(a) Absorbed Power

Calculate absorbed power (kW) to drive designated machine P.

(b) Absorbed Torque

Determine the absorbed torque and speed required by the driven machine. If the required output torque is not known it can be calculated using the following formula:

$$T = \frac{P \times 9550}{N^2}$$

T = required output torque (Nm)
P = absorbed power (kW)
N^2 = machine speed (rev/min)

(c) 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 in excess of 10 times per day then multiply factor Fm by Factor Fs from table 2.

(d) Motor Power

Refer to the selection tables and choose motor power closest above the required absorbed power then find the nearest available output speed to that required. Ensure it has sufficient output torque, if not, move to next motor size.

(e) Unit Selection

At the selected output speed read downwards to the first unit with an output torque in excess of the absorbed torque from step (b).

Read across to column 3 and check if the maximum service factor exceeds the value from step (c).

If maximum service factor equals or exceeds the value from step (c) read across to unit selection column, this gives the relevant product code.

If the value from step (c) exceeds the maximum service factor read down to the first service factor to equal or exceed the value from step (c) and read across to the unit selection column.

(f) 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 188 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.

(g) Shaft Mounted

From the relevant dimension pages determine the required machine shaft diameter.

NOTE:

(i) The output speeds in the selection table assume nominal motor speeds. In order to determine the exact output speeds of the unit refer to the motor details on page 251.

(ii) For exact ratios of series C units refer to page 186.

EXAMPLE

A Series C motorised shaft mounted gear unit is required for a uniformly loaded conveyor which absorbs 5.7 kW at 46 rev/min when running for up to 16 hours/day during which it stops and starts 8 times.

(a) Absorbed power is 5.7kW

(b) Torque = $\frac{5.7 \times 9550}{46}$ = 1183 Nm

(c) From table 1 service factor is 1.25.

The machine stops and starts only 8 times a day therefore an additional stop/start factor is not required.

(d) Closest motor power above 5.7kW is 7.5kW and the nearest available speed is 46 rev/min.

(e) First unit with output torque in excess of 1183 Nm is capable of 1424 Nm and has a maximum service factor of 1.37.

Service factor exceeds 1.25 from step (c) therefore read across to unit selection column for product code, 875A1156.

(f) From column 5 the overhung load capacity is 37565 N. If an indirect drive is fitted calculate the load using the formula on page 188 and compare it with this value.

(g) Shaft diameter needs to be 70 mm.

TABLE 1 - MECHANICAL SERVICE FACTOR FM

Types of Driven Machine	Operational hours per day		
	under 3	3 to 10	over 10
Uniform Loads 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	1.25
Moderate Shock Loads 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	1.25	1.50
Heavy Shock Loads Brick Presses Briquetting Machines Conveyors – reciprocating and shaker Crushers Feeders – reciprocating Hammer Mills Pumps – reciprocating, 1 or 2 cylinders Rubber Masticators Screens – vibrating	1.50	1.75	2.00

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

*** See page 252 for notes on reducing service factors**

TABLE 2 - STARTING SERVICE FACTOR FS

	Start/stops per hour					
	Up to 1	5	10	40	60	>200
Factor Fs	1.00	1.03	1.06	1.10	1.15	1.20

Fenner Series C Motorised Selection

Bold print denotes triple reduction gearbox. Higher ratios available—consult your local Authorised Distributor

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
0.18KW MOTOR				
158	8	9.03	870A0102	2858
117	12	7.30	870A0202	2857
103	13	6.67	870A0302	2857
91	15	6.09	870A0402	2857
83	14	5.83	870A0502	2856
71	19	5.11	870A0602	2856
66	20	4.84	870A0702	2856
62	19	4.77	870A0802	2856
54	22	4.36	870A0902	2855
48	25	4.02	870A1002	2855
40	33	3.38	870A1102	2844
37	31	3.39	870A1202	2844
35	34	3.22	870A1302	2844
30	44	2.72	870A1402	2841
26	52	2.44	870A1502	2831
24	47	2.51	870A1602	2841
21	54	2.29	870A1702	2830
18	71	2.00	870A1802	2825
18	72	2.84	871A1802	5284
17	79	1.85	870A1902	2818
17	80	2.39	871A1902	5284
16	71	1.94	870A2002	2825
16	73	3.11	871A2002	5287
13	82	1.73	870A2102	2816
13	84	2.77	871A2102	5285
12	108	1.20	870A2202	2801
12	108	1.20	871A2202	5280
12	107	3.23	872A2202	7438
11	122	1.03	870A2302	2796
11	123	1.03	871A2302	5278
11	121	3.19	872A2302	7438
10	113	1.32	870A2402	2801
10	116	1.32	871A2402	5278
8.7	124	1.20	870A2502	2796
8.7	127	2.02	871A2502	5280
8.6	133	3.61	872A2502	7436
7.2	176	1.13	**871A4502**	5278
6.8	153	0.97	**870A4602**	2780
6.8	157	1.75	**871A4602**	5271
6.5	174	2.76	872A2602	7433
6.3	168	0.88	870A2602	2770
6.3	172	1.20	871A2602	5271
6.0	178	1.55	**871A4702**	5271
5.7	196	2.45	872A2702	7437
5.7	206	3.71	873A2702	11852
5.5	194	1.03	871A2702	5261
5.2	265	2.89	**873A4802**	11830
4.7	273	1.42	**872A4902**	7430
4.5	237	1.17	**871A5002**	5250
4.5	297	2.57	**873A4902**	11728
4.4	246	1.95	**872A5002**	7432
4.2	275	2.78	**873A5002**	11828
4.0	330	3.84	**874A5102**	28143
3.8	275	1.00	**871A5102**	5240
3.7	286	1.67	**872A5102**	7428
3.7	297	2.57	**873A5102**	11828
3.7	384	3.49	**874A5202**	27930
3.4	374	1.02	**872A5202**	7421
3.4	390	1.96	**873A5202**	11704
3.3	429	3.12	**875A5302**	29161
3.0	425	0.90	**872A5302**	7416
3.0	440	1.74	**873A5302**	11661
2.7	394	1.21	**872A5402**	7421
2.7	419	1.83	**873A5402**	11707
2.7	479	2.65	**874A5402**	29152
2.4	435	1.10	**872A5502**	7420
2.4	469	1.63	**873A5502**	11707
2.4	522	2.43	**874A5502**	29152
1.8	610	1.25	**873A5602**	11600
1.8	701	1.80	**874A5602**	29130
1.6	688	1.11	**873A5702**	11500
1.6	784	1.61	**874A5702**	29116

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
0.25KW MOTOR				
159	12	6.64	870A0106	2856
118	16	5.37	870A0206	2855
104	18	4.90	870A0306	2854
92	21	4.48	870A0406	2854
84	20	4.29	870A0506	2853
72	27	3.76	870A0606	2852
66	28	3.56	870A0706	2852
62	27	3.51	870A0806	2852
54	31	3.21	870A0906	2849
48	34	2.95	870A1006	2849
41	46	2.49	870A1106	2837
38	43	2.49	870A1206	2837
38	44	3.98	871A1206	5286
35	47	2.37	870A1306	2837
35	47	3.78	871A1306	5286
30	62	2.00	870A1406	2831
30	61	3.35	871A1406	5285
26	72	1.79	870A1506	2821
26	71	2.92	871A1506	5281
24	66	1.85	870A1606	2831
24	66	2.96	871A1606	5283
21	75	1.69	870A1706	2818
21	74	2.70	871A1706	5281
19	98	2.09	871A1806	5277
19	99	3.83	872A1806	7437
18	99	1.47	870A1806	2808
17	110	1.36	870A1906	2804
17	109	1.76	871A1906	5277
17	111	3.45	872A1906	7436
16	99	1.43	870A2006	2808
16	99	2.29	871A2006	5284
13	115	1.27	870A2106	2800
13	114	2.04	871A2106	5279
13	137	2.91	**872A4006**	7433
12	149	0.88	870A2206	2780
12	151	0.98	**870A4106**	2780
12	147	0.88	871A2206	5269
12	154	1.31	**871A4106**	5268
12	145	2.70	872A2206	7435
12	156	2.55	**872A4106**	7430
11	138	1.07	**870A4206**	2790
11	142	1.68	**871A4206**	5271
11	164	2.34	872A2306	7436
11	151	3.25	**872A4206**	7427
11	173	3.05	873A2306	11838
10	151	0.97	870A2406	2780
10	148	1.00	**870A4306**	2780
10	156	1.61	871A2406	5269
10	162	2.97	872A2406	7436
8.9	169	0.88	870A2506	2770
8.7	172	1.46	871A2506	5264
8.7	181	2.65	872A2506	7431
8.2	234	3.27	**873A4406**	11817
7.6	253	3.02	**873A4506**	11796
7.5	243	1.61	**872A4506**	7427
7.0	222	2.16	**872A4606**	7430
6.5	252	3.03	873A2606	11817
6.3	233	0.88	871A2606	5250
6.3	235	2.04	872A2606	7425
5.7	265	1.82	872A2706	7434
5.7	280	2.73	873A2706	11796
5.6	354	3.78	**874A4806**	29152
5.2	335	1.16	**872A4806**	7424
5.2	360	2.12	**873A4806**	11748
5.1	386	3.46	**874A4906**	29143
4.7	372	1.04	**872A4906**	7419
4.7	404	1.89	**873A4906**	11644
4.4	335	1.44	**872A5006**	7424
4.4	374	2.05	**873A5006**	11744
4.4	422	3.01	**874A5006**	28013
4.1	449	2.82	**874A5106**	26909
3.8	390	1.24	**872A5106**	7214
3.8	404	1.89	**873A5106**	11744

