



**DODGE[®] COUPLINGS
& MECHANICAL SOFT STARTS**

BALDOR
DODGE



RANGE PARA-FLEX® PX-50

DODGE® COUPLING SOLUTION

THE DODGE COUPLING FAMILY

Uniquely engineered to dampen torsional vibration, handle unavoidable misalignment, and resist catastrophic failure

Continuing our long-standing tradition of developing products that improve the performance and total cost efficiency of our customers' operations, we are proud to offer a complete family of DODGE® couplings.

Exclusive to Baldor Electric Company and our DODGE brand, these couplings include product features and performance capabilities that increase bore size, improve torque capacity, speed installation, reduce maintenance, and lower the total cost of ownership.

No other manufacturer can offer you the variety of coupling designs, sizes, and options we can. Nor can

any other supplier provide you with the knowledge and experience we have gained from 100-plus years of application expertise. We were the first to develop the industry's only elastomeric shear-type coupling—the original DODGE PARA-FLEX®—and we remain the only resource today who can offer you a five-year limited warranty on couplings in the elastomeric family.

With DODGE and Baldor Electric Company, you get elastomeric or metallic coupling solutions you can trust from a time-tested supplier. With their built-in ability to solve problems, DODGE couplings can withstand the toughest applications and processes, performing reliably and efficiently long after other couplings have failed.



DODGE COUPLINGS - ENGINEERED FOR SUCCESS

DODGE PARA-FLEX G-SERIES COUPLINGS

SUPERIOR TECHNOLOGY IN A SMALLER, MORE COST-EFFECTIVE PACKAGE

PARA-FLEX G-Series couplings are the most technologically advanced products in the DODGE coupling family. These unique couplings combine all the advantages of our standard PARA-FLEX, offering dependable performance, fast installation, and less maintenance with the benefits of a smaller, cost-effective coupling built on superior technology.

AVAILABLE IN GREATER FINISHED BORE, GREATER TAPER-LOCK, AND GRIP TIGHT STYLES

This versatile product line is available in three different styles of shaft attachment in order to meet the specifications of your application, providing you with the product solution required to fulfill your needs.

PRE-ASSEMBLED FLANGES

The G-Series flanges come pre-assembled with fewer parts and no flange bolts. The flange bolts have been replaced by an element locking nut that provides fast, easy element replacement, without the hassle of broken, lost, or improperly installed bolts. This offers true time savings in installation and maintenance.

LARGER BORE SIZES AND HIGHER TORQUE CAPACITY

Compared to other elastomeric couplings, the technology of this design provides larger bores and higher torque capacity, enabling you to downsize to a dimensionally smaller coupling to perform the same functions you've previously gotten from larger couplings. This means you realize significant favorable impact to your cost per-piece and inventory requirements.

RELIABLE MECHANICAL GRIP WITH THE ELEMENT LOCKING NUT

The element locking nut provides a 360° concentric mechanical clamping of the PARA-FLEX element, allowing for the increased torque ratings and larger bore sizes.

GRIP TIGHT KEYLESS BUSHING SYSTEM

In addition to TAPER-LOCK and finished bore, the G-Series design is available in our GRIP TIGHT version, utilizing our patent-pending keyless bushing design to provide 360° concentric grip on the shaft for better balance and reduced vibration. With this design, there is no need for shaft keys or keyways, providing quick and easy installation on even commercial grade shafting. The concentric grip on the shaft also eliminates shaft damage from set-screw marks and fretting corrosion.



DODGE STANDARD PARA-FLEX COUPLINGS

FINISHED BORE COUPLINGS

The finished bore flange design allows you to downsize your coupling selection for greater cost savings. Plus, with its built-in, factory assembled features, the FBX design ensures long service life, eliminates loose parts, and reduces maintenance requirements.

TAPER-LOCK COUPLINGS

The TAPER-LOCK flange design uses standard TAPER-LOCK bushings and accommodates a wide range of bore sizes. Quick, easy installation and removal with minimal shaft damage help reduce maintenance time and costs.

