

# Section 9:

## Gearboxes: Series F

The new Fenner® Series F geared motor range is primarily designed as a compact shaft mounted unit incorporating an integral torque reaction bracket.



- New range now has 11 sizes
- Input power up to 110kW
- Output torque up to 16,500 Nm
- Ratios from 5:1 to 350:1 available
- Dimensionally interchangeable with market leaders
- Accepts standard IEC motors
- ATEX certification available 

| Geared Drives: Design Data Required                          |   |
|--|---|
| Motorised (integral motor) or non-motorised?                 | <ul style="list-style-type: none"> <li>&gt; If motorised: electrical supply available any special motor features required (brake, thermistors, flameproof etc.)</li> <li>&gt; 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.</li> </ul> |
| Shaft mounting or flange mounted?                            | <ul style="list-style-type: none"> <li>&gt; If shaft mounted, machine shaft diameter/length</li> <li>&gt; if flange mounted, is an output shaft and coupling required?</li> </ul>   |
| 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 F                   | Page |
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## SERIES F

Highly Efficient and Versatile.

Compact solutions

- > New range now has 11 sizes
- > Input power up to 110kW
- > Output torque up to 16,500 Nm
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# Fenner®

THE MARK OF ENGINEERING EXCELLENCE

# Series F Gearboxes : Motorised selection

## MOTORISED UNITS 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 in excess of 10 times per day then multiply factor Fm by Factor Fs from table 2 below.

### (b) Motor Power

Refer to the selection tables on pages 249 to 263 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.

$$P_2 = \frac{M_2 \times n_2}{9550}$$

$P_2$  = machine absorbed power (kW)

$M_2$  = machine absorbed torque (Nm)

$n_2$  = machine speed (rev/min)

If the absorbed power is given in kW use the formula below to check the selected unit will give sufficient output torque.

Output torque values for Fenner Series F Gear Motor units are given in column two of the selection tables.

$$M_2 = \frac{P_2 \times 9550}{n}$$

$M_2$  = machine absorbed torque (Nm)

$P_2$  = machine absorbed power (kW)

$n_2$  = machine speed (rev/min)

### (c) Unit Selection

Refer to the selection tables on page 249 to 263 and choose the closest above that calculated in step (b). Then read down the column headed "Nominal Output" 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 276 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 264. Torque bush dimensions can be found on page 279.

## SELECTION EXAMPLE

A Series F shaft mounted gearbox is required to drive a non-uniformly loaded conveyor, which absorbs 2kW at 48 rpm and operates for up to 16 hours per day. The conveyor stops and starts on average 6 times a day. Specify the shaft diameter required to fit the unit selected, a torque bush is also required please specify the relevant product code.

### (a) Service Factor

From table 1 a non-uniformly loaded conveyor is classed as a moderately loaded machine and when running for up to 16 hours per day has a service factor of 1.5. The machine stops and starts only 6 times a day therefore an additional stop/start factor is not required.

### (b) Motor Power

The absorbed power is given as 2kW therefore use the next largest standard motor power above this which is 2.2kW.

To determine the required torque use the absorbed power (kW) and the machine shaft speed in the formula given. Therefore the machine absorbed Torque

$$T = \frac{2 \times 9550}{48} = 398 \text{ Nm}$$

### (c) Unit Selection

The nearest standard motor power above 2 kW is 2.2 kW therefore we go to the 2.2kW geared motor selections on page 255. Reading down the column headed nominal output it is found that there are 5 units listed at 48 rpm, at the first one of these read across to service factor column, it can be seen that the unit size 781A1445 has a service factor of 1.31, which does not exceed the 1.5 required service factor therefore read down the table to a factor that equals or exceeds this.

It can be seen that the 783A1445 is the first unit with a factor above 1.5, the last two digits of the product code (45) indicate that this unit is fitted with a 6 pole motor, it is usually more economical to select a 4 pole version if possible. Therefore the next unit down 783A1836 would be selected as this is the same size gearbox (783), and has a service factor of 1.58 exceeding the required value of 1.5. The output torque for this selection is 422Nm which exceeds the required 398Nm, therefore is suitable for the application.

### (d) Overhung Loads

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

### (e) Shaft Mounted

The unit is to be shaft mounted, referring to page 264 we see that the hub bore size is 40mm. From page 279 the torque bush to suit the size 783 unit selected has a product code of 881A9600.

TABLE 1 - MECHANICAL SERVICE FACTOR (Fm)

| Types of Driven Machine   | Operational Hours |         |         |
|---|-------------------|---------|---------|
|   | Under 3           | 3 to 10 | Over 10 |
| <b>Uniform Loads</b><br>Agitators and Mixers – liquid or semi-liquid<br>Blowers – centrifugal<br>Bottling Machines<br>Conveyors and Elevators – uniformly loaded<br>Cookers<br>Laundry Washing Machines – non-reversing<br>Line Shafts<br>Pumps – centrifugal and gear<br>Wire Drawing Machines   | 0.80              | 1.00    | 1.25    |
| <b>Moderate Shock Loads</b><br>Agitators and Mixers – variable density<br>Conveyors – not uniformly loaded<br>Cranes travel motion and hoisting<br>Drawbench<br>Feeders – pulsating load<br>Hoists<br>Kilns<br>Laundry Tumblers<br>Lifts<br>Pumps – reciprocating with 3 or more cylinders<br>Pump and Paper Making Machinery<br>Rubber Mixers and Calendars<br>Screens – rotary<br>Textile Machinery | 1.00              | 1.25    | 1.50    |
| <b>Heavy Shock Loads</b><br>Brick Presses<br>Briquetting Machines<br>Conveyors – reciprocating and shaker<br>Crushers<br>Feeders – reciprocating<br>Hammer Mills<br>Pumps – reciprocating, 1 or 2 cylinders<br>Rubber Masticators<br>Screens – vibrating  | 1.50              | 1.75    | 2.00    |

TABLE 2 - STARTING FACTOR (Fs)

| 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 |

For high inertia applications, consult you local Authorised Distributor for verification of selection.













# Series F Gearboxes : Motorised selection

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 17                     | 815              | 1.10           | <b>784A2337</b> | 10500           |
| 17                     | 820              | 3.50           | 786A2528        | 19700           |
| 16                     | 890              | 1.00           | <b>784A2437</b> | 10500           |
| 16                     | 872              | 1.46           | 785A2728        | 15631           |
| 16                     | 861              | 2.08           | <b>785A2337</b> | 15630           |
| 15                     | 942              | 1.92           | <b>785A2437</b> | 15838           |
| 15                     | 894              | 3.23           | 786A2728        | 19700           |
| 15                     | 910              | 3.24           | <b>786A2337</b> | 19000           |
| 14                     | 962              | 1.14           | 785A2828        | 15851           |
| 14                     | 997              | 3.01           | <b>786A2437</b> | 19000           |
| 14                     | 988              | 4.00           | <b>787A2537</b> | 29900           |
| 13                     | 1043             | 1.19           | 785A3728        | 16088           |
| 13                     | 1022             | 2.63           | 786A2828        | 19700           |
| 12                     | 1118             | 1.06           | 785A3828        | 16192           |
| 12                     | 1131             | 1.46           | <b>785A2537</b> | 16117           |
| 12                     | 1100             | 3.08           | 786A3728        | 19700           |
| 12                     | 1107             | 3.31           | <b>787A2637</b> | 29900           |
| 12                     | 1100             | 3.85           | 787A3828        | 29900           |
| 11                     | 1294             | 1.00           | <b>785A2737</b> | 16400           |
| 11                     | 1226             | 2.52           | <b>786A2537</b> | 19000           |
| 11                     | 1204             | 2.81           | 786A3828        | 19700           |
| 11                     | 1273             | 3.38           | <b>787A2737</b> | 29900           |
| 11                     | 1274             | 3.38           | 787A3928        | 29900           |
| 10                     | 1323             | 0.96           | 785A3928        | 16400           |
| 10                     | 1335             | 2.34           | <b>786A2737</b> | 19000           |
| 10                     | 1362             | 2.49           | 786A3928        | 19700           |
| 10                     | 1429             | 3.01           | <b>787A2837</b> | 29900           |
| 10                     | 1416             | 3.04           | 787A4028        | 29873           |
| 9.6                    | 1412             | 0.92           | 785A4128        | 16500           |
| 9.3                    | 1484             | 2.86           | <b>787A3737</b> | 29886           |
| 9.0                    | 1531             | 1.91           | <b>786A2837</b> | 19000           |
| 8.9                    | 1536             | 2.21           | 786A4128        | 19700           |
| 8.8                    | 1570             | 0.91           | <b>785A3737</b> | 16500           |
| 8.8                    | 1549             | 2.74           | 787A4128        | 29873           |
| 8.5                    | 1610             | 3.98           | 788A4128        | 43000           |
| 8.3                    | 1646             | 2.06           | <b>786A3737</b> | 19000           |
| 8.3                    | 1647             | 2.57           | <b>787A3837</b> | 29873           |
| 8.3                    | 1655             | 3.87           | <b>788A3837</b> | 43400           |
| 8.2                    | 1673             | 0.82           | <b>785A3837</b> | 16500           |
| 8.0                    | 1713             | 2.47           | 787A4228        | 29865           |
| 7.8                    | 1754             | 0.81           | 785A4228        | 16600           |
| 7.6                    | 1802             | 1.88           | <b>786A3837</b> | 19000           |
| 7.4                    | 1854             | 3.45           | 788A4228        | 43000           |
| 7.3                    | 1861             | 1.82           | 786A4228        | 19700           |
| 7.3                    | 1868             | 3.88           | <b>788A3937</b> | 43400           |
| 7.2                    | 1910             | 2.26           | <b>787A3937</b> | 29860           |
| 6.8                    | 1994             | 2.16           | 787A4328        | 29847           |
| 6.8                    | 2018             | 3.59           | 788A4328        | 43000           |
| 6.7                    | 2039             | 1.66           | <b>786A3937</b> | 19000           |
| 6.6                    | 2077             | 3.49           | <b>788A4037</b> | 43400           |
| 6.5                    | 2121             | 2.03           | <b>787A4037</b> | 29836           |
| 6.3                    | 2163             | 1.57           | 786A4328        | 19700           |
| 6.2                    | 2207             | 1.95           | 787A4428        | 29833           |
| 6.0                    | 2304             | 1.47           | <b>786A4137</b> | 19000           |
| 5.9                    | 2320             | 1.83           | <b>787A4137</b> | 29836           |
| 5.9                    | 2324             | 3.12           | 788A4428        | 43000           |
| 5.8                    | 2353             | 1.80           | 787A4528        | 29833           |
| 5.8                    | 2360             | 2.71           | <b>788A4137</b> | 43400           |
| 5.7                    | 2381             | 1.42           | 786A4428        | 19700           |
| 5.5                    | 2503             | 2.56           | 788A4528        | 43000           |
| 5.4                    | 2570             | 1.65           | <b>787A4237</b> | 29804           |
| 5.2                    | 2639             | 1.61           | 787A4628        | 29800           |
| 5.1                    | 2717             | 2.36           | <b>788A4237</b> | 43400           |
| 5.1                    | 2684             | 2.38           | 788A4628        | 43000           |
| 4.9                    | 2777             | 1.22           | <b>786A4237</b> | 19000           |
| 4.7                    | 2926             | 1.17           | 786A4628        | 19700           |
| 4.6                    | 2996             | 1.44           | <b>787A4337</b> | 29791           |
| 4.6                    | 2962             | 2.45           | <b>788A4337</b> | 43300           |
| 4.5                    | 3028             | 1.42           | 787A4728        | 29783           |
| 4.3                    | 3192             | 1.08           | 786A4728        | 19700           |
| 4.3                    | 3142             | 2.31           | 788A4728        | 43000           |
| 4.2                    | 3256             | 1.07           | <b>786A4337</b> | 19000           |
| 4.1                    | 3299             | 1.31           | <b>787A4437</b> | 29737           |
| 4.0                    | 3402             | 1.27           | 787A4828        | 29744           |
| 4.0                    | 3402             | 2.13           | <b>788A4437</b> | 43300           |
| 4.0                    | 3366             | 2.15           | 788A4828        | 43000           |
| 3.9                    | 3531             | 1.20           | <b>787A4537</b> | 29737           |
| 3.8                    | 3567             | 0.99           | <b>786A4437</b> | 19000           |
| 3.7                    | 3663             | 0.97           | 786A4828        | 19700           |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 3.7                    | 3660             | 1.75           | <b>788A4537</b> | 43300           |
| 3.5                    | 3942             | 1.08           | <b>787A4637</b> | 29800           |
| 3.5                    | 3927             | 1.63           | <b>788A4637</b> | 43300           |
| 3.0                    | 4536             | 0.95           | <b>787A4737</b> | 29700           |
| 3.0                    | 4598             | 1.58           | <b>788A4737</b> | 43300           |
| 2.8                    | 4928             | 1.47           | <b>788A4837</b> | 43300           |
| 2.7                    | 5103             | 0.84           | <b>787A4837</b> | 29600           |

## 2.2 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 228                    | 89               | 3.20           | 781A0536        | 3280            |
| 228                    | 89               | 3.20           | 782A0536        | 3280            |
| 194                    | 105              | 3.76           | <b>783A0245</b> | 4430            |
| 163                    | 125              | 2.51           | 781A0736        | 3405            |
| 163                    | 125              | 2.51           | 782A0736        | 3405            |
| 151                    | 135              | 3.76           | <b>784A0545</b> | 6590            |
| 149                    | 136              | 2.11           | <b>781A0545</b> | 3553            |
| 149                    | 136              | 2.11           | <b>782A0545</b> | 3553            |
| 148                    | 138              | 2.31           | 781A0836        | 3451            |
| 148                    | 138              | 2.31           | 782A0836        | 3451            |
| 139                    | 146              | 3.85           | <b>785A0545</b> | 8950            |
| 138                    | 147              | 3.49           | <b>783A0445</b> | 4710            |
| 132                    | 155              | 3.74           | 783A0836        | 4760            |
| 130                    | 157              | 2.08           | 781A1036        | 3503            |
| 130                    | 157              | 2.08           | 782A1036        | 3503            |
| 123                    | 165              | 3.36           | <b>783A0545</b> | 4790            |
| 116                    | 176              | 3.36           | 783A1036        | 4840            |
| 110                    | 186              | 3.00           | <b>783A0745</b> | 4870            |
| 107                    | 190              | 3.41           | <b>784A0745</b> | 7160            |
| 106                    | 190              | 1.68           | <b>781A0745</b> | 3535            |
| 106                    | 190              | 1.68           | <b>782A0745</b> | 3535            |
| 102                    | 199              | 1.69           | 781A1136        | 3563            |
| 102                    | 199              | 1.69           | 782A1136        | 3563            |
| 102                    | 199              | 3.65           | 784A1136        | 7250            |
| 100                    | 203              | 3.85           | <b>785A0745</b> | 9780            |
| 97                     | 209              | 2.89           | 783A1136        | 4941            |
| 96                     | 210              | 1.56           | <b>781A0845</b> | 3561            |
| 96                     | 210              | 1.56           | <b>782A0845</b> | 3561            |
| 96                     | 213              | 3.24           | <b>784A0845</b> | 7340            |
| 90                     | 226              | 1.53           | 781A1236        | 3573            |
| 90                     | 226              | 1.53           | 782A1236        | 3573            |
| 90                     | 226              | 3.42           | 784A1236        | 7450            |
| 89                     | 228              | 3.85           | <b>785A0845</b> | 10100           |
| 86                     | 236              | 2.60           | <b>783A0845</b> | 4987            |
| 85                     | 238              | 1.38           | <b>781A1045</b> | 3581            |
| 85                     | 238              | 1.38           | <b>782A1045</b> | 3581            |
| 85                     | 239              | 3.00           | <b>784A1045</b> | 7520            |
| 84                     | 241              | 2.38           | 783A1236        | 4999            |
| 81                     | 251              | 3.85           | <b>785A1045</b> | 10300           |
| 76                     | 267              | 2.33           | <b>783A0945</b> | 5023            |
| 76                     | 270              | 3.10           | 784A1436        | 7722            |
| 73                     | 277              | 1.29           | 781A1436        | 3551            |
| 73                     | 277              | 1.29           | 782A1436        | 3551            |
| 73                     | 280              | 2.24           | 783A1436        | 5035            |
| 67                     | 303              | 1.11           | <b>781A1145</b> | 3571            |
| 67                     | 303              | 1.11           | <b>782A1145</b> | 3571            |
| 67                     | 304              | 2.65           | <b>784A1145</b> | 7885            |
| 66                     | 308              | 1.18           | 781A1536        | 3521            |
| 66                     | 308              | 1.18           | 782A1536        | 3521            |
| 66                     | 311              | 2.38           | 784A1536        | 7927            |
| 65                     | 313              | 2.04           | 783A1536        | 5042            |
| 64                     | 319              | 2.01           | <b>783A1145</b> | 5030            |
| 62                     | 329              | 3.85           | <b>785A1145</b> | 11000           |
| 61                     | 334              | 1.93           | 783A1636        | 5026            |
| 59                     | 344              | 1.03           | <b>781A1245</b> | 3528            |
| 59                     | 344              | 1.03           | <b>782A1245</b> | 3528            |
| 59                     | 345              | 2.39           | <b>784A1245</b> | 8053            |
| 58                     | 350              | 1.06           | 781A1636        | 3454            |
| 58                     | 350              | 1.06           | 782A1636        | 3454            |
| 56                     | 367              | 1.57           | <b>783A1245</b> | 5002            |
| 56                     | 361              | 2.31           | 784A1636        | 8131            |
| 55                     | 374              | 3.57           | <b>785A1245</b> | 11400           |
| 54                     | 375              | 3.70           | 785A1636        | 11400           |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 51                     | 397              | 0.94           | 781A1736        | 3370            |
| 51                     | 397              | 0.94           | 782A1736        | 3370            |
| 51                     | 395              | 1.67           | 783A1736        | 4973            |
| 50                     | 411              | 2.05           | <b>784A1445</b> | 8270            |
| 50                     | 403              | 2.18           | 784A1736        | 8271            |
| 48                     | 4.22             | 0.90           | <b>781A1445</b> | 3416            |
| 48                     | 4.22             | 0.90           | <b>782A1445</b> | 3416            |
| 48                     | 427              | 1.52           | <b>783A1445</b> | 4921            |
| 48                     | 422              | 1.58           | 783A1836        | 4929            |
| 48                     | 425              | 3.43           | 785A1736        | 11700           |
| 47                     | 437              | 0.86           | 781A1836        | 3276            |
| 47                     | 437              | 0.86           | 782A1836        | 3276            |
| 47                     | 431              | 2.07           | 784A1836        | 8334            |
| 45                     | 453              | 3.17           | <b>785A1445</b> | 11800           |
| 43                     | 468              | 0.81           | <b>781A1545</b> | 3331            |
| 43                     | 468              | 0.81           | <b>782A1545</b> | 3331            |
| 43                     | 476              | 1.42           | <b>783A1545</b> | 4828            |
| 43                     | 472              | 1.57           | <b>784A1545</b> | 8416            |
| 43                     | 471              | 3.12           | 785A1836        | 11927           |
| 41                     | 497              | 2.97           | <b>785A1545</b> | 12100           |
| 40                     | 508              | 1.34           | <b>783A1645</b> | 4753            |
| 40                     | 509              | 1.74           | 784A1936        | 8485            |
| 39                     | 524              | 1.31           | 783A1936        | 4715            |
| 38                     | 540              | 2.83           | 785A1936        | 12247           |
| 37                     | 549              | 1.52           | <b>784A1645</b> | 8557            |
| 37                     | 543              | 1.64           | 784A2036        | 8550            |
| 36                     | 572              | 2.66           | <b>785A1645</b> | 12394           |
| 34                     | 603              | 1.15           | <b>783A1745</b> | 4501            |
| 33                     | 617              | 1.14           | 783A2036        | 4456            |
| 33                     | 614              | 1.43           | <b>784A1745</b> | 8586            |
| 33                     | 610              | 2.54           | 785A2036        | 12535           |
| 32                     | 643              | 1.09           | <b>783A1845</b> | 4375            |
| 31                     | 654              | 1.36           | <b>784A1845</b> | 8633            |
| 31                     | 648              | 2.47           | <b>785A1745</b> | 12678           |
| 30                     | 675              | 1.05           | 783A2236        | 4265            |
| 30                     | 674              | 1.32           | 784A2236        | 8644            |
| 29                     | 703              | 2.25           | 785A2236        | 12874           |
| 28                     | 717              | 2.24           | <b>785A1845</b> | 12849           |
| 27                     | 748              | 3.44           | <b>786A1845</b> | 16700           |
| 27                     | 759              | 3.53           | 786A2236        | 16800           |
| 26                     | 795              | 1.12           | 784A2336        | 8655            |
| 26                     | 775              | 1.14           | <b>784A1945</b> | 8651            |
| 25                     | 796              | 0.89           | <b>783A1945</b> | 3829            |
| 25                     | 829              | 1.07           | <b>784A2045</b> | 8635            |
| 25                     | 819              | 2.04           | <b>785A1945</b> | 13075           |
| 24                     | 841              | 1.95           | 785A2336        | 13191           |
| 24                     | 849              | 3.19           | <b>786A1945</b> | 17200           |
| 23                     | 868              | 1.03           | 784A2436        | 8616            |
| 23                     | 885              | 3.09           | 786A2336        | 17400           |
| 22                     | 921              | 1.80           | 785A2436        | 13300           |
| 22                     | 926              | 1.82           | <b>785A2045</b> | 13297           |
| 21                     | 972              | 2.88           | 786A2436        | 17273           |
| 21                     | 956              | 2.91           | <b>786A2045</b> | 17600           |
| 20                     | 1028             | 0.87           | <b>784A2245</b> | 8455            |
| 19                     | 1070             | 1.62           | <b>785A2245</b> | 13448           |
| 19                     | 1079             | 3.34           | 787A2636        | 29900           |
| 18                     | 1098             | 1.45           | 785A2536        | 13496           |
| 18                     | 1159             | 2.48           | <b>786A2245</b> | 18240           |
| 17                     | 1194             | 2.40           | 786A2536        | 18389           |
| 16                     | 1270             | 1.00           | 785A2736        | 13591           |
| 16                     | 1276             | 1.40           | <b>785A2345</b> | 13606           |
| 16                     | 1302             | 2.22           | 786A2736        | 18663           |
| 16                     | 1246             | 3.46           | <b>787A2345</b> | 29900           |
| 16                     | 1240             | 3.47           | 787A2736        | 29900           |
| 15                     | 1397             | 1.300          | <b>785A2445</b> | 13634           |
| 15                     | 1349             | 2.19           | <b>786A2345</b> | 18757           |
| 15                     | 1391             | 3.100          | 787A2836        | 29900           |
| 15                     | 1377             | 3.13           |                 |                 |

## Series F Gearboxes : Motorised selection

**Bold print indicates a 6 pole motor is used**

Double reduction

Triple reduction

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 12                     | 1632             | 3.92           | 788A3836        | 43400           |
| 11                     | 1817             | 1.70           | <b>786A2545</b> | 19524           |
| 11                     | 1754             | 1.93           | 786A3836        | 19600           |
| 11                     | 1887             | 2.28           | <b>787A2745</b> | 29856           |
| 11                     | 1856             | 2.32           | 787A3936        | 29865           |
| 11                     | 1871             | 3.87           | <b>788A2745</b> | 43400           |
| 11                     | 1842             | 3.93           | 788A3936        | 43400           |
| 10                     | 1980             | 1.58           | <b>786A2745</b> | 19658           |
| 10                     | 1984             | 1.71           | 786A3936        | 19793           |
| 10                     | 2118             | 2.03           | <b>787A2845</b> | 29848           |
| 10                     | 2063             | 2.09           | 787A4036        | 29826           |
| 10                     | 2009             | 3.51           | <b>788A2845</b> | 43400           |
| 10                     | 2047             | 3.54           | 788A4036        | 43400           |
| 9.2                    | 2200             | 1.93           | <b>787A3745</b> | 29863           |
| 9.2                    | 2197             | 2.91           | <b>788A3845</b> | 43400           |
| 9.0                    | 2237             | 1.52           | 786A4136        | 19938           |
| 8.9                    | 2270             | 1.29           | <b>786A2845</b> | 19908           |
| 8.9                    | 2257             | 1.88           | 787A4136        | 29826           |
| 8.7                    | 2327             | 2.75           | 788A4136        | 43400           |
| 8.3                    | 2442             | 1.74           | <b>787A3845</b> | 29826           |
| 8.3                    | 2440             | 2.62           | <b>788A3845</b> | 43400           |
| 8.2                    | 2441             | 1.39           | <b>786A3745</b> | 20014           |
| 8.1                    | 2495             | 1.70           | 787A4236        | 29820           |
| 7.5                    | 2672             | 1.27           | <b>786A3845</b> | 20059           |
| 7.5                    | 2581             | 2.39           | 788A4236        | 43400           |
| 7.3                    | 2755             | 2.63           | <b>788A3945</b> | 43400           |
| 7.1                    | 2831             | 1.52           | <b>787A3945</b> | 29790           |
| 6.9                    | 2904             | 1.48           | 787A4336        | 29780           |
| 6.9                    | 2918             | 2.48           | 788A4336        | 43400           |
| 6.7                    | 3022             | 1.12           | <b>786A3945</b> | 19995           |
| 6.6                    | 3062             | 2.37           | <b>788A4045</b> | 43400           |
| 6.4                    | 3144             | 1.37           | <b>787A4045</b> | 29776           |
| 6.2                    | 3215             | 1.34           | 787A4436        | 29771           |
| 6.0                    | 3361             | 2.16           | 788A4436        | 43300           |
| 5.9                    | 3415             | 0.99           | <b>786A4145</b> | 18688           |
| 5.9                    | 3426             | 1.24           | 787A4536        | 29771           |
| 5.8                    | 3439             | 1.23           | <b>787A4145</b> | 29776           |
| 5.8                    | 3480             | 1.84           | <b>788A4145</b> | 43400           |
| 5.6                    | 3619             | 1.77           | 788A4536        | 43300           |
| 5.3                    | 3810             | 1.11           | <b>787A4245</b> | 29714           |
| 5.2                    | 3844             | 1.10           | 787A4636        | 29706           |
| 5.2                    | 3881             | 1.65           | 788A4636        | 43300           |
| 5.2                    | 4074             | 2.48           | 789A4636        | 56000           |
| 5.0                    | 4006             | 1.60           | <b>788A4245</b> | 43300           |
| 4.9                    | 4117             | 0.82           | <b>786A4245</b> | 16008           |
| 4.6                    | 4367             | 1.66           | <b>788A4345</b> | 43300           |
| 4.5                    | 4442             | 0.97           | <b>787A4345</b> | 29711           |
| 4.5                    | 4410             | 0.98           | 787A4736        | 29697           |
| 4.5                    | 4640             | 2.29           | 789A4736        | 56000           |
| 4.4                    | 4543             | 1.60           | 788A4736        | 43300           |
| 4.2                    | 5040             | 2.01           | <b>789A4445</b> | 56000           |
| 4.1                    | 4890             | 0.88           | <b>787A4445</b> | 29617           |
| 4.1                    | 4867             | 1.49           | 788A4836        | 43300           |
| 4.0                    | 4955             | 0.87           | 787A4836        | 29630           |
| 4.0                    | 5016             | 1.45           | <b>788A4445</b> | 43300           |
| 3.8                    | 5234             | 0.81           | <b>787A4545</b> | 29617           |
| 3.7                    | 5397             | 1.19           | <b>788A4545</b> | 43300           |
| 3.7                    | 5741             | 1.85           | <b>789A4545</b> | 56000           |
| 3.5                    | 5790             | 1.11           | <b>788A4645</b> | 43300           |
| 3.4                    | 6197             | 1.63           | <b>789A4645</b> | 56000           |
| 3.0                    | 6779             | 1.07           | <b>788A4745</b> | 43300           |
| 3.0                    | 7059             | 1.50           | <b>789A4745</b> | 56000           |
| 2.8                    | 7265             | 1.00           | <b>788A4845</b> | 43200           |

