



# Fenner®

## SERIES W

### WORM REDUCTION

**A modern modular designed aluminium worm box available in a vast range of sizes and ratios for cost effective solutions.**



- 11 Sizes with ratings from 0.06 to 15kW
- Ratios from 5:1 to 5000:1 with helical or double worm combinations
- Interchangeable dimensionally with other makes
- Hollow bore or solid shaft versions
- Accepts standard IEC motors

### Geared Drives Design Data Required

- **Motorised (integral motor) or non-motorised?**  
electrical supply available
- **If motorised:**  
any special motor features required (brake, clutch, flameproof etc.)
- **If non-motorised:**  
type of prime mover  
rotational speed of prime mover  
power rating of prime mover  
is an input shaft coupling required?  
if so, prime mover shaft dia.
- **Shaft mounting or foot mounted?**  
if shaft mounted, machine shaft diameter/length  
if foot mounted, is an output shaft coupling required?
- **Orientation of input/output**  
parallel or right angle?
- **Type of driven machine**
- **Rotational speed of driven machine**  
constant or variable over what range?
- **Power absorbed by driven machine**  
(or required output torque)
- **Hours/day duty & start/stop frequency**

### SERIES W

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**SELECTION PROCEDURE**

**(a) Service Factor**

From Table 1 select the Mechanical Service Factor (Fm) applicable to the drive.

If the unit is to be subjected to frequent stop/starts then multiply factor Fm by Factor Fs from table 2.

**(b) Motor Power**

Refer to the selection tables on pages 250 to 255 and choose a motor power equal to or in excess of that required, if the motor power is not known then from the formula below determine the power requirements of the driven machine and select a motor power in excess of the calculated machine absorbed power.

$$PA = \frac{T \times N}{9550}$$

PA = Machine absorbed power (kW)

T = Machine absorbed torque (Nm)

N = Machine speed (Rev/Min)

**(c) Unit Selection**

Refer to the selection tables on page 250 to 255 and choose a motor power equal to or closest above that calculated in step (b). Then read down the column headed "Nominal Output Speed" until a speed equal to or near to the required speed is found. On this line read across to the service factor column and check that the service factor exceeds the value from step (a). If the service factor is either lower or much higher than that required check the speeds at each side of the required speed to see if a more suitable unit and factor can be found.

**(d) Overhung Loads**

If the unit is to be fitted with an output shaft and an indirect drive attached to the shaft, calculate the overhung load value using the formula on page 270 and compare this value with the maximum allowable value given in column 5 of the selection tables. If the value exceeds the maximum allowed, then either re-design the indirect drive or select a larger unit capable of supporting the overhung load.

**(e) Shaft mounted**

If the unit is to be shaft mounted determine the relevant machine shaft size from the dimension tables on page 256. Torque arm dimensions can be found on page 262.

**SELECTION EXAMPLE**

A series W shaft mounted gearbox is required to drive a variable density mixer, which absorbs 450 Nm at 36 rev/min and operates for up to 8 hours per day. The mixer stops and starts on average 4 times a day. Specify the shaft diameter required to fit the unit selected, a torque arm bracket is also required please specify the relevant product code.

**(a) Service Factor**

From table 1, a variable density mixer is classed as a moderately loaded machine and when running for 8 hours per day has a service factor of 1.2.

The machine stops and starts only 4 times a day therefore an additional stop/start factor is not required.

**(b) Motor Power**

To determine the required motor power use the absorbed torque and the machine shaft speed in the formula given. Then use the next largest standard motor power above this.

Therefore the absorbed Power PA =

$$\frac{450 \times 36}{9550} = 1.7 \text{ kW}$$

**(c) Unit Selection**

The nearest standard motor power above 1.7 kW is 2.2 kW therefore we go to the 2.2kW geared motor selections on page 254.

Reading down the column headed nominal output speed it is found that there are 2 units listed at 36 rev/min, at the first one of these read across to maximum service factor column, it can be seen that the unit size 747A0645 has a service factor of 1.4.

This exceeds the 1.2 Service factor required and therefore is suitable for the application.

**(d) Overhung Loads**

The gearbox is to be shaft mounted therefore there are no overhung loads present.

**(e) Shaft Mounted**

The unit is to be shaft mounted, referring to page 256 we see that the hub bore size is 42 mm.

From page 263 the torque arm bracket to suit the size 747 unit selected has a product code of NRV105TA.

**TABLE 1 - MECHANICAL SERVICE FACTOR Fm**

Types of Driven Machine	Operational hours per day			
	under 2	2 to 8	over 8 to 16	Over 16
<b>Uniform Loads</b> Agitators and Mixers – liquid or semi-liquid Blowers – centrifugal Bottling Machines Conveyors and Elevators – uniformly loaded Cookers Laundry Washing Machines – non-reversing Line Shafts Pumps – centrifugal and gear Wire Drawing Machines	0.80	1.00	1.20	1.50
<b>Moderate Shock Loads</b> Agitators and Mixers – variable density Conveyors – not uniformly loaded Cranes, travel motion and hoisting Drawbench Feeders – pulsating load Hoists Kilns Laundry Tumblers Lifts Pumps – reciprocating with 3 or more cylinders Pulp and Paper Making Machinery Rubber Mixers and Calenders Screens – rotary Textile Machinery	1.00	1.20	1.40	1.70
<b>Heavy Shock Loads</b> Brick Presses Briquetting Machines Conveyors – reciprocating and shaker Crushers Feeders – reciprocating Hammer Mills Pumps – reciprocating, 1 or 2 cylinders Rubber Masticators Screens – vibrating	1.20	1.40	1.60	2.0

For High Inertia Applications, consult your authorised distributor for verification of selection

**\* See page 298 for notes on reducing service factors**

**TABLE 2 - STARTING SERVICE FACTOR Fs**

	Start/stops per hour					
	Up to 5	6 - 20	21 - 30	31 - 50	51 - 80	81 - 100
<b>Uniform Load</b>	1.00	1.05	1.10	1.15	1.20	1.25
<b>Moderate ShockLoad</b>	1.05	1.10	1.20	1.25	1.35	1.40
<b>Heavy Shock Load</b>	1.20	1.25	1.30	1.40	1.45	1.50

Fenner Series W Motorised Selection

**Bold print indicates unit with helical input gear train**  
*Italic print indicates worm/worm combination*

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>0.06 KW MOTOR</b>				
280	1.8	6.2	740A0141	439
280	1.8	10.1	741A0141	597
187	2.6	4.2	740A0241	503
187	2.6	6.9	741A0241	683
180	2.7	4.8	740A0142	509
140	3.4	3.5	740A0341	553
140	3.4	5.4	741A0341	752
120	4.0	3.2	740A0242	583
93	4.9	2.5	740A0441	633
93	4.7	3.8	741A0441	861
90	5.2	2.7	740A0342	641
70	6.1	2.0	740A0541	697
70	6.0	3.0	741A0541	948
60	7.4	1.9	740A0442	734
56	7.0	3.0	741A0641	1021
47	8.2	1.6	740A0741	798
47	8.0	2.5	741A0741	1085
45	9.3	1.4	740A0542	808
35	10.0	1.3	740A0841	878
35	9.7	1.9	741A0841	1194
30	12	1.2	740A0742	925
28	12	0.9	740A0941	946
28	11	1.5	741A0941	1286
23	14	0.7	740A1041	1006
23	13	1.3	741A1041	1367
22	15	0.9	740A0842	1018
18	18	0.7	740A0942	1096
18	18	2.3	742A0942	2868
17.5	14	0.9	741A1141	1504
15.0	18	0.9	741A1042	1583
15.0	21	1.9	742A1042	3047
11.0	24	1.4	742A1142	3354
9.0	27	1.2	742A1242	3490
4.7	57	1.3	<i>742B4041</i>	3490
3.5	70	0.9	<i>742B4141</i>	3490
2.8	96	0.6	<i>742B4241</i>	3490
2.3	104	0.7	<i>742B4341</i>	3490
1.6	141	1.0	<i>743B4541</i>	4840
1.2	169	0.7	<i>743B4641</i>	4840
0.9	204	1.1	<i>744B4741</i>	6270
0.78	225	0.9	<i>744B4841</i>	6270
0.60	330	1.1	<i>745B4941</i>	7380
0.58	276	0.8	<i>744B4941</i>	6270
0.50	406	1.4	<i>746B5041</i>	8180
0.47	377	0.8	<i>745B5041</i>	7380
0.35	355	0.7	<i>745B5241</i>	7380
0.35	365	1.3	<i>746B5241</i>	8180
0.28	431	1.0	<i>746B5441</i>	8180
<b>0.09 KW MOTOR</b>				
560	1.40	5.90	740A0143	349
560	1.40	8.80	741A0143	474
373	2.00	3.90	740A0243	399
373	2.00	6.50	741A0243	542
280	2.70	4.10	740A0114	439
280	2.60	3.40	740A0343	439
280	2.70	6.70	741A0114	597
280	2.60	5.00	741A0343	597
187	3.90	2.80	740A0214	503
187	3.80	2.40	740A0443	503
187	3.90	4.60	741A0214	683
187	3.70	3.50	741A0443	683
180	4.10	4.90	741A0115	692
140	5.10	2.40	740A0314	553
140	4.90	1.90	740A0543	553
140	5.00	3.60	741A0314	752
140	4.80	2.50	741A0543	752
120	5.90	3.40	741A0215	792
112	5.70	2.80	741A0643	810
93	7.30	1.60	740A0414	633
93	6.70	1.30	740A0743	633
93	7.10	2.50	741A0414	861
93	6.50	2.30	741A0743	861

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
90	7.60	2.60	741A0315	871
70	9.20	1.30	740A0514	697
70	8.30	1.10	740A0843	697
70	9.00	2.00	741A0514	948
70	8.10	1.70	741A0843	948
60	11.00	1.90	741A0415	997
56	10.00	0.90	740A0943	751
56	10.00	2.00	741A0614	1021
56	10.00	1.40	741A0943	1021
47	12.00	1.10	740A0714	798
47	12.00	1.70	741A0714	1085
47	11.00	1.10	741A1043	1085
45	13.00	1.50	741A0515	1098
36	15.00	1.50	741A0615	1183
35	15.00	0.90	740A0814	878
35	14.00	1.20	741A0814	1194
35	13.00	0.90	741A1143	1194
30	17.00	1.20	741A0715	1257
30	19.00	2.60	742A0715	2419
28	17.00	1.00	741A0914	1286
28	19.00	2.00	742A0914	2475
23	21.00	1.00	741A0815	1383
23	19.00	0.90	741A1014	1367
23	21.00	1.70	742A1014	2630
22.5	24.00	1.90	742A0815	2662
18.0	24.00	0.70	741A0915	1490
18.0	27.00	1.50	742A0915	2868
17.5	26.00	1.30	742A1114	2895
15.0	31.00	1.30	742A1015	3047
15.0	32.00	2.30	743A1015	4183
14.0	29.00	1.00	742A1214	3118
12.0	47.00	1.30	<b>742A2015</b>	3283
11.5	37.00	1.00	742A1115	3354
11.5	37.00	1.80	743A1115	4604
10.0	51.00	1.40	<b>742A2115</b>	3488
9.0	41.00	0.80	742A1215	3490
9.0	42.00	1.30	743A1215	4840
7.5	62.00	1.10	<b>742A2215</b>	3490
6.0	72.00	0.80	<b>742A2315</b>	3490
6.0	73.00	1.60	<b>743A2315</b>	4840
5.0	79.00	0.70	<b>742A2415</b>	3490
5.0	81.00	1.30	<b>743A2415</b>	4840
4.7	88.00	0.80	<i>742B4014</i>	3490
3.8	94.00	0.90	<b>743A2515</b>	4840
3.8	99.00	1.70	<b>744A2515</b>	6270
3.5	107.00	1.20	<i>743B4114</i>	4840
3.0	106.00	0.70	<b>743A2615</b>	4840
3.0	109.00	1.40	<b>744A2615</b>	6270
2.8	123.00	1.00	<i>743B4214</i>	4840
2.3	159.00	0.90	<i>743B4314</i>	4840
1.9	185.00	0.80	<i>743B4414</i>	4840
1.6	212.00	0.70	<i>743B4514</i>	4840
1.6	200.00	1.00	<i>744B4414</i>	6270
1.2	263.00	0.90	<i>744B4614</i>	6270
0.93	305.00	0.70	<i>744B4714</i>	6270
0.90	360.00	1.10	<i>745B4714</i>	7380
0.78	404.00	1.00	<i>745B4814</i>	7380
0.58	496.00	0.70	<i>745B4914</i>	7380
0.50	609.00	0.90	<i>746B5014</i>	8180
0.35	548.00	0.80	<i>746B5214</i>	8180
<b>0.12 KW MOTOR</b>				
560	1.80	4.40	740A0147	349
373	2.70	3.00	740A0247	399
280	3.50	2.60	740A0347	439
280	3.60	5.10	741A0148	597
187	5.00	1.80	740A0447	503
187	5.20	3.40	741A0248	683
180	5.40	3.70	741A0113	692
140	6.50	1.40	740A0547	553
140	6.70	2.70	741A0348	752
120	7.90	2.50	741A0213	792
93	9.00	1.00	740A0647	633
93	9.50	1.90	741A0448	861

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
90	10.00	2.00	741A0313	871
70	11.00	0.80	740A0747	697
70	12.00	1.50	741A0548	948
60	14.00	1.40	741A0413	997
56	14.00	1.50	741A0648	1021
47	16.00	1.30	741A0748	1085
47	17.00	2.60	742A0748	2087
45	18.00	1.10	741A0513	1098
36	20.00	1.10	741A0613	1183
35	19.00	0.90	741A0848	1194
35	21.00	1.90	742A0848	2298
30	23.00	0.90	741A0713	1257
30	25.00	1.90	742A0713	2419
28	23.00	0.80	741A0948	1286
28	25.00	1.50	742A0948	2475
23	29.00	2.30	743A1048	3610
23	28.00	1.30	742A1048	2630
22.5	32.00	1.40	742A0813	2662
22.5	32.00	2.60	743A0813	3654
19.0	42.00	1.20	<b>742A2048</b>	2833
18.0	36.00	1.20	742A0913	2868
18.0	38.00	2.00	743A0913	3936
17.5	34.00	1.00	742A1148	2895
17.5	35.00	1.90	743A1148	3973
15.5	46.00	1.20	<b>742A2148</b>	3011
15.0	41.00	0.90	742A1013	3047
15.0	42.00	1.70	743A1013	4183
14.0	38.00	0.80	742A1248	3118
14.0	40.00	1.40	743A1248	4280
12.0	62.00	1.00	<b>742A2013</b>	3283
12.0	63.00	1.70	<b>743A2013</b>	4506
11.5	57.00	0.90	<b>742A2248</b>	3314
11.5	50.00	1.40	743A1113	4604
10.0	68.00	1.10	<b>742A2113</b>	3488
10.0	70.00	2.10	<b>743A2113</b>	4788
9.5	66.00	0.70	<b>742A2348</b>	3490
9.5	68.00	1.30	<b>743A2348</b>	4840
9.0	56.00	1.00	743A1213	4840
8.0	74.00	0.60	<b>742A2448</b>	3490
8.0	75.00	1.10	<b>743A2448</b>	4840
7.5	83.00	0.80	<b>742A2213</b>	3490
7.5	84.00	1.50	<b>743A2213</b>	4840
6.0	97.00	1.20	<b>743A2313</b>	4840
6.0	101.00	2.10	<b>744A2313</b>	6270
5.8	88.00	0.80	<b>743A2548</b>	4840
5.8	92.00	1.50	<b>744A2548</b>	6270
5.0	108.00	1.00	<b>743A2413</b>	4840
5.0	112.00	1.80	<b>744A2413</b>	6270
4.7	98.00	0.70	<b>743A2648</b>	4840
4.7	119.00	1.20	<i>743B4048</i>	4840
4.7	103.00	1.20	<b>744A2648</b>	6270
3.8	125.00	0.70	<b>743A2513</b>	4840
3.8	131.00	1.30	<b>744A2513</b>	6270
3.5	142.00	0.90	<i>743B4148</i>	4840
3.0	145.00	1.00	<b>744A2613</b>	6270
2.8	164.00	0.70	<i>743B4248</i>	4840
2.8	171.00	1.30	<i>744B4248</i>	6270
2.3	208.00	1.10	<i>744B4348</i>	6270
1.9	241.00	0.90	<i>744B4448</i>	6270
1.6	325.00	1.20	<i>745B4548</i>	7380
1.2	399.00	0.90	<i>745B4648</i>	7380
0.8	547.00	0.90	<i>746B4848</i>	8180
0.58	695.00	0.90	<i>746B4948</i>	8180
0.50	884.00	1.10	<i>747B5048</i>	10320
0.50	884.00	1.20	<i>748B5048</i>	10320
0.35	784.00	1.00	<i>747B5248</i>	10320
0.35	784.00	1.00	<i>748B5248</i>	10320
0.28	928.00	0.78	<i>747B5448</i>	10320
0.28	928.00	0.80	<i>748B5448</i>	10320

Fenner Series W Motorised Selection

**Bold print indicates unit with helical input gear train**

*Italic print indicates worm/worm combination*



Section 8

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>0.18 KW MOTOR</b>				
560	2.7	4.4	741A0101	474
373	4.0	3.2	741A0201	542
280	5.2	2.5	741A0301	597
280	5.3	3.4	741A0102	597
187	7.5	1.7	741A0401	683
187	8	2.3	741A0202	683
140	10	1.3	741A0501	752
140	10	1.8	741A0302	752
112	11	1.4	741A0601	810
93	13	1.1	741A0701	861
93	14	1.3	741A0402	861
93	14	2.4	742A0701	1657
70	18	0.9	741A0801	948
70	18	1.0	741A0502	948
70	18	1.8	742A0801	1824
70	19	2.0	742A0502	1824
56	21	1.0	741A0602	1021
56	21	1.4	742A0901	1964
56	23	1.7	742A0602	1964
47	24	0.8	741A0702	1085
47	26	1.7	742A0702	2087
47	24	2.1	743A1001	2865
35	32	1.3	742A0802	2298
35	30	1.5	743A1101	3153
35	33	2.3	743A0802	3153
28	38	1.0	742A0902	2475
28	34	1.2	743A1201	3397
28	39	1.9	743A0902	3397
23	43	0.8	742A1002	2630
23	43	1.6	743A1002	3610
19.0	64	0.8	<b>742A2002</b>	2833
19.0	64	1.4	<b>743A2002</b>	3889
18.0	56	1.4	743A0905	3936
17.5	52	1.2	743A1102	3973
15.5	70	0.8	<b>742A2102</b>	3011
15.5	71	1.5	<b>743A2102</b>	4132
15.0	63	1.1	743A1005	4183
15.0	66	2.1	744A1005	5467
14.0	60	0.9	743A1202	4280
12.0	95	1.2	<b>743A2005</b>	4506
12.0	97	2.2	<b>744A2005</b>	5889
11.5	85	0.6	<b>742A2202</b>	3314
11.5	87	1.1	<b>743A2202</b>	4548
11.5	79	1.6	744A1105	6018
11.0	75	0.9	743A1105	4604
10.0	105	1.4	<b>743A2105</b>	4788
10.0	107	2.4	<b>744A2105</b>	6259
9.5	101	0.9	<b>743A2302</b>	4840
9.5	103	1.7	<b>744A2302</b>	6270
9.0	90	1.4	744A1205	6270
8.0	113	0.7	<b>743A2402</b>	4840
8.0	117	1.4	<b>744A2402</b>	6270
7.5	126	1.0	<b>743A2205</b>	4840
7.5	131	1.8	<b>744A2205</b>	6270
6.0	152	1.4	<b>744A2305</b>	6270
5.8	133	0.6	<b>743A2502</b>	4840
5.8	139	1.0	<b>744A2502</b>	6270
5.0	168	1.2	<b>744A2405</b>	6270
5.0	179	1.7	<b>745A2405</b>	7380
4.7	155	0.8	<b>744A2602</b>	6270
3.8	197	0.9	<b>744A2505</b>	6270
3.8	211	1.2	<b>745A2505</b>	7380
3.5	222	1.0	<i>744B4102</i>	6270
3.0	218	0.7	<b>744A2605</b>	6270
3.0	235	1.0	<b>745A2605</b>	7380
2.8	257	0.8	<i>744B4202</i>	6270
2.3	362	1.1	<i>745B4302</i>	7380
1.9	435	0.9	<i>745B4402</i>	7380
1.6	487	0.8	<i>745B4502</i>	7380
1.2	629	1.0	<i>746B4602</i>	8180
0.9	735	0.8	<i>746B4702</i>	8180
0.8	861	1.3	<i>747B4802</i>	10320
0.8	861	1.5	<i>748B4802</i>	10320
0.6	1113	0.9	<i>747B4902</i>	10320
0.6	1113	1.1	<i>748B4902</i>	10320

