



FLEXIBLE JAW COUPLINGS

Jaw Type Couplings — USA Standard

The Jaw Type Couplings from Vescor are offered in the industry's largest variety of stock bore/keyway combinations. These couplings require no lubrication and provide highly reliable service for light, medium, and heavy duty electrical motor and internal combustion power transmission applications. Other features and benefits include:

- Fail safe-will still perform if elastomer fails.
- No metal to metal contact
- Resistant to oil, dirt, sand, moisture and grease.
- More than 850,000 combinations of bore sizes.
- Most types available from stock in 24 hours

L Type

This coupling offers standard shaft-to-shaft connection for general industrial duty applications. Standard L type coupling hub materials are either sintered iron (L035-L150) or cast iron (L190-L276).

AL Type

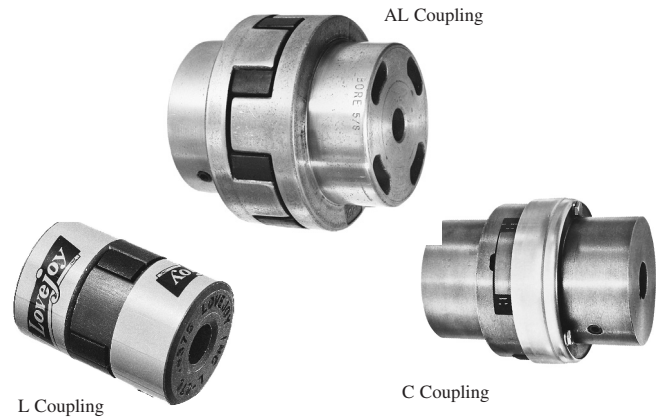
The aluminum construction means this coupling is light weight with low overhung load and low inertia. The AL type also offers excellent resistance to atmospheric conditions, so it is perfect for corrosive environment applications.

C Type

These couplings provide standard shaft-to-shaft connection for medium range applications. The standard coupling hub is made of cast iron.

Applications include power transmission to industrial equipment such as pumps, gear boxes, compressors, blowers, mixers and conveyors. Jaw Type couplings are available in 24 sizes from a minimum torque rating of 3.5 in-lbs. to a maximum torque rating of 170,004 in-lbs. and a bore range of .125 inches to 7 inches. Vescor's standard bore program covers AGMA, SAE and DIN bore/keyway and spline bore combinations.

The Jaw Type coupling is available in a variety of metal hub and insert materials. Hubs are offered in sintered metal, aluminum, bronze, steel, stainless steel and ductile iron.



Elastomers in Compression

Vescor offers four types of elastomer designs to allow for additional flexibility in addressing specific application requirements. One piece designs are used in the "L" and "AL" models (referred to as spiders) and multiple part "load cushions" are used in the "C" model couplings. The load cushions are in sets of 8 to 14 pieces depending on coupling size.

Solid Center Spider

The solid center spider design is the most commonly used in general power transmissions applications when the shafts of the driver and driven can be kept separate by a standard gap.

Open Center Spider

The open center spider design allows the shafts of the driver and driven to be positioned within a short distance. Open center spiders offer shaft positioning flexibility but have lower maximum RPM capability (1750 RPM max for NBR, 3600 RPM max for Urethane/Hytrel).

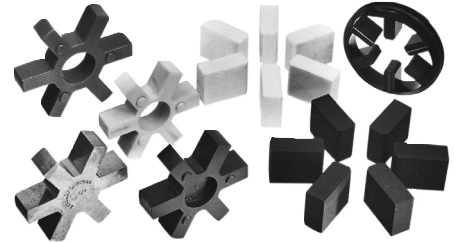
Cushions

The cushion design is available exclusively for the C Type jaw couplings. The load cushions are held in place radially by a steel collar which is attached to one of the hubs. This design allows for easy installation and removal of the load cushions. The cushion design have the same engineering purpose as the spider design but is more effective in the heavy duty applications that Type C couplings address.

Snap Wrap Flexible Spider

The snap wrap flexible spider design allows line spider section of the coupling to be easily installed or removed without disturbing the coupling hub. This design also allows for close shaft separations all the way up to hubs maximum bore, which is not possible with open center spiders. Maximum RPM is 1750 with retaining ring.

Spider Materials



SOX (NBR) Rubber

Nitrile Butadiene (Buna-N) Rubber, a highly flexible insert material that is oil resistant, is our standard elastomer. It resembles natural rubber in resilience and elasticity and operates effectively in temperature ranges of -40° to +212°F (-40° to +100°C). (Also applies to SXB Cushions.)

Urethane

Urethane has 1.5 times greater torque capacity than NBR and offers good resistance to oil and chemicals. However, this material provides less dampening effect and operates at a temperature range of -30° to +160°F (-34° to +71°C)

Hytrel

Hytrel is a flexible elastomer designed for high torque and high temperature operations. Hytrel can operate in temperatures of -60° to +250°F (-51° to +121°C) and has an excellent resistance to oil and chemicals. It is best used in continuous load applications rather than cycle or on/off service.

Bronze

Bronze is a rigid, porous, oil-impregnated metal insert exclusively for low speed (max. 250 rpm) applications requiring high torque capabilities. Bronze performance is not affected by water, oil, dirt, or extreme temperatures—operates in temperatures of -40° to +450°F (-40° to +232°C).



FLEXIBLE JAW COUPLINGS

Jaw Type Coupling Selection Process

The selection process for determining the proper jaw coupling size and elastomer requires using the charts shown on the following pages. There are three components to be selected, two hubs and one elastomer. When the shaft size of the driver and driven of the application are of the same diameter, the hubs selected will be the same. When shaft diameters differ, hubs selected will differ accordingly.

Information necessary before a coupling can be selected:

- HP (or KW) and RPM or Torque of driver
- Shaft sizes of driver and driven equipment and corresponding keyways
- Application description
- Environmental conditions (i.e. extreme temperature, corrosive conditions, space limitations)

List of charts provided for Selection

Chart 1-Application Service Factors

Chart 2-Spider Performance Data

Chart 3-Coupling Nominal Rated Torque

$$\text{Formulas: Nominal Torque} = \text{in-lb} = \frac{(\text{HP} \times 63025)}{\text{RPM}}$$

$$\text{Nm} = \frac{(\text{KW} \times 9550)}{\text{RPM}}$$

Design Torque = Nominal Torque x Application Service Factor

Steps in Selecting a Jaw Coupling

Step 1: Determine the Nominal Torque of your application by using the following formula:

$$\text{Nominal Torque} = \text{in-lb} = \frac{\text{HP} \times 63025}{\text{RPM}}$$

$$\text{Nm} = \frac{(\text{KW} \times 9550)}{\text{RPM}}$$

Step 2: Using the Application Service Factors Chart 1 select the service factor which best corresponds to your application.

Step 3: Calculate the Design Torque of your application by multiplying the Nominal Torque calculated in Step 1 by the application Service Factor determined in Step. 2

Design Torque = Nominal Torque x Application Service Factor

Step 4: Using the Spider Performance Data Chart 2, select the elastomer material which best corresponds to your application.

Step 5: Using the coupling Nominal Rated Torque Chart 3, locate the appropriate elastomer material column for the elastomer selected in Step 4. Scan down this column to the first entry where the Torque Value in the appropriate column is greater than or equal to the Design Torque calculated in Step 3.

Once this value is located, refer to the corresponding coupling size in the first column of the Coupling Nominal Rated Torque Chart 3.

Refer to the maximum RPM value for this elastomer torque capability to ensure that the application requirements are met. If the requirement is not satisfied at this point, another type of coupling may be required for the application. Please consult our engineers.

Step 6: Compare the application driver/driven shaft sizes to the maximum bore size available on the coupling selected. If coupling bore size is not large enough for the shaft diameter, select the next largest coupling that will accommodate the drive/driven shaft diameters. Refer to Chart 3.

Step 7: Using the item Number Selection Charts, find the appropriate Bore and keyway sizes required and locate the item number.

Selection Example

A coupling is needed to connect a 20HP standard electric motor rated at 1800 RPM to a rotary pump. The shaft sizes of the electric motor (driver) is 2.0 inches and the pump (driven) is 1.75 inches. There are no special environmental conditions and the general operating temperature is normal room temperature 72°F. Less than 1° of misalignment is expected.

Step 1: Determine the Nominal Torque:

$$\begin{aligned} \text{Nominal Torque} &= (\text{HP} \times 63025) \\ &= \frac{20 \times 63025}{180} \\ &= 700.28 \text{ in-lb} \end{aligned}$$

Step 2: Using the Application Service Factor Chart 1, select the service factor which best corresponds to your application. The application Service Factor for an electric motor with standard torque driving a rotary pump is 1.25. The value of 1.25 is found under the application category Pumps, Rotary, column: Electric Motor w/Standard Torque in Chart 1.

Step 3: Calculate the Design Torque of your application:

$$\begin{aligned} \text{Design Torque} &= \text{Nominal Torque} \times \text{Application Service Factor} \\ &= 700.28 \times 1.25 \\ &= 875.35 \text{ in-lb} \end{aligned}$$

Step 4: Using the Elastomer Performance Data Chart 2, select the elastomer material which best corresponds to your application. Since there are not special environmental conditions, the operating temperature is 72°F and less than 1° of angular misalignment is required, the NBR elastomer material is selected.

Step 5: Using the Coupling Nominal Rated Torque Chart 3, the NBR elastomer column is used to determine the proper coupling size. Scanning down the NBR column, the first entry to accommodate the Design Torque value of 875.35 in-lb is the size L150 with a nominal torque rating of 1,240 in-lb. Referring to the maximum RPM of 1800 on the electric motor of the application does not exceed the 5000 RPM maximum allowed for the L150 size coupling with an NBR elastomer.