### 3.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 230                    | 120              | 3.88           | 784A0538        | 5730            |
| 228                    | 122              | 2.25           | 781A0538        | 2895            |
| 228                    | 122              | 2.35           | 782A0538        | 2895            |
| 210                    | 133              | 3.88           | 783A0438        | 4070            |
| 198                    | 140              | 2.81           | <b>783A0253</b> | 4113            |
| 187                    | 148              | 3.65           | 783A0538        | 4140            |
| 167                    | 166              | 3.35           | 783A0738        | 4200            |
| 163                    | 171              | 1.84           | 781A0738        | 3039            |
| 163                    | 171              | 1.84           | 782A0738        | 3039            |
| 163                    | 170              | 3.35           | 784A0738        | 6210            |
| 154                    | 180              | 2.81           | <b>784A0553</b> | 6299            |
| 148                    | 188              | 1.70           | 781A0838        | 3058            |
| 148                    | 188              | 1.70           | 782A0838        | 3058            |
| 146                    | 190              | 3.20           | 784A0838        | 6360            |
| 142                    | 195              | 2.88           | <b>785A0553</b> | 6884            |
| 141                    | 197              | 2.61           | <b>783A0453</b> | 4265            |
| 132                    | 211              | 2.74           | 783A0838        | 4289            |
| 130                    | 214              | 1.53           | 781A1038        | 3072            |
| 130                    | 214              | 1.53           | 782A1038        | 3072            |
| 130                    | 214              | 3.02           | 784A1038        | 6517            |
| 126                    | 221              | 2.51           | <b>783A0553</b> | 4292            |
| 116                    | 240              | 2.46           | 783A1038        | 4307            |
| 112                    | 248              | 2.25           | <b>783A0753</b> | 4310            |
| 110                    | 254              | 2.55           | <b>784A0753</b> | 6748            |
| 102                    | 271              | 1.24           | 781A1138        | 3051            |
| 102                    | 271              | 1.24           | 782A1138        | 3051            |
| 102                    | 272              | 2.68           | 784A1138        | 6815            |
| 102                    | 271              | 2.88           | <b>785A0753</b> | 9411            |
| 98                     | 285              | 2.42           | <b>784A0853</b> | 6879            |
| 97                     | 285              | 2.12           | 783A1138        | 4306            |
| 94                     | 294              | 3.94           | 785A1138        | 9560            |
| 91                     | 305              | 2.88           | <b>785A0853</b> | 9683            |
| 90                     | 308              | 1.12           | 781A1238        | 3012            |
| 90                     | 308              | 1.12           | 782A1238        | 3012            |
| 90                     | 308              | 2.51           | 784A1238        | 6957            |
| 88                     | 315              | 1.95           | <b>783A0853</b> | 4275            |
| 87                     | 319              | 2.25           | <b>784A1053</b> | 7002            |
| 84                     | 329              | 1.75           | 783A1238        | 4268            |
| 83                     | 336              | 2.88           | <b>785A1053</b> | 9850            |
| 83                     | 334              | 3.65           | 785A1238        | 9840            |
| 78                     | 357              | 1.75           | <b>783A1053</b> | 4217            |
| 76                     | 368              | 2.27           | 784A1438        | 7135            |
| 73                     | 378              | 0.94           | 781A1438        | 2904            |
| 73                     | 378              | 0.94           | 782A1438        | 2904            |
| 73                     | 382              | 1.64           | 783A1438        | 4184            |
| 69                     | 406              | 1.99           | <b>784A1153</b> | 7228            |
| 68                     | 407              | 3.24           | 785A1438        | 10300           |
| 66                     | 420              | 0.86           | 781A1538        | 2827            |
| 66                     | 420              | 0.86           | 782A1538        | 2827            |
| 66                     | 424              | 1.75           | 784A1538        | 7250            |
| 65                     | 427              | 1.50           | 783A1538        | 4091            |
| 65                     | 426              | 1.50           | <b>783A1153</b> | 4070            |
| 63                     | 440              | 2.88           | <b>785A1153</b> | 10409           |
| 62                     | 445              | 3.03           | 785A1538        | 10400           |
| 61                     | 456              | 1.41           | 783A1638        | 4013            |
| 61                     | 460              | 1.79           | <b>784A1253</b> | 7309            |
| 58                     | 477              | 0.78           | 781A1638        | 2702            |
| 58                     | 477              | 0.80           | 782A1638        | 2702            |
| 57                     | 490              | 1.17           | <b>783A1253</b> | 3899            |
| 56                     | 493              | 1.70           | 784A1638        | 7345            |
| 56                     | 500              | 2.68           | <b>785A1253</b> | 10717           |
| 54                     | 512              | 2.71           | 785A1638        | 10715           |
| 51                     | 539              | 1.22           | 783A1738        | 3771            |
| 51                     | 549              | 1.53           | <b>784A1453</b> | 7382            |
| 50                     | 550              | 1.60           | 784A1738        | 7393            |
| 49                     | 570              | 1.14           | <b>783A1453</b> | 3636            |
| 48                     | 576              | 1.16           | 783A1838        | 3649            |
| 48                     | 580              | 2.51           | 785A1738        | 10926           |
| 47                     | 587              | 1.52           | 784A1838        | 7399            |
| 46                     | 605              | 2.38           | <b>785A1453</b> | 10986           |
| 44                     | 636              | 1.06           | <b>783A1553</b> | 3393            |
| 44                     | 631              | 1.17           | <b>784A1553</b> | 7395            |
| 43                     | 642              | 2.29           | 785A1838        | 11076           |
| 42                     | 664              | 2.23           | <b>785A1553</b> | 11194           |
| 41                     | 678              | 1.01           | <b>783A1653</b> | 3221            |
| 41                     | 673              | 3.68           | 786A1838        | 14500           |
| 40                     | 695              | 1.28           | 784A1938        | 7384            |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 39                     | 715              | 0.96           | 783A1938        | 3130            |
| 39                     | 708              | 3.50           | <b>786A1553</b> | 14700           |
| 38                     | 734              | 1.14           | <b>784A1653</b> | 7363            |
| 38                     | 736              | 2.08           | 785A1938        | 11272           |
| 37                     | 741              | 1.20           | 784A2038        | 7367            |
| 37                     | 759              | 3.39           | 786A1938        | 14900           |
| 36                     | 763              | 1.99           | <b>785A1653</b> | 11360           |
| 35                     | 806              | 0.86           | <b>783A1753</b> | 2686            |
| 34                     | 819              | 1.07           | <b>784A1753</b> | 7268            |
| 34                     | 824              | 3.17           | <b>786A1653</b> | 15200           |
| 33                     | 841              | 0.83           | 783A2038        | 2590            |
| 33                     | 833              | 1.86           | 785A2038        | 11432           |
| 32                     | 859              | 0.81           | <b>783A1853</b> | 2441            |
| 32                     | 874              | 1.02           | <b>784A1853</b> | 7217            |
| 32                     | 866              | 1.85           | <b>785A1753</b> | 11504           |
| 32                     | 858              | 3.06           | 786A2038        | 15300           |
| 30                     | 919              | 0.97           | 784A2238        | 7180            |
| 30                     | 912              | 2.87           | <b>786A1753</b> | 15500           |
| 29                     | 959              | 1.65           | 785A2238        | 11589           |
| 29                     | 958              | 1.68           | <b>785A1853</b> | 11559           |
| 28                     | 1000             | 2.58           | <b>786A1853</b> | 15688           |
| 27                     | 1035             | 0.86           | <b>784A1953</b> | 6970            |
| 27                     | 1035             | 2.59           | 786A2238        | 15773           |
| 26                     | 1085             | 0.82           | 784A2338        | 6920            |
| 25                     | 1107             | 0.80           | <b>784A2053</b> | 6835            |
| 25                     | 1093             | 1.53           | <b>785A1953</b> | 11602           |
| 25                     | 1133             | 2.39           | <b>786A1953</b> | 16057           |
| 24                     | 1146             | 1.43           | 785A2338        | 11658           |
| 24                     | 1175             | 3.67           | <b>787A2053</b> | 29900           |
| 23                     | 1207             | 2.27           | 786A2338        | 16198           |
| 22                     | 1256             | 1.32           | 785A2438        | 11637           |
| 22                     | 1236             | 1.37           | <b>785A2053</b> | 11623           |
| 22                     | 1277             | 2.18           | <b>786A2053</b> | 16315           |
| 22                     | 1291             | 3.28           | <b>787A2153</b> | 29900           |
| 22                     | 1236             | 3.48           | 787A2438        | 29900           |
| 21                     | 1326             | 2.11           | 786A2438        | 16407           |
| 21                     | 1311             | 2.74           | 787A2538        | 29900           |
| 20                     | 1426             | 2.97           | <b>787A2253</b> | 29875           |
| 19                     | 1429             | 1.21           | <b>785A2253</b> | 11520           |
| 19                     | 1471             | 2.45           | 787A2638        | 29877           |
| 19                     | 1456             | 3.85           | 788A2638        | 43400           |
| 18                     | 1497             | 1.06           | 785A2538        | 11510           |
| 18                     | 1548             | 1.86           | <b>786A2253</b> | 16687           |
| 17                     | 1628             | 1.76           | 786A2538        | 16777           |
| 17                     | 1664             | 2.59           | <b>787A2353</b> | 29869           |
| 16                     | 1704             | 1.05           | <b>785A2353</b> | 11292           |
| 16                     | 1776             | 1.63           | 786A2738        | 16907           |
| 16                     | 1691             | 2.55           | 787A2738        | 29865           |
| 16                     | 1720             | 4.00           | 788A2738        | 43400           |
| 15                     | 1865             | 0.97           | <b>785A2453</b> | 11114           |
| 15                     | 1802             | 1.64           | <b>786A2353</b> | 16941           |
| 15                     | 1897             | 2.27           | 787A2838        | 29869           |
| 15                     | 1839             | 2.34           | <b>787A2453</b> | 29869           |
| 15                     | 1827             | 3.85           | 788A2838        | 43400           |
| 15                     | 1878             | 3.86           | <b>788A2453</b> | 43400           |
| 14                     | 2030             | 1.32           | 786A2838        | 17086           |
| 14                     | 1973             | 1.52           | <b>786A2453</b> | 17050           |
| 14                     | 1955             | 2.02           | <b>787A2553</b> | 29850           |
| 14                     | 1966             | 2.16           | 787A3738        | 29869           |
| 14                     | 2022             | 3.05           | <b>788A2553</b> | 43400           |
| 14                     | 1989             | 3.20           | 788A3738        | 43400           |
| 13                     | 2184             | 1.55           | 786A3738        | 17206           |
| 13                     | 2191             | 1.67           | <b>787A2653</b> | 29826           |
| 13                     | 2186             | 1.94           | 787A3838        | 29863           |
| 13                     | 2169             | 2.59           | <b>788A2653</b> | 43400           |
| 12                     | 2210             | 2.90           | 788A3838        | 43400           |
| 11                     | 2426             | 1.27           | <b>786A2553</b> | 17068           |
| 11                     | 2392             | 1.42           | 786A3838        | 17200           |
| 11                     | 2531             | 1.70           | 787A3938        | 29826           |
| 11                     | 2520             | 1.71           | <b>787A2753</b> | 29806           |
| 11                     | 2537             | 2.86           | <b>788A2753</b> | 43400           |
| 11                     | 2495             | 2.91           | 788A3938        | 43400           |
| 10                     | 2644             | 1.18           | <b>786A2753</b> | 17010           |
| 10                     | 2706             | 1.25           | 786A3938        | 17101           |
| 10                     | 2829             | 1.52           | <b>787A2853</b> | 29790           |
| 10                     | 2813             | 1.53           | 787A4038        | 29773           |
| 10                     | 2726             |                |                 |                 |

Series F Gearboxes : Motorised selection

Table with 5 columns: Nominal Output Rev/Min, Output Torque Nm, Service Factor, Unit Selection, Overhung Load N. Contains 50 rows of gear specifications.

Table with 5 columns: Nominal Output Rev/Min, Output Torque Nm, Service Factor, Unit Selection, Overhung Load N. Contains 50 rows of gear specifications.

Table with 5 columns: Nominal Output Rev/Min, Output Torque Nm, Service Factor, Unit Selection, Overhung Load N. Contains 50 rows of gear specifications.

4.0 KW MOTOR

Table with 5 columns: Nominal Output Rev/Min, Output Torque Nm, Service Factor, Unit Selection, Overhung Load N. Contains 35 rows of gear specifications for a 4.0 KW motor.

## Series F Gearboxes : Motorised selection

**Bold print indicates a 6 pole motor is used**

Double reduction

Triple reduction

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 3.5                    | 11033            | 0.92           | <b>789A4655</b> | 56000           |
| 3.4                    | 11354            | 1.46           | <b>790A4655</b> | 62200           |
| 3.1                    | 12263            | 1.34           | <b>790A4755</b> | 62200           |
| 3.0                    | 12567            | 0.84           | <b>789A4755</b> | 56000           |

## 5.5 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 300                    | 169              | 2.33           | 783A0254        | 3186            |
| 233                    | 218              | 2.15           | 784A0554        | 5124            |
| 214                    | 236              | 2.38           | 785A0554        | 7240            |
| 213                    | 240              | 2.15           | 783A0454        | 3150            |
| 197                    | 258              | 1.53           | <b>783A0257</b> | 3126            |
| 190                    | 268              | 2.02           | 783A0554        | 3108            |
| 169                    | 300              | 1.85           | 783A0754        | 3041            |
| 166                    | 308              | 1.85           | 784A0754        | 5357            |
| 155                    | 328              | 2.38           | 785A0754        | 7741            |
| 153                    | 333              | 1.53           | <b>784A0557</b> | 5390            |
| 148                    | 345              | 1.77           | 784A0854        | 5408            |
| 141                    | 361              | 1.56           | <b>785A0557</b> | 7854            |
| 140                    | 363              | 1.42           | <b>783A0457</b> | 2874            |
| 138                    | 369              | 2.38           | 785A0854        | 7905            |
| 137                    | 371              | 3.15           | <b>786A0557</b> | 10000           |
| 133                    | 382              | 1.52           | 783A0854        | 2818            |
| 132                    | 387              | 1.67           | 784A1054        | 5445            |
| 125                    | 407              | 1.36           | <b>783A0557</b> | 2737            |
| 125                    | 406              | 2.38           | 785A1054        | 8025            |
| 118                    | 433              | 1.36           | 783A1054        | 2642            |
| 112                    | 457              | 1.22           | <b>783A0757</b> | 2560            |
| 109                    | 468              | 1.39           | <b>784A0757</b> | 5461            |
| 104                    | 492              | 1.48           | 784A1154        | 5458            |
| 102                    | 501              | 1.56           | <b>785A0757</b> | 8260            |
| 99                     | 516              | 1.17           | 783A1154        | 2320            |
| 97                     | 525              | 1.31           | <b>784A0857</b> | 5440            |
| 97                     | 527              | 3.15           | <b>786A0757</b> | 10900           |
| 96                     | 531              | 2.18           | 785A1154        | 8332            |
| 92                     | 555              | 3.56           | 786A1154        | 11000           |
| 91                     | 558              | 1.39           | 784A1254        | 5418            |
| 91                     | 563              | 1.56           | <b>785A0857</b> | 8381            |
| 88                     | 581              | 1.06           | <b>783A0857</b> | 2051            |
| 87                     | 588              | 1.22           | <b>784A1057</b> | 5387            |
| 87                     | 584              | 3.15           | <b>786A0857</b> | 11100           |
| 86                     | 595              | 0.97           | 783A1254        | 1981            |
| 84                     | 604              | 2.02           | 785A1254        | 8445            |
| 82                     | 619              | 1.56           | <b>785A1057</b> | 8444            |
| 82                     | 622              | 3.33           | 786A1254        | 11300           |
| 78                     | 653              | 2.98           | <b>786A1057</b> | 11331           |
| 77                     | 659              | 0.95           | <b>783A1057</b> | 1698            |
| 77                     | 666              | 1.26           | 784A1454        | 5299            |
| 74                     | 691              | 0.91           | 783A1454        | 1526            |
| 69                     | 737              | 1.79           | 785A1454        | 8591            |
| 68                     | 749              | 1.08           | <b>784A1157</b> | 5176            |
| 67                     | 767              | 0.97           | 784A1554        | 5134            |
| 67                     | 759              | 2.91           | 786A1454        | 11666           |
| 66                     | 772              | 0.83           | 783A1554        | 1118            |
| 65                     | 785              | 0.82           | <b>783A1157</b> | 1070            |
| 63                     | 811              | 1.56           | <b>785A1157</b> | 8565            |
| 63                     | 805              | 1.68           | 785A1554        | 8550            |
| 61                     | 844              | 2.57           | <b>786A1157</b> | 11837           |
| 60                     | 849              | 0.97           | <b>784A1257</b> | 4984            |
| 59                     | 861              | 2.64           | 786A1554        | 11911           |
| 57                     | 892              | 0.94           | 784A1654        | 4888            |
| 56                     | 922              | 1.45           | <b>785A1257</b> | 8585            |
| 55                     | 926              | 1.50           | 785A1654        | 8576            |
| 54                     | 946              | 2.39           | <b>786A1257</b> | 12032           |
| 51                     | 1012             | 0.83           | <b>784A1457</b> | 4610            |
| 51                     | 995              | 0.88           | 784A1754        | 4649            |
| 51                     | 1003             | 2.38           | 786A1654        | 12166           |
| 48                     | 1063             | 0.84           | 784A1854        | 4476            |
| 48                     | 1049             | 1.39           | 785A1754        | 8508            |
| 46                     | 1116             | 1.29           | <b>785A1457</b> | 8443            |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 46                     | 1109             | 2.22           | 786A1754        | 12350           |
| 44                     | 1161             | 1.27           | 785A1854        | 8417            |
| 44                     | 1163             | 2.08           | <b>786A1457</b> | 12315           |
| 42                     | 1224             | 1.21           | <b>785A1557</b> | 8364            |
| 42                     | 1217             | 2.04           | 786A1854        | 12413           |
| 40                     | 1288             | 3.35           | 787A1954        | 29900           |
| 39                     | 1305             | 1.90           | <b>786A1557</b> | 12465           |
| 38                     | 1331             | 1.15           | 785A1954        | 8226            |
| 37                     | 1372             | 1.87           | 786A1954        | 12536           |
| 36                     | 1407             | 1.08           | <b>785A1657</b> | 8126            |
| 36                     | 1428             | 3.02           | 787A2054        | 29872           |
| 34                     | 1506             | 1.03           | 785A2054        | 7987            |
| 34                     | 1518             | 1.72           | <b>786A1657</b> | 12590           |
| 34                     | 1522             | 2.79           | <b>787A1757</b> | 29870           |
| 33                     | 1552             | 1.69           | 786A2054        | 12625           |
| 33                     | 1565             | 2.71           | 787A2154        | 29868           |
| 32                     | 1596             | 1.00           | <b>785A1757</b> | 7834            |
| 31                     | 1660             | 3.85           | <b>788A1857</b> | 43300           |
| 30                     | 1682             | 1.56           | <b>786A1757</b> | 12612           |
| 30                     | 1686             | 2.51           | <b>787A1857</b> | 29872           |
| 29                     | 1766             | 0.91           | <b>785A1857</b> | 7530            |
| 29                     | 1734             | 0.91           | 785A2254        | 7570            |
| 29                     | 1727             | 2.45           | 787A2254        | 29872           |
| 28                     | 1842             | 1.40           | <b>786A1857</b> | 12528           |
| 28                     | 1805             | 3.55           | 788A2254        | 43400           |
| 27                     | 1872             | 1.43           | 786A2254        | 12566           |
| 27                     | 1872             | 3.87           | <b>788A1957</b> | 43300           |
| 26                     | 1953             | 2.21           | <b>787A1957</b> | 29839           |
| 26                     | 1964             | 3.69           | 788A2354        | 43400           |
| 25                     | 2015             | 0.83           | <b>785A1957</b> | 7000            |
| 25                     | 2026             | 2.13           | 787A2354        | 29862           |
| 24                     | 2089             | 1.30           | <b>786A1957</b> | 12486           |
| 24                     | 2087             | 3.47           | <b>788A2057</b> | 43300           |
| 23                     | 2184             | 1.25           | 786A2354        | 12443           |
| 23                     | 2236             | 1.93           | 787A2454        | 29844           |
| 23                     | 2166             | 1.99           | <b>787A2057</b> | 29837           |
| 22                     | 2353             | 1.18           | <b>786A2057</b> | 12301           |
| 22                     | 2362             | 2.71           | <b>788A2157</b> | 43300           |
| 22                     | 2265             | 3.20           | 788A2454        | 43400           |
| 21                     | 2398             | 1.17           | 786A2454        | 12292           |
| 21                     | 2371             | 1.52           | 787A2554        | 29859           |
| 21                     | 2379             | 1.78           | <b>787A2157</b> | 29837           |
| 21                     | 2423             | 2.55           | 788A2554        | 43400           |
| 19                     | 2661             | 1.35           | 787A2654        | 29805           |
| 19                     | 2628             | 1.61           | <b>787A2257</b> | 29789           |
| 19                     | 2614             | 2.15           | 788A2654        | 43400           |
| 19                     | 2728             | 2.35           | <b>788A2257</b> | 43300           |
| 18                     | 2853             | 1.01           | <b>786A2257</b> | 11833           |
| 17                     | 2944             | 0.97           | 786A2554        | 11740           |
| 17                     | 3066             | 1.41           | <b>787A2357</b> | 29775           |
| 17                     | 3058             | 1.41           | 787A2754        | 29758           |
| 17                     | 3043             | 2.38           | 788A2754        | 43400           |
| 16                     | 3211             | 0.90           | 786A2754        | 11419           |
| 15                     | 3321             | 0.89           | <b>786A2357</b> | 11266           |
| 15                     | 3430             | 1.26           | 787A2854        | 29775           |
| 15                     | 3389             | 1.27           | <b>787A2457</b> | 29775           |
| 15                     | 3408             | 2.13           | <b>788A2457</b> | 43300           |
| 15                     | 3281             | 2.15           | 788A2854        | 43400           |
| 14                     | 3637             | 0.82           | <b>786A2457</b> | 10800           |
| 14                     | 3603             | 1.10           | <b>787A2557</b> | 29766           |
| 14                     | 3668             | 1.68           | <b>788A2557</b> | 43300           |
| 14                     | 3571             | 1.78           | 788A3754        | 43400           |
| 13                     | 3950             | 0.86           | 786A3754        | 10373           |
| 13                     | 4039             | 0.91           | <b>787A2657</b> | 29704           |
| 13                     | 3935             | 1.43           | <b>788A2657</b> | 43300           |
| 13                     | 3968             | 1.61           | 788A3854        | 43400           |
| 11                     | 4645             | 0.93           | <b>787A2757</b> | 29650           |
| 11                     | 4604             | 1.57           | <b>788A2757</b> | 43300           |
| 11                     | 4480             | 1.62           | 788A3954        | 43400           |
| 11                     | 4578             | 2.32           | 789A3954        | 56000           |
| 10                     | 4945             | 1.43           | <b>788A2857</b> | 43300           |
| 10                     | 4978             | 1.46           | 788A4054        | 43400           |
| 10                     | 5099             | 1.98           | 789A4054        | 56000           |
| 9.6                    | 5214             | 0.83           | <b>787A2857</b> | 29607           |
| 9.3                    | 5407             | 1.18           | <b>788A3857</b> | 43200           |
| 9.0                    | 5809             | 1.83           | 789A4154        | 56000           |
| 8.9                    | 5659             | 1.13           | 788A4154        | 43400           |
| 8.4                    | 6006             | 1.07           | <b>788A3857</b> | 43200           |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 8.1                    | 6450             | 1.57           | 789A4254        | 56000           |
| 8.0                    | 6566             | 2.50           | 790A4254        | 62200           |
| 7.7                    | 6518             | 0.98           | 788A4254        | 43400           |
| 7.4                    | 6781             | 1.07           | <b>788A3957</b> | 43200           |
| 7.4                    | 7092             | 2.31           | 790A4354        | 62200           |
| 7.1                    | 7095             | 1.02           | 788A4354        | 43200           |
| 7.1                    | 7348             | 1.44           | 789A4354        | 56000           |
| 6.7                    | 7537             | 0.96           | <b>788A4057</b> | 43200           |
| 6.4                    | 8168             | 1.24           | 789A4454        | 56000           |
| 6.3                    | 8315             | 1.98           | 790A4454        | 62200           |
| 6.1                    | 8171             | 0.89           | 788A4454        | 43100           |
| 5.8                    | 8981             | 1.82           | 790A4554        | 62200           |
| 5.6                    | 9304             | 1.14           | 789A4554        | 56000           |
| 5.2                    | 10044            | 1.01           | 789A4654        | 56000           |
| 5.1                    | 10336            | 1.60           | 790A4654        | 62200           |
| 4.7                    | 11164            | 1.47           | 790A4754        | 62200           |
| 4.6                    | 11441            | 0.93           | 789A4754        | 56000           |
| 4.2                    | 12402            | 0.82           | <b>789A4457</b> | 56000           |
| 4.2                    | 12625            | 1.31           | <b>790A4457</b> | 62200           |
| 3.9                    | 13636            | 1.21           | <b>790A4557</b> | 62200           |
| 3.3                    | 15693            | 1.05           | <b>790A4657</b> | 62200           |
| 3.1                    | 16950            | 0.97           | <b>790A4757</b> | 62200           |

## 7.5 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 300                    | 230              | 1.71           | 783A0256        | 2661            |
| 233                    | 297              | 1.57           | 784A0556        | 4640            |
| 214                    | 322              | 1.75           | 785A0556        | 6800            |
| 213                    | 327              | 1.57           | 783A0456        | 2415            |
| 208                    | 333              | 3.51           | 786A0556        | 8270            |
| 190                    | 366              | 1.48           | 783A0556        | 2283            |
| 169                    | 409              | 1.36           | 783A0756        | 2115            |
| 166                    | 421              | 1.36           | 784A0756        | 4675            |
| 155                    | 448              | 1.75           | 785A0756        | 7130            |
| 148                    | 470              | 1.30           | 784A0856        | 4647            |
| 147                    | 473              | 3.40           | 786A0756        | 9420            |
| 143                    | 484              | 1.17           | <b>785A0556</b> | 7190            |
| 139                    | 499              | 2.34           | <b>786A0556</b> | 9501            |
| 138                    | 503              | 1.75           | 785A0856        | 7220            |
| 133                    | 521              | 1.11           | 783A0856        | 1642            |
| 132                    | 529              | 1.23           | 784A1056        | 4588            |
| 132                    | 523              | 3.23           | 786A0856        | 9620            |
| 125                    | 554              | 1.75           | 785A1056        | 7272            |
| 119                    | 585              | 3.04           | 786A1056        | 9820            |
| 118                    | 591              | 1.00           | 783A1056        | 1310            |
| 104                    | 671              | 1.09           | 784A1156        | 4372            |
| 103                    | 672              | 1.17           | <b>785A0765</b> | 7340            |
| 99                     | 704              | 0.86           | 783A1156        | 732             |
| 98                     | 708              | 2.34           | <b>786A0765</b> | 10170           |
| 96                     | 725              | 1.60           | 785A1156        | 7351            |
| 92                     | 755              | 1.17           | <b>785A0865</b> | 7340            |
| 92                     | 757              | 2.61           | 786A1156        | 10237           |
| 91                     | 761              | 1.02           | 784A1256        | 4186            |
| 89                     | 784              | 2.34           | <b>786A0865</b> | 10297           |
| 84                     | 831              | 1.17           | <b>785A1065</b> | 7320            |
| 84                     | 824              | 1.48           | 785A1256        | 7330            |
| 82                     | 848              | 2.44           | 786A1256        | 10437           |
| 80                     | 877              | 2.22           | <b>786A1065</b> | 10439           |
| 77                     | 908              | 0.92           | 784A1456        | 3830            |
| 69                     | 1005             | 1.31           | 785A1456        | 7225            |
| 67                     | 1035             | 2.13           | 786A1456        | 10618           |
| 64                     | 1089             | 1.17           | <b>785A1165</b> | 7090            |
| 63                     | 1098             | 1.23           | 785A1556        | 7070            |
| 62                     | 1134             | 1.91           | <b>786A1165</b> | 10687           |
| 59                     | 1174             | 1.93           | 786A1556        | 10727           |
| 56                     | 1238             | 1.08           | <b>785A1265</b> | 6880            |
| 55                     | 1263             | 1.10           | 785A1656        | 6864            |
| 55                     | 1270             | 1.78           | <b>786A1265</b> | 10742           |
| 51                     | 1368             | 1.75           | 786A1656        | 10788           |
| 51                     | 1364             | 3.11           | 787A1756        | 29888           |
| 48                     | 1431             | 1.02           | 785A1756        | 6574            |
| 47                     | 1479             |                |                 |                 |

## Series F Gearboxes : Motorised selection

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 45                     | 1561             | 1.55           | <b>786A1465</b> | 10735           |
| 44                     | 1584             | 0.93           | 785A1856        | 6290            |
| 42                     | 1644             | 0.90           | <b>785A1565</b> | 6100            |
| 42                     | 1660             | 1.49           | 786A1856        | 10745           |
| 42                     | 1643             | 3.77           | <b>788A1565</b> | 43300           |
| 41                     | 1694             | 3.81           | 788A1956        | 43300           |
| 40                     | 1756             | 2.45           | 787A1956        | 29863           |
| 39                     | 1753             | 1.41           | <b>786A1565</b> | 10678           |
| 38                     | 1815             | 0.84           | 785A1956        | 5790            |
| 37                     | 1889             | 0.80           | <b>785A1665</b> | 5540            |
| 37                     | 1871             | 1.37           | 786A1956        | 10645           |
| 37                     | 1859             | 3.48           | <b>788A1665</b> | 43300           |
| 37                     | 1879             | 3.56           | 788A2056        | 43300           |
| 36                     | 1947             | 2.21           | 787A2056        | 29833           |
| 34                     | 2039             | 1.28           | <b>786A1665</b> | 10503           |
| 34                     | 2043             | 2.07           | <b>787A1765</b> | 29832           |
| 34                     | 2031             | 3.15           | <b>788A1765</b> | 43300           |
| 33                     | 2116             | 1.24           | 786A2056        | 10485           |
| 33                     | 2134             | 1.99           | 787A2156        | 29827           |
| 33                     | 2133             | 3.00           | 788A2156        | 43300           |
| 31                     | 2258             | 1.16           | <b>786A1765</b> | 10302           |
| 31                     | 2264             | 1.87           | <b>787A1865</b> | 29836           |
| 31                     | 2252             | 2.84           | <b>788A1865</b> | 43300           |
| 29                     | 2355             | 1.80           | 787A2256        | 29836           |
| 28                     | 2474             | 1.04           | <b>786A1865</b> | 10000           |
| 28                     | 2461             | 2.60           | 788A2256        | 43300           |
| 27                     | 2554             | 1.05           | 786A2256        | 10000           |
| 27                     | 2539             | 2.85           | <b>788A1965</b> | 43300           |
| 26                     | 2622             | 1.64           | <b>787A1965</b> | 29789           |
| 26                     | 2678             | 2.71           | 788A2356        | 43300           |
| 25                     | 2805             | 0.97           | <b>786A1965</b> | 9630            |
| 25                     | 2762             | 1.56           | 787A2356        | 29812           |
| 24                     | 2908             | 1.48           | <b>787A2065</b> | 29787           |
| 24                     | 2832             | 2.56           | <b>788A2065</b> | 43300           |
| 23                     | 2978             | 0.92           | 786A2356        | 9440            |
| 23                     | 3049             | 1.41           | 787A2456        | 29800           |
| 22                     | 3160             | 0.88           | <b>786A2065</b> | 9090            |
| 22                     | 3195             | 1.33           | <b>787A2165</b> | 29787           |
| 22                     | 3204             | 2.00           | <b>788A2165</b> | 43300           |
| 22                     | 3089             | 2.35           | 788A2456        | 43300           |
| 21                     | 3271             | 0.86           | 786A2456        | 9000            |
| 21                     | 3233             | 1.11           | 787A2556        | 29827           |
| 21                     | 3305             | 1.87           | 788A2556        | 43300           |
| 20                     | 3528             | 1.20           | <b>787A2265</b> | 29720           |
| 19                     | 3629             | 0.99           | 787A2656        | 29748           |
| 19                     | 3565             | 1.57           | 788A2656        | 43300           |
| 19                     | 3701             | 1.73           | <b>788A2265</b> | 43300           |
| 19                     | 3829             | 2.02           | <b>789A2365</b> | 49100           |
| 17                     | 4170             | 1.03           | 787A2756        | 29672           |
| 17                     | 4117             | 1.05           | <b>787A2365</b> | 29700           |
| 17                     | 4150             | 1.75           | 788A2756        | 43300           |
| 17                     | 4036             | 1.80           | <b>788A2365</b> | 43300           |
| 16                     | 4361             | 2.02           | <b>789A2465</b> | 50200           |
| 16                     | 4473             | 2.26           | 789A3656        | 56000           |
| 15                     | 4678             | 0.92           | 787A2856        | 29700           |
| 15                     | 4550             | 0.95           | <b>787A2465</b> | 29700           |
| 15                     | 4623             | 1.57           | <b>788A2465</b> | 43300           |
| 15                     | 4474             | 1.57           | 788A2856        | 43300           |
| 14                     | 4838             | 0.82           | <b>787A2565</b> | 29700           |
| 14                     | 4976             | 1.24           | <b>788A2565</b> | 43300           |
| 14                     | 4870             | 1.31           | 788A3756        | 43200           |
| 14                     | 5095             | 2.08           | 789A3756        | 56000           |
| 13                     | 5338             | 1.05           | <b>788A2665</b> | 43300           |
| 13                     | 5411             | 1.18           | 788A3856        | 43200           |
| 13                     | 5480             | 1.85           | 789A3856        | 56000           |
| 11                     | 6246             | 1.16           | <b>788A2765</b> | 43300           |
| 11                     | 6109             | 1.18           | 788A3956        | 43200           |
| 11                     | 6242             | 1.70           | 789A3956        | 56000           |
| 10                     | 6709             | 1.05           | <b>788A2865</b> | 43300           |
| 10                     | 6788             | 1.07           | 788A4056        | 43200           |
| 10                     | 6954             | 1.46           | 789A4056        | 56000           |
| 10                     | 6910             | 2.37           | 790A4056        | 62200           |
| 9.6                    | 7463             | 2.19           | 790A4156        | 62200           |
| 9.0                    | 7921             | 1.34           | 789A4156        | 56000           |
| 8.9                    | 7717             | 0.83           | 788A4156        | 43200           |
| 8.1                    | 8796             | 1.15           | 789A4256        | 56000           |
| 8.0                    | 8954             | 1.83           | 790A4256        | 62200           |
| 7.4                    | 9671             | 1.69           | 790A4356        | 62200           |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 7.1                    | 10020            | 1.06           | 789A4356        | 56000           |
| 6.4                    | 11138            | 0.91           | 789A4456        | 56000           |
| 6.3                    | 11338            | 1.45           | 790A4456        | 62200           |
| 5.8                    | 12246            | 1.34           | 790A4556        | 62200           |
| 5.6                    | 12688            | 0.84           | 789A4556        | 56000           |
| 5.1                    | 14094            | 1.17           | 790A4656        | 62200           |
| 4.7                    | 15223            | 1.08           | 790A4756        | 62200           |
| 4.2                    | 16949            | 0.97           | <b>790A4465</b> | 62200           |
| 3.9                    | 18306            | 0.90           | <b>790A4565</b> | 62200           |