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>0.25 KW MOTOR</b>				
560	3.8	3.2	741A0103	474
373	5.6	2.3	741A0203	542
280	7.2	1.8	741A0303	597
280	8	4.5	742A0106	1149
187	10	1.3	741A0403	683
187	11	3.6	742A0206	1315
180	12	3.5	742A0107	1331
140	13	0.9	741A0503	752
140	14	2.8	742A0306	1447
120	17	2.6	742A0207	1524
112	16	1.0	741A0603	810
93	18	0.8	741A0703	861
93	21	1.9	742A0406	1657
90	22	2.0	742A0307	1677
70	27	1.5	742A0506	1824
70	27	2.7	743A0506	2503
60	31	1.4	742A0407	1920
56	32	1.2	742A0606	1964
56	32	2.2	743A0606	2696
47	36	1.3	742A0706	2087
47	37	2.3	743A0706	2865
45	40	1.1	742A0507	2113
45	40	1.9	743A0507	2900
36	48	0.9	742A0607	2276
36	48	1.5	743A0607	3124
35	44	0.9	742A0806	2298
35	42	1.1	743A1103	3153
35	46	1.7	743A0806	3153
30	53	0.9	742A0707	2419
30	54	1.7	743A0707	3320
28	48	0.8	743A1203	3397
28	54	1.4	743A0906	3397
28	56	2.4	744A0906	4440
23	60	1.1	743A1006	3610
23	63	2.0	744A1006	4719
23	67	1.2	743A0807	3654
19.0	88	1.0	<b>743A2006</b>	3889
19.0	91	1.8	<b>744A2006</b>	5083
18.0	78	1.0	743A0907	3936
18.0	81	1.8	744A0907	5145
18.0	72	0.9	743A1106	3973
17.5	78	1.6	744A1106	5193
17.5	82	2.3	745A1106	6130
15.5	98	1.1	<b>743A2106</b>	4132
15.5	100	2.0	<b>744A2106</b>	5401
15.0	88	0.8	743A1007	4183
15.0	92	1.5	744A1007	5467
14.0	87	1.4	744A1206	5595
14.0	94	1.9	745A1206	6603
12.0	135	1.6	<b>744A2007</b>	5889
12.0	139	2.4	<b>745A2007</b>	6952
11.5	121	0.8	<b>743A2206</b>	4548
11.5	125	1.5	<b>744A2206</b>	5945
11.5	117	1.7	745A1107	7103
11.0	110	1.2	744A1107	6018
10.0	148	1.8	<b>744A2107</b>	6259
10.0	155	2.5	<b>745A2107</b>	7380
9.5	143	1.2	<b>744A2306</b>	6270
9.5	151	1.7	<b>745A2306</b>	7380
9.0	125	1.0	744A1207	6270
9.0	133	1.4	745A1207	7380
8.0	163	1.0	<b>744A2406</b>	6270
8.0	172	1.4	<b>745A2406</b>	7380
7.5	181	1.3	<b>744A2207</b>	6270
7.5	191	1.9	<b>745A2207</b>	7380
7.0	159	1.4	<i>744B4103</i>	6270
6.0	211	1.0	<b>744A2307</b>	6270
6.0	219	1.5	<b>745A2307</b>	7380
5.8	192	0.7	<b>744A2506</b>	6270
5.8	201	1.1	<b>745A2506</b>	7380
5.6	185	1.2	<i>744B4203</i>	6270
5.0	248	1.2	<b>745A2407</b>	7380
5.0	263	1.9	<b>746A2407</b>	8180

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
4.7	215	0.6	<b>744A2606</b>	6270
4.7	230	0.9	<b>745A2606</b>	7380
3.8	318	1.4	<b>746A2507</b>	8180
3.5	336	1.1	<i>745B4106</i>	7380
3.0	358	1.1	<b>746A2607</b>	8180
2.8	384	0.8	<i>745B4206</i>	7380
2.3	512	1.2	<i>746B4306</i>	8180
1.9	598	0.9	<i>746B4406</i>	8180
1.6	667	0.8	<i>746B4506</i>	8180
1.2	943	1.1	<i>747B4606</i>	10320
1.2	943	1.3	<i>748B4606</i>	10320
0.93	1064	1.0	<i>747B4706</i>	10320
0.93	1064	1.2	<i>748B4706</i>	10320
0.80	1199	1.8	<i>750B4806</i>	18000
0.78	1195	0.9	<i>747B4806</i>	10320
0.78	1195	1.1	<i>748B4806</i>	10320
0.60	1624	1.0	<i>749B4906</i>	13500
0.60	1446	1.8	<i>750B4906</i>	18000
0.50	1713	1.4	<i>750B5006</i>	18000
0.47	1935	0.8	<i>749B5006</i>	13500
0.40	2026	0.9	<i>750B5206</i>	18000
0.35	2046	0.6	<i>749B5206</i>	13500
0.30	2251	0.7	<i>750B5406</i>	18000
0.28	2430	0.5	<i>749B5406</i>	13500

<b>0.37 KW MOTOR</b>				
Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
560	5.6	2.1	741A01**	474
560	5.7	4.2	742A0109	912
373	8.2	1.6	741A02**	542
373	8.4	3.3	742A0209	1044
280	11	1.2	741A03**	597
280	11	2.6	742A0309	1149
280	11	3	742A0108	1149
187	15	0.8	741A04**	683
187	16	1.9	742A0409	1315
187	16	2.4	742A0208	1315
180	17	4.3	743A0112	1827
140	21	1.4	742A0509	1447
140	21	1.9	742A0308	1447
140	22	3.3	743A0308	1987
120	25	3.3	743A0212	2091
112	25	1.1	742A0609	1559
112	25	2.0	743A0609	2140
93	31	1.3	742A0408	1657
93	29	2.2	743A0709	2274
93	31	2.4	743A0408	2274
90	33	2.5	743A0312	2302
70	39	1.0	742A0508	1824
70	37	1.6	743A0809	2503
70	40	1.8	743A0508	2503
60	47	1.8	743A0412	2635
56	47	0.8	742A0608	1964
56	44	1.2	743A0909	2696
56	48	1.5	743A0608	2696
47	53	0.8	742A0708	2087
47	50	1.0	743A1009	2865
47	55	1.5	743A0708	2865
45	60	1.3	743A0512	2900
45	60	2.4	744A0512	3791
36	72	1	743A0612	3124
36	74	1.9	744A0612	4084
35	62	0.7	743A1109	3153
35	68	1.1	743A0808	3153
35	71	2.1	744A0808	4122
30	80	1.1	743A0712	3320
30	82	2.1	744A0712	4339
28	80	0.9	743A0908	3397
28	83	1.6	744A0908	4440
23	89	0.8	743A1008	3610
23	94	1.4	744A1008	4719
23	98	2.0	745A1008	5569
22.5	102	1.6	744A0812	4776
19	134	1.2	<b>744A2008</b>	5083

\*\* For full product code please consult your local authorised distributor



**Bold print indicates unit with helical input gear train**  
*Italic print indicates worm/worm combination*

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>0.37 KW MOTOR</b>				
19.0	138	1.8	<b>745A2008</b>	6000
18.0	120	1.2	744A0912	5145
18.0	126	1.8	745A0912	6073
17.5	115	1.1	744A1108	5193
17.5	121	1.6	745A1108	6130
15.5	148	1.4	<b>744A2108</b>	5401
15.5	154	1.9	<b>745A2108</b>	6375
15.0	137	1.0	744A1012	5467
15.0	144	1.5	745A1012	6453
14.0	129	0.9	744A1208	5595
14.0	139	1.3	745A1208	6603
12.0	206	1.6	<b>745A2012</b>	6952
11.5	185	1.0	<b>744A2208</b>	5945
11.5	173	1.2	745A1112	7103
11.5	191	1.5	<b>745A2108</b>	7017
11.5	185	1.7	746A1112	7859
10.0	230	1.7	<b>745A2112</b>	7380
9.5	212	0.8	<b>744A2308</b>	6270
9.5	181	1.3	<i>744B4009</i>	6270
9.5	223	1.1	<b>745A2108</b>	7380
9.0	196	1.0	745A1212	7380
9.0	212	1.3	746A1212	8180
8.0	254	0.9	<b>745A2108</b>	7380
8.0	268	1.5	<b>746A2408</b>	8180
7.5	283	1.3	<b>745A2112</b>	7380
7.0	236	1.0	<i>744B4109</i>	6270
6.0	324	1.0	<b>745A2112</b>	7380
6.0	347	1.6	<b>746A2312</b>	8180
5.8	321	1.1	<b>746A2508</b>	8180
5.0	389	1.3	<b>746A2412</b>	8180
4.7	405	1.0	<i>745B4008</i>	7380
4.7	371	0.9	<b>746A2608</b>	8180
4.7	402	1.5	<i>746B4008</i>	8180
3.8	471	1.0	<b>746A2512</b>	8180
3.8	509	1.5	<b>747A2512</b>	10320
3.8	509	1.6	<b>748A2512</b>	10320
3.5	498	0.7	<i>745B4108</i>	7380
3.5	523	1.2	<i>746B4108</i>	8180
3.0	577	1.2	<b>747A2612</b>	10320
3.0	577	1.3	<b>748A2612</b>	10320
2.8	611	0.9	<i>746B4208</i>	8180
2.3	757	0.8	<i>746B4308</i>	8180
1.9	950	1.2	<i>747B4408</i>	10320
1.9	950	1.3	<i>748B4408</i>	10320
1.6	1079	1.0	<i>747B4508</i>	10320
1.6	1079	1.2	<i>748B4508</i>	10320
1.2	1396	0.7	<i>747B4608</i>	10320
1.2	1396	0.8	<i>748B4608</i>	10320
0.90	1674	1.1	<i>749B4708</i>	13500
0.80	1775	1.2	<i>750B4808</i>	18000
0.78	1887	0.9	<i>749B4808</i>	13500
0.60	2141	1.2	<i>750B4908</i>	18000
0.50	2535	0.9	<i>750B5008</i>	18000
<b>0.55 KW MOTOR</b>				
560	8.4	2.8	742A0110	912
373	13	2.2	742A0210	1044
280	17	1.8	742A0310	1149
280	17	2.0	742A0181	1149
280	17	3.7	743A0116	1577
187	24	1.3	742A0410	1315
187	24	1.6	742A0281	1315
187	25	2.9	743A0216	1805
140	31	0.9	742A0510	1447
140	32	1.3	742A0381	1447
140	31	1.7	743A0510	1987
140	32	2.2	743A0316	1987
120	38	2.2	743A0217	2091
112	37	0.8	742A0610	1559
112	38	1.4	743A0610	2140
93	46	0.9	742A0481	1657
93	43	1.5	743A0710	2274
93	46	1.6	743A0416	2274

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
90	49	1.7	743A0317	2302
70	55	1.1	743A0810	2503
70	59	1.2	743A0516	2503
70	56	1.9	744A0810	3272
70	61	2.2	744A0516	3272
60	69	1.2	743A0417	2635
60	71	2.2	744A0417	3444
56	65	0.8	743A0910	2696
56	71	1.0	743A0616	2696
56	67	1.5	744A0910	3524
56	73	1.8	744A0616	3524
47	74	0.7	743A1010	2865
47	81	1.0	743A0716	2865
47	77	1.2	744A1010	3745
47	83	1.9	744A0716	3745
45	89	0.9	743A0517	2900
45	90	1.6	744A0517	3791
36	109	1.3	744A0617	4084
35	95	0.9	744A1110	4122
35	105	1.4	744A0816	4122
35	99	1.3	745A1110	4865
35	108	2.0	745A0816	4865
30	123	1.4	744A0717	4339
30	128	2	745A0717	5122
28	109	0.7	744A1210	4440
28	124	1.1	744A0916	4440
28	114	1.0	745A1210	5241
28	129	1.6	745A0916	5241
23	140	0.9	744A1016	4719
23	146	1.4	745A1016	5569
22.5	152	1.1	744A0817	4776
22.5	159	1.5	745A0817	5637
19.0	200	0.8	<b>744A2081</b>	5083
19.0	205	1.2	<b>745A2081</b>	6000
19.0	205	1.2	<b>745A2016</b>	6000
18.0	187	1.2	745A0917	6073
18.0	198	2.0	746A0917	6719
17.5	180	1.1	745A1116	6130
17.5	189	1.5	746A1116	6783
17.5	201	2.4	747A1116	8571
17.5	201	2.6	748A1116	8571
15.5	219	0.9	<b>744A2181</b>	5401
15.5	230	1.3	<b>745A2181</b>	6375
15.5	230	1.3	<b>745A2116</b>	6375
15.5	240	2.3	<b>746A2116</b>	7054
15.0	214	1.0	745A1017	6453
15.0	224	1.6	746A1017	7140
14.0	206	0.9	745A1216	6603
14.0	221	1.2	746A1216	7306
14.0	236	1.9	747A1216	9232
14.0	236	2.0	748A1216	9232
12.0	306	1.1	<b>745A2017</b>	6952
11.5	284	1.0	<b>745A2281</b>	7017
11.5	284	1.0	<b>745A2216</b>	7017
11.5	275	1.1	746A1117	7859
11.5	297	1.6	<b>746A2216</b>	7764
11.5	294	1.8	747A1117	9931
11.5	294	1.9	748A1117	9931
10.0	341	1.1	<b>745A2117</b>	7380
10.0	357	2.0	<b>746A2117</b>	8174
9.5	332	0.8	<b>745A2316</b>	7380
9.5	355	1.3	<b>746A2316</b>	8180
9.5	306	2.0	<i>746B4010</i>	8180
9.0	315	0.9	746A1217	8180
9.0	338	1.4	747A1217	10320
9.0	338	1.5	748A1217	10320
8.0	398	1.0	<b>746A2416</b>	8180
8.0	425	1.7	<b>747A2416</b>	10320
8.0	425	1.8	<b>748A2416</b>	10320
7.5	441	1.4	<b>746A2217</b>	8180
7.5	462	2.2	<b>747A2217</b>	10320
7.5	462	2.6	<b>748A2217</b>	10320
7.0	403	1.5	<i>746B4110</i>	8180
6.0	516	1.1	<b>746A2317</b>	8180
6.0	513	1.2	<b>747A2516</b>	10320

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
6.0	552	1.8	<b>747A2317</b>	10320
6.0	513	1.3	<b>748A2516</b>	10320
6.0	552	2.0	<b>748A2217</b>	10320
5.5	470	1.2	<i>746B4210</i>	8180
5.0	578	0.9	<b>746A2417</b>	8180
5.0	620	1.5	<b>747A2417</b>	10320
5.0	620	1.6	<b>748A2417</b>	10320
4.7	597	1.0	<b>747A2616</b>	10320
4.7	639	1.7	<i>747B4016</i>	10320
4.7	597	1	<b>748A2616</b>	10320
4.7	639	2.0	<i>748B4016</i>	10320
3.8	756	1.0	<b>747A2517</b>	10320
3.8	756	1.1	<b>748A2517</b>	10320
3.8	756	1.6	<b>749A2517</b>	13500
3.5	826	1.2	<i>747B4116</i>	10320
3.5	826	1.4	<i>748B4116</i>	10320
3.0	858	1.3	<b>749A2617</b>	13500
2.8	984	1.0	<i>747B4216</i>	10320
2.8	984	1.1	<i>748B4216</i>	10320
2.8	996	1.6	<i>749B4216</i>	13500
2.3	1181	0.9	<i>747B4316</i>	10320
2.3	1181	1.0	<i>748B4316</i>	10320
1.9	1411	0.8	<i>747B4416</i>	10320
1.9	1411	0.9	<i>748B4416</i>	10320
1.9	1471	1.2	<i>749B4416</i>	13500
1.2	2132	0.8	<i>749B4516</i>	13500
0.8	2638	0.8	<i>750B4816</i>	18000
0.6	3182	0.8	<i>750B4916</i>	18000
<b>0.75 KW MOTOR</b>				
560	12	2.1	742A01**	912
560	12	3.9	743A0119	1251
373	17	1.6	742A02**	1044
373	17	3.0	743A0219	1433
280	23	1.3	742A03**	1149
280	23	2.4	743A0319	1577
280	23	2.7	743A0118	1577
187	32	1.0	742A04**	1315
187	33	1.7	743A0419	1805
187	34	2.1	743A0218	1805
140	42	1.3	743A0519	1987
140	44	1.6	743A0318	1987
140	43	2.3	744A0519	2597
120	52	2.9	744A0223	2734
112	51	1.0	743A0619	2140
112	52	1.8	744A0619	2797
93	58	1.1	743A0719	2274
93	63	1.2	743A0418	2274
93	60	2.0	744A0719	2973
93	64	2.2	744A0418	2973
90	68	2.3	744A0323	3009
70	81	0.9	743A0518	2503
70	77	1.4	744A0819	3272
70	83	1.6	744A0518	3272
60	97	1.6	744A0423	3444
60	98	2.4	745A0423	4065
56	91	1.1	744A0919	3524
56	100	1.3	744A0618	3524
56	102	2.0	745A0618	4160
47	104	0.9	744A1019	3745
47	114	1.4	744A0718	3745
47	109	1.3	745A1019	4421
47	117	2.0	745A0718	4421
45	123	1.2	744A0523	3791
45	126	1.9	745A0523	4474
36	149	0.9	744A0623	4084
36	153	1.4	745A0623	4820
35	143	1.0	744A0818	4122
35	147	1.5	745A0818	4865
35	141	1.6	746A1119	5383
30	167	1.0	744A0723	4339
30	174	1.5	745A0723	5122
30	179	2.6	746A0723	5667
28	156	0.8	745A1219	5241
28	177	1.2	745A0918	5241