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
3.7	522	2.56	**874A5206**	26449
3.5	530	1.44	**873A5206**	11592
3.3	584	2.29	**874A5306**	29117
3.0	599	1.28	**873A5306**	11500
2.8	535	0.90	**872A5406**	7400
2.8	651	1.95	**874A5406**	29096
2.7	569	1.34	**873A5406**	11600
2.6	710	1.79	**874A5506**	29096
2.4	637	1.20	**873A5506**	11600
1.9	953	1.32	**874A5606**	29048
1.7	1066	1.18	**874A5706**	29018
0.37KW MOTOR				
161	18	4.49	870A0108	2852
119	24	3.63	870A0208	2850
105	27	3.31	870A0308	2849
92	30	3.03	870A0408	2849
84	30	2.90	870A0508	2847
72	39	2.54	870A0608	2844
67	41	2.41	870A0708	2844
63	39	2.37	870A0808	2844
63	41	3.78	871A0808	5286
56	45	2.17	870A0908	2840
56	46	3.47	871A0908	5284
49	50	2.00	870A1008	2840
49	52	3.21	871A1008	5284
41	67	1.68	870A1108	2826
41	68	2.82	871A1108	5280
38	63	1.68	870A1208	2826
38	65	2.69	871A1208	5282
35	68	1.60	870A1308	2826
35	70	2.55	871A1308	5282
30	90	1.35	870A1408	2815
30	91	2.26	871A1408	5282
26	104	1.21	870A1508	2805
26	105	1.97	871A1508	5274
25	96	1.25	870A1608	2815
25	98	2.00	871A1608	5278
21	108	1.14	870A1708	2799
21	110	1.82	871A1708	5274
19	143	0.99	870A1808	2780
19	145	1.41	871A1808	5266
19	147	2.59	872A1808	7434
17	159	0.92	870A1908	2780
17	161	1.19	871A1908	5266
17	165	2.33	872A1908	7432
17	171	3.55	873A1908	11909
16	143	0.97	870A2008	2780
16	146	1.54	871A2008	5280
16	159	3.00	872A2008	74342
14	169	1.38	871A2108	5270
14	171	2.82	872A2108	7429
13	200	1.02	**871A4008**	5255
13	215	1.82	872A2208	7432
13	204	1.96	**872A4008**	7427
13	230	2.74	873A2208	11797
12	228	0.89	**871A4108**	5249
12	232	1.72	**872A4108**	7422
11	210	1.14	**871A4208**	5255
11	243	1.58	872A2308	7434
11	219	2.19	**872A4208**	7424
11	257	2.06	873A2308	11780
10	232	1.09	871A2408	5250
10	225	1.09	**871A4308**	5250
10	240	2.00	**872A2408**	7434
10	235	2.05	**872A4308**	7422
10	257	2.97	873A2408	11780
8.9	279	2.74	873A2508	11780
8.8	268	1.79	872A2508	7424
8.8	340	3.94	**874A4408**	29139
8.7	255	1.00	871A2508	5240
8.7	309	1.28	**872A4408**	7416
8.2	346	2.21	**873A4408**	11741
8.2	361	3.71	**874A4508**	29145

Fenner Series C Motorised Selection

Bold print denotes triple reduction gearbox. Higher ratios available—consult your local Authorised Distributor

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
7.5	360	1.09	**872A4508**	7416
7.5	375	2.04	**873A4508**	11701
7.2	389	3.05	**874A4608**	29145
7.0	316	0.87	**871A4608**	5230
7.0	329	1.46	**872A4608**	7422
6.5	349	1.38	872A2608	7412
6.5	373	2.05	873A2608	11741
6.2	449	2.71	**874A4708**	29127
6.1	375	1.29	**872A4708**	7416
5.8	392	1.23	872A2708	7430
5.8	415	1.84	873A2708	11701
5.6	523	2.56	**874A4808**	29109
5.2	533	1.44	**873A4808**	11609
5.1	572	2.34	**874A4908**	29091
4.7	599	1.28	**873A4908**	11500
4.5	496	0.97	**872A5008**	7410
4.4	624	2.03	**874A5008**	26917
4.3	553	1.38	**873A5008**	11600
4.1	665	1.91	**874A5108**	24796
3.9	577	0.84	**872A5108**	7390
3.9	599	1.28	**873A5108**	11600
3.7	773	1.73	**874A5208**	23910
3.5	784	0.98	**873A5208**	11400
3.3	864	1.55	**874A5308**	29041
2.8	963	1.32	**874A5408**	29001
2.6	1051	1.21	**874A5508**	29001
1.9	1411	0.89	**874A5808**	28909
0.55KW MOTOR				
164	26	3.06	870A0116	2847
121	35	2.47	870A0216	2844
107	39	2.26	870A0316	2841
107	40	3.76	871A0316	5283
94	45	2.07	870A0416	2841
94	46	3.45	871A0416	5285
86	44	1.98	870A0516	2838
86	45	3.17	871A0516	5283
74	57	1.73	870A0616	2833
74	58	2.88	871A0616	5283
68	61	1.64	870A0716	2833
68	62	2.74	871A0716	5283
64	58	1.62	870A0816	2833
64	60	2.58	871A0816	5283
56	66	1.48	870A0916	2825
56	67	2.37	871A0916	5280
50	74	1.36	870A1016	2825
50	76	2.19	871A1016	5280
42	99	3.44	872A1116	7440
42	98	1.15	870A1116	2809
42	99	1.92	871A1116	5274
40	98	3.85	872A1216	7440
39	93	1.15	870A1216	2809
39	95	1.83	871A1216	5276
36	100	1.09	870A1316	2809
36	102	1.74	871A1316	5276
36	110	3.51	872A1316	7440
31	132	0.92	870A1416	2890
31	133	1.54	871A1416	5276
31	141	2.71	872A1416	7440
27	153	0.83	870A1516	2880
27	155	1.35	871A1516	5262
27	152	2.56	872A1516	7440
25	140	0.85	870A1616	2890
25	143	1.36	871A1616	5269
25	147	2.81	872A1616	7440
21	162	1.24	871A1716	5262
21	165	2.58	872A1716	7440
21	180	3.99	873A1716	11896
19	213	0.97	871A1816	5250
19	215	1.76	872A1816	7431
19	230	3.31	873A1816	11844
19	243	3.85	874A1916	29200
17	236	0.81	871A1916	5250
17	241	1.59	872A1916	7426

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
17	251	2.42	873A1916	11844
17	271	3.79	874A2016	29200
15	233	2.05	872A2016	7426
15	250	3.06	873A2016	11844
15	303	3.45	874A2116	29200
14	250	1.92	872A2116	7422
14	265	2.88	873A2116	11844
14	330	2.94	874A2216	29200
13	316	1.24	872A2216	7426
13	338	1.87	873A2216	11724
11	357	1.08	872A2316	7430
11	376	1.41	873A2316	11695
11	366	2.64	874A2316	29200
10	352	1.37	872A2416	7430
10	377	2.03	873A2416	11695
10	413	2.71	874A2416	29200
9	394	1.22	872A2516	7412
9	409	1.87	873A2516	11695
9	454	2.51	874A2516	29200
8.3	529	2.53	**874A4516**	29106
7.3	571	2.08	**874A4616**	29106
6.7	511	0.94	872A2616	7392
6.7	548	1.40	873A2616	11626
6.7	612	1.96	874A2616	29200
6.3	658	1.85	**874A4716**	29075
6	609	1.26	873A2716	11558
6	678	1.80	874A2716	29200
6	699	3.61	875A2716	41900
5.5	782	0.98	**873A4816**	11400
5.5	767	1.74	**874A4816**	29044
5	838	1.60	**874A4916**	29013
4.3	915	1.39	**874A5016**	25273
4	975	1.30	**874A5116**	21625
3.7	1133	1.18	**874A5216**	20101
3.3	1266	1.06	**874A5316**	28926
2.8	1412	0.90	**874A5416**	28858
2.6	1540	0.82	**874A5516**	28858
0.75KW MOTOR				
165	36	2.24	870A0118	2841
165	37	3.70	871A0118	5287
119	48	1.81	870A0218	2837
119	49	3.01	871A0218	5283
105	54	1.65	870A0318	2832
105	56	2.75	871A0318	5283
93	62	1.51	870A0418	2832
93	62	2.52	871A0418	5280
85	60	1.44	870A0518	2827
85	62	2.32	871A0518	5280
72	78	1.27	870A0618	2821
72	79	2.11	871A0618	5280
72	79	3.57	872A0618	7440
67	84	1.20	870A0718	2821
67	85	2.00	871A0718	5280
67	89	3.30	872A0718	7439
63	80	1.18	870A0818	2821
63	82	1.89	871A0818	5280
63	87	3.94	872A0818	7439
55	90	1.08	870A0918	2810
55	93	1.73	871A0918	5276
55	95	3.68	872A0918	7439
49	101	1.00	870A1018	2810
49	104	1.60	871A1018	5276
49	107	3.37	872A1018	7438
42	134	0.84	870A1118	2790
42	136	1.41	871A1118	5267
42	135	2.51	872A1118	7437
39	127	0.84	870A1218	2790
39	131	1.34	871A1218	5270
39	134	2.81	872A1218	7437
35	140	1.27	871A1318	5270
35	151	2.56	872A1318	7437
30	182	1.13	871A1418	5270
30	193	1.98	872A1418	7437

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
30	205	3.38	873A1418	11868
26	212	0.98	871A1518	5250
26	208	1.87	872A1518	7435
26	218	3.24	873A1518	11848
26	222	3.96	874A1518	29187
25	196	1.00	871A1618	5260
25	201	2.06	872A1618	7435
25	215	3.24	873A1618	11878
22	222	0.91	871A1718	5250
22	226	1.89	872A1718	7433
22	247	2.91	873A1718	11848
22	262	3.70	874A1718	29182
19	295	1.29	872A1818	7427
19	314	2.42	873A1818	11771
19	304	3.04	874A1818	29182
19	333	2.81	874A1918	29176
17	330	1.16	872A1918	7420
17	344	1.77	873A1918	11771
15	319	1.50	872A2018	7420
15	342	2.24	873A2018	11771
15	371	2.77	874A2018	29175
14	343	1.41	872A2118	7414
14	363	2.11	873A2118	11771
14	415	2.52	874A2118	29175
13	432	0.91	872A2218	7420
13	409	0.98	**872A4018**	7407
13	462	1.37	873A2218	11642
13	452	2.15	874A2218	29175
12	465	0.86	**872A4118**	7395
11	440	1.09	**872A4218**	7401
11	515	1.03	873A2318	11600
11	516	1.64	**873A4218**	11690
11	502	1.93	874A2318	29163
10	472	1.02	**872A4318**	7395
10	516	1.48	873A2418	11600
10	566	1.98	874A2418	29157
10	578	3.99	875A2418	41882
9	539	0.89	872A2518	7400
9	560	1.37	873A2518	11600
9	621	1.83	874A2518	29157
9	633	3.71	875A2518	41883
8	710	1.10	**873A4418**	11500
8	725	1.85	**874A4518**	29603
7	749	1.02	873A2618	11500
7	700	1.09	**873A4618**	11500
7	838	1.43	874A2618	29127
7	836	2.95	875A2618	41867
6	833	0.92	873A2718	11500
6	928	1.31	874A2718	29090
6	957	2.64	875A2718	41875
5	1050	1.28	**874A4818**	28971
4	1252	1.01	**874A5018**	23447
3.5	1550	0.86	**874A5218**	15869

