



# PRODUCT INFORMATION



## FENNER® V-BELTS AND WEDGE BELTS

Not all belts are the same. Fenner® belts are made to exacting specifications and have set the standard in technical development in the toughest applications in the field today.



### Vee and Wedge Belts

The standard setting range high power, high ratio drives to standard run of the mill drives.



### Synchronous Belts

State of the art, integrated range for compact long life drives.



## FENNER® VEE BELTS AND WEDGE BELTS

Wedge Belts and Vee Belts offer a versatile and economical low maintenance drive which is standardised throughout the world.

- State of the art design and manufacture reflected in Power Ratings Optimised drives for compact size, economy or extended life.
- Fenner® PB (Precision Built) belts, no belt matching required
- PB-the only belt in the world to offer: - "one-shot tensioning". The "Fit and Forget" belt. Minimum stretch, no coding required. On all belts up to 12500mm pitch length.
- Fullest range of International Standard lengths available.
- All Wedge Belts and Vee Belts have superior anti static, heat and oil resistant properties which exceeds the new industry anti ignition standards

Fully approved by all international standards.

BS 3790 (British Standard)

ISO4184 (International Standards Organisation)

RMA IP22 (Wedge) (Rubber Manufacturers of America)

RMA IP20 (Classical)

API (American Petroleum Institute)

NCB244/1961 (National Coal Board - for FRAS Belts)

DIN 7753 (Wedge) (German Standard)

DIN 2215 (Classical)

**Fenner Classic**

**Fenner CRE PLUS**

**Fenner PolyDrive**

**Fenner Power PLUS**

**Fenner Concord**

**Fenner Quattro PLUS**

**PowerTwist Plus**  
V-BELT



## FENNER® SYNCHRONOUS BELTS

- Comprehensive range of belt styles
  - Original, cost effective timing belts
  - Curvilinear tooth high torque drive (HTD) belts
  - Premium Performance Torque Drive Plus 3 belts
- Absolute drive synchronism - no slippage
- Stock sizes to suit all applications
- I.S.O. compliance
  - Timing belts to I.S.O. 5296
  - HTD belts to I.S.O. 13050
- Chloroprene rubber / glass fibre construction
  - Strength, durability, precision and length stability
- Torque Drive Plus 3 performance advantage
  - Highest power rating from belt construction
  - Compact drive package
  - Minimum backlash, for precise positioning
  - Ultra low noise levels
  - Runs on standard HTD pulleys

**Fenner HTD**

**Fenner Timing Belt**

**Fenner Torque Drive PLUS™**



## FRICTION PULLEYS AND SYNCHRONOUS PULLEYS

- Manufacture to exacting specifications.
- High grade, close grain grey iron is used for construction (GG25).
  - Tolerates shock loading.
  - Allows rim speeds up to 40 m/s (8000 feet/min).
- Statically balanced to exceed grade G 6.3 (ISO 1940). N.B. Use a TaperLock™ 4 hole bush to improve balance where critical.
- Pulleys are blackened.
  - Reduce corrosion.
  - Acts as ideal primer.
  - Removes the need for cleaning coating agents prior to installation.

### FRICTION PULLEYS

- Universal Dual Duty design (ISO 4183).
- Accept both Wedge and 'Vee' belts.
- Consistent and high grade of accuracy, e.g. groove wobble tolerance exceeds DIN 2211 part 1 requirements.
- Special designs and sizes are available.

### SYNCHRONOUS PULLEYS

- Available in both Classical Timing & HTD.
- Precision machined grooves protect and maximise belt life while reducing noise emissions.
- Special designs and sizes are available.



## **FENNER® ADVANCED CHAIN TECHNOLOGY (FACT)**

Roller Chain technology has evolved over the centuries, with new design features and production processes, Fenner® roller chain is a product of this technology.

### **INCREASED FATIGUE RESISTANCE**

- Shot peening of roller and side plates gives increased fatigue resistance
- Ball swaged side plate holes improve finish and combat fatigue failure
- Deep waisted side plates increase effective cross section lowering fatigue

### **INCREASED WEAR LIFE**

- Case hardened pins extend wear life
- Solid rollers evenly distribute load and increase wear life
- Seam Oriented Bushes ensure seams are positioned away for bearing areas

### **FIT AND FORGET RELIABILITY**

- Preloaded to load in all component parts
- Final 100% quality check enabling you to simply fit and forget

### **COMPREHENSIVE RANGE**

- Extensive range of BS and ANSI chains with attachments available from stock
- Hollow Pin; Agricultural and Double Pitch chains all available to order
- Can be supplied "Cut to Length" or in "Boxed" Lengths
- Full range of TaperLock™ and Pilot Bored sprockets available from stock



## SPROCKETS

Fenner® sprockets are available with either TaperLock™ or pilot bored fixings and are precision manufactured from fine grade cast iron. Sprockets are available in simplex, duplex and triplex forms for sizes 05B to 20B.

