						R
	PAM IEC	N	M	P	E	F	
GWM025	56B14	50	65	80	3	10.4	45
GWM030	63B5	95	115	140	4	12.8	55
	63B14	60	75	90	3	10.4	
	56B5	80	100	120			
	56B14	50	65	80			
GWM040	71B5	110	130	160	5	16.3	70
	71B14	70	85	105	4	12.8	
	63B5	95	115	140			
	63B14	60	75	90			
	56B5	80	100	120	3	10.4	
GWM050	80B5	130	165	200	6	21.8	80
	80B14	80	100	120	5	16.3	
	71B5	110	130	160			
	71B14	70	85	105			
	63B5	95	115	140	4	12.8	
GWM063	90B5	130	165	200	8	27.3	95
	90B14	95	115	140	6	21.8	
	80B5	130	165	200			
	80B14	80	100	120			
	71B5	110	130	160	5	16.3	
	71B14	70	85	105			
GWM075	100/112B5	180	215	250	8	31.3	112.5
	100/112B14	110	130	160	8	27.3	
	90B5	130	165	200			
	90B14	95	115	140			
	80B5	130	165	200	6	21.8	
	80B14	80	100	120			

## GHS AND GWM PRE-DISPOSITION

Model	i	GHS063	GHS071	GHS080	GHS090
		i: 3.0	i: 3.0	i: 3.0	i: 2.5
GWM040	25				
	30				
	40				
	50				
	60				
	80				
	100				
GWM050	25				
	30				
	40				
	50				
	60				
	80				
	100				
GWM063	25				
	30				
	40				
	50				
	60				
	80				
	100				
GWM075	25				
	30				
	40				
	50				
	60				
	80				
	100				
GWM090	25				
	30				
	40				
	50				
	60				
	80				
	100				
GWM110	25				
	30				
	40				
	50				
	60				
	80				
	100				
GWM130	25				
	30				
	40				
	50				
	60				
	80				
	100				

## PERFORMANCE OF HELI WORM - GHWM

P1n (Kw)	n2 (1/min)	M2n (Nm)	i (ratio)	Fr2(N)2	fs	GHS	GWM	Motor
0.12	20.5	42	68.25	2833	1.2	GHS063	GWM040	6314
	17.1	46	81.9	3011	1.2			
	12.8	57	109.2	3314	0.9			
	10.3	66	136.5	3490	0.7			
	8.55	74	163.8	3490	0.6			
	10.3	68	136.5	4840	1.3	GHS063	GWM050	6314
	8.55	75	163.8	4840	1.1			
	6.41	88	218.4	4840	0.8			
	5.13	98	273	4840	0.7			
	6.41	92	218.4	6270	1.5	GHS063	GWM063	6314
5.13	103	273	6270	1.2				
0.18	20.5	64	68.25	2833	0.8	GHS063	GWM040	6324
	17.1	70	81.9	3011	0.8			
	12.8	85	109.2	3314	0.6			
	20.5	64	68.25	3889	1.4	GHS063	GWM050	6324
	17.1	71	81.9	4132	1.5			
	12.8	87	109.2	4548	1.1			
	10.3	101	136.5	4840	0.9			
	8.55	113	163.8	4840	0.7			
	6.41	133	218.4	4840	0.6			
	10.3	103	136.5	6270	1.7	GHS063	GWM063	6324
	8.55	117	163.8	6270	1.4			
	6.41	139	218.4	6270	1			
	5.13	155	273	6270	0.8			
	13.2	95	68.25	4506	1.2	GHS071	GWM050	7116
	11	105	81.9	4788	1.4			
	8.24	126	109.2	4840	1			
	13.2	97	68.25	5889	2.2	GHS071	GWM063	7116
	11	107	81.9	6259	2.4			
	8.24	131	109.2	6270	1.8			
	6.59	152	136.5	6270	1.4			
5.49	168	163.8	6270	1.2				
4.12	197	218.4	6270	0.9				
3.3	218	273	6270	0.7				
5.49	179	163.8	7380	1.7	GHS071	GWM075	7116	
4.12	211	218.4	7380	1.2				
3.3	235	273	7380	1				
0.25	20.5	88	68.25	3889	1	GHS071	GWM050	7114
	17.1	98	81.9	4132	1.1			
	12.8	121	109.2	4548	0.8			
	20.5	91	68.25	5083	1.8	GHS071	GWM063	7114
	17.1	100	81.9	5401	2			
	12.8	125	109.2	5945	1.5			
	10.3	143	136.5	6270	1.2			