## 11.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 216                    | 470              | 1.20           | 785A0566        | 6030            |
| 210                    | 486              | 2.41           | 786A0566        | 8130            |
| 156                    | 652              | 1.20           | 785A0766        | 6061            |
| 148                    | 689              | 2.33           | 786A0766        | 8582            |
| 148                    | 690              | 3.72           | <b>787A0467</b> | 29900           |
| 139                    | 733              | 1.20           | 785A0866        | 6020            |
| 139                    | 732              | 1.60           | <b>786A0567</b> | 8628            |
| 139                    | 737              | 3.59           | <b>787A0567</b> | 29900           |
| 133                    | 762              | 2.22           | 786A0866        | 8689            |
| 129                    | 794              | 3.76           | 787A0966        | 29900           |
| 126                    | 807              | 1.20           | 785A1066        | 5955            |
| 124                    | 827              | 3.41           | <b>787A0667</b> | 29900           |
| 120                    | 852              | 2.09           | 786A1066        | 8784            |
| 115                    | 888              | 3.53           | 787A1066        | 29900           |
| 110                    | 930              | 3.21           | <b>787A0767</b> | 29900           |
| 100                    | 1023             | 3.31           | 787A1166        | 29900           |
| 98                     | 1038             | 1.60           | <b>786A0767</b> | 8894            |
| 96                     | 1056             | 1.10           | 785A1166        | 5633            |
| 96                     | 1065             | 3.02           | <b>787A0867</b> | 29900           |
| 93                     | 1103             | 1.79           | 786A1166        | 8902            |
| 89                     | 1151             | 1.60           | <b>786A0867</b> | 8893            |
| 89                     | 1144             | 3.10           | 787A1266        | 29900           |
| 85                     | 1200             | 1.02           | 785A1266        | 5377            |
| 85                     | 1198             | 2.83           | <b>787A0967</b> | 29900           |
| 84                     | 1219             | 3.76           | <b>788A0967</b> | 43200           |
| 83                     | 1235             | 1.68           | 786A1266        | 8927            |
| 83                     | 1228             | 2.94           | 787A1366        | 29900           |
| 81                     | 1269             | 3.87           | 788A1366        | 43200           |
| 80                     | 1286             | 1.52           | <b>786A1067</b> | 8878            |
| 78                     | 1314             | 3.59           | <b>788A1067</b> | 43200           |
| 77                     | 1337             | 2.65           | <b>787A1067</b> | 29900           |
| 73                     | 1406             | 2.71           | 787A1466        | 29900           |
| 71                     | 1436             | 3.59           | 788A1466        | 43200           |
| 70                     | 1464             | 0.90           | 785A1466        | 4833            |
| 67                     | 1508             | 1.46           | 786A1466        | 8784            |
| 67                     | 1529             | 3.35           | <b>788A1167</b> | 43200           |
| 66                     | 1542             | 2.49           | <b>787A1167</b> | 29900           |
| 64                     | 1599             | 0.84           | 785A1566        | 4480            |
| 64                     | 1587             | 2.56           | 787A1566        | 29900           |
| 64                     | 1594             | 3.43           | 788A1566        | 43200           |
| 62                     | 1663             | 1.30           | <b>786A1167</b> | 8675            |
| 62                     | 1653             | 3.20           | <b>788A1267</b> | 43200           |
| 60                     | 1710             | 1.33           | 786A1566        | 8654            |
| 59                     | 1722             | 2.33           | <b>787A1267</b> | 29900           |
| 56                     | 1812             | 2.36           | 787A1666        | 29900           |
| 56                     | 1804             | 3.17           | 788A1666        | 43200           |
| 55                     | 1863             | 1.21           | <b>786A1267</b> | 8485            |
| 55                     | 1855             | 2.20           | <b>787A1367</b> | 29900           |
| 53                     | 1919             | 2.90           | <b>788A1367</b> | 43200           |
| 52                     | 1969             | 2.96           | 788A1766        | 43200           |
| 51                     | 1993             | 1.20           | 786A1666        | 8376            |
| 51                     | 1988             | 2.13           | 787A1766        | 29867           |
| 48                     | 2117             | 2.00           | <b>787A1467</b> | 29900           |
| 47                     | 2169             | 2.69           | <b>788A1467</b> | 43200           |
| 47                     | 2185             | 2.76           | 788A1866        | 43200           |
| 46                     | 2202             | 1.12           | 786A1766        | 8135            |
| 46                     | 2205             | 1.92           | 787A1866        | 29834           |
| 45                     | 2290             | 1.06           | <b>786A1467</b> | 7970            |
| 43                     | 2393             | 1.80           | <b>787A1567</b> | 29900           |
| 42                     | 2419             | 1.03           | 786A1866        | 7824            |
| 42                     | 2410             | 2.57           | <b>788A1567</b> | 43200           |
| 41                     | 2476             | 2.61           | 788A1966        | 43200           |
| 40                     | 2571             | 0.96           | <b>786A1567</b> | 7550            |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 40                     | 2558             | 1.68           | 787A1966        | 29800           |
| 37                     | 2725             | 0.94           | 786A1966        | 7335            |
| 37                     | 2727             | 1.58           | <b>787A1667</b> | 29900           |
| 37                     | 2727             | 2.38           | <b>788A1667</b> | 43200           |
| 37                     | 2746             | 2.44           | 788A2066        | 43200           |
| 36                     | 2836             | 1.52           | 787A2066        | 29765           |
| 34                     | 2990             | 0.87           | <b>786A1667</b> | 6850            |
| 34                     | 2997             | 1.41           | <b>787A1767</b> | 29764           |
| 34                     | 2980             | 2.15           | <b>788A1767</b> | 43200           |
| 33                     | 3082             | 0.85           | 786A2066        | 6740            |
| 33                     | 3108             | 1.36           | 787A2166        | 29755           |
| 33                     | 3118             | 2.05           | 788A2166        | 43200           |
| 32                     | 3304             | 2.41           | 789A3066        | 38900           |
| 31                     | 3320             | 1.28           | <b>787A1867</b> | 29772           |
| 31                     | 3303             | 1.94           | <b>788A1867</b> | 43200           |
| 30                     | 3431             | 1.24           | 787A2266        | 29772           |
| 28                     | 3597             | 1.78           | 788A2266        | 43200           |
| 28                     | 3731             | 2.02           | 789A2366        | 41400           |
| 28                     | 3763             | 2.41           | 789A3166        | 39500           |
| 27                     | 3724             | 1.95           | <b>788A1967</b> | 43200           |
| 26                     | 3846             | 1.12           | <b>787A1967</b> | 29700           |
| 26                     | 3915             | 1.85           | 788A2366        | 43200           |
| 26                     | 4033             | 2.13           | 789A3266        | 41500           |
| 25                     | 4024             | 1.07           | 787A2366        | 29725           |
| 25                     | 4249             | 2.02           | 789A2466        | 42200           |
| 24                     | 4265             | 1.01           | <b>787A2067</b> | 29700           |
| 24                     | 4158             | 1.75           | <b>788A2067</b> | 43200           |
| 24                     | 4314             | 2.46           | <b>789A2167</b> | 45300           |
| 23                     | 4442             | 0.97           | 787A2466        | 29722           |
| 23                     | 4595             | 2.13           | 789A3366        | 42100           |
| 22                     | 4686             | 0.90           | <b>787A2167</b> | 29700           |
| 22                     | 4700             | 1.36           | <b>788A2167</b> | 43200           |
| 22                     | 4515             | 1.61           | 788A2466        | 43200           |
| 21                     | 4831             | 1.28           | 788A2566        | 43200           |
| 20                     | 5174             | 0.82           | <b>787A2267</b> | 29600           |
| 20                     | 5235             | 1.80           | 789A3466        | 45200           |
| 19                     | 5211             | 1.08           | 788A2666        | 43200           |
| 19                     | 5429             | 1.18           | <b>788A2267</b> | 43200           |
| 19                     | 5556             | 1.78           | <b>789A2267</b> | 45900           |
| 18                     | 5615             | 1.37           | <b>789A2367</b> | 49100           |
| 18                     | 5962             | 1.78           | 789A3566        | 46000           |
| 18                     | 5821             | 1.96           | <b>790A2367</b> | 56300           |
| 17                     | 6066             | 1.20           | 788A2766        | 43200           |
| 17                     | 5920             | 1.22           | <b>788A2367</b> | 43200           |
| 17                     | 6288             | 1.96           | <b>790A2467</b> | 57300           |
| 16                     | 6540             | 1.08           | 788A2866        | 43200           |
| 16                     | 6396             | 1.37           | <b>789A2467</b> | 50200           |
| 16                     | 6561             | 1.54           | 789A3666        | 48700           |
| 16                     | 6769             | 2.41           | 790A3666        | 54000           |
| 15                     | 6780             | 1.07           | <b>788A2467</b> | 43200           |
| 14                     | 7299             | 0.85           | <b>788A2567</b> | 43200           |
| 14                     | 7473             | 1.42           | 789A3766        | 50600           |
| 14                     | 7311             | 2.22           | 790A3766        | 56100           |
| 13                     | 8037             | 1.26           | 789A3866        | 53000           |
| 13                     | 8360             | 1.95           | 790A3866        | 59200           |
| 12                     | 9029             | 1.80           | 790A3966        | 61400           |
| 11                     | 9155             | 1.15           | 789A3966        | 55100           |
| 10                     | 10199            | 0.99           | 789A4066        | 56000           |
| 10                     | 10134            | 1.62           | 790A4066        | 62200           |
| 9.6                    | 10945            | 1.49           | 790A4166        | 62200           |
| 9.0                    | 11617            | 0.91           | 789A4166        | 56000           |
| 8.0                    | 13133            | 1.25           | 790A4266        | 62200           |
| 7.4                    | 14185            | 1.15           | 790A4366        | 62200           |
| 6.3                    | 16630            | 0.99           | 790A4466        | 62200           |
| 5.8                    | 17961            | 0.91           | 790A4566        | 62200           |
| 5.1                    | 20672            | 0.80           | 790A4666        | 62200           |

## Series F Gearboxes : Motorised selection

**Bold print indicates a 6 pole motor is used**

Double reduction

Triple reduction

## 15.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 222                    | 623              | 3.64           | 787A0468        | 29900           |
| 210                    | 662              | 1.77           | 786A0568        | 7457            |
| 209                    | 666              | 3.51           | 787A0568        | 29900           |
| 191                    | 729              | 3.04           | <b>787A0274</b> | 29900           |
| 190                    | 733              | 3.49           | <b>788A0274</b> | 43500           |
| 186                    | 747              | 3.33           | 787A0668        | 29900           |
| 166                    | 840              | 3.14           | 787A0768        | 29900           |
| 156                    | 890              | 0.88           | 785A0768        | 4840            |
| 151                    | 922              | 3.49           | <b>788A0474</b> | 43500           |
| 148                    | 940              | 1.71           | 786A0768        | 7626            |
| 148                    | 942              | 2.73           | <b>787A0474</b> | 29888           |
| 144                    | 964              | 2.95           | 787A0868        | 29889           |
| 139                    | 1000             | 0.88           | 785A0868        | 4650            |
| 139                    | 1006             | 2.63           | <b>787A0574</b> | 29888           |
| 136                    | 1025             | 3.49           | <b>788A0574</b> | 43500           |
| 133                    | 1040             | 1.62           | 786A0868        | 7626            |
| 129                    | 1083             | 2.76           | 787A0968        | 29889           |
| 127                    | 1094             | 3.69           | 788A0968        | 43200           |
| 126                    | 1100             | 0.88           | 785A1068        | 4450            |
| 125                    | 1115             | 3.39           | <b>788A0674</b> | 43500           |
| 124                    | 1128             | 2.50           | <b>787A0674</b> | 29888           |
| 120                    | 1163             | 1.53           | 786A1068        | 7601            |
| 118                    | 1183             | 3.52           | 788A1068        | 43200           |
| 115                    | 1211             | 2.59           | 787A1068        | 29889           |
| 110                    | 1268             | 2.36           | <b>787A0774</b> | 29888           |
| 110                    | 1270             | 3.18           | <b>788A0774</b> | 43500           |
| 101                    | 1377             | 3.29           | 788A1168        | 43200           |
| 100                    | 1395             | 2.43           | 787A1168        | 29876           |
| 99                     | 1402             | 3.04           | <b>788A0874</b> | 43500           |
| 96                     | 1440             | 0.81           | 785A1168        | 3670            |
| 96                     | 1452             | 2.22           | <b>787A0874</b> | 29885           |
| 94                     | 1486             | 3.14           | 788A1268        | 43200           |
| 93                     | 1504             | 1.32           | 786A1168        | 7376            |
| 89                     | 1560             | 2.28           | 787A1268        | 29885           |
| 85                     | 1633             | 2.07           | <b>787A0974</b> | 29870           |
| 84                     | 1654             | 2.77           | <b>788A0974</b> | 43500           |
| 83                     | 1685             | 1.23           | 786A1268        | 7201            |
| 83                     | 1675             | 2.15           | 787A1368        | 29870           |
| 81                     | 1725             | 2.85           | 788A1368        | 43200           |
| 78                     | 1762             | 2.65           | <b>788A1074</b> | 43500           |
| 77                     | 1823             | 1.95           | <b>787A1074</b> | 29880           |
| 73                     | 1917             | 1.99           | 787A1468        | 29869           |
| 71                     | 1952             | 2.64           | 788A1468        | 43200           |
| 67                     | 2057             | 1.07           | 786A1468        | 6688            |
| 67                     | 2075             | 2.47           | <b>788A1174</b> | 43500           |
| 66                     | 2103             | 1.83           | <b>787A1174</b> | 29860           |
| 64                     | 2165             | 1.88           | 787A1568        | 29860           |
| 64                     | 2167             | 2.52           | 788A1568        | 43200           |
| 62                     | 2243             | 2.36           | <b>788A1274</b> | 43400           |
| 60                     | 2332             | 0.97           | 786A1568        | 6285            |
| 59                     | 2349             | 1.71           | <b>787A1274</b> | 29860           |
| 56                     | 2471             | 1.73           | 787A1668        | 29840           |
| 56                     | 2452             | 2.34           | 788A1668        | 43200           |
| 55                     | 2529             | 1.62           | <b>787A1374</b> | 29836           |
| 53                     | 2603             | 2.14           | <b>788A1374</b> | 43400           |
| 52                     | 2675             | 2.17           | 788A1768        | 43200           |
| 51                     | 2717             | 0.88           | 786A1668        | 5620            |
| 51                     | 2710             | 1.56           | 787A1768        | 29842           |
| 48                     | 2887             | 1.47           | <b>787A1474</b> | 29827           |
| 47                     | 2943             | 1.98           | <b>788A1474</b> | 43400           |
| 47                     | 2969             | 2.03           | 788A1868        | 43200           |
| 46                     | 3003             | 0.82           | 786A1768        | 5070            |
| 46                     | 3007             | 1.41           | 787A1868        | 29785           |
| 43                     | 3264             | 1.32           | <b>787A1574</b> | 29827           |
| 42                     | 3270             | 1.89           | <b>788A1574</b> | 43400           |
| 41                     | 3364             | 1.92           | 788A1968        | 43200           |
| 40                     | 3489             | 1.24           | 787A1968        | 29727           |
| 37                     | 3719             | 1.16           | <b>787A1674</b> | 29805           |
| 37                     | 3699             | 1.75           | <b>788A1674</b> | 43400           |
| 37                     | 3732             | 1.79           | 788A2068        | 43200           |
| 36                     | 3867             | 1.11           | 787A2068        | 29687           |
| 34                     | 4087             | 1.04           | <b>787A1774</b> | 29687           |
| 34                     | 4042             | 1.58           | <b>788A1774</b> | 43200           |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 33                     | 4239             | 1.00           | 787A2168        | 29672           |
| 33                     | 4237             | 1.51           | 788A2168        | 43200           |
| 32                     | 4489             | 1.77           | <b>789A3074</b> | 38900           |
| 32                     | 4434             | 1.92           | 789A2168        | 38000           |
| 31                     | 4528             | 0.94           | <b>787A1874</b> | 29700           |
| 31                     | 4481             | 1.43           | <b>788A1874</b> | 43200           |
| 30                     | 4678             | 0.91           | 787A2268        | 29700           |
| 28                     | 4889             | 1.31           | 788A2268        | 43200           |
| 28                     | 5105             | 1.49           | 789A2368        | 41400           |
| 28                     | 5114             | 1.77           | <b>789A3174</b> | 39500           |
| 28                     | 5051             | 1.92           | 789A2268        | 38500           |
| 27                     | 5052             | 1.43           | <b>788A1974</b> | 43200           |
| 27                     | 5292             | 2.12           | 790A2368        | 47400           |
| 26                     | 5244             | 0.82           | <b>787A1974</b> | 29600           |
| 26                     | 5320             | 1.36           | 788A2368        | 43200           |
| 26                     | 5481             | 1.56           | <b>789A3274</b> | 41500           |
| 25                     | 5815             | 1.49           | 789A2468        | 42200           |
| 25                     | 5375             | 2.12           | 790A2468        | 48100           |
| 24                     | 5635             | 1.29           | <b>788A2074</b> | 43200           |
| 24                     | 5882             | 1.80           | <b>789A2074</b> | 40500           |
| 23                     | 6244             | 1.56           | <b>789A3374</b> | 42100           |
| 22                     | 6376             | 1.00           | <b>788A2174</b> | 43200           |
| 22                     | 6136             | 1.18           | 788A2468        | 43200           |
| 22                     | 6652             | 1.30           | <b>789A2174</b> | 45300           |
| 22                     | 6461             | 2.18           | <b>790A2174</b> | 48900           |
| 21                     | 6565             | 0.94           | 788A2568        | 43200           |
| 21                     | 6979             | 2.18           | <b>790A2274</b> | 49600           |
| 20                     | 7114             | 1.32           | <b>789A3474</b> | 45200           |
| 20                     | 7105             | 2.28           | <b>790A3474</b> | 48200           |
| 19                     | 7365             | 0.87           | <b>788A2274</b> | 43200           |
| 19                     | 7657             | 1.01           | <b>789A2374</b> | 49100           |
| 19                     | 7576             | 1.30           | <b>789A2274</b> | 46100           |
| 19                     | 7674             | 2.11           | <b>790A3574</b> | 50200           |
| 18                     | 8103             | 1.31           | <b>789A3574</b> | 46000           |
| 18                     | 7938             | 1.43           | <b>790A2374</b> | 56300           |
| 17                     | 8244             | 0.88           | 788A2768        | 43100           |
| 17                     | 8032             | 0.90           | <b>788A2374</b> | 43200           |
| 17                     | 8594             | 1.43           | <b>790A2474</b> | 57300           |
| 16                     | 8722             | 1.01           | <b>789A2474</b> | 50200           |
| 16                     | 8916             | 1.14           | <b>789A3674</b> | 48700           |
| 16                     | 9199             | 1.77           | <b>790A3674</b> | 54000           |
| 14                     | 10155            | 1.05           | <b>789A3774</b> | 50600           |
| 14                     | 9935             | 1.63           | <b>790A3774</b> | 56100           |
| 13                     | 10922            | 0.93           | <b>789A3874</b> | 53000           |
| 13                     | 11361            | 1.44           | <b>790A3874</b> | 59200           |
| 12                     | 12442            | 0.85           | <b>789A3974</b> | 55100           |
| 12                     | 12270            | 1.33           | <b>790A3974</b> | 61400           |
| 10                     | 13772            | 1.19           | <b>790A4074</b> | 62200           |
| 9.6                    | 14874            | 1.10           | <b>790A4174</b> | 62200           |
| 8.0                    | 17847            | 0.92           | <b>790A4274</b> | 62200           |
| 7.4                    | 19276            | 0.85           | <b>790A4374</b> | 62200           |

## 18.5 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 287                    | 597              | 3.28           | 787A0276        | 29785           |
| 222                    | 769              | 2.95           | 787A0476        | 29900           |
| 209                    | 822              | 2.85           | 787A0576        | 29891           |
| 205                    | 839              | 3.81           | 788A0576        | 43500           |
| 194                    | 885              | 2.51           | <b>787A0275</b> | 29900           |
| 190                    | 904              | 2.83           | <b>788A0275</b> | 43500           |
| 188                    | 913              | 3.66           | 788A0676        | 43500           |
| 186                    | 922              | 2.70           | 787A0676        | 29874           |
| 166                    | 1036             | 2.55           | 787A0776        | 29840           |
| 166                    | 1036             | 3.43           | 788A0776        | 43500           |
| 151                    | 1138             | 2.80           | <b>788A0475</b> | 43500           |
| 150                    | 1144             | 2.25           | <b>787A0475</b> | 29877           |
| 149                    | 1146             | 3.29           | 788A0876        | 43500           |
| 144                    | 1190             | 2.39           | 787A0876        | 29879           |
| 141                    | 1222             | 2.17           | <b>787A0575</b> | 29877           |
| 136                    | 1265             | 2.83           | <b>788A0575</b> | 43500           |
| 129                    | 1336             | 2.24           | 787A0976        | 29879           |
| 127                    | 1349             | 2.99           | 788A0976        | 43500           |
| 126                    | 1370             | 2.06           | <b>787A0675</b> | 29877           |
| 125                    | 1375             | 2.75           | <b>788A0675</b> | 43500           |
| 118                    | 1459             | 2.86           | 788A1076        | 43500           |
| 115                    | 1494             | 2.10           | 787A1076        | 29879           |
| 112                    | 1540             | 1.94           | <b>787A0775</b> | 29877           |
| 110                    | 1567             | 2.58           | <b>788A0775</b> | 43500           |
| 101                    | 1698             | 2.67           | 788A1176        | 43500           |
| 100                    | 1720             | 1.97           | 787A1176        | 29855           |
| 99                     | 1729             | 2.47           | <b>788A0875</b> | 43500           |
| 97                     | 1764             | 1.82           | <b>787A0875</b> | 29872           |
| 94                     | 1833             | 2.55           | 788A1276        | 43400           |
| 89                     | 1924             | 1.85           | 787A1276        | 29872           |
| 87                     | 1984             | 1.71           | <b>787A0975</b> | 29844           |
| 84                     | 2040             | 2.24           | <b>788A0975</b> | 43500           |
| 83                     | 2066             | 1.75           | 787A1376        | 29844           |
| 81                     | 2127             | 2.31           | 788A1376        | 43400           |
| 78                     | 2214             | 1.60           | <b>787A1075</b> | 29862           |
| 78                     | 2198             | 2.15           | <b>788A1075</b> | 43500           |
| 73                     | 2364             | 1.61           | 787A1476        | 29842           |
| 71                     | 2407             | 2.14           | 788A1476        | 43400           |
| 67                     | 2554             | 1.50           | <b>787A1175</b> | 29825           |
| 67                     | 2559             | 2.00           | <b>788A1175</b> | 43500           |
| 64                     | 2670             | 1.52           | 787A1576        | 29825           |
| 64                     | 2672             | 2.05           | 788A1576        | 43400           |
| 62                     | 2767             | 1.91           | <b>788A1275</b> | 43400           |
| 60                     | 2853             | 1.41           | <b>787A1275</b> | 29825           |
| 56                     | 3072             | 1.33           | <b>787A1375</b> | 29781           |
| 56                     | 3047             | 1.40           | 787A1676        | 29787           |
| 56                     | 3025             | 1.89           | 788A1676        | 43400           |
| 53                     | 3211             | 1.73           | <b>788A1375</b> | 43400           |
| 52                     | 3300             | 1.76           | 788A1776        | 43300           |
| 51                     | 3343             | 1.27           | 787A1776        | 29821           |
| 49                     | 3506             | 1.21           | <b>787A1475</b> | 29763           |
| 47                     | 3630             | 1.61           | <b>788A1475</b> | 43400           |
| 47                     | 3662             | 1.65           | 788A1876        | 43300           |
| 46                     | 3709             | 1.14           | 787A1876        | 29742           |
| 43                     | 3964             | 1.09           | <b>787A1575</b> | 29763           |
| 42                     | 4033             | 1.53           | <b>788A1575</b> | 43400           |
| 42                     | 4202             | 2.41           | 789A1976        | 32100           |
| 41                     | 4150             | 1.56           | 788A1976        | 43300           |
| 40                     | 4303             | 1.00           | 787A1976        | 29663           |
| 38                     | 4518             | 0.95           | <b>787A1675</b> | 29723           |
| 37                     | 4563             | 1.42           | <b>788A1675</b> | 43300           |
| 37                     | 4603             | 1.45           | 788A2076        | 43300           |
| 37                     | 4787             | 2.22           | 789A2076        | 33300           |
| 36                     | 4770             | 0.90           | 787A2076        | 29619           |
| 35                     | 4964             | 0.85           | <b>787A1775</b> | 29619           |
| 34                     | 4986             | 1.28           | <b>788A1775</b> | 43300           |
| 33                     | 5228             | 0.81           | 787A2176        | 29600           |
| 33                     | 5226             | 1.22           | 788A2176        | 43200           |
| 33                     | 5413             | 1.57           | 789A2176        | 38000           |
| 32                     | 5481             | 1.45           | 789A3076        | 38900           |
| 31                     | 5527             | 1.16           | <b>788A1875</b> | 43300           |
| 29                     | 6166             | 1.57           | 789A2276        | 38500           |
| 28                     | 6030             | 1.06           | 788A2276        | 43200           |
| 28                     | 6232             | 1.22           | 789A2376        | 41400           |
| 28                     | 6233             | 1.45           | 789A3176        | 39500           |
| 27                     | 6232             | 1.16           | <b>788A1975</b> | 43200           |
| 27                     | 6460             | 1.74           | 790A2376        | 47400           |

## Series F Gearboxes : Motorised selection

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 26                     | 6561             | 1.10           | 788A2376        | 43100           |
| 26                     | 6691             | 1.28           | 789A3276        | 41500           |
| 26                     | 6898             | 2.33           | <b>790A2075</b> | 44400           |
| 25                     | 7098             | 1.22           | 789A2476        | 42200           |
| 25                     | 7144             | 1.49           | <b>789A2075</b> | 40500           |
| 25                     | 6978             | 1.74           | 790A2476        | 48100           |
| 25                     | 7003             | 2.31           | 790A3276        | 43800           |
| 24                     | 6949             | 1.04           | <b>788A2075</b> | 43200           |
| 23                     | 7622             | 1.28           | 789A3376        | 42100           |
| 23                     | 7847             | 1.80           | <b>790A2175</b> | 48900           |
| 23                     | 7565             | 2.13           | 790A3376        | 45600           |
| 22                     | 7864             | 0.81           | <b>788A2175</b> | 43100           |
| 22                     | 7568             | 0.96           | 788A2476        | 43100           |
| 22                     | 8079             | 1.07           | <b>789A2175</b> | 45300           |
| 21                     | 8477             | 1.80           | <b>790A2275</b> | 49600           |
| 20                     | 8685             | 1.08           | 789A3476        | 45200           |
| 20                     | 8674             | 1.87           | 790A3476        | 48200           |
| 19                     | 9300             | 0.83           | <b>789A2375</b> | 49100           |
| 19                     | 9201             | 1.07           | <b>789A2275</b> | 46100           |
| 19                     | 9369             | 1.73           | 790A3576        | 50200           |
| 18                     | 9891             | 1.07           | 789A3576        | 46000           |
| 18                     | 9641             | 1.18           | <b>790A2375</b> | 56300           |
| 17                     | 10593            | 0.83           | <b>789A2475</b> | 50200           |
| 17                     | 10414            | 1.18           | <b>790A2475</b> | 57300           |
| 16                     | 11884            | 0.93           | 789A3676        | 48700           |
| 16                     | 11229            | 1.45           | 790A3676        | 54000           |
| 15                     | 12128            | 1.34           | 790A3776        | 56100           |
| 14                     | 12397            | 0.86           | 789A3776        | 50600           |
| 13                     | 13868            | 1.18           | 790A3876        | 59200           |
| 12                     | 14979            | 1.09           | 790A3976        | 61400           |
| 11                     | 16812            | 0.97           | 790A4076        | 62200           |
| 9.7                    | 18518            | 0.90           | 790A4176        | 62200           |

## 22.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 287                    | 710              | 2.76           | 787A0278        | 29670           |
| 287                    | 712              | 3.59           | 788A0278        | 43500           |
| 228                    | 893              | 3.38           | 788A0478        | 43500           |
| 222                    | 915              | 2.48           | 787A0478        | 29900           |
| 209                    | 977              | 2.39           | 787A0578        | 29882           |
| 205                    | 995              | 3.21           | 788A0578        | 43500           |
| 193                    | 1058             | 2.10           | <b>787A0284</b> | 29900           |
| 190                    | 1076             | 2.38           | <b>788A0284</b> | 43500           |
| 188                    | 1082             | 3.09           | 788A0678        | 43500           |
| 186                    | 1096             | 2.27           | 787A0678        | 29848           |
| 166                    | 1232             | 2.14           | 787A0778        | 29780           |
| 166                    | 1228             | 2.90           | 788A0778        | 43500           |
| 151                    | 1353             | 2.38           | <b>788A0484</b> | 43500           |
| 149                    | 1367             | 1.88           | <b>787A0484</b> | 29867           |
| 149                    | 1359             | 2.77           | 788A0878        | 43500           |
| 144                    | 1415             | 2.01           | 787A0878        | 29870           |
| 140                    | 1460             | 1.81           | <b>787A0584</b> | 29867           |
| 136                    | 1504             | 2.38           | <b>788A0584</b> | 43500           |
| 129                    | 1589             | 1.88           | 787A0978        | 29870           |
| 127                    | 1599             | 2.53           | 788A0978        | 43500           |
| 125                    | 1638             | 1.72           | <b>787A0684</b> | 29867           |
| 125                    | 1636             | 2.31           | <b>788A0684</b> | 43500           |
| 118                    | 1729             | 2.41           | 788A1078        | 43500           |
| 115                    | 1777             | 1.77           | 787A1078        | 29870           |
| 111                    | 1841             | 1.62           | <b>787A0784</b> | 29867           |
| 110                    | 1863             | 2.17           | <b>788A0784</b> | 43500           |
| 101                    | 2013             | 2.25           | 788A1178        | 43500           |
| 100                    | 2046             | 1.66           | 787A1178        | 29835           |
| 99                     | 2056             | 2.08           | <b>788A0884</b> | 43500           |
| 97                     | 2109             | 1.53           | <b>787A0884</b> | 29859           |
| 94                     | 2172             | 2.15           | 788A1278        | 43400           |
| 89                     | 2288             | 1.55           | 787A1278        | 29859           |
| 86                     | 2372             | 1.43           | <b>787A0984</b> | 29818           |
| 84                     | 2426             | 1.89           | <b>788A0984</b> | 43500           |
| 83                     | 2457             | 1.47           | 787A1378        | 29818           |
| 81                     | 2521             | 1.95           | 788A1378        | 43400           |
| 78                     | 2614             | 1.80           | <b>788A1084</b> | 43500           |
| 77                     | 2647             | 1.34           | <b>787A1084</b> | 29845           |
| 73                     | 2812             | 1.35           | 787A1478        | 29815           |
| 71                     | 2853             | 1.80           | 788A1478        | 43400           |
| 67                     | 3053             | 1.26           | <b>787A1184</b> | 29790           |
| 67                     | 3043             | 1.69           | <b>788A1184</b> | 43500           |
| 64                     | 3175             | 1.28           | 787A1578        | 29790           |
| 64                     | 3167             | 1.73           | 788A1578        | 43400           |
| 62                     | 3290             | 1.61           | <b>788A1284</b> | 43400           |
| 60                     | 3410             | 1.18           | <b>787A1284</b> | 29790           |
| 56                     | 3672             | 1.11           | <b>787A1384</b> | 29726           |
| 56                     | 3624             | 1.18           | 787A1678        | 29735           |
| 56                     | 3585             | 1.60           | 788A1678        | 43400           |
| 53                     | 3818             | 1.46           | <b>788A1384</b> | 43400           |
| 52                     | 3911             | 1.49           | 788A1778        | 43300           |
| 52                     | 4059             | 2.49           | 789A1778        | 29100           |
| 51                     | 3976             | 1.07           | 787A1778        | 29800           |
| 49                     | 4191             | 1.01           | <b>787A1484</b> | 29700           |
| 47                     | 4317             | 1.35           | <b>788A1484</b> | 43400           |
| 47                     | 4340             | 1.39           | 788A1878        | 43300           |
| 46                     | 4411             | 0.96           | 787A1878        | 29700           |
| 45                     | 4622             | 2.21           | 789A1878        | 30700           |
| 43                     | 4739             | 0.91           | <b>787A1584</b> | 29700           |
| 42                     | 4796             | 1.29           | <b>788A1584</b> | 43400           |
| 42                     | 4997             | 2.03           | 789A1978        | 32100           |
| 41                     | 4918             | 1.31           | 788A1978        | 43200           |
| 40                     | 5117             | 0.84           | 787A1978        | 29600           |
| 37                     | 5426             | 1.19           | <b>788A1684</b> | 43300           |
| 37                     | 5455             | 1.23           | 788A2078        | 43200           |
| 37                     | 5693             | 1.87           | 789A2078        | 33300           |
| 34                     | 5929             | 1.08           | <b>788A1784</b> | 43300           |
| 34                     | 6253             | 2.18           | 790A2178        | 40900           |
| 33                     | 6193             | 1.03           | 788A2178        | 43200           |
| 33                     | 6437             | 1.32           | 789A2178        | 38000           |
| 33                     | 6426             | 2.47           | 790A3078        | 39100           |
| 32                     | 6517             | 1.22           | 789A3078        | 38900           |
| 31                     | 6573             | 0.97           | <b>788A1884</b> | 43300           |
| 31                     | 6755             | 2.18           | 790A2278        | 41300           |
| 30                     | 6940             | 2.31           | 790A3178        | 40500           |
| 29                     | 7332             | 1.32           | 789A2278        | 38500           |
| 28                     | 7146             | 0.90           | 788A2278        | 43200           |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| 28                     | 7411             | 1.03           | 789A2378        | 41400           |
| 28                     | 7424             | 1.22           | 789A3178        | 39500           |
| 27                     | 7411             | 0.98           | <b>788A1984</b> | 43200           |
| 27                     | 7682             | 1.46           | 790A2378        | 47400           |
| 26                     | 7776             | 0.93           | 788A2378        | 43100           |
| 26                     | 7957             | 1.08           | 789A3278        | 41500           |
| 25                     | 8441             | 1.03           | 789A2478        | 42200           |
| 25                     | 8539             | 1.24           | <b>789A2084</b> | 40500           |
| 25                     | 8298             | 1.46           | 790A2478        | 48100           |
| 25                     | 8328             | 1.94           | 790A3278        | 43800           |
| 25                     | 8245             | 1.95           | <b>790A2084</b> | 44400           |
| 24                     | 8264             | 0.88           | <b>788A2084</b> | 43100           |
| 23                     | 9064             | 1.08           | 789A3378        | 42100           |
| 23                     | 8996             | 1.79           | 790A3378        | 45600           |
| 22                     | 8969             | 0.81           | 788A2478        | 43100           |
| 22                     | 9656             | 0.90           | <b>789A2184</b> | 45300           |
| 22                     | 9379             | 1.50           | <b>790A2184</b> | 48900           |
| 21                     | 10132            | 1.50           | <b>790A2284</b> | 49600           |
| 20                     | 10328            | 0.91           | 789A3478        | 45200           |
| 20                     | 10315            | 1.57           | 790A3478        | 48200           |
| 19                     | 10998            | 0.90           | <b>789A2284</b> | 46100           |
| 19                     | 11141            | 1.45           | 790A3578        | 50200           |
| 18                     | 11723            | 0.90           | 789A3578        | 46000           |
| 18                     | 11523            | 0.99           | <b>790A2384</b> | 56300           |
| 17                     | 12447            | 0.99           | <b>790A2484</b> | 57300           |
| 16                     | 13353            | 1.12           | 790A3678        | 54000           |
| 15                     | 14423            | 1.13           | 790A3778        | 56100           |
| 13                     | 16492            | 0.99           | 790A3878        | 59200           |
| 12                     | 17813            | 0.91           | 790A3978        | 61400           |
| 11                     | 19992            | 0.82           | 790A4078        | 62200           |