Step 6: Compare the application driver/driven shaft size to the maximum bore available in the coupling selected. The electric motor (driver) of this application has a shaft size of 2.0 inches and the pump (driven) has a shaft size of 1.75 inches. The L150 coupling has a maximum bore less than the driver shaft size. Continuing down the Maximum Bore column, in Chart 3, the L190 size is found to have a maximum bore size of 2.125 and is able to accommodate the driver/ driven shaft sizes. Therefore the proper coupling size for the application is a L190 coupling with an NBR elastomer.

Step 7: Using the item number Selection charts, locate the appropriate item numbers. The L Type Coupling Elastomer Chart, and the L Type Coupling Inch Hubs Chart, provides easy reference to the item numbers.

Locate the L Type Couplings Inch Hubs Elastomer Chart.

The elastomer is selected by scanning down the type column and locating the NBR (Solid) entry. Read across to the L190 column and locate the item number 12274.

Locate the L Type coupling Inch Hubs selection chart

The first bore size to be located is for the 2 inch shaft on the electric motor. Scan down the Bore/Keyway column to the 2 inch bore entry. Read across to the L190 column to locate item number of 12303.

The second bore size is located is for the 1.75 inch shaft on the pump. Scan down the Bore/Keyway column to the 1¾ inch bore entry. Read across to the L190 column to locate the item number of 12299.



FLEXIBLE JAW COUPLINGS

Chart 1

| | Service Factors | | | | | | Service Factors | | | | |
|---|--------------------------------------|----------------------------------|--|--------------------------|------------|---|--------------------------------------|----------------------------------|--|--------------------------|------------|
| | Electric Motor w/ Standard Torque | Electric motor w/ High Torque | Steam Turbines & Engines w/4 or more cyl. | Reciprocating Engines | | | Electric Motor w/ Standard Torque | Electric motor w/ High Torque | Steam Turbines & Engines w/4 or more cyl. | Reciprocating Engines | |
| | | | | 1- Cyl. | 2- Cyl. | | | | | 1- Cyl. | 2- Cyl. |
| Agitators | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 | Machine Tools | | | | | |
| Band Resaw (lumber) | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 | Punch Press-Gear Driven, | | | | | |
| Barge Haul Puller | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Plate Planer | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Beaters | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 | Tapping Machinery, Bending Roll | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Blowers | | | | | | Main Drive | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Centrifugal | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 | Auxiliary Drives | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 |
| Lobe, Vane | 1.25 | 1.50 | 1.25 | 2.0 | 1.6 | Metal Forming Machines | | | | | |
| Bottling Machinery | 1.25 | 1.50 | 1.25 | 2.0 | 1.6 | Draw Bench-carriage & Main Drive | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Brew Kettles (distilling) | 1.25 | 1.50 | 1.25 | 2.0 | 1.6 | Extruder, Forming Machine, | | | | | |
| Can Filling Machinery | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 | Wire Drawing | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Car Dumpers | 2.50 | 2.75 | 2.50 | 3.2 | 2.8 | Table Conveyors | 2.50 | 2.75 | 2.50 | 3.2 | 2.8 |
| Car Pullers | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 | Wire Winding, Coilers, Slitters | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Card Machine | 1.75 | 2.00 | 1.75 | 2.5 | 2.0 | Mills, Rotary Type | | | | | |
| Chiller (oil) | 1.50 | 2.00 | 1.25 | 2.0 | 2.0 | Ball, Kilns, Pebble, Rolling, Tube | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Compressors | | | | | | Cement Kilns, Dryers, Coolers | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Centrifugal | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 | Tumbling | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Screw, Lobe | 1.25 | 1.50 | 1.25 | 2.0 | 1.6 | Mixers | | | | | |
| Reciprocating | | | See Note | | | Concrete, continuous | 1.75 | 2.00 | 1.75 | 2.5 | 2.0 |
| Conveyors, Uniformly Fed | | | | | | Muller | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Assembly, Belt, Screw | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 | Paper Mills | | | | | |
| Bucket, Sawdust | 1.25 | 1.50 | 1.25 | 2.0 | 1.6 | Agitator (mixers), Reel, Winder | 1.20 | 1.45 | 1.20 | 1.9 | 1.5 |
| Live Roll, Shaker, Reciprocating | 3.00 | 3.25 | 3.00 | 3.7 | 3.3 | Winder | 1.20 | 1.45 | 1.20 | 1.9 | 1.5 |
| Conveyors, Not Uniformly Fed | | | | | | Barker (mechanical), Log Haul, | | | | | |
| Assembly, Belt, Oven, Screw | 1.20 | 1.45 | 1.20 | 1.9 | 1.5 | Chipper | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Reciprocating | 2.50 | 2.75 | 2.50 | 3.2 | 2.8 | Barking Drum (spur gear) | 2.50 | 2.75 | 2.50 | 3.2 | 2.8 |
| Shaker | 3.00 | 3.25 | 3.00 | 3.7 | 3.3 | Beater, Pulper, Jordans, Dresses | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Cookers-Brewing, Distilling | | | | | | Calenders, Dryers, Washers, | | | | | |
| Food | 1.25 | 1.50 | 1.25 | 2.0 | 1.6 | Thickener | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Cranes & Hoist | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Converting Machines, Conveyors | 1.20 | 1.45 | 1.20 | 1.9 | 1.5 |
| Crushers-Cane (Sugar, Stone, or Ore) | 3.00 | 3.25 | 3.00 | 3.7 | 3.3 | Printing Presses | 1.50 | 1.75 | 1.50 | 1.7 | 1.3 |
| Dredges | | | | | | Pug Mill | 1.75 | 2.00 | 1.75 | 2.0 | 1.6 |
| Cable Reels | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Pumps | | | | | |
| Conveyors, Pumps | | | | | | Centrifugal | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 |
| Maneuvering Winches | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 | Gear, Rotary, Vane | 1.25 | 1.50 | 1.25 | 2.0 | 1.6 |
| Cutter Head Drives | 2.50 | 2.75 | 2.50 | 3.2 | 2.8 | Reciprocating; | | | | | |
| Dynamometer | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 | 1-Cyl. Single or Double Acting | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Evaporators | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 | 2-Cyl. Single Acting | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Fans | | | | | | 2-Cyl. Double Acting | 1.75 | 2.00 | 1.75 | 2.5 | 2.0 |
| Centrifugal | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 | 3 or more Cyl. | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Cooling Towers | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Rubber Machinery | | | | | |
| Forced Draft, Propeller | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 | Mixers | 2.50 | 2.75 | 2.50 | 3.2 | 2.8 |
| Induced Draft w/damper control | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Rubber Calender | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Induced draft w/o damper control | 1.25 | 1.50 | 1.25 | 2.0 | 1.6 | Screens | | | | | |
| Feeders | | | | | | Air washing, Water | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 |
| Belt, Screw | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 | Rotary-stone or gravel, Dewatering | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Reciprocating | 2.50 | 2.75 | 2.50 | 3.2 | 2.8 | Vibrating | 2.50 | 2.75 | 2.50 | 3.2 | 2.8 |
| Filter, press-oil | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 | Grizzly | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Generators | | | | | | Shredders | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Not Welding | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 | Steering Gears | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 |
| Welding | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Stokers | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 |
| Hoist | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 | Suction Roll (paper) | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Hammermills | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Textile Machinery, | | | | | |
| Kilns | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 | Dryers, Dyeing Machinery, Mangle | 1.20 | 1.45 | 1.20 | 2.0 | 1.6 |
| Laundry Washers-Reversing | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Loom Spinner, Tenter Frames | 1.50 | 1.75 | 1.50 | 2.2 | 1.8 |
| Lumber Machinery | | | | | | Tumbling Barrels | 1.75 | 2.00 | 1.75 | 2.5 | 2.0 |
| Barkers, Edger Feeder, Live Roll | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Windlass | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 |
| Planer, Slab Conveyor | 2.00 | 2.25 | 2.00 | 2.7 | 2.3 | Woodworking Machine | 1.00 | 1.25 | 1.00 | 1.7 | 1.3 |

Note: Applications involving reciprocating engines and reciprocating driven devices are subject to critical rotational speeds which may damage the coupling and/or connected equipment. Contact engineering with specific requirements.



FLEXIBLE JAW COUPLINGS

Spider Performance Data

Chart 2

| Characteristics | Temperature Range | Misalignment | | Shore ₁ Hardness | Dampening Capacity | Chemical ₂ Resistance | Color |
|--|----------------------------------|----------------|---------------|--------------------------------------|--------------------|----------------------------------|--------|
| | | Angular Degree | Parallel Inch | | | | |
| SOX(NBR) Rubber —Nitrile Butadiene (Buna N) Rubber is a flexible elastomer material that is oil resistant resembles natural rubber in resilience and elasticity and operates effectively in temperature range of -40° to +212°F (-40° TO +100°C). Good resistance to oil. Standard elastomer. (Also applies to SXB Cushions.) | -40° to +212°F -40° to +100°C | 1° | .015 | 80A | High | Good | Black |
| URETHANE —Urethane has greater torque capability than NBR (1.5 times), provides less dampening effect, and operates at at temperature range of -30° to +160°F (-34° to +71°C). Good resistance to oil and chemicals | -30° to +160°F -34° to +71°C | 1° | .015 | 55D L050-L095 40D L099-L225 | Low | Very Good | Blue |
| HYTREL —Hytrel is a flexible elastomer designed for high torque and high temperature operations. Hytrel can operate in temperatures of -60°F to +250°F (-51° to +121°C) and has an excellent resistance to oil and chemicals. Not recommended for cyclic or start/stop applications. | -60° to +250°F -51° to +121°C | 1/2° | .015 | 55D | Low | Excellent | Tan |
| BRONZE —Bronze is a rigid, porous oil-impregnated metal insert exclusively for slow speed (maximum 250 RPM) applications requiring high torque capabilities. Bronze operations are not affected by extreme temperatures, water, oil or dirt. | -40° to +450°F -40° to +232°C | 1/2° | .010 | — | None | Excellent | Bronze |