## PERFORMANCE OF HELIWORM - GHWM...

P1n (Kw)	n2 (1/min)	M2n (Nm)	i (ratio)	Fr2(N)2	fs	GHS	GWM	Motor
<b>0.25</b>	8.55	163	163.8	6270	1	GHS071	GWM063	7114
	6.41	192	218.4	6270	0.7			
	5.13	215	273	6270	0.6			
	13.2	135	68.25	5889	1.6	GHS071	GWM063	7126
	11	148	81.9	6259	1.8			
	8.24	181	109.2	6270	1.3			
	6.59	211	136.5	6270	1			
	10.3	151	136.5	7380	1.7	GHS071	GWM075	7114
	8.55	172	163.8	7380	1.4			
	6.41	201	218.4	7380	1.1			
	5.13	230	273	7380	0.9			
	13.2	139	68.25	6952	2.4	GHS071	GWM075	7126
	11	155	81.9	7380	2.5			
	8.24	191	109.2	7380	1.9			
	6.59	219	136.5	7380	1.5			
	5.49	248	163.8	7380	1.2			
	5.49	263	163.8	8180	1.9	GHS071	GWM090	7126
	4.12	318	218.4	8180	1.4			
	3.3	358	273	8180	1.1			
	20.5	134	68.25	5083	1.2	GHS071	GWM063	7124
17.1	148	81.9	5401	1.4				
12.8	185	109.2	5945	1				
10.3	212	136.5	6270	0.8				
<b>0.37</b>	20.5	138	68.25	6000	1.8	GHS071	GWM075	7124
	17.1	154	81.9	6375	1.9			
	12.8	191	109.2	7017	1.5			
	10.3	223	136.5	7380	1.1			
	8.55	254	163.8	7380	0.9			
	12.9	206	70	6952	1.6	GHS071	GWM075	8016
	10.7	230	84	7380	1.7			
	8	283	112	7380	1.3			
	6.4	324	140	7380	1			
	8.55	268	163.8	8180	1.5	GHS071	GWM090	7124
	6.41	321	218.4	8180	1.1			
	5.13	370	273	8180	0.9			
	6.4	347	148	8180	1.6	GHS080	GWM090	8016
	5.4	289	168	8180	1.3			
	4	471	224	8180	1			
	4	509	224	10320	1.6	GHS080	GWM110	8016
3.2	577	280	10320	1.3				
<b>0.55</b>	20	205	70	6000	1.2	GHS080	GWM075	8014
	16.7	230	84	6375	1.3			
	12.5	284	112	7017	1			
	10	332	140	7380	0.8			

## PERFORMANCE OF HELIWORM - GHWM...

P1n (Kw)	n2 (1/min)	M2n (Nm)	i (ratio)	Fr2(N)2	fs	GHS	GWM	Motor
0.55	12.9	306	70	6952	1.1	GHS080	GWM075	8026
	10.7	341	84	7380	1.1			
	16.7	240	84	7054	2.3	GHS080	GWM090	8014
	12.5	297	112	7764	1.6			
	10	355	140	8180	1.3			
	8.3	398	163.8	8180	1			
	10.7	357	84	8174	2	GHS080	GWM090	8026
	8	441	112	8180	1.4			
	6.4	516	140	8180	1.1			
	5.4	578	163.8	8180	0.9			
	8.3	425	163.8	10320	1.8	GHS080	GWM110	8014
	6.25	513	224	10320	1.3			
	5	597	280	10320	1			
	8	462	112	10320	2.6	GHS080	GWM110	8026
	6.4	552	140	10320	2			
	5.4	620	163.8	10320	1.6			
	4	756	224	10320	1.1			
	4	756	224	13500	1.6	GHS080	GWM130	8026
	3.2	858	280	13500	1.3			
	0.75	2	280	70	6000	0.9	GHS080	GWM075
16.7		313	84	6375	1			
16.7		327	84	7054	1.7	GHS080	GWM090	8024
12.5		405	112	7764	1.2			
10		483	140	8180	0.9			
8.3		543	163.8	8180	0.7			
12.5		430	112	9811	2.2	GHS080	GWM110	8024
10		506	140	10320	1.7			
8.3		580	163.8	10320	1.3			
6.25		700	224	10320	0.9			
12		393	73.5	9614	3.2	GHS090	GWM110	90S6
9.18		508	98	10320	2.3			
7.35		607	122.5	10320	1.8			
6.12		682	147	10320	1.5			
4.59		832	196	10320	1			
6.25		712	224	13500	1.4	GHS080	GWM130	8024
5		813	280	13500	1.1			
12.2		399	73.5	12575	4.4	GHS090	GWM130	90S6
9.18		508	98	13500	3.2			
7.35		607	122.5	13500	2.6			
6.12	682	147	13500	2.1				
4.59	832	196	13500	1.5				
3.67	944	245	13500	1.2				



