

REFERENCE GUIDE



D-FLEX Couplings

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- Low-cost Type J couplings offered in four sizes
- Type S couplings feature AGMA 9 balanced flanges off the shelf
- Type B couplings offered with standard QD bushing shaft attachment
- Type SC spacer couplings satisfy standard spacing requirements for pump
- Rounded EPDM and Neoprene elements for improved fit and longer
- AGMA 9 balance on S and SC flanges for reduced vibration



Applications

- Interchangeable components make installation quick, easy
- No lubrication assures trouble-free operation

PARA-FLEX Couplings

Page PT1-14

- Torque transmitted through composite element system
- Finished-bore and TAPER-LOCK® flange designs
- Five-year limited warranty
- No lubrication and visual inspection reduces maintenance time
- Accommodates highest misalignment of any coupling in the industry
 - 4° angular
 - 1/8" parallel
 - 5/16" end float



GRID-LIGN Couplings

Page PT1-42

- Flexible tapered element isolates vibration and cushions shock loads
- High-torque capability
- Interchangeability with other taper grid couplings
- Speed capability as high as 6000 RPM
- Tapered grid design



Gear Couplings

Page PT1-52

- High-quality forged steel
- Largest tooth profile provides additional service factor
- Largest bore capacity in the industry, in most sizes
- Proven "O"-ring seal design
- Machined flanges for improved sealing
- High-grade fasteners
- High-torque rating allows for coupling downsizing
- Crowned tooth profile for longer life and improved performance
- Interchangeable with industry-standard gear couplings half for half



Chain Couplings

Page PT1-57

- Simple, widely accepted, inexpensive way to couple two shafts
- Interchangeable with industry-standard dimensions
- Can be provided with TAPER-LOCK bushed hubs, finished bore, or reboreable flanges
- Covers and assemblies available from stock
- Shaft attachment flexibility
- High-torque capability
- Compact design
- Low operating cost
- Broad product line



Fluid Couplings

Page PT4-1

- Motor starts under no-load conditions
- Starting torque can be customized easily
- Permits use of standard NEMA design B motors
- Reduced voltage starters not needed
- Sizes 7 to 24 KSD with standard QD mounting sheave style
- Sizes 7 to 19 KSD use collect mounting for a wide range of
- KCP and CKCP mountings may require tapped motor shaft
- Available in standard and delay fill for increased control
- Optional fuse plug for overload protection
- Contact DODGE for non-standard sheaves



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Rigid Coupling

Page PT 1-65

- Metallic Coupling
- Requires no lubrication
- Taper-Lock Bushing allows for connection of two different shaft sizes
- 8 Flange Sizes thru 6" Bore
- Torque up to 254,500 in. lbs.
- Max RPM = 4965



Ribbed Rigid Coupling

Page PT1-66

- Metallic Coupling
- Requires no lubrication
- Clearance Fit with Full Length Key
- Same shaft size required on both sides
- 34 Sizes thru 7" Bore
- Torque up to 404,000 in. lbs.
- Max RPM = 5360



Poly-Disc Coupling

Page PT1-63

- Requires no lubrication
- Taper-Lock Bushing allows for connection of two different shaft sizes
- Polyurethane Element
- Pin design cushions Shock Loads
- Excellent for Washdown Applications
- Wide Temperature Range (-90 to 170 Deg F)
- Misalignment = 2 deg.Angular, 1/32 in. parallel



FLEXIDYNE Couplings

Page PT3-1

- Motor starts under no-load conditions
- Permits use of STD NEMA-B motor
- Coupling or drive styles available
- 100% efficient, no slippage
- Can provide overload protection by slipping at loads somewhat greater than pre-set starting torque



Heavy Duty Drum Pulley

Assemblies

Page PT13-10

- Standard, stock pulley assemblies fit CEMA dimensions and exceed the CEMA application standards for use with conveyor belts rated up to 750 PIW/131 kN/m
- 14° taper bushings with the lowest installation stress of any taper bushing shaft mounting system for two hub pulley applications
- Up to 1" vulcanized 45, 60, and 70 durometer SBR and 45, 60, and 70 durometer Neoprene rubber lagged with plain and groove surfaces
- Vulcanized 60 durometer D-Lag with +73% more abrasion resistance than 60 durometer SBR
- Drums either center crowned or straight face



Heavy Duty Wing Pulley

Assemblies

Page PT13-22

- Standard, stock pulley assemblies fit CEMA dimensions and exceed the CEMA application standards for use with conveyor belts rated up to 350 PIW/61 kN/m
- 14° taper bushings with the lowest installation stress of any taper bushing shaft mounting system for two hub pulley applications
- Slide-on 92 durometer urethane wing lagging 1/2" thick or 45, 60, and 70 durometer SBR, vulcanized directly to contact bars. Also weld-on strips with 45 and 60 durometer with prebonded SBR rubber lagging



MINE DUTY EXTRA

Wing Pulley Assemblies

Page PT13-28

- Made to order based on conveyor load, belt tension, and belt wrap
- Designed for use with DODGE Mine Duty EXTRA drum pulleys
- One-piece integral hubs eliminate welded hub heat-affected zones (HAZ)
- 14° taper bushings with the lowest installation stress of any taper bushing shaft mounting system for two hub pulley applications
- Rugged wing-on-drum construction incorporating 2" x 3/4" thick contact bars, 3/8" thick wings, and 3/8" thick spacers
- Up to 1/2" vulcanized 45, 60, and 70 durometer SBR and 45, 60, and 70 Neoprene rubber lagging on contact bars
- Vulcanized 60 durometer D-Lag with +73% more abrasion resistance than 60 durometer SBR