Note: NBR standard shore hardness is 80A±5A-except L035=60A. Other softer or harder designs are available in NBR material, consult engineering

Coupling Nominal Rated Torque

Chart 3

| Size | Maximum Bore | | Spider Material | | | | | | | |
|---------|--------------|-----|------------------|--------|-----------------|-------|---------------|--------|---------------|--------|
| | inch | mm | SOX (NBR) Torque | | Urethane Torque | | Hytrel Torque | | Bronze Torque | |
| | | | in-lbs | Nm | in-lbs | Nm | in-lbs | Nm | in-lbs | Nm |
| L035 | .375 | 9 | 3.5 | 0.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| L/AL050 | .625 | 16 | 26.3 | 3.0 | 39 | 4.5 | 50 | 5.6 | 50 | 5.6 |
| L/AL070 | .750 | 19 | 43.2 | 4.9 | 65 | 7.3 | 114 | 12.9 | 114 | 12.9 |
| L/AL075 | .875 | 22 | 90.0 | 10.2 | 135 | 15.3 | 227 | 25.6 | 227 | 25.6 |
| L/AL090 | 1.000 | 25 | 144.0 | 16.3 | 216 | 24.4 | 401 | 45.3 | 401 | 45.3 |
| L/AL095 | 1.125 | 28 | 194.0 | 21.9 | 291 | 32.9 | 561 | 63.4 | 561 | 63.4 |
| L/AL099 | 1.188 | 30 | 318.0 | 35.9 | 477 | 53.9 | 792 | 89.5 | 792 | 89.5 |
| L/AL100 | 1.375 | 35 | 417.0 | 47.1 | 626 | 70.7 | 1134 | 128.0 | 1134 | 128.0 |
| L/AL110 | 1.625 | 42 | 792.0 | 89.5 | 1188 | 134.0 | 2268 | 256.0 | 2268 | 256.0 |
| L150 | 1.875 | 48 | 1240.0 | 140.0 | 1660 | 210.0 | 3708 | 419.0 | 3706 | 419.0 |
| AL150 | 1.875 | 48 | 1450.0 | 163.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| L190 | 2.125 | 55 | 1726.0 | 195.0 | 2592 | 293.0 | 4680 | 529.0 | 4680 | 529.0 |
| L225 | 2.625 | 65 | 2340.0 | 264.0 | 3510 | 397.0 | 6228 | 704.0 | 6228 | 704.0 |
| L276 | 2.875 | 73 | 4716.0 | 533.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| C226 | 2.500 | 64 | 2988.0 | 338.0 | N/A | N/A | 5940 | 671.0 | 5940 | 671.0 |
| C276 | 2.875 | 73 | 4716.0 | 533.0 | N/A | N/A | 9432 | 1066.0 | N/A | N/A |
| C280 | 3.000 | 76 | 7560.0 | 854.0 | N/A | N/A | 13866 | 1567.0 | N/A | N/A |
| C285 | 4.000 | 102 | 9182.0 | 1038.0 | N/A | N/A | 16680 | 1882.0 | N/A | N/A |
| C295 | 3.500 | 89 | 11340.0 | 1281.0 | N/A | N/A | 22680 | 2563.0 | 22680 | 2563.0 |
| C2955 | 4.000 | 102 | 18900.0 | 2136.0 | N/A | N/A | 37800 | 4271.0 | 37800 | 4271.0 |

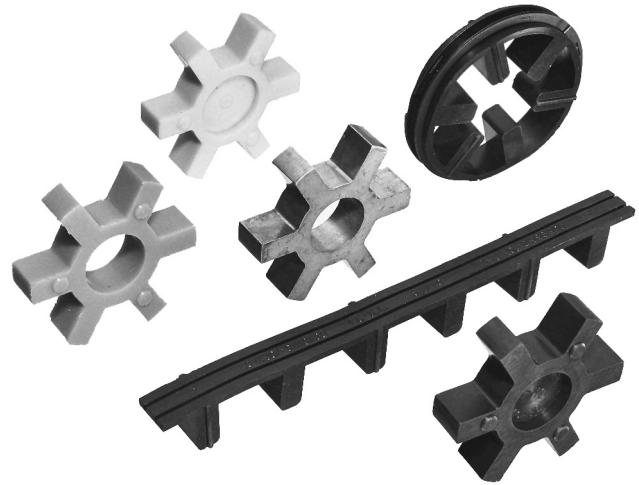
Note: Bronze has a maximum RPM capability of 250RPM. N/A indicates not available



FLEXIBLE JAW COUPLINGS

L Type Coupling

The L Type sizes range from L035 to L276.
Ordering requires selecting part numbers for two standard L hubs and one standard open or solid center elastomer (spider).



L Type Coupling

| Type | L035 | L050 | L070 | L075 | L090 | L095 | L099 | L100 | L110 | L150 | L190 | L225 | L276 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SOX (NBR) (solid) | 10118 | 10194 | 10406 | 10621 | 11070 | 11070 | 11494 | 11494 | 11724 | 12001 | 12274 | 12409 | |
| SOX (NBR) (open center) | | | 10393 | 10620 | 10968 | 10968 | 11492 | 11492 | 11711 | 37880 | 37881 | 12406 | 12612 |
| Urethane (solid) | | 37786 | 10395 | | | | | | | | | | |
| Urethane (open center) | | | 10411 | 10626 | 11075 | 11075 | 11499 | 11499 | 11729 | 12006 | 12280 | 12417 | |
| Hytrel (solid) | | 25307 | | | | | | | 11717 | 11993 | 12285 | 12400 | |
| Hytrel (open center) | | | 25308 | 25309 | 25310 | 25310 | 11486 | 11486 | 38097 | 38098 | 38099 | 12401 | |
| Bronze (open center) | | 10498 | 10409 | 10624 | 11073 | 11073 | 11497 | 11497 | 11727 | 12004 | 12274 | 34517 | 25767 |
| Snap Wrap w/ring | | | | | 24669 | 24669 | 24670 | 24670 | 24671 | 24672 | 24673 | | |
| Snap Wrap w/o ring | | | | | 11071 | 11071 | 11495 | 11495 | 11725 | 12002 | 12275 | | |
| Snap Wrap Urethane (Solid Ring) | | | | | | | 41170 | 41170 | 41171 | | 28284 | 26093 | |

L Type Hub Spline Bore Chart

| No. Teeth | Pitch | SAE | Spline Diameters | | Shaft Maj. Dia. | L090 | L095 | L099 | L100 | L110 | L150 | L190 | L225 | L276 |
|-----------|-------|------|------------------|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | Major | Minor | | | | | | | | | | |
| 9 | 16/32 | A | .651 | .509 | .625 | 38568 | 37900 | 38571 | 37904 | | | | | |
| 11 | 16/32 | | .776 | .631 | .750 | 38569 | 37901 | 38572 | 37905 | 37909 | 37917 | 37925 | | |
| 13 | 16/32 | B | .901 | .754 | .875 | 38570 | 37902 | 38573 | 37906 | 37910 | 37918 | 37926 | 37935 | |
| 13 | 8/16 | D, E | 1.798 | 1.506 | 1.750 | | | | | 37915 | 37923 | 37931 | 37940 | 38576 |
| 14 | 12/24 | C | 1.289 | 1.087 | 1.250 | | | | | 37912 | 37920 | 37928 | 37937 | 38577 |
| 15 | 16/32 | BB | 1.026 | .877 | 1.000 | | | 38574 | 37907 | 37911 | 37919 | 37927 | 37936 | 38578 |
| 21 | 16/32 | | 1.401 | 1.250 | 1.375 | | | | | 37913 | 37921 | 37929 | 37938 | |
| 23 | 16/32 | | 1.526 | 1.375 | 1.500 | | | | | 37914 | 37922 | 37930 | 37939 | |
| 27 | 16/32 | | 1.776 | 1.625 | 1.750 | | | | | 37916 | 37924 | 37932 | 37941 | 38579 |
| 15 | 8/16 | F | 2.048 | 1.753 | 2.000 | | | | | | | 37933 | 37942 | |

Note: 1. All pressure angles on above splines = 30°. Class 5 fit is standard, unless otherwise specified.
2. All stock spline bore hubs are supplied standard with standard Centaloc Spline Locking Feature. See page 142.