## PERFORMANCE OF HELIWORM – GHWM...

P1n (Kw)	n2 (1/min)	M2n (Nm)	i (ratio)	Fr2(N)2	fs	GHS	GWM	Motor
1.1	12.2	576	73.5	9614	2.2	GHS090	GWM110	90L6
	9.18	746	98	10320	1.6			
	7.35	890	122.5	10320	1.2			
	6.12	1000	147	10320	1			
	19.05	392	73.5	8293	2.5	GHS090	GWM110	90S4
	14.3	508	98	9133	1.8			
	11.4	599	122.5	9838	1.5	GHS090	GWM110	90S4
	9.52	686	147	10320	1.1			
	7.14	828	196	10320	0.8			
	12.2	585	73.5	12575	3	GHS090	GWM130	90L6
	9.18	746	98	13500	2.2			
	7.35	890	122.5	13500	1.7			
	6.12	1000	147	13500	1.4			
	4.59	1220	196	13500	1			
1.5	19.05	398	73.5	10853	3.5	GHS090	GWM130	90S4
	14.3	508	98	11945	2.6			
	11.4	608	122.5	12868	2			
	9.52	686	147	13500	1.6			
	7.14	846	196	13500	1.2			
	5.71	962	245	13500	0.9			
	19.05	535	73.5	8298	1.9	GHS090	GWM110	90L6
	14.3	693	98	9133	1.3			
	11.4	817	122.5	9838	1.1			
	9.52	936	147	10320	0.8			
	19.05	542	73.5	10853	2.6	GHS090	GWM130	90L4
	14.3	693	98	11945	1.9			
	11.4	830	122.5	12868	1.5			
	9.52	936	147	13500	1.1			
7.14	1149	196	13500	0.8				
2.2	38.1	398	73.5	6586	2.1	GHS090	GWM110	90L2
	28.6	516	98	7249	1.5			
	22.9	617	122.5	7809	1.2			
	38.1	4.9	73.5	8614	2.9	GHS090	GWM130	90L2
	28.6	545	98	9481	2			
	22.9	654	122.5	10213	1.6			
	19.05	752	147	10853	1.3			

## INSTALLATION - GHS

To install the reduction unit it is necessary to note the following recommendations;

1. Check the correct direction of rotation of the reduction unit output shaft before fitting the unit to the machine.
2. Before mount with the prime mover and device, please check the reducer's every axial diameter, aperture, key and key slot, to be sure their dimensions are not deviation, and avoid assembling too tight or too loose, unless it will influence the reducer's performance.
3. The mounting on the machine must be stable to avoid any vibration.
4. Drives such as sprocket wheel and gear must be fitted close to bearing in order to reduce bending stress of hanging shaft
5. While assembling motor to the reducer, it is necessary to add butters to the worm shaft input hole and keyway, so as to avoid tightly assembling and rusting when it is used for a long time.
6. Supporting unit is required when reducers directly match with motors whose weight is bigger than normal types.

## NOTES FOR OPERATION - GHS

1. Before using, please check carefully whether the reducer model, distance size, ratio, input connecting method, output shaft structure, input and output shaft direction and revolving direction are tight according to requirement. It is better for the input speed of worm shaft not more than 1500r/min.
2. The load should be added step by step when using the machine. Never running it with full load.
3. All the reduction units are fitted with breather. Please replace the closed plug used for transportation with the breather plug supplied with the unit after installation.
4. Please check the correct level of the lubricant through the indicator or open the plug.
5. Whenever possible, protect the reduction unit against solar radiation and bad weather. Ensure the motor cools correctly by assuring good passage of air from the fan side.
6. In the case of particularly lengthy periods of storage(4-6 months),if the oil seal is not immersed in the lubricant inside the unit, it is recommended to change it since the rubber could stick to the shaft or may even have lost the elasticity.
7. In the case of ambient temperatures  $< -5^{\circ}\text{C}$  or  $> +40^{\circ}\text{C}$  call the Technical Service.