BORED-TO-SIZE (BBS) AND MILL MOTOR TAPER (TBS) COUPLINGS

These steel flange assemblies are designed to accommodate larger bore sizes than TAPER-LOCK style couplings, while still providing the industry-leading misalignment capabilities. The TBS style is designed to fit ANSI 600 or 800 Series mill motors. And both BBS and TBS model couplings are available in a piloted design for use in floating shaft applications.



HIGH SPEED PARA-FLEX AND FLYWHEEL PARA-FLEX COUPLINGS

These performance-proven couplings are designed for applications with speeds up to 6000 RPM. They work with almost any power source, including internal combustion engines, and can accommodate angular misalignment up to 1°, parallel misalignment up to 1/16", and end float of 3/32".

PRE-ASSEMBLED SPACER FLANGES

The coupling's factory-assembled spacer center drops in and drops out for easy installation and removal. The spacer design accommodates a wide range of between-shaft-end lengths for greater versatility.

DODGE PARA-FLEX Couplings will accommodate up to 11" bores and 453,000 in. lbs. of torque.

DODGE PARA-FLEX ELEMENTS

SUPERIOR DESIGN PROVIDES ADVANTAGES OVER OTHER RUBBER OR POLYURETHANE ELEMENTS

DODGE PARA-FLEX elements are manufactured with reinforced fabric tension cords throughout the center of the rubber, with uniform and centered beads at the edge of the rubber element. This helps to prevent tire pull-out from the flanges, provides increased reliability, limits untimely catastrophic failures and provides replacement warning signs. Additionally, DODGE PARA-FLEX elements are reinforced at the split to limit wear.

TORSIONALLY SOFT RUBBER PROTECTS CONNECTED EQUIPMENT

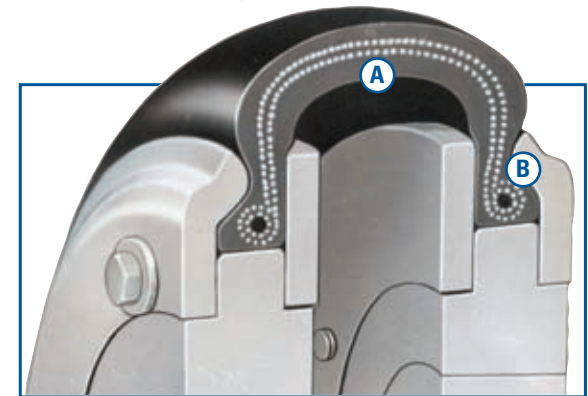
The flexible design of the DODGE PARA-FLEX element is crucial in preventing damage to connected equipment in harsh-running environments. The torsional softness is instrumental in dampening vibrations and absorbing shock loads to the system, and it also requires less service factor than stiffer elements.

INDUSTRY LEADING MISALIGNMENT CAPABILITIES

DODGE PARA-FLEX elements provide accommodation of shaft misalignment during installation, running-time, and replacement better than other elastomeric elements. With an industry-leading combined 4° angular, 1/8" parallel, and 5/16" end-float capability, you can be sure that PARA-FLEX couplings will perform in harsh environments, reducing valuable time needed for installation and maintenance.

LARGE INSTALLED BASE

With over 50 years of history and development, DODGE PARA-FLEX elements have the experience of providing reliable solutions in a wide range of industries and applications. DODGE PARA-FLEX Couplings carry an industry-leading 5-Year Limited Warranty.



- A** Fabric centered throughout rubber increases tire life.
- B** Uniformed and centered beads prevent tire from pulling out of flange.