Fenner Series C Motorised Selection

Bold print denotes triple reduction gearbox. Higher ratios available—consult your local Authorised Distributor

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
1.1KW MOTOR				
165	53	1.52	870A0124	2831
165	54	2.51	871A0124	5286
165	53	3.88	872A0124	7440
120	71	1.23	870A0224	2824
120	72	2.04	871A0224	5279
120	74	3.20	872A0224	7440
105	80	1.12	870A0324	2817
105	82	1.87	871A0324	5280
105	81	3.02	872A0324	7440
93	91	1.03	870A0424	2817
93	92	1.71	871A0424	5275
93	92	2.80	872A0424	7438
85	88	0.98	870A0524	2810
85	91	1.57	871A0524	5275
85	93	3.41	872A0524	7440
72	115	0.86	870A0624	2800
72	117	1.43	871A0624	5275
72	116	2.42	872A0624	7440
68	123	0.82	870A0724	2800
68	125	1.36	871A0724	5275
68	131	2.25	872A0724	7437
68	137	3.86	873A0724	11944
64	117	0.80	870A0824	2800
64	121	1.28	871A0824	5275
64	128	2.68	872A0824	7437
55	136	1.18	871A0924	5268
55	140	2.50	872A0924	7437
55	149	3.97	873A0924	11944
48	153	1.09	871A1024	5268
48	158	2.29	872A1024	7435
48	167	3.65	873A1024	11936
41	201	0.95	871A1124	5254
41	199	1.71	872A1124	7433
41	216	2.88	873A1124	11820
38	193	0.91	871A1224	5260
38	197	1.91	872A1224	7433
38	208	3.05	873A1224	11836
34	206	0.87	871A1324	5260
34	222	1.74	872A1324	7433
34	235	2.77	873A1324	11832
30	284	1.34	872A1424	7434
30	302	2.30	873A1424	11795
30	290	3.00	874A1424	29166
27	307	1.27	872A1524	7428
27	322	2.20	873A1524	11764
27	327	2.69	874A1524	29166
25	297	1.40	872A1624	7428
25	317	2.20	873A1624	11811
25	338	2.79	874A1624	29168
22	333	1.28	872A1724	7422
22	364	1.98	873A1724	11764
22	386	2.51	874A1724	29152
19	434	0.88	872A1824	7420
19	463	1.64	873A1824	11644
19	448	2.07	874A1824	29152
17	506	1.20	873A1924	11644
17	490	1.91	874A1924	29136
15	470	1.02	872A2024	7410
15	503	1.52	873A2024	11644
15	547	1.88	874A2024	29133
15	546	3.88	875A2024	41877
14	504	0.95	872A2124	7400
14	534	1.43	873A2124	11644
14	612	1.71	874A2124	29133
14	621	2.16	**874A4024**	29097
14	612	3.53	875A2124	41884
12	680	0.93	873A2224	11500
12	665	1.46	874A2224	29133
12	718	1.87	**874A4124**	29029
12	756	3.77	875A2324	41868
11	687	1.11	**873A4224**	11500
11	739	1.31	874A2324	29100
11	749	1.47	**874A4224**	29087
10	773	0.99	**873A4324**	11500
10	833	1.34	874A2424	29084
10	851	2.71	875A2424	41852
9	914	1.25	874A2524	29084
9	932	2.52	875A2524	41855
7	1234	0.97	874A2624	29000
7	1230	2.01	875A2624	41810
6	1366	0.89	874A2724	28900
6	1409	1.79	875A2724	41833
6	1485	3.76	876A2724	53800
1.5KW MOTOR				
162	72	1.12	870A0128	2820
162	73	1.85	871A0128	5285
162	72	2.87	872A0128	7440
120	96	0.91	870A0228	2810
120	98	1.51	871A0228	5275
120	100	2.36	872A0228	7440
105	109	0.83	870A0328	2800
105	111	1.38	871A0328	5276
105	110	2.23	872A0328	7440
105	116	3.82	873A0328	11945
93	125	1.27	871A0428	5270
93	125	2.07	872A0428	7437
93	130	3.56	873A0428	11923
86	123	1.16	871A0528	5270
86	126	2.52	872A0528	7440
86	131	3.94	873A0528	11942
74	158	1.06	871A0628	5270
74	157	1.79	872A0628	7440
74	164	3.08	873A0628	11904
67	170	1.01	871A0728	5270
67	177	1.66	872A0728	7436
67	186	2.85	873A0728	11904
63	164	0.95	871A0828	5270
63	174	1.98	872A0828	7436
63	182	3.18	873A0828	11904
56	185	0.87	871A0928	5260
56	190	1.85	872A0928	7436
56	202	2.93	873A0928	11904
49	207	0.80	871A1028	5260
49	214	1.69	872A1028	7432
49	226	2.70	873A1028	11889
43	270	1.26	872A1128	7428
43	292	2.13	873A1128	11762
43	278	2.85	874A1128	28940
39	268	1.41	872A1228	7428
39	282	2.25	873A1228	11789
34	301	1.29	872A1328	7428
34	318	2.04	873A1328	11783
30	384	0.99	872A1428	7430
30	409	1.70	873A1428	11712
30	393	2.21	874A1428	29142
28	415	0.94	872A1528	7420
28	436	1.63	873A1528	11668
28	443	1.98	874A1528	29142
25	402	1.03	872A1628	7420
25	429	1.63	873A1628	11734
25	458	2.06	874A1628	29144
22	451	0.95	872A1728	7410
22	493	1.46	873A1728	11668
22	523	1.85	874A1728	29117
20	627	1.21	873A1828	11500
20	606	1.53	874A1828	29117
18	685	0.89	873A1928	11500
18	663	1.41	874A1928	29089
18	677	3.78	875A1928	41845
16	682	1.12	873A2028	11500
16	740	1.39	874A2028	29084
16	739	2.87	875A2028	41861
14	724	1.06	873A2128	11500
14	829	1.27	874A2128	29084
14	841	1.59	874A4028	29056
14	829	2.60	**875A2128**	41872
13	901	1.08	874A2228	29084
13	897	3.08	875A2228	41872
12	1000	0.97	874A2328	29027
12	972	1.38	**874A4128**	28960
12	1024	2.78	875A2328	41844
11	1014	1.08	**874A4228**	29006
10	1128	0.99	874A2428	29000
10	1152	2.00	875A2428	41817
9	1238	0.92	874A2528	29000
9	1262	1.86	875A2528	41822
8	1445	0.93	**874A4528**	28900
6.5	1666	1.48	875A2628	41744
6.5	1803	3.09	876A2628	53736
5.6	1908	1.33	875A2728	41784
5.6	2011	2.77	876A2728	53727
2.2KW MOTOR				
165	107	1.27	871A0136	5282
165	106	1.96	872A0136	7440
165	109	3.40	873A0136	11928
121	144	1.03	871A0236	5268
121	147	1.62	872A0236	7440
121	152	2.80	873A0236	11905
110	163	0.94	871A0336	5270
110	161	1.53	872A0336	7440
110	170	2.61	873A0336	11905
97	183	0.87	871A0436	5260
97	182	1.42	872A0436	7435
97	191	2.44	873A0436	11866
88	185	1.72	872A0536	7440
88	191	2.69	873A0536	11900
88	205	3.49	874A0536	27500
76	230	1.22	872A0636	7440
76	240	2.11	873A0636	11833
76	237	3.70	874A0636	28200
67	259	1.13	872A0736	7433
67	272	1.95	873A0736	11833
67	269	3.42	874A0736	29200
62	254	1.35	872A0836	7433
62	266	2.18	873A0836	11833
62	282	2.77	874A0836	29200
57	278	1.26	872A0936	7433
57	296	2.01	873A0936	11833
57	315	2.54	874A0936	29200
50	312	1.16	872A1036	7426
50	331	1.84	873A1036	11808
50	347	2.37	874A1036	29200
43	395	0.86	872A1136	7420
43	427	1.46	873A1136	11660
43	406	1.95	874A1136	28748
40	391	0.96	872A1236	7420
40	413	1.54	873A1236	11708
40	448	1.94	874A1236	29200
40	453	3.97	875A1236	41900
35	440	0.88	872A1336	7420
35	465	1.40	873A1336	11697
35	507	1.76	874A1336	29200
35	506	3.64	875A1336	41900
30	598	1.16	873A1436	11566
30	575	1.51	874A1436	29100
30	576	3.77	875A1436	41063
28	637	1.11	873A1536	11500
28	648	1.36	874A1536	29100
28	646	3.48	875A1536	41638
25	627	1.11	873A1636	11600
25	670	1.41	874A1636	29104
25	690	2.84	875A1636	41900
22	720	1.00	873A1736	11500
22	764	1.27	874A1736	29056
22	797	2.52	875A1736	41900
20	886	1.05	874A1836	29056
20	901	2.76	875A1836	41828
18	970	0.96	874A1936	29008
18	989	2.59	875A1936	41805

Fenner Series C Motorised Selection

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Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
16	1082	0.95	874A2036	29000
16	1081	1.96	875A2036	41833
15	1211	1.78	875A2136	41852
14	1211	0.87	874A2136	29000
14	1229	1.09	**874A4036**	28983
14	1311	2.10	875A2236	41852
14	1280	3.79	876A2136	53722
13	1376	3.23	876A2236	53731
12	1421	0.94	**874A4136**	28838
12	1497	1.90	875A2336	41804
12	1539	2.92	876A2336	53714
10	1684	1.37	875A2436	41756
10	1772	2.98	876A2436	53696
9	1845	1.27	875A2536	41765
9	1950	2.78	876A2536	53679
7	2435	1.01	875A2636	41630
7	2635	2.12	876A2636	53625
6	2789	0.91	875A2736	41700
6	2939	1.90	876A2736	53600
4	3876	1.44	876A2645	53443
4	4064	2.17	877A2645	87347
3.0KW MOTOR				
171	147	0.93	871A0138	5280
171	145	1.44	872A0138	7440
171	149	2.50	873A0138	11894
123	200	1.19	872A0238	7440
123	208	2.05	873A0238	11858
123	201	3.64	874A0238	24654
116	220	1.12	872A0338	7440
116	232	1.92	873A0338	11858
116	227	3.37	874A0338	25318
100	249	1.04	872A0438	7432
100	260	1.79	873A0438	11802
100	249	3.19	874A0438	25990
90	253	1.26	872A0538	7440
90	261	1.98	873A0538	11851
90	279	2.56	874A0538	27218
80	314	0.90	872A0638	7440
80	328	1.55	873A0638	11752
80	323	2.72	874A0638	27800
70	354	0.83	872A0738	7430
70	370	1.43	873A0738	11752
70	367	2.51	874A0738	28732
62	347	0.99	872A0838	7430
62	362	1.60	873A0838	11752
62	385	2.03	874A0838	28898
58	379	0.93	872A0938	7430
58	403	1.47	873A0938	11752
58	430	1.86	874A0938	28943
58	434	3.80	875A0938	38856
50	426	0.85	872A1038	7420
50	451	1.35	873A1038	11715
50	473	1.74	874A1038	29018
50	480	3.54	875A1038	39518
45	583	1.07	873A1138	11544
45	554	1.43	874A1138	28530
45	577	3.37	875A1138	40736
40	563	1.13	873A1238	11615
40	611	1.42	874A1238	29151
40	618	2.91	875A1238	41500
35	634	1.03	873A1338	11600
35	691	1.29	874A1338	29151
35	690	2.67	875A1338	41563
33	785	2.76	875A1438	41657
31	815	0.85	873A1438	11400
31	785	1.11	874A1438	29051
29	883	1.00	874A1538	29051
29	881	2.55	875A1538	41512
26	913	1.04	874A1638	29057
26	942	2.08	875A1638	41884
22	1042	0.93	874A1738	28986
22	1087	1.85	875A1738	41869
20	1229	2.02	875A1838	41794