**\* In case of ambient temperatures is not as envisaged in the table, call our technical service .**

## INTRODUCTION TO GVL/C VARIATOR

**The design of GVL/C series stepless speed variator compromises the advanced technology both at home and abroad. The products include the following main characteristics:**

- 1, High speed-regulating precision : up to 0.5-1 rotation.
- 2, Large speed-changing range: The speed ratio ranges from 1:1.4 to 1:7 freely.
- 3, High in strength and long in service life.
- 4, Convenient to regulate the speed.
- 5, Continuous in running, front-to-back in running direction, smooth in driving, stable in performance and low in noise.
- 6, Full in sealing and suitable for any environment.
- 7, Compact in structure and small in volume.
- 8, Made in high-quality aluminium alloy diecast into forming, good-looking in appearance, light in weight and it never gets rusty.
- 9, Good in adaptation: GVL/I series stepless speed variators can be combined with all kinds of speed reducers, as to achieve low stepless speed-changing.

GVL/I series stepless speed variators are widely used for foodstuffs, ceramics, packing, chemicals, pharmacy, plastics, paper making, machine-tools, communications, and all kinds of automatic lines, pipelines and assembly lines which need speed regulation. it is a good companion for your production.



## PERFORMANCE OF VARIATOR- GVL/C

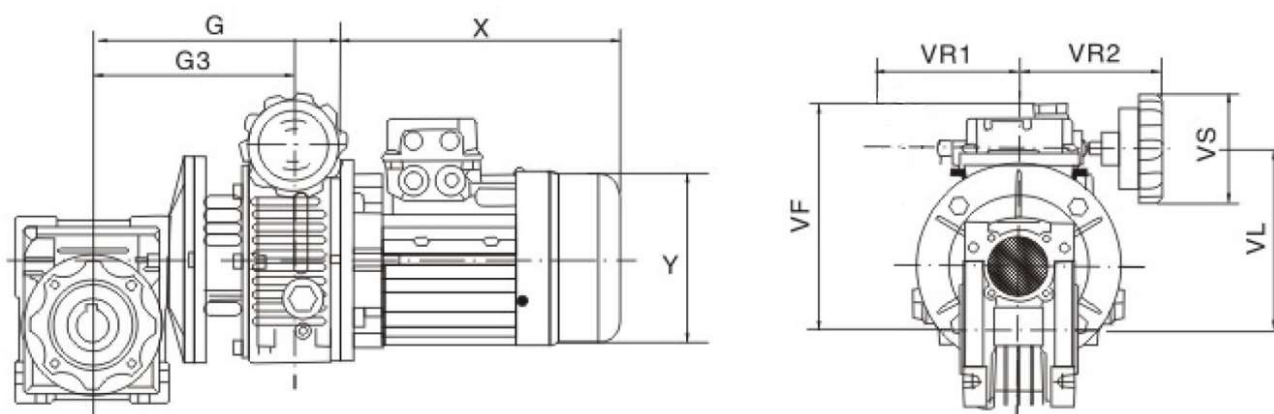
4P/ 3pH Motor	Model	I min~max	N <sub>2</sub> [r/min]	M2[Nm]
0.18KW	GVL0.18	1.6~8.2	880-170	1.5~3
0.37KW	GVL0.37	1.4~7	1000~200	3~6
0.55KW	GVL0.55	1.4~7	1000-200	4~8
0.75KW	GVL0.75	1.4~7	1000~200	6~12
1.1KW	GVC1.1	1.4~7	1000~200	9~18
1.5KW	GVC1.5	1.4~7	1000~200	12~24
2.2KW	GVC2.2	1.4~7	1000~200	18~36
3.7KW	GVC3.7	1.4~7	1000~200	32~64
5.5KW	GVC5.5	1.4~7	1000~200	45~90
7.5KW	GVC7.5	1.4~7	1000~200	59~118

## ORDERING CODE- GVL/ GVC

### GVL 0.75 71B5

NO	CODE DESCRIPTION
1	Code of step less speed variator
2	1) L: Aluminium alloy casing
	2) C: iron casting
3	Motor power
4	1) B3 :Foot-mounted model
	2) B5 :Flange-mounted model
5	Code of installation position