\*\* For full product code please consult your local authorised distributor

Fenner Series W Motorised Selection

**Bold print indicates unit with helical input gear train**

*Italic print indicates worm/worm combination*



Section 8

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>0.75 KW MOTOR</b>				
28	166	1.2	746A1219	5799
28	184	1.8	746A0918	5799
23	200	1.0	745A1018	5569
23	212	1.5	746A1018	6163
22.5	216	1.1	745A0823	5637
22.5	226	1.8	746A0823	6238
19.0	280	0.9	<b>745A2018</b>	6000
18.0	271	1.4	746A0923	6719
17.5	258	1.1	746A1118	6783
17.5	274	1.8	747A1118	8571
17.5	274	1.9	748A1118	8571
15.5	313	1.0	<b>745A2018</b>	6375
15.5	327	1.7	<b>746A2118</b>	7054
15.0	306	1.1	746A1023	7140
15.0	325	1.9	747A1023	9023
15.0	325	2.1	748A1023	9023
14.0	302	0.9	746A1218	7306
14.0	322	1.4	747A1218	9232
14.0	322	1.5	748A1218	9232
12.5	393	2.8	<b>747A2023</b>	9614
12.5	393	3.2	<b>748A2023</b>	9614
12.5	399	4.4	<b>749A2023</b>	12575
11.5	405	1.2	<b>746A2218</b>	7764
11.5	401	1.3	747A1123	9931
11.5	430	1.9	<b>747A2218</b>	9811
11.5	401	1.4	748A1123	9931
11.5	430	2.2	<b>748A2218</b>	9811
11.5	407	2.1	749A1123	12989
9.5	483	0.9	<b>746A2318</b>	8180
9.5	506	1.6	<b>747A2318</b>	10320
9.5	508	2.0	<b>747A2123</b>	10320
9.5	446	2.5	<i>747B4019</i>	10320
9.5	506	1.7	<b>748A2318</b>	10320
9.5	508	2.3	<b>748A2123</b>	10320
9.5	446	2.8	<i>748B4019</i>	10320
9.5	508	3.2	<b>749A2123</b>	13500
9.0	462	1.1	747A1223	10320
9.0	462	1.1	748A1223	10320
9.0	470	1.7	749A1223	13500
8.0	543	0.7	<b>746A2418</b>	8180
8.0	580	1.2	<b>747A2418</b>	10320
8.0	580	1.3	<b>748A2418</b>	10320
7.5	607	1.6	<b>747A2223</b>	10320
7.5	607	1.8	<b>748A2223</b>	10320
7.5	607	2.6	<b>749A2223</b>	13500
7.0	549	1.1	<i>746B41**</i>	18180
7.0	563	1.8	<i>747B4119</i>	10320
7.0	563	2.1	<i>748B4119</i>	10320
6.0	700	0.9	<b>747A2518</b>	10320
6.0	682	1.3	<b>747A2323</b>	10320
6.0	700	0.9	<b>748A2518</b>	10320
6.0	682	1.5	<b>748A2323</b>	10320
6.0	712	1.4	<b>749A2518</b>	13500
6.0	682	2.1	<b>749A2323</b>	13500
5.5	642	0.9	<i>746B42**</i>	8180
5.5	687	1.5	<i>747B4219</i>	10320
5.5	687	1.6	<i>748B4219</i>	10320
4.7	871	1.3	<i>747B4018</i>	10320
4.7	871	1.5	<i>748B4018</i>	10320
4.7	813	1.1	<b>749A2618</b>	13500
4.5	832	0.9	<b>747A2423</b>	10320
4.5	832	1.0	<b>748A2423</b>	10320
4.5	832	1.5	<b>749A2423</b>	13500
3.7	944	1.2	<b>749A2523</b>	13500
3.5	1126	0.9	<i>747B4118</i>	10320
3.5	1126	1.1	<i>748B4118</i>	10320
2.8	1358	1.1	<i>749B4218</i>	13500
2.8	1291	1.8	<i>750B4218</i>	18000
2.3	1631	1.0	<i>749B4318</i>	13500
2.3	1529	1.7	<i>750B4318</i>	18000
1.9	2005	0.9	<i>749B4418</i>	13500
1.9	1783	1.3	<i>750B4418</i>	18000
1.6	2283	0.8	<i>749B4518</i>	13500
1.6	2215	0.9	<i>750B4518</i>	18000
1.2	2680	1.0	<i>750B4618</i>	18000

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>1.1 KW MOTOR</b>				
560	17	2.6	743A0120	1251
373	25	2.1	743A0220	1433
280	33	1.6	743A0320	1577
187	48	1.2	743A0420	1805
187	48	2.1	744A0420	2359
187	50	2.6	744A0224	2359
140	62	0.9	743A0520	1987
140	63	1.6	744A0520	2597
140	65	2.0	744A0324	2597
120	76	2.0	744A0227	2734
112	77	1.2	744A0620	2797
112	78	1.9	745A0620	3302
93	88	1.4	744A0720	2973
93	93	1.5	744A0424	2973
93	90	1.9	745A0720	3509
93	96	2.1	745A0424	3509
90	99	1.5	744A0327	3009
90	100	2.3	745A0327	3551
70	113	1.0	744A0820	3272
70	122	1.1	744A0524	3272
70	116	1.4	745A0820	3862
70	123	1.7	745A0524	3862
60	142	1.1	744A0427	3444
60	144	1.6	745A0427	4065
56	146	0.9	744A0624	3524
56	139	1.1	745A0920	4160
56	150	1.3	745A0624	4160
47	167	1.0	744A0724	3745
47	160	0.9	745A1020	4421
47	171	1.3	745A0724	4421
45	180	0.8	744A0527	3791
45	184	1.3	745A0527	4474
36	225	1.0	745A0627	4820
36	231	1.6	746A0627	5333
35	216	1.0	745A0824	4865
35	207	1.1	746A1120	5383
35	225	1.6	746A0824	5383
30	256	1.0	745A0727	5122
30	263	1.8	746A0727	5667
28	244	0.8	746A1220	5799
28	270	1.3	746A0924	5799
28	281	2.1	747A0924	7328
28	281	2.3	748A0924	7328
23	311	1.0	746A1024	6163
23	324	1.7	747A1024	7787
23	324	1.9	748A1024	7787
22.5	331	1.2	746A0827	6238
22.5	345	2.0	747A0827	7882
22.5	345	2.3	748A0827	7882
19.5	392	2.2	<b>747A2024</b>	8298
19.5	392	2.5	<b>748A2024</b>	8298
19.5	398	3.5	<b>749A2024</b>	10853
18.0	397	1.0	746A0927	6719
18.0	414	1.6	747A0927	8491
18.0	414	1.8	748A0927	8491
17.5	402	1.2	747A1124	8571
17.5	402	1.3	748A1124	8571
17.5	408	2.1	749A1124	11210
15.0	448	0.8	746A1027	7140
15.0	476	1.3	747A1027	9023
15.0	476	1.4	748A1027	9023
14.5	508	1.6	<b>747A2124</b>	9133
14.5	508	1.8	<b>748A2124</b>	9133
14.5	508	2.6	<b>749A2124</b>	11945
14.0	473	1.0	747A1224	9232
14.0	473	1.0	748A1124	9232
14.0	480	1.5	749A1224	12076
12.5	576	1.9	<b>747A2027</b>	9614
12.5	576	2.2	<b>748A2027</b>	9614
12.5	585	3.0	<b>749A2027</b>	12575
11.6	599	1.3	<b>747A2224</b>	9838
11.6	599	1.5	<b>748A2224</b>	9838
11.6	608	2.0	<b>749A2224</b>	12868

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
11.5	588	0.9	747A1127	9931
11.5	588	1.0	748A1127	9931
11.5	598	1.4	749A1127	12989
9.6	686	1.0	<b>747A2324</b>	10320
9.6	686	1.1	<b>748A2324</b>	10320
9.6	686	1.6	<b>749A2324</b>	13500
9.5	746	1.4	<b>747A2127</b>	10320
9.5	654	1.7	<i>747B4020</i>	10320
9.5	746	1.6	<b>748A2127</b>	10320
9.5	654	1.9	<i>748B4020</i>	10320
9.5	746	2.2	<b>749A2127</b>	13500
9.0	689	1.1	749A1227	13500
7.5	890	1.1	<b>747A2227</b>	10320
7.5	890	1.2	<b>748A2227</b>	10320
7.5	890	1.7	<b>749A2227</b>	13500
7.0	828	0.8	<b>747A2424</b>	10320
7.0	845	1.2	<i>747B4120</i>	10320
7.0	828	0.8	<b>748A2424</b>	10320
7.0	845	1.4	<i>748B4120</i>	10320
7.0	843	1.2	<b>749A2424</b>	13500
6.0	1000	0.9	<b>747A2327</b>	10320
6.0	1000	1.0	<b>748A2327</b>	10320
6.0	1000	1.4	<b>749A2327</b>	13500
6.0	962	0.9	<b>749A2524</b>	13500
5.5	1007	1.0	<i>747B4220</i>	10320
5.5	1007	1.1	<i>748B4220</i>	10320
4.7	1312	1.3	<i>749B4024</i>	13500
4.7	1364	1.7	<i>750B4024</i>	18000
4.5	1220	1.0	<b>749A2427</b>	13500
3.5	1671	1.0	<i>749B4124</i>	13500
3.5	1619	1.6	<i>750B4124</i>	18000
2.8	1991	0.8	<i>749B4224</i>	13500
2.8	1893	1.2	<i>750B4224</i>	18000
2.3	2242	1.2	<i>750B4324</i>	18000
1.9	2616	0.9	<i>750B4424</i>	18000

<b>1.5 KW MOTOR</b>				
Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
560	23	1.9	743A01**	1251
373	35	1.5	743A02**	1433
373	35	2.7	744A0226	1873
280	45	1.2	743A03**	1577
280	46	2.1	744A0326	2061
280	46	3.1	745A0326	2433
187	65	0.9	743A04**	1805
187	68	1.9	744A0228	2359
187	66	1.6	744A0426	2359
187	67	2.2	745A0426	2785
140	89	1.5	744A0328	2597
140	86	1.2	744A0526	2597
140	90	2.2	745A0328	3065
140	87	1.8	745A0526	3065
120	105	2.0	745A0237	3227
112	105	0.9	744A0626	2797
112	106	1.4	745A0626	3302
93	127	1.1	744A0428	2973
93	120	1.0	744A0726	2973
93	130	1.5	745A0428	3509
93	123	1.4	745A0726	3509
90	137	1.7	745A0337	3551
90	138	2.7	746A0337	3929
70	166	0.8	744A0528	3272
70	168	1.3	745A0528	3862
70	158	1.0	745A0826	3862
70	172	2.1	746A0528	4273
60	196	1.2	745A0437	4065
60	201	2.1	746A0437	4498
56	189	0.8	745A0926	4160
56	205	1.0	745A0628	4160
56	210	1.6	746A0628	4603
56	194	1.4	746A0926	4603
47	218	0.7	745A1026	4421
47	233	1.0	745A0728	4421

**Bold print indicates unit with helical input gear train**  
*Italic print indicates worm/worm combination*

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>1.5KW MOTOR</b>				
47	239	1.7	746A0728	4891
47	227	1.1	746A1026	4891
47	236	1.8	747A1026	6181
47	236	2.0	748A1026	6181
45	258	1.5	746A0537	4951
45	264	2.4	747A0537	6256
45	264	2.7	748A0537	6256
36	314	1.2	746A0637	5333
36	322	2.0	747A0637	6739
36	322	2.4	748A0637	6739
35	307	1.2	746A0828	5383
35	319	1.9	747A0828	6803
35	299	1.3	747A1126	6803
35	319	2.2	748A0828	6803
35	299	1.3	748A1126	6803
30	358	1.3	746A0737	5667
30	363	2.0	747A0737	7161
30	363	2.3	748A0737	7161
28	368	0.9	746A0928	5799
28	384	1.6	747A0928	7328
28	353	1.0	747A1226	7328
28	384	1.7	748A0928	7328
28	353	1.0	748A1226	7328
23	424	0.8	746A1028	6163
23	442	1.3	747A1028	7787
23	442	1.4	748A1028	7787
22.5	471	1.5	747A0837	7882
22.5	471	1.7	748A0837	7882
22.5	478	2.3	749A0837	10309
19.5	535	1.6	<b>747A2028</b>	8298
19.5	535	1.9	<b>748A2028</b>	8928
19.5	542	2.6	<b>749A2028</b>	10853
18.0	565	1.2	747A0937	8491
18.0	565	1.3	748A0937	8491
18.0	573	1.8	749A0937	11105
17.5	548	0.9	747A1128	8571
17.5	548	0.9	748A1128	8571
17.5	557	1.5	749A1128	11210
15.0	649	1.0	747A1037	9023
15.0	649	1.1	748A1037	9023
15.0	659	1.4	749A1037	11801
14.5	693	1.2	<b>747A2128</b>	9133
14.5	693	1.3	<b>748A2128</b>	9133
14.5	693	1.9	<b>749A2128</b>	11945
14.0	655	1.1	749A1228	12076
11.6	817	1.0	<b>747A2228</b>	9838
11.6	817	1.1	<b>748A2228</b>	9838
11.6	830	1.5	<b>749A2228</b>	12868
11.5	815	1.1	749A1137	12989
9.6	936	0.8	<b>747A2328</b>	10320
9.6	936	0.8	<b>748A2328</b>	10320
9.6	936	1.1	<b>749A2328</b>	13500
9.5	891	1.2	<i>747B40**</i>	10320
9.5	891	1.4	<i>748B4026</i>	10320
9.5	915	1.9	<i>749B4026</i>	13500
7.0	1153	0.9	<i>747B41**</i>	10320
7.0	1153	1.0	<i>748A41**</i>	10320
7.0	1149	0.8	<b>749A2428</b>	13500
7.0	1166	1.4	<i>749B4126</i>	13500
5.5	1373	0.7	<i>747B4226</i>	10320
5.5	1373	0.8	<i>748B4226</i>	10320
5.5	1389	1.1	<i>749B4226</i>	13500
4.7	1789	1.0	<i>749B4028</i>	13500
4.7	1860	1.3	<i>750B4028</i>	18000
3.5	2279	0.7	<i>749B4128</i>	13500
3.5	2208	1.2	<i>750B4128</i>	18000
2.8	2582	0.9	<i>750B4228</i>	18000
2.3	3057	0.9	<i>750B4328</i>	18000

\*\* For full product code please consult your local authorised distributor

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>2.2 KW MOTOR</b>				
373	51	1.8	744A0229	1873
373	51	2.5	745A0229	2210
280	67	1.5	744A0329	2061
280	68	2.1	745A0329	2433
187	97	1.1	744A0429	2359
187	100	1.8	745A0236	2785
187	98	1.5	745A0429	2785
187	101	2.9	746A0236	3081
140	132	1.5	745A0336	3065
140	128	1.3	745A0529	3065
140	134	2.3	746A0336	3391
140	131	2.0	746A0529	3391
120	156	2.2	746A0245	3570
112	156	1.0	745A0629	3302
112	159	1.6	746A0629	3653
112	163	2.7	747A0629	4616
112	163	3.1	748A0629	4616
93	191	1.0	745A0436	3509
93	180	0.9	745A0729	3509
93	194	1.9	746A0436	3882
93	185	1.7	746A0729	3882
93	187	2.6	747A0729	4905
93	187	3.0	748A0729	4905
90	203	1.8	746A0345	3929
90	205	3.0	747A0345	4965
90	205	3.5	748A0345	4965
70	252	1.4	746A0536	4273
70	237	1.2	746A0829	4273
70	255	2.2	747A0536	5399
70	246	1.9	747A0829	5399
70	255	2.5	748A0536	5399
70	246	2.1	748A0829	5399
60	294	1.4	746A0445	4498
60	298	2.2	747A0445	5684
60	298	2.6	748A0445	5684
56	308	1.1	746A0636	4603
56	285	0.9	746A0929	4603
56	315	1.9	747A0636	5816
56	296	1.5	747A0929	5816
56	315	2.2	748A0636	5816
56	296	1.7	748A0929	5816
47	351	1.2	746A0736	4891
47	356	1.8	747A0736	6181
47	347	1.2	747A1029	6181
47	356	2.0	748A0736	6181
47	347	1.4	748A1029	6181
45	378	1.0	746A0545	4951
45	388	1.6	747A0545	6256
45	388	1.9	748A0545	6256
38.6	398	1.8	<b>747A2029</b>	6586
38.6	398	2.1	<b>748A2029</b>	6586
38.6	409	2.9	<b>749A2029</b>	8614
36.0	473	1.4	747A0645	6739
36.0	473	1.6	748A0645	6739
36.0	479	2.2	749A0645	8814
35.0	468	1.3	747A0836	6803
35.0	468	1.5	748A0836	6803
35.0	468	2.2	749A0836	8897
35.0	438	1.3	749A1129	8897
30.0	532	1.4	747A0745	7161
30.0	532	1.6	748A0745	7161
30.0	546	2.1	749A0745	9366
28.9	516	1.3	<b>747A2129</b>	7249
28.9	516	1.5	<b>748A2129</b>	7249
28.9	545	2.0	<b>749A2129</b>	9481
28.0	563	1.1	747A0936	7328
28.0	563	1.2	748A0936	7328
28.0	563	1.7	749A0936	9584
28.0	525	1.0	749A1229	9584
28.0	570	2.5	750A0936	13103
23.1	617	1.1	<b>747A2229</b>	7809
23.1	617	1.2	<b>748A2229</b>	7809

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
23.1	654	1.6	<b>749A2229</b>	10213
23.0	648	0.9	747A1036	7787
23.0	648	1.0	748A1036	7787
23.0	648	1.4	749A1036	10185
23.0	657	1.9	750A1036	13924
22.5	700	1.6	749A0845	10309
19.5	752	1.3	<b>749A2329</b>	10853
18.0	840	1.2	749A0945	11105
17.5	816	1.0	749A1136	11210
17.5	816	1.4	750A1136	15325
15.0	966	1.0	749A1045	11801
14.0	960	1.0	750A1236	16508
<b>3.0 KW MOTOR</b>				
373	70	1.9	745A0239	2210
373	71	3.0	746A0239	2446
280	92	1.6	745A0339	2433
280	92	2.6	746A0339	2692
187	137	1.4	744A0238	2785
187	138	2.1	746A0238	3081
140	180	1.1	744A0338	3065
140	182	1.7	746A0338	3391
120	212	2.7	747A0253	4511
120	212	3.1	748A0253	4511
93	261	0.8	744A0438	3509
93	264	1.4	746A0438	3882
93	264	2.2	747A0438	4905
93	264	2.5	748A0438	4905
90	280	2.2	747A0353	4965
90	280	2.5	748A0353	4965
90	280	3.4	749A0353	6494
70	344	1.0	746A0538	4273
70	348	1.6	747A0538	5399
70	348	1.9	748A0538	5399
60	406	1.6	747A0453	5684
60	406	1.9	748A0453	5684
60	406	2.6	749A0453	7434
56	420	0.8	746A0638	4603
56	430	1.4	747A0638	5816
56	430	1.6	748A0638	5816
56	430	2.2	749A0638	7607
47	479	0.9	746A0738	4891
47	485	1.3	747A0738	6181
47	485	1.5	748A0738	6181
47	491	2.1	749A0738	8084
45	528	1.2	747A0553	6256
45	528	1.4	748A0553	6256
45	535	1.9	749A0553	8182
36	653	1.6	749A0653	8814
35	638	1.0	747A0838	6803
35	638	1.1	748A0838	6803
35	638	1.6	749A0838	8897
30	745	1.6	749A0753	9366
28	767	0.8	747A0938	7328
28	767	0.9	748A0938	7328
28	767	1.3	749A0938	9584
28	778	1.8	750A0938	13103
23	884	1.0	749A1038	10185
23	896	1.4	750A1038	13924
22.5	955	1.2	749A0853	10309
17.5	1113	0.8	749A1138	11210
17.5	1113	1.0	750A1138	15325
14	1310	0.8	750A1238	16508