DODGE COUPLINGS - ENGINEERED FOR SUCCESS

D-FLEX™ ELASTOMERIC SLEEVE COUPLINGS

FOUR-WAY FLEXING ACTION HANDLES SHOCK, VIBRATION, AND MISALIGNMENT

The DODGE D-FLEX™ coupling features molded, non-lubricated, interchangeable elastomeric sleeves of EPDM, Neoprene, or Hytrel. Its four-way flexing action accommodates torsional, angular, and parallel misalignment, as well as axial end float. Plus, it has a torque capacity up to 72,480 in.-lbs. and horsepower range up to 2,000 HP at 1800 RPM.

TYPE J COUPLING

Offered in four sizes, the cost-saving Type J coupling features die-cast flanges that are bored to size with two setscrews for optimum attachment to the shaft. It accommodates applications through 10 HP at 1750 RPM and is available with EPDM or Neoprene sleeves.

TYPE S COUPLING

The Type S coupling features high-strength, cast-iron flanges that are bored to size for a clearance fit and balanced to AGMA 9 Standards. With one setscrew over the keyway and the other at 65°, D-FLEX S flanges provide optimum shaft attachment. Type S couplings are offered with EPDM, Neoprene, or Hytrel sleeves.

TYPE B COUPLING

Constructed of high-strength cast iron and utilizing QD bushings for shaft attachments, Type B couplings are available for use with EPDM or Neoprene sleeves.

TYPE SC COUPLING

Dynamically balanced to AGMA Class 9 Standards, the Type SC spacer coupling accommodates a wide range of shaft spacing. It features a drop-out center for easy equipment maintenance, and uses H and HS shaft hubs (bored to size for a slip fit or with plain bore for reborring), as well as hub flats for a stationary hold while loosening or tightening.



D-FLEX COUPLING SPECIFICATIONS

Sizes: 3 to 16

Bore Range: .375" to 6"

O.D. Range: 2.06" to 18.88"

Misalignment Capability*:

- .125° to 1° angular
- 0.01" to 0.062" parallel
- 0.03" to .125" axial

** Depending on size and design*

DODGE GRID-LIGN™ COUPLINGS

COMPACT IN SIZE, YET HIGH IN TORQUE CAPABILITY

DODGE GRID-LIGN couplings are available in a variety of sizes in standard and spacer styles. Every coupling features two steel shaft hubs, a tapered grid element, two seals and a cover assembly. Its versatile design allows for a motor or reducer output speed connection, and its speed capability ranges up to 6,000 RPM. DODGE GRID-LIGN is also available in a spacer design up to size 1090.

FLEXIBLE TAPERED ELEMENT

The DODGE GRID-LIGN coupling's tapered grid element is engineered with high-strength, spring steel that is quenched and tempered. This helps isolate vibration and cushions shock loads. In addition, it allows uniform contact during light, normal, and shock-loading conditions for long machine life.

HIGH TORQUE CAPABILITY

Torque capabilities on the DODGE GRID-LIGN coupling range up to 1.65 million in-lbs.

INTERCHANGEABLE CONFIGURATIONS

Its configurations, which include the standard full-flex design in vertically or horizontally split covers, half spacers, and full spacers, are interchangeable with other taper-grid style couplings size-for-size.

TAPERED GRID DESIGN

The coupling's compact tapered grid design utilizes the tapered grid element and the contoured hub grooves to transmit torque efficiently, while also accommodating misalignment and cushioning shock loads.