### Series F Gearboxes : Motorised selection

**Bold print indicates a 6 pole motor is used**

Double reduction

Triple reduction

#### 30.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| <b>289</b>             | 961              | 2.04           | 787A0288        | 29408           |
| <b>287</b>             | 968              | 2.64           | 788A0288        | 43500           |
| <b>228</b>             | 1214             | 2.49           | 788A0488        | 43500           |
| <b>224</b>             | 1239             | 1.83           | 787A0488        | 29900           |
| <b>210</b>             | 1323             | 1.77           | 787A0588        | 29863           |
| <b>205</b>             | 1352             | 2.37           | 788A0588        | 43500           |
| <b>194</b>             | 1436             | 1.55           | <b>787A0291</b> | 29900           |
| <b>190</b>             | 1459             | 1.75           | <b>788A0291</b> | 43500           |
| <b>188</b>             | 1470             | 2.27           | 788A0688        | 43500           |
| <b>187</b>             | 1485             | 1.68           | 787A0688        | 29790           |
| <b>167</b>             | 1669             | 1.58           | 787A0788        | 29643           |
| <b>166</b>             | 1669             | 2.13           | 788A0788        | 43500           |
| <b>151</b>             | 1836             | 1.75           | <b>788A0491</b> | 43500           |
| <b>150</b>             | 1855             | 1.39           | <b>787A0491</b> | 29844           |
| <b>149</b>             | 1847             | 2.04           | 788A0888        | 43500           |
| <b>145</b>             | 1916             | 1.49           | 787A0888        | 29848           |
| <b>141</b>             | 1981             | 1.34           | <b>787A0591</b> | 29844           |
| <b>136</b>             | 2041             | 1.75           | <b>788A0591</b> | 43500           |
| <b>130</b>             | 2152             | 1.39           | 787A0988        | 29848           |
| <b>127</b>             | 2173             | 1.86           | 788A0988        | 43500           |
| <b>126</b>             | 2222             | 1.27           | <b>787A0691</b> | 29844           |
| <b>125</b>             | 2219             | 1.70           | <b>788A0691</b> | 43500           |
| <b>118</b>             | 2350             | 1.77           | 788A1088        | 43500           |
| <b>116</b>             | 2407             | 1.30           | 787A1088        | 29848           |
| <b>112</b>             | 2497             | 1.20           | <b>787A0791</b> | 29844           |
| <b>110</b>             | 2528             | 1.60           | <b>788A0791</b> | 43500           |
| <b>101</b>             | 2735             | 1.66           | 788A1188        | 43500           |
| <b>100</b>             | 2771             | 1.22           | 787A1188        | 29788           |
| <b>99</b>              | 2790             | 1.53           | <b>788A0891</b> | 43500           |
| <b>97</b>              | 2861             | 1.13           | <b>787A0891</b> | 29829           |
| <b>94</b>              | 2952             | 1.58           | 788A1288        | 43400           |
| <b>90</b>              | 3098             | 1.15           | 787A1288        | 29829           |
| <b>87</b>              | 3218             | 1.05           | <b>787A0991</b> | 29759           |
| <b>84</b>              | 3327             | 1.08           | 787A1388        | 29759           |
| <b>84</b>              | 3291             | 1.39           | <b>788A0991</b> | 43500           |
| <b>81</b>              | 3426             | 1.43           | 788A1388        | 43400           |
| <b>78</b>              | 3591             | 0.99           | <b>787A1091</b> | 29805           |
| <b>78</b>              | 3547             | 1.33           | <b>788A1091</b> | 43500           |
| <b>73</b>              | 3808             | 1.00           | 787A1488        | 29753           |
| <b>72</b>              | 3974             | 2.26           | 788A1488        | 26100           |
| <b>71</b>              | 3877             | 1.33           | 788A1488        | 43300           |
| <b>67</b>              | 4143             | 0.93           | <b>787A1191</b> | 29710           |
| <b>67</b>              | 4128             | 1.24           | <b>788A1191</b> | 43500           |
| <b>66</b>              | 4355             | 2.22           | 789A1588        | 26600           |
| <b>65</b>              | 4301             | 0.95           | 787A1588        | 29710           |
| <b>64</b>              | 4304             | 1.27           | 788A1588        | 43300           |
| <b>62</b>              | 4464             | 1.18           | <b>788A1291</b> | 43400           |
| <b>60</b>              | 4627             | 0.87           | <b>787A1291</b> | 29710           |
| <b>58</b>              | 4961             | 1.92           | 789A1688        | 28300           |
| <b>57</b>              | 4909             | 0.87           | 787A1688        | 29615           |
| <b>56</b>              | 4982             | 0.82           | <b>787A1391</b> | 29600           |
| <b>56</b>              | 4872             | 1.18           | 788A1688        | 43300           |
| <b>53</b>              | 5180             | 1.07           | <b>788A1391</b> | 43400           |
| <b>52</b>              | 5315             | 1.09           | 788A1788        | 43200           |
| <b>52</b>              | 5516             | 1.83           | 789A1788        | 29100           |
| <b>47</b>              | 5857             | 1.00           | <b>788A1491</b> | 43400           |
| <b>47</b>              | 5898             | 1.02           | 788A1888        | 43200           |
| <b>46</b>              | 6282             | 1.63           | 789A1888        | 30700           |
| <b>42</b>              | 6506             | 0.95           | <b>788A1591</b> | 43400           |
| <b>42</b>              | 6791             | 1.49           | 789A1988        | 32100           |
| <b>41</b>              | 6684             | 0.97           | 788A1988        | 43200           |
| <b>41</b>              | 6917             | 2.24           | 790A1988        | 35200           |
| <b>38</b>              | 7470             | 2.14           | 790A2088        | 36300           |
| <b>37</b>              | 7361             | 0.88           | <b>788A1691</b> | 43300           |
| <b>37</b>              | 7414             | 0.90           | 788A2088        | 43100           |
| <b>37</b>              | 7736             | 1.37           | 789A2088        | 33300           |
| <b>34</b>              | 8498             | 1.61           | 790A2188        | 40900           |
| <b>33</b>              | 8748             | 0.97           | 789A2188        | 38000           |
| <b>33</b>              | 8733             | 1.82           | 790A3088        | 39100           |
| <b>31</b>              | 9180             | 1.61           | 790A2288        | 41300           |
| <b>30</b>              | 9432             | 1.70           | 790A3188        | 40500           |
| <b>29</b>              | 9964             | 0.97           | 789A2288        | 38300           |
| <b>27</b>              | 10440            | 1.08           | 790A2388        | 47400           |

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| <b>26</b>              | 11187            | 1.44           | <b>790A2091</b> | 44400           |
| <b>25</b>              | 11585            | 0.92           | <b>789A2091</b> | 40500           |
| <b>25</b>              | 11277            | 1.08           | 790A2488        | 48100           |
| <b>25</b>              | 11318            | 1.43           | 790A3288        | 43800           |
| <b>23</b>              | 12725            | 1.11           | <b>790A2191</b> | 48900           |
| <b>23</b>              | 12225            | 1.32           | 790A3388        | 45600           |
| <b>21</b>              | 13746            | 1.11           | <b>790A2291</b> | 49600           |
| <b>20</b>              | 14018            | 1.16           | 790A3488        | 48200           |
| <b>19</b>              | 15141            | 1.07           | 790A3588        | 50200           |
| <b>16</b>              | 18148            | 0.90           | 790A3688        | 54000           |
| <b>15</b>              | 19600            | 0.83           | 790A3788        | 56100           |

#### 37.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection  | Overhung Load N |
|------------------------|------------------|----------------|-----------------|-----------------|
| <b>290</b>             | 1182             | 1.66           | 787A0294        | 29179           |
| <b>287</b>             | 1190             | 2.15           | 788A0294        | 43500           |
| <b>228</b>             | 1492             | 2.02           | 788A0494        | 43500           |
| <b>225</b>             | 1523             | 1.49           | 787A0494        | 29900           |
| <b>211</b>             | 1627             | 1.44           | 787A0594        | 29846           |
| <b>205</b>             | 1662             | 1.92           | 788A0594        | 43500           |
| <b>188</b>             | 1825             | 1.36           | 787A0694        | 29739           |
| <b>188</b>             | 1807             | 1.85           | 788A0694        | 43500           |
| <b>167</b>             | 2051             | 1.29           | 787A0794        | 29524           |
| <b>166</b>             | 2052             | 1.73           | 788A0794        | 43500           |
| <b>149</b>             | 2270             | 1.66           | 788A0894        | 43500           |
| <b>146</b>             | 2355             | 1.21           | 787A0894        | 29829           |
| <b>130</b>             | 2646             | 1.13           | 787A0994        | 29829           |
| <b>127</b>             | 2671             | 1.51           | 788A0994        | 43500           |
| <b>118</b>             | 2889             | 1.44           | 788A1094        | 43500           |
| <b>116</b>             | 2958             | 1.06           | 787A1094        | 29829           |
| <b>101</b>             | 3406             | 1.00           | 787A1194        | 29747           |
| <b>101</b>             | 3362             | 1.35           | 788A1194        | 43500           |
| <b>95</b>              | 3715             | 2.22           | 789A1294        | 23700           |
| <b>94</b>              | 3629             | 1.29           | 788A1294        | 43400           |
| <b>90</b>              | 3808             | 0.93           | 787A1294        | 29803           |
| <b>84</b>              | 4090             | 0.88           | 787A1394        | 29707           |
| <b>82</b>              | 4288             | 2.11           | 789A1394        | 24600           |
| <b>81</b>              | 4212             | 1.17           | 788A1394        | 43400           |
| <b>74</b>              | 4681             | 0.81           | 787A1494        | 29700           |
| <b>72</b>              | 4885             | 1.84           | 789A1494        | 26100           |
| <b>71</b>              | 4766             | 1.09           | 788A1494        | 43400           |
| <b>66</b>              | 5353             | 1.81           | 789A1594        | 26600           |
| <b>64</b>              | 5291             | 1.03           | 788A1594        | 43400           |
| <b>58</b>              | 6098             | 1.56           | 789A1694        | 28300           |
| <b>56</b>              | 5988             | 0.96           | 788A1694        | 43300           |
| <b>52</b>              | 6533             | 0.89           | 788A1794        | 43200           |
| <b>52</b>              | 6761             | 1.49           | 789A1794        | 29100           |
| <b>51</b>              | 6905             | 2.20           | 790A1794        | 28100           |
| <b>47</b>              | 7250             | 0.83           | 788A1894        | 43200           |
| <b>47</b>              | 7456             | 2.13           | 790A1894        | 28300           |
| <b>46</b>              | 7721             | 1.32           | 789A1894        | 30700           |
| <b>42</b>              | 8347             | 1.21           | 789A1994        | 32100           |
| <b>42</b>              | 8502             | 1.82           | 790A1994        | 35200           |
| <b>38</b>              | 9182             | 1.74           | 790A2094        | 36300           |
| <b>37</b>              | 9509             | 1.12           | 789A2094        | 33300           |
| <b>34</b>              | 10445            | 1.31           | 790A2194        | 40900           |
| <b>33</b>              | 10734            | 1.48           | 790A3094        | 39100           |
| <b>31</b>              | 11283            | 1.31           | 790A2294        | 41300           |
| <b>30</b>              | 11594            | 1.38           | 790A3194        | 40500           |
| <b>27</b>              | 12833            | 0.88           | 790A2394        | 47400           |
| <b>26</b>              | 13797            | 1.17           | <b>790A2092</b> | 44400           |
| <b>25</b>              | 13862            | 0.88           | 790A2494        | 48100           |
| <b>25</b>              | 13912            | 1.16           | 790A3294        | 43800           |
| <b>24</b>              | 15027            | 1.07           | 790A3394        | 45600           |
| <b>23</b>              | 15694            | 0.90           | <b>790A2192</b> | 48900           |
| <b>21</b>              | 16954            | 0.90           | <b>790A2292</b> | 49600           |
| <b>21</b>              | 17321            | 0.94           | 790A3494        | 48200           |
| <b>19</b>              | 18611            | 0.87           | 790A3594        | 50200           |

#### 45.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection | Overhung Load N |
|------------------------|------------------|----------------|----------------|-----------------|
| <b>290</b>             | 1437             | 1.36           | 787A0295       | 28917           |
| <b>287</b>             | 1448             | 1.77           | 788A0295       | 43500           |
| <b>228</b>             | 1815             | 1.66           | 788A0495       | 43500           |
| <b>225</b>             | 1852             | 1.23           | 787A0495       | 29900           |
| <b>211</b>             | 1979             | 1.18           | 787A0595       | 29826           |
| <b>205</b>             | 2022             | 1.58           | 788A0595       | 43500           |
| <b>188</b>             | 2220             | 1.12           | 787A0695       | 29680           |
| <b>188</b>             | 2198             | 1.52           | 788A0695       | 43500           |
| <b>167</b>             | 2495             | 1.06           | 787A0795       | 29387           |
| <b>166</b>             | 2495             | 1.43           | 788A0795       | 43500           |
| <b>149</b>             | 2761             | 1.37           | 788A0895       | 43500           |
| <b>148</b>             | 2895             | 2.50           | 789A0895       | 20300           |
| <b>146</b>             | 2865             | 0.99           | 787A0895       | 29808           |
| <b>131</b>             | 3290             | 2.37           | 789A0995       | 21000           |
| <b>130</b>             | 3218             | 0.93           | 787A0995       | 29808           |
| <b>127</b>             | 3249             | 1.24           | 788A0995       | 43500           |
| <b>118</b>             | 3513             | 1.19           | 788A1095       | 43500           |
| <b>116</b>             | 3598             | 0.87           | 787A1095       | 29808           |
| <b>115</b>             | 3746             | 2.08           | 789A1095       | 22200           |
| <b>108</b>             | 3966             | 2.09           | 789A1195       | 22400           |
| <b>101</b>             | 4142             | 0.82           | 787A1195       | 29700           |
| <b>101</b>             | 4089             | 1.11           | 788A1195       | 43500           |
| <b>95</b>              | 4518             | 1.83           | 789A1295       | 23700           |
| <b>94</b>              | 4414             | 1.06           | 788A1295       | 43400           |
| <b>82</b>              | 5215             | 1.74           | 789A1395       | 24600           |
| <b>81</b>              | 5122             | 0.96           | 788A1395       | 43400           |
| <b>72</b>              | 5941             | 1.51           | 789A1495       | 26100           |
| <b>71</b>              | 5796             | 0.89           | 788A1495       | 43400           |
| <b>66</b>              | 6510             | 1.49           | 789A1595       | 26600           |
| <b>65</b>              | 6632             | 2.20           | 790A1595       | 22400           |
| <b>64</b>              | 6435             | 0.85           | 788A1595       | 43400           |
| <b>60</b>              | 7163             | 2.20           | 790A1695       | 19600           |
| <b>58</b>              | 7416             | 1.28           | 789A1695       | 28300           |
| <b>52</b>              | 8237             | 1.23           | 789A1795       | 29100           |
| <b>51</b>              | 8398             | 1.81           | 790A1795       | 28100           |
| <b>47</b>              | 9068             | 1.75           | 790A1895       | 28300           |
| <b>46</b>              | 9391             | 1.09           | 789A1895       | 30700           |
| <b>42</b>              | 10151            | 1.00           | 789A1995       | 32100           |
| <b>42</b>              | 10340            | 1.50           | 790A1995       | 35200           |
| <b>38</b>              | 11168            | 1.43           | 790A2095       | 36300           |
| <b>37</b>              | 11566            | 0.92           | 789A2095       | 33300           |
| <b>34</b>              | 12704            | 1.07           | 790A2195       | 40900           |
| <b>33</b>              | 13055            | 1.22           | 790A3095       | 39100           |
| <b>31</b>              | 13723            | 1.07           | 790A2295       | 41300           |
| <b>30</b>              | 14100            | 1.14           | 790A3195       | 40500           |
| <b>26</b>              | 16780            | 0.96           | 790A2093       | 44400           |
| <b>25</b>              | 16920            | 0.96           | 790A3295       | 43800           |
| <b>24</b>              | 18276            | 0.88           | 790A3395       | 45600           |



## Series F Gearboxes : Motorised selection

## 55.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection | Overhung Load N |
|------------------------|------------------|----------------|----------------|-----------------|
| 327                    | 1608             | 2.36           | 789A0196       | 17900           |
| 320                    | 1643             | 2.50           | 790A0196       | 21800           |
| 296                    | 1774             | 2.50           | 790A0296       | 22200           |
| 287                    | 1831             | 2.36           | 789A0296       | 18100           |
| 268                    | 1963             | 2.37           | 789A0396       | 18400           |
| 235                    | 2236             | 2.37           | 789A0496       | 18600           |
| 206                    | 2550             | 2.36           | 789A0596       | 18900           |
| 187                    | 2804             | 2.50           | 790A0296       | 23900           |
| 180                    | 2910             | 2.35           | 789A0696       | 18900           |
| 169                    | 3105             | 2.30           | 789A0796       | 19300           |
| 161                    | 3262             | 2.50           | 790A0796       | 24200           |
| 148                    | 3538             | 2.04           | 789A0896       | 20300           |
| 131                    | 4021             | 1.94           | 789A0996       | 21000           |
| 128                    | 4099             | 2.50           | 790A0996       | 24600           |
| 119                    | 4429             | 2.50           | 790A1096       | 24500           |
| 115                    | 4578             | 1.71           | 789A1096       | 22200           |
| 108                    | 4848             | 1.71           | 789A1196       | 22400           |
| 107                    | 4926             | 2.43           | 790A1196       | 21400           |
| 99                     | 5320             | 2.43           | 790A1296       | 19000           |
| 95                     | 5522             | 1.50           | 789A1296       | 23700           |
| 83                     | 6307             | 2.20           | 790A1396       | 17900           |
| 82                     | 6374             | 1.42           | 789A1396       | 24600           |
| 77                     | 6811             | 2.20           | 790A1496       | 15100           |
| 72                     | 7261             | 1.23           | 789A1496       | 26100           |
| 66                     | 7957             | 1.22           | 789A1596       | 26600           |
| 65                     | 8106             | 1.80           | 790A1596       | 22400           |
| 60                     | 8755             | 1.80           | 790A1696       | 19600           |
| 58                     | 9064             | 1.05           | 789A1696       | 28300           |
| 52                     | 10079            | 1.00           | 789A1796       | 29100           |
| 51                     | 10264            | 1.48           | 790A1796       | 28100           |
| 47                     | 11083            | 1.43           | 790A1896       | 28300           |
| 46                     | 11477            | 0.89           | 789A1896       | 30700           |
| 42                     | 12407            | 0.82           | 789A1996       | 32100           |
| 42                     | 12638            | 1.22           | 790A1996       | 35200           |
| 38                     | 13649            | 1.17           | 790A2096       | 36300           |
| 34                     | 15527            | 0.88           | 790A2196       | 40900           |
| 31                     | 16773            | 0.88           | 790A2296       | 41300           |

## 75.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection | Overhung Load N |
|------------------------|------------------|----------------|----------------|-----------------|
| 320                    | 2236             | 1.84           | 790A0198       | 21800           |
| 297                    | 2415             | 1.84           | 790A0298       | 22200           |
| 259                    | 2767             | 1.84           | 790A0398       | 22700           |
| 240                    | 2990             | 1.84           | 790A0498       | 23100           |
| 203                    | 3531             | 1.84           | 790A0598       | 23600           |
| 188                    | 3815             | 1.84           | 790A0698       | 23900           |
| 161                    | 4439             | 1.84           | 790A0798       | 24200           |
| 149                    | 4791             | 1.84           | 790A0898       | 24500           |
| 128                    | 5578             | 1.84           | 790A0998       | 24600           |
| 119                    | 6028             | 1.84           | 790A1098       | 24500           |
| 107                    | 6704             | 1.79           | 790A1198       | 21400           |
| 99                     | 7240             | 1.79           | 790A1298       | 19000           |
| 83                     | 8582             | 1.62           | 790A1398       | 17900           |
| 77                     | 9268             | 1.61           | 790A1498       | 15100           |
| 65                     | 11031            | 1.33           | 790A1598       | 22400           |
| 60                     | 11915            | 1.32           | 790A1698       | 19600           |
| 51                     | 13968            | 1.09           | 790A1798       | 28100           |
| 47                     | 15083            | 1.05           | 790A1898       | 28300           |
| 42                     | 17199            | 0.90           | 790A1998       | 35200           |
| 39                     | 18575            | 0.86           | 790A2098       | 36300           |

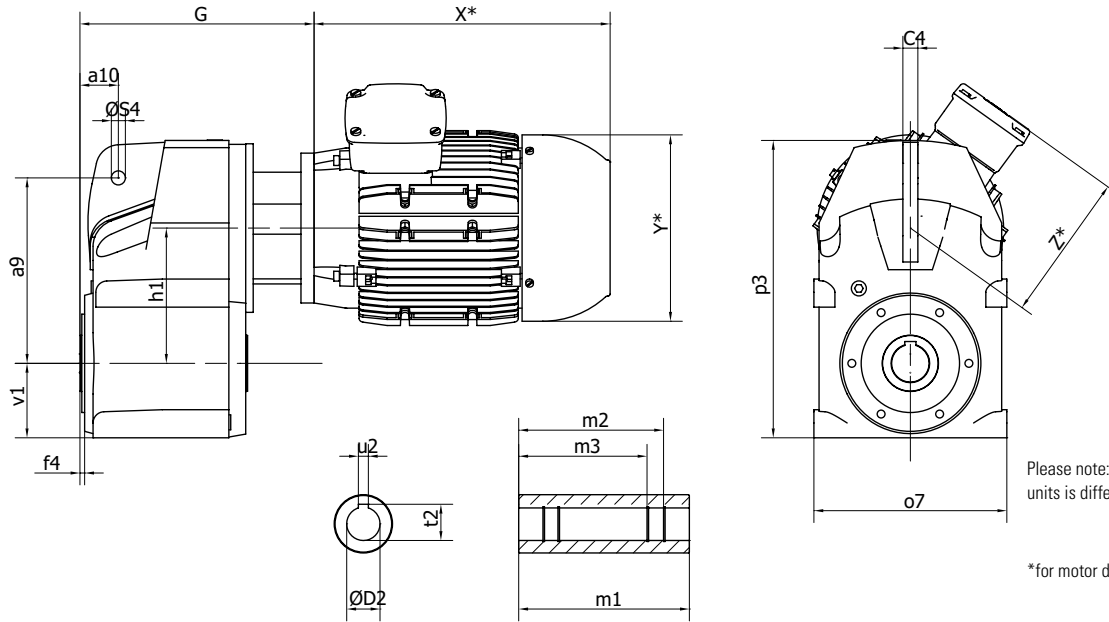
## 90.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection | Overhung Load N |
|------------------------|------------------|----------------|----------------|-----------------|
| 321                    | 2682             | 1.53           | 790A0199       | 21800           |
| 297                    | 2896             | 1.53           | 790A0299       | 22200           |
| 259                    | 3319             | 1.53           | 790A0399       | 22700           |
| 240                    | 3585             | 1.53           | 790A0499       | 23100           |
| 203                    | 4234             | 1.53           | 790A0599       | 23600           |
| 188                    | 4576             | 1.53           | 790A0699       | 23900           |
| 161                    | 5323             | 1.53           | 790A0799       | 24200           |
| 150                    | 5745             | 1.53           | 790A0899       | 24500           |
| 128                    | 6690             | 1.53           | 790A0999       | 24600           |
| 119                    | 7228             | 1.53           | 790A1099       | 24500           |
| 107                    | 8039             | 1.49           | 790A1199       | 21400           |
| 99                     | 8682             | 1.49           | 790A1299       | 19000           |
| 84                     | 10292            | 1.35           | 790A1399       | 17900           |
| 77                     | 11114            | 1.35           | 790A1499       | 15100           |
| 65                     | 13228            | 1.11           | 790A1599       | 22400           |
| 60                     | 14288            | 1.10           | 790A1699       | 19600           |
| 51                     | 16750            | 0.91           | 790A1799       | 28100           |
| 48                     | 18088            | 0.88           | 790A1899       | 28300           |

## 110.0 KW MOTOR

| Nominal Output Rev/Min | Output Torque Nm | Service Factor | Unit Selection | Overhung Load N |
|------------------------|------------------|----------------|----------------|-----------------|
| 320                    | 2682             | 1.25           | 790A0173       | 21800           |
| 297                    | 2896             | 1.25           | 790A0273       | 22200           |
| 259                    | 3319             | 1.25           | 790A0373       | 22700           |
| 240                    | 3585             | 1.25           | 790A0473       | 23100           |
| 203                    | 4234             | 1.25           | 790A0573       | 23600           |
| 188                    | 4576             | 1.25           | 790A0673       | 23900           |
| 161                    | 5323             | 1.25           | 790A0773       | 24200           |
| 149                    | 5745             | 1.25           | 790A0873       | 24500           |
| 128                    | 6690             | 1.25           | 790A0973       | 24600           |
| 119                    | 7228             | 1.25           | 790A1073       | 24500           |
| 107                    | 8039             | 1.22           | 790A1173       | 21400           |
| 99                     | 8682             | 1.22           | 790A1273       | 19000           |
| 83                     | 10292            | 1.10           | 790A1373       | 17900           |
| 77                     | 11114            | 1.10           | 790A1473       | 15100           |
| 65                     | 13228            | 0.90           | 790A1573       | 22400           |
| 60                     | 14288            | 0.90           | 790A1673       | 19600           |

Series F Gearboxes : Dimensions motorised



Please note: The appearance of unit 789 & 790 units is different to the other units.

\*for motor dimensions see page 314

| Unit Size | a9  | a10 | C4 | f4  | h1  | Ø7  | P3  | S4 | V1  | Hollow Output Bore |       |     |     |       |    |
|-----------|-----|-----|----|-----|-----|-----|-----|----|-----|--------------------|-------|-----|-----|-------|----|
|           |     |     |    |     |     |     |     |    |     | D2                 | m1    | m2  | m3  | t2    | u2 |
| 780       | 140 | 25  | 15 | 5   | 96  | 150 | 224 | 15 | 59  | 25                 | 117.5 | 105 | 89  | 28.5  | 8  |
| 781       | 158 | 32  | 16 | 5   | 121 | 171 | 273 | 15 | 76  | 30                 | 156.5 | 122 | 105 | 33.5  | 8  |
| 782       | 170 | 32  | 16 | 5   | 121 | 171 | 273 | 15 | 76  | 35                 | 156.5 | 132 | 122 | 38.5  | 10 |
| 783       | 198 | 41  | 16 | 5   | 144 | 206 | 318 | 15 | 80  | 40                 | 179.0 | 174 | 142 | 43.5  | 12 |
| 784       | 218 | 41  | 16 | 6   | 165 | 231 | 365 | 15 | 101 | 40                 | 205.0 | 174 | 156 | 43.5  | 12 |
| 785       | 278 | 50  | 20 | 7   | 200 | 282 | 442 | 24 | 127 | 50                 | 233.5 | 198 | 183 | 54.0  | 14 |
| 786       | 346 | 62  | 26 | 3   | 243 | 346 | 536 | 24 | 156 | 60                 | 270.0 | 230 | 210 | 64.6  | 18 |
| 787       | 395 | 70  | 30 | 5   | 274 | 400 | 612 | 27 | 175 | 70                 | 330.0 | 270 | -   | 75.0  | 20 |
| 788       | 485 | 88  | 36 | 5.5 | 332 | 470 | 748 | 27 | 216 | 80                 | 370.0 | 313 | -   | 85.5  | 22 |
| 789       | 485 | 89  | 40 | 3   | 385 | 498 | 784 | 26 | 237 | 90                 | 350.0 | -   | -   | 95.4  | 25 |
| 790       | 550 | 99  | 50 | 4   | 414 | 550 | 877 | 33 | 236 | 100                | 410.0 | -   | -   | 106.4 | 28 |

G DIMENSION/WEIGHT

| Motor Frame Size | 780    |    |        |    | 781 & 782 |    |        |    | 783    |    |        |    | 784    |    |        |    | 785    |    |        |    |
|------------------|--------|----|--------|----|-----------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|
|                  | Double |    | Triple |    | Double    |    | Triple |    | Double |    | Triple |    | Double |    | Triple |    | Double |    | Triple |    |
|                  | G      | kg | G      | kg | G         | kg | G      | kg | G      | kg | G      | kg | G      | kg | G      | kg | G      | kg | G      | kg |
| 63               | 154    | 12 | 169    | 13 | 175       | 19 | 188    | 20 | 189    | 27 | 219    | 28 | 200    | 42 | 230    | 43 | -      | -  | 250    | 67 |
| 71               | 158    | 11 | 173    | 12 | 179       | 19 | 192    | 20 | 195    | 27 | 223    | 28 | 206    | 42 | 234    | 43 | -      | -  | 256    | 67 |
| 80               | 171    | 12 | 186    | 13 | 192       | 19 | 205    | 20 | 213    | 27 | 236    | 28 | 224    | 42 | 247    | 43 | 259    | 63 | 274    | 68 |
| 90               | 181    | 12 | 196    | 13 | 202       | 20 | 215    | 21 | 223    | 28 | 246    | 29 | 234    | 42 | 257    | 43 | 269    | 64 | 284    | 69 |
| 100              | 189    | 15 | 204    | 16 | 210       | 23 | 223    | 24 | 250    | 31 | 254    | 32 | 261    | 45 | 265    | 46 | 281    | 65 | 311    | 70 |
| 112              | 189    | 15 | 204    | 16 | 210       | 23 | 223    | 24 | 250    | 31 | 254    | 32 | 261    | 45 | 265    | 46 | 281    | 65 | 311    | 70 |
| 132              | -      | -  | -      | -  | -         | -  | -      | -  | 250    | 32 | -      | -  | 261    | 46 | -      | -  | 303    | 65 | 311    | 70 |
| 160              | -      | -  | -      | -  | -         | -  | -      | -  | -      | -  | -      | -  | -      | -  | -      | -  | 311    | 65 | -      | -  |
| 180              | -      | -  | -      | -  | -         | -  | -      | -  | -      | -  | -      | -  | -      | -  | -      | -  | -      | -  | -      | -  |

| Motor Frame Size | 786    |     |        |     | 787    |     |        |     | 788    |     |        |     | 789    |     |        |     | 790    |     |        |     |
|------------------|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|
|                  | Double |     | Triple |     | Double |     | Triple |     | Double |     | Triple |     | Double |     | Triple |     | Double |     | Triple |     |
|                  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  |
| 63               | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   |
| 71               | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   |
| 80               | 340    | 114 | 325    | 116 | 354    | 174 | 380    | 184 | -      | -   | 441    | 273 | -      | -   | -      | -   | -      | -   | -      | -   |
| 90               | 340    | 114 | 335    | 116 | 354    | 174 | 380    | 184 | -      | -   | 441    | 273 | -      | -   | -      | -   | -      | -   | -      | -   |
| 100              | 346    | 116 | 347    | 118 | 360    | 174 | 386    | 184 | 390    | 254 | 447    | 273 | -      | -   | 446    | 320 | -      | -   | -      | -   |
| 112              | 346    | 116 | 347    | 118 | 360    | 174 | 386    | 184 | 390    | 254 | 447    | 273 | -      | -   | 446    | 320 | -      | -   | -      | -   |
| 132              | 346    | 119 | 369    | 121 | 360    | 174 | -      | -   | 390    | 254 | 447    | 273 | -      | -   | 446    | 320 | -      | -   | 524    | 506 |
| 160              | 376    | 119 | -      | -   | 395    | 181 | -      | -   | 425    | 263 | 482    | 280 | -      | 345 | 476    | 332 | -      | 500 | 496    | 495 |
| 180              | -      | -   | -      | -   | 395    | 181 | -      | -   | 425    | 263 | 482    | 280 | 491    | 345 | 476    | 332 | 516    | 500 | 496    | 495 |
| 200              | -      | -   | -      | -   | 395    | 195 | -      | -   | 425    | 263 | 482    | 281 | 491    | 345 | -      | -   | 516    | 500 | 524    | 506 |
| 225              | -      | -   | -      | -   | 422    | 195 | -      | -   | 452    | 277 | 509    | 295 | 521    | 359 | -      | -   | 546    | 514 | 526    | 509 |
| 250              | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | 521    | 375 | -      | -   | 546    | 530 | -      | -   |
| 280              | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | 546    | 530 | -      | -   |

\* For bolt-on options refer to pages 274-275

## Series F Gearboxes : Non-motorised selection

### NON-MOTORISED UNITS 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 in excess of 10 times per day then multiply factor Fm by Factor Fs from table 2.