Fenner Series W Motorised Selection

**Bold print indicates unit with helical input gear train**  
*Italic print indicates worm/worm combination*

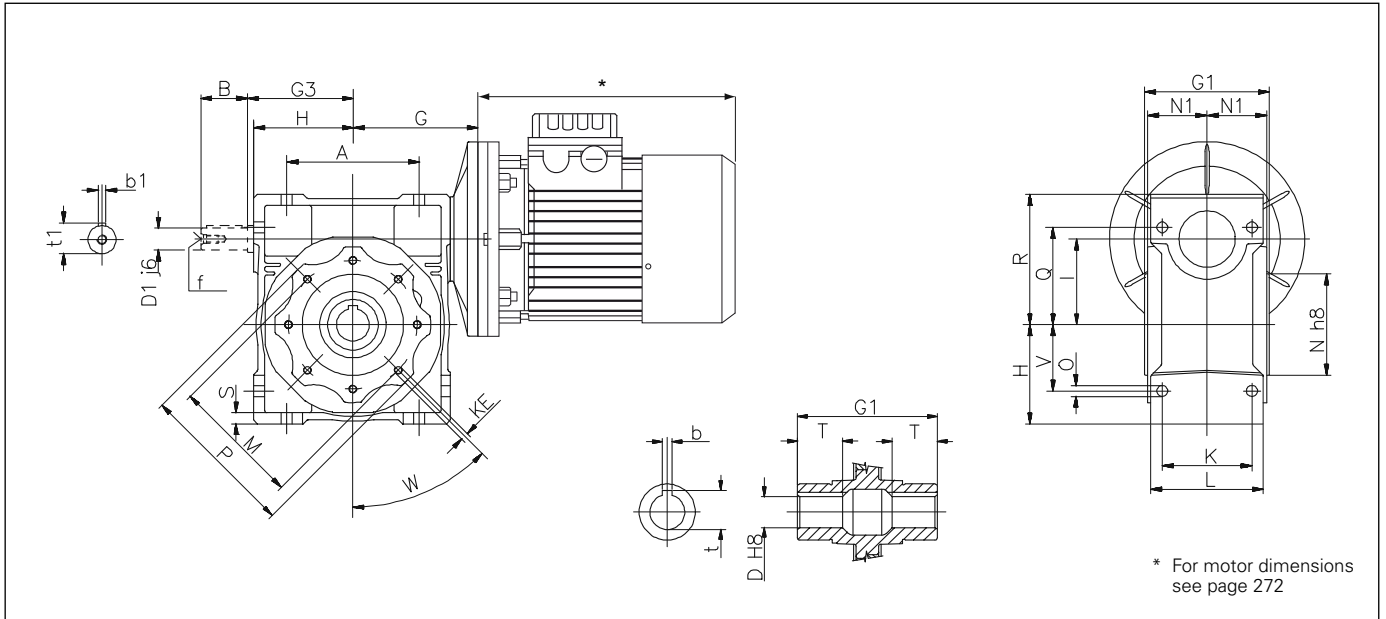


Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>4.0 KW MOTOR</b>				
373	93	1.4	745A0244	2210
373	94	2.2	746A0244	2446
280	123	1.2	745A0344	2433
280	123	1.9	746A0344	2692
187	182	1.0	745A0246	2785
187	184	1.6	746A0246	3081
140	240	0.8	745A0346	3065
140	243	1.3	746A0346	3391
140	243	2.1	747A0346	4285
140	243	2.5	748A0346	4285
120	283	2.0	747A0255	4511
120	283	2.3	748A0255	4511
120	287	3.1	749A0255	5901
93	352	1.0	746A0446	3882
93	352	1.6	747A0446	4905
93	352	1.9	748A0446	4905
90	374	1.7	747A0355	4965
90	374	1.9	748A0355	4965
90	374	2.6	749A0355	6494
70	458	0.8	746A0546	4273
70	464	1.2	747A0546	5399
70	464	1.4	748A0546	5399
60	541	1.2	747A0455	5684
60	541	1.4	748A0455	5684
60	541	2.0	749A0455	7434
56	573	1.0	747A0646	5816
56	573	1.2	748A0646	5816
56	573	1.6	749A0646	7607
47	647	1.0	747A0746	6181
47	647	1.1	748A0746	6181
47	655	1.6	749A0746	8084
45	713	1.5	749A0555	8182
36	870	1.2	749A0655	8814
35	851	1.2	749A0846	8897
28	1023	1.0	749A0946	9584
28	1037	1.4	750A0946	13103
23	1179	0.8	749A1046	10185
23	1195	1.1	750A1046	13924
17.5	1484	0.8	750A1146	15325

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>5.5 KW MOTOR</b>				
187	253	1.9	747A0254	3893
187	253	2.2	748A0254	3893
140	334	1.6	747A0354	4285
140	334	1.8	748A0354	4285
140	334	2.5	749A0354	5605
93	484	1.2	747A0454	4905
93	484	1.4	748A0454	4905
93	490	1.9	749A0454	6416
70	638	0.9	747A0554	5399
70	638	1.0	748A0554	5399
70	645	1.4	749A0554	7062
70	645	2.0	750A0554	9654
56	788	1.2	749A0654	7607
56	788	1.5	750A0654	10400
47	900	1.2	749A0754	8084
47	934	1.3	750A0754	11051
35	1171	0.9	749A0854	8897
35	1171	1.3	750A0854	12163
28	1426	1.0	750A0954	13103
23	1643	0.8	750A1054	13924
<b>7.5 KW MOTOR</b>				
187	345	1.4	747A0256	3893
187	345	1.6	748A0256	3893
187	349	2.1	749A0256	5092
140	455	1.1	747A0356	4285
140	455	1.3	748A0356	4285
140	455	1.8	749A0356	5605
93	660	0.9	747A0456	4905
93	660	1.0	748A0456	4905
93	668	1.4	749A0456	6416
70	880	1.0	749A0556	7062
70	880	1.5	750A0556	9654
56	1074	0.9	749A0656	7607
56	1074	1.1	750A0656	10400
47	1228	0.8	749A0756	8084
47	1274	0.9	750A0756	11051
35	1596	0.7	749A0856	8897
35	1596	1.0	750A0856	12163
35	1596	1.0	750A0856	12163

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
<b>11.0 KW MOTOR</b>				
187	512	2.3	750A0266	6962
140	675	1.8	750A0366	7663
93	990	1.3	750A0466	8771
70	1291	1.0	750A0566	9654
56	1576	0.8	750A0666	10400
<b>15.0 KW MOTOR</b>				
187	698	1.7	750A0268	6962
140	921	1.3	750A0368	7663
93	1351	0.9	750A0468	8771
70	1760	0.7	750A0568	9654

Fenner Series W Dimensions Motorised



Dimension (mm)	Unit Size										
	740	741	742	743	744	745	746	747	748	749	750
A	45	54	70	80	100	120	140	170	170	200	240
B	-	20	23	30	40	50	50	60	60	80	80
D†	11	14	18 (19)	25 (24)	25 (28)	28 (35)	35 (38)	42	42	45	50
D1	-	9	11	14	19	24	24	28	28	30	35
G	45	55	70	80	95	112.5	129.5	160	160	180	210
G1	50	63	78	92	112	120	140	155	155	170	200
G3	-	45	53	64	75	90	108	135	135	155	175
H	35	40	50	60	72	86	103	127.5	127.5	147.5	170
I	25	30	40	50	63	75	90	110	110	130	150
K	34	44	60	70	85	90	100	115	115	120	145
KE**	6.5 (3)	M6x11 (4)	M6x10 (4)	M8x10 (4)	M8x14(8)	M8x14(8)	M10x18(8)	M10x18(8)	M10x18(8)	M12x21(8)	M12x21(8)
L	42	56	71	85	103	112	130	144	144	155	185
M	55	65	75	85	95	115	130	165	165	215	215
N (h8)	45	55	60	70	80	95	110	130	130	180	180
N1	22.5	29.0	36.5	43.5	53.0	57.0	67.0	74.0	74.0	81.0	96.0
O	6.0	6.5	6.5	8.5	8.5	11.5	13.0	14.0	14.0	16.0	18.0
P	-	75	87	100	110	140	160	200	200	250	250
Q	35.5	44	55	64	80	93	102	125	125	140	180
R	48.0	57.0	71.5	84.0	102.0	119.0	135.0	167.5	167.5	187.5	230.0
S	5.0	5.5	6.5	7.0	8.0	10.0	11.0	16.0	14.5	15.5	18.0
T	16.0	21.0	26.0	30.0	36.0	40.0	45.0	50.0	50.0	60.0	72.5
V	22.5	27	35	40	50	60	70	85	85	100	120
W	100°	0°	45°	45°	45°	45°	45°	45°	45°	45°	45°
b#	4	5	6	8	8	8 (10)	10	12	12	14	14
t#	12.8	16.3	20.8 (21.8)	28.3 (27.3)	28.3 (31.3)	31.3 (38.3)	38.3 (41.3)	45.3	45.3	48.8	53.8
b1	-	3	4	5	6	8	8	8	8	8	10
t1	-	10.2	12.5	16.0	21.5	27.0	27.0	31.0	31.0	33.0	38.0
f	-	-	-	M6	M6	M8	M8	M10	M10	M10	M12
~Kg	0.7	1.2	2.3	3.5	6.2	9.0	13.0	21.0	35.0	48.0	84.0

All dimensions in mm.

† Dimension in brackets are the alternative bore sizes available on request.

\*\* Number in brackets are the number of tapped holes with the exception of the size 740 where the holes are not tapped.

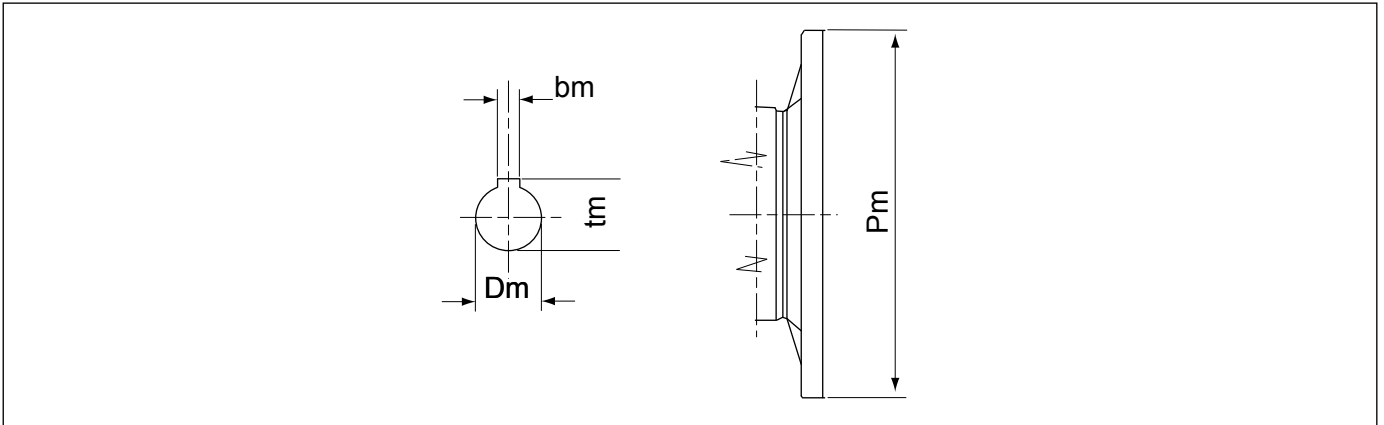
# Dimension in brackets relate to the alternative bore sizes.

~Kg Refers to the approximate weight without motor.

Fenner Series W Motor Input Dimensions



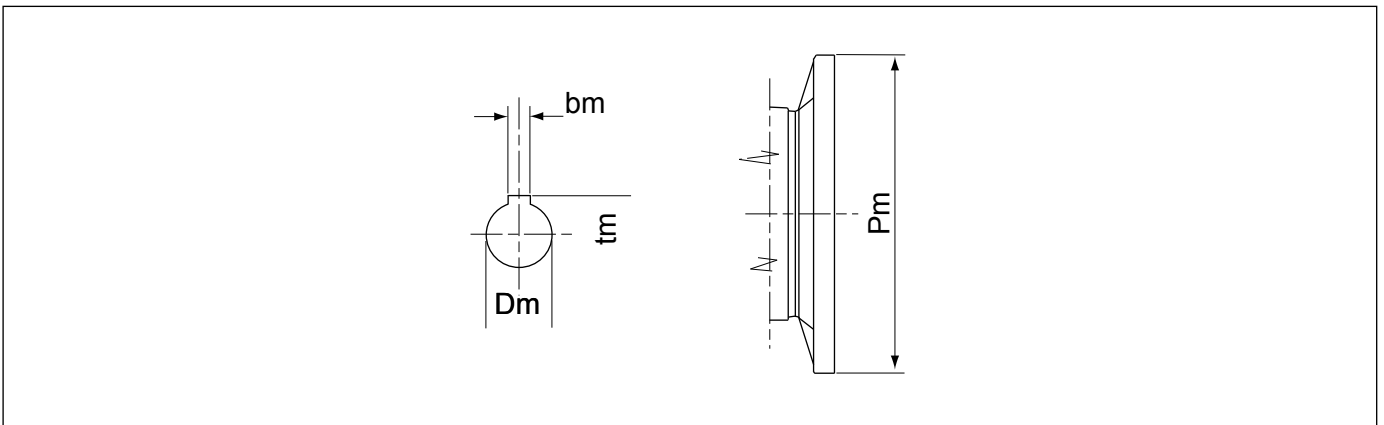
**B5 FLANGE DIMENSIONS**



B5 Flange	IEC Motor Frame Size										
	56	63	71	80	90	100	112	132	160	180	200
Pm	120	140	160	200	200	250	250	300	350	350	400
Dm	9	11	14	19	24	28	28	38	42	48	55
bm	3	4	5	6	8	8	8	10	12	14	16
tm	10.4	12.8	16.3	21.8	27.3	31.3	31.3	41.3	45.3	51.8	59.3

Sizes 748 & 749 Dimension  $t_m$  is 40.3 (IEC 132)

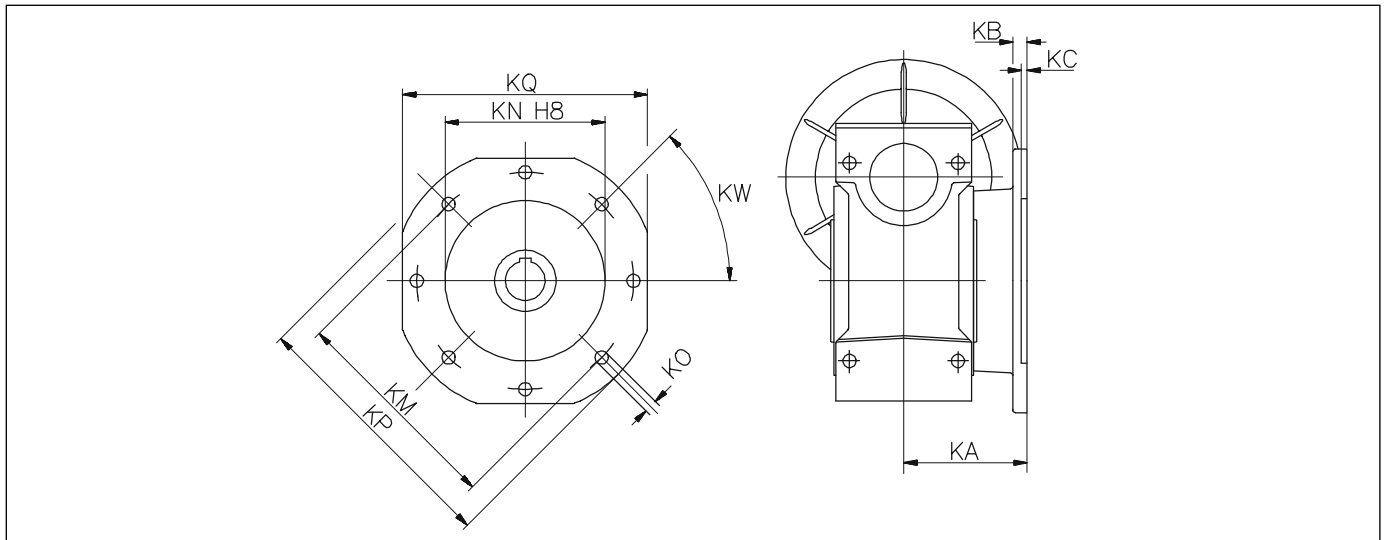
**B14 FLANGE DIMENSIONS**



B14 Face	IEC Motor Frame Size								
	56	63	71	80	90	100	112	132	
Pm	80	90	105	120	140	160	160	200	
Dm	9	11	14	19	24	28	28	38	
bm	3	4	5	6	8	8	8	10	
tm	10.4	12.8	16.3	21.8	27.3	31.3	31.3	41.3	

Sizes 748 & 749 Dimension  $t_m$  is 40.3 (IEC 132).

