FLEXIBLE DRIVE COUPLINGS

Why You Should Specify Vescor Flexible Couplings.

Vescor uses stronger materials. Because flexible couplings are subjected to constant torque and stress, they eventually wear out. Obviously, the longer the coupling lasts, the more value you get for your money.

The key to flexible coupling longevity is the elastomeric element that is sandwiched between the coupling halves. Most flexible coupling manufacturers use compression-molded, rubber-like materials for their standard inserts. Reuland, however, uses a high-tech injection molded material called P380 for our standard inserts. Torque tests and shock loads prove P380 is stronger and more durable than most of our competitors' standard elastomeric elements.

Vescor flexible couplings cost less. P380 is priced like a standard insert while providing the performance and specifications of a premium selection. This allows us to offer you a superior product that saves you money when you purchase it and that continues to save you money with lowered maintenance and replacement costs.

Vescor's flexible couplings are made from lightweight aluminum. Our flexible couplings are lighter than steel and cast iron couplings, which helps prolong bearing and seal life on pumps, gear boxes and motors. Our lightweight aluminum coupling also cost less to ship to your location.

Vescor flexible couplings are precision machined. By maintaining tight tolerances, we help eliminate vibration and noise. Alignment is easily made with a straight edge and a feeler gage.

Vescor flexible couplings offer double set screws standard. Most manufacturers charge you extra for a double set screw option. Since our couplings are designed to be the finest on the market, we make double set screws standard on all coupling sizes. The extra set screw offers greater hoop stress generation, creating a more secure fit from coupling to shaft.

Rigorous Quality Control

We design and manufacture all flexible couplings ourselves. And we subject each one to exacting quality control inspections. This total control allows us to offer you higher quality at a lower price.

Specials, Metrics and Splines

Vescor stocks one of the industry's largest selections of Vescor flexible couplings. In addition, splines, metric bores and keys and other special options may be available from stock. If not, we can modify any flexible coupling to your exact specifications. please consult the factory for your specials needs.

The One Source for all Your Flexible Couplings and Pump/Motor Adapter Needs

When you connect a pump to a motor, you want a perfect alignment for optimal performance. And that's what you get when you specify Vescor flexible couplings and Vescor pump motor adapters. These two components work together to achieve near perfect concentricity. Together they reduce vibration, heat, noise and wear and tear. In short, they're your best guarantee for increased performance and life expectancy.

Fast Delivery

Vescor flexible couplings are stocked in Vescor's South Elgin facility for fast response and reduced transportation costs. Most orders are shipped within 24 hours of receiving your order.

The Vescor Guarantee

All Vescor products are covered by our quality and service guarantee.

How to Select a Coupling

Just because applications have the same horsepower doesn't mean they require the same size flexible couplings. If you follow these simple steps, you can easily find the flexible coupling in the following Selection Chart that's perfect for your application.

Step 1: Determine the Service Factor.

Motors with the same horsepower are assigned different Service Factors to reflect the different loads and stresses. For example, a 40HP motor running a standard hydraulic application with infrequent stops carries a Service Factor of 1.00 while another 40HP application on an injection molding machine has a Service Factor of 3.00. This means the second motor requires a larger flexible coupling than the first. Ignoring the Service Factor can cause you to buy a coupling too small for your application, leading to premature wear and maintenance.

For applications with intermittent starts and stops and no reversing, a 1.50 to 1.75 Service Factor would be appropriate. Applications with frequent starts and stops or reversing duty normally carry a 2.00 Service Factor. Typically, motors designed for high torque or reversing applications have a 3.00 Service Factor. Service Factors for other typical applications include:

Application	Service Factor
Hydraulics applications with infrequent stops	1.00-1.50
Hydraulic units with cycling loads	1.50-2.50
Conveyors	1.50-2.50
Internal combustion engines	1.75-2.50
Machine tool, textile, cranes and woodworking machinery	2.0
Saw mill machines	3.0
Injection molding machines	3.0

Note: The standard P380 insert is rated for Service Factors up to 1.5. For applications rated above 1.5, we highly recommend using our hytrel insert.

Step 2: Determine Minimum Torque Rating in Lbs.-In.

If the minimum Torque Rating is not known, it can be calculated using the HP and RPM: Minimum torque = (HP x 63000)/RPM.

Step 3: Multiply Full Load Torque by the Selected Service Factor.

Step 4: Determine Shaft Size.

A shaft diameter MUST NOT EXCEED a coupling's maximum bore. For example, RC3 flexible drive coupling has a $1^{5}/_{8}$" maximum bore (shaft diameter). Therefore, $1^{5}/_{8}$" is the largest shaft that can be installed in the coupling.

Step 5: Go to the Coupling Data Table.

Select the coupling size that meets or exceeds your minimum Torque and Service Factor calculation. Then go to the coupling Availability Chart to match Bore & Key. (Make sure the motor shaft does not exceed the coupling's maximum bore.)

Part Numbers

Vescor part numbering system is based on the coupling's size, bore & key or spline. The first three digits represent the coupling size. The next four digits refer to the bore or number of teeth/pitch (in inches or millimeters). The last grouping indicates keyways, clamps, set screws or spline options.

No Bore Example

RC2 - N B

- RC2: Coupling Size
- N: Bore No

Bore & Keyway Example

RC3 - 1375 - 375

- RC3: Coupling Size
- 1375: 1.375 Bore
- 375: 3/8" Keyway

Spline Example

RC5 - 1412 - A - S

- RC5: Coupling Size
- 1412: Number of Teeth
- A: A = Aluminum, S = Steel
- S: C = Clamp Type, S = Set Screw
- Pitch