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
20	1250	3.41	876A1838	53723
19	1349	1.89	875A1938	41758
19	1380	3.12	876A1938	53704
16	1474	1.43	875A2038	41801
16	1578	2.98	876A2038	53684
14	1652	1.30	875A2138	41828
14	1745	2.78	876A2138	53665
13	1788	1.54	875A2238	41828
13	1877	2.37	876A2238	53681
12	2042	1.21	875A2338	41757
12	2098	2.14	876A2338	53651
12	2064	3.87	877A2338	87400
10	2296	1.00	875A2438	41686
10	2417	2.19	876A2438	53621
10	2462	3.15	877A2438	87381
9	2517	1.00	875A2538	41700
9	2660	2.04	876A2538	53592
9	2818	2.82	877A2538	87372
6.4	3593	1.55	876A2638	53497
6.4	3757	2.23	877A2638	87369
5.7	4007	1.39	876A2738	53454
5.7	4021	2.11	877A2738	87369
4.0KW MOTOR				
173	193	3.19	874A0146	22778
173	197	1.89	873A0146	11851
173	192	1.09	872A0146	7440
130	267	2.75	874A0246	24347
130	275	1.55	873A0246	11801
130	265	0.90	872A0246	7440
116	301	2.55	874A0346	24965
116	308	1.45	873A0346	11801
116	291	0.85	872A0346	7440
100	329	2.41	874A0446	25604
100	344	1.35	873A0446	11721
90	369	3.76	875A0546	34793
90	370	1.93	874A0546	26865
90	346	1.49	873A0546	11790
80	431	3.66	875A0646	35596
80	428	2.05	874A0646	27300
80	435	1.17	873A0646	11651
70	483	3.41	875A0746	36798
70	485	1.90	874A0746	28147
70	491	1.08	873A0746	11651
65	519	3.04	875A0846	37796
65	509	1.53	874A0846	28520
65	480	1.20	873A0846	11651
58	574	2.87	875A0946	38426
58	570	1.41	874A0946	28622
58	534	1.11	873A0946	11651
50	636	2.67	875A1046	39040
50	626	1.31	874A1046	28792
50	597	1.02	873A1046	11600
45	765	2.55	875A1146	40031
45	734	1.08	874A1146	28526
45	772	0.81	873A1146	11400
40	819	2.20	875A1246	41000
40	810	1.08	874A1246	29090
40	746	0.85	873A1246	11500
35	913	2.01	875A1346	41143
35	915	0.98	874A1346	29090
33	1071	3.76	876A1446	53733
33	1040	2.09	875A1446	40150
33	1039	0.84	874A1446	28990
29	1189	3.44	876A1546	53716
29	1167	1.93	875A1546	41353
26	1247	1.57	875A1646	41866
22	1440	1.40	875A1746	41832
20	1655	2.57	876A1846	53682
20	1628	1.53	875A1846	41751
18	1827	2.35	876A1946	53653
18	1787	1.43	875A1946	41701
16	1951	1.09	875A2046	41760
15	2100	3.39	877A2046	87400

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
15	2089	2.25	876A2046	53624
14	2322	3.12	877A2146	87385
14	2311	2.10	876A2146	53594
14	2188	0.99	875A2146	41800
13	2551	3.39	877A2246	87400
13	2485	1.79	876A2246	53618
12	2733	2.92	877A2346	87400
12	2779	1.62	876A2346	53573
12	2368	1.17	875A2246	41800
10	3260	2.38	877A2446	87359
10	3200	1.65	876A2446	53528
10	2704	1.05	875A2346	41700
9	3732	2.13	877A2546	87338
9	3521	1.54	876A2546	53482
6.5	4974	1.68	877A2646	87332
6.5	4758	1.17	876A2646	53338
5.7	5324	1.59	877A2746	87332
5.7	5306	1.05	876A2746	53272

Fenner Series C Motorised Selection

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Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
5.5KW MOTOR				
175	270	1.38	873A0154	11786
175	265	2.33	874A0154	22426
130	377	1.13	873A0254	11715
130	366	2.00	874A0254	23887
130	371	3.56	875A0254	31175
119	413	3.34	875A0354	31897
110	422	1.06	873A0354	11715
110	412	1.86	874A0354	24437
100	472	0.99	873A0454	11600
100	452	1.76	874A0454	25025
100	457	3.12	875A0454	32868
90	474	1.09	873A0554	11700
90	507	1.41	874A0554	26337
90	506	2.74	875A0554	34371
77	596	0.85	873A0654	11500
77	587	1.50	874A0654	26550
77	591	2.67	875A0654	35010
72	665	1.38	874A0754	27269
72	662	2.49	875A0754	36130
65	658	0.88	873A0854	11500
65	698	1.12	874A0854	27965
65	711	2.22	875A0854	37210
58	732	0.81	873A0954	11500
58	781	1.03	874A0954	28141
58	787	2.09	875A0954	37782
54	858	0.96	874A1054	28452
54	871	1.95	875A1054	38325
46	1048	1.86	875A1154	38975
41	1122	1.60	875A1254	40250
37	1251	1.47	875A1354	40512
33	1425	1.52	875A1454	39389
33	1468	2.74	876A1454	53698
29	159	1.41	875A1554	41116
29	1629	2.51	876A1554	53673
27	1709	1.15	875A1654	41837
23	1973	1.02	875A1754	41775
21	2231	1.12	875A1854	41686
21	2268	1.88	876A1854	53622
21	2272	3.34	877A1854	85716
19	2448	1.05	875A1954	41615
19	2504	1.72	876A1954	53577
19	2606	2.94	877A1954	86407
16	2863	1.64	876A2054	53533
16	2878	2.47	877A2054	87400
14	3167	1.53	876A2154	53488
14	3182	2.28	877A2154	87374
13	3405	1.30	876A2254	53525
13	3496	2.47	877A2254	87400
12	3808	1.18	876A2354	53456
12	3745	2.13	877A2354	87400
10	4385	1.21	876A2454	53387
10	4467	1.74	877A2454	87325
9	4825	1.12	876A2554	53318
9	5114	1.56	877A2554	87287
6.5	6519	0.86	876A2654	53100
6.5	6816	1.23	877A2654	87275
6	7295	1.16	877A2754	87275

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
7.5KW MOTOR				
180	367	1.01	873A0156	11700
180	360	1.71	874A0156	21957
180	355	3.20	875A0156	28647
130	513	0.83	873A0256	11600
130	497	1.47	874A0256	23273
130	504	2.62	875A0256	30675
118	561	1.37	874A0356	23732
118	561	2.46	875A0356	31350
107	614	1.30	874A0456	24252
107	622	2.30	875A0456	32243
92	689	1.04	874A0556	25632
92	688	2.02	875A0556	33809
82	797	1.10	874A0656	25550
82	803	1.97	875A0656	34229
72	904	1.02	874A0756	26100
72	899	1.83	875A0756	35239
66	949	0.82	874A0856	27200
66	966	1.63	875A0856	36429
59	1070	1.54	875A0956	36922
53	1184	1.44	875A1056	37370
46	1424	1.37	875A1156	37565
41	1525	1.18	875A1256	39250
37	1701	1.08	875A1356	39671
33	1937	1.12	875A1456	38375
33	1995	2.02	876A1456	53652
33	1975	3.61	877A1456	82939
29	2173	1.04	875A1556	40800
29	2214	1.85	876A1556	53616
29	2188	3.32	877A1556	83701
26	2322	0.84	875A1656	41800
21	3032	0.82	875A1856	41600
21	3082	1.38	876A1856	53541
21	3087	2.46	877A1856	84696
19	3412	1.26	876A1956	53476
19	3541	2.17	877A1956	85806
16	3891	1.21	876A2056	53412
16	3911	1.82	877A2056	87400
14	4304	1.10	876A2156	53347
14	4324	1.67	877A2156	87358
13	4628	0.96	876A2256	53400
13	4751	1.82	877A2256	87400
12	5174	0.87	876A2356	53300
12	5089	1.57	877A2356	87400
10	5959	0.89	876A2456	53200
10	6070	1.28	877A2456	87279
9	6557	0.83	876A2556	53100
9	6949	1.15	877A2556	87219
6.5	9263	0.90	877A2656	87200
6	9913	0.85	877A2756	87200