## Fenner Series W Output Flange Dimensions



## STANDARD OUTPUT FLANGE (TYPE FA)

Unit Size	KA	KB	KC	KM	KN	KO	KP	KQ	KW
<b>740</b>	45	6	3	55	40	6.5 (4)	75	70	45°
<b>741</b>	54.5	6	4	68	50	6.5 (4)	80	70	45°
<b>742</b>	67	7	4	80 min	60	9 (4)	110	95	45°
<b>743</b>	90	9	5	90 min	70	11 (4)	125	110	45°
<b>744</b>	82	10	6	150	115	11 (4)	180	142	45°
<b>745</b>	111	13	6	165	130	14 (4)	200	170	45°
<b>746</b>	111	13	6	175	152	14 (4)	210	200	45°
<b>747</b>	131	15	6	230	170	14 (8)	280	260	45°
<b>748</b>	131	15	6	230	170	14 (8)	280	260	45°
<b>749</b>	140	15	6	255	180	16 (8)	320	290	22.5°
<b>750</b>	155	15	6	255	180	16 (8)	320	290	22.5°

## OUTPUT FLANGE (TYPE FB)

Unit Size	KA	KB	KC	KM	KN	KO	KP	KQ	KW
<b>742</b>	97	7	4	80 min	60	9 (4)	110	95	45°
<b>743</b>	120	9	5	90 min	70	11 (4)	125	110	45°
<b>744</b>	112	10	6	150	115	11 (4)	180	142	45°
<b>745</b>	90	13	6	130	110	14 (4)	160	-	45°
<b>746</b>	122	18	6	215	180	14 (4)	250	-	45°
<b>747</b>	180	15	6	230	170	14 (8)	280	260	45°
<b>748</b>	180	15	6	230	170	14 (8)	280	260	45°

## OUTPUT FLANGE (TYPE FC)

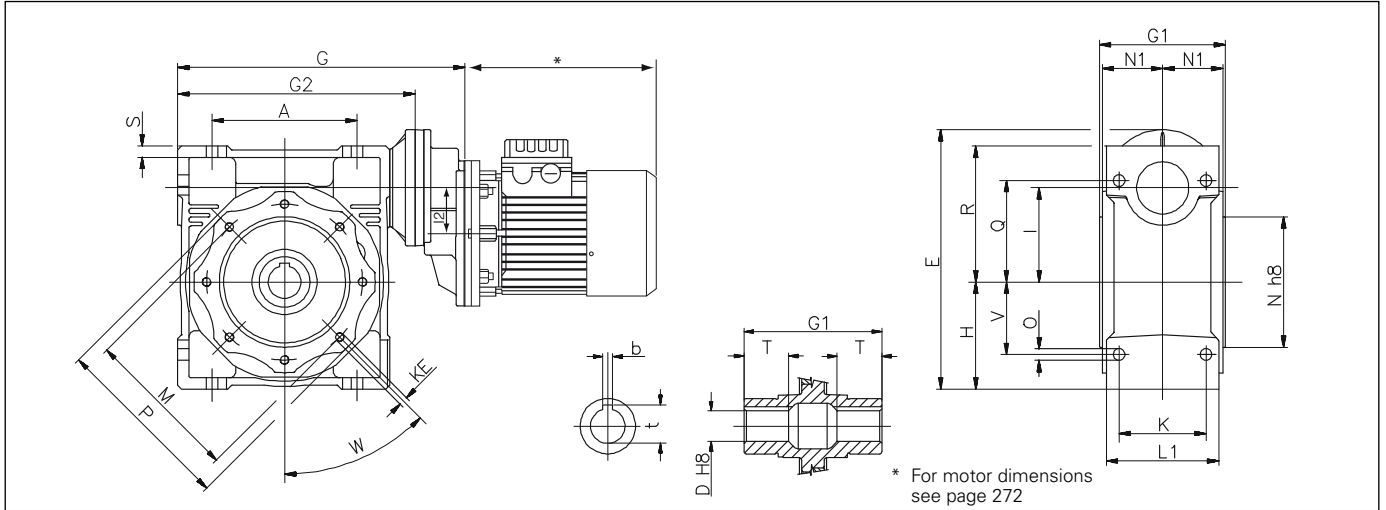
Unit Size	KA	KB	KC	KM	KN	KO	KP	KQ	KW
<b>742</b>	80	9	5	95	115	9.5 (4)	140	-	45°
<b>743</b>	89	10	5	110	130	9.5 (4)	160	-	45°
<b>744</b>	98	10	5	130	165	11 (4)	200	-	45°
<b>745</b>	-	-	-	-	-	-	-	-	-
<b>746</b>	110	17	6	130	165	11 (4)	200	-	45°

## OUTPUT FLANGE (TYPE FD)

Unit Size	KA	KB	KC	KM	KN	KO	KP	KQ	KW
<b>742</b>	58	12	5	80	100	9 (4)	120	-	45°
<b>743</b>	72	14.5	5	95	115	11 (4)	140	-	45°
<b>744</b>	107	10	5	130	165	11 (4)	200	-	45°
<b>745</b>	-	-	-	-	-	-	-	-	-
<b>746</b>	151	13	6	152	175	14 (4)	210	-	45°



Fenner Series W Helical Worm Unit Dimensions



IEC Motor Size	63 Frame Gearbox Size			71 Frame Gearbox Size				80 & 90 Frame Gearbox Size				
	742	743	744	743	744	745	746	745	746	747	748	749
A	70	80	100	80	100	120	140	120	140	170	170	200
E	147.0	167.0	192.0	177.5	202.5	228.5	260.5	241.0	273.0	317.5	317.5	357.5
G	165	185	212	193	220	251.5	285.5	267.5	301.5	356.5	356.5	396.5
G1	78	92	112	92	112	120	140	120	140	155	155	170
G2	120.0	140.0	167.0	140.0	167.0	198.5	232.5	198.5	232.5	287.5	287.5	327.5
H	50.0	60.0	72.0	60.0	72.0	86.0	103.0	86.0	103.0	127.5	127.5	147.5
I	40	50	63	50	63	75	90	75	90	110	110	130
I2	40	40	40	50	50	50	50	63	63	63	63	63
L	140	140	140	160	160	160	160	200	200	200	200	200
L1	71	85	103	85	103	112	130	112	130	144	144	155
K	60	70	85	70	85	90	100	90	100	115	115	120
KE**	M6x10(4)	M8x10(4)	M8x14(8)	M8x10(4)	M8x14(8)	M8x14(8)	M10x18(8)	M8x14(8)	M10x18(8)	M10x18(8)	M10x18(8)	M12x21(8)
M	75	85	95	85	95	115	130	115	130	165	165	215
N	60	70	80	70	80	95	110	95	110	130	130	180
N1	36.5	43.5	53.0	43.5	53.0	57.0	67.0	57.0	67.0	74.0	74.0	81.0
O	6.5	8.5	8.5	8.5	8.5	11.5	13.0	11.5	13.0	14.0	14.0	16.0
P	87	100	110	100	110	140	160	140	160	200	200	250
Q	55	64	80	64	80	93	102	93	102	125	125	140
R	71.5	84.0	102.0	84.0	102.0	119.0	135.0	119.0	135.0	167.5	167.5	187.5
S	6.5	7.0	8.0	7.0	8.0	10.0	11.0	10.0	11.0	16.0	14.5	15.5
T	26	30	36	30	36	40	45	40	45	50	50	60
V	35	40	50	40	50	60	70	60	70	85	85	100
W	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°
D	18	25	25	25	25	28	35	28	35	42	42	45
b	6	8	8	8	8	8	10	8	10	12	12	14
t	20.8	28.3	28.3	28.3	28.3	31.3	38.3	31.3	38.3	45.3	45.3	48.8
~Kg	3.4	4.6	7.3	5.1	7.8	10.6	14.6	12.4	16.4	24.4	38.4	51.4

All Dimensions in mm. For alternative hollow bore options see page 256 and the relevant motorised worm unit size.

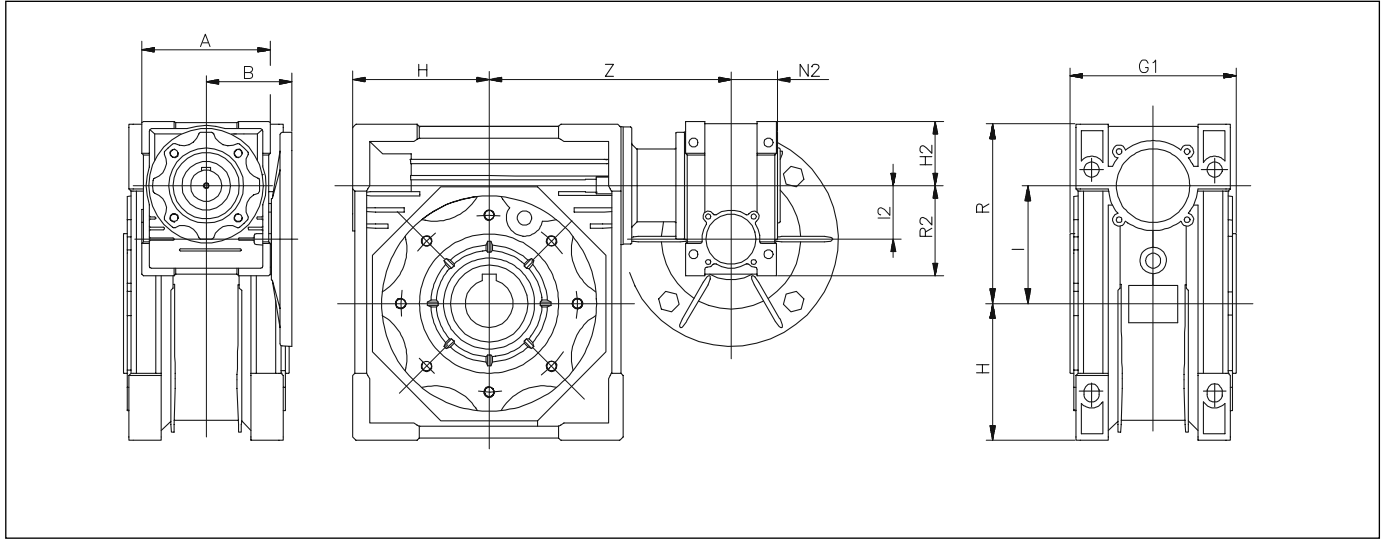
The frame size of the electric motor fitted to a worm unit determines the helical gear part of the assembly, the relevant dimensions are given in the above table

Eg: Dimension G (the overall length) for a size 743 Helical Worm gearbox fitted with an IEC 71 Frame motor is 193mm.

\*\* Number in brackets are the number of tapped holes.

~Kg Refers to the approximate weight without motor.

**MOTORISED WORM-WORM COMBINATION UNIT DIMENSIONS**



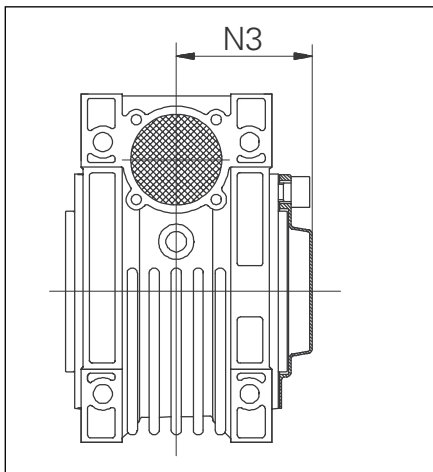
	740-741	741-742	741-743	741-744	742-745	742-746	743-747	743-748	744-749	744-750
A	70	80	80	80	100	100	120	120	144	144
B	45	55	55	55	70	70	80	80	95	95
G1	63	78	92	112	120	140	155	155	170	200
H	40.0	50.0	60.0	72.0	86.0	103.0	127.5	127.5	147.5	170.0
I	30	40	50	63	75	90	110	110	130	150
R	57.0	71.5	84.0	102.0	119.0	135.0	167.5	167.5	187.5	230.0
H2	35	40	40	40	50	50	60	60	72	72
I2	25	30	30	30	40	40	50	50	63	63
N2	22.5	29.0	29.0	29.0	36.5	36.5	43.5	43.5	53.0	53.0
R2	48.0	57.0	57.0	57.0	71.5	71.5	84.0	84.0	102.0	102.0
Z	100.0	122.0	132.0	145.0	167.5	184.5	226.0	226.0	245.0	275.0
~Kg	1.9	3.5	4.7	7.4	11.3	15.3	24.5	38.5	54.2	90.2

All dimensions in mm

~Kg Refers to the approximate weight without motor

The unit size given in the selection tables (the third digit) refers to the largest gearbox in the combination

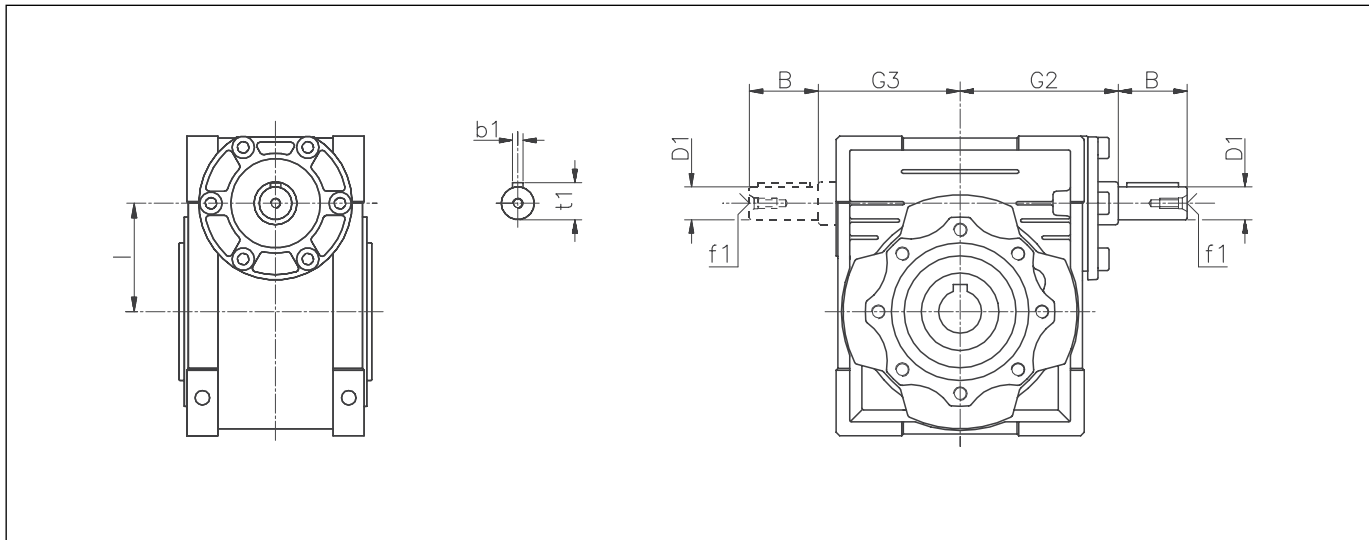
**OUTPUT HUB COVER DIMENSIONS**



Unit Size	N3
741	42.0
742	50.0
743	57.5
744	68.5
745	73.5
746	85.5
747	94.0
748	94.0
749	102.0
750	117.0



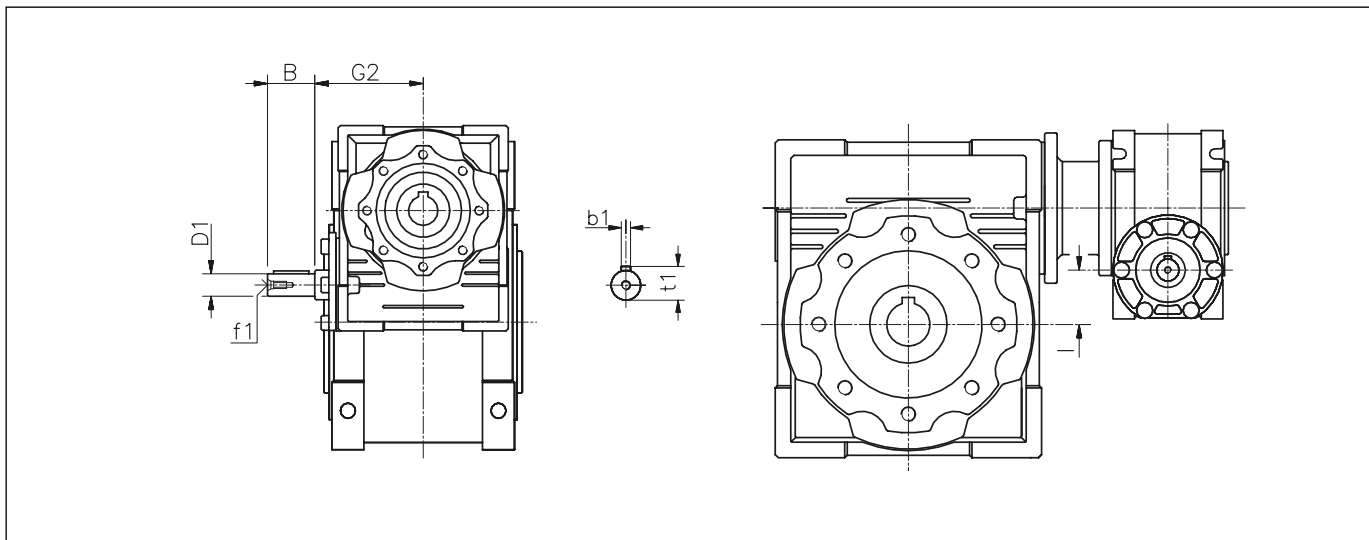
SHAFT MOUNTED WORM REDUCER



Unit Size	B	D1 j6	G2	G3	l	b1	f1	t1
741	20	9	51	45	30	3	-	10.2
742	23	11	60	53	40	4	-	12.5
743	30	14	74	64	50	5	M6	16.0
744	40	19	90	75	63	6	M6	21.5
745	50	24	105	90	75	8	M8	27.0
746	50	24	125	108	90	8	M8	27.0
747	60	28	142	135	110	8	M10	31.0
748	60	28	142	135	110	8	M10	31.0
749	80	30	162	155	130	8	M10	33.0
750	80	35	195	175	150	10	M12	38.0

For all other dimensions consult page 256 and the relevant size gearbox.

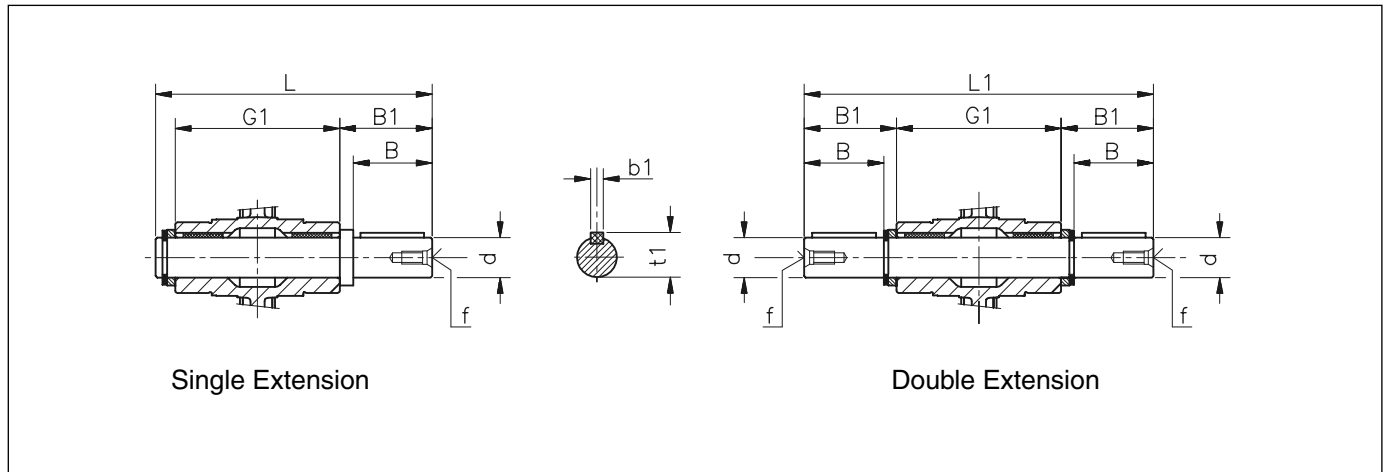
WORM WORM COMBINATION REDUCER



Unit Size	B	D1 j6	G2	l	b1	f1	t1
741-742	20	9	51	10	3	-	10.2
741-743	20	9	51	20	3	-	10.2
741-744	20	9	51	33	3	-	10.2
742-745	23	11	60	35	4	-	12.5
742-746	23	11	60	50	4	-	12.5
743-747	30	14	74	60	5	M6	16.0
743-748	30	14	74	60	5	M6	16.0
744-749	40	19	90	67	6	M6	21.5
744-750	40	19	90	87	6	M6	21.5

For all other dimensions consult page 260 and the relevant size gearbox.