#### (b) Input Power

Determine either the required torque (Nm) or the absorbed power (kW) required by the machine. The required Torque can be calculated using the following formula:

$$M_2 = \frac{P_2 \times 9550}{n_2}$$

$M_2$  = required output torque (Nm)

$P_2$  = absorbed power (kW)

$n_2$  = machine speed (rev/min)

#### (c) Design Power

Multiply either the required torque (Nm) or the power (kW) by the service factor determined in (a).

#### (d) Ratio Required

Divide the input shaft speed by the required output shaft speed to determine the gear ratio.

#### (e) Unit Selection

In the selection pages: 266 to 272 refer to column 1 for the nominal gear ratio closest to the value determined in step (d).

The Fenner gear ratio code is given in column 2. These are the fifth & sixth digits used in the eight digit ordering code and are included for easy reference when the unit size has been selected.

Check in column 3 for the nearest input shaft speed, then read across the table at this speed until a unit is found with either an output torque or input power that equals or exceeds the design power value determined in step (c) above. Column 4 gives the approximate output shaft speed for the selected speed and ratio combination.

#### (f) Overhung Loads

If an indirect drive is fitted to either the input shaft or output shaft see page 276 for more information.

TABLE 1 - MECHANICAL SERVICE FACTOR (Fm)

| Types of Driven Machine   | Operational Hours |         |         |
|---|-------------------|---------|---------|
|   | Under 3           | 3 to 10 | Over 10 |
| <b>Uniform Loads</b><br>Agitators and Mixers – liquid or semi-liquid<br>Blowers – centrifugal<br>Bottling Machines<br>Conveyors and Elevators – uniformly loaded<br>Cookers<br>Laundry Washing Machines – non-reversing<br>Line Shafts<br>Pumps – centrifugal and gear<br>Wire Drawing Machines   | 0.80              | 1.00    | 1.25    |
| <b>Moderate Shock Loads</b><br>Agitators and Mixers – variable density<br>Conveyors – not uniformly loaded<br>Cranes travel motion and hoisting<br>Drawbench<br>Feeders – pulsating load<br>Hoists<br>Kilns<br>Laundry Tumblers<br>Lifts<br>Pumps – reciprocating with 3 or more cylinders<br>Pump and Paper Making Machinery<br>Rubber Mixers and Calendars<br>Screens – rotary<br>Textile Machinery | 1.00              | 1.25    | 1.50    |
| <b>Heavy Shock Loads</b><br>Brick Presses<br>Briquetting Machines<br>Conveyors – reciprocating and shaker<br>Crushers<br>Feeders – reciprocating<br>Hammer Mills<br>Pumps – reciprocating, 1 or 2 cylinders<br>Rubber Masticators<br>Screens – vibrating  | 1.50              | 1.75    | 2.00    |

TABLE 2 - STARTING FACTOR (Fs)

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

## Series F Gearboxes : Non-motorised selection

## DOUBLE REDUCTION RATINGS SIZES 780-783

| Nominal Ratio | Fenner Ratio Code | Input Speed Rev/Min | Nominal Output Speed Rev/Min | 780              |                |                        | 781              |                |                        | 782              |                |                        | 783              |                |                        |
|---------------|-------------------|---------------------|------------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|
|               |                   |                     |                              | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) |
| 5.0           | 02                | 2900                | 580                          | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | 355              | 23.10          | 0.42                   |
|               |                   | 1450                | 290                          | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | 394              | 12.80          | 0.73                   |
|               |                   | 960                 | 192                          | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | 395              | 8.44           | 1.00                   |
|               |                   | 725                 | 145                          | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | 395              | 6.28           | 1.25                   |
| 6.3           | 04                | 2900                | 460                          | 52               | 2.80           | 1.07                   | -                | -              | -                      | -                | -              | -                      | 428              | 19.70          | 0.55                   |
|               |                   | 1450                | 230                          | 61               | 1.62           | 1.38                   | -                | -              | -                      | -                | -              | -                      | 516              | 11.80          | 0.95                   |
|               |                   | 960                 | 152                          | 68               | 1.19           | 1.60                   | -                | -              | -                      | -                | -              | -                      | 516              | 7.84           | 1.31                   |
|               |                   | 725                 | 115                          | 72               | 0.95           | 1.78                   | -                | -              | -                      | -                | -              | -                      | 516              | 5.92           | 1.64                   |
| 7.1           | 05                | 2900                | 408                          | 61               | 2.41           | 1.19                   | 251              | 12.60          | 0.99                   | 251              | 12.60          | 0.99                   | 453              | 18.6           | 0.60                   |
|               |                   | 1450                | 204                          | 71               | 1.40           | 1.54                   | 286              | 7.16           | 1.44                   | 286              | 7.16           | 1.44                   | 542              | 11.10          | 1.04                   |
|               |                   | 960                 | 135                          | 79               | 1.03           | 1.79                   | 286              | 4.74           | 1.80                   | 286              | 4.74           | 1.80                   | 556              | 7.54           | 1.44                   |
|               |                   | 725                 | 102                          | 84               | 0.82           | 1.98                   | 287              | 3.58           | 2.11                   | 287              | 3.58           | 2.11                   | 557              | 5.69           | 1.78                   |
| 9.0           | 07                | 2900                | 322                          | 65               | 2.25           | 1.25                   | 283              | 10.10          | 1.19                   | 283              | 10.10          | 1.19                   | 477              | 17.50          | 0.86                   |
|               |                   | 1450                | 161                          | 76               | 1.32           | 1.61                   | 314              | 5.60           | 1.73                   | 314              | 5.60           | 1.73                   | 557              | 10.20          | 1.13                   |
|               |                   | 960                 | 107                          | 84               | 0.96           | 1.87                   | 319              | 3.76           | 2.17                   | 319              | 3.76           | 2.17                   | 558              | 6.74           | 1.57                   |
|               |                   | 725                 | 81                           | 89               | 0.77           | 2.08                   | 319              | 2.84           | 2.53                   | 319              | 2.84           | 2.53                   | 558              | 5.09           | 1.96                   |
| 10            | 08                | 2900                | 290                          | 68               | 2.09           | 1.31                   | 287              | 9.31           | 1.26                   | 287              | 9.31           | 1.26                   | 527              | 15.20          | 0.80                   |
|               |                   | 1450                | 145                          | 81               | 1.23           | 1.68                   | 319              | 5.16           | 1.83                   | 319              | 5.16           | 1.83                   | 580              | 8.34           | 1.37                   |
|               |                   | 960                 | 96                           | 88               | 0.89           | 1.96                   | 327              | 3.50           | 2.28                   | 327              | 3.50           | 2.28                   | 614              | 5.84           | 1.89                   |
|               |                   | 725                 | 73                           | 94               | 0.71           | 2.17                   | 327              | 2.64           | 2.67                   | 327              | 2.64           | 2.67                   | 615              | 4.42           | 2.37                   |
| 12            | 10                | 2900                | 242                          | 75               | 1.81           | 1.43                   | 292              | 8.34           | 1.35                   | 292              | 8.34           | 1.35                   | 537              | 13.70          | 0.88                   |
|               |                   | 1450                | 121                          | 89               | 1.06           | 1.84                   | 326              | 4.65           | 1.96                   | 326              | 4.65           | 1.96                   | 591              | 7.49           | 1.51                   |
|               |                   | 960                 | 80                           | 97               | 0.77           | 2.14                   | 329              | 3.10           | 2.45                   | 329              | 3.10           | 2.45                   | 625              | 5.24           | 2.10                   |
|               |                   | 725                 | 60                           | 104              | 0.62           | 2.37                   | 329              | 2.34           | 2.87                   | 329              | 2.34           | 2.87                   | 630              | 3.99           | 2.62                   |
| 14            | 11                | 2900                | 207                          | 76               | 1.72           | 1.47                   | 304              | 6.83           | 1.53                   | 304              | 6.83           | 1.53                   | 550              | 11.70          | 1.01                   |
|               |                   | 1450                | 104                          | 92               | 1.01           | 1.89                   | 337              | 3.78           | 2.23                   | 337              | 3.78           | 2.23                   | 605              | 6.44           | 1.74                   |
|               |                   | 960                 | 69                           | 100              | 0.73           | 2.21                   | 337              | 2.50           | 2.80                   | 337              | 2.50           | 2.80                   | 641              | 4.51           | 2.40                   |
|               |                   | 725                 | 52                           | 108              | 0.60           | 2.44                   | 337              | 1.89           | 3.27                   | 337              | 1.89           | 3.27                   | 648              | 3.44           | 2.99                   |
| 16            | 12                | 2900                | 181                          | 85               | 1.50           | 1.60                   | 309              | 6.12           | 1.64                   | 309              | 6.12           | 1.64                   | 561              | 10.4           | 1.12                   |
|               |                   | 1450                | 91                           | 99               | 0.87           | 2.06                   | 345              | 3.41           | 2.39                   | 345              | 3.41           | 2.39                   | 575              | 5.31           | 1.94                   |
|               |                   | 960                 | 60                           | 110              | 0.64           | 2.41                   | 354              | 2.31           | 2.99                   | 354              | 2.31           | 2.99                   | 575              | 3.52           | 2.69                   |
|               |                   | 725                 | 45                           | 120              | 0.53           | 2.67                   | 354              | 1.74           | 3.49                   | 354              | 1.74           | 3.49                   | 576              | 2.66           | 3.38                   |
| 20            | 14                | 2900                | 145                          | 89               | 1.38           | 1.68                   | 319              | 5.15           | 1.84                   | 319              | 5.15           | 1.84                   | 517              | 9.12           | 1.27                   |
|               |                   | 1450                | 73                           | 103              | 0.80           | 2.16                   | 357              | 2.87           | 2.67                   | 357              | 2.87           | 2.67                   | 629              | 5.00           | 2.19                   |
|               |                   | 960                 | 48                           | 116              | 0.59           | 2.51                   | 380              | 2.02           | 3.34                   | 380              | 2.02           | 3.34                   | 650              | 3.42           | 3.04                   |
|               |                   | 725                 | 36                           | 127              | 0.49           | 2.80                   | 386              | 1.55           | 3.88                   | 386              | 1.55           | 3.88                   | 650              | 2.58           | 3.81                   |
| 22            | 15                | 2900                | 132                          | 93               | 1.27           | 1.76                   | 326              | 4.74           | 1.94                   | 326              | 4.74           | 1.94                   | 582              | 8.29           | 1.39                   |
|               |                   | 1450                | 66                           | 108              | 0.73           | 2.27                   | 362              | 2.63           | 2.82                   | 362              | 2.63           | 2.82                   | 639              | 4.55           | 2.40                   |
|               |                   | 960                 | 44                           | 123              | 0.55           | 2.64                   | 380              | 1.83           | 3.54                   | 380              | 1.83           | 3.54                   | 677              | 3.19           | 3.31                   |
|               |                   | 725                 | 33                           | 129              | 0.44           | 2.93                   | 380              | 1.38           | 4.13                   | 380              | 1.38           | 4.13                   | 684              | 2.43           | 4.18                   |
| 25            | 16                | 2900                | 116                          | 96               | 1.18           | 1.83                   | 332              | 4.25           | 2.08                   | 332              | 4.25           | 2.08                   | 587              | 7.85           | 1.46                   |
|               |                   | 1450                | 58                           | 112              | 0.68           | 2.36                   | 370              | 2.36           | 3.02                   | 370              | 2.36           | 3.02                   | 645              | 4.30           | 2.52                   |
|               |                   | 960                 | 38                           | 129              | 0.52           | 2.74                   | 386              | 1.63           | 3.78                   | 386              | 1.63           | 3.78                   | 683              | 3.02           | 3.51                   |
|               |                   | 725                 | 29                           | 129              | 0.39           | 3.04                   | 386              | 1.23           | 4.43                   | 386              | 1.23           | 4.43                   | 701              | 2.34           | 4.39                   |
| 28            | 17                | 2900                | 104                          | 99               | 1.10           | 1.89                   | 338              | 3.82           | 2.22                   | 338              | 3.82           | 2.22                   | 601              | 6.78           | 1.66                   |
|               |                   | 1450                | 52                           | 117              | 0.65           | 2.44                   | 375              | 2.11           | 3.23                   | 375              | 2.11           | 3.23                   | 660              | 3.72           | 2.86                   |
|               |                   | 960                 | 34                           | 129              | 0.47           | 2.86                   | 375              | 1.40           | 4.07                   | 375              | 1.40           | 4.07                   | 696              | 2.59           | 3.98                   |
|               |                   | 725                 | 26                           | 129              | 0.36           | 3.17                   | 375              | 1.06           | 4.70                   | 375              | 1.06           | 4.70                   | 696              | 1.96           | 4.91                   |
| 32            | 18                | 2900                | 91                           | 102              | 1.03           | 1.97                   | 343              | 3.52           | 2.35                   | 343              | 3.52           | 2.35                   | 605              | 6.40           | 1.75                   |
|               |                   | 1450                | 45                           | 121              | 0.61           | 2.53                   | 374              | 1.91           | 3.41                   | 374              | 1.91           | 3.41                   | 667              | 3.52           | 3.04                   |
|               |                   | 960                 | 30                           | 129              | 0.43           | 2.96                   | 374              | 1.27           | 4.27                   | 374              | 1.27           | 4.27                   | 699              | 2.44           | 4.18                   |
|               |                   | 725                 | 23                           | 129              | 0.32           | 3.26                   | 375              | 0.96           | 5.02                   | 375              | 0.96           | 5.02                   | 699              | 1.84           | 5.23                   |
| 36            | 19                | 2900                | 81                           | 107              | 0.92           | 2.08                   | 351              | 3.13           | 2.53                   | 351              | 3.13           | 2.53                   | 623              | 5.32           | 2.08                   |
|               |                   | 1450                | 40                           | 129              | 0.56           | 2.69                   | 391              | 1.74           | 3.68                   | 391              | 1.74           | 3.68                   | 687              | 2.92           | 3.58                   |
|               |                   | 960                 | 27                           | 129              | 0.37           | 3.12                   | 393              | 1.16           | 4.60                   | 393              | 1.16           | 4.60                   | 709              | 2.00           | 4.91                   |
|               |                   | 725                 | 20                           | 51               | 0.28           | 3.50                   | 393              | 0.87           | 5.42                   | 393              | 0.87           | 5.42                   | 709              | 1.51           | 6.28                   |
| 40            | 20                | 2900                | 73                           | 112              | 0.81           | 2.23                   | 355              | 2.91           | 2.65                   | 355              | 2.91           | 2.65                   | 638              | 4.62           | 2.37                   |
|               |                   | 1450                | 36                           | 129              | 0.46           | 2.89                   | 371              | 1.52           | 3.88                   | 371              | 1.52           | 3.88                   | 703              | 2.54           | 4.08                   |
|               |                   | 960                 | 24                           | 129              | 0.31           | 3.37                   | 371              | 1.01           | 4.80                   | 371              | 1.01           | 4.80                   | 716              | 1.71           | 5.60                   |
|               |                   | 725                 | 18                           | 129              | 0.23           | 3.73                   | 371              | 0.76           | 5.73                   | 371              | 0.76           | 5.73                   | 716              | 1.29           | 7.19                   |
| 50            | 22                | 2900                | 58                           | 117              | 0.72           | 2.36                   | 366              | 2.50           | 2.94                   | 366              | 2.50           | 2.94                   | 646              | 4.28           | 2.55                   |
|               |                   | 1450                | 29                           | 129              | 0.40           | 3.04                   | 391              | 1.34           | 4.27                   | 391              | 1.34           | 4.27                   | 712              | 2.35           | 4.39                   |
|               |                   | 960                 | 19                           | 129              | 0.26           | 3.57                   | 392              | 0.89           | 5.42                   | 392              | 0.89           | 5.42                   | 720              | 1.57           | 6.03                   |
|               |                   | 725                 | 15                           | 129              | 0.2            | 3.91                   | 392              | 0.67           | 6.33                   | 392              | 0.67           | 6.33                   | 720              | 1.19           | 7.56                   |
| 56            | 23                | 2900                | 52                           | 122              | 0.68           | 2.46                   | 371              | 2.12           | 3.23                   | 371              | 2.12           | 3.23                   | 522              | 2.83           | 2.99                   |
|               |                   | 1450                | 26                           | 129              | 0.36           | 3.17                   | 387              | 1.10           | 4.70                   | 387              | 1.10           | 4.70                   | 543              | 1.47           | 5.23                   |
|               |                   | 960                 | 17                           | 129              | 0.24           | 3.73                   | 387              | 0.73           | 5.91                   | 387              | 0.73           | 5.91                   | 566              | 1.01           | 7.19                   |
|               |                   | 725                 | 13                           | 129              | 0.18           | 4.14                   | 387              | 0.55           | 6.83                   | 387              | 0.55           | 6.83                   | 582              | 0.79           | 9.00                   |
| 63            | 24                | 2900                | 46                           | 129              | 0.59           | 2.62                   | 339              | 1.72           | 3.45                   | 339              | 1.72           | 3.45                   | 462              | 2.25           | 3.25                   |
|               |                   | 1450                | 23                           | 129              | 0.30           | 3.37                   | 363              | 0.92           | 5.02                   | 363              | 0.92           | 5.02                   | 480              | 1.17           | 5.60                   |
|               |                   | 960                 | 15                           | 129              | 0.20           | 3.86                   | 378              | 0.63           | 6.33                   | 378              | 0.63           | 6.33                   | 501              | 0.80           | 7.98                   |
|               |                   | 725                 | 12                           | 129              | 0.15           | 4.36                   | 389              | 0.49           | 7.10                   | 389              | 0.49           | 7.10                   | 512              | 0.62           | 9.20                   |
| 71            | 25                | 2900                | 41                           | 113              | 0.46           | 2.77                   | 293              | 1.28           | 3.72                   | 293              | 1.28           | 3.72                   | 364              | 1.58           | 3.58                   |
|               |                   | 1450                | 20                           | 113              | 0.22           | 3.57                   | 314              | 0.69           | 5.42                   | 314              | 0.69           | 5.42                   | 364              | 0.79           | 6.28                   |
|               |                   | 960                 | 14                           | 113              | 0.15           | 4.06                   | 328              | 0.47           | 6.83                   | 328              | 0.47           | 6.83                   | 364              | 0.52           | 8.46                   |
|               |                   | 725                 | 10                           | 113              | 0.11           | 4.56                   | 337              | 0.37           | 7.70                   | 337              | 0.37           | 7.70                   | 364              | 0.40           | 9.20                   |
| 90            | 27                | 2900                | 32                           | 105              | 0.37           | 2.89                   | 264              | 1.02           | 4.00                   | 264              | 1.02           | 4.00                   | -                | -              | -                      |
|               |                   | 1450                | 16                           | 112              | 0.20           | 3.73                   | 283              | 0.54           | 5.91                   | 283              | 0.54           | 5.91                   | -                | -              | -                      |
|               |                   | 960                 | 11                           | 112              | 0.13           | 4.36                   | 295              | 0.38           | 7.10                   | 295              | 0.38           | 7.10                   | -                | -              | -                      |
|               |                   | 725                 | 8                            | 112              | 0.10           | 4.86                   | 303              | 0.29           | 7.90                   | 303              | 0.29           | 7.90                   | -                | -              | -                      |
| 100           | 28                | 2900                | 29                           | -                | -              | -                      | 235              | 0.80           | 4.27                   | 235              | 0.80           | 4.27                   | -                | -              | -                      |
|               |                   | 1450                | 15                           | -                | -              | -                      | 252              | 0.43           | 6.33                   | 252              | 0.43           | 6.33                   | -                | -              | -                      |
|               |                   | 960                 | 10                           | -                | -              | -                      | 263              | 0.30           | 7.10                   | 263              | 0.30           | 7.10                   | -                | -              | -                      |
|               |                   | 725                 | 7                            | -                | -              | -                      | 270              | 0.23           | 7.90                   | 270              | 0.23           | 7.90                   | -                | -              | -                      |

**Series F Gearboxes : Non-motorised selection****DOUBLE REDUCTION RATINGS SIZES 784-786**

| Nominal Ratio | Fenner Ratio Code | Input Speed Rev/Min | Nominal Output Speed Rev/Min | 784              |                |                        | 785              |                |                        | 786              |                |                        |
|---------------|-------------------|---------------------|------------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|
|               |                   |                     |                              | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) |
| 7.1           | 05                | 2900                | 408                          | 380              | 19.20          | 1.85                   | 560              | 26.10          | 2.05                   | 908              | 41.30          | 2.12                   |
|               |                   | 1450                | 204                          | 468              | 11.80          | 2.63                   | 564              | 13.10          | 2.89                   | 914              | 20.70          | 3.02                   |
|               |                   | 960                 | 135                          | 509              | 8.44           | 3.22                   | 565              | 8.65           | 3.54                   | 917              | 13.70          | 3.74                   |
|               |                   | 725                 | 102                          | 509              | 6.38           | 3.71                   | 566              | 6.53           | 4.05                   | 918              | 10.30          | 4.31                   |
| 9.0           | 07                | 2900                | 322                          | 465              | 16.70          | 2.20                   | 771              | 25.90          | 2.41                   | 1290             | 41.30          | 2.54                   |
|               |                   | 1450                | 161                          | 573              | 10.20          | 3.11                   | 783              | 13.10          | 3.39                   | 1300             | 20.70          | 3.62                   |
|               |                   | 960                 | 107                          | 649              | 7.66           | 3.83                   | 784              | 8.65           | 4.15                   | 1300             | 13.70          | 4.46                   |
|               |                   | 725                 | 81                           | 665              | 5.92           | 4.42                   | 785              | 6.53           | 4.76                   | 1300             | 10.30          | 5.16                   |
| 10            | 08                | 2900                | 290                          | 495              | 15.80          | 2.33                   | 822              | 24.50          | 2.55                   | 1440             | 41.30          | 2.68                   |
|               |                   | 1450                | 145                          | 610              | 9.72           | 3.30                   | 880              | 13.10          | 3.59                   | 1450             | 20.70          | 3.81                   |
|               |                   | 960                 | 96                           | 691              | 7.27           | 4.06                   | 881              | 8.65           | 4.39                   | 1450             | 13.70          | 4.72                   |
|               |                   | 725                 | 73                           | 717              | 5.69           | 4.68                   | 882              | 6.53           | 5.06                   | 1450             | 10.30          | 5.43                   |
| 12            | 10                | 2900                | 242                          | 526              | 15.00          | 2.47                   | 866              | 23.50          | 2.67                   | 1550             | 39.80          | 2.83                   |
|               |                   | 1450                | 121                          | 649              | 9.20           | 3.49                   | 968              | 13.10          | 3.75                   | 1610             | 20.70          | 4.04                   |
|               |                   | 960                 | 80                           | 718              | 6.74           | 4.29                   | 969              | 8.65           | 4.62                   | 1610             | 13.70          | 4.99                   |
|               |                   | 725                 | 60                           | 719              | 5.09           | 4.96                   | 970              | 6.53           | 5.29                   | 1610             | 10.30          | 5.75                   |
| 14            | 11                | 2900                | 207                          | 593              | 13.30          | 2.78                   | 986              | 20.40          | 3.05                   | 1750             | 34.90          | 3.23                   |
|               |                   | 1450                | 104                          | 730              | 8.15           | 3.94                   | 1210             | 12.50          | 4.30                   | 2080             | 20.70          | 4.61                   |
|               |                   | 960                 | 69                           | 808              | 5.96           | 4.85                   | 1270             | 8.65           | 5.25                   | 2090             | 13.70          | 5.70                   |
|               |                   | 725                 | 52                           | 808              | 4.50           | 5.60                   | 1270             | 6.53           | 6.06                   | 2090             | 10.30          | 6.60                   |
| 16            | 12                | 2900                | 181                          | 629              | 12.40          | 2.96                   | 1050             | 19.10          | 3.25                   | 1850             | 32.70          | 3.42                   |
|               |                   | 1450                | 91                           | 775              | 7.63           | 4.19                   | 1290             | 11.70          | 4.56                   | 2270             | 20.10          | 4.89                   |
|               |                   | 960                 | 60                           | 825              | 5.37           | 5.16                   | 1440             | 8.65           | 5.61                   | 2340             | 13.70          | 6.02                   |
|               |                   | 725                 | 45                           | 825              | 4.06           | 5.96                   | 1440             | 6.53           | 6.41                   | 2340             | 10.30          | 7.01                   |
| 20            | 14                | 2900                | 145                          | 681              | 11.30          | 3.23                   | 1140             | 17.20          | 3.58                   | 2020             | 29.20          | 3.80                   |
|               |                   | 1450                | 73                           | 838              | 6.92           | 4.59                   | 1410             | 10.50          | 5.02                   | 2490             | 17.90          | 5.43                   |
|               |                   | 960                 | 48                           | 842              | 4.60           | 5.66                   | 1520             | 7.54           | 6.19                   | 2810             | 13.40          | 6.68                   |
|               |                   | 725                 | 36                           | 842              | 3.47           | 6.49                   | 1520             | 5.69           | 7.11                   | 2870             | 10.30          | 7.73                   |
| 22            | 15                | 2900                | 132                          | 723              | 10.40          | 3.47                   | 1190             | 16.20          | 3.74                   | 2120             | 27.20          | 4.04                   |
|               |                   | 1450                | 66                           | 741              | 5.31           | 4.92                   | 1470             | 9.98           | 5.25                   | 2610             | 16.70          | 5.75                   |
|               |                   | 960                 | 44                           | 741              | 3.52           | 6.03                   | 1590             | 7.14           | 6.48                   | 2950             | 12.50          | 7.10                   |
|               |                   | 725                 | 33                           | 741              | 2.66           | 6.96                   | 1590             | 5.39           | 7.44                   | 3170             | 10.10          | 8.26                   |
| 25            | 16                | 2900                | 116                          | 770              | 9.52           | 3.75                   | 1260             | 14.90          | 4.02                   | 2260             | 24.90          | 4.37                   |
|               |                   | 1450                | 58                           | 837              | 5.16           | 5.30                   | 1550             | 9.18           | 5.66                   | 2780             | 15.30          | 6.26                   |
|               |                   | 960                 | 38                           | 837              | 3.42           | 6.58                   | 1720             | 6.73           | 6.91                   | 3150             | 11.40          | 7.73                   |
|               |                   | 725                 | 29                           | 837              | 2.58           | 7.56                   | 1720             | 5.08           | 7.96                   | 3320             | 9.11           | 8.91                   |
| 28            | 17                | 2900                | 104                          | 798              | 8.83           | 3.96                   | 1320             | 13.80          | 4.27                   | 2320             | 23.10          | 4.61                   |
|               |                   | 1450                | 52                           | 880              | 4.86           | 5.60                   | 1620             | 8.47           | 6.00                   | 2690             | 13.40          | 6.60                   |
|               |                   | 960                 | 34                           | 880              | 3.22           | 6.96                   | 1830             | 6.35           | 7.32                   | 2700             | 8.85           | 8.12                   |
|               |                   | 725                 | 26                           | 880              | 2.43           | 8.00                   | 1860             | 4.86           | 8.43                   | 2700             | 6.68           | 9.51                   |
| 32            | 18                | 2900                | 91                           | 828              | 8.59           | 4.08                   | 1380             | 13.10          | 4.48                   | 2370             | 21.50          | 4.83                   |
|               |                   | 1450                | 45                           | 891              | 4.61           | 5.77                   | 1690             | 8.03           | 6.33                   | 2580             | 11.70          | 6.92                   |
|               |                   | 960                 | 30                           | 892              | 3.06           | 7.18                   | 1750             | 5.48           | 7.68                   | 2580             | 7.74           | 8.57                   |
|               |                   | 725                 | 23                           | 892              | 2.31           | 8.16                   | 1750             | 4.14           | 9.00                   | 2580             | 5.85           | 9.98                   |
| 36            | 19                | 2900                | 81                           | 882              | 7.72           | 4.44                   | 1450             | 12.00          | 4.79                   | 2450             | 19.70          | 5.12                   |
|               |                   | 1450                | 40                           | 887              | 3.88           | 6.32                   | 1790             | 7.40           | 6.73                   | 2770             | 11.10          | 7.29                   |
|               |                   | 960                 | 27                           | 887              | 2.57           | 7.84                   | 1800             | 4.93           | 8.26                   | 2770             | 7.34           | 9.10                   |
|               |                   | 725                 | 20                           | 887              | 1.94           | 8.94                   | 1800             | 3.72           | 9.45                   | 2770             | 5.54           | 10.53                  |
| 40            | 20                | 2900                | 73                           | 889              | 7.30           | 4.62                   | 1520             | 11.10          | 5.10                   | 2510             | 17.80          | 5.47                   |
|               |                   | 1450                | 36                           | 890              | 3.65           | 6.58                   | 1780             | 6.51           | 7.21                   | 2910             | 10.30          | 7.85                   |
|               |                   | 960                 | 24                           | 890              | 2.41           | 8.00                   | 1780             | 4.31           | 8.80                   | 2910             | 6.84           | 9.74                   |
|               |                   | 725                 | 18                           | 890              | 1.82           | 9.43                   | 1780             | 3.25           | 10.28                  | 2910             | 5.16           | 11.19                  |
| 50            | 22                | 2900                | 58                           | 890              | 5.89           | 5.12                   | 1570             | 9.92           | 5.47                   | 2560             | 15.00          | 6.02                   |
|               |                   | 1450                | 29                           | 892              | 2.95           | 7.30                   | 1790             | 5.66           | 7.68                   | 3160             | 9.26           | 8.57                   |
|               |                   | 960                 | 19                           | 893              | 1.95           | 8.94                   | 1790             | 3.74           | 9.45                   | 3160             | 6.13           | 10.84                  |
|               |                   | 725                 | 15                           | 893              | 1.47           | 10.33                  | 1790             | 2.83           | 10.98                  | 3160             | 4.63           | 12.44                  |
| 56            | 23                | 2900                | 52                           | 891              | 5.01           | 5.60                   | 1620             | 8.62           | 5.94                   | 2620             | 13.20          | 6.53                   |
|               |                   | 1450                | 26                           | 892              | 2.50           | 8.00                   | 1840             | 4.88           | 8.43                   | 3300             | 8.31           | 9.30                   |
|               |                   | 960                 | 17                           | 893              | 1.66           | 9.70                   | 1840             | 3.23           | 10.28                  | 3380             | 5.63           | 11.56                  |
|               |                   | 725                 | 13                           | 893              | 1.25           | 11.30                  | 1840             | 2.44           | 11.84                  | 3380             | 4.25           | 13.54                  |
| 63            | 24                | 2900                | 46                           | 858              | 4.41           | 5.83                   | 1640             | 7.97           | 6.26                   | 2670             | 12.30          | 6.84                   |
|               |                   | 1450                | 23                           | 892              | 2.29           | 8.34                   | 1840             | 4.48           | 8.80                   | 3370             | 7.73           | 9.74                   |
|               |                   | 960                 | 15                           | 893              | 1.52           | 10.33                  | 1840             | 2.96           | 10.98                  | 3390             | 5.14           | 11.97                  |
|               |                   | 725                 | 12                           | 893              | 1.15           | 11.30                  | 1840             | 2.24           | 12.35                  | 3390             | 3.88           | 14.22                  |
| 71            | 25                | 2900                | 41                           | 673              | 2.83           | 6.49                   | 1490             | 6.05           | 6.82                   | 2740             | 10.20          | 7.62                   |
|               |                   | 1450                | 20                           | 699              | 1.47           | 9.18                   | 1590             | 3.23           | 9.70                   | 3390             | 6.34           | 10.84                  |
|               |                   | 960                 | 14                           | 729              | 1.01           | 11.30                  | 1650             | 2.21           | 11.84                  | 3390             | 4.20           | 13.54                  |
|               |                   | 725                 | 10                           | 750              | 0.79           | 11.30                  | 1650             | 1.67           | 13.63                  | 3390             | 3.17           | 15.93                  |
| 90            | 27                | 2900                | 32                           | 595              | 2.25           | 6.86                   | 1220             | 4.30           | 7.32                   | 2760             | 9.47           | 7.98                   |
|               |                   | 1450                | 16                           | 619              | 1.17           | 9.70                   | 1270             | 2.23           | 10.28                  | 3300             | 5.65           | 11.56                  |
|               |                   | 960                 | 11                           | 645              | 0.80           | 11.30                  | 1290             | 1.51           | 12.94                  | 3300             | 3.74           | 14.22                  |
|               |                   | 725                 | 8                            | 659              | 0.62           | 11.30                  | 1290             | 1.14           | 14.44                  | 3300             | 2.82           | 17.05                  |
| 100           | 28                | 2900                | 29                           | 468              | 1.58           | 7.30                   | 1070             | 3.41           | 7.68                   | 2700             | 8.06           | 8.57                   |
|               |                   | 1450                | 15                           | 469              | 0.79           | 10.33                  | 1100             | 1.75           | 10.98                  | 2690             | 4.03           | 12.44                  |
|               |                   | 960                 | 10                           | 469              | 0.52           | 11.30                  | 1100             | 1.16           | 13.63                  | 2920             | 2.89           | 15.00                  |
|               |                   | 725                 | 7                            | 469              | 0.40           | 11.30                  | 1100             | 0.87           | 15.42                  | 2940             | 2.19           | 18.45                  |

