

# SELECTION GUIDE & RATING CHART

## RATING CHART

| SERIES | SIZE COUPLING | NOMINAL TORQUE (in-lbs.) | MAX. BORE | BUSHINGS PER HUB | HUB OD  | HP @     | HP @     | HP @     |
|--------|---------------|--------------------------|-----------|------------------|---------|----------|----------|----------|
|        |               |                          |           |                  |         | 1200 RPM | 1800 RPM | 3600 RPM |
| 1      | FC-1-200      | 67,769                   | 2.000"    | 6                | 5.250"  | 1,291    | 1,936    | 3,873    |
|        | FC-1-300      | 155,666                  | 3.000"    | 10               | 6.750"  | 2,965    | 4,448    | 8,895    |
|        | FC-1-400      | 230,241                  | 4.000"    | 12               | 8.000"  | 4,386    | 6,578    | 13,157   |
|        | FC-1-500      | 446,003                  | 5.000"    | 16               | 11.000" | 8,495    | 12,743   | 25,486   |
| 2      | FC-2-400      | 547,344                  | 4.000"    | 10               | 10.000" | 10,426   | 15,638   | 31,277   |
|        | FC-2-500      | 737,108                  | 5.000"    | 12               | 11.000" | 14,040   | 21,060   | 42,120   |
|        | FC-2-600      | 953,636                  | 6.000"    | 14               | 12.000" | 18,164   | 27,247   | 54,493   |
|        | FC-2-700      | 1,303,990                | 7.000"    | 16               | 14.000" | 24,838   | 37,257   | 74,514   |
| 3      | FC-3-600      | 1,737,693                | 6.000"    | 12               | 15.000" | 33,099   | 49,648   | 99,297   |
|        | FC-3-700      | 2,189,494                | 7.000"    | 14               | 16.000" | 41,705   | 62,557   | 125,114  |
|        | FC-3-800      | 2,872,987                | 8.000"    | 16               | 18.000" | 54,724   | 82,085   | 164,171  |
|        | FC-3-900      | 3,649,156                | 9.000"    | 18               | 20.000" | 69,508   | 104,262  | 208,523  |
|        | FC-3-1000     | 4,518,003                | 10.000"   | 20               | 22.000" | 86,057   | 129,086  | 258,172  |
| 4      | FC-4-800      | 3,323,104                | 8.000"    | 12               | 20.000" | 63,297   | 94,946   | 189,892  |
|        | FC-4-900      | 4,344,057                | 9.000"    | 14               | 22.000" | 82,744   | 124,116  | 248,232  |
|        | FC-4-1000     | 5,498,469                | 10.000"   | 16               | 24.000" | 104,733  | 157,099  | 314,198  |
|        | FC-4-1100     | 6,786,339                | 11.000"   | 18               | 26.000" | 129,264  | 193,895  | 387,791  |
| 5      | FC-5-1000     | 4,931,770                | 10.000"   | 12               | 22.000" | 93,938   | 140,908  | 281,815  |
|        | FC-5-1100     | 6,675,600                | 11.000"   | 14               | 24.000" | 127,154  | 190,731  | 381,463  |
|        | FC-5-1300     | 7,025,275                | 13.000"   | 14               | 26.000" | 133,815  | 200,722  | 401,444  |
|        | FC-5-1400     | 8,755,481                | 14.000"   | 16               | 28.000" | 166,771  | 250,157  | 500,313  |
|        | FC-5-1600     | 11,076,047               | 16.000"   | 18               | 31.000" | 210,972  | 316,458  | 632,917  |
|        | FC-5-1700     | 13,214,964               | 17.000"   | 20               | 33.000" | 251,714  | 377,570  | 755,141  |

**NOTE:** Due to the high power density of Frontline Couplings, in most cases you can select the right coupling, based solely on max. shaft diameter of your application. Always consult Frontline if you are unsure about your choice.

## SELECTION GUIDE

1. Determine the nominal torque (Tn) in "in-lb" as follows:

$$\text{NOMINAL TORQUE} = \frac{(\text{HP} \times 63025)}{\text{RPM}}$$

2. Refer to "Service Factors" chart on the previous page and select the appropriate service factor for your application.
3. Calculate the "Design Torque" as follows:

$$\text{DESIGN TORQUE} = \text{NOMINAL TORQUE} \times \text{SERVICE FACTOR}$$

4. Using the "Coupling Rating Chart," compare the calculated Design Torque with the Nominal Torque column, locate the nearest higher rating and find the corresponding coupling size to the left.
5. Compare the driver/driven shaft size to the maximum bore available for the coupling selected. If it is smaller than the driver/driven shaft sizes, then go further down the "max.bore" column to select the coupling that can accommodate these shaft sizes.

Although the performance and useful life of Frontline Couplings are greatly enhanced by their unique features and advantages, there is no substitute for:

1. Accurately sizing the Coupling for the specific application.
2. Proper installation and setting.
3. Precision shaft alignment.
4. Taking into consideration the proper service factor.
5. Allowing for environmental conditions such as extreme temperature, excessive dust and humidity.
6. Periodic Inspections.