## WORM UNIT WITH VARIATOR- GVWM



Model	G	G3	VF	VL	vs	VR	VR1	Motor Frame 4P	X	y
GVWM040 Y0.18 63B5	183	135	151	118	85	110	110	63	200	120
GVWM050 Y0.18 63B5	193	145	161	128	85	110	110			
GVWM050 Y0.37 71B5	190	154	173	140	85	110	110	71	227	141
GVWM063 Y0.37 71B5	205	169	186	153	85	110	110			
GVWM063 Y0.55 80B5	234	181	203	170	110	120	120	80	268	160
GVWM063 Y0.75 80B5	234	181	203	170	110	120	120			
GVWM075 Y0.37 71B5	223	187	198	165	85	110	110	71	227	141
GVWM075 Y0.55 80B5	252	198	215	182	110	120	120			
GVWM075 Y0.75 80B5	252	198	215	182	110	120	120	80	268	160
GVWM075 Y1.1 90B5	259.5	207.5	199	177	110	150	-			
GVWM075 Y1.5 90B5	300.5	227.5	219	197	110	150	-	90L	290	195
GVWM090 Y0.55 80B5	269	215	230	197	110	120	120	80	268	160
GVWM090 Y0.75 80B5	269	215	230	197	110	120	120			
GVWM090 Y1.1 90B5	276.5	224.5	214	192	110	150	-	90S	265	195
GVWM090 Y1.5 90B5	317.5	244.5	234	212	110	150	-	90L	290	195
GVWM110 Y1.1 90B5	307	255	234	212	110	120	-	90S	265	195
GVWM110 Y1.5 90B5	348	275	254	232	110	150	-	90L	290	195
GVWM110 Y2.2 100B5	368	291	298	260	110	160	-	100L	320	215
GVWM110 Y3.7 112B5	368	291	298	260	110	160	-	112M	340	240
GVWM130 Y1.5 90B5	368	295	274	252	110	150	-	90L	290	195
GVWM130 Y 2.2 100B5	388	311	318	280	110	160	-	100L	320	215
GVWM130 Y3.7 112B5	388	311	318	280	110	160	-	112M	340	240

## PERFORMANCE OF VARIATOR- GVWM

P1n (Kw)	n2 (1/min)	M2n (NM)	i (ratio)	Variator	Gearbox	Motor Frame
<b>0.18</b>	117-22.5	9-18	12-61.5	GVL0.18	GWM040	6324
	88-17	12-23	16-82			
	58.7-11.3	17-32	24-123			
	44-8.5	22-40	32-164			
	35.2-6.8	27-47	40-205			
	29.3-5.7	30-51	48-246			
	22-4.3	37-62	64-328			
	17.6-3.4	43-60	80-410	GVL0.18	GWM050	6324
	22-4.3	38-63	64-328			
	17.6-3.4	44-73	80-410			
	14.7-2.8	50-80	96-492			
	11-2.1	59-82	128-656			
	8.8-1.7	66-79	160-820			
	8.8-1.7	66-79	160-820			
<b>0.37</b>	133-26.7	19-36	10.5-52.5	GVL0.37	GWM050	7124
	100-20	25-47	14-70			
	66.7-13.3	36-65	21-105			
	50-10	46-82	28-140			
	40-8	55-97	35-175			
	33.3-6.7	61-107	42-210			
	25-5	76-124	56-280			
	20-4	89-120	70-350	GVL0.37	GWM063	7124
	25-5	79-134	56-280			
	20-4	92-155	70-350			
	16.7-3.3	104-173	84-420			
	12.5-2.5	125-173	112-560			
	10-2	139-150	140-700			
	10-2	139-150	140-700			
<b>0.55</b>	133-26.7	26-49	10.5-52.5	GVL0.55	GWM063	8014
	100-20	34-63	14-70			
	66.7-13.3	48-88	21-105			
	50-10	62-112	28-140			
	40-8	75-133	35-175			
	33.3-6.7	81-146	42-210			
	25-5	105-179	56-280			
	20-4	123-207	70-350	GVL0.55	GWM075	8014
	20-4	129-216	70-350			
	16.7-3.3	146-242	84-420			
	12.5-2.5	176-250	112-560			
	12.5-2.5	189-309	112-560			
	10-2	218-350	140-700			
	10-2	218-350	140-700			
<b>0.75</b>	133-26.7	39-73	10.5-52.5	GVL0.75	GWM063	8024
	100-20	51-94	14-70			
	66.7-13.3	72-132	21-105			
	50-10	92-168	28-140			
	40-8	112-199	35-175			
	33.3-6.7	126-219	42-210			
	25-5	156-232	56-280			
	20-4	185-310	70-350	GVL0.75	GWM075	8024
	20-4	192-320	70-350			
	16.7-3.3	219-300	84-420			
	16.7-3.3	230-389	84-420			
	12.5-2.5	265-428	112-560			
	10-2	303-410	140-700			
	10-2	303-410	140-700			
12.5-2.5	302-503	112-560				
10-2	348-575	140-700				