FLEXIBLE JAW COUPLINGS



L Type Inch Hubs Standard Bore and Keyway Chart Selection

| Bore | Keyway | L035 | L050 | L070 | L075 | L090 | L095 | L099 | L100 | L110 | L150 | L190 | L225 | L276 |
|---------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1/8 | No KW | 10124 | | | | | | | | | | | | |
| 3/16 | No KW | 10126 | | | | | | | | | | | | |
| 1/4 | No KW | 10127 | 10206 | 10416 | 10680 | 10766 | | | | | | | | |
| 1/4 | 1/8 x 1/16 | | | | 35744 | | | | | | | | | |
| 5/16 | No KW | 10128 | 10207 | 10417 | 10681 | 26209 | | | | | | | | |
| 3/8 | No KW | 24687 | 10208 | 10418 | 10682 | 10767 | | | | | | | | |
| 3/8 | 3/32 x 3/64 | | 46121 | 41985 | 37234 | 37235 | | | | | | | | |
| 3/8 | 1/8 x 1/16 | | 44136 | 48829 | 35745 | 37236 | | | | | | | | |
| 7/16 | No KW | | 10209 | 10419 | 10683 | 10768 | 11082 | 31297 | 11505 | | | | | |
| 7/16 | 3/32 x 3/64 | | 44713 | 44007 | 28089 | 28877 | 27613 | 38198 | 37237 | | | | | |
| 7/16 | 1/8 x 1/16 | | | 44066 | 28875 | 28878 | 28879 | 38199 | 37238 | | | | | |
| 1/2 | No KW | | 10210 | 10420 | 10684 | 10769 | 11083 | 11333 | 11506 | | | | | |
| 1/2 | 1/8 x 1/16 | | 10211 | 10421 | 10685 | 26087 | 26088 | 11334 | 26089 | | | | | |
| 9/16 | No KW | | 10212 | 52338 | 10686 | 24976 | 37239 | 11335 | 11508 | | | | | |
| 9/16 | 1/8 x 1/16 | | 10213 | 10423 | 10687 | 28876 | 11084 | 38200 | 11509 | | | | | |
| 5/8 | No KW | | 10214 | 24771 | 44322 | 46052 | 41911 | 44174 | 44291 | 11733 | 12101 | | | |
| 5/8 | 5/32 x 5/64 | | | 51104 | 37240 | 37241 | 37242 | 38201 | 37243 | 37244 | 37245 | | | |
| 5/8 | 3/16 x 3/32 | | | 10424 | 10688 | 10771 | 11085 | 11336 | 11510 | 26211 | 26212 | | | |
| 1 1/16 | 3/16 x 3/32 | | | 10425 | 10689 | 10772 | 11086 | 11337 | 11511 | 11734 | 12102 | | | |
| 3/4 | No KW | | | 46116 | 56140 | 54282 | 56887 | 11455 | 45212 | | | 12285 | 12422 | |
| 3/4 | 1/8 x 15/16 | | | 51719 | 35881 | 37246 | 37074 | 38202 | 37247 | 37248 | 37249 | 37250 | | |
| 3/4 | 3/16 x 3/32 | | | 10426 | 10690 | 10773 | 11087 | 11338 | 11512 | 11735 | 12103 | 38468 | 35882 | |
| 13/16 | 3/16 x 3/32 | | | | 10691 | 10774 | 11088 | 11339 | 11513 | 11736 | 12104 | 37252 | 37255 | |
| 7/8 | No KW | | | | 56941 | | | 59063 | | | | | | 12582 |
| 7/8 | 3/16 x 3/32 | | | | 10692 | 10775 | 11089 | 11340 | 11514 | 11737 | 12105 | 12286 | 12423 | 12585 |
| 7/8 | 1/4 x 1/8 | | | | | 38188 | 35747 | 38203 | 35686 | 35749 | 35750 | 37256 | 35753 | 54883 |
| 1 5/16 | 1/4 x 1/8 | | | | | 32332 | 11090 | 11341 | 11515 | 11738 | 12106 | 12287 | 12424 | |
| 1 | 1/4 x 1/8 | | | | | 31296 | 11091 | 11342 | 11516 | 11739 | 12107 | 12288 | 12425 | 12586 |
| 1 | 3/16 x 3/32 | | | | | 37257 | 37258 | 38204 | 37259 | 37260 | 37261 | | 37263 | |
| 1 1/16 | 1/4 x 1/8 | | | | | | 11092 | 11343 | 11517 | 11740 | 12108 | 12289 | 12426 | |
| 1 1/8 | 1/4 x 1/8 | | | | | | 11093 | 11344 | 11518 | 11741 | 12109 | 12290 | 12427 | 12587 |
| 1 3/16 | 1/4 x 1/8 | | | | | | | 11345 | 11519 | 11742 | 12110 | 12291 | 12428 | |
| 1 1/4 | 1/4 x 1/8 | | | | | | | | 11520 | 11743 | 12111 | 12292 | 12429 | 12588 |
| 1 1/4 | 5/16 x 5/32 | | | | | | | | 35748 | 35752 | 35751 | 37264 | 35754 | 12589 |
| 1 5/16 | 5/16 x 5/32 | | | | | | | | 11521 | 11744 | 12112 | 12293 | 26090 | |
| 1 3/8 | 5/16 x 5/32 | | | | | | | | 11522 | 11745 | 12113 | 12294 | 12430 | 12590 |
| 1 3/8 | 3/8 x 3/16 | | | | | | | | 44348 | 37265 | 37266 | 37267 | 37268 | 46758 |
| 1 7/16 | 3/8 x 3/16 | | | | | | | | | 11746 | 12114 | 12295 | 12431 | 12591 |
| 1 1/2 | 5/16 x 5/32 | | | | | | | | | 37269 | 37270 | 37271 | 37272 | |
| 1 1/2 | 3/8 x 3/16 | | | | | | | | | 11747 | 12115 | 12296 | 12432 | 12592 |
| 1 9/16 | 3/8 x 3/16 | | | | | | | | | 11748 | 12116 | 37273 | 12433 | 45689 |
| 1 5/8 | 3/8 x 3/16 | | | | | | | | | 11749 | 12117 | 12297 | 12434 | 12593 |
| 1 11/16 | 3/8 x 3/16 | | | | | | | | | | 12118 | 12298 | 12435 | 60057 |
| 1 3/4 | 3/8 x 3/16 | | | | | | | | | | 12119 | 12299 | 12436 | 12594 |
| 1 3/4 | 7/16 x 7/32 | | | | | | | | | | 37274 | 37275 | 37276 | 48250 |
| 1 13/16 | 1/2 x 1/4 | | | | | | | | | | 12120 | 12300 | 26091 | |
| 1 7/8 | 1/2 x 1/4 | | | | | | | | | | 12121 | 12301 | 12437 | 12595 |
| 1 15/16 | 1/2 x 1/4 | | | | | | | | | | | 12302 | 12438 | 49762 |
| 2 | 1/2 x 1/4 | | | | | | | | | | | 12303 | 12439 | 12596 |
| 2 1/16 | 1/2 x 1/4 | | | | | | | | | | | 12304 | 26092 | |
| 2 1/8 | 1/2 x 1/4 | | | | | | | | | | | 12305 | 12440 | 12597 |
| 2 3/16 | 1/2 x 1/4 | | | | | | | | | | | | 12441 | 12598 |
| 2 1/4 | 1/2 x 1/4 | | | | | | | | | | | | 12442 | 12599 |
| 2 3/8 | 5/8 x 5/16 | | | | | | | | | | | | 12443 | 12602 |
| 2 5/8 | 5/8 x 5/16 | | | | | | | | | | | | 41809 | 12605 |
| 2 7/8 | 3/4 x 3/8 | | | | | | | | | | | | | 12607 |

NOTE: WITH VESCORS' POLICY OF CONSTANTLY IMPROVING ITS PRODUCTS, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



FLEXIBLE JAW COUPLINGS

Metric Bore and Keyway Chart



L Type Metric Hubs Standard Bore and Keyway Chart Selection

| Bore | Keyway | L035 | L050 | L070 | L075 | L090 | L095 | L099 | L100 | L110 | L150 | L190 | L225 | L276 |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 4 | No KW | 41850 | | | | | | | | | | | | |
| 5 | No KW | 47419 | 46214 | | | | | | | | | | | |
| 6 | No KW | 45872 | 50351 | | | | | | | | | | | |
| 7 | No KW | 60679 | 10215 | 58803 | | | | | | | | | | |
| 8 | No KW | 55169 | 41460 | 46151 | | 60945 | | | | | | | | |
| 9 | 3 x 1.4 | | 41313 | 56177 | 44298 | | | | | | | | | |
| 10 | No KW | | 10216 | 41452 | 41456 | | | | | | | | | |
| 10 | 3 x 1.4 | | 41450 | 49870 | 41457 | 52828 | | | | | | | | |
| 11 | 4 x 1.8 | | 41314 | 41453 | 50811 | | 49424 | | | | | | | |
| 12 | No KW | | 48510 | 51562 | | 48276 | | | | | | | | |
| 12 | 4 x 1.8 | | 41315 | 41454 | 44153 | 44329 | 44832 | | 55195 | | | | | |
| 14 | No KW | | 58036 | 47505 | | 41461 | 41465 | | | | | | | |
| 14 | 5 x 2.3 | | 41316 | 41317 | 41321 | 51231 | 41466 | 60094 | 45101 | | | | | |
| 15 | No KW | | 60708 | | 10693 | | 46561 | 52697 | 41469 | | | | | |
| 15 | 5 x 2.3 | | 41451 | 41455 | 41458 | 52096 | 45778 | 46972 | 47123 | | | | | |
| 16 | 5 x 2.3 | | 56176 | 41318 | 41322 | 49198 | 41325 | 52098 | 55534 | 52092 | 52471 | | | |
| 17 | 5 x 2.3 | | | 45333 | 49398 | | 49704 | | 56178 | 60067 | 60156 | | | |
| 18 | 6 x 2.8 | | | 59724 | 41884 | 46433 | 46826 | 44647 | 41926 | 44288 | | | | |
| 19 | No KW | | | | | 10777 | | | | 41471 | | | | |
| 19 | 6 x 2.8 | | | 41319 | 41323 | 41462 | 41326 | 44157 | 41329 | 49700 | 48821 | 46717 | | |
| 20 | 6 x 2.8 | | | | 41459 | 41925 | 41467 | 47122 | 52093 | 41804 | 61218 | 61497 | | |
| 22 | 6 x 2.8 | | | | 52846 | 41968 | 44827 | 41959 | 44467 | 45214 | 44720 | | | |
| 24 | 8 x 3.3 | | | | | 41463 | 41327 | 41990 | 41330 | 48301 | 48182 | 59109 | | |
| 25 | 8 x 3.3 | | | | | 41464 | 41468 | 45055 | 41470 | 41906 | 46751 | 52153 | | |
| 28 | No KW | | | | | | | | | | 56179 | 56182 | | |
| 28 | 8 x 3.3 | | | | | | 41328 | 50103 | 41331 | 41333 | 45679 | 52976 | | |
| 30 | 8 x 3.3 | | | | | | | 47132 | 48317 | 45681 | 41738 | 44471 | 48982 | |
| 32 | No KW | | | | | | | | | | 41472 | 41473 | 48319 | 56232 |
| 32 | 10 x 3.3 | | | | | | | | 41332 | 41334 | 41873 | 45562 | 41849 | 41885 |
| 35 | No KW | | | | | | | | | | 56180 | 56183 | 56184 | |
| 35 | 10 x 3.3 | | | | | | | | 49925 | 45682 | 46562 | 58035 | 52197 | |
| 38 | 10 x 3.3 | | | | | | | | | 41335 | 41337 | 41474 | 49664 | 52961 |
| 40 | 12 x 3.3 | | | | | | | | | 45683 | 48318 | 48320 | 49605 | 59308 |
| 42 | 12 x 3.3 | | | | | | | | | 41336 | 41338 | 41475 | 47492 | 45609 |
| 45 | 14 x 3.8 | | | | | | | | | | 45102 | 56017 | 52674 | 50292 |
| 48 | No KW | | | | | | | | | | 56181 | 51995 | | |
| 48 | 14 x 3.8 | | | | | | | | | | 56227 | 48322 | 47569 | 61202 |
| 50 | No KW | | | | | | | | | | | 56228 | 56230 | 56233 |
| 50 | 14 x 3.8 | | | | | | | | | | | 44392 | 48797 | 45062 |
| 55 | No KW | | | | | | | | | | | 56229 | 56231 | 56234 |
| 55 | 16 x 4.3 | | | | | | | | | | | 47006 | 44089 | 56067 |
| 60 | No KW | | | | | | | | | | | | 56185 | 56235 |
| 60 | 18 x 4.4 | | | | | | | | | | | | 44598 | 56236 |
| 65 | No KW | | | | | | | | | | | | 56185 | 56237 |
| 65 | 18 x 4.4 | | | | | | | | | | | | 56544 | 50102 |
| 70 | 20 x 4.9 | | | | | | | | | | | | | 52868 |