## Series F Gearboxes : Non-motorised selection

## DOUBLE REDUCTION RATINGS SIZES 787-790

| Nominal Ratio | Fenner Ratio Code | Input Speed Rev/Min | Nominal Output Speed Rev/Min | 787              |                |                        | 788              |                |                        | 789              |                |                        | 790              |                |                        |
|---------------|-------------------|---------------------|------------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|
|               |                   |                     |                              | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) |
| 4.5           | 01                | 2900                | -                            | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      |
|               |                   | 1450                | 322                          | -                | -              | -                      | -                | -              | -                      | 3798             | 125.50         | 17.90                  | 4115             | 133.10         | 21.80                  |
|               |                   | 960                 | 213                          | -                | -              | -                      | -                | -              | -                      | 3798             | 81.65          | 21.30                  | 4115             | 86.55          | 25.80                  |
|               |                   | 725                 | 161                          | -                | -              | -                      | -                | -              | -                      | 3798             | 61.45          | 23.90                  | 4115             | 65.15          | 28.80                  |
| 5.0           | 02                | 2900                | 580                          | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      |
|               |                   | 1450                | 290                          | 1960             | 60.30          | 32.00                  | 2560             | 78.20          | 43.00                  | 4326             | 125.50         | 18.10                  | 4445             | 133.10         | 22.20                  |
|               |                   | 960                 | 192                          | 2220             | 45.20          | 32.00                  | 2560             | 51.80          | 43.00                  | 4326             | 81.65          | 21.80                  | 4445             | 86.55          | 26.30                  |
|               |                   | 725                 | 145                          | 2420             | 37.10          | 32.00                  | 2560             | 39.10          | 43.00                  | 4326             | 61.45          | 24.50                  | 4445             | 65.15          | 29.40                  |
| 5.6           | 03                | 2900                | -                            | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      |
|               |                   | 1450                | 259                          | -                | -              | -                      | -                | -              | -                      | 4642             | 125.50         | 18.40                  | 5097             | 133.10         | 22.70                  |
|               |                   | 960                 | 171                          | -                | -              | -                      | -                | -              | -                      | 4642             | 81.65          | 22.10                  | 5097             | 86.55          | 27.00                  |
|               |                   | 725                 | 129                          | -                | -              | -                      | -                | -              | -                      | 4642             | 61.45          | 24.90                  | 5097             | 65.15          | 30.30                  |
| 6.3           | 04                | 2900                | -                            | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      |
|               |                   | 1450                | 230                          | 2270             | 54.20          | 32.00                  | 3020             | 73.60          | 43.00                  | 5288             | 125.50         | 18.60                  | 5505             | 133.10         | 23.10                  |
|               |                   | 960                 | 152                          | 2570             | 40.50          | 32.00                  | 3220             | 51.80          | 43.00                  | 5288             | 81.65          | 22.40                  | 5505             | 86.55          | 27.50                  |
|               |                   | 725                 | 115                          | 2800             | 33.20          | 32.00                  | 3220             | 39.10          | 43.00                  | 5288             | 61.45          | 25.30                  | 5505             | 65.15          | 30.80                  |
| 7.1           | 05                | 2900                | -                            | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      |
|               |                   | 1450                | 204                          | 2340             | 52.30          | 32.00                  | 3200             | 70.00          | 43.00                  | 6037             | 125.50         | 18.90                  | 6500             | 133.10         | 23.60                  |
|               |                   | 960                 | 135                          | 2650             | 39.10          | 32.00                  | 3580             | 51.80          | 43.00                  | 6037             | 81.65          | 22.90                  | 6500             | 86.55          | 28.30                  |
|               |                   | 725                 | 102                          | 2890             | 32.10          | 32.00                  | 3580             | 39.10          | 43.00                  | 6037             | 61.45          | 25.90                  | 6500             | 65.15          | 31.80                  |
| 8.0           | 06                | 2900                | -                            | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      |
|               |                   | 1450                | 181                          | 2490             | 49.50          | 32.00                  | 3340             | 67.20          | 43.00                  | 6852             | 125.50         | 18.90                  | 7021             | 133.10         | 23.90                  |
|               |                   | 960                 | 120                          | 2820             | 37.00          | 32.00                  | 3780             | 50.30          | 43.00                  | 6852             | 81.65          | 23.10                  | 7021             | 86.55          | 28.70                  |
|               |                   | 725                 | 91                           | 3070             | 30.40          | 32.00                  | 3900             | 39.10          | 43.00                  | 6852             | 61.45          | 26.30                  | 7021             | 65.15          | 32.30                  |
| 9.0           | 07                | 2900                | -                            | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      |
|               |                   | 1450                | 161                          | 2640             | 46.80          | 32.00                  | 3560             | 63.10          | 43.00                  | 7141             | 122.20         | 19.30                  | 8166             | 133.10         | 24.20                  |
|               |                   | 960                 | 107                          | 2990             | 35.00          | 32.00                  | 4040             | 47.20          | 43.00                  | 7192             | 80.04          | 23.60                  | 8166             | 86.55          | 29.30                  |
|               |                   | 725                 | 81                           | 3250             | 28.80          | 32.00                  | 4390             | 38.80          | 43.00                  | 7192             | 60.25          | 26.80                  | 8166             | 65.15          | 33.10                  |
| 10            | 08                | 2900                | -                            | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      |
|               |                   | 1450                | 145                          | 2850             | 44.00          | 32.00                  | 3770             | 60.40          | 43.00                  | 7224             | 108.50         | 20.30                  | 8820             | 133.10         | 24.50                  |
|               |                   | 960                 | 96                           | 3220             | 32.90          | 32.00                  | 4270             | 45.20          | 43.00                  | 8193             | 80.03          | 23.60                  | 8820             | 86.55          | 29.70                  |
|               |                   | 725                 | 73                           | 3510             | 27.00          | 32.00                  | 4550             | 37.10          | 43.00                  | 8193             | 60.23          | 27.00                  | 8820             | 65.15          | 33.60                  |
| 11            | 09                | 2900                | 264                          | -                | -              | -                      | -                | -              | -                      | 6328             | 167.30         | 16.50                  | -                | -              | -                      |
|               |                   | 1450                | 132                          | 2990             | 41.10          | 32.00                  | 4040             | 55.00          | 43.00                  | 7791             | 103.00         | 21.00                  | 10268            | 133.10         | 24.60                  |
|               |                   | 960                 | 87                           | 3380             | 30.80          | 32.00                  | 4580             | 41.10          | 43.00                  | 8370             | 71.94          | 25.00                  | 10268            | 86.55          | 30.10                  |
|               |                   | 725                 | 66                           | 3680             | 25.30          | 32.00                  | 4980             | 33.80          | 43.00                  | 8370             | 54.15          | 28.50                  | 10268            | 65.15          | 34.20                  |
| 12            | 10                | 2900                | 242                          | -                | -              | -                      | -                | -              | -                      | 6340             | 147.20         | 17.50                  | -                | -              | -                      |
|               |                   | 1450                | 121                          | 3140             | 38.60          | 32.00                  | 4170             | 52.50          | 43.00                  | 7806             | 90.61          | 22.20                  | 11090            | 133.10         | 24.50                  |
|               |                   | 960                 | 80                           | 3550             | 28.90          | 32.00                  | 4720             | 39.30          | 43.00                  | 8881             | 67.04          | 25.80                  | 11090            | 86.55          | 30.40                  |
|               |                   | 725                 | 60                           | 3850             | 23.60          | 32.00                  | 5140             | 32.30          | 43.00                  | 9434             | 54.17          | 28.70                  | 11090            | 65.15          | 34.60                  |
| 14            | 11                | 2900                | 207                          | -                | -              | -                      | -                | -              | -                      | 6733             | 147.60         | 17.60                  | -                | -              | -                      |
|               |                   | 1450                | 104                          | 3390             | 36.20          | 32.00                  | 4530             | 49.00          | 43.00                  | 8289             | 90.86          | 22.40                  | 11993            | 129.40         | 21.40                  |
|               |                   | 960                 | 69                           | 3840             | 27.10          | 32.00                  | 5130             | 36.70          | 43.00                  | 8744             | 62.34          | 26.90                  | 11993            | 84.14          | 30.90                  |
|               |                   | 725                 | 52                           | 4180             | 22.20          | 32.00                  | 5580             | 30.10          | 43.00                  | 8744             | 46.92          | 30.60                  | 11993            | 63.33          | 35.20                  |
| 16            | 12                | 2900                | 181                          | -                | -              | -                      | -                | -              | -                      | 6708             | 129.10         | 18.60                  | 10138            | 202.50         | 15.90                  |
|               |                   | 1450                | 91                           | 3550             | 33.90          | 32.00                  | 4670             | 46.80          | 43.00                  | 8258             | 79.47          | 23.70                  | 12954            | 129.40         | 19.00                  |
|               |                   | 960                 | 60                           | 4020             | 25.40          | 32.00                  | 5290             | 35.00          | 43.00                  | 9396             | 58.80          | 27.60                  | 12954            | 84.16          | 31.10                  |
|               |                   | 725                 | 45                           | 4310             | 20.50          | 32.00                  | 5750             | 28.80          | 43.00                  | 9960             | 46.92          | 30.80                  | 12954            | 63.34          | 35.60                  |
| 18            | 13                | 2900                | 161                          | -                | -              | -                      | -                | -              | -                      | 7357             | 122.68         | 19.30                  | 10577            | 178.30         | 17.00                  |
|               |                   | 1450                | 81                           | 3610             | 32.00          | 32.00                  | 4910             | 42.40          | 43.00                  | 9058             | 75.52          | 24.60                  | 13884            | 116.99         | 17.90                  |
|               |                   | 960                 | 53                           | 4090             | 24.00          | 32.00                  | 5560             | 31.70          | 43.00                  | 10120            | 54.87          | 28.80                  | 15151            | 83.03          | 26.10                  |
|               |                   | 725                 | 40                           | 4310             | 19.10          | 32.00                  | 6050             | 26.10          | 43.00                  | 10120            | 41.30          | 32.80                  | 15254            | 62.92          | 35.90                  |
| 20            | 14                | 2900                | 145                          | -                | -              | -                      | -                | -              | -                      | 7282             | 106.59         | 20.50                  | 11409            | 178.10         | 14.90                  |
|               |                   | 1450                | 73                           | 3760             | 29.20          | 32.00                  | 5150             | 39.30          | 43.00                  | 8965             | 65.61          | 26.10                  | 14966            | 116.78         | 15.10                  |
|               |                   | 960                 | 48                           | 4240             | 21.80          | 32.00                  | 5830             | 29.40          | 43.00                  | 10200            | 48.55          | 30.30                  | 15852            | 80.44          | 26.10                  |
|               |                   | 725                 | 36                           | 4240             | 16.50          | 32.00                  | 6340             | 24.10          | 43.00                  | 10617            | 38.04          | 34.10                  | 15957            | 60.95          | 36.70                  |
| 22            | 15                | 2900                | 132                          | 3300             | 45.60          | 32.00                  | 4440             | 61.20          | 43.00                  | 7854             | 104.91         | 20.90                  | 11145            | 146.10         | 20.60                  |
|               |                   | 1450                | 66                           | 4070             | 28.00          | 32.00                  | 5470             | 37.60          | 43.00                  | 9669             | 64.58          | 26.60                  | 14520            | 95.85          | 22.40                  |
|               |                   | 960                 | 44                           | 4310             | 19.60          | 32.00                  | 6190             | 28.10          | 43.00                  | 10120            | 43.96          | 31.90                  | 16005            | 68.24          | 31.30                  |
|               |                   | 725                 | 33                           | 4310             | 14.80          | 32.00                  | 6740             | 23.10          | 43.00                  | 10120            | 33.09          | 36.30                  | 16100            | 51.67          | 39.50                  |
| 25            | 16                | 2900                | 116                          | 3480             | 42.10          | 32.00                  | 4650             | 56.60          | 43.00                  | 7732             | 90.66          | 22.20                  | 12019            | 145.90         | 18.50                  |
|               |                   | 1450                | 58                           | 4280             | 25.80          | 32.00                  | 5730             | 34.80          | 43.00                  | 9519             | 55.81          | 28.30                  | 15757            | 95.64          | 19.60                  |
|               |                   | 960                 | 38                           | 4310             | 17.20          | 32.00                  | 6480             | 26.00          | 43.00                  | 10617            | 40.48          | 33.10                  | 15946            | 62.95          | 36.10                  |
|               |                   | 725                 | 29                           | 4310             | 13.00          | 32.00                  | 7050             | 21.40          | 43.00                  | 10617            | 30.47          | 37.70                  | 16039            | 47.65          | 41.20                  |
| 28            | 17                | 2900                | 104                          | 3220             | 35.50          | 32.00                  | 4730             | 52.80          | 43.00                  | 8433             | 88.93          | 22.60                  | 11582            | 119.90         | 25.30                  |
|               |                   | 1450                | 52                           | 4060             | 22.30          | 32.00                  | 5820             | 32.40          | 43.00                  | 10120            | 53.36          | 29.10                  | 15188            | 78.64          | 28.10                  |
|               |                   | 960                 | 34                           | 4240             | 15.40          | 32.00                  | 6400             | 23.50          | 43.00                  | 10120            | 34.70          | 35.50                  | 16086            | 54.17          | 38.60                  |
|               |                   | 725                 | 26                           | 4240             | 11.60          | 32.00                  | 6400             | 17.80          | 43.00                  | 10120            | 26.12          | 40.30                  | 16172            | 40.99          | 44.10                  |
| 32            | 18                | 2900                | 91                           | 3250             | 32.30          | 32.00                  | 4910             | 49.30          | 43.00                  | 8302             | 76.88          | 24.10                  | 12488            | 119.80         | 23.20                  |
|               |                   | 1450                | 45                           | 4110             | 20.30          | 32.00                  | 6040             | 30.30          | 43.00                  | 10221            | 47.32          | 30.70                  | 15874            | 76.11          | 28.30                  |
|               |                   | 960                 | 30                           | 4240             | 13.90          | 32.00                  | 6400             | 21.20          | 43.00                  | 10617            | 31.97          | 36.90                  | 16024            | 49.97          | 40.30                  |
|               |                   | 725                 | 23                           | 4240             | 10.50          | 32.00                  | 6400             | 15.00          | 43.00                  | 10617            | 24.06          | 41.80                  | 16108            | 37.81          | 45.90                  |
| 36            | 19                | 2900                | 81                           | 3960             | 33.80          | 32.00                  | 5240             | 46.60          | 43.00                  | 9043             | 77.46          | 24.30                  | 11943            | 100.40         | 28.40                  |
|               |                   | 1450                | 40                           | 4310             | 18.40          | 32.00                  | 6460             | 28.60          | 43.00                  | 10120            | 43.35          | 32.10                  | 15465            | 64.03          | 35.20                  |
|               |                   | 960                 | 27                           | 4310             | 12.20          | 32.00                  | 7250             | 21.30          | 43.00                  | 10120            | 28.19          | 39.00                  | 16150            | 44.17          | 42.50                  |
|               |                   | 725                 | 20                           | 4310             | 9.18           | 32.00                  | 7250             | 16.00          | 43.00                  | 10120            | 21.22          | 44.10                  | 16229            | 33.41          | 48.40                  |

Series F Gearboxes : Non-motorised selection

DOUBLE REDUCTION RATINGS SIZES 787-790

| Nominal Ratio | Fenner Ratio Code | Input Speed Rev/Min | Nominal Output Speed Rev/Min | 787              |                |                        | 788              |                |                        | 789              |                |                        | 790              |                |                        |
|---------------|-------------------|---------------------|------------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|
|               |                   |                     |                              | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) |
| 40            | 20                | 2900                | 73                           | 4100             | 31.60          | 32.00                  | 5440             | 43.50          | 43.00                  | 8893             | 66.87          | 25.90                  | 12874            | 100.3          | 27.90                  |
|               |                   | 1450                | 36                           | 4310             | 16.60          | 32.00                  | 6690             | 26.70          | 43.00                  | 10617            | 39.91          | 33.30                  | 15951            | 62.10          | 36.30                  |
|               |                   | 960                 | 24                           | 4310             | 11.00          | 32.00                  | 7250             | 19.10          | 43.00                  | 10617            | 25.96          | 40.50                  | 16087            | 40.73          | 44.40                  |
|               |                   | 725                 | 18                           | 4310             | 8.27           | 32.00                  | 7250             | 14.50          | 43.00                  | 10617            | 19.54          | 45.80                  | 16163            | 30.8           | 50.30                  |
| 45            | 21                | 2900                | 64                           | 3460             | 24.30          | 32.00                  | 5570             | 39.30          | 43.00                  | 8153             | 54.57          | 28.40                  | 10498            | 71.86          | 32.80                  |
|               |                   | 1450                | 32                           | 4310             | 15.10          | 32.00                  | 6400             | 22.50          | 43.00                  | 8545             | 28.60          | 37.80                  | 13655            | 46.74          | 40.90                  |
|               |                   | 960                 | 21                           | 4310             | 10.00          | 32.00                  | 6400             | 14.90          | 43.00                  | 8710             | 18.96          | 45.10                  | 14114            | 31.42          | 48.90                  |
|               |                   | 725                 | 16                           | 4310             | 7.57           | 32.00                  | 6400             | 11.20          | 43.00                  | 8780             | 14.38          | 50.50                  | 14233            | 23.85          | 55.10                  |
| 50            | 22                | 2900                | 58                           | 3500             | 22.30          | 32.00                  | 5850             | 35.80          | 43.00                  | 9287             | 54.58          | 28.50                  | 11310            | 71.67          | 33.20                  |
|               |                   | 1450                | 29                           | 4240             | 13.50          | 32.00                  | 6400             | 19.50          | 43.00                  | 9733             | 28.60          | 38.40                  | 14749            | 46.73          | 41.30                  |
|               |                   | 960                 | 19                           | 4240             | 8.92           | 32.00                  | 6400             | 12.90          | 43.00                  | 9921             | 18.96          | 45.90                  | 15244            | 31.41          | 49.60                  |
|               |                   | 725                 | 15                           | 4240             | 6.73           | 32.00                  | 6400             | 9.77           | 43.00                  | 10000            | 14.38          | 51.60                  | 15373            | 23.84          | 55.90                  |
| 56            | 23                | 2900                | 52                           | 4310             | 23.50          | 32.00                  | 6160             | 34.60          | 43.00                  | 7406             | 42.78          | 31.20                  | 10598            | 58.74          | 35.90                  |
|               |                   | 1450                | 26                           | 4310             | 11.70          | 32.00                  | 7250             | 20.30          | 43.00                  | 7617             | 22.00          | 41.40                  | 11213            | 31.08          | 47.50                  |
|               |                   | 960                 | 17                           | 4310             | 7.77           | 32.00                  | 7250             | 13.40          | 43.00                  | 7720             | 14.50          | 49.10                  | 11370            | 20.49          | 56.50                  |
|               |                   | 725                 | 13                           | 4310             | 5.87           | 32.00                  | 7250             | 10.10          | 43.00                  | 7779             | 11.00          | 54.80                  | 11458            | 15.54          | 62.20                  |
| 63            | 24                | 2900                | 46                           | 4310             | 21.30          | 32.00                  | 6460             | 31.50          | 43.00                  | 8435             | 42.77          | 31.60                  | 11471            | 59.86          | 36.30                  |
|               |                   | 1450                | 23                           | 4310             | 10.60          | 32.00                  | 7250             | 17.60          | 43.00                  | 8677             | 22.00          | 42.20                  | 12112            | 31.08          | 48.20                  |
|               |                   | 960                 | 15                           | 4310             | 7.03           | 32.00                  | 7250             | 11.70          | 43.00                  | 8794             | 14.50          | 50.20                  | 12281            | 20.49          | 57.40                  |
|               |                   | 725                 | 12                           | 4310             | 5.31           | 32.00                  | 7250             | 8.82           | 43.00                  | 8860             | 11.00          | 56.00                  | 12376            | 15.54          | 62.20                  |
| 71            | 25                | 2900                | 41                           | 3610             | 16.80          | 32.00                  | 6160             | 27.90          | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 1450                | 20                           | 3950             | 9.16           | 32.00                  | 6170             | 14.00          | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 960                 | 14                           | 3950             | 6.06           | 32.00                  | 6170             | 9.25           | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 725                 | 10                           | 3950             | 4.58           | 32.00                  | 6170             | 6.98           | 43.00                  | -                | -              | -                      | -                | -              |                        |
| 90            | 26                | 2900                | 36                           | 3610             | 14.90          | 32.00                  | 5600             | 23.70          | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 1450                | 18                           | 3660             | 7.56           | 32.00                  | 5610             | 11.80          | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 960                 | 12                           | 3660             | 5.01           | 32.00                  | 5610             | 7.84           | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 725                 | 9                            | 3660             | 3.78           | 32.00                  | 5610             | 5.92           | 43.00                  | -                | -              | -                      | -                | -              |                        |
| 90            | 27                | 2900                | 32                           | 4310             | 15.50          | 32.00                  | 7080             | 25.60          | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 1450                | 16                           | 4310             | 7.75           | 32.00                  | 7250             | 13.10          | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 960                 | 11                           | 4310             | 5.13           | 32.00                  | 7250             | 8.66           | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 725                 | 8                            | 4310             | 3.87           | 32.00                  | 7250             | 6.54           | 43.00                  | -                | -              | -                      | -                | -              |                        |
| 100           | 28                | 2900                | 29                           | 4310             | 13.80          | 32.00                  | 7040             | 23.70          | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 1450                | 15                           | 4310             | 6.91           | 32.00                  | 7040             | 11.80          | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 960                 | 10                           | 4310             | 4.57           | 32.00                  | 7050             | 7.84           | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 725                 | 7                            | 4310             | 3.45           | 32.00                  | 7050             | 5.92           | 43.00                  | -                | -              | -                      | -                | -              |                        |

## Series F Gearboxes : Non-motorised selection

## TRIPLE REDUCTION RATINGS SIZES 780-783

| Nominal Ratio | Fenner Ratio Code | Input Speed Rev/Min | Nominal Output Speed Rev/Min | 780              |                |                        | 781              |                |                        | 782              |                |                        | 783              |                |                        |
|---------------|-------------------|---------------------|------------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|
|               |                   |                     |                              | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) |
| 90            | 35                | 2900                | 36                           | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | 448              | 1.82           | 3.81                   |
|               |                   | 1450                | 18                           | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | 530              | 1.07           | 6.55                   |
|               |                   | 960                 | 12                           | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | 617              | 0.82           | 9.00                   |
|               |                   | 725                 | 9                            | -                | -              | -                      | -                | -              | -                      | -                | -              | -                      | 685              | 0.69           | 9.20                   |
| 90            | 36                | 2900                | 32                           | 128              | 0.45           | 2.93                   | -                | -              | -                      | -                | -              | -                      | 433              | 1.59           | 4.08                   |
|               |                   | 1450                | 16                           | 129              | 0.23           | 3.81                   | -                | -              | -                      | -                | -              | -                      | 519              | 0.95           | 7.19                   |
|               |                   | 960                 | 11                           | 135              | 0.16           | 3.86                   | -                | -              | -                      | -                | -              | -                      | 605              | 0.73           | 9.20                   |
|               |                   | 725                 | 8                            | 141              | 0.12           | 3.86                   | -                | -              | -                      | -                | -              | -                      | 673              | 0.62           | 9.20                   |
| 100           | 37                | 2900                | 29                           | 129              | 0.41           | 3.04                   | 303              | 0.98           | 4.43                   | 303              | 0.98           | 4.43                   | 447              | 1.43           | 4.51                   |
|               |                   | 1450                | 15                           | 129              | 0.20           | 3.86                   | 366              | 0.59           | 6.57                   | 366              | 0.59           | 6.57                   | 547              | 0.87           | 7.98                   |
|               |                   | 960                 | 10                           | 137              | 0.14           | 3.86                   | 417              | 0.44           | 7.10                   | 417              | 0.44           | 7.10                   | 638              | 0.67           | 9.20                   |
|               |                   | 725                 | 7                            | 144              | 0.11           | 3.86                   | 424              | 0.34           | 7.10                   | 424              | 0.34           | 7.10                   | 710              | 0.57           | 9.20                   |
| 112           | 38                | 2900                | 26                           | 129              | 0.37           | 3.17                   | 309              | 0.90           | 4.70                   | 309              | 0.90           | 4.70                   | 457              | 1.35           | 4.91                   |
|               |                   | 1450                | 13                           | 130              | 0.19           | 3.86                   | 380              | 0.55           | 6.83                   | 380              | 0.55           | 6.83                   | 566              | 0.83           | 8.46                   |
|               |                   | 960                 | 9                            | 139              | 0.13           | 3.86                   | 423              | 0.41           | 7.10                   | 423              | 0.41           | 7.10                   | 660              | 0.64           | 9.20                   |
|               |                   | 725                 | 6                            | 146              | 0.10           | 3.86                   | 425              | 0.31           | 7.10                   | 425              | 0.31           | 7.10                   | 735              | 0.54           | 9.20                   |
| 125           | 39                | 2900                | 23                           | 129              | 0.32           | 3.32                   | 319              | 0.85           | 4.91                   | 319              | 0.85           | 4.91                   | 480              | 1.18           | 5.60                   |
|               |                   | 1450                | 12                           | 133              | 0.16           | 3.86                   | 398              | 0.53           | 7.10                   | 398              | 0.53           | 7.10                   | 609              | 0.74           | 9.20                   |
|               |                   | 960                 | 8                            | 143              | 0.12           | 3.86                   | 429              | 0.38           | 7.10                   | 429              | 0.38           | 7.10                   | 712              | 0.58           | 9.20                   |
|               |                   | 725                 | 6                            | 147              | 0.09           | 3.86                   | 429              | 0.28           | 7.10                   | 429              | 0.28           | 7.10                   | 771              | 0.47           | 9.20                   |
| 160           | 41                | 2900                | 18                           | 129              | 0.27           | 3.57                   | 332              | 0.75           | 5.42                   | 332              | 0.75           | 5.42                   | 502              | 1.03           | 6.55                   |
|               |                   | 1450                | 9                            | 138              | 0.14           | 3.86                   | 413              | 0.47           | 7.10                   | 413              | 0.47           | 7.10                   | 650              | 0.66           | 9.20                   |
|               |                   | 960                 | 6                            | 147              | 0.10           | 3.86                   | 431              | 0.32           | 7.10                   | 431              | 0.32           | 7.10                   | 761              | 0.51           | 9.20                   |
|               |                   | 725                 | 5                            | 147              | 0.08           | 3.86                   | 431              | 0.24           | 7.10                   | 431              | 0.24           | 7.10                   | 771              | 0.39           | 9.20                   |
| 190           | 42                | 2900                | 16                           | 129              | 0.23           | 3.81                   | 348              | 0.66           | 5.91                   | 348              | 0.66           | 5.91                   | 526              | 0.96           | 7.19                   |
|               |                   | 1450                | 8                            | 141              | 0.12           | 3.86                   | 425              | 0.40           | 7.10                   | 425              | 0.40           | 7.10                   | 682              | 0.62           | 9.20                   |
|               |                   | 960                 | 5                            | 147              | 0.09           | 3.86                   | 433              | 0.27           | 7.10                   | 433              | 0.27           | 7.10                   | 771              | 0.46           | 9.20                   |
|               |                   | 725                 | 4                            | 147              | 0.07           | 3.86                   | 433              | 0.20           | 7.10                   | 433              | 0.20           | 7.10                   | 771              | 0.35           | 9.20                   |
| 200           | 43                | 2900                | 15                           | 129              | 0.21           | 3.86                   | 376              | 0.61           | 6.57                   | 376              | 0.61           | 6.57                   | 561              | 0.88           | 7.98                   |
|               |                   | 1450                | 7                            | 144              | 0.11           | 3.86                   | 436              | 0.35           | 7.10                   | 436              | 0.35           | 7.10                   | 728              | 0.57           | 9.20                   |
|               |                   | 960                 | 5                            | 147              | 0.08           | 3.86                   | 441              | 0.24           | 7.10                   | 441              | 0.24           | 7.10                   | 771              | 0.40           | 9.20                   |
|               |                   | 725                 | 4                            | 147              | 0.06           | 3.86                   | 441              | 0.18           | 7.10                   | 441              | 0.18           | 7.10                   | 771              | 0.30           | 9.20                   |
| 225           | 44                | 2900                | 13                           | 132              | 0.17           | 3.86                   | 390              | 0.57           | 6.83                   | 390              | 0.57           | 6.83                   | 591              | 0.81           | 9.00                   |
|               |                   | 1450                | 6                            | 147              | 0.10           | 3.86                   | 441              | 0.32           | 7.10                   | 441              | 0.32           | 7.10                   | 731              | 0.50           | 9.20                   |
|               |                   | 960                 | 4                            | 147              | 0.06           | 3.86                   | 441              | 0.21           | 7.10                   | 441              | 0.21           | 7.10                   | 762              | 0.35           | 9.20                   |
|               |                   | 725                 | 3                            | 147              | 0.05           | 3.86                   | 441              | 0.16           | 7.10                   | 441              | 0.16           | 7.10                   | 771              | 0.27           | 9.20                   |
| 290           | 46                | 2900                | 10                           | 132              | 0.16           | 3.86                   | 408              | 0.49           | 7.10                   | 408              | 0.49           | 7.10                   | 621              | 0.75           | 9.20                   |
|               |                   | 1450                | 5                            | 147              | 0.08           | 3.86                   | 442              | 0.27           | 7.10                   | 442              | 0.27           | 7.10                   | 651              | 0.39           | 9.20                   |
|               |                   | 960                 | 3                            | 147              | 0.06           | 3.86                   | 442              | 0.18           | 7.10                   | 442              | 0.18           | 7.10                   | 679              | 0.27           | 9.20                   |
|               |                   | 725                 | 3                            | 147              | 0.04           | 3.86                   | 442              | 0.13           | 7.10                   | 442              | 0.13           | 7.10                   | 699              | 0.21           | 9.20                   |
| 315           | 47                | 2900                | 9                            | 138              | 0.14           | 3.86                   | 418              | 0.44           | 7.10                   | 418              | 0.44           | 7.10                   | -                | -              | -                      |
|               |                   | 1450                | 5                            | 147              | 0.07           | 3.86                   | 432              | 0.23           | 7.10                   | 432              | 0.23           | 7.10                   | -                | -              | -                      |
|               |                   | 960                 | 3                            | 147              | 0.05           | 3.86                   | 432              | 0.15           | 7.10                   | 432              | 0.15           | 7.10                   | -                | -              | -                      |
|               |                   | 725                 | 2                            | 147              | 0.04           | 3.86                   | 432              | 0.11           | 7.10                   | 432              | 0.11           | 7.10                   | -                | -              | -                      |
| 360           | 50                | 2900                | 8                            | -                | -              | -                      | 401              | 0.37           | 7.10                   | 401              | 0.37           | 7.10                   | -                | -              | -                      |
|               |                   | 1450                | 4                            | -                | -              | -                      | 425              | 0.20           | 7.10                   | 425              | 0.20           | 7.10                   | -                | -              | -                      |
|               |                   | 960                 | 3                            | -                | -              | -                      | 425              | 0.13           | 7.10                   | 425              | 0.13           | 7.10                   | -                | -              | -                      |
|               |                   | 725                 | 2                            | -                | -              | -                      | 425              | 0.10           | 7.10                   | 425              | 0.10           | 7.10                   | -                | -              | -                      |