## PERFORMANCE OF VARIATOR- GVWM...

P1n (Kw)	n2 (1/min)	M2n (NM)	i (ratio)	Variator	Gearbox	Motor Frame
<b>1.1</b>	133-26.7	59-111	10.5-52.5	GVC1.1	GWM075	90S4
	100-20	77-144	14-70			
	66.7-13.3	110-203	21-105			
	50-10	142-258	28-140			
	40-8	172-308	35-175			
	33.3-6.7	195-340	42-210			
	25-5	245-360	56-280			
	100-20	78-146	14-70	GVC1.1	GWM090	90S4
	66.7-13.3	113-208	21-105			
	50-10	146-266	28-140			
	40-8	177-320	35-175			
	33.3-6.7	202-356	42-210			
	25-5	256-442	56-280			
	20-4	304-517	70-350			
	20-4	320-550	70-350	GVC1.1	GWM110	90S4
16.7-3.3	368-625	84-420				
12.5-2.5	455-754	112-560				
10-2	522-710	140-700				
16.7-3.3	373-623	84-420	GVC1.1	GWM130	90S4	
12.5-2.5	460-749	112-560				
10-2	531-868	140-700				
<b>1.5</b>	133-26.7	78-148	10.5-52.5	GVC1.5	GWM075	90L4
	100-20	102-192	14-70			
	66.7-13.3	147-270	21-105			
	50-10	190-344	28-140			
	40-8	229-330	35-175			
	33.3-6.7	260-390	42-210			
	25-5	327-360	56-280			
	133-26.7	77-150	10.5-52.5	GVC1.5	GWM090	90L4
	100-20	104-195	14-70			
	66.7-13.3	150-277	21-105			
	50-10	194-355	28-140			
	40-8	236-427	35-175			
	33.3-6.7	270-474	42-210			
	25-5	341-589	56-280			
	20-4	406-560	70-350	GVC1.5	GWM110	90L4
	20-4	426-733	70-350			
	16.7-3.3	490-833	84-420			
	16.7-3.3	498-831	84-420			
	16.7-3.3	498-831	84-420	GVC1.5	GWM130	90L4
	12.5-2.5	614-999	112-560			
	10-2	696-1100	140-700			

## PERFORMANCE OF VARIATOR- GVWM...

P1n (Kw)	n2 (1/min)	M2n (NM)	i (ratio)	Variator	Gearbox	Motor Frame			
<b>2.2</b>	133-26.7	120-226	10.5-52.5	GVC2.2	GWM110	100L4			
	100-20	157-294	14-70						
	66.7-13.3	228-418	21-105						
	50-10	298-549	28-140						
	40-8	364-664	35-175						
	33.3-6.7	413-717	42-210						
	25-5	533-931	56-280						
	25-5	542-932	56-280				GVC2.2	GWM130	100L4
	20-4	648-1097	70-350						
	16.7-3.3	7461246	84-420						
125-2.5	921-1499	112-560							
10-2	1040-1690	140-700							
<b>3.7</b>	133-26.7	160-302	10.5-52.5	GVC3.0	GWM110	100B4			
	100-20	210-392	14-70						
	66.7-13.3	304-558	21-105						
	50-10	398-732	28-140						
	40-8	485-885	35-175						
	33.3-8.7	547-956	42-210						
	25-5	711-1030	56-280						
	133-26.7	213-402	10.5-52.5				GVC4.0	GWM110	112M4
	100-20	279-523	14-70						
	66.7-13.3	405-744	21-105						
50-10	530-975	28-140							
40-8	647-1020	35-175							
133-26.7	214-401	10.5-52.5	GVC4.0	GWM130	112M4				
100-20	281-527	14-70							
66.7-13.3	410-751	21-105							
50-10	536-978	28-140							
40-8	653-1180	35-175							
33.3-6.7	749-1298	42-210							
25-5	960-1650	56-280							



## LUBRICATION- IMPORTANT GUIDENCE

In the case of ambient temperature is  $< -30^{\circ}\text{C}$  or  $> 60^{\circ}\text{C}$ , it is necessary to use oil seals with special material.

◆ For operating ranges with temperatures under  $0^{\circ}\text{C}$  it is necessary to consider the following;

->The motors need to be suitable for operation at the envisaged ambient temperature.

->The power of the electric motor needs to be adequate for exceeding the higher starting torques required.

->In the case of reduction units with a cast-iron case , pay attention to impact loads since cast iron may have problems of fragility at temperatures under  $-15^{\circ}\text{C}$ .

->During the early stages of service , problems of lubrication may arise due to the high level of viscosity taken on by the oil and so it is wise to have a few minutes of rotation under no load.

◆ The oil needs to be changed after approximately 5000 hours. This period depends on the type of service and the environment where the reduction unit works. The synthetic oil and the mineral oil cannot be combined used in the reduction units.