NOTE: All finished bore hubs are provided with one set screw as standard. Non-standard bores available, consult engineering.



FLEXIBLE JAW COUPLINGS

AL Type Couplings

AL Type Coupling Spiders

| Type | AL050 | AL070 | AL075 | AL090 | AL095 | AL099 | AL100 | AL110 | AL150 |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SOX (NBR) (solid) | 10194 | 10406 | 10621 | 11070 | 11070 | 11494 | 11494 | 11724 | 18027 |
| SOX (NBR) (open center) | | 10393 | 10620 | 10968 | 10968 | 11492 | 11492 | 11711 | |
| Urethane (solid) | 37786 | 10395 | | | | | | | |
| Urethane (open center) | | 10411 | 10626 | 11075 | 11075 | 11499 | 11499 | 11729 | |
| Hytrel (solid) | 25307 | | | | | | | 11717 | |
| Hytrel (open center) | | 25308 | 25309 | 25310 | 25310 | 11486 | 11486 | 38097 | |
| Bronze (open center) | 10198 | 10409 | 10624 | 11073 | 11073 | 11497 | 11497 | 11727 | |
| Snap Wrap w/ring | | | | 24669 | 24669 | 24670 | 24670 | 24671 | |
| Snap Wrap no ring | | | | 11071 | 11071 | 11495 | 11495 | 11725 | |

AL Type Inch Hubs Standard Bore and Keyway Chart

| Bore | Keyway | AL050 | AL070 | AL075 | AL090 | AL095 | AL099 | AL100 | AL110 | AL150 |
|---------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1/4 | No KW | 10252 | 10463 | 10630 | 10791 | | | | | |
| 5/16 | No KW | 10253 | 10464 | 10631 | 10792 | | | | | |
| 3/8 | No KW | 10254 | 10466 | 10632 | 10793 | | | | | |
| 7/16 | No KW | 10256 | 10469 | 10633 | 10794 | | | | | |
| 1/2 | No KW | 10257 | 10471 | 10634 | 10795 | 17847 | 17880 | 17914 | | |
| 1/2 | 1/8 x 1/16 | 49706 | 10473 | 10635 | 10796 | 17848 | 17881 | 17915 | | |
| 9/16 | No KW | | | 10637 | 10797 | | | 56473 | | |
| 9/16 | 1/8 x 1/16 | | | 10638 | 44812 | 37994 | 44323 | 17917 | | |
| 5/8 | No KW | 10259 | 10480 | 61817 | 44004 | | | | 17977 | 18035 |
| 5/8 | 3/16 x 3/32 | | 10482 | 10639 | 10798 | 17850 | 17882 | 17918 | 38888 | 44828 |
| 11/16 | 3/16 x 3/32 | | | 45227 | 10799 | 17851 | 45494 | 17919 | 44059 | 46642 |
| 3/4 | 1/8 x 1/16 | | | 47835 | 47725 | 46295 | | | | |
| 3/4 | 3/16 x 3/32 | | | 10640 | 10800 | 17852 | 17883 | 17920 | 17978 | 18036 |
| 13/16 | 3/16 x 3/32 | | | 10641 | 10801 | 17853 | 17884 | 17921 | | |
| 7/8 | 3/16 x 3/32 | | | 10642 | 10802 | 17854 | 17885 | 17922 | 17979 | 18037 |
| 15/16 | 1/4 x 1/8 | | | | | 17855 | 17886 | 17923 | 17980 | 18038 |
| 1 | 1/4 x 1/8 | | | | | 17856 | 17887 | 17924 | 17981 | 18039 |
| 1 1/16 | 1/4 x 1/8 | | | | | 17857 | 17888 | 17925 | 26094 | 18040 |
| 1 1/8 | 1/4 x 1/8 | | | | | 17858 | 17889 | 17926 | 17982 | 18041 |
| 1 3/16 | 1/4 x 1/8 | | | | | | 17890 | 17927 | 17983 | 18042 |
| 1 1/4 | 1/4 x 1/8 | | | | | | | 17928 | 17984 | 18043 |
| 1 5/16 | 5/16 x 5/32 | | | | | | | 17929 | 17985 | 18044 |
| 1 3/8 | 5/16 x 5/32 | | | | | | | 17930 | 17986 | 18045 |
| 1 7/16 | 3/8 x 3/16 | | | | | | | 45508 | 17987 | 18046 |
| 1 1/2 | 3/8 x 3/16 | | | | | | | | 17988 | 18047 |
| 1 9/16 | 3/8 x 3/16 | | | | | | | | 17989 | 18048 |
| 1 5/8 | 3/8 x 3/16 | | | | | | | | 17990 | 18049 |
| 1 11/16 | 3/8 x 3/16 | | | | | | | | | 18050 |
| 1 3/4 | 3/8 x 3/16 | | | | | | | | | 18051 |
| 1 13/16 | 1/2 x 1/4 | | | | | | | | | 18052 |
| 1 7/8 | 1/2 x 1/4 | | | | | | | | | 18053 |



AL Type Metric Hubs Standard Bore and Keyway Chart

| Bore | Keyway | AL050 | AL070 | AL075 | AL090 | AL095 | AL099 | AL100 | AL110 | AL150 |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 8 | No KW | | | 48973 | | | | | | |
| 10 | 3 x 1.4 | | | 41924 | 56514 | | | | | |
| 11 | 4 x 1.8 | | 65694 | 51098 | 58620 | | | | | |
| 12 | 4 x 1.8 | | 56487 | 65655 | 60429 | | | | | |
| 14 | 5 x 2.3 | | 65696 | 47302 | 58621 | 56800 | 58624 | | | |
| 15 | 5 x 2.3 | | 62906 | 49633 | 58622 | 56801 | | 49629 | | |
| 16 | 5 x 2.3 | | | 52221 | | 47014 | | 45012 | | |
| 17 | 5 x 2.3 | | | | 60887 | 44712 | | 59164 | | |
| 19 | 6 x 2.8 | | 65698 | 47427 | 44679 | 47012 | 58625 | 47253 | 59064 | |
| 20 | No KW | | | 56137 | | | | | | |
| 20 | 6 x 2.8 | | | 59394 | | 48327 | 49634 | 49630 | 49631 | 60878 |
| 22 | 6 x 2.8 | | | | | 47013 | | | | |
| 24 | 8 x 3.3 | | | | | 45736 | 58626 | 44058 | 45690 | 64634 |
| 25 | 8 x 3.3 | | | | | | 49709 | 55687 | 45933 | 64633 |
| 28 | 8 x 3.3 | | | | | 47105 | 58627 | 47393 | 45463 | |
| 30 | 8 x 3.3 | | | | | | 52048 | 58266 | 49632 | 45063 |
| 32 | 10 x 3.3 | | | | | | | | 54417 | 44347 |
| 35 | 10 x 3.3 | | | | | | | | 46215 | |
| 36 | 10 x 3.3 | | | | | | | | | 51737 |
| 38 | 10 x 3.3 | | | | | | | | 52692 | 58215 |
| 42 | 12 x 3.3 | | | | | | | | | 45404 |

Note: Vescor does not recommend reboring AL hubs. All hubs are supplied standard with one set screw.