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
11.0KW MOTOR				
180	526	1.17	874A0166	21137
180	520	2.19	875A0166	28018
180	539	3.93	876A0166	44500
132	727	1.01	874A0266	22200
132	737	1.79	875A0266	29800
132	741	3.26	876A0266	47600
118	820	0.94	874A0366	22500
118	820	1.68	875A0366	30393
118	831	3.05	876A0366	48700
107	898	0.89	874A0466	22900
107	909	1.57	875A0466	31150
107	928	2.85	876A0466	50100
94	1005	1.38	875A0566	32825
94	1075	2.40	876A0566	53100
83	1174	1.35	875A0666	32862
83	1194	2.45	876A0666	53300
74	1315	1.25	875A0766	33681
74	1326	2.29	876A0766	53800
66	1413	1.12	875A0866	35062
66	1473	1.98	876A0866	53800
66	1520	3.55	877A0866	73000
59	1564	1.05	875A0966	35418
59	1652	1.85	876A0966	53800
59	1651	3.35	877A0966	74000
53	1731	0.98	875A1066	35700
53	1841	1.73	876A1066	53800
53	1869	3.05	877A1066	75400
46	2082	0.94	875A1166	35100
46	2078	1.73	876A1166	53800
46	2126	3.01	877A1166	75100
40	2229	0.81	875A1266	37500
40	2355	1.48	876A1266	53800
40	2424	2.50	877A1266	79400
35	2634	1.38	876A1366	53700
35	2601	2.36	877A1366	81000
33	2916	1.38	876A1466	53572
33	2887	2.47	877A1466	80522
29	3236	1.26	876A1566	53515
29	3198	2.27	877A1566	81258
25	3601	1.13	876A1666	53600
25	3753	1.76	877A1666	87400
22	4091	1.04	876A1766	53500
22	4231	1.60	877A1766	87400
21	4505	0.95	876A1866	53400
21	4512	1.68	877A1866	82911
19	4973	0.86	876A1966	53300
19	5176	1.48	877A1966	84754
16	5687	0.83	876A2066	53200
16	5716	1.25	877A2066	87400
14	6320	1.15	877A2166	87331
13	6945	1.25	877A2266	87400
12	7438	1.07	877A2366	87400
10	8873	0.87	877A2466	87200

Fenner Series C Motorised Selection

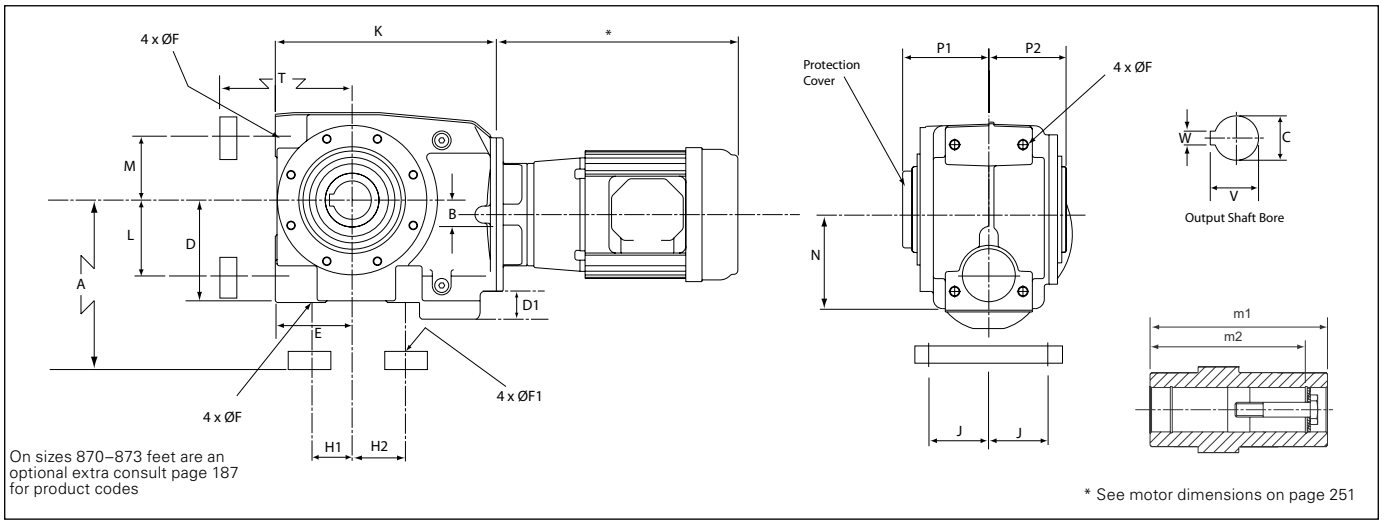
Bold print denotes triple reduction gearbox. Higher ratios available—consult your local Authorised Distributor

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
15.0KW MOTOR				
183	716	0.86	874A0168	20200
183	707	1.61	875A0168	27300
183	733	2.89	876A0168	43852
132	1001	1.32	875A0268	28800
132	1007	2.40	876A0268	46717
118	1115	1.24	875A0368	29300
118	1130	2.25	876A0368	47715
118	1116	3.99	877A0368	60823
106	1235	1.16	875A0468	29900
106	1261	2.10	876A0468	49007
106	1265	3.70	877A0468	62817
91	1366	1.02	875A0568	31700
91	1460	1.77	876A0568	52131
91	1482	3.19	877A0568	66523
82	1595	0.99	875A0668	31300
82	1622	1.80	876A0668	51889
82	1640	3.16	877A0668	67047
75	1787	0.92	875A0768	31900
75	1803	1.69	876A0768	52636
75	1766	3.02	877A0768	68664
66	1920	0.82	875A0868	33500
66	2002	1.46	876A0868	53727
66	2065	2.61	877A0868	71917
57	2245	1.36	876A0968	53727
57	2244	2.47	877A0968	72823
51	2501	1.27	876A1068	53727
51	2540	2.25	877A1068	74061
46	2824	1.27	876A1168	53586
46	2890	2.21	877A1168	73069
39	3200	1.09	876A1268	53640
39	3294	1.84	877A1268	77673
35	3579	1.02	876A1368	53540
35	3535	1.74	877A1368	79147
33	3963	1.02	876A1468	53480
33	3923	1.82	877A1468	77759
30	4398	0.93	876A1568	53400
30	4347	1.67	877A1568	78467
25	4894	0.83	876A1668	53400
25	5100	1.30	877A1668	85327
22	5750	1.18	877A1768	85945
21	6132	1.24	877A1866	80870
18	7034	1.09	877A1968	83552
16	7768	0.92	877A2068	87400
14	8589	0.84	877A2168	87300

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
18.5KW MOTOR				
183	895	2.37	876A0176	43286
133	1230	1.97	876A0276	45945
133	1251	3.44	877A0276	59054
120	1379	1.84	876A0376	46853
120	1362	3.27	877A0376	60144
106	1540	1.72	876A0476	48051
106	1544	3.03	877A0476	62045
88	1783	1.45	876A0576	51284
88	1809	2.61	877A0576	65844
82	1980	1.47	876A0676	50655
82	2002	2.59	877A0676	66038
74	2201	1.38	876A0776	51618
74	2156	2.47	877A0776	67583
64	2444	1.19	876A0876	53663
64	2522	2.14	877A0876	70970
57	2741	1.11	876A0976	53663
57	2739	2.02	877A0976	71794
51	3054	1.04	876A1076	53663
51	3101	1.84	877A1076	72890
46	3447	1.04	876A1176	53400
46	3528	1.81	877A1176	71292
39	3907	0.89	876A1276	53500
39	4021	1.51	877A1276	76163
35	4316	1.42	877A1376	77526
35	4369	0.83	876A1376	53400
33	4838	0.83	876A1476	53400
33	4790	1.49	877A1476	75342
30	5306	1.37	877A1576	76025
25	6226	1.06	877A1676	83513
22	7019	0.96	877A1776	84672
21	7486	1.10	877A1876	79085
18	8586	0.89	877A1976	82500
22.0KKW MOTOR				
184	1064	1.99	876A0178	42720
184	1066	3.50	877A0178	54676
133	1462	1.65	876A0278	45173
133	1488	2.89	877A0278	58426
119	1640	1.55	876A0378	45992
119	1620	2.75	877A0378	59464
106	1831	1.45	876A0478	47096
106	1836	2.55	877A0478	61273
88	2120	1.22	876A0578	50436
88	2151	2.20	877A0578	65164
82	2355	1.24	876A0678	49421
82	2381	2.18	877A0678	65029
74	2617	1.16	876A0778	50600
74	2564	2.08	877A0778	66502
64	2906	1.00	876A0878	53600
64	2999	1.80	877A0878	70023
58	3250	0.94	876A0978	53600
58	3258	1.70	877A0978	70764
51	3632	0.88	876A1078	53600
51	3687	1.55	877A1078	71719
46	4195	1.53	877A1178	69515
39	4782	1.27	877A1278	74652
36	5133	1.20	877A1378	75905
34	5696	1.25	877A1478	72925
30	6310	1.15	877A1578	73582
25	7405	0.89	877A1678	81700
22	8347	0.81	877A1778	83400
21	8903	0.85	877A1878	77300

Nom. Output Rev/Min	Output Torque Nm	Max Service Factor	Unit Selection	Overhung Load N
30.0KW MOTOR				
184	1452	1.46	876A0188	41426
184	1454	2.56	877A0188	53641
134	1994	1.21	876A0288	43408
134	2029	2.12	877A0288	56991
120	2237	1.14	876A0388	44023
120	2209	2.01	877A0388	57911
106	2497	1.06	876A0488	44911
106	2504	1.87	877A0488	59508
88	2891	0.89	876A0588	48500
88	2934	1.61	877A0588	63611
83	3212	0.91	876A0688	46600
83	3247	1.60	877A0688	62723
76	3497	1.52	877A0788	64032
63	4089	1.32	877A0888	67858
58	4442	1.25	877A0988	68411
51	5028	1.14	877A1088	69042
46	5721	1.12	877A1188	65453
39	6520	0.93	877A1288	71200
36	6999	0.88	877A1388	72200
34	7767	0.92	877A1488	67400
30	8605	0.84	877A1588	68000
37.0KW MOTOR				
185	1784	1.19	876A0194	40294
185	1787	2.09	877A0194	52735
134	2451	0.99	876A0294	41864
134	2494	1.72	877A0294	55735
120	2749	0.92	876A0394	42300
120	2715	1.64	877A0394	56552
106	3069	0.86	876A0494	43000
106	3078	1.52	877A0494	57964
89	3606	1.31	877A0594	62252
83	3991	1.30	877A0694	60705
76	4298	1.24	877A0794	61870
63	5026	1.07	877A0894	65964
58	5460	1.01	877A0994	66352
51	6181	0.92	877A1094	66700
46	7032	0.91	877A1194	61900
45.0KW MOTOR				
185	2170	0.98	876A0195	39000
185	2173	1.72	877A0195	51700
134	2982	0.81	876A0295	40100
134	3033	1.42	877A0295	54300
122	3302	1.35	877A0395	55000
108	3743	1.25	877A0495	56200
89	4386	1.08	877A0595	60700
83	4854	1.07	877A0695	58400
76	5228	1.02	877A0795	59400
63	6113	0.88	877A0895	63800
58	6641	0.83	877A0995	64000