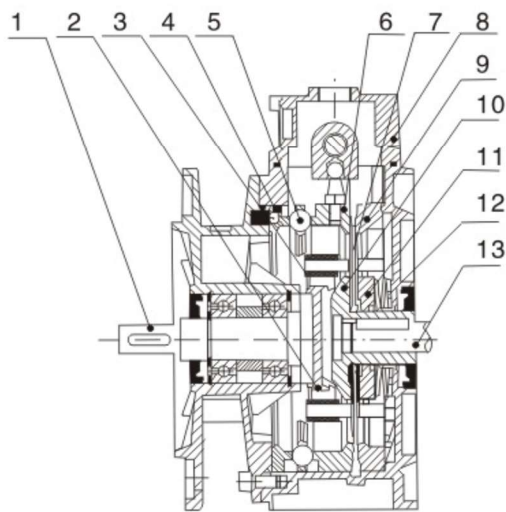
◆ The reduction units size 025-030-040-050-063-075-090 are supplied complete with lubricant for life, synthetic oil (SHELL TEVELA OIL 320), and can therefore be mounted in any position envisaged in the catalogue. V5/V6 for which you should call our technical service to assess the condition of use.

◆ The reduction units size 110 , 130 and 150 are supplied complete with lubricant, mineral oil , (SHELL TEVELA OIL 320)

◆ The variator speed are supplied complete with lubricant, mineral oil (GUANGYAN Ub-3x).

◆ For size 110, 130 and 150 it is necessary to specify the mounting position, otherwise the reduction units are supplied with the fixed quantity of oil for B3 mounting

## OPERATION AND MAINTENANACE- GVL/C



SI No	Part code
1	Output Shaft
2	Planet Carrier
3	Friction bearing- Planet disk
4	Cam ring
5	Ball ring
6	Adjustable annulus ring
7	Planet disk
8	Control cover
9	Fixed annulus ring
10	fixed sun race
11	Adjustable sun race
12	Belleville spring
13	Motor shaft

1, The shapes of shaft extension are all cylindrical. It is subject to GB 1569-1990 cylindrical shaft extension. The key joint refers to GE1095-2003 Ordinary flat key

2, The shaft lines should be kept concentric when the coupling is connected with a motor. The installation error should be no more than the tolerance value of the coupling.

3, When the output shaft is installed with the coupling or belt wheel , they should be pressed into the screw hole on shaft end

or assembled by heating. No hammering on it.

4, The mechinal stepless speed variator is not used in such an occasion where overload or running-blockage happene to occur.

5, Pl regulate speed only during running . **Do not turn the hand wheel of speed-regulation when the machine stops!**

6, The limit screws of speed-regulation on two ends under the operating box are well adjusted, **Please don't touch them!**

7, This set is not suited to work in the environment over 45<sup>0</sup>C temperature, especially no more than 45<sup>0</sup>C temperature when the temperature rises. In regard to its temperature rise, please read the explanation as follows.

*If a 4-pole motor is used for the speed variatcr, the temperature under running-in(empty running)is 40-50<sup>0</sup>C temperature higher than that of normal working environment . After running-in up to 60-80<sup>0</sup>C hours , the temperature rise will go down gradually . From that time on , it is 20<sup>0</sup>C temperature higher than of environment ; and the temperature will keep on rising stably. The high temperature rise in running will affect normal permissive working condition, but it won 't bring any bad effects to the service life of parts.*


8, The liquid lubricating oil is used for the speed variator. Its trade mark is Ub-3x, Please check up the oil level before use.

9, The machine is filled with lubricating oil before leaving factory. When it starts to work up to 2000 hours for the first time, its lubricating oil should be replaced, changing the lubricating oil every 5000 hours later.

## LUBRICATION: SPECIAL INSTRUCTION

- ◆ In case of ambient temperature  $< -30^{\circ}\text{C}$  or  $> 60^{\circ}\text{C}$ , it is necessary to use oil seals with special material.
- ◆ For operating ranges with temperatures under  $0^{\circ}\text{C}$  it is necessary to consider the following;
  - >The motors need to be suitable for operation at the envisaged ambient temperature.
  - >The power of the electric motor needs to be adequate for exceeding the higher starting torques required.
  - >In the case of reduction units with a cast-iron case , pay attention to impact loads since cast iron may have problems of fragility at temperatures under  $-15^{\circ}\text{C}$ .
  - >During the early stages of service , problems of lubrication may arise due to the high level of viscosity taken on by the oil and so it is wise to have a few minutes of rotation under no load.
- ◆ The oil needs to be changed after approximately 5000 hours. This period depends on the type of service and the environment where the reduction unit works. The synthetic oil and the mineral oil cannot be combined used in the reduction units.
- ◆ The reduction units size 025-030-040-050-063-075-090 are supplied complete with lubricant for life, synthetic oil (SHELL TEVELA OIL 320), and can therefore be mounted in any position envisaged in the catalogue. V5/V6 for which you should call our technical service to assess the condition of use.
- ◆ The reduction units size 110 , 130 and 150 are supplied complete with lubricant, mineral oil , (SHELL TEVELA OIL 320)
- ◆ The variator speed are supplied complete with lubricant, mineral oil (GUANGYAN Ub-3x).
- ◆ *For size 110, 130 and 150 it is necessary to specify the mounting position, otherwise the reduction units are supplied with the fixed quantity of oil for B3 mounting*