Series F Gearboxes : Non-motorised selection

TRIPLE REDUCTION RATINGS SIZES 784-786

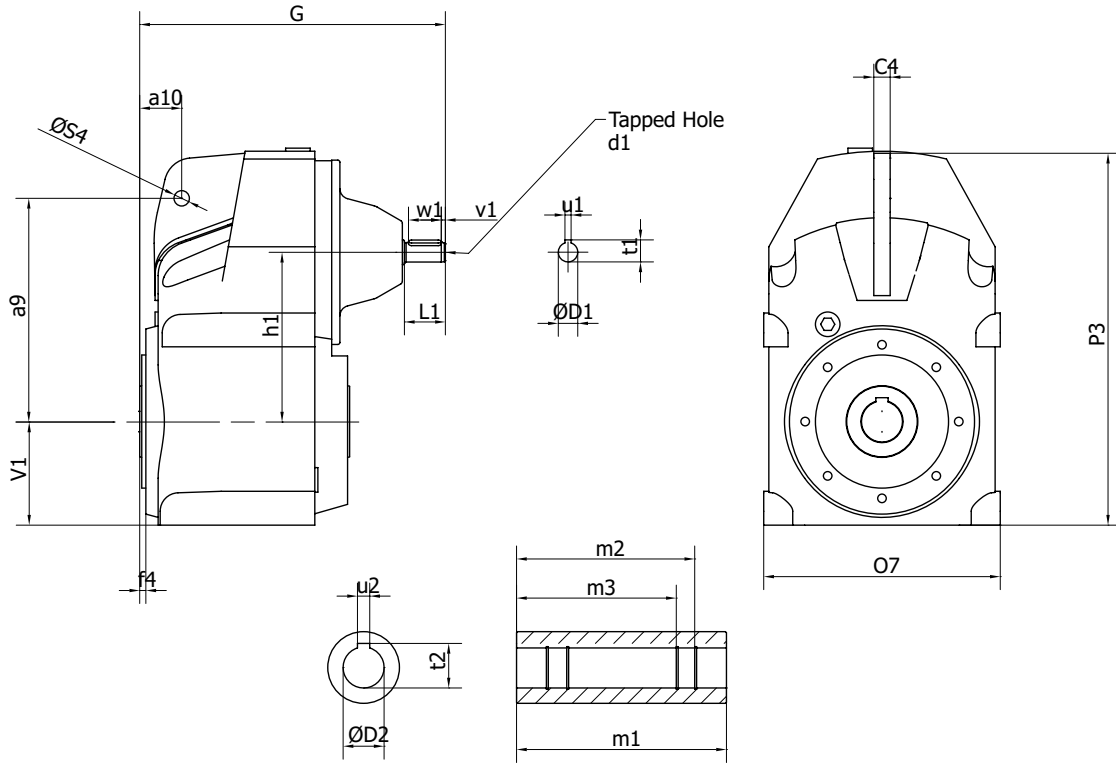
| Nominal Ratio | Fenner Ratio Code | Input Speed Rev/Min | Nominal Output Speed Rev/Min | 784              |                |                        | 785              |                |                        | 786              |                |                        |
|---------------|-------------------|---------------------|------------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|
|               |                   |                     |                              | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) |
| 100           | 37                | 2900                | 29                           | 578              | 1.82           | 4.62                   | 1060             | 3.11           | 8.10                   | 3100             | 8.70           | 8.91                   |
|               |                   | 1450                | 15                           | 682              | 1.07           | 8.36                   | 1240             | 1.82           | 11.38                  | 3390             | 4.72           | 12.95                  |
|               |                   | 960                 | 10                           | 795              | 0.82           | 11.30                  | 1430             | 1.38           | 14.44                  | 3390             | 3.12           | 15.93                  |
|               |                   | 725                 | 7                            | 883              | 0.69           | 11.30                  | 1580             | 1.16           | 16.63                  | 3390             | 2.36           | 18.45                  |
| 112           | 38                | 2900                | 26                           | 557              | 1.59           | 5.09                   | 1010             | 2.80           | 8.26                   | 3000             | 7.69           | 9.30                   |
|               |                   | 1450                | 13                           | 668              | 0.95           | 9.53                   | 1190             | 1.63           | 11.84                  | 3390             | 4.31           | 13.54                  |
|               |                   | 960                 | 9                            | 779              | 0.73           | 11.30                  | 1380             | 1.25           | 14.44                  | 3390             | 2.85           | 17.05                  |
| 125           | 39                | 2900                | 23                           | 576              | 1.43           | 5.68                   | 1060             | 2.47           | 9.00                   | 3120             | 7.05           | 9.98                   |
|               |                   | 1450                | 12                           | 704              | 0.87           | 10.27                  | 1270             | 1.47           | 12.94                  | 3390             | 3.81           | 14.22                  |
|               |                   | 960                 | 8                            | 822              | 0.67           | 11.30                  | 1470             | 1.13           | 15.42                  | 3390             | 2.52           | 18.45                  |
| 160           | 41                | 2900                | 18                           | 589              | 1.35           | 6.16                   | 1080             | 2.35           | 9.45                   | 3220             | 6.45           | 10.53                  |
|               |                   | 1450                | 9                            | 729              | 0.83           | 11.15                  | 1300             | 1.41           | 13.63                  | 3390             | 3.38           | 15.00                  |
|               |                   | 960                 | 6                            | 851              | 0.64           | 11.30                  | 1510             | 1.09           | 16.63                  | 3390             | 2.23           | 18.45                  |
| 180           | 42                | 2900                | 16                           | 618              | 1.18           | 7.08                   | 1140             | 2.00           | 10.61                  | 3380             | 5.59           | 11.97                  |
|               |                   | 1450                | 8                            | 784              | 0.74           | 11.30                  | 1420             | 1.24           | 15.42                  | 3390             | 2.79           | 17.05                  |
|               |                   | 960                 | 5                            | 917              | 0.58           | 11.30                  | 1650             | 0.96           | 17.00                  | 3390             | 1.85           | 19.00                  |
| 200           | 43                | 2900                | 15                           | 647              | 1.03           | 8.36                   | 1190             | 1.77           | 11.38                  | 3390             | 4.81           | 12.95                  |
|               |                   | 1450                | 7                            | 837              | 0.66           | 11.30                  | 1510             | 1.12           | 16.63                  | 3390             | 2.40           | 18.45                  |
|               |                   | 960                 | 5                            | 944              | 0.50           | 11.30                  | 1770             | 0.87           | 17.00                  | 3480             | 1.62           | 19.70                  |
| 225           | 44                | 2900                | 13                           | 677              | 0.96           | 9.53                   | 1220             | 1.66           | 11.84                  | 3390             | 4.38           | 13.54                  |
|               |                   | 1450                | 6                            | 878              | 0.62           | 11.30                  | 1570             | 1.06           | 17.00                  | 3390             | 2.18           | 19.70                  |
|               |                   | 960                 | 4                            | 962              | 0.45           | 11.30                  | 1830             | 0.82           | 17.00                  | 3530             | 1.50           | 19.70                  |
| 280           | 46                | 2900                | 10                           | 722              | 0.88           | 11.30                  | 1310             | 1.46           | 12.94                  | 3390             | 3.57           | 15.00                  |
|               |                   | 1450                | 5                            | 923              | 0.56           | 11.30                  | 1700             | 0.94           | 17.00                  | 3420             | 1.79           | 19.70                  |
|               |                   | 960                 | 3                            | 985              | 0.39           | 11.30                  | 1990             | 0.73           | 17.00                  | 3600             | 1.25           | 19.70                  |
| 315           | 47                | 2900                | 9                            | 761              | 0.81           | 11.30                  | 1400             | 1.39           | 13.63                  | 3390             | 3.27           | 15.93                  |
|               |                   | 1450                | 5                            | 941              | 0.50           | 11.30                  | 1810             | 0.90           | 17.00                  | 3460             | 1.66           | 19.70                  |
|               |                   | 960                 | 3                            | 981              | 0.35           | 11.30                  | 2100             | 0.69           | 17.00                  | 3600             | 1.14           | 19.70                  |
| 360           | 50                | 2900                | 8                            | 800              | 0.75           | 11.30                  | 1460             | 1.30           | 14.44                  | 3390             | 2.85           | 17.05                  |
|               |                   | 1450                | 4                            | 839              | 0.39           | 11.30                  | 1780             | 0.79           | 17.00                  | 3540             | 1.48           | 19.70                  |
|               |                   | 960                 | 3                            | 875              | 0.27           | 11.30                  | 1780             | 0.52           | 17.00                  | 3600             | 1.00           | 19.70                  |
|               |                   | 725                 | 2                            | 900              | 0.21           | 11.30                  | 1780             | 0.40           | 17.00                  | 3600             | 0.75           | 19.70                  |

## Series F Gearboxes : Non-motorised selection

## TRIPLE REDUCTION RATINGS SIZES 787-790

| Nominal Ratio | Fenner Ratio Code | Input Speed Rev/Min | Nominal Output Speed Rev/Min | 787              |                |                        | 788              |                |                        | 789              |                |                        | 790              |                |                        |
|---------------|-------------------|---------------------|------------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|
|               |                   |                     |                              | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) | Output Torque Nm | Input Power kW | Overhung Load Fra (kN) |
| 45            | 30                | 2900                | 64                           | -                | -              | -                      | -                | -              | -                      | 6470             | 42.49          | 30.70                  | -                | -              | -                      |
|               |                   | 1450                | 32                           | -                | -              | -                      | -                | -              | -                      | 7965             | 26.15          | 38.90                  | 15873            | 52.86          | 39.10                  |
|               |                   | 960                 | 21                           | -                | -              | -                      | -                | -              | -                      | 9063             | 19.35          | 45.00                  | 16216            | 35.12          | 47.30                  |
|               |                   | 725                 | 16                           | -                | -              | -                      | -                | -              | -                      | 9869             | 15.86          | 49.60                  | 16286            | 26.55          | 53.60                  |
| 50            | 31                | 2900                | 58                           | -                | -              | -                      | -                | -              | -                      | 7369             | 42.49          | 31.10                  | -                | -              | -                      |
|               |                   | 1450                | 29                           | -                | -              | -                      | -                | -              | -                      | 9073             | 26.16          | 39.50                  | 16031            | 49.43          | 40.50                  |
|               |                   | 960                 | 19                           | -                | -              | -                      | -                | -              | -                      | 10323            | 19.35          | 45.80                  | 16153            | 32.39          | 49.20                  |
|               |                   | 725                 | 15                           | -                | -              | -                      | -                | -              | -                      | 10617            | 14.98          | 51.20                  | 16222            | 24.49          | 55.70                  |
| 56            | 32                | 2900                | 52                           | -                | -              | -                      | -                | -              | -                      | 6965             | 37.47          | 32.70                  | 14174            | 72.85          | 33.30                  |
|               |                   | 1450                | 26                           | -                | -              | -                      | -                | -              | -                      | 8575             | 23.06          | 41.50                  | 16169            | 41.55          | 43.80                  |
|               |                   | 960                 | 17                           | -                | -              | -                      | -                | -              | -                      | 9756             | 17.07          | 48.00                  | 16281            | 27.21          | 53.00                  |
|               |                   | 725                 | 13                           | -                | -              | -                      | -                | -              | -                      | 10120            | 13.32          | 53.50                  | 16343            | 20.56          | 60.00                  |
| 63            | 33                | 2900                | 46                           | -                | -              | -                      | -                | -              | -                      | 7933             | 37.46          | 33.20                  | 15310            | 72.85          | 32.10                  |
|               |                   | 1450                | 23                           | -                | -              | -                      | -                | -              | -                      | 9767             | 23.06          | 42.10                  | 16108            | 38.22          | 45.60                  |
|               |                   | 960                 | 15                           | -                | -              | -                      | -                | -              | -                      | 10617            | 16.30          | 49.40                  | 16216            | 25.09          | 55.10                  |
|               |                   | 725                 | 12                           | -                | -              | -                      | -                | -              | -                      | 10617            | 12.27          | 55.70                  | 16277            | 18.96          | 62.20                  |
| 71            | 34                | 2900                | 41                           | -                | -              | -                      | -                | -              | -                      | 7641             | 31.67          | 35.60                  | 15403            | 63.92          | 35.60                  |
|               |                   | 1450                | 20                           | -                | -              | -                      | -                | -              | -                      | 9408             | 19.50          | 45.20                  | 16227            | 33.67          | 48.20                  |
|               |                   | 960                 | 14                           | -                | -              | -                      | -                | -              | -                      | 10120            | 13.64          | 53.00                  | 16328            | 22.03          | 58.20                  |
|               |                   | 725                 | 10                           | -                | -              | -                      | -                | -              | -                      | 10120            | 10.27          | 56.00                  | 16385            | 16.54          | 62.20                  |
| 80            | 35                | 2900                | 36                           | -                | -              | -                      | -                | -              | -                      | 8704             | 31.67          | 36.20                  | 15958            | 61.31          | 36.60                  |
|               |                   | 1450                | 18                           | -                | -              | -                      | -                | -              | -                      | 10617            | 19.32          | 46.00                  | 16164            | 31.05          | 50.20                  |
|               |                   | 960                 | 12                           | -                | -              | -                      | -                | -              | -                      | 10617            | 12.56          | 55.10                  | 16263            | 20.32          | 60.40                  |
|               |                   | 725                 | 9                            | -                | -              | -                      | -                | -              | -                      | 10617            | 9.46           | 56.00                  | 16317            | 15.34          | 62.20                  |
| 90            | 36                | 2900                | 32                           | -                | -              | -                      | -                | -              | -                      | 8354             | 27.63          | 38.30                  | 16102            | 51.61          | 39.50                  |
|               |                   | 1450                | 16                           | -                | -              | -                      | -                | -              | -                      | 10120            | 16.73          | 48.70                  | 16290            | 26.11          | 54.00                  |
|               |                   | 960                 | 11                           | -                | -              | -                      | -                | -              | -                      | 10120            | 10.88          | 56.00                  | 16380            | 17.07          | 62.20                  |
|               |                   | 725                 | 8                            | -                | -              | -                      | -                | -              | -                      | 10120            | 8.19           | 56.00                  | 16430            | 12.89          | 62.20                  |
| 100           | 37                | 2900                | 29                           | 4130             | 13.34          | 32.00                  | 6370             | 19.62          | 43.00                  | 9516             | 27.63          | 38.80                  | 16043            | 47.61          | 41.20                  |
|               |                   | 1450                | 15                           | 4130             | 6.67           | 32.00                  | 6370             | 9.81           | 43.00                  | 10617            | 15.41          | 50.60                  | 16226            | 24.08          | 56.10                  |
|               |                   | 960                 | 10                           | 4130             | 4.42           | 32.00                  | 6370             | 6.49           | 43.00                  | 10617            | 10.02          | 56.00                  | 16313            | 15.74          | 62.20                  |
|               |                   | 725                 | 7                            | 4130             | 3.34           | 32.00                  | 6370             | 4.91           | 43.00                  | 10617            | 7.54           | 56.00                  | 16361            | 11.88          | 62.20                  |
| 112           | 38                | 2900                | 26                           | 4130             | 12.00          | 32.00                  | 6400             | 17.74          | 43.00                  | 8801             | 23.76          | 41.40                  | 16166            | 41.96          | 43.60                  |
|               |                   | 1450                | 13                           | 4130             | 6.00           | 32.00                  | 6400             | 8.87           | 43.00                  | 10120            | 13.66          | 53.00                  | 16337            | 21.20          | 59.20                  |
|               |                   | 960                 | 9                            | 4130             | 3.97           | 32.00                  | 6400             | 5.87           | 43.00                  | 10120            | 8.88           | 56.00                  | 16417            | 13.85          | 62.20                  |
|               |                   | 725                 | 6                            | 4130             | 3.00           | 32.00                  | 6400             | 4.44           | 43.00                  | 10120            | 6.69           | 56.00                  | 16463            | 10.46          | 62.20                  |
| 125           | 39                | 2900                | 23                           | 4220             | 10.16          | 32.00                  | 7250             | 17.80          | 43.00                  | 10024            | 23.76          | 41.80                  | 16105            | 38.70          | 45.40                  |
|               |                   | 1450                | 12                           | 4220             | 5.08           | 32.00                  | 7250             | 8.90           | 43.00                  | 10617            | 12.58          | 55.10                  | 16271            | 19.55          | 61.40                  |
|               |                   | 960                 | 8                            | 4220             | 3.36           | 32.00                  | 7250             | 5.89           | 43.00                  | 10617            | 8.18           | 56.00                  | 16349            | 12.77          | 62.20                  |
|               |                   | 725                 | 6                            | 4220             | 2.54           | 32.00                  | 7250             | 4.45           | 43.00                  | 10617            | 6.16           | 56.00                  | 16393            | 9.64           | 62.20                  |
| 140           | 40                | 2900                | 21                           | 4220             | 9.14           | 32.00                  | 7250             | 16.02          | 43.00                  | 9664             | 20.56          | 44.40                  | 16219            | 34.72          | 47.50                  |
|               |                   | 1450                | 10                           | 4220             | 4.57           | 32.00                  | 7250             | 8.01           | 43.00                  | 10120            | 10.76          | 56.00                  | 16375            | 17.53          | 62.20                  |
|               |                   | 960                 | 7                            | 4220             | 3.03           | 32.00                  | 7250             | 5.30           | 43.00                  | 10120            | 7.00           | 56.00                  | 16449            | 11.45          | 62.20                  |
|               |                   | 725                 | 5                            | 4220             | 2.29           | 32.00                  | 7250             | 4.01           | 43.00                  | 10120            | 5.27           | 56.00                  | 16490            | 8.64           | 62.20                  |
| 160           | 41                | 2900                | 18                           | 4310             | 8.52           | 32.00                  | 6400             | 12.44          | 43.00                  | 10617            | 19.83          | 45.50                  | 16156            | 32.03          | 49.50                  |
|               |                   | 1450                | 9                            | 4310             | 4.26           | 32.00                  | 6400             | 6.22           | 43.00                  | 10617            | 9.91           | 56.00                  | 16308            | 16.16          | 62.20                  |
|               |                   | 960                 | 6                            | 4310             | 2.82           | 32.00                  | 6400             | 4.12           | 43.00                  | 10617            | 6.45           | 56.00                  | 16379            | 10.56          | 62.20                  |
|               |                   | 725                 | 5                            | 4310             | 2.13           | 32.00                  | 6400             | 3.11           | 43.00                  | 10617            | 4.85           | 56.00                  | 16409            | 7.97           | 62.20                  |
| 180           | 42                | 2900                | 16                           | 4310             | 7.70           | 32.00                  | 6400             | 10.80          | 43.00                  | 10120            | 17.02          | 48.40                  | 16283            | 26.90          | 53.30                  |
|               |                   | 1450                | 8                            | 4310             | 3.85           | 32.00                  | 6400             | 5.40           | 43.00                  | 10120            | 8.51           | 56.00                  | 16421            | 13.56          | 62.20                  |
|               |                   | 960                 | 5                            | 4310             | 2.55           | 32.00                  | 6400             | 3.58           | 43.00                  | 10120            | 5.53           | 56.00                  | 16486            | 8.86           | 62.20                  |
|               |                   | 725                 | 4                            | 4310             | 1.93           | 32.00                  | 6400             | 2.70           | 43.00                  | 10120            | 4.17           | 56.00                  | 16523            | 6.68           | 62.20                  |
| 200           | 43                | 2900                | 15                           | 4230             | 6.48           | 32.00                  | 7250             | 11.24          | 43.00                  | 10617            | 15.68          | 50.30                  | 16219            | 24.81          | 55.40                  |
|               |                   | 1450                | 7                            | 4230             | 3.24           | 32.00                  | 7250             | 5.62           | 43.00                  | 10617            | 7.84           | 56.00                  | 16353            | 12.51          | 62.20                  |
|               |                   | 960                 | 5                            | 4230             | 2.15           | 32.00                  | 7250             | 3.72           | 43.00                  | 10617            | 5.10           | 56.00                  | 16416            | 8.17           | 62.20                  |
|               |                   | 725                 | 4                            | 4230             | 1.62           | 32.00                  | 7250             | 2.81           | 43.00                  | 10617            | 3.84           | 56.00                  | 16451            | 6.16           | 62.20                  |
| 225           | 44                | 2900                | 13                           | 4230             | 5.86           | 32.00                  | 7250             | 9.76           | 43.00                  | 10120            | 13.44          | 53.30                  | 16334            | 21.31          | 59.00                  |
|               |                   | 1450                | 6                            | 4230             | 2.93           | 32.00                  | 7250             | 4.88           | 43.00                  | 10120            | 6.72           | 56.00                  | 16459            | 10.74          | 62.20                  |
|               |                   | 960                 | 4                            | 4230             | 1.94           | 32.00                  | 7250             | 3.23           | 43.00                  | 10120            | 4.37           | 56.00                  | 16517            | 7.01           | 62.20                  |
|               |                   | 725                 | 3                            | 4230             | 1.47           | 32.00                  | 7250             | 2.44           | 43.00                  | 10120            | 3.29           | 56.00                  | 16549            | 5.28           | 62.20                  |
| 250           | 45                | 2900                | 12                           | 4310             | 5.62           | 32.00                  | 6400             | 8.00           | 43.00                  | 10617            | 12.38          | 55.50                  | 16289            | 19.65          | 61.30                  |
|               |                   | 1450                | 6                            | 4310             | 2.81           | 32.00                  | 6400             | 4.00           | 43.00                  | 10617            | 6.19           | 56.00                  | 16389            | 9.90           | 62.20                  |
|               |                   | 960                 | 4                            | 4310             | 1.86           | 32.00                  | 6400             | 2.65           | 43.00                  | 10617            | 4.03           | 56.00                  | 16445            | 6.46           | 62.20                  |
|               |                   | 725                 | 3                            | 4310             | 1.41           | 32.00                  | 6400             | 2.00           | 43.00                  | 10617            | 3.03           | 56.00                  | 16447            | 4.87           | 62.20                  |
| 280           | 46                | 2900                | 10                           | 4310             | 5.00           | 32.00                  | 6400             | 7.46           | 43.00                  | 10120            | 10.93          | 56.00                  | 16379            | 17.19          | 62.20                  |
|               |                   | 1450                | 5                            | 4310             | 2.50           | 32.00                  | 6400             | 3.73           | 43.00                  | 10120            | 5.47           | 56.00                  | 16489            | 8.65           | 62.20                  |
|               |                   | 960                 | 3                            | 4310             | 1.66           | 32.00                  | 6400             | 2.47           | 43.00                  | 10120            | 3.55           | 56.00                  | 16542            | 5.65           | 62.20                  |
|               |                   | 725                 | 3                            | 4310             | 1.25           | 32.00                  | 6400             | 1.87           | 43.00                  | 10120            | 2.68           | 56.00                  | 16560            | 4.25           | 62.20                  |
| 315           | 47                | 2900                | 9                            | 4230             | 4.28           | 32.00                  | 7250             | 7.22           | 43.00                  | 10617            | 10.07          | 56.00                  | 16311            | 15.85          | 62.20                  |
|               |                   | 1450                | 5                            | 4230             | 2.14           | 32.00                  | 7250             | 3.61           | 43.00                  | 10617            | 5.03           | 56.00                  | 16419            | 7.98           | 62.20                  |
|               |                   | 960                 | 3                            | 4230             | 1.42           | 32.00                  | 7250             | 2.39           | 43.00                  | 10617            | 3.27           | 56.00                  | 16470            | 5.20           | 62.20                  |
|               |                   | 725                 | 2                            | 4230             | 1.07           | 32.00                  | 7250             | 1.81           | 43.00                  | 10617            | 2.46           | 56.00                  | 16498            | 3.92           | 62.20                  |
| 360           | 50                | 2900                | 8                            | 4230             | 3.80           | 32.00                  | 7250             | 6.74           | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 1450                | 4                            | 4230             | 1.90           | 32.00                  | 7250             | 3.37           | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 960                 | 3                            | 4230             | 1.26           | 32.00                  | 7250             | 2.23           | 43.00                  | -                | -              | -                      | -                | -              |                        |
|               |                   | 725                 | 2                            | 4230             | 0.95           | 32.00                  | 7250             | 1.69           | 43.00                  | -                | -              | -                      | -                | -              |                        |

Series F Gearboxes : Reducer dimensions



| Unit Size | Reduction | a9  | a10 | C4 | f4  | h1  | K1  | Ø7  | P3  | S4 | V1  | Weight |
|-----------|-----------|-----|-----|----|-----|-----|-----|-----|-----|----|-----|--------|
| 780       | Double    | 140 | 25  | 15 | 5   | 96  | 231 | 150 | 224 | 15 | 59  | 13     |
|           | Triple    |     |     |    |     |     | 246 |     |     |    |     | 14     |
| 781       | Double    | 158 | 32  | 16 | 5   | 121 | 252 | 171 | 273 | 15 | 76  | 20     |
|           | Triple    |     |     |    |     |     | 265 |     |     |    |     | 21     |
| 782       | Double    | 170 | 32  | 16 | 5   | 121 | 252 | 171 | 273 | 15 | 76  | 21     |
|           | Triple    |     |     |    |     |     | 265 |     |     |    |     | 22     |
| 783       | Double    | 198 | 41  | 16 | 5   | 144 | 288 | 206 | 318 | 15 | 80  | 31     |
|           | Triple    |     |     |    |     |     | 296 |     |     |    |     | 32     |
| 784       | Double    | 218 | 41  | 16 | 6   | 165 | 299 | 231 | 365 | 15 | 101 | 45     |
|           | Triple    |     |     |    |     |     | 307 |     |     |    |     | 46     |
| 785       | Double    | 278 | 50  | 20 | 7   | 200 | 337 | 282 | 442 | 24 | 127 | 70     |
|           | Triple    |     |     |    |     |     | 349 |     |     |    |     | 77     |
| 786       | Double    | 346 | 62  | 26 | 3   | 243 | 418 | 346 | 536 | 24 | 156 | 115    |
|           | Triple    |     |     |    |     |     | 403 |     |     |    |     | 121    |
| 787       | Double    | 395 | 70  | 30 | 5   | 274 | 491 | 400 | 612 | 27 | 175 | 171    |
|           | Triple    |     |     |    |     |     | 493 |     |     |    |     | 180    |
| 788       | Double    | 485 | 88  | 36 | 5.5 | 332 | 576 | 470 | 748 | 27 | 216 | 261    |
|           | Triple    |     |     |    |     |     | 578 |     |     |    |     | 270    |

| Unit Size |        | Input Shaft |     |      |    |    |    |                    |
|-----------|--------|-------------|-----|------|----|----|----|--------------------|
|           |        | ØD1         | L1  | t1   | u1 | v1 | w1 | d1                 |
| 780       | Double | 16 k6       | 40  | 18.0 | 5  | 4  | 32 | M5x0.8 x 12 deep   |
|           | Triple | 16 k6       | 40  | 18.0 | 5  | 4  | 32 | M5x0.8 x 12 deep   |
| 781       | Double | 16 k6       | 40  | 18.0 | 5  | 4  | 32 | M5x0.8 x 12 deep   |
|           | Triple | 16 k6       | 40  | 18.0 | 5  | 4  | 32 | M5x0.8 x 12 deep   |
| 782       | Double | 16 k6       | 40  | 18.0 | 5  | 4  | 32 | M5x0.8 x 12 deep   |
|           | Triple | 16 k6       | 40  | 18.0 | 5  | 4  | 32 | M5x0.8 x 12 deep   |
| 783       | Double | 19 k6       | 40  | 21.5 | 6  | 4  | 32 | M6x1.0 x 16 deep   |
|           | Triple | 16 k6       | 40  | 18.0 | 5  | 4  | 32 | M5x0.8 x 12 deep   |
| 784       | Double | 19 k6       | 40  | 21.5 | 6  | 4  | 32 | M6x1.0 x 16 deep   |
|           | Triple | 16 k6       | 40  | 18.0 | 5  | 4  | 32 | M5x0.8 x 12 deep   |
| 785       | Double | 24 k6       | 50  | 27.0 | 8  | 5  | 40 | M8x1.25 x 18 deep  |
|           | Triple | 19 k6       | 40  | 21.5 | 6  | 4  | 32 | M6x1.0 x 16 deep   |
| 786       | Double | 28 k6       | 60  | 31.0 | 8  | 5  | 50 | M10x1.5 x 22 deep  |
|           | Triple | 24 k6       | 50  | 27.0 | 8  | 5  | 40 | M8x1.25 x 18 deep  |
| 787       | Double | 38 k6       | 80  | 41.0 | 10 | 5  | 70 | M12x1.75 x 28 deep |
|           | Triple | 28 k6       | 60  | 31.0 | 8  | 5  | 50 | M10x1.5 x 22 deep  |
| 788       | Double | 42 k6       | 110 | 45.0 | 12 | 10 | 70 | M16x2.0 x 36 deep  |
|           | Triple | 38 k6       | 80  | 41.0 | 10 | 5  | 70 | M12x1.75 x 28 deep |

| Unit Size | Hollow Output Bore |      |    |       |     |     |
|-----------|--------------------|------|----|-------|-----|-----|
|           | ØD2                | t2   | u2 | m1    | m2  | m3  |
| 780       | 25                 | 29.0 | 8  | 117.5 | 105 | 89  |
| 781       | 30                 | 33.5 | 8  | 156.5 | 122 | 105 |
| 782       | 35                 | 38.5 | 10 | 156.5 | 132 | 122 |
| 783       | 40                 | 43.5 | 12 | 179   | 174 | 142 |
| 784       | 40                 | 43.5 | 12 | 205   | 174 | 156 |
| 785       | 50                 | 54.0 | 14 | 233.5 | 198 | 183 |
| 786       | 60                 | 64.6 | 18 | 270   | 230 | 210 |
| 787       | 70                 | 75.0 | 20 | 330   | 270 | -   |
| 788       | 80                 | 85.5 | 22 | 370   | 313 | -   |