FLEXIBLE JAW COUPLINGS

C Type Couplings

Cushions and Collar Chart

| Size | C226 | C276 | C280 | C285 | C295 | C2955 |
|-----------------------|-------|-------|-------|-------|-------|-------|
| No. of Cushions | 6 | 6 | 6 | 6 | 6 | 10 |
| SXB (NBR) cushion set | 14547 | 14633 | 14712 | 14771 | 14805 | 14805 |
| HYTREL cushion set | 27529 | 14637 | 14716 | 14774 | 14808 | 14859 |
| BRONZE cushion set | 14545 | | | | 51914 | 51915 |
| COLLAR with hardware | 40122 | 40123 | 40124 | 40292 | 40293 | 40293 |

C Type Metric Hubs Standard Bore and Keyway Chart

| Bore mm | Keyway mm | C226 | C276 | C280 | C285 | C295 | C2955 |
|---------|-----------|-------|-------|-------|-------|-------|-------|
| 30 | 8x3.3 | 62792 | | | | | |
| 35 | 10x3.3 | 60243 | 47386 | | | | |
| 38 | 10x3.3 | 45348 | 62160 | | | | |
| 40 | 12x3.3 | 49379 | 54037 | | | | |
| 42 | 12x3.3 | | 45219 | | | | |
| 45 | 14x3.8 | 52550 | 44723 | 58265 | | | |
| 48 | 14x3.8 | 54288 | | 52205 | | | |
| 55 | 16x4.3 | 58011 | 58444 | 49012 | | | |
| 60 | 18x4.4 | | 47265 | 49378 | | | |
| 65 | 18x4.4 | | 52008 | | | | 58676 |
| 70 | 20x4.9 | | 59032 | | 56794 | 54355 | 58677 |
| 75 | 22x5.4 | | | | | 47813 | 58678 |
| 80 | 22x5.4 | | | | 44487 | 58675 | 58679 |
| 90 | 25x5.4 | | | | 54363 | | |
| 95 | 25x5.4 | | | | | | 62695 |

C Type Inch Hubs Standard Bore and Keyway Chart

| Bore | Keyway | C226 | C276 | C280 | C285 | C295 | C2955 |
|-----------|-------------|-------|-------|-------|-------|-------|-------|
| 7/8 RSB | | 40125 | 40126 | | | | |
| 1 1/8 | 1/4 x 1/8 | 26036 | 26050 | | | | |
| 1 1/4 RSB | | | | 26067 | 41036 | | |
| 1 1/4 | 1/4 x 1/8 | 26037 | 26051 | 48988 | 47173 | | |
| 1 3/8 | 5/16 x 5/32 | 26038 | 26052 | 46278 | 55546 | | |
| 1 7/16 | 3/8 x 3/16 | 26039 | | | | | |
| 1 1/2 RSB | | | | | | 41037 | |
| 1 1/2 | 3/8 x 3/16 | 26040 | 26053 | 46277 | 48366 | 44824 | |
| 1 5/8 | 3/8 x 3/16 | 26041 | 26054 | 46194 | 41892 | 56078 | |
| 1 3/4 RSB | | | | | | | 41038 |
| 1 3/4 | 3/8 x 3/16 | 26042 | 26055 | 44011 | 52311 | 45780 | |
| 1 7/8 | 1/2 x 1/4 | 20643 | 26056 | 44012 | 51533 | 47080 | 49075 |
| 2 | 1/2 x 1/4 | 26044 | 26057 | 48194 | | | |
| 2 1/8 | 1/2 x 1/4 | 26045 | 26058 | 44370 | 49809 | 44711 | |
| 2 1/4 | 1/2 x 1/4 | 20646 | 44547 | | | | |
| 2 3/8 | 5/8 x 5/16 | 26047 | 26060 | 44014 | 47288 | 44825 | 52703 |
| 2 1/2 | 5/8 x 5/16 | 26048 | 46120 | 51998 | 56779 | 45249 | 48454 |
| 2 5/8 | 5/8 x 5/16 | | 46755 | 44013 | | 50145 | 54549 |
| 2 7/8 | 3/4 x 3/8 | | 26064 | 51525 | 49456 | 52702 | 48108 |
| 3 | 3/4 x 3/8 | | | 48193 | | | |
| 3 3/8 | 7/8 x 7/16 | | | | 47171 | 45402 | 49077 |
| 3 1/2 | 7/8 x 7/16 | | | | 46844 | 52988 | 44545 |
| 3 5/8 | 7/8 x 7/16 | | | | | | 50106 |
| 3 3/4 | 7/8 x 7/16 | | | | | | 58378 |
| 3 7/8 | 1 x 1/2 | | | | 48247 | | 49351 |
| 4 | 1 x 1/2 | | | | | | 55016 |

C Type Couplings

Complete coupling selection includes two standard hubs, one cushion set, and one collar with hardware



Note: RSB (Rough Stock Bore) hub has no keyway or set screw hole, it is not useable as shown and must be machined to proper bore tolerances. Hub includes inside sleeve and is drilled and tapped for collar bolts. Non-standard bores available, consult engineering.