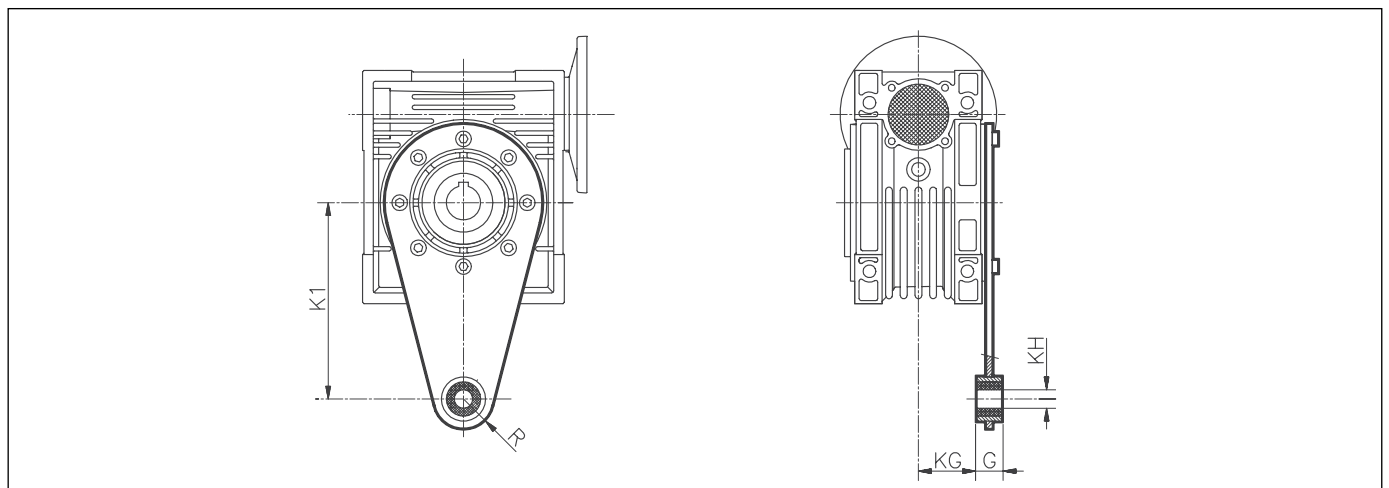
OUTPUT SHAFTS



Unit Size	d h6	B	B1	G1	L	L1	f	b1	t1
<b>740*</b>	11 g6	23	25.5	50	81	101	-	4	12.5
<b>741</b>	14	30	32.5	63	102	128	M6	5	16.0
<b>742</b>	18	40	43.0	78	128	164	M6	6	20.5
<b>743</b>	25	50	53.5	92	153	199	M10	8	28.0
<b>744</b>	25	50	53.5	112	173	219	M10	8	28.0
<b>745</b>	28	60	63.5	120	192	247	M10	8	31.0
<b>746</b>	35	80	84.5	140	234	309	M12	10	38.0
<b>747</b>	42	80	84.5	155	249	324	M16	12	45.0
<b>748</b>	42	80	84.5	155	249	324	M16	12	45.0
<b>749</b>	45	80	85.0	170	265	340	M16	14	48.5
<b>750</b>	50	82	87.0	200	297	374	M16	14	53.5

\*Alternative small shaft available on request contact your local Authorised Distributor  
All dimensions in mm

TORQUE ARM DIMENSIONS



Unit Size	K1	G	KG	KH	R
<b>740</b>	70	14	17.5	8	15
<b>741</b>	85	14	24.0	8	15
<b>742</b>	100	14	31.5	10	18
<b>743</b>	100	14	38.5	10	18
<b>744</b>	150	14	49.0	10	18
<b>745</b>	200	25	47.5	20	30
<b>746</b>	200	25	57.5	20	30
<b>747</b>	250	30	62.0	25	35
<b>748</b>	250	30	62.0	25	35
<b>749</b>	250	30	69.0	25	35
<b>750</b>	250	30	84.0	25	35

All dimensions in mm



**WORM GEAR UNIT RATIOS**

Ratio Code	Ratio
01	5.0
02	7.5
03	10.0
04	15.0
05	20.0
06	25.0
07	30.0
08	40.0
09	50.0
10	60.0
11	80.0
12	100.0

**HELICAL WORM GEAR UNIT RATIOS**

Ratio Code	Ratio Combination	Final Ratio	Frame Size 90 Final ratio	Ratio Combination
20	3 x 25	75	72.6	2.42 x 30
21	3 x 30	90	96.8	2.42 x 40
22	3 x 40	120	121.0	2.42 x 50
23	3 x 50	150	145.2	2.42 x 60
24	3 x 60	180	193.6	2.42 x 80
25	3 x 80	240	242.0	2.42 x 100
26	3 x 100	300	-	-

**WORM-WORM GEAR UNIT RATIOS**

Ratio Code	Ratio Combination	Final Ratio
40	10 x 30	300
41	10 x 40	400
42	20 x 25	500
43	20 x 30	600
44	25 x 30	750
45	30 x 30	900
46	30 x 40	1200
47	50 x 30	1500
48	60 x 30	1800
49	60 x 40	2400
50	60 x 50	3000*
51	80 x 40	3200
52	50 x 80	4000
53	60 x 80	4800**
54	50 x 100	5000

\* Not available on size 742

\*\* Only available on size 743

**ACCESSORY PRODUCT CODES**

Unit Size	Single Extension Output Shaft	Double Extended Output Shaft	Torque Arm	Type FA	Output Flanges			Output Cover
					Type FB	Type FC	Type FD	
<b>740</b>	NRV25OS	NRV25DOS	NRV25TA	NRV25F	-	-	-	-
<b>741</b>	NRV30OS	NRV30DOS	NRV30TA	NRV30F	-	-	-	NRV30OC
<b>742</b>	NRV40OS	NRV40DOS	NRV40TA	NRV40F	NRV40FL	NRV40FC	NRV40FD	NRV40OC
<b>743</b>	NRV50OS	NRV50DOS	NRV50TA	NRV50F	NRV50FL	NRV50FC	NRV50FD	NRV50OC
<b>744</b>	NRV63OS	NRV63DOS	NRV63TA	NRV63F	NRV63FL	NRV63FC	NRV63FD	NRV63OC
<b>745</b>	NRV75OS	NRV75DOS	NRV75TA	NRV75F	NRV75FL	-	-	NRV75OC
<b>746</b>	NRV90OS	NRV90DOS	NRV90TA	NRV90F	NRV90FL	NRV90FC	NRV90FD	NRV90OC
<b>747</b>	NRV105OS	NRV105DOS	NRV105TA	NRV105F	NRV105FL	-	-	NRV105OC
<b>748</b>	NRV110OS	NRV110DOS	NRV110TA	NRV110F	NRV110FL	-	-	NRV110OC
<b>749</b>	NRV130OS	NRV130DOS	NRV130TA	NRV130F	-	-	-	NRV130OC
<b>750</b>	NRV150OS	NRV150DOS	NRV150TA	NRV150F	-	-	-	NRV150OC

## ORDERING INSTRUCTIONS

### FIRST THREE DIGITS:

Gearmotor size. Select from the tables on pages 250 to 255 for motorised units and pages 266 to 269 for non-motorised units.

### FOURTH DIGIT: Mounting Type.

- A:** Standard Bore - Motorised shaft mounted worm gear unit
- B:** Standard Bore - Motorised shaft mounted worm worm combination gear unit
- D:** Standard Bore - Motor ready worm gear unit
- E:** Standard Bore - Motor ready worm worm combination unit
- G:** Standard Bore - Shaft mounted reducer
- H:** Standard Bore - Worm worm combination reducer
- Z:** Alternative Bore - Motorised shaft mounted worm gear unit
- Y:** Alternative Bore - Motorised shaft mounted worm worm combination gear unit
- W:** Alternative Bore - Motor ready worm gear unit
- V:** Alternative Bore - Motor ready worm worm combination unit
- T:** Alternative Bore - Shaft mounted reducer
- S:** Alternative Bore - Worm worm combination reducer

### FIFTH AND SIXTH DIGIT: Gear Ratio Code.

1. Assemblies A and B use complete eight digit code obtained directly from selection tables. Exact gear ratios can be found on page 263.
2. For selection and specification for D, E, G and H assemblies then consult your local Authorised Distributor.

### SEVENTH/EIGHTH DIGITS: Type of drive code

1. Motorised units - use complete code from selection tables with if applicable, additional ninth digit for motor type.
2. Input reducer assembly - use **00**
3. Unmotorised - units ready for a motor fitting by a third party use the three digits as shown in the table opposite.

Code	Frame	Flange
56C	56	B14
56D	56	B5
63C	63	B14
63D	63	B5
71C	71	B14
71D	71	B5
80C	80	B14
80D	80	B5
90C	90	B14
90D	90	B5
10C	100/112	B14
10D	100/112	B5
13D	132	B5
16D	160	B5

### NINTH DIGIT:

Type of motor variant.

Use eight digit code obtained from selection tables for required motor power and speed and then add the relevant letter code from the table on page 272 of the motor variant required.

## EFFICIENCY - STATIC AND DYNAMIC IRREVERSIBILITY

### EFFICIENCY

Efficiency is a parameter which has a major influence on the sizing of certain applications, and basically depends on gear pair design elements.

The mesh data table on page 265 shows dynamic efficiency ( $\eta_1=1400$ ) and static efficiency values. Remember that these values are only achieved after the unit has been run in.

### DYNAMIC IRREVERSIBILITY

Dynamic irreversibility is achieved when the output shaft stops instantly when drive is no longer transmitted through the worm shaft. This condition requires a dynamic efficiency of  $\eta_d < 0.5$  (see table on page 265).

### STATIC IRREVERSIBILITY

Static irreversibility is achieved when, with the gear reducer at a standstill, the application of a load to the output shaft does not set in motion the worm shaft. This condition requires a static efficiency of  $\eta_s < 0.5$  (see table on page 265).

The tables below shows approximate irreversibility classes.

Vibrations and shocks can affect a gear reducer's irreversibility.

For the irreversibility conditions of a combined geared unit one must consider that the efficiency of the group is given by the product of the efficiencies of each single reducer, i.e.  $\eta_{tot} = \eta_1 \times \eta_2$

### DYNAMIC IRREVERSIBILITY

$\eta_d$	Dynamic Irreversibility
>0.6	dynamic reversibility
0.5 ÷ 0.6	low dynamic reversibility
0.4 ÷ 0.5	good dynamic irreversibility
< 0.4	dynamic irreversibility

### STATIC IRREVERSIBILITY

$\eta_s$	Static Irreversibility
> 0.55	static reversibility
0.5 ÷ 0.55	low static reversibility
< 0.5	static irreversibility



MESH DATA

Unit Size		Ratio											
		5	7,5	10	15	20	25	30	40	50	60	80	100
740	Z1	6	4	3	2	2	1	1	1	1			
	γ	35°02'	25°03'	19°19'	13°09'	10°41'	6°40'	5°23'	4°31'	3°53'			
	Mx	1.30	1.30	1.30	1.30	0.995	1.30	0.995	0.80	0.67			
	ηd(1400)	0.87	0.85	0.83	0.79	0.75	0.67	0.62	0.58	0.55			
	ηs	0.72	0.71	0.68	0.61	0.56	0.46	0.41	0.36	0.34			
741	Z1	6	4	3	2	2	1	1	1	1	1	1	
	γ	27°04'	18°49'	14°20'	9°40'	7°42'	5°35'	4°52'	3°52'	3°12'	2°45'	2°07'	
	Mx	1.44	1.44	1.44	1.44	1.09	1.70	1.44	1.09	0.89	0.74	0.56	
	ηd(1400)	0.87	0.85	0.82	0.77	0.73	0.68	0.65	0.59	0.55	0.51	0.44	
	ηs	0.72	0.67	0.63	0.55	0.50	0.43	0.39	0.35	0.31	0.27	0.23	
742	Z1	6	4	3	2	2	2	1	1	1	1	1	1
	γ	34°19'	24°28'	18°51'	12°49'	10°23'	8°43'	6°29'	5°14'	4°23'	3°47'	2°57'	2°25'
	Mx	2.06	2.06	2.06	2.06	1.57	1.27	2.06	1.57	1.27	1.06	0.81	0.65
	ηd(1400)	0.89	0.87	0.85	0.82	0.78	0.75	0.70	0.65	0.62	0.58	0.52	0.47
	ηs	0.74	0.71	0.67	0.60	0.55	0.51	0.45	0.40	0.36	0.32	0.28	0.24
743	Z1	6	4	3	2	2	2	1	1	1	1	1	1
	γ	33°37'	23°54'	18°23'	12°30'	10°06'	8°29'	6°19'	5°06'	4°16'	3°40'	2°52'	2°21'
	Mx	2.56	2.56	2.56	2.56	1.95	1.58	2.56	1.95	1.58	1.32	1.00	0.8
	ηd(1400)	0.89	0.88	0.86	0.82	0.79	0.76	0.72	0.67	0.63	0.59	0.53	0.49
	ηs	0.74	0.70	0.66	0.59	0.55	0.51	0.44	0.39	0.35	0.32	0.27	0.23
744	Z1	4	3	2	2	2	1	1	1	1	1	1	
	γ	24°31'	18°53'	12°51'	10°25'	8°45'	6°30'	5°15'	4°24'	3°47'	2°58'	2°26'	
	Mx	3.25	3.25	3.25	2.48	2.00	3.25	2.48	2.0	1.68	1.27	1.02	
	ηd(1400)	0.88	0.87	0.83	0.81	0.78	0.74	0.70	0.66	0.62	0.57	0.51	
	ηs	0.71	0.67	0.60	0.55	0.51	0.45	0.40	0.36	0.33	0.28	0.24	
745	Z1	4	3	2	2	2	1	1	1	1	1	1	
	γ	26°17'	20°20'	13°52'	11°18'	9°32'	7°02'	5°42'	4°48'	4°08'	3°14'	2°40'	
	Mx	3.94	3.94	3.94	3.00	2.42	3.94	3.0	2.42	2.03	1.54	1.24	
	ηd(1400)	0.89	0.88	0.85	0.82	0.80	0.76	0.72	0.69	0.65	0.60	0.55	
	ηs	0.71	0.68	0.61	0.57	0.53	0.46	0.42	0.38	0.35	0.29	0.26	
746	Z1	4	3	2	2	2	1	1	1	1	1	1	
	γ	29°11'	22°44'	15°36'	12°50'	10°54'	7°57'	6°30'	5°30'	4°46'	3°45'	3°06'	
	Mx	4.84	4.84	4.84	3.69	2.98	4.84	3.69	2.98	2.50	1.89	1.52	
	ηd(1400)	0.90	0.89	0.86	0.84	0.82	0.78	0.75	0.72	0.69	0.63	0.59	
	ηs	0.73	0.70	0.64	0.60	0.56	0.49	0.45	0.41	0.38	0.32	0.28	
747	Z1	4	3	2	2	2	1	1	1	1	1	1	
	γ	28°15'	21°57'	15°02'	14°41'	12°34'	7°39'	7°28'	6°22'	5°32'	4°24'	3°39'	
	Mx	5.875	5.875	5.875	4.62	3.73	5.875	4.62	3.73	3.13	2.37	1.91	
	ηd(1400)	0.90	0.89	0.86	0.85	0.84	0.79	0.78	0.75	0.72	0.67	0.63	
	ηs	0.72	0.69	0.63	0.62	0.59	0.48	0.48	0.44	0.41	0.36	0.32	
748	Z1	4	3	2	2	2	1	1	1	1	1	1	
	γ	28°15'	21°57'	15°02'	14°41'	12°34'	7°39'	7°28'	6°22'	5°32'	4°24'	3°39'	
	Mx	5.875	5.875	5.875	4.62	3.73	5.875	4.62	3.73	3.13	2.37	1.91	
	ηd(1400)	0.90	0.89	0.86	0.85	0.84	0.79	0.78	0.75	0.72	0.67	0.63	
	ηs	0.72	0.69	0.63	0.62	0.59	0.48	0.48	0.44	0.41	0.36	0.32	
749	Z1	4	3	2	2	2	1	1	1	1	1	1	
	γ	28°41'	22°19'	15°18'	13°52'	11°49'	7°47'	7°02'	5°58'	5°11'	4°07'	3°24'	
	Mx	6.97	6.97	6.97	5.4	4.37	6.97	5.4	4.37	3.67	2.77	2.23	
	ηd(1400)	0.91	0.89	0.87	0.86	0.84	0.80	0.78	0.75	0.72	0.68	0.64	
	ηs	0.72	0.69	0.63	0.61	0.58	0.49	0.46	0.43	0.39	0.34	0.30	
750	Z1	6	4	3	2	2	2	1	1	1	1	1	
	γ	32°09'	24°35'	17°27'	12°53'	11°19'	9°50'	6°32'	5°43'	4°57'	3°55'	3°14'	
	Mx	5.5	6.155	,5	6.155	5.0	4.193	6.155	5.0	4.193	3.17	2.55	
	ηd(1400)	0.91	0.90	0.88	0.86	0.84	0.83	0.78	0.76	0.73	0.68	0.64	
	ηs	0.73	0.71	0.66	0.60	0.57	0.54	0.45	0.42	0.39	0.33	0.29	

## NON MOTORISED RATINGS

Input speed 500 rev/min

Unit Size	Ratio	Nominal Output Speed Rev/Min	Input Power kW	Output Torque Nm	Overhung Load Fr1 N	Overhung Load Fr2 N
741	5.0	100	0.30	24	210	841
	7.5	66.7	0.21	24	210	963
	10	50.0	0.16	24	210	1060
	15	33.3	0.12	24	210	1213
	20	25.0	0.09	23	210	1336
	25	20.0	0.10	29	210	1439
	30	16.7	0.08	26	210	1529
	40	12.5	0.06	23	210	1683
	50	10.0	0.05	21	210	1813
	60	8.3	0.04	19	210	1830
80	6.3	0.03	17	210	1830	
742	5	100	0.60	49	350	1619
	7.5	66.7	0.45	54	350	1853
	10	50.0	0.35	54	350	2040
	15	33.3	0.26	55	350	2335
	20	25.0	0.19	52	350	2570
	25	20.0	0.15	49	350	2769
	30	16.7	0.16	58	350	2942
	40	12.5	0.12	53	350	3238
	50	10.0	0.10	49	350	3488
	60	8.3	0.08	46	350	3490
	80	6.3	0.06	40	350	3490
100	5.0	0.05	36	350	3490	
743	5	100	1.1	92	490	2222
	7.5	66.7	0.86	103	490	2544
	10	50.0	0.67	103	490	2800
	15	33.3	0.47	103	490	3205
	20	25.0	0.33	93	490	3528
	25	20.0	0.28	91	490	3800
	30	16.7	0.29	108	490	4038
	40	12.5	0.22	98	490	4445
	50	10.0	0.17	91	490	4788
	60	8.3	0.14	83	490	4840
	80	6.3	0.11	75	490	4840
100	5.0	0.09	65	490	4840	
744	7.5	66.7	1.50	184	700	3325
	10	50.0	1.20	185	700	3660
	15	33.3	0.85	187	700	4190
	20	25.0	0.63	178	700	4611
	25	20.0	0.48	164	700	4967
	30	16.7	0.54	200	700	5279
	40	12.5	0.40	185	700	5810
	50	10.0	0.32	173	700	6259
	60	8.3	0.26	160	700	6270
	80	6.3	0.19	137	700	6270
	100	5.0	0.16	128	700	6270
745	7.5	66.7	2.10	260	980	3925
	10	50.0	1.70	270	980	4320
	15	33.3	1.20	280	980	4945
	20	25.0	0.98	285	980	5443
	25	20.0	0.73	255	980	5863
	30	16.7	0.77	300	980	6231
	40	12.5	0.58	280	980	6858
	50	10.0	0.44	250	980	7380
	60	8.3	0.37	240	980	7380
	80	6.3	0.29	215	980	7380
	100	5.0	0.24	210	980	7380