## Series F Gearboxes : Exact ratios

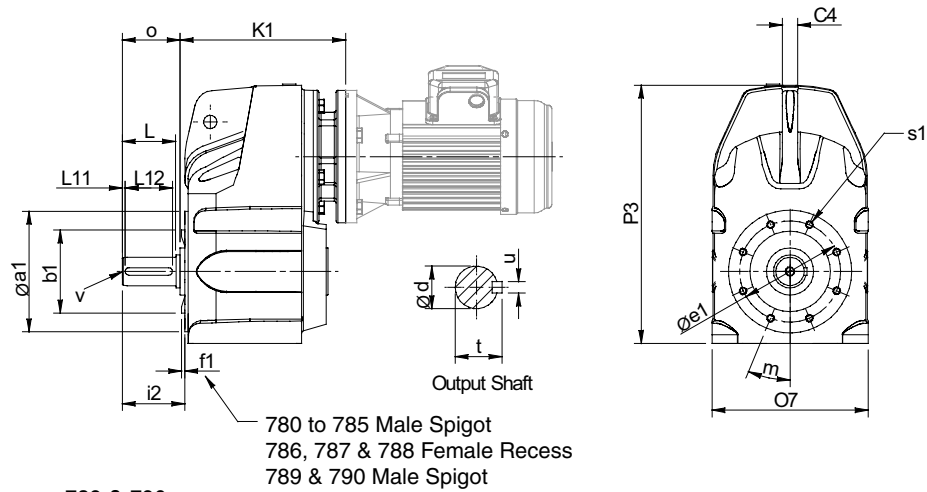
## DOUBLE REDUCTION

| Ratio Code | 780   | 781   | 782   | 783   | 784    | 785   | 786    | 787   | 788   | 789   | 790   |
|------------|-------|-------|-------|-------|--------|-------|--------|-------|-------|-------|-------|
| 01         | -     | -     | -     | -     | -      | -     | -      | -     | -     | 4.530 | 4.630 |
| 02         | -     | -     | -     | 4.841 | -      | -     | -      | 5.085 | 5.107 | 5.160 | 5.000 |
| 03         | -     | -     | -     | -     | -      | -     | -      | -     | -     | 5.530 | 5.730 |
| 04         | 5.903 | -     | -     | 6.806 | -      | -     | -      | 6.567 | 6.433 | 6.300 | 6.190 |
| 05         | 7.974 | 6.262 | 6.262 | 7.628 | 6.224  | 6.772 | 6.959  | 7.000 | 7.133 | 7.200 | 7.310 |
| 06         | -     | -     | -     | -     | -      | -     | -      | 7.846 | 7.758 | 8.200 | 7.900 |
| 07         | 9.069 | 8.784 | 8.784 | 8.563 | 8.750  | 9.380 | 9.865  | 8.807 | 8.810 | 8.750 | 9.190 |
| 08         | 10.27 | 9.680 | 9.680 | 10.87 | 9.807  | 10.54 | 10.96  | 10.13 | 9.772 | 9.970 | 9.920 |
| 09         | -     | -     | -     | -     | -      | -     | -      | 11.35 | 11.48 | 11.33 | 11.55 |
| 10         | 13.14 | 10.99 | 10.99 | 12.33 | 11.009 | 11.59 | 12.19  | 12.68 | 12.39 | 12.90 | 12.48 |
| 11         | 14.16 | 13.96 | 13.96 | 14.70 | 13.98  | 15.13 | 15.76  | 14.66 | 14.46 | 13.66 | 13.88 |
| 12         | 17.88 | 15.86 | 15.86 | 16.93 | 15.85  | 17.21 | 17.70  | 16.37 | 15.61 | 15.56 | 14.99 |
| 13         | -     | -     | -     | -     | -      | -     | -      | 17.58 | 18.07 | 17.96 | 17.77 |
| 14         | 20.27 | 19.46 | 19.46 | 19.69 | 18.90  | 20.89 | 21.70  | 20.04 | 20.46 | 20.46 | 19.19 |
| 15         | 23.16 | 21.59 | 21.59 | 22.03 | 21.76  | 22.98 | 24.45  | 22.70 | 22.76 | 22.42 | 22.84 |
| 16         | 25.77 | 24.52 | 24.52 | 23.48 | 25.31  | 26.41 | 28.46  | 25.88 | 25.77 | 25.54 | 24.67 |
| 17         | 28.41 | 27.86 | 27.86 | 27.83 | 28.32  | 29.95 | 31.57  | 28.41 | 28.04 | 28.40 | 28.92 |
| 18         | 31.26 | 30.68 | 30.68 | 29.71 | 30.18  | 33.03 | 34.55  | 31.56 | 31.16 | 32.34 | 31.23 |
| 19         | 36.63 | 35.30 | 35.30 | 36.87 | 35.77  | 37.83 | 39.09  | 36.69 | 35.32 | 34.96 | 35.61 |
| 20         | 43.94 | 38.37 | 38.37 | 43.47 | 38.19  | 42.77 | 44.13  | 40.76 | 39.25 | 39.83 | 38.46 |
| 21         | -     | -     | -     | -     | -      | -     | -      | 44.58 | 44.43 | 45.04 | 43.75 |
| 22         | 51.22 | 46.07 | 46.07 | 47.60 | 47.40  | 49.59 | 53.49  | 49.22 | 51.19 | 51.30 | 47.26 |
| 23         | 56.91 | 55.28 | 55.28 | 58.34 | 55.89  | 59.14 | 62.38  | 57.58 | 55.97 | 51.85 | 53.75 |
| 24         | 68.54 | 62.29 | 62.29 | 65.02 | 61.20  | 64.77 | 68.52  | 63.56 | 64.49 | 59.06 | 58.06 |
| 25         | 78.56 | 72.41 | 72.41 | 72.92 | 75.00  | 77.72 | 83.97  | 67.71 | 69.24 | -     | -     |
| 26         | -     | -     | -     | -     | -      | -     | -      | 76.14 | 74.39 | -     | -     |
| 27         | 89.28 | 82.18 | 82.18 | -     | 83.59  | 89.42 | 91.70  | 87.44 | 87.21 | -     | -     |
| 28         | -     | 93.43 | 93.43 | -     | 93.75  | 99.36 | 105.60 | 98.32 | 93.70 | -     | -     |

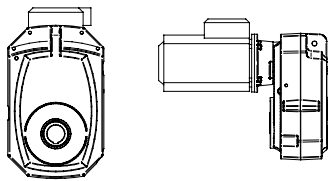
## TRIPLE REDUCTION

| Ratio Code | 780    | 781    | 782    | 783    | 784    | 785    | 786    | 787    | 788    | 789    | 790    |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 30         | -      | -      | -      | -      | -      | -      | -      | -      | -      | 45.60  | 44.96  |
| 31         | -      | -      | -      | -      | -      | -      | -      | -      | -      | 51.94  | 48.56  |
| 32         | -      | -      | -      | -      | -      | -      | -      | -      | -      | 55.67  | 58.27  |
| 33         | -      | -      | -      | -      | -      | -      | -      | -      | -      | 63.42  | 62.94  |
| 34         | -      | -      | -      | -      | -      | -      | -      | -      | -      | 72.26  | 72.17  |
| 35         | -      | -      | -      | 78.80  | -      | -      | -      | -      | -      | 82.30  | 77.95  |
| 36         | 92.02  | -      | -      | 86.80  | -      | -      | -      | -      | -      | 90.56  | 93.43  |
| 37         | 101.50 | 99.52  | 99.52  | 99.86  | 101.40 | 108.60 | 114.20 | 102.50 | 102.80 | 103.15 | 100.91 |
| 38         | 111.60 | 109.70 | 109.70 | 108.60 | 111.60 | 115.70 | 124.90 | 113.90 | 114.20 | 110.94 | 115.39 |
| 39         | 130.80 | 120.70 | 120.70 | 130.30 | 128.40 | 137.10 | 141.30 | 132.30 | 129.50 | 126.37 | 124.63 |
| 40         | -      | -      | -      | -      | -      | -      | -      | 147.00 | 143.90 | 140.77 | 139.88 |
| 41         | 156.90 | 141.50 | 141.50 | 156.40 | 139.60 | 146.40 | 159.50 | 160.80 | 162.90 | 160.35 | 151.08 |
| 42         | 182.90 | 169.70 | 169.70 | 176.20 | 167.60 | 181.70 | 193.40 | 177.50 | 187.70 | 178.07 | 181.27 |
| 43         | 203.30 | 197.80 | 197.80 | 204.90 | 201.10 | 214.20 | 225.50 | 207.70 | 205.20 | 202.84 | 195.79 |
| 44         | 244.80 | 219.80 | 219.80 | 232.50 | 226.60 | 234.60 | 247.70 | 229.30 | 236.40 | 225.49 | 229.54 |
| 45         | -      | -      | -      | -      | -      | -      | -      | 244.20 | 253.90 | 256.85 | 247.92 |
| 46         | 280.60 | 264.70 | 264.70 | 264.30 | 263.40 | 287.50 | 303.60 | 274.60 | 272.70 | 277.27 | 285.33 |
| 47         | 318.80 | 303.40 | 303.40 | -      | 298.90 | 320.40 | 331.50 | 315.40 | 319.80 | 315.83 | 308.18 |
| 48         | -      | 344.80 | 344.80 | -      | 339.80 | 359.40 | 381.80 | 354.70 | 343.60 | -      | -      |

Series F Gearboxes : B14 Flange dimensions



**789 & 790**



Please Note: The appearance of the 789 & 790 units is different to the other units. See pictures above.

| Unit Size | a1  | b1     | C4 | e1  | f1 Male | a9  | m    | o   | O7  | P3  | s1        | Output Shaft |       |     |    |     |      |    |        |
|-----------|-----|--------|----|-----|---------|-----|------|-----|-----|-----|-----------|--------------|-------|-----|----|-----|------|----|--------|
|           |     |        |    |     |         |     |      |     |     |     |           | D2           | i2    | L2  | v2 | w2  | t2   | u2 | d2     |
| 780       | 117 | 85 j6  | 15 | 107 | 3       | 140 | 67.5 | -   | 150 | 224 | 4xM8x12   | -            | -     | -   | -  | -   | -    | -  | -      |
| 781       | 122 | 85 j6  | 16 | 107 | 3       | 158 | 22.5 | 50  | 171 | 273 | 4xM8x12   | 25           | 55    | 47  | 3  | 40  | 28   | 8  | M10x22 |
| 782       | 122 | 85 j6  | 16 | 107 | 3       | 170 | 22.5 | 60  | 171 | 273 | 4xM8x12   | 30           | 65    | 56  | 3  | 50  | 33   | 8  | M12x28 |
| 783       | 145 | 105 j6 | 16 | 125 | 3       | 198 | 30   | 70  | 206 | 318 | 6xM10x17  | 35           | 75    | 66  | 3  | 60  | 38   | 10 | M16x36 |
| 784       | 181 | 130 j6 | 16 | 150 | 4       | 218 | 0    | 81  | 231 | 365 | 8xM10x20  | 40           | 87    | 76  | 3  | 70  | 43   | 12 | M16x36 |
| 785       | 181 | 130 j6 | 20 | 150 | 4       | 278 | 0    | 101 | 282 | 442 | 8xM10x20  | 50           | 108   | 95  | 3  | 80  | 53.5 | 14 | M16x36 |
| 786       | 227 | 150 H7 | 26 | 195 | 5*      | 346 | 22.5 | 120 | 346 | 536 | 8xM10x20  | 60           | 123   | 114 | 3  | 100 | 64   | 18 | M20x42 |
| 787       | 280 | 180 H7 | 30 | 230 | 6*      | 395 | 0    | 141 | 400 | 612 | 6xM16x27  | 70           | 146   | 135 | 3  | 110 | 74.5 | 20 | M20x42 |
| 788       | 310 | 210 H7 | 36 | 280 | 7*      | 485 | 0    | 172 | 470 | 748 | 10xM20x35 | 90           | 177.5 | 172 | 5  | 140 | 95   | 25 | M20x42 |
| 789       | 320 | 230 j7 | 40 | 265 | 5       | 485 | 0    | 208 | 498 | 784 | 8xM20x35  | 90           | 498   | 141 | 14 | 141 | 95   | 25 | M24x50 |
| 790       | 350 | 250 j7 | 50 | 300 | 5       | 550 | 22.5 | 253 | 550 | 877 | 8xM20x35  | 110          | 550   | 160 | 25 | 160 | 116  | 28 | M24x50 |

\*Female spigot

**G DIMENSION/WEIGHT**

| Motor Frame Size | 780    |    |        |    | 781 & 782 |    |        |    | 783    |    |        |    | 784    |    |        |    | 785    |    |        |    |
|------------------|--------|----|--------|----|-----------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|
|                  | Double |    | Triple |    | Double    |    | Triple |    | Double |    | Triple |    | Double |    | Triple |    | Double |    | Triple |    |
|                  | G      | kg | G      | kg | G         | kg | G      | kg | G      | kg | G      | kg | G      | kg | G      | kg | G      | kg | G      | kg |
| 63               | 154    | 12 | 169    | 13 | 175       | 19 | 188    | 20 | 189    | 27 | 219    | 28 | 200    | 42 | 230    | 43 | -      | -  | 250    | 67 |
| 71               | 158    | 11 | 173    | 12 | 179       | 19 | 192    | 20 | 195    | 27 | 223    | 28 | 206    | 42 | 234    | 43 | -      | -  | 256    | 67 |
| 80               | 171    | 12 | 186    | 13 | 192       | 19 | 205    | 20 | 213    | 27 | 236    | 28 | 224    | 42 | 247    | 43 | 259    | 63 | 274    | 68 |
| 90               | 181    | 12 | 196    | 13 | 202       | 20 | 215    | 21 | 223    | 28 | 246    | 29 | 234    | 42 | 257    | 43 | 269    | 64 | 284    | 69 |
| 100              | 189    | 15 | 204    | 16 | 210       | 23 | 223    | 24 | 250    | 31 | 254    | 32 | 261    | 45 | 265    | 46 | 281    | 65 | 311    | 70 |
| 112              | 189    | 15 | 204    | 16 | 210       | 23 | 223    | 24 | 250    | 31 | 254    | 32 | 261    | 45 | 265    | 46 | 281    | 65 | 311    | 70 |
| 132              | -      | -  | -      | -  | -         | -  | -      | -  | 250    | 32 | -      | -  | 261    | 46 | -      | -  | 303    | 65 | 311    | 70 |
| 160              | -      | -  | -      | -  | -         | -  | -      | -  | -      | -  | -      | -  | -      | -  | -      | -  | 311    | 65 | -      | -  |

| Motor Frame Size | 786    |     |        |     | 787    |     |        |     | 788    |     |        |     | 789    |     |        |     | 790    |     |        |     |
|------------------|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|
|                  | Double |     | Triple |     | Double |     | Triple |     | Double |     | Triple |     | Double |     | Triple |     | Double |     | Triple |     |
|                  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  | G      | kg  |
| 63               | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   |
| 71               | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   |
| 80               | 340    | 114 | 325    | 116 | 354    | 174 | 380    | 184 | -      | -   | 441    | 273 | -      | -   | -      | -   | -      | -   | -      | -   |
| 90               | 340    | 114 | 335    | 116 | 354    | 174 | 380    | 184 | -      | -   | 441    | 273 | -      | -   | -      | -   | -      | -   | -      | -   |
| 100              | 346    | 116 | 347    | 118 | 360    | 174 | 386    | 184 | 390    | 254 | 447    | 273 | -      | -   | 446    | 320 | -      | -   | -      | -   |
| 112              | 346    | 116 | 347    | 118 | 360    | 174 | 386    | 184 | 390    | 254 | 447    | 273 | -      | -   | 446    | 320 | -      | -   | -      | -   |
| 132              | 346    | 119 | 369    | 121 | 360    | 174 | -      | -   | 390    | 254 | 447    | 273 | -      | -   | 446    | 320 | -      | -   | 524    | 506 |
| 160              | 376    | 119 | -      | -   | 395    | 181 | -      | -   | 425    | 263 | 482    | 280 | -      | 345 | 476    | 332 | -      | 500 | 496    | 495 |
| 180              | -      | -   | -      | -   | 395    | 181 | -      | -   | 425    | 263 | 482    | 280 | 491    | 345 | 476    | 332 | 516    | 500 | 496    | 495 |
| 200              | -      | -   | -      | -   | 395    | 195 | -      | -   | 425    | 263 | 482    | 281 | 491    | 345 | -      | -   | 516    | 500 | 524    | 506 |
| 225              | -      | -   | -      | -   | 422    | 195 | -      | -   | 452    | 277 | 509    | 295 | 521    | 359 | -      | -   | 546    | 514 | 526    | 509 |
| 250              | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | 521    | 375 | -      | -   | 546    | 530 | -      | -   |
| 280              | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | -      | -   | 546    | 530 | -      | -   |

## Series F Gearboxes : Overhung Load Capacities

### 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 overhung 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 a 100% momentary overload on stated capacities.

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

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

$$\text{Overhung load (N)} = \frac{M_2 \times 1000 \times K}{r}$$

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

$$\text{Overhung load (N)} = \frac{P_2 \times 9550 \times 1000 \times K}{n_2 \times r}$$

Where:

- $M_2$  = Absorbed torque at shaft in Nm.
- $P_2$  = Absorbed power (kW).
- $r$  = Pitch radius of sprocket, gear or 'V' pulley in mm.
- $n_2$  = Rev/min of shaft.
- $K$  = Application factor -  
1.00 for a sprocket  
1.25 for a gear or timing pulley  
1.50 for a 'V' pulley

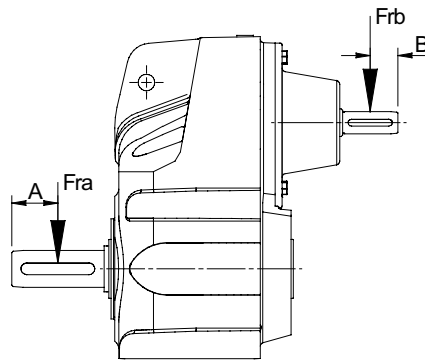
Overhung loads may be reduced by one of the following methods:

Increase the diameter of the sprocket, gear or pulley within reasonable limits.

Mount the sprocket, gear or pulley on a separate shaft, supported on it's own bearings and couple to gearbox output shaft by means of a Fenner shaft coupling.

#### Axial Thrust Capacities (N)

No check or calculation is required for axial loads ( $F_a$ ) towards or away from the unit up to 50% 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 | No. of Reductions | Dimension A (mm) | Dimension B (mm) |
|-----------|-------------------|------------------|------------------|
| 780       | 2-3               | -                | 20               |
| 781       | 2-3               | 23.5             | 20               |
| 782       | 2-4               | 28               | 20               |
| 783       | 2-3               | 33               | 20               |
| 784       | 4                 | 32               | 20               |
| 785       | 2-4               | 38               | 20               |
| 786       | 2                 | 47.5             | 25               |
| 787       | 3-4               | 47.5             | 20               |
| 788       | 2                 | 55               | 30               |
| 789       | 3                 | 55               | 25               |
| 790       | 4                 | 55               | 20               |
| 791       | 2                 | 68               | 40               |
| 792       | 3                 | 65               | 30               |
| 793       | 4                 | 65               | 20               |
| 794       | 2                 | 85               | 35               |
| 795       | 3                 | 85               | 40               |
| 796       | 4                 | 85               | 25               |
| 797       | 2-3               | 70               | -                |
| 798       | 2-3               | 80               | -                |

### ALLOWABLE INPUT SHAFT OVERHUNG LOADS Frb (KN) @1450 Rev/Min.

| Unit Size | No. of Reductions | Dimension A (mm) | Dimension B (mm) |
|-----------|-------------------|------------------|------------------|
| 780       | 1.5               | 1.5              | 1.5              |
| 781       | 1.5               | 1.5              | 1.5              |
| 782       | 1.5               | 1.5              | 1.5              |
| 783       | 1.25              | 1.5              | 1.5              |
| 784       | 1.05              | 1.5              | 1.5              |
| 785       | 2.1               | 1.25             | 1.5              |
| 786       | 3.1               | 2.1              | 1.5              |
| 787       | 3.5               | 3.1              | 1.5              |
| 788       | 4.5               | 3.5              | 1.8              |
| 789       | N/A               | N/A              | N/A              |
| 790       | N/A               | N/A              | N/A              |

For larger units please consult your local authorised distributor.

# Series F Gearboxes : Installation and Maintenance

## 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 and secure unit onto the shaft using chosen method. Fit side fitting key. **DO NOT USE TAPER OR TOP FITTING KEY.**

## FLANGE MOUNTING

The Fenner Series F Mk II is designed primarily as a shaft mounted gearbox. However, it can be supplied with a single or double output shaft and a mounting flange if required.

## LUBRICATION

Sizes 780 to 784 are pre-filled for mounting position B3 with a quantity of EP mineral oil (Shell Omala 320). However, if the unit is supplied without lubricant then the oil quantity is obtained from the table at the bottom of page 278.

Other mounting positions must be specified on order. Sizes 785 to 790 are supplied without oil. Before running they should be filled with an appropriate amount of the correct lubricant shown in the table, dependent on the mounting position, see chart. **WARNING:** Do not over fill as excess lubricant may cause overheating and leakage.

For Lubrication quantity, recommended grades and viscosity tables see table opposite.

## OIL CHANGES

Sizes 780 to 783 are lubricated for life except when the units are required to work in an explosive atmosphere (94/9/EC Atex 100a Group II category 2 zones 1 & 21 & category 3 zones 2 & 22) See separate leaflet for recommendations. All other sizes will require an oil change depending on the unit operating temperature. Initial fill of oil should be changed in a new gear unit after 1000 hours operation or one year or half the life in the table below whichever is the soonest.

## BREATHERS/MOUNTING POSITIONS

All sizes of Series F are supplied for operation without a breather. On sizes 785 and above the unit should be filled to the recommended level for operating position being used and the blanking plug replaced in the filling position indicated below.

## MOTOR CONNECTIONS TO MAINS

Connection of the electric motor to the mains supply should be made by a qualified person.

The current rating of the motor will be identified on the motor plate and correct sizing of the cables to electrical regulations is essential.

## STARTING UP

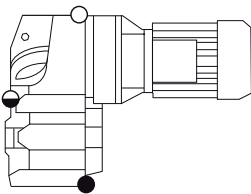
Prior to starting up the following procedure should be followed

- 1: Check Oil level (784 and above) top up if necessary
- 2: Ensure all safety devices are in place (i.e. guards fitted)
- 3: Remove any safety devices fitted to prevent machine rotation

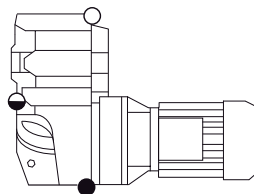
Starting up should be performed or supervised by suitably qualified personnel.

## MOUNTING POSITIONS

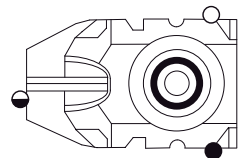
Mounting B3



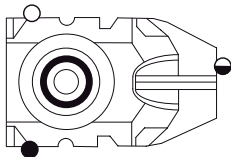
Mounting B8



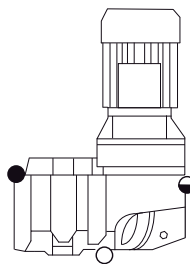
Mounting B7



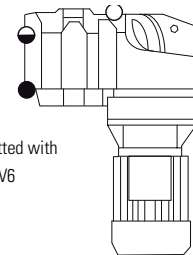
Mounting B6



Mounting V5



Mounting V6



Motor must be fitted with seal for position V6

- Ventilator/Filling Position
- ◐ Level Position
- Drain Position

## Series F Gearboxes : Installation and Maintenance

### LUBRICATION VISCOSITY

| ISO Viscosity   | Ambient Temperature °C |               |             |              |
|-----------------|------------------------|---------------|-------------|--------------|
|                 | -5°C to 20°C           | -30°C to 20°C | 0°C to 35°C | 20°C to 50°C |
| EP Mineral Oil  | 220                    | -             | 320         | 460          |
| Synthetic Oil 1 | -                      | 220           | 220         | 320          |
| Synthetic Oil 2 | -                      | 220           | 320         | 460          |

Synthetic Oil 1 = Polyalphaolefin based.

Synthetic Oil 2 = Polyglycol based

### RECOMMENDED OIL GRADES

| Supplier | Mineral Oils Containing EP Additives | Synthetic Lubricants Polyglycol Based | Synthetic Lubricants Polyalphaolefin based |
|----------|--------------------------------------|---------------------------------------|--|
| BP       | Energol GR-XP or XF                  | Enersyn SG-XP                         | Enersyn EPX                                |
| Castrol  | Alpha Max or SP                      | Alphasyn PG                           | Alphasyn EP or T                           |
| Esso     | Spartan EP                           | Glycolube                             | Spartan Synthetic EP                       |
| Fuchs    | Renogear V or WE                     | Renolin PG                            | Renogear SG                                |
| Mobil    | Mobilgear 600                        | Glygoyle                              | Mobilgear SHC                              |
| OKS      | -                                    | -                                     | OKS 3725                                   |
| Shell    | Omala or Omala F                     | Tivela or Tivela S                    | Omala HD                                   |
| Texaco   | Meropa or Meropa WM                  | Synlube CLP                           | Pinnacle EP                                |
| Total    | Carter EP                            | Carter SY                             | Carter EP/HT                               |
| Rocol    | Sapphire Hi-Torque                   | -                                     | -  |

### OIL RENEWAL PERIODS

| Unit Op Temp °C | Renewal Period (Hours) |                 |
|-----------------|------------------------|-----------------|
|                 | Mineral Oil            | Synthetic Oil   |
| 75 or less      | 17000 or 3 yrs         | 26000 or 3 yrs  |
| 80              | 12000 or 3 yrs         | 26000 or 3 yrs  |
| 85              | 8500 or 3 yrs          | 21000 or 3 yrs  |
| 90              | 6000 or 2 yrs          | 15000 or 3 yrs  |
| 95              | 4200 or 17 mths        | 10500 or 3 yrs  |
| 100             | 3000 or 12 mths        | 7500 or 2.5 yrs |
| 105             | 2100 or 8 mths         | 6200 or 2 yrs   |
| 110             | 1500 or 6 mths         | 2100 or 18 mths |

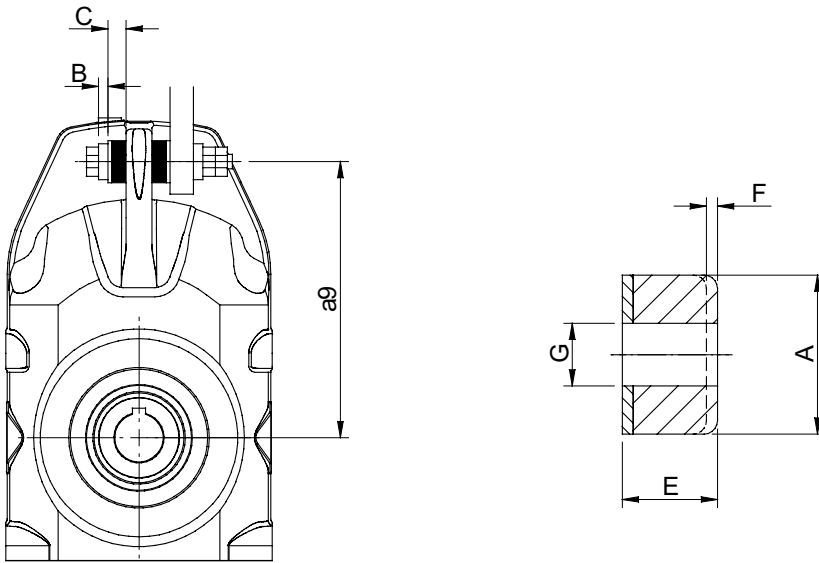
### LUBRICANT QUANTITY (LITRES)

| ISO Viscosity | 780    |        | 781    |        | 782    |        | 783    |        | 784    |        | 785    |        | 786    |        | 787    |        | 788    |        | 789    |        | 790    |        |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|               | Double | Triple | Double | Triple | Double | Triple | Double | Triple | Double | Triple | Double | Triple | Double | Triple | Double | Triple | Double | Triple | Double | Triple | Double | Triple |
| B3            | 0.5    | 0.6    | 0.8    | 0.8    | 0.8    | 0.8    | 1.5    | 1.6    | 1.5    | 1.6    | 2.0    | 2.1    | 2.6    | 2.7    | 4.2    | 4.4    | 10.5   | 11.5   | 11     | 14     | 17     | 18     |
| B8            | 0.8    | 0.9    | 1.2    | 1.3    | 1.2    | 1.3    | 1.8    | 1.9    | 1.8    | 1.9    | 2.0    | 2.1    | 2.9    | 3.0    | 6.3    | 6.5    | 12.0   | 12.0   | 22     | 24     | 31     | 33     |
| B7            | 0.6    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.6    | 1.7    | 1.6    | 1.7    | 1.9    | 2.0    | 2.7    | 2.8    | 5.4    | 5.6    | 12.0   | 12.0   | 22     | 24     | 31     | 33     |
| B6            | 0.8    | 0.9    | 1.2    | 1.2    | 1.2    | 1.2    | 1.8    | 1.9    | 1.8    | 1.9    | 1.7    | 1.8    | 3.0    | 3.1    | 7.3    | 7.5    | 12.0   | 12.0   | 19     | 21     | 28     | 30     |
| V5            | 0.7    | 0.7    | 1.1    | 1.1    | 1.1    | 1.1    | 2.0    | 2.1    | 2.0    | 2.1    | 2.2    | 2.3    | 3.2    | 3.3    | 6.8    | 6.8    | 16.8   | 16.8   | 32     | 32     | 47     | 47     |
| V6            | 1.0    | 1.1    | 1.4    | 1.6    | 1.4    | 1.6    | 2.6    | 2.7    | 2.6    | 2.7    | 2.8    | 2.9    | 4.7    | 4.8    | 9.3    | 9.7    | 16.4   | 16.5   | 26     | 28     | 38     | 40     |

Oil quantities are approximate, fill gearbox until oil escapes from level plug hole. Do not over fill as excess lubricant may cause overheating and leakage.



## Series F Gearboxes : Torque Bush Dimensions



| Unit Size | A   | B (Min Thickness) | C     | a9  | E  | F    | G  |
|-----------|-----|-------------------|-------|-----|----|------|----|
| 780       | 40  | 2                 | 18.50 | 140 | 20 | 1.50 | 13 |
| 781       | 40  | 2                 | 18    | 158 | 20 | 2    | 13 |
| 782       | 40  | 2                 | 18    | 170 | 20 | 2    | 13 |
| 783       | 40  | 2                 | 18    | 198 | 20 | 2    | 13 |
| 784       | 40  | 2                 | 18    | 218 | 20 | 2    | 13 |
| 785       | 62  | 10                | 30    | 278 | 33 | 3    | 23 |
| 786       | 62  | 10                | 29    | 346 | 33 | 4    | 23 |
| 787       | 82  | 12                | 40    | 395 | 44 | 4    | 26 |
| 788       | 82  | 12                | 38    | 485 | 44 | 5    | 26 |
| 789       | 82  | 12                | 38    | 485 | 44 | 6    | 26 |
| 790       | 102 | 12                | 48    | 550 | 54 | 6    | 33 |

### ACCESSORY PRODUCT CODES

| Unit Size           | 780      | 781      | 782      | 783      | 784      | 785      | 786      | 787      | 788      |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Torque Bush         | 881A9600 | 881A9600 | 881A9600 | 881A9600 | 881A9600 | 883A9600 | 883A9600 | 884A9600 | 884A9600 |
| Single Output Shaft | -        | 890A9700 | 891A9700 | 892A9700 | 893A9700 | 894A9700 | 883A9700 | 884A9700 | 885A9700 |
| Double Output Shaft | -        | 890A9800 | 891A9800 | 892A9800 | 893A9800 | 894A9800 | 883A9800 | 884A9800 | 897A9800 |
| Output Flange       | 871A9900 | 871A9900 | 871A9900 | 892A9300 | 893A9300 | 894A9300 | 875A9900 | 876A9900 | 877A9900 |

For accessory codes of 789 and 790 units, please consult your local Authorised distributor.

## Series F Gearboxes : Ordering Instructions

All gearboxes and geared motors are identified by an eight digit code for a unit with a standard electric motor, if a special motor type is required a ninth digit is added to the end of the normal code. These codes should be included on all enquiries, correspondence and orders. The code is made up as follows:-

**First THREE digits:** Gearmotor type and size.

Select from the tables on pages 250-261 and 266-272.

**Fourth digit:** Type of assembly required

- A: Foot mounted motorised
- B: Flange mounted motorised
- D: Foot mounted with input shaft
- E: Flange mounted with input shaft
- G: Foot mounted - motor ready
- H: Flange mounted - motor ready

**Fifth/Sixth digit:** Ratio code

1. Assemblies A and B use the complete eight digit code obtained directly from the selection tables.
2. Exact gear ratios can be found on page 274.
3. For selection and specification of D & E reducer units, select from tables on page 266-272 and create code as shown.
4. For selection of motor ready units (types G & H) use motor selection tables and replace motor codes with frame codes.

**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. Motor ready units are supplied to fit standard IEC motors. Insert frame code from the table below.

| Code | Frame | Flange |
|------|-------|--------|
| 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   | B14    |
| 10D  | 100   | B5     |
| 11C  | 112   | B14    |
| 11D  | 112   | B5     |
| 13C  | 132   | B14    |
| 13D  | 132   | B5     |
| 16D  | 160   | B5     |
| 18D  | 180   | B5     |
| 20D  | 200   | B5     |
| 22D  | 225   | B5     |
| 25D  | 250   | 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 table below of the motor variant required.

| Code | Additional Feature                |
|------|-----------------------------------|
| A    | Anti-condensation heaters fitted  |
| B    | Backstop Fitted                   |
| M    | Brake motor                       |
| N    | Brake motor with Hand Release     |
| Q    | Refer to Original Quote - Special |
| S    | Single Phase motor                |
| T    | Fitted with Thermistors           |
| X    | Fitted with Variator              |
| Z    | Fitted with Force Vent unit       |