GRID-LIGN COUPLING SPECIFICATIONS

Sizes: 1020T to 1200T

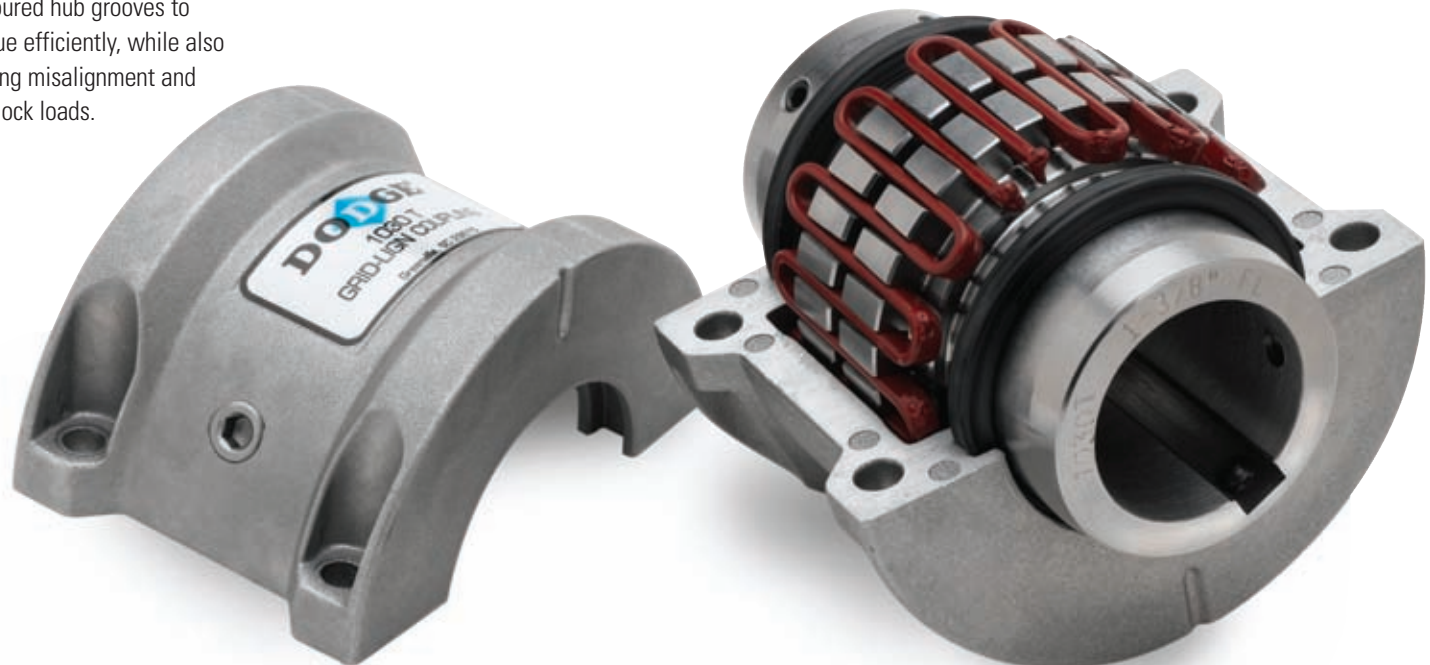
Bore Range: 1.125" to 13"

O.D. Range: 3.47" to 30"

Misalignment Capability*:

- .5° angular
- 0.012" parallel
- 0.375" end float

** Depending on size and design*



DODGE COUPLINGS - ENGINEERED FOR SUCCESS

DODGE GEAR COUPLINGS

THE MOST POWER-DENSE COUPLING DODGE OFFERS

Engineered for improved operation, the DODGE gear coupling is manufactured with high-quality forged steel for longer service life, and features a high torque rating for efficient downsizing.

EXCELLENT TORQUE/SPEED RATINGS

Capable of transmitting high torque at high speeds, the DODGE Gear coupling is designed with two flanged sleeves that are bolted together. Each sleeve contains internal gear teeth that transmit torque when meshed with each hub's external gear teeth.

SUPERIOR SEALING SYSTEM

Machined flanges offer improved sealing, and the coupling's reliable O-ring seal design provides an effective barrier against contaminants. Unlike competitive gear couplings, which use paper gaskets that could become dry or damaged over time, sealing compound is included with every DODGE Gear coupling.

VERSATILE DESIGN

Its versatile, modular system design is half-for-half interchangeable with all standard gear couplings. Plus, the DODGE Gear coupling's high torque rating allows for downsizing, while its versatile design permits interchangeable half couplings.

LARGEST BORE CAPACITY IN INDUSTRY

The DODGE Gear coupling also offers the largest bore capacity in the industry in most sizes. It's well suited for reversing applications and can be combined with any DODGE speed reducer to achieve a tailored package for maximum results.