Unit Size	Ratio	Nominal Output Speed Rev/Min	Input Power kW	Output Torque Nm	Overhung Load Fr1 N	Overhung Load Fr2 N
746	7.5	66.7	3.30	410	1270	4343
	10	50.0	2.70	435	1270	4780
	15	33.3	2.10	490	1270	5472
	20	25.0	1.60	470	1270	6022
	25	20.0	1.20	440	1270	6487
	30	16.7	1.40	550	1270	6894
	40	12.5	0.95	480	1270	7588
	50	10.0	0.75	450	1270	8174
	60	8.3	0.59	400	1270	8180
	80	6.3	0.45	365	1270	8180
	100	5.0	0.35	330	1270	8180
747	7.5	66.7	5.50	690	1700	5488
	10	50.0	4.60	740	1700	6040
	15	33.3	3.40	790	1700	6914
	20	25.0	2.50	750	1700	7610
	25	20.0	2.10	790	1700	8198
	30	16.7	2.10	870	1700	8711
	40	12.5	1.50	810	1700	9588
	50	10.0	1.30	800	1700	10320
	60	8.3	0.98	710	1700	10320
	80	6.3	0.72	630	1700	10320
	100	5.0	0.56	570	1700	10320
748	7.5	66.7	6.40	794	1700	5488
	10	50.0	5.20	851	1700	6040
	15	33.3	3.90	909	1700	6914
	20	25.0	2.80	863	1700	7610
	25	20.0	2.40	909	1700	8198
	30	16.7	2.40	1000	1700	8711
	40	12.5	1.70	932	1700	9588
	50	10.0	1.40	880	1700	10320
	60	8.3	1.10	781	1700	10320
	80	6.3	0.76	662	1700	10320
	100	5.0	0.59	599	1700	10320
749	7.5	66.7	8.60	1080	2100	7178
	10	50.0	7.10	1160	2100	7900
	15	33.3	5.50	1300	2100	9043
	20	25.0	4.00	1230	2100	9953
	25	20.0	3.20	1200	2100	10722
	30	16.7	3.30	1400	2100	11394
	40	12.5	2.40	1300	2100	12540
	50	10.0	1.90	1220	2100	13500
	60	8.3	1.50	1070	2100	13500
	80	6.3	1.10	970	2100	13500
	100	5.0	0.85	860	2100	13500
750	7.5	66.7	13.5	1700	2800	9812
	10	50.0	10.7	1780	2800	10800
	15	33.3	7.2	1730	2800	12363
	20	25.0	5.9	1820	2800	13607
	25	20.0	4.3	1630	2800	14658
	30	16.7	3.8	1670	2800	15576
	40	12.5	3.9	2120	2800	17144
	50	10.0	2.9	1870	2800	18000
	60	8.3	2.3	1680	2800	18000
	80	6.3	1.7	1530	2800	18000
	100	5.0	1.3	1350	2800	18000





Non Motorised Ratings - Input Speed 900 rev/min

NON MOTORISED RATINGS

Input speed 900 rev/min

Unit Size	Ratio	Nominal Output Speed Rev/Min	Input Power kW	Output Torque Nm	Overhung Load Fr1 N	Overhung Load Fr2 N
741	5	180	0.44	20	175	692
	7.5	120	0.30	20	175	792
	10	90.0	0.24	20	197	871
	15	60.0	0.17	20	197	997
	20	45.0	0.13	20	210	1098
	25	36.0	0.14	23	210	1183
	30	30.0	0.11	21	210	1257
	40	22.5	0.09	20	210	1383
	50	18.0	0.07	18	210	1490
	60	15.0	0.06	17	210	1583
80	11.3	0.04	15	210	1743	
742	5	180	0.87	40	290	1331
	7.5	120	0.65	44	319	1524
	10	90.0	0.50	44	350	1677
	15	60.0	0.36	45	350	1920
	20	45.0	0.28	44	350	2113
	25	36.0	0.23	43	350	2276
	30	30.0	0.23	49	350	2419
	40	22.5	0.17	45	350	2662
	50	18.0	0.14	42	350	2868
	60	15.0	0.11	39	350	3047
80	11.3	0.09	35	350	3354	
100	9.0	0.07	32	350	3490	
743	5	180	1.60	75	400	1827
	7.5	120	1.20	84	448	2091
	10	90.0	0.94	84	490	2302
	15	60.0	0.67	84	490	2635
	20	45.0	0.48	77	490	2900
	25	36.0	0.39	75	490	3124
	30	30.0	0.42	90	490	3320
	40	22.5	0.31	82	490	3654
	50	18.0	0.25	77	490	3936
	60	15.0	0.21	72	490	4183
80	11.3	0.16	68	490	4604	
100	9.0	0.12	56	490	4840	
744	7.5	120	2.20	151	580	2734
	10	90.0	1.70	153	661	3009
	15	60.0	1.20	155	670	3444
	20	45.0	0.91	148	700	3791
	25	36.0	0.69	137	700	4084
	30	30.0	0.79	175	700	4339
	40	22.5	0.58	160	700	4776
	50	18.0	0.45	145	700	5145
	60	15.0	0.37	138	700	5467
	80	11.3	0.29	128	700	6018
100	9.0	0.25	124	700	6270	
745	7.5	120	3.10	215	810	3227
	10	90.0	2.50	230	975	3551
	15	60.0	1.80	235	980	4065
	20	45.0	1.40	235	980	4474
	25	36.0	1.10	215	980	4820
	30	30.0	1.10	260	980	5122
	40	22.5	0.83	240	980	5637
	50	18.0	0.65	220	980	6073
	60	15.0	0.54	210	980	6453
	80	11.3	0.43	200	980	7103
100	9.0	0.36	190	980	7380	

Unit Size	Ratio	Nominal Output Speed Rev/Min	Input Power kW	Output Torque Nm	Overhung Load Fr1 N	Overhung Load Fr2 N
746	7.5	120	4.8	340	1040	3570
	10	90.0	4.0	370	1270	3929
	15	60.0	3.1	420	1270	4498
	20	45.0	2.3	390	1270	4951
	25	36.0	1.8	370	1270	5333
	30	30.0	1.9	460	1270	5667
	40	22.5	1.4	410	1270	6238
	50	18.0	1.1	390	1270	6719
	60	15.0	0.86	350	1270	7140
	80	11.3	0.63	315	1270	7859
100	9.0	0.49	280	1270	8180	
747	7.5	120	8.0	565	1390	4511
	10	90.0	6.6	620	1700	4965
	15	60.0	4.9	660	1700	5684
	20	45.0	3.6	630	1700	6256
	25	36.0	3.1	660	1700	6739
	30	30.0	3.0	730	1700	7161
	40	22.5	2.2	690	1700	7882
	50	18.0	1.8	680	1700	8491
	60	15.0	1.4	620	1700	9023
	80	11.3	1.0	540	1700	9931
100	9.0	0.8	490	1700	10320	
748	7.5	120	9.2	650	1390	4511
	10	90.0	7.6	713	1700	4965
	15	60.0	5.6	759	1700	5684
	20	45.0	4.1	725	1700	6256
	25	36.0	3.5	759	1700	6739
	30	30.0	3.5	840	1700	7161
	40	22.5	2.5	794	1700	7882
	50	18.0	2.0	748	1700	8491
	60	15.0	1.6	682	1700	9023
	80	11.3	1.1	567	1700	9931
100	9.0	0.84	515	1700	10320	
749	7.5	120	12.3	880	1740	5901
	10	90.0	10.3	960	2100	6494
	15	60.0	7.8	1060	2100	7434
	20	45.0	5.8	1040	2100	8182
	25	36.0	4.8	1050	2100	8814
	30	30.0	4.7	1170	2100	9366
	40	22.5	3.5	1100	2100	10309
	50	18.0	2.7	1050	2100	11105
	60	15.0	2.1	940	2100	11801
	80	11.3	1.6	860	2100	12989
100	9.0	1.2	780	2100	13500	
750	7.5	120	19.5	1400	2270	8067
	10	90.0	15.7	1480	2700	8878
	15	60.0	10.5	1450	2645	10163
	20	45.0	8.4	1500	2800	11186
	25	36.0	6.3	1380	2800	12050
	30	30.0	5.4	1400	2800	12805
	40	22.5	5.7	1800	2800	14094
	50	18.0	4.1	1600	2800	15182
	60	15.0	3.2	1440	2800	16133
	80	11.3	2.4	1300	2800	17757
100	9.0	1.8	1150	2800	18000	

## NON MOTORISED RATINGS

Input speed 1400 rev/min

Unit Size	Ratio	Nominal Output Speed Rev/Min	Input Power kW	Output Torque Nm	Overhung Load Fr1 N	Overhung Load Fr2 N
741	5	280.0	0.61	18	150	597
	7.5	186.7	0.41	18	150	683
	10	140.0	0.32	18	169	752
	15	93.3	0.23	18	169	861
	20	70.0	0.18	18	190	948
	25	56.0	0.18	21	210	1021
	30	46.7	0.15	20	210	1085
	40	35.0	0.11	18	210	1194
	50	28.0	0.09	17	210	1286
	60	23.3	0.08	16	210	1367
80	17.5	0.05	13	210	1504	
742	5	280.0	1.10	34	250	1149
	7.5	186.7	0.90	40	294	1315
	10	140.0	0.69	40	331	1447
	15	93.3	0.48	40	331	1657
	20	70.0	0.37	39	350	1824
	25	56.0	0.30	38	350	1964
	25	56.0	0.30	38	350	1964
	30	46.7	0.31	45	350	2087
	40	35.0	0.23	41	350	2298
	50	28.0	0.18	39	350	2475
60	23.3	0.15	36	350	2630	
80	17.5	0.12	33	350	2895	
100	14.0	0.09	29	350	3118	
743	5	280.0	2.00	62	350	1577
	7.5	186.7	1.60	71	401	1805
	10	140.0	1.20	72	490	1987
	15	93.3	0.88	74	490	2274
	20	70.0	0.68	73	490	2503
	25	56.0	0.54	70	490	2696
	30	46.7	0.57	84	490	2865
	40	35.0	0.42	76	490	3153
	50	28.0	0.34	73	490	3397
	60	23.3	0.28	68	490	3610
80	17.5	0.22	65	490	3973	
100	14.0	0.16	55	490	4280	
744	7.5	186.7	2.80	128	500	2359
	10	140.0	2.20	130	571	2597
	15	93.3	1.60	140	615	2973
	20	70.0	1.20	135	667	3272
	25	56.0	1.00	130	700	3524
	30	46.7	1.10	160	700	3745
	40	35.0	0.76	145	700	4122
	50	28.0	0.6	135	700	4440
	60	23.3	0.51	130	700	4719
	80	17.5	0.39	122	700	5193
100	14.0	0.34	118	700	5595	
745	7.5	186.7	4.10	185	700	2785
	10	140.0	3.20	195	830	3065
	15	93.3	2.30	200	851	3509
	20	70.0	1.90	210	980	3862
	25	56.0	1.50	200	980	4160
	30	46.7	1.50	230	980	4421
	40	35.0	1.10	220	980	4865
	50	28.0	0.89	210	980	5241
	60	23.3	0.75	200	980	5569
	80	17.5	0.58	190	980	6130
100	14.0	0.48	180	980	6603	

Unit Size	Ratio	Nominal Output Speed Rev/Min	Input Power kW	Output Torque Nm	Overhung Load Fr1 N	Overhung Load Fr2 N
746	7.5	186.7	6.3	290	900	3081
	10	140.0	5.1	310	1082	3391
	15	93.3	4.1	360	1257	3882
	20	70.0	3.1	355	1270	4273
	25	56.0	2.4	340	1270	4603
	30	46.7	2.6	410	1270	4891
	40	35.0	1.8	360	1270	5383
	50	28.0	1.4	340	1270	5799
	60	23.3	1.1	320	1270	6163
	80	17.5	0.83	285	1270	6783
100	14.0	0.67	270	1270	7306	
747	7.5	186.7	10.4	480	1200	3893
	10	140.0	8.6	520	1463	4285
	15	93.3	6.5	570	1603	4905
	20	70.0	4.8	560	1700	5399
	25	56.0	4.1	590	1700	5816
	30	46.7	3.9	630	1700	6181
	40	35.0	2.9	610	1700	6803
	50	28.0	2.3	600	1700	7328
	60	23.3	1.9	560	1700	7787
	80	17.5	1.3	490	1700	8571
100	14.0	1.1	460	1700	9232	
748	7.5	186.7	12.0	552	1200	3893
	10	140.0	9.8	598	1463	4285
	15	93.3	7.5	656	1604	4905
	20	70.0	5.6	644	1700	5399
	25	56.0	4.7	679	1700	5816
	30	46.7	4.5	725	1700	6181
	40	35.0	3.3	702	1700	6803
	50	28.0	2.6	660	1700	7328
	60	23.3	2.1	616	1700	7787
	80	17.5	1.4	515	1700	8571
100	14.0	1.1	483	1700	9232	
749	7.5	186.7	16.1	750	1500	5092
	10	140.0	13.5	820	1845	5605
	15	93.3	10.3	920	2070	6416
	20	70.0	7.8	910	2100	7062
	25	56.0	6.5	930	2100	7607
	30	46.7	6.4	1040	2100	8084
	40	35.0	4.9	1050	2100	8897
	50	28.0	3.8	980	2100	9584
	60	23.3	3.1	900	2100	10185
	80	17.5	2.3	840	2100	11210
100	14.0	1.7	740	2100	12076	
750	7.5	186.7	25.8	1200	1950	6962
	10	140.0	20.2	1240	2267	7663
	15	93.3	13.9	1250	2285	8771
	20	70.0	11.1	1300	2674	9654
	25	56.0	8.4	1200	2800	10400
	30	46.7	7.1	1200	2800	11051
	40	35.0	7.3	1550	2800	12163
	50	28.0	5.4	1400	2800	13103
	60	23.3	4.2	1260	2800	13924
	80	17.5	3.1	1150	2800	15325
100	14.0	2.3	1000	2800	16508	



Non Motorised Ratings - Input Speed 2800 rev/min

NON MOTORISED RATINGS

Input speed 2800 rev/min

Unit Size	Ratio	Nominal Output Speed Rev/Min	Input Power kW	Output Torque Nm	Overhung Load Fr1 N	Overhung Load Fr2 N
741	5	560.0	0.79	12	115	474
	7.5	373.3	0.58	13	125	542
	10	280.0	0.45	13	140	597
	15	186.7	0.31	13	140	683
	20	140.0	0.23	12	146	752
	25	112.0	0.25	16	210	810
	30	93.3	0.21	15	210	861
	40	70.0	0.16	14	127	948
	50	56.0	0.12	13	128	1021
	60	46.7	0.10	12	126	1085
80	35.0	0.08	11	130	1194	
742	5	560.0	1.6	24	200	912
	7.5	373.3	1.2	28	233	1044
	10	280.0	1.0	29	272	1149
	15	186.7	0.72	31	291	1315
	20	140.0	0.52	29	204	1447
	25	112.0	0.42	28	236	1559
	30	93.3	0.44	34	350	1657
	40	70.0	0.32	31	350	1824
	50	56.0	0.26	30	350	1964
	60	46.7	0.21	28	350	2087
80	35.0	0.16	25	350	2298	
100	28.0	0.12	23	350	2475	
743	5	560.0	2.9	45	280	1251
	7.5	373.3	2.3	52	324	1433
	10	280.0	1.8	54	378	1577
	15	186.7	1.3	57	399	1805
	20	140.0	0.95	53	417	1987
	25	112.0	0.75	51	482	2140
	30	93.3	0.82	64	490	2274
	40	70.0	0.59	59	490	2503
	50	56.0	0.45	53	490	2696
	60	46.7	0.37	50	490	2865
80	35.0	0.27	45	490	3153	
100	28.0	0.21	40	490	3397	
744	7.5	373.3	4.0	93	395	1873
	10	280.0	3.2	97	463	2061
	15	186.7	2.3	103	492	2359
	20	140.0	1.7	100	538	2597
	25	112.0	1.3	92	593	2797
	30	93.3	1.5	120	700	2973
	40	70.0	1.1	108	700	3272
	50	56.0	0.83	100	700	3524
	60	46.7	0.68	95	700	3745
	80	35.0	0.49	85	700	4122
100	28.0	0.37	74	700	4440	
745	7.5	373.3	5.6	130	560	2210
	10	280.0	4.7	145	703	2433
	15	186.7	3.4	150	727	2785
	20	140.0	2.8	160	872	3065
	25	112.0	2.1	150	980	3302
	30	93.3	2.1	170	980	3509
	40	70.0	1.6	165	980	3862
	50	56.0	1.2	150	980	4160
	60	46.7	1.0	145	980	4421
	80	35.0	0.72	130	980	4865
100	28.0	0.58	120	980	5241	

Unit Size	Ratio	Nominal Output Speed Rev/Min	Input Power kW	Output Torque Nm	Overhung Load Fr1 N	Overhung Load Fr2 N
746	7.5	373.3	8.9	210	715	2446
	10	280.0	7.7	235	900	2692
	15	186.7	6.0	270	1034	3081
	20	140.0	4.4	260	1120	3391
	25	112.0	3.4	250	1270	3653
	30	93.3	3.7	310	1270	3882
	40	70.0	2.6	275	1270	4273
	50	56.0	2.0	265	1270	4603
	60	46.7	1.6	245	1270	4891
	80	35.0	1.2	225	1270	5383
100	28.0	0.9	200	1270	5799	
747	7.5	373.3	14.4	340	950	3090
	10	280.0	12.2	380	1194	3401
	15	186.7	9.3	425	1336	3893
	20	140.0	7.0	420	1485	4285
	25	112.0	5.9	440	1700	4616
	30	93.3	5.7	480	1700	4905
	40	70.0	4.1	460	1700	5399
	50	56.0	3.3	450	1700	5816
	60	46.7	2.7	430	1700	6181
	80	35.0	1.9	380	1700	6803
100	28.0	1.5	350	1700	7328	
748	7.5	373.3	16.6	391	950	3090
	10	280.0	14.1	437	1194	3401
	15	186.7	10.7	489	1337	3893
	20	140.0	8.0	483	1485	4285
	25	112.0	6.8	506	1700	4616
	30	93.3	6.5	552	1700	4905
	40	70.0	4.7	529	1700	5399
	50	56.0	3.7	495	1700	5816
	60	46.7	3.0	473	1700	6181
	80	35.0	2.0	399	1700	6803
100	28.0	1.6	368	1700	7328	
749	7.5	373.3	22.1	520	1190	4042
	10	280.0	18.7	580	1493	4449
	15	186.7	14.7	670	1725	5092
	20	140.0	11.0	660	1912	5605
	25	112.0	9.0	670	2100	6038
	30	93.3	9.0	770	2100	6416
	40	70.0	6.5	730	2100	7062
	50	56.0	5.1	700	2100	7607
	60	46.7	4.0	640	2100	8084
	80	35.0	3.0	590	2100	8897
100	28.0	2.2	520	2100	9584	
750	7.5	373.3	35.7	840	1550	5526
	10	280.0	28.4	890	1848	6082
	15	186.7	19.8	910	1889	6962
	20	140.0	16.1	980	2289	7663
	25	112.0	12.0	890	2494	8254
	30	93.3	10.5	920	2800	8771
	40	70.0	10.6	1200	2800	9654
	50	56.0	8.1	1100	2800	10400
	60	46.7	6.2	990	2800	11051
	80	35.0	4.6	920	2800	12163
100	28.0	3.3	810	2800	13103	

**ALLOWABLE OVERHUNG LOADS**

Units are fitted with input and output bearings of ample proportions to cater for the radial and thrust loads imposed by the gear loads, leaving sufficient capacity for taking overhung loads.