Fenner Series C Motorised Dimensions

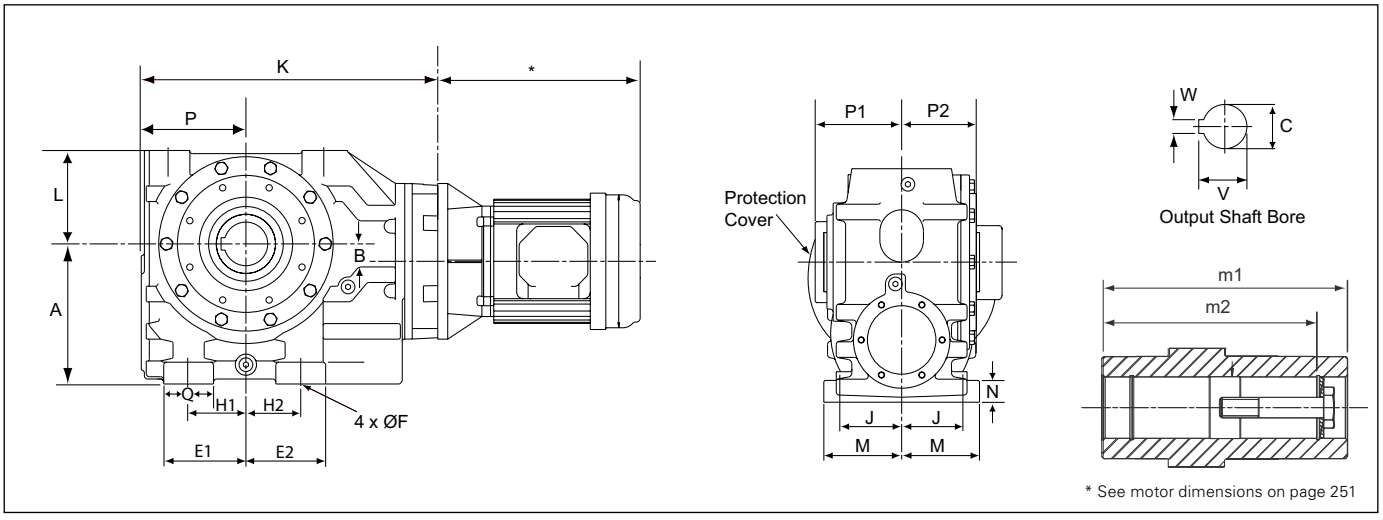


On sizes 870–873 feet are an optional extra consult page 187 for product codes

* See motor dimensions on page 251

Unit Size	A	B	C H7	D	D1	E	F	F1	H1	H2	J	K DOUBLE REDUCTION MOTOR FRAME SIZE 63	71	80	90	100/112	132	K Triple #	L	M	m1	m2	N	P1	P2	T	V	W
870	80	5.3	20	71	9	54	M8X15	9	35	28	45	197	201	214	224	213	-	56	40	40	124	104	70.5	70	57.0	63	22.9	6
871	100	15.0	30	86	7	64	M10X20	11	35	45	50	217	221	234	244	233	-	76	45	53	130	122	86.5	74.5	65.0	78	33.5	8
872	112	13.0	35	96	16	68	M10X18	11	45	55	55	236	240	253	263	252	-	95	77	65	140	127	96.5	79	70.0	84	38.5	10
873	140	17.0	45	120	20	90	M12X20	14	60	70	65	271	277	295	305	332	331	163	96	76	180	156	119.5	101	90.5	110	49.0	14

This value should be added to K Double Reduction value in the table above.



* See motor dimensions on page 251

Unit Size	A	B	C H7	E1	E2	F	H1	H2	J	K DOUBLE REDUCTION MOTOR FRAME SIZE 80	90	100/112	132	160/180	200	225	K Triple #	L	M	m1	m2	N	P	P1	P2	Q	V	W
874	180	26	60	108	93	18	75	60	75	400	410	421	444	452	—	—	80	122	93	218	188	28	143	125	109	67	64.6	18
874 Triple										479	489	516	515	—	—	—												
875	225	28	70	132	128	22	92	88	100	470	470	476	476	506	—	—	N/A	150	119	250	220	35	168	143	125	80	75.1	20
876	280	40	90	157	162	26	115	120	125	553	553	559	559	594	594	621	N/A	177	153	300	265	40	195	169	150	85	95.6	25
877	335	65	100	225	195	26	170	140	150	—	—	637	637	672	672	699	N/A	230	180	350	313	45	235	198	175	110	106.6	28

This value should be added to K Double Reduction value in the table above.

Fenner Series C Non Motorised Selection

DOUBLE REDUCTION - RATINGS AT 1450 REV/MIN

Unit	Size	870		871		872		873		874		875		876		877	
Ratio (:1)	Output Speed Rev/min	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm
8.0	181	1.72	81	2.84	137	4.39	209	7.62	372	12.90	618	24.10	1140	43.20	2120	75.90	3730
11.2	131	1.39	88	2.31	149	3.62	238	6.26	427	11.10	734	19.70	1320	35.90	2420	62.70	4300
12.5	121	1.27	90	2.11	154	3.42	247	5.85	446	10.30	768	18.50	1380	33.60	2540	59.60	4450
14.0	104	1.16	94	1.94	159	3.17	259	5.46	466	9.75	796	17.3	1430	31.40	2650	55.30	4680
16.0	90	1.11	87	1.78	144	2.98	250	2.95	517	7.81	716	15.20	1390	26.70	2610	47.70	4730
18.0	80	0.97	99	1.62	168	2.74	282	4.72	508	8.29	879	14.80	1580	26.90	2970	47.20	5180
20.0	72	0.92	101	1.54	171	2.54	295	4.37	531	7.66	921	13.80	1650	25.20	3040	45.10	5330
22.0	66	0.91	95	1.45	156	3.23	368	4.95	589	6.19	781	12.30	1580	22.00	2960	39.00	5390
25.0	58	0.83	98	1.33	161	3.03	377	4.63	614	5.69	803	11.60	1650	20.60	3090	36.90	5540
28.0	52	0.77	101	1.23	167	2.77	388	4.33	640	5.30	822	10.80	1700	19.20	3220	33.60	5710
32.0	45	0.64	113	1.08	192	1.93	341	3.26	623	4.37	794	10.30	1950	19.00	3590	33.10	6400
36.0	40	0.65	107	1.03	176	2.34	410	3.58	663	4.35	872	8.88	1800	16.50	3540	27.50	6060
40.0	36	0.61	110	0.98	179	2.14	421	3.18	663	3.95	895	8.14	1840	15.40	3680	26.00	6150
45.0	32	0.52	122	0.87	206	1.52	382	2.48	663	3.39	872	8.43	2170	15.20	4030	27.20	7140
50.0	29	0.46	127	0.76	209	1.44	391	2.33	663	3.04	880	7.79	2250	13.90	4090	25.00	7270
56.0	26	0.48	120	0.77	196	1.70	447	2.37	663	3.16	946	6.35	1960	12.60	4110	19.40	6620
63.0	23	0.44	124	0.70	202	1.55	457	2.06	663	2.84	970	5.64	2010	11.60	4290	17.60	6770
71.0	20	0.38	143	0.54	206	1.06	406	1.62	663	2.34	927	6.18	2490	10.40	4260	18.50	7590
80.0	18	0.35	147	0.46	192	0.93	399	1.48	663	2.16	936	5.79	2560	9.51	4300	16.30	7670
90.0	16	0.37	139	0.59	227	1.16	482	1.49	663	2.13	1030	4.39	2120	9.21	4760	13.70	7120
100	14	0.33	143	0.53	234	1.08	482	1.41	663	1.94	1050	3.99	2160	8.58	4900	12.60	7240
112	13	0.26	149	0.30	171	0.62	348	1.10	663	1.65	971	4.71	2760	7.22	4440	12.90	8140
125	12	0.23	147	0.23	148	0.47	300	0.79	530	1.48	967	3.70	2480	6.53	4490	11.50	7740
140	10	0.25	149	0.42	252	0.77	482	0.99	663	1.52	1120	3.07	2310	6.76	5360	9.62	7760
160	9	0.23	149	0.39	257	0.69	482	0.91	663	1.41	1140	2.85	2350	6.29	5480	8.62	7960
212	7	0.17	149	0.30	270	0.53	482	0.68	663	1.10	1200	2.27	2470	4.74	5580	6.80	8370
250	6	0.15	149	0.23	233	0.47	482	0.61	663	1.01	1220	2.03	2530	4.25	5580	6.43	8470

Note; For ratings at input speeds other than 1450 rev/min, contact your local Authorised Distributor

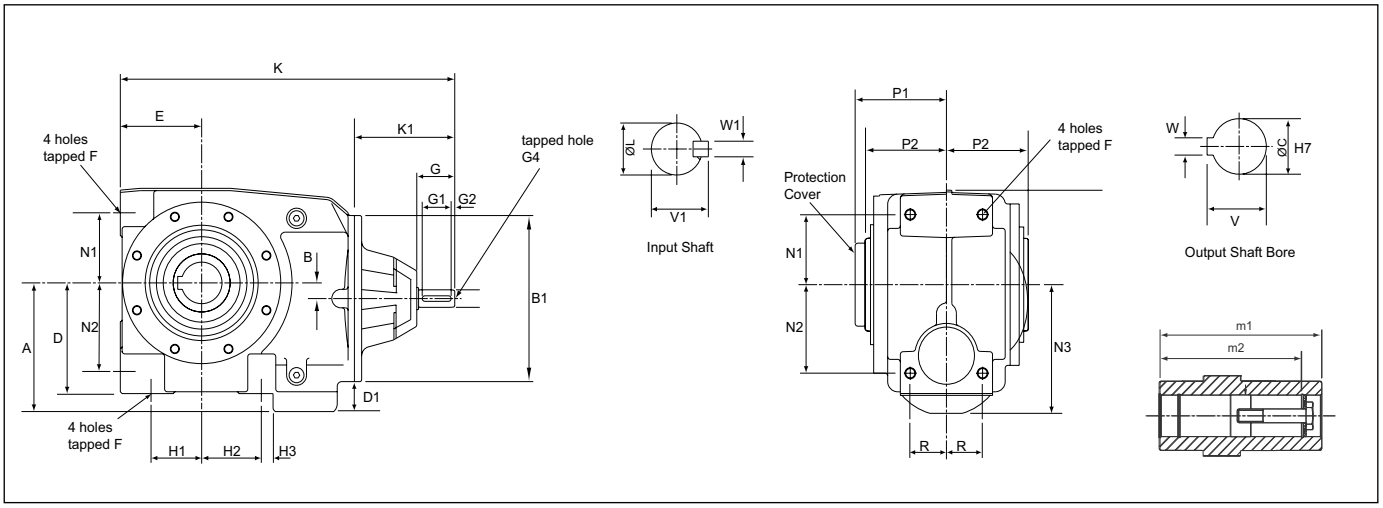
TRIPLE REDUCTION - RATINGS AT 1450 REV/MIN