FLEXIBLE JAW COUPLINGS

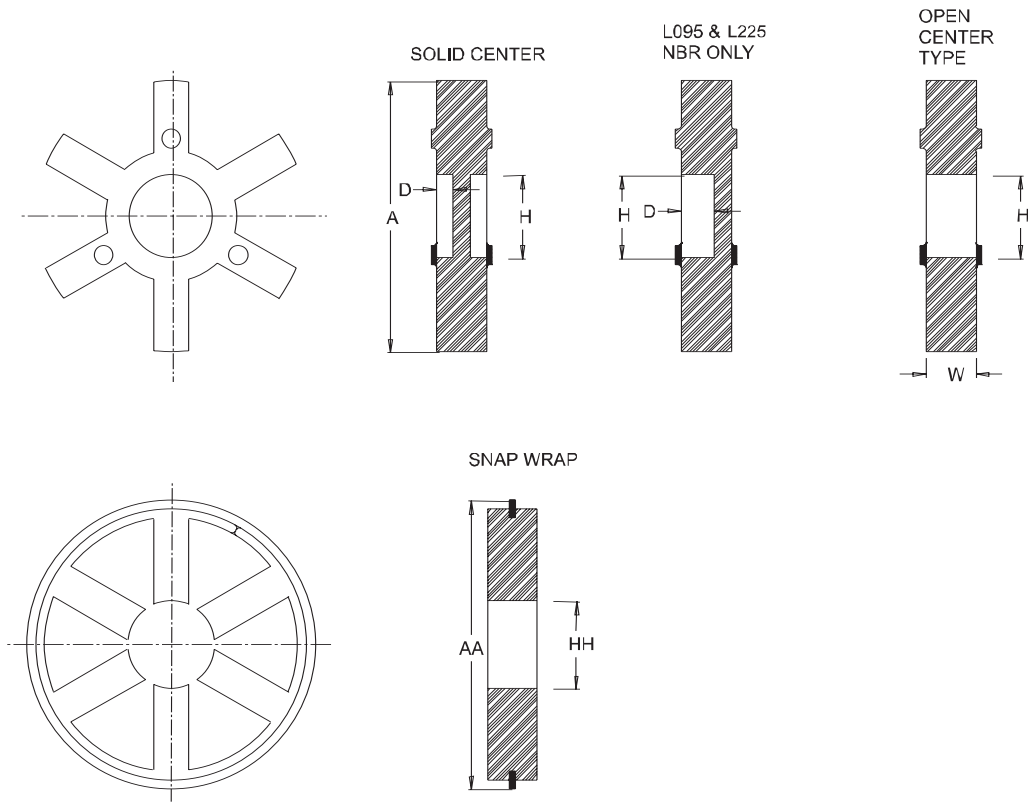
Performance Data

| Size | Elastomeric Member | Number of Jaws | Basic HP Ratings @Varying RPM | | Torque Rating | | Bore | | Maximum RPM 1000 |
|----------------------|--------------------|----------------|-------------------------------|---------|---------------|---------|------|-----|------------------|
| | | | 100 | 1800 | in-lbs | Nm | inch | Nm | |
| L and AL TYPE | | | | | | | | | |
| L035 | SOX (NBR) | 2 | .006 | .10 | 3.5 | .40 | .375 | 9 | 31.0 |
| L050/AL050 | SOX (NBR) | 2 | .042 | .75 | 26.3 | 2.97 | .625 | 16 | 18.0 |
| L050/AL050 | Hytrel | 2 | .080 | 1.43 | 50.0 | 5.65 | .625 | 16 | 18.0 |
| L070/AL070 | SOX (NBR) | 2 | .070 | 1.23 | 43.2 | 4.88 | .750 | 19 | 14.0 |
| L070/AL070 | Hytrel | 2 | .180 | 3.26 | 114.0 | 12.88 | .750 | 19 | 14.0 |
| L075/AL075 | SOX (NBR) | 3 | .140 | 2.57 | 90.0 | 10.17 | .875 | 22 | 11.0 |
| L075/AL075 | Hytrel | 3 | .360 | 6.48 | 227.0 | 25.65 | .875 | 22 | 11.0 |
| L090/AL090 | SOX (NBR) | 3 | .230 | 4.11 | 144.0 | 16.27 | 1.00 | 25 | 9.0 |
| L090/AL090 | Hytrel | 3 | .640 | 11.50 | 401.0 | 45.31 | 1.00 | 25 | 9.0 |
| L095/AL095 | SOX (NBR) | 3 | .310 | 5.50 | 194.0 | 21.92 | 1.12 | 28 | 9.0 |
| L095/AL095 | Hytrel | 3 | .890 | 16.00 | 561.0 | 63.38 | 1.12 | 28 | 9.0 |
| L099/AL099 | SOX (NBR) | 3 | .500 | 9.10 | 318.0 | 35.93 | 1.18 | 30 | 7.0 |
| L099/AL099 | Hytrel | 3 | 1.260 | 22.60 | 792.0 | 89.48 | 1.18 | 30 | 7.0 |
| L100/AL100 | SOX (NBR) | 3 | .660 | 11.90 | 417.00 | 47.11 | 1.38 | 35 | 7.0 |
| L100/AL100 | Hytrel | 3 | 1.800 | 32.40 | 1134.0 | 128.12 | 1.38 | 35 | 7.0 |
| L110/AL110 | SOX (NBR) | 3 | 1.260 | 23.00 | 792.0 | 89.48 | 1.62 | 42 | 5.0 |
| L110/AL110 | Hytrel | 3 | 3.600 | 65.00 | 2268.0 | 256.25 | 1.62 | 42 | 5.0 |
| L150 | SOX (NBR) | 3 | 2.000 | 35.00 | 1240.0 | 140.10 | 1.88 | 48 | 5.0 |
| L150 | Hytrel | 3 | 5.900 | 106.00 | 3708.0 | 418.95 | 1.88 | 48 | 5.0 |
| AL150 | SOX (NBR) | 4 | 2.300 | 41.40 | 1450.0 | 163.63 | 1.88 | 48 | 5.0 |
| L190 | SOX (NBR) | 3 | 2.700 | 49.00 | 1728.0 | 195.24 | 2.12 | 55 | 5.0 |
| L190 | Hytrel | 3 | 7.400 | 134.00 | 4680.0 | 528.77 | 2.12 | 55 | 5.0 |
| L225 | SOX (NBR) | 3 | 3.700 | 67.00 | 2340.0 | 264.38 | 2.62 | 65 | 4.2 |
| L225 | Hytrel | 3 | 9.900 | 178.00 | 6228.0 | 703.67 | 2.62 | 65 | 4.2 |
| L276 | SOX (NBR) | 3 | 7.500 | 135.00 | 4716.0 | 532.84 | 2.88 | 73 | 1.8 |
| C TYPE | | | | | | | | | |
| C226 | SXB (NBR) | 3 | 4.700 | 85.00 | 2988.0 | 337.60 | 2.50 | 64 | 4.8 |
| C226 | Hytrel | 3 | 9.400 | 170.00 | 5940.0 | 671.13 | 2.50 | 64 | 4.8 |
| C276 | SXB (NBR) | 3 | 7.500 | 135.00 | 4716.0 | 532.84 | 2.88 | 73 | 4.2 |
| C276 | Hytrel | 3 | 15.000 | 269.00 | 9432.0 | 1065.67 | 2.88 | 73 | 4.2 |
| C280 | SXB (NBR) | 3 | 12.000 | 216.00 | 7560.0 | 254.17 | 3.00 | 76 | 3.5 |
| C280 | Hytrel | 3 | 22.000 | 396.00 | 13866.0 | 1566.65 | 3.00 | 76 | 3.5 |
| C285 | SXB (NBR) | 3 | 14.600 | 262.00 | 9182.0 | 1037.43 | 4.00 | 102 | 3.2 |
| C285 | Hytrel | 3 | 26.000 | 476.00 | 16660.0 | 1882.33 | 4.00 | 102 | 3.2 |
| C295 | SXB (NBR) | 3 | 18.000 | 324.00 | 11340.0 | 1281.25 | 3.50 | 89 | 2.3 |
| C295 | Hytrel | 3 | 36.000 | 648.00 | 22680.0 | 2562.50 | 3.50 | 89 | 2.3 |
| C2955 | SXB(NBR) | 5 | 30.000 | 540.00 | 18900.0 | 2135.42 | 4.00 | 102 | 2.3 |
| C2955 | Hytrel | 5 | 60.000 | 1080.00 | 37800.0 | 4270.83 | 4.00 | 102 | 2.3 |

NOTE: WITH VESCORS' POLICY OF CONSTANTLY IMPROVING ITS PRODUCTS, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



FLEXIBLE JAW COUPLINGS



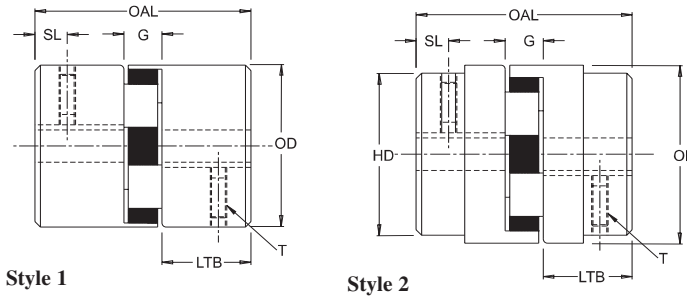
| Solid Center Spiders | | | | | | | | Open Center Spiders | | | | | | | Snap Wrap Spiders | | | All | |
|----------------------|--------------------|------------|------------|------------|------------|--------------------|------|---------------------|--------------------|------------|------------|------------|---------|------|-------------------|---------------|----|------|------|
| Size | Material Available | | | | Dimensions | | | Size | Material Available | | | | Dimens. | | Size | Matl. Dimens. | | Size | W |
| | NBR SOX | Ureth. URE | Hytrel HYT | Bronze BRZ | A | D | H | | NBR SOX | Ureth. URE | Hytrel HYT | Bronze BRZ | A | H | | NBR | AA | | |
| L035 | 10118 | | | | .062 | | | L035 | | | | | | | | | | L035 | .27 |
| L050 | 10194 | 37786 | 25307 | | 1.06 | | | L050 | | | | 10498 | 1.06 | .31 | | | | L050 | .40 |
| L070 | 10406 | | | | 1.38 | | | L070 | 10393 | 10395 | 25308 | 10409 | 1.38 | .50 | | | | L070 | .42 |
| L075 | 10621 | | | | 1.75 | | | L075 | 10620 | 10626 | 25309 | 10624 | 1.75 | .75 | | | | L075 | .44 |
| L090 | 11070 | | | | 2.12 | .18 | .87 | L090 | 10968 | 11075 | 25310 | 11073 | 2.12 | .87 | | | | L090 | .44 |
| L095 | 11070 | | | | 2.12 | .18 | .87 | L095 | 10968 | 11075 | 25310 | 11073 | 2.12 | .87 | | | | L095 | .44 |
| L099 | 11494 | | | | 2.53 | .25 | 1.03 | L099 | 11492 | 11499 | 11486 | 11497 | 2.53 | 1.03 | | | | L099 | .63 |
| L100 | 11494 | | | | 2.53 | .25 | 1.03 | L100 | 11492 | 11499 | 11486 | 11497 | 2.53 | 1.03 | | | | L100 | .63 |
| L110 | 11724 | | 11717 | | 3.31 | NBR .25 HYT .18 | 1.18 | L110 | 11711 | 11729 | 38097 | 11727 | 3.31 | 1.18 | | | | L110 | .75 |
| L150 | 12001 | | 11993 | | 3.75 | NBR .31 HYT .21 | 1.25 | L150 | 37880 | 12006 | 38098 | 12004 | 3.75 | 1.25 | | | | L150 | .88 |
| L190 | 12274 | | 12265 | | 4.50 | NBR .31 HYT .18 | 1.38 | L190 | 37881 | 12280 | 38099 | 12274 | 4.50 | 1.38 | | | | L190 | .88 |
| L225 | 12409 | | 12400 | | 5.00 | NBR .38 HYT .18 | 1.75 | L225 | 12406 | 12417 | 12401 | 34517 | 5.00 | 1.75 | | | | L225 | .92 |
| L276 | | | | | | | | L276 | 12612 | | | 25767 | 6.18 | 1.75 | | | | L276 | 1.50 |