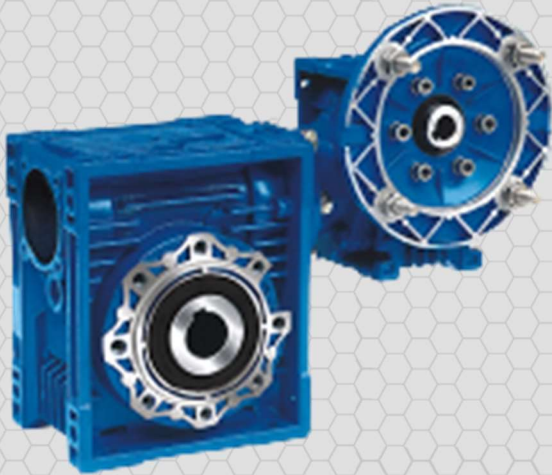
## LUBRICANT SPECIFICATION

MODEL / SIZE	 TEMPERATURE		ISO	 SHELL	 AGIP	 ESSO	 MOBIL	 CASTROL	 BP	 GMER	
	-25	+50									
GWM 025-090	-25	+50	VG320	Tivela Oil460	Telium VSF320	S220	Glygoyle 30	Alphasyn Pg320	Emrthpl SGXP320		Synthetic oil
GWM 025-090	-5	+40	VG460	Omala Oil460	Blasia 460	Spartaun Ep450	Mobilgear 634	Alpha MAX 450	Energol GAXP460	CKE460	Mineral oil
	-15	+25	VG220	Omala Oil220	Blasia 220	Spartaun Ep220	Mobilgear 630	Alpha MAX 220	Energol GAXP220		
GVL/C 025-090	-25	+40	VG32	A.T.F.DXRON	A.T.F.DXRON	A.T.F.DXRON	A.T.F.220	TQ.DXRONII	Autran DX	Ub-3x	Mineral oil

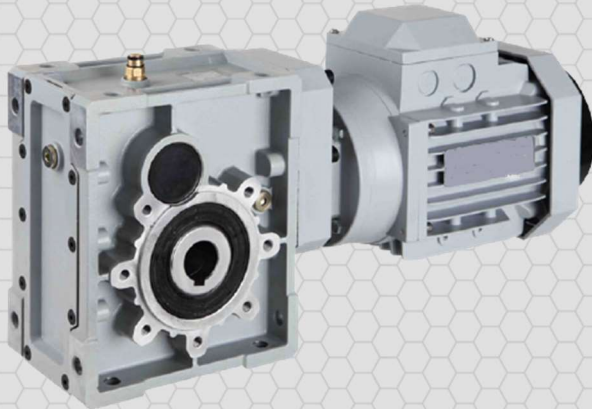
## LUBRICANT FILL QTY (ltr)

Model/ Size	B3	B6	B7	B8	V5	V6
GWM025				0.023		
GWM030				0.05		
GWM040				0.1		
GWM050				0.15		
GWM063				0.3		
GWM075				0.5		
GWM090				1		
GWM110	3	2.5	2.5	2.2	3	2.2
GWM130	4.5	3.5	3.5	3.3	4.5	3.3
GWM150	7	5.1	5.1	5.4	7	5.1
GVL0.18			0.13		0.2	
GVL0.37			0.15		0.25	
GVL0.55			0.33		0.45	
GVL0.75			0.33		0.45	
GVC1.1			0.8		1	
GVC1.5			0.8		1	
GVC2.2			1.2		1.2	
GVC3.0			1.2		1.2	
GVC4.0			1.2		1.2	

# GAEYAH RANGE OF PRODUCTS INCLUDE:



**GWM Series Worm  
Geared Motor  
Upto Size 150**



**GPM Series Hypoid  
Geared Motor  
Upto Size 110**



**GCL Series Helical  
Geared Motor  
Upto Size 50**