The calculated overhung load should be compared with the value in the selection tables.

These values may be exceeded at lower input speeds or if limited bearing lives are acceptable. In cases where higher overhang load capacities are necessary consult your distributor, quoting details of power, speed, direction of gearbox rotation, angle of application of load, distance of load application from gearbox and acceptable bearing life.

Permissible overhung loads vary according to the direction of rotation. The values tabulated are for the most unfavourable direction with the unit transmitting full rated power and the load applied midway along the shaft extension. Hence they can sometimes be increased for a more favourable direction of rotation, or if the power transmitted is less than the rated capacity of the gear unit, or if the load is applied nearer to the gear unit case. Refer to your Distributor for further details. In any event, the sprocket, gear etc. should be positioned as close as possible to the gear unit case in order to reduce bearing loads and shaft stresses, and to prolong life.

All units will accept 100% momentary overload on stated capacities.

To determine the overhung load when a sprocket, gear or 'V' pulley is fitted to the output shaft, one or the following formulae may be used in the absence of accurate information.

**(1) Calculation on a basis of Torque**

$$\text{Overhung load (N)} = \frac{T \times 1000 \times K}{r}$$

**(2) Calculation on a basis of Power**

$$\text{Overhung load (N)} = \frac{\text{kW} \times 9550 \times 1000 \times K}{n \times r}$$

Where:

- T = Absorbed torque at worm gear output shaft in Nm.
- kW = Absorbed torque at worm gear output shaft in (kW).
- r = Pitch radius of sprocket, gear or 'V' pulley in mm.
- n = Rev/min of worm gear output shaft.
- K = Application factor -
  - 1.00 for a sprocket
  - 1.25 for a gear or timing pulley
  - 1.50 for a 'V' pulley

The same formula can be used to calculate the overhung load on the input shaft, substituting the input torque or kW for the output values.

Overhung loads may be reduced by one of the following methods:

- (1) Increase the diameter of the sprocket, gear or pulley within reasonable limits.
- (2) Mount the sprocket, gear or pulley on a separate shaft, supported on its own bearings and couple to the worm gear output shaft by means of a Fenner shaft coupling.
- (3) Use a special extended output shaft and support the free end with an outrigger bearing.

**Axial Thrust Capacities (N)**

No check or calculation is required for axial loads towards or away from the unit up to 20% of the permissible overhung load. If the axial thrust exceeds these values or if there is a combination of axial thrust loads and overhung loads please refer to your local Authorised Distributor.

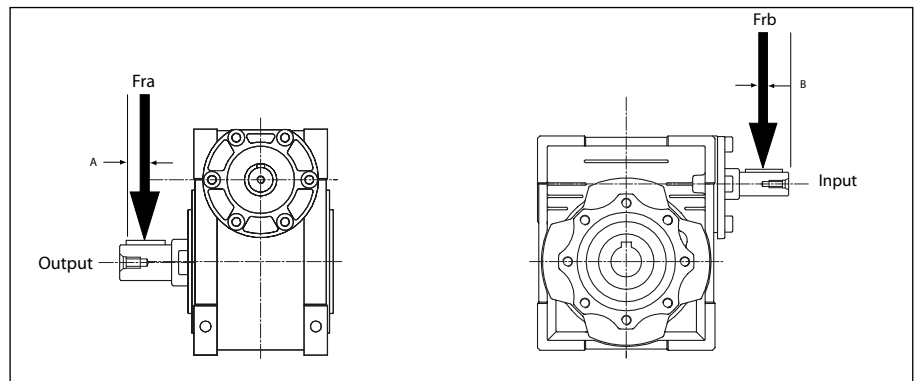
**DISTANCE MIDWAY ALONG SHAFT EXTENSION**

Unit Size	Dimension A (mm)	Dimension B (mm)
740	11.5	-
741	15	10
742	20	11.5
743	25	15
744	25	20
745	30	25
746	40	25
747	40	30
748	40	30
749	40	40
750	41	40

**ALLOWABLE INPUT SHAFT OVERHUNG LOADS Frb (N) @1450 REV/MIN**

Unit Size	Max. Load (N)
740	-
741	210
742	350
743	490
744	700
745	980
746	1270
747	1700
748	1700
749	2100
750	2800

\* For Output Shaft Overhung Load Capacities (Fra) see the relevant selection tables



Output shaft dimensions refer to both motorised and non motorised units.



Satisfactory performance depends on proper installation, lubrication and maintenance. All instructions given in the installation leaflet must be followed carefully.

**Shaft Mounting**

Ensure that the shaft on to which the gear unit is to be mounted and the gear unit bore are clean and free from burrs. Liberally smear the shaft and bore with lubricants to aid assembly and prevent fretting corrosion. Slide the unit on to the driven shaft fit side fitting key. **DO NOT USE TAPER OR TOP FITTING KEY.**

**Foot Mounting**

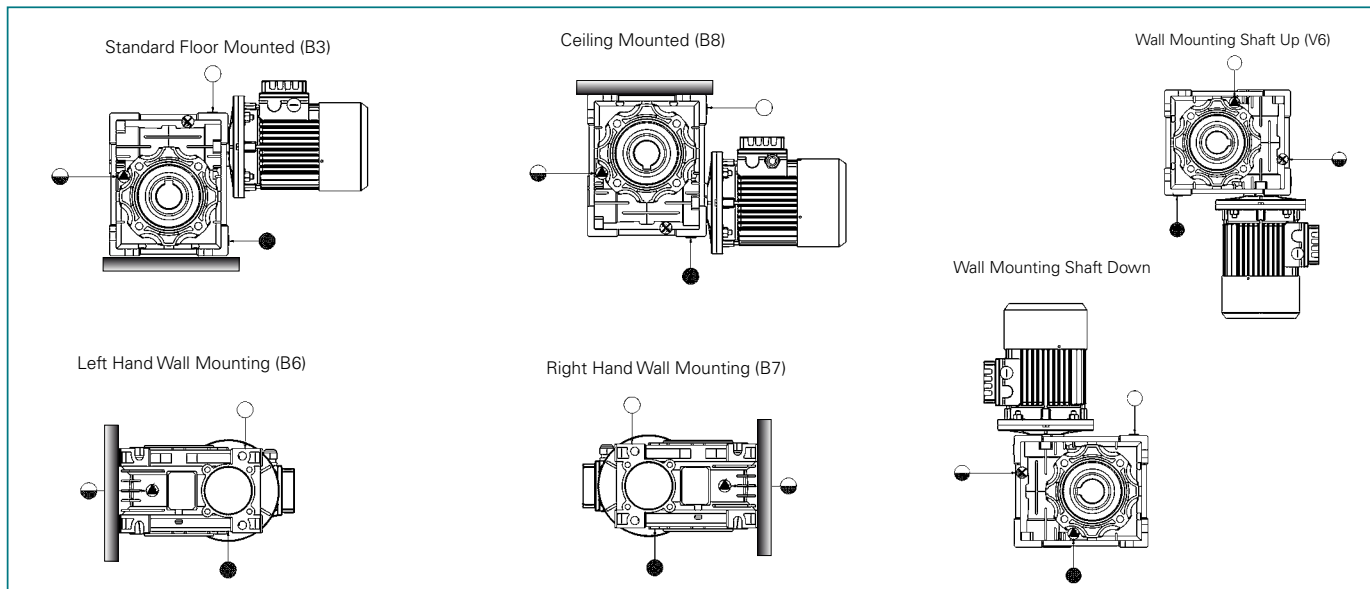
Mount the unit securely to a rigid structure. Fit the output extension shaft as required use flexible couplings such as Fenaflex for shaft to shaft connections and ensure that shaft misalignment is within the couplings capacity. When a pulley or sprocket is fitted to either shaft, mount it as close as possible to the gearcase.

When fitting or removing drive components do not hammer on shaft as this will damage the bearings, Fenner Taper Lock bushes permit easy fixing and dismantling without undue force.

**LUBRICATION CAPACITY**

Unit size	All Positions	Mounting Position	Unit Size		
			748	749	750
740	0.02	B3	3.0	4.5	7.0
741	0.04		2.2	3.3	5.1
742	0.08	B8	2.2	3.3	5.1
743	0.15	B6-B7	2.5	3.5	5.4
744	0.30		3.0	4.5	7.0
745	0.55	V5	3.0	4.5	7.0
746	1.00	V6	2.2	3.3	5.1
747	1.60				

**MOUNTING POSITIONS**



○ Ventilator/Filling Position ● Level Position ● Drain Position

**LUBRICATION**

Sizes 740 to 747 are pre-filled with IP TELIUM VSF 320 a synthetic gear oil suitable for permanent lubrication. They can be mounted in any position. Sizes 745, 746 & 747 should not be installed in the V5 or V6 position without prior consultation.

The synthetic oil used is suitable for ambient temperatures between -25°C and +50°C

Sizes 748, 749 and 750 are pre-filled for mounting position B3 with IP MELLANA OIL 220, a mineral based gear oil. Other mounting positions must be specified on order.

The Mineral oil used is suitable to operate in ambient temperatures between -15°C and +25°C

**Helical Worm Gear Unit**

The helical modules are supplied as a sealed for life unit complete with a long-life synthetic oil, AGIP TELIUM VSF320 and can be mounted in all positions.

The lubrication is separate from that of the worm gear unit.

**Worm Worm Combination Units**

When using a worm worm combination unit both gearboxes are lubricated separately.

Both units are supplied lubricated up to size 747, on sizes above 747 the small unit will be supplied lubricated, the large one not.

Use the mounting position detail below and fill to the required level.

**RECOMMENDED TYPES**

Supplier	Synthetic Oil	Mineral Oil	
	Operating Temp. °C	Operating Temp. °C	
	-25°C to +50°C	-5°C to +40°C	-15°C to +25°C
AGIP	TELIUM VSF 320	BLASIA 460	BLASIA 220
BP	ENERGOL SG-XP320	ENERGOL GR-XP 460	ENERGOL GR-XP 220
CASTROL	ALPHASYN PG320	ALPHA MAX 460	ALPHA MAX 220
ESSO	S220	SPARTAN EP 460	SPARTAN EP 220
MOBIL	GLYGOYLE 30	MOBILGEAR 634	MOBILGEAR 630
SHELL	TIVELA OIL SC320	OMALA OIL 460	OMALA OIL 220

**BREATHERS/MOUNTING POSITIONS**

Sizes 740 to 747 are supplied for operation without breathers, level & drain plugs.

Sizes 748 to 750 are supplied for operation with a breather but are dispatched with a closed transport plug. When the unit is in its operating position it is essential to replace the transport plug with the breather plug (supplied) in the position indicated on the installation leaflet prior to operating the unit.

**MAINTENANCE**

The high quality of Series W ensures that the unit will operate correctly with only the minimum amount of maintenance. Periodically check that the exterior of the assembly is clean, especially the cooling areas; periodically check for any oil leaks especially around the oil seals.

Sizes 740 to 747 are lubricated for life and do not require any special maintenance other than stated above.

Sizes 748 to 750 will require an oil change between 8/10000 hours of use depending on the type of environment and use. Make sure the breather hole in the plug is clean and using the oil window, check for sufficient lubricant. Should it be necessary to top up the lubricant use the same type that is already in the unit or one that is compatible with it. If in doubt we recommend you empty the oil from the gearbox completely and before refilling with new oil, wash out the unit to remove any residue.



**Standard Motor Specification**

Conforming in performance to BS5000 and IEC34-1 in dimensions to BS4999 and IEC72-1 and 2.

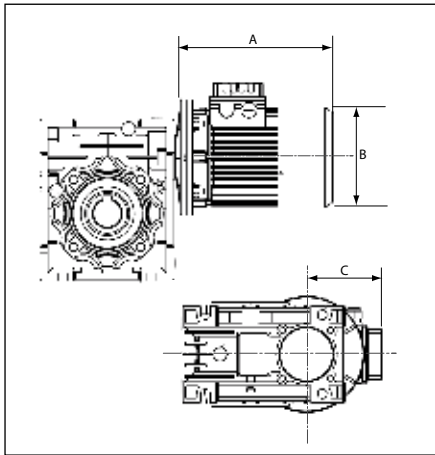
Range mounting, squirrel cage, totally enclosed fan cooled design (TEFC).

**Protection**

IP55, dust and hose proof.

**Insulation**

Class F.

**ELECTRIC MOTORS  
(BS AND IEC SPECIFICATION)****ELECTRIC MOTOR VARIANTS**

All variants of standard IEC frame motors can be fitted to the Fenner gearmotor range. They are also capable of accepting NEMA motor variants as well. Examples of some of the variants and their ninth digit code letter are:-

Code	Motor Type
<b>A</b>	Anti-condensation heaters fitted
<b>B</b>	Backstop Fitted
<b>C</b>	Cast Iron motor
<b>D</b>	Brook Motor Fitted
<b>E</b>	Fitted with Encoder
<b>F</b>	Flameproof motor
<b>G</b>	Fitted with Oil seal
<b>H</b>	Class H Insulation
<b>I</b>	IP65 enclosure
<b>J</b>	Inverter-motor
<b>K</b>	Fitted with Tacho-generator
<b>L</b>	Clutch/Brake unit Fitted
<b>M</b>	Brake motor
<b>N</b>	Brake motor with Hand Release
<b>P</b>	Premium Efficiency Motor Fitted (EFF1)
<b>Q</b>	Refer To Original Quote - Special
<b>R</b>	Fitted with Brook ARGUS Cast Iron motor
<b>S</b>	Single Phase motor
<b>T</b>	Fitted with Thermistors
<b>V</b>	Special Voltage
<b>W</b>	WIMES Spec motor (Water Industry)
<b>X</b>	Fitted with Variator
<b>Z</b>	Fitted with Force Vent unit
<b>5</b>	ExN Non-Sparking motor
<b>8</b>	Two-speed motor
<b>9</b>	Special Feature

Standard clutch brake modules with IEC flanges can be fitted between motor and gearhead. Variable speed packages are available, either belt variators or mechanical disc variators. For any of these combinations please contact your local Authorised Distributor.

**2 POLE - 3000 REV/MIN**

Motor Code *	Frame Size	Output		Speed rev/min	Dimensions (mm)			Mass kg
		kW	h.p.		A	B	C	
43	56A	0.09	0.12	2755	163	110	85	4
47	56B	0.12	0.16	2755	163	110	85	4
01	63	0.18	0.24	2755	193	124	113	7
03	63	0.25	0.33	2790	193	124	113	7
09	71	0.37	0.50	2825	218	139	121	8
10	71	0.55	0.75	2820	218	139	121	9
19	80	0.75	1.00	2810	236	157	130	12
20	80	1.10	1.50	2825	236	157	130	13
26	90S/L	1.50	2.00	2880	280	177	150	20
29	90S/L	2.20	3.00	2850	280	177	150	22
39	100L	3.00	4.00	2890	316	198	160	26
44	112M	4.00	5.50	2900	333	235	180	39

**4 POLE - 1500 REV/MIN**

Motor Code *	Frame Size	Output		Speed rev/min	Dimensions (mm)			Mass kg
		kW	h.p.		A	B	C	
41	56A	0.06	0.08	1400	163	110	85	4
14	56B	0.09	0.12	1400	163	110	85	4
48	63	0.12	0.16	1400	193	124	113	8
2	63	0.18	0.25	1410	193	124	113	8
6	71	0.25	0.33	1420	218	139	121	9
8	71	0.37	0.50	1405	218	139	121	9
81	71	0.55	0.75	1410	250	159	111	10
16	80	0.55	0.75	1440	236	157	130	12
82	71	0.75	1.00	1410	250	159	111	10
18	80	0.75	1.00	1430	236	157	130	13
24	90S/L	1.10	1.50	1445	280	177	150	20
28	90S/L	1.50	2.00	1430	280	177	150	23
36	100L	2.20	3.00	1430	316	198	160	25
38	100L	3.00	4.00	1420	316	198	160	29
46	112M	4.00	5.50	1440	333	235	180	44
54	132S	5.50	7.50	1470	410	274	207	58
56	132M	7.50	10.00	1470	410	274	207	60
66	160MA	11.00	15.00	1450	520	330	250	134
68	160LA	15.00	20.00	1455	565	330	250	152

**6 POLE - 1000 REV/MIN**

Motor Code *	Frame Size	Output		Speed rev/min	Dimensions (mm)			Mass kg
		kW	h/p		A	B	C	
42	56B	0.06	0.08	900	163	110	85	4
15	63A	0.09	0.12	900	197	122	90	4.3
13	63	0.12	0.16	915	193	124	113	8
5	71	0.18	0.25	890	218	139	121	10
7	71	0.25	0.33	890	218	139	121	10
12	80	0.37	0.50	925	236	157	130	12
17	80	0.55	0.75	920	236	157	130	13
23	90S/L	0.75	1.00	930	280	177	150	21
27	90S/L	1.10	1.50	935	280	177	150	23
37	100L	1.50	2.00	950	316	198	160	24
45	112M	2.20	3.00	950	333	235	180	34
53	132S	3.00	4.00	965	410	274	207	47
55	132M	4.00	5.50	965	410	274	207	56

Dimensions A, B and C are based on the standard motor normally supplied, for details when another type of motor is required consult your local Authorised Distributor.

Starting torque, starting current and current at various voltages vary depending on the type of unit. Consult your local Authorised Distributor.

\* Last two digits of the complete eight digit ordering code from the selection tables.