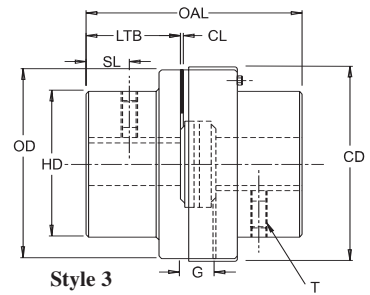
FLEXIBLE JAW COUPLINGS

Dimensional Data

L Type Flexible Couplings



C Type Flexible Couplings

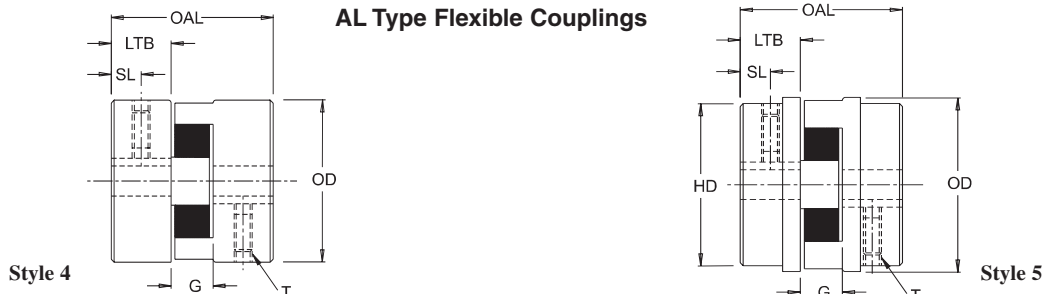


L Type, C Type and AL Type Flexible Couplings Dimensional Data-Inch

| Vescor Part Number | Style No. | Bore | | Outer Dia. OD | Overall Length OAL | Gap G | Length Thru Bore LTB | Hub Dia. HD | Clearance CL | Set Screw Location SL | Collar Dia. CD | Set Screw Size T | Weight Lbs. | | Moment of Inert WR^2 in-lb ³ (Solid) |
|--------------------|-----------|-------|-------|---------------|--------------------|-------|----------------------|-------------|--------------|-----------------------|----------------|------------------|-------------|----------|---|
| | | Min. | Max. | | | | | | | | | | Solid | Max Bore | |
| L035 | 1 | .125 | .375 | .62 | .81 | .27 | .27 | .62 | N/A | .13 | N/A | #6-32 | .1 | .1 | .003 |
| L050 | 1 | .250 | .625 | 1.08 | 1.72 | .48 | .62 | 1.08 | N/A | .31 | N/A | 1/4-20 | .3 | .2 | .054 |
| L070 | 1 | .250 | .750 | 1.36 | 2.00 | .50 | .75 | 1.36 | N/A | .38 | N/A | 1/4-20 | .6 | .4 | .115 |
| L075 | 1 | .250 | .875 | 1.75 | 2.12 | .50 | .81 | 1.75 | N/A | .31 | N/A | 1/4-20 | 1.0 | .8 | .388 |
| L090 | 1 | .250 | 1.000 | 2.11 | 2.12 | .50 | .81 | 2.11 | N/A | .44 | N/A | 1/4-20 | 1.5 | 1.2 | .772 |
| L095 | 1 | .437 | 1.125 | 2.11 | 2.50 | .50 | 1.00 | 2.11 | N/A | .44 | N/A | 5/16-18 | 1.8 | 1.3 | .890 |
| L099 | 1 | .437 | 1.188 | 2.54 | 2.87 | .75 | 1.06 | 2.54 | N/A | .44 | N/A | 5/16-18 | 2.5 | 2.0 | 2.048 |
| L100 | 1 | .437 | 1.375 | 2.54 | 3.50 | .75 | 1.37 | 2.54 | N/A | .44 | N/A | 5/16-18 | 3.5 | 2.5 | 2.783 |
| L110 | 1 | .625 | 1.625 | 3.31 | 4.25 | .87 | 1.69 | 3.31 | N/A | .75 | N/A | 3/8-16 | 6.6 | 5.0 | 8.993 |
| L150 | 1 | .625 | 1.875 | 3.75 | 4.50 | 1.00 | 1.75 | 3.75 | N/A | .75 | N/A | 3/8-16 | 9.1 | 7.0 | 11.477 |
| L190 | 2 | .750 | 2.125 | 4.50 | 4.88 | 1.00 | 1.94 | 4.00 | N/A | .88 | N/A | 1/2-13 | 17.0 | 13.0 | 39.256 |
| L225 | 2 | .750 | 2.625 | 5.00 | 5.38 | 1.00 | 2.19 | 4.25 | N/A | 1.00 | N/A | 1/2-13 | 23.0 | 18.0 | 65.000 |
| L276 | 2 | .875 | 2.875 | 6.18 | 7.87 | 1.63 | 3.12 | 5.00 | N/A | 1.56 | N/A | 1/2-13 | 47.0 | 36.0 | 188.000 |
| C226 | 3 | .875 | 2.500 | 5.15 | 7.00 | 1.50 | 2.75 | 4.12 | .12 | 1.38 | 5.50 | 1/2-13 | 29.0 | 22.0 | 74.000 |
| C276 | 3 | .875 | 2.875 | 6.18 | 7.87 | 1.63 | 3.12 | 5.00 | .12 | 1.56 | 6.53 | 1/2-13 | 47.0 | 36.0 | 188.000 |
| C280 | 3 | 1.250 | 3.000 | 7.50 | 7.87 | 1.63 | 3.12 | 5.50 | .12 | 1.56 | 7.81 | 1/2-13 | 61.0 | 49.0 | 362.000 |
| C285 | 3 | 1.250 | 4.000 | 8.50 | 9.13 | 1.63 | 3.75 | 6.50 | .12 | 1.75 | 8.88 | 5/8-11 | 87.0 | 68.0 | 642.000 |
| C295 | 3 | 1.500 | 3.500 | 9.12 | 9.38 | 1.88 | 3.75 | 6.31 | .12 | 1.88 | 9.62 | 5/8-11 | 97.0 | 78.0 | 862.000 |
| C2955 | 3 | 1.750 | 4.000 | 9.12 | 10.38 | 1.88 | 4.25 | 7.12 | .12 | 2.12 | 9.62 | 5/8-11 | 117.0 | 90.0 | 392.000 |
| AL050 | 4 | .250 | .625 | 1.08 | 1.72 | .48 | .56 | 1.08 | N/A | .31 | N/A | 1/4-20 | .2 | .2 | .020 |
| AL070 | 4 | .250 | .750 | 1.36 | 2.00 | .50 | .75 | 1.36 | N/A | .38 | N/A | 1/4-20 | .3 | .2 | .040 |
| AL075 | 5 | .250 | .875 | 1.75 | 2.12 | .50 | .81 | 1.53 | N/A | .31 | N/A | 1/4-20 | .4 | .3 | .121 |
| AL090 | 5 | .500 | .875 | 2.12 | 2.34 | .52 | .91 | 1.53 | N/A | .34 | N/A | 1/4-20 | .5 | .4 | .271 |
| AL095 | 4 | .500 | 1.125 | 2.12 | 2.50 | .50 | 1.00 | 2.12 | N/A | .44 | N/A | 5/16-18 | .8 | .6 | .336 |
| AL099 | 5 | .500 | 1.187 | 2.53 | 2.81 | .75 | 1.03 | 2.06 | N/A | .44 | N/A | 5/16-18 | 1.0 | .8 | .644 |
| AL100 | 5 | .500 | 1.375 | 2.53 | 3.50 | .75 | 1.37 | 2.41 | N/A | .44 | N/A | 5/16-18 | 1.5 | 1.1 | 1.207 |
| AL110 | 4 | .625 | 1.625 | 3.31 | 4.25 | .87 | 1.69 | 3.31 | N/A | .75 | N/A | 5/16-18 | 2.7 | 2.1 | 3.531 |
| AL150 | 5 | .625 | 1.875 | 4.25 | 4.50 | 1.00 | 1.75 | 3.19 | N/A | .63 | N/A | 5/16-18 | 3.7 | 2.8 | 7.002 |

NOTE: N/A=not applicable Hubs are standard with one set screw. AL150 has 2 set screws provided.

AL Type Flexible Couplings



NOTE: WITH VESCORS' POLICY OF CONSTANTLY IMPROVING ITS PRODUCTS, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



FLEXIBLE JAW COUPLINGS

Splined Shafts

Installation Instructions for Fluid Power Applications

Spline bores furnished by Vescor are provided with a special spline locking feature called Centaloc (see Fig. 1).

Spline shafts: For optimum spline shaft life, Vescor recommends full shaft engagement in the coupling hub. (see Fig 2.) Caution: If only partial spline shaft engagement is used, tightening of the special Centaloc spline locking feature set screw over the unused section of

the spline bore will result in damage to the hub. Before tightening the Centaloc set screws, check to see if the spline shaft is engaged under the set screws. Then tighten the Centaloc set screws to the recommended torque shown below. If only one of the two Centaloc set screws is used because of limited shaft engagement, please remove the unused set screw. (see Fig. 3)

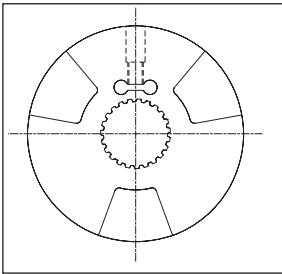


Figure 1

Spline Bore with Centaloc spline locking feature

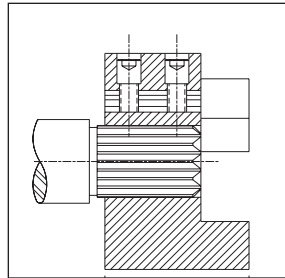


Figure 2

Recommended for spline engagement with Centaloc locking feature

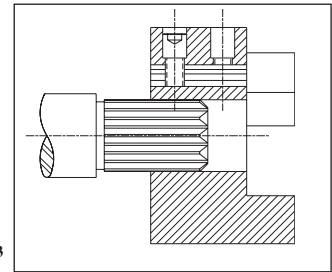


Figure 3

Remove second Centaloc set screw if not used

Flexible Couplings with splined shafts for Fluid Power Applications

Minimum Equipment Separations

| Coupling Size | C | Min-Shaft Separation* |
|---------------|-------|-----------------------|
| L035 | 9/32 | 9/32 |
| L050 | 15/32 | 1/8 |
| L070 | 1/2 | 1/8 |
| L075 | 1/2 | 1/8 |
| L090 | 1/2 | 1/8 |
| L095 | 1/2 | 1/8 |
| L099 | 3/4 | 1/8 |
| L100 | 3/4 | 1/8 |
| L110 | 7/8 | 1/8 |
| L150 | 1 | 1/8 |
| L190 | 1 | 1/8 |
| L225 | 1 | 1/8 |
| L276 | 1 5/8 | 1/8 |
| C226 | 1 1/2 | 1/8 |
| C276 | 1 5/8 | 1/8 |
| C280 | 1 5/8 | 1/8 |
| C285 | 1 5/8 | 1/8 |

Spline Bore Centaloc Set Screw Torque

| Coupling Size | Set Screw Size | Torque ft.-lb. |
|---------------|----------------|----------------|
| L090 | 5/16-18UNC | 13 |
| L095 | 5/16-18UNC | 13 |
| L099 | 5/16-18UNC | 13 |
| L100 | 5/16-18UNC | 13 |
| L110 | 3/8-16UNC | 23 |
| L150 | 3/8-16UNC | 23 |
| L190 | 5/8-11UNC | 100 |
| L225 | 5/8-11UNC | 100 |
| L276 | * | * |
| C226 | * | * |
| C280 | * | * |

*Consult Engineering. Items shipped are marked with appropriate torque values.

Straight Bore & Keyway Set Screw Torque

| Coupling Size | Set Screw Size | Torque ft.-lb. |
|---------------|----------------|----------------|
| L035 | 6-32 | 10 |
| L050-L090 | 1/4-20 | 80 |
| L095-L100 | 5/16-18 | 160 |
| L110-L150 | 3/8-16 | 275 |
| L190-L276 | 1/2-13 | 600 |
| C225 | 1/2-13 | 600 |
| C280 | 1/2-13 | 600 |
| C285 | 5/8-11 | 1200 |

Misalignment Data

| Type of Spider | Angular | Parallel |
|----------------|---------|----------|
| NBR (SOX) | 1° | .015 |
| Hytrel | 1/2° | .015 |
| Urethane | 1° | .015 |

Note: *indicates that the min. shaft separation is based on Open Center or Snap Wrap Spiders or Style 3 couplings.