Unit	Size	870		871		872		873		874	
Ratio (:1)	Output Speed Rev/min	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm	Input Power kW	Output Torque Nm
265	5.5	0.12	149	0.15	198	0.30	389	0.48	663	0.98	1340
280	5.2	0.11	149	0.14	197	0.27	388	0.42	663	0.90	1340
315	4.5	0.12	149	0.22	278	0.37	482	0.46	663	0.78	1270
360	4.0	0.11	149	0.19	278	0.32	482	0.43	663	0.73	1270
400	3.5	0.08	149	0.10	195	0.20	385	0.32	663	0.66	1340
450	3.2	0.07	149	0.09	195	0.17	384	0.29	663	0.59	1340
500	2.9	0.08	149	0.14	278	0.23	482	0.30	663	0.50	1270
560	2.6	0.07	149	0.13	278	0.21	482	0.27	663	0.46	1270
800	1.8	0.05	149	0.09	278	0.16	482	0.21	663	0.34	1260
900	1.6	0.05	149	0.08	278	0.14	482	0.18	663	0.31	1260

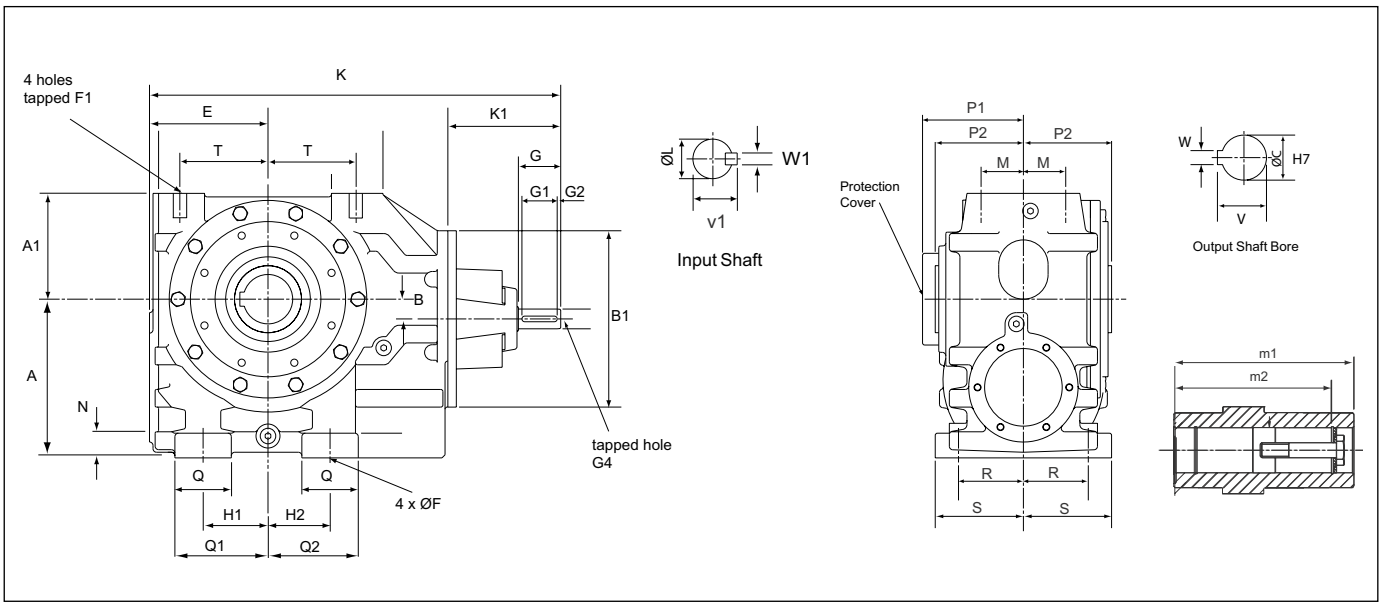
Note; For ratings at input speeds other than 1450 rev/min contact your local Distributor

For output speeds below 6 rev/min in sizes 875–877 consult your local Distributor

Fenner Series C Dimensions Non Motorised



Unit Size	A	B	B1	C H7	D	D1	E	F	G	G1	G2	G4	H1	H2	K Double	K Triple	K1	L k6	m1	m2	N1	N2	N3	P1	P2	R	V	V1	W	W1
870	80	5.3	140	20	71	9	54	M8X15	40	32	4	M5X12.5	35	28	274	330	111	16	124	104	40	40	79.5	70.0	62	27	22.9	18.5	6	5
871	100	15.0	140	30	86	7	64	M10X20	40	32	4	M5X12.5	35	45	293	349	111	16	130	122	53	65	93	74.0	65	28	33.5	18.5	8	5
872	112	13.0	140	35	96	16	68	M10X18	40	32	4	M5X12.5	45	55	313	369	111	16	140	127	65	77	112	74.5	70	34	38.5	18.5	10	5
873	140	17.0	180	45	120	20	90	M12X20	40	32	4	M6X16	60	70	370	436	111	19	180	156	76	96	139.5	101.0	90	40	49.0	21.5	14	6

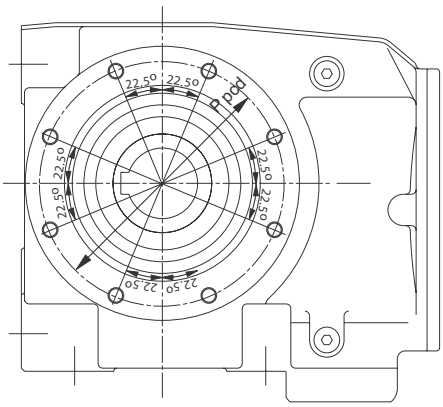


Unit Size	A	A1	B	B1	C H7	M	E	F	F1	G	G1	G2	G4	H1	H2	K *	K1	L k6	m1	m2	N	P1	P2	Q	Q1	Q2	R	S	T	V	V1	W	W1
874	180	122	26	212	60	50	143	18	M20X34	50	40	5	M8X19	75	60	478	115	24	218	188	28	124	109	67	108	94	60	93	108	64.6	27	18	8
875	225	150	28	250	70	60	168	22	M20X34	60	50	5	M10X22	92	88	583	160	28	250	220	35	143	125	80	132	128	112.5	125	125	75.1	31	20	8
876	280	177	40	300	90	67.5	195	26	M24X45	80	70	5	M12X28	115	120	690	195	38	300	265	40	169	150	85	157	163	140	153	145	95.6	41	25	10
877	335	230	65	360	100	75	235	26	M24X45	110	70	10	M16X36	170	140	823	233	42	350	313	45	198	175	110	225	195	167.5	180	173	106.6	45	28	12

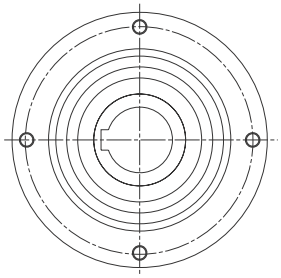
* K dimension for 874 triple reduction unit is 560mm.

Fenner Series C Dimensions (B14) Flange

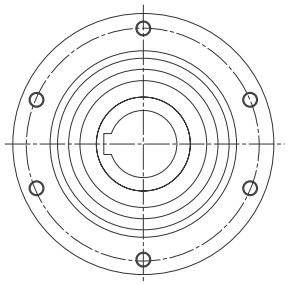
871, 872, 873 & 875
Eight hole pattern



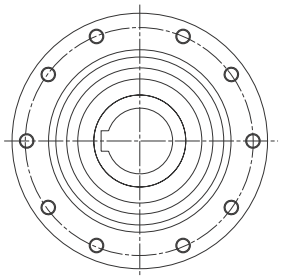
870
Four hole pattern



874 & 876
Six hole pattern



877
Ten hole pattern



Size	P pcd	F Thread Diameter	N No of Holes	D Deep
870	90	M8 x 1.25	4	22
871	107	M8 x 1.25	8	22
872	130	M8 x 1.25	8	22
873	155	M10 x 1.5	8	27
874	150	M12 x 1.75	6	22
875	195	M12 x 1.75	8	21
876	230	M16 x 2.0	6	27
877	280	M16 x 2.0	10	27

Fenner Series C Exact Ratios

DOUBLE REDUCTION

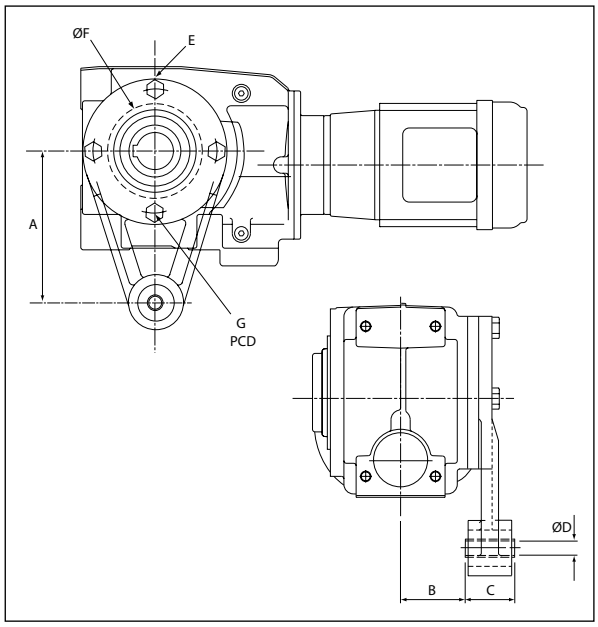
Code	870	871	872	873	874	875	876	877	Final Reduction Worm Ratio
01	8.59	8.59	8.31	8.23	7.90	7.77	7.97	7.95	10 : 1
02	11.61	11.61	11.66	11.57	10.94	11.01	10.98	11.11	10 : 1
03	13.20	13.20	12.85	12.97	12.29	12.24	12.30	12.08	10 : 1
04	14.95	14.95	14.59	14.56	13.52	13.61	13.81	13.72	10 : 1
05	16.36	16.36	16.09	15.93	15.80	15.54	16.68	16.63	20 : 1
06	19.13	19.13	18.53	18.49	17.66	17.60	17.79	17.87	10 : 1
07	20.61	20.61	21.05	20.96	20.07	19.76	19.88	19.29	10 : 1
08	22.11	22.11	22.56	22.40	21.89	22.03	22.96	23.23	20 : 1
09	25.14	25.14	24.86	25.11	24.59	24.47	25.73	25.27	20 : 1
10	28.48	28.48	28.24	28.18	27.03	27.22	28.89	28.70	20 : 1
11	33.71	33.71	32.55	33.48	30.81	31.78	31.43	31.85	10 : 1
12	36.43	36.43	35.86	35.79	35.31	35.20	37.22	37.38	20 : 1
13	39.26	39.26	40.74	40.57	40.15	39.51	41.59	40.36	20 : 1
14	45.50	45.50	46.84	47.32	44.13	43.64	44.55	43.65	10 : 1
15	53.31	53.31	50.93	50.52	49.90	49.26	49.49	48.51	10 : 1
16	56.19	56.19	55.45	55.71	53.63	54.60	57.66	58.85	20 : 1
17	64.21	64.21	63.00	64.80	61.62	63.56	65.74	66.63	20 : 1
18	74.55	74.55	73.37	73.92	69.00	69.64	69.91	69.18	10 : 1
19	82.83	82.83	82.67	80.94	75.56	76.50	77.18	79.71	10 : 1
20	86.67	86.67	90.67	91.58	88.26	87.29	93.18	91.32	20 : 1
21	101.50	101.50	98.57	97.78	99.79	98.53	103.50	101.50	20 : 1
22	114.30	114.30	109.10	110.60	104.30	102.40	106.20	107.80	10 : 1
23	129.90	129.90	124.00	124.00	115.90	117.90	119.40	115.80	10 : 1
24	142.00	142.00	142.00	143.10	138.00	139.30	146.20	144.70	20 : 1
25	157.80	157.80	160.00	156.70	151.10	153.00	161.40	166.70	20 : 1
26	217.80	217.80	211.10	214.00	208.60	204.80	222.10	225.50	20 : 1
27	247.50	247.50	240.00	240.00	231.80	235.80	249.70	242.30	20 : 1