GEAR COUPLING SPECIFICATIONS

Sizes: 1.0 to 7.0

Bore Range: 0.438" to 11.25"

O.D. Range: 4.5625" to 20.75"

Misalignment Capability*:

- .75° to 1.5° angular

** Depending on size and design*



CHAIN COUPLINGS

COST-EFFECTIVE, VERSATILE SOLUTIONS FOR PAIRING TWO SHAFTS

DODGE provides a broad line of chain couplings with TAPER-LOCK bushed hubs, finished bore, or reboreable flanges. Interchangeable with industry-standard dimensions, these couplings offer a simple, widely accepted, and inexpensive way to couple two shafts. Their compact design features all metallic components and helps provide excellent torque-to-bore capacity.

BROAD PRODUCT LINE

DODGE chain couplings are stocked in six popular TAPER-LOCK coupling sizes and 12 straight bore sizes. Horsepower ratings range from 10 HP up to 1800 HP.

HIGH-TORQUE CAPABILITY

These compact couplings transmit torque through two hubs with hardened sprocket teeth and an ANSI-standard, double-width roller chain. The chain is wrapped around the sprocket and connected with a link or pin for easy installation and removal.

SHAFT ATTACHMENT FLEXIBILITY

Chain coupling hubs offer a variety of shaft attachment methods, including clearance fit, interference fit, or TAPER-LOCK bushings. TAPER-LOCK and interference fits are supplied with an industry-standard keyway, while clearance fits feature one setscrew over the keyway.

ALUMINUM COVERS FOR ADDED PROTECTION AND EXTENDED SERVICE LIFE

If your chain couplings are operating under abrasive or moist conditions, or if they exceed recommended RPM speeds, DODGE offers aluminum covers with elastomeric seals. These seals contain lubricant and help protect the chain and teeth from premature wear.

CHAIN COUPLING SPECIFICATIONS

Sizes: 4012 to 12020

Bore Range: 0.5" to 4.6875"

O.D. Range: 2.41" to 12.25"

Misalignment Capability*:

- 2° angular
- 0.015" parallel
- 0.3" axial

** Depending on size and design*



OTHER DODGE COUPLINGS & SOFT STARTS

DODGE POWERPLUS™ ELASTOMERIC COMPRESSION COUPLINGS

COST-SAVING ALTERNATIVE TO METALLIC-STYLE COUPLINGS

The DODGE POWERPLUS™ coupling offers a combination of some of the best features of metallic and elastomeric style couplings in a cost-effective solution. Even at critical speeds, this elastomeric coupling helps driven equipment run more efficiently with less vibration. The dampening effect of its natural rubber insert protects against shock load, and its simple, non-lubricated design makes it versatile and easy to maintain.

MORE TORQUE TRANSMISSION PER DOLLAR THAN COMPETITIVE PRODUCTS

Not only can the DODGE POWERPLUS coupling perform at high speeds (up to 1900 HP at 1800 RPMs), but it has a torque range up to 146,000 in-lbs and bore sizes of 0.75" to 5.71". Additionally, the compact size of this coupling, relative to its capability for large torque transmission, makes it ideal for a variety of space-limited applications.

NO LUBRICATION

Unlike most metallic style couplings, the DODGE POWERPLUS coupling uses hardened synthetic rubber elements for torque transmission. This feature eliminates the need for time-consuming lubrication.



POWERPLUS COUPLING SPECIFICATIONS

Sizes: 58 to 480
Bore Range: 0.75" to 5.71"
O.D. Range: 58mm to 480mm

POLY-DISC™ COUPLINGS

This "captured-pin-type" flexible coupling features a molded polyurethane disc that helps cushion shock loads. Its proven design reduces hole elongation and pin wear; accommodates 2° angular misalignment and 1/32" parallel misalignment; and assures a smoother, quieter operation. It requires no lubrication and no periodic maintenance. Plus, with no metal-to-metal contact, the POLY-DISC coupling ensures clean, trouble-free performance. Both flanges on the POLY-DISC coupling are machined all over and taper bored for TAPER-LOCK bushings.