REFERENCE GUIDE



MINE DUTY EXTRA Drum Pulley Assemblies Page PT13-28

- One-piece integral hubs eliminate welded hub heat-affected zones (HAZ)
- 14° taper bushings with the lowest installation stress of any taper bushing shaft mounting system for two hub pulley applications
- 360° welding of internal center disc
- Up to 1" vulcanized 45, 60, and 70 durometer SBR and 45, 60, and 70 durometer Neoprene rubber lagged with plain and groove surfaces
- Vulcanized 60 durometer D-Lag with +73% more abrasion resistance than 60 durometer SBR
- Drums either center crowned or straight face



Engineered Drum Pulley Assemblies Page PT13-30

- Made to order based upon conveyor load, belt tension, belt wrap angles, and bearing centers
- Supplied for belt ratings up to and exceeding 8000 PIW or 1400 kN/m
- Welded, integral, and "T" section super hub versions minimize the harmful effects of weld heat-affected zones (HAZ)
- 14° taper bushings with the lowest installation stress of any taper bushing shaft mounting system for two hub pulley applications up to 12" shaft diameter
- B-LOK keyless locking devices for shafts from 11" to 30" diameter



Weld-On Hubs Page PT6-12

- Full line of TAPER-LOCK and QD available
- Steel material with rugged, compact designs
- Hubs to accommodate most bushing sizes
- Made-to-order capabilities—special construction and materials



Bushings Page PT6-1

- Full line of TAPER-LOCK and QD available
- Stock sizes available up to 12" shaft diameter
- Material: sintered steel, cast iron, ductile iron, and stainless steel
- Easy installation and demounting
- Inch and metric bores



V-Belt Sheaves Page PT7-27

- Full line of TAPER-LOCK and QD available
- Classical (A, B, and C) and D-V Wedge style (3V, 5V, and 8V) groove profiles
- Stock sizes from one to 12 grooves and 2.65" to 71" in diameter
- Manufactured to MPTA standards
- MTO capabilities—material, construction, BTS, etc.
- Computer drive selection available



V-Belts Page PT7-28

- Full range of Classical (A, B, and C) and D-V Wedge (3V, 5V, and 8V) belts
- Manufactured to RMA standards
- Poly-band, Double-V (hex), and FHP belts available
- Lengths from 22" to 660"
- Drive capability from 1 HP to over 1000 HP



FHP Belt Drives Page PT8-10

- Full range of FHP belts available
- Finished-bore and "QT" bushed style sheaves available
- "QT" bushings available in metric bores
- Cast iron and manufactured to MPTA standards
- Sheave outside diameter range: 1-1/2" to 19-3/4"
- Variable pitch sheaves available
- Computer drive selection available



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Roller Chain Drives

Page PT12-2

- Sprockets manufactured to ANSI standard
- TAPER-LOCK sprockets: #35 (3/8" pitch) to #160 (2" pitch)
- Double-strand, double-single, and re-boreable sprockets also available
- Special machining and re-bore capabilities
- Accessories available: chain casings, idlers, tensioners, etc.
- Hardened teeth up to 25 teeth on #40 through #160 sprockets
- Chain tools available



HT Synchronous (Timing) Belt Drives

Page PT11-2

- Full line of TAPER-LOCK, QD, and minimum plain bore sprockets
- Higher capacity drives
- Available pitches: HT series, 5 mm, 8 mm, and 14 mm
- Made-to-order sprocket capabilities: construction, non-standard number of teeth, etc.
- HT200 belt profiles
- Computer drive selection available



D-Series Motor Brakes

Page PT2-6

- Exceptionally long-life friction material
- Internally rectified DC coil provides quieter operation
- Easy installation and external adjustment
- One moving part, reduces replacement parts
- Smooth stopping action
- Splined hub for superior load distribution
- Manual release



Clutch/Brake Modules

Page PT2-12

- Conforms to UL and CSA requirements
- One-piece, die-cast housing simplifies mounting; housing finned for maximum heat dissipation
- Pre-lubricated and sealed ball bearings have higher B10 life rating than competitive modules
- High-torque, non-asbestos friction material assures long life and environmental safety
- Armatures incorporate a high-impact, high-temperature molded spline for heavy-torque and high-cycle capabilities
- DYNA-GAP automatic air gap mechanism automatically compensates for friction surface wear
- Modules are factory assembled, adjusted, and burnished for easy installation and out-of-the-box operation
- Rotor incorporates ball bearing and Driv-Lok key for foolproof installation
- Standard NEMA C-face and base mounted, shaft-in/shaft-out mounting configurations



Torque Tamer Clutch

Page PT2-19

- Low cost overload protection
- Easy Set Adjustment = Adjustable slip-protection torque level
- Non asbestos friction discs
- Long Life Bushing
- Application Versatility: May be used with sprockets, gears, sheave, flange or other driven members.



Shaft Mounted Clutches & Brakes

Page PT2-19

- Bore to Size and Taper Lock Bushings
- Voltage Input = 90, 24 and 6 VDC
- Static Torque Range: 22 lb-ft thru 175 lb-ft
- Factory Assembled, Adjusted, Burnished
- Dyna-Gap Self Adjusting Mechanism
- Heavy Duty Spline Driven Armature