TRIPLE REDUCTION

Code	870	871	872	873	874	Final Reduction Worm Ratio
40	105.4	105.4	103.9	103.9	97.33	10:1
41	120.4	120.4	118.7	118.0	113.20	10:1
42	130.1	130.1	130.4	130.0	125.00	20:1
43	140.2	140.2	140.5	147.7	141.7	20:1
44	162.5	162.5	160.3	169.8	160.00	10:1
45	190.4	190.4	187.8	184.6	170.80	10:1
46	200.7	200.7	201.1	201.0	194.70	20:1
47	229.3	229.3	229.8	228.4	226.40	20:1
48	266.3	266.3	262.6	266.0	249.90	10 : 1
49	295.8	295.8	291.8	299.7	273.70	10 : 1
50	309.5	309.5	310.2	328.7	320.00	20 : 1
51	362.6	362.6	363.4	357.3	341.60	20 : 1
52	408.3	408.3	402.7	395.4	373.80	10 : 1
53	464.1	464.1	457.7	449.5	419.30	10 : 1
54	507.1	507.1	508.2	514.8	499.90	20 : 1
55	563.5	563.5	564.7	580.0	547.40	20 : 1
56	777.8	777.8	779.4	765.3	747.70	20 : 1
57	883.9	883.9	885.8	870.0	838.50	20 : 1

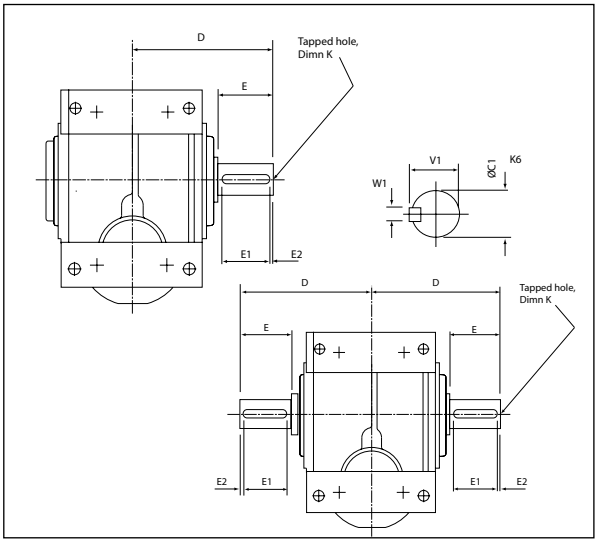
TORQUE ARM

Unit Size	A	B	C	D	E	F spigot dia	G pcd	Product Code
870	110	47.0	36	10.3	4 x M8	69.99 69.969	90	870A9600
871	130	52.0	36	10.3	8 x M8	84.99 84.968	107	871A9600
872	160	52.0	36	10.3	8 x M8	104.99 104.968	130	872A9600
873	200	71.5	44	16.5	8 x M10	124.990 124.965	155	873A9600
874	250	77.5	60	16.4	6 x M12	—	150	874A9600
875	310	85.5	60	16.4	8 x M12	—	195	875A9600
876	380	98.0	80	25.0	6 x M16	—	230	876A9600
877	430	137.0	80	25.0	10 x M16	—	280	877A9600



SINGLE & DOUBLE OUTPUT SHAFTS

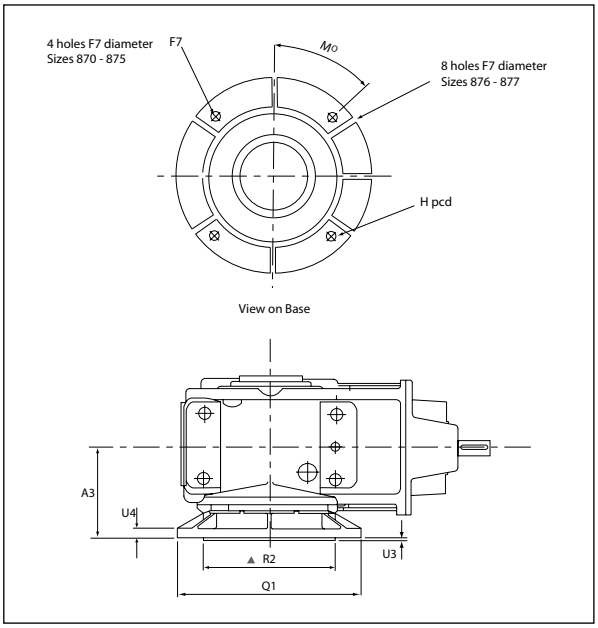
Unit Size	C1 k6	D	E	E1	E2	V1	W1	Product Code	
								Single Ex	Double Ex
870	20	100	35	31	3	22.5	6	870A9700	870A9800
871	25	115	46	42	3	28.0	8	871A9700	871A9800
872	30	134	60	53	3	33.0	8	872A9700	872A9800
873	35	160	63	55	3	38.0	10	873A9700	873A9800
874	45	195	76	70	3	48.5	14	874A9700	874A9800
875	60	255	120	110	3	64.0	18	875A9700	875A9800
876	70	295	135	125	3	74.5	20	876A9700	876A9800
877	90	366	170	160	3	95.0	25	877A9700	877A9800



OUTPUT FLANGE

Unit Size	A3	F7	H pcd	M	Q1	R2	U3	U4	Product Code
870*	75	6.6	100	45°	120	80	3.0	8	870A9990
870	75	9	130	45°	160	110	4.0	10	870A9900
871	86	9	130	45°	160	110	3.5	10	871A9900
872	107	11	165	45°	200	130	3.5	12	872A9900
873	120	11	165	45°	200	130	3.5	12	873A9900
874	145	14	215	45°	250	180	4.0	12	874A9900
875	170	18	300	45°	350	250	5.0	18	875A9900
876	200	18	400	22.5°	450	350	5.0	20	876A9900
877	232	18	400	22.5°	450	350	5.0	22	877A9900

* reduced diameter flange
R2 < 230 mm j6
> 230 mm h6



FEET CODE

Unit Size	Product Code
870	870A9500
871	871A9500
872	872A9500
873	873A9500

Fenner Series C Overhung Load Capacities

Units are fitted with output bearings of ample proportions to cater for the radial and thrust loads imposed by the worm gear, 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 Authorised 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.

Series C	
Unit Size	A mm
870	17.5
871	23.0
872	30.0
873	31.5
874	38.0
875	60.0
876	67.5
877	85.0

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

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

Where:

T = Absorbed torque at worm gear output shaft in Nm.

kW = Absorbed power at worm gear output shaft (kW).

r = Pitch radius of sprocket, gear or 'V' pulley in mm.

n = Rev/min of worm gear output shaft.

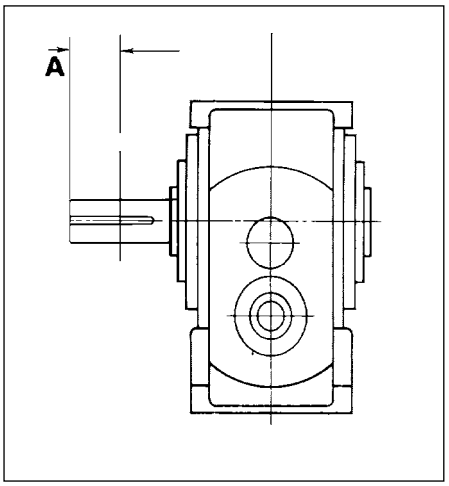
K = Application factor -
1.00 for a sprocket
1.25 for a gear or timing pulley
1.50 for a 'V' pulley

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.



ORDERING INSTRUCTIONS

All Series C motorised worm gear units fitted with a standard electric motor are identified by an eight digit code taken from the selection tables.

If an alternative motor type is required a ninth digit is added to the standard code.

FIRST TWO DIGITS: Product prefix–constant for Series C **87**

THIRD DIGIT: unit size **0–7**

FOURTH DIGIT:

MOUNTING TYPE

A: shaft mounting

D: input reducer assembly

G: shaft mounted unmotorised

FIFTH AND SIXTH DIGIT: Gear Ratio Code. Exact ratios can be found above.

SEVENTH/EIGHTH DIGIT: 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 motor fitting by third party use the first two digits of the motor frame size to be fitted, i.e. frame 71 use **71** for 132 frame use **13**.

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 table opposite of the motor variant required.

ELECTRIC MOTOR VARIANTS

All variants of standard IEC motors can be fitted to Fenner Gearmotors, Series C is also capable of accepting NEMA motor variants as well. Examples of some of the variants and their ninth digit code letter are in the table opposite.

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.

Backstop modules are available for motor frame sizes 100 to 200.

For any of these combinations please contact your local Authorised Distributor.

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