POLY-DISC COUPLING SPECIFICATIONS

Sizes: 2.625 to 10
Bore Range: 0.5" to 3.25"
O.D. Range: 2.63" to 10"
Misalignment Capability:

- 2° angular
- .03125" parallel
- .03125" end float



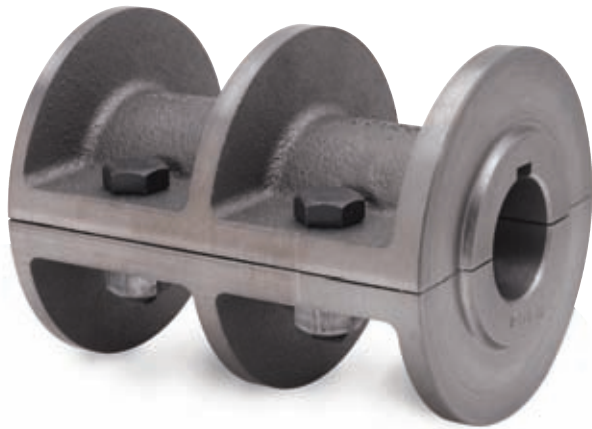
TAPER-LOCK RIGID COUPLINGS

The DODGE TAPER-LOCK RIGID coupling is machined all over for good inherent balance. Capable of operating at speeds up to 4965 RPM, it connects shafts of different diameters and requires no maintenance.

TAPER-LOCK RIGID COUPLING SPECIFICATIONS

Sizes: R16 to R60
Bore Range: 0.5" to 6"
O.D. Range: 5" to 20"





RIBBED COUPLINGS

With rated load capacities of ANSI 1018 and operating speeds up to 5360 RPM, the DODGE Ribbed coupling can be clamp fit onto shafts of equal diameter with a full-length key.

RIBBED RIGID COUPLING SPECIFICATIONS

Sizes: 1 to 7

Bore Range: 1" to 7"

O.D. Range: 3.625" to 15.5"



DODGE FLUID COUPLINGS

DODGE FLUID Couplings are fixed fill mechanical soft start devices which utilize hydrokinetic energy to transmit torque via a system of impellers. The input impeller functions as a centrifugal pump and hydraulic turbine, so that when the input drive moves, it imparts kinetic energy to the oil which is distributed in the housing engaging the outer impeller, transmitting torque.

The advantage of using a FLUID Coupling is that the driver starts under "no load", resulting in smooth operation and a reduction of amp draw from the motor. Since there is no physical connection inside the housing, the FLUID Coupling has built-in overload protection and inherent torsional vibration absorption. Additionally, load balancing is possible with the use of asynchronous motors, instead of custom motors, since the FLUID Couplings automatically adjust to load speed.

FLUID Couplings are ideal for remote locations since they do not require their own power supply or programming.



DODGE FLEXIDYNE®

The DODGE FLEXIDYNE is a mechanical soft start device providing smooth, controlled acceleration with reduced current draw from the motor. FLEXIDYNE is available for use in belted-duty or direct drive applications, utilizing either HIGH SPEED PARA FLEX or POLY-DISC couplings, for increased versatility.

FLEXIDYNE operates at 100% efficiency, using centrifugal forces which cause the flow charge to be distributed throughout the housing, engaging the internal rotor and thus moving the driven load.

The result is the equivalent of a "no load" start on the motor, meaning that the initial amp draw is significantly lower. Additional advantages of the DODGE FLEXIDYNE are that the motor can be sized based upon running torque of the application, instead of start up torque, and equipment life is prolonged as a result of decreased wear and tear.

Since the FLEXIDYNE is a mechanical device, it does not require an additional power supply or programming, making it ideal for remote locations.



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