- All Sprockets manufactured to exacting specifications.
- Fully machined 0.45% carbon steel (C45) or high grade, close grain grey iron (GG25) is used for construction.
  - Tolerates shock loading.
  - Extends sprocket life.
- Strict manufacturing tolerances match sprocket profiles to ISO R606 chain standards for a rolling action which significantly reduces sprocket tooth wear.
- Sprockets are blackened.
  - Reduce sprocket corrosion.
  - Acts as ideal primer.
  - Removes the need for cleaning coating agents prior to installation.
- Short-reach bushes on selected sizes - compact hubs.
- TaperLock™ and pilot bored sizes available from stock.
  - TaperLock™ mounting for quick and simple installation.
  - Boring and keywaying service available.
- Fenner® platewheels to suit BS chain in simplex, duplex and triplex forms for sizes 05B to 20B.
- Fully machined 0.45% carbon steel (C45) used for construction.

Sprockets are blackened.



## Fenner® TaperLock



Fenner® TaperLock™ four hole bush has been tried and tested in over 40 million applications. It is the most successful shaft fixing on the market place today with a full range of both metric and imperial sizes as well as a full range of weld-on hubs, bolt-on hubs and hub adaptors.

- Ease of installation and removal (on and off in 1 minute) - no skill required.
- Equivalent to a shrink-on fit when in uniform load applications and thus eliminates the cost of a key.
- No costly re-boring: full range of both metric and imperial bores available.
- Saves costs of precision machining shafts.
  - Accommodates wide shaft diameter limits +0.05mm (0.002") to 0.125mm (0.005").
- Full range of products to accept TaperLock™: -
- 'V' -Pulleys, Timing and HTD Pulleys, Sprockets, Shaft Couplings, Hubs and Adaptors.
- Avoids the use of Taper Keys.
- No protruding bolts, by using hexagon wrenches.
- No machining of standard shafts required.
- Compact range of Bushes, 3525, 4030, 4535, 5040, etc. for more compact drives.
- High grade, close grain grey iron (GG25) material.

- Tolerates shock loading.
- Spheroidal Graphite (S.G.) iron construction on some sizes to give increased maximum bores.
- Keys not required on light/medium duty applications.

#### **WELD-ON-HUBS**

- Manufactured from steel to provide a convenient means to secure fan rotors, steel pulleys, plate sprockets, impellers etc. to a shaft.
- Shouldered outer diameter allows for easy location.
- Taper bored to receive 4 hole TaperLock® bush.
  - Standard 4 hole bush has improved balance at higher speed.
- Range covers TaperLock™ sizes 1210 to 5040.

#### **BOLT-ON-HUBS**

- A convenient means to secure fan rotors, steel pulleys, plate sprockets, impellers etc. to a shaft.
- Taper bored to receive 4 hole TaperLock™ bush.
  - Standard 4 hole bush has improved balance at higher speed.
- Welding not necessary.
- Range covers TaperLock™ sizes 1210 to 3040.

#### **HUB ADAPTERS**

- For use with parallel bores eliminating the cost of drilling, tapping and taper-boring.
  - Taper bored to receive 4 hole Taper Lock bush.
  - Standard 4 hole bush has improved balance at higher speed.
- Range covers TaperLock™ sizes 1008 to 4040.
- Keyed version also available for heavy duty applications





## Trantorque GT



Trantorque GT keyless bushing is the ideal solution for high power or critical timing applications. It offers a mechanical shrink fit eliminating the problems of fretting corrosion, backlash and key wallowing.

- Locks and unlocks with the twist of just one nut.
- Precise radial and axial adjustment on shaft. Ideal for timing components.
- Trantorque GT is "self-centring" unlike other cone clamping units. It needs no location diameter in component to retain concentricity.
- Repair of damaged keyways. Just slip Tran Torque over damaged keyway to effect repair.
- Eliminates keyways thereby reducing shaft costs. Also allow smaller shafts as keyway does not weaken shaft.



## COUPLINGS - FENAFLEX



These highly elastic lubrication free couplings tolerate large amounts of misalignment in all planes as well as offering simple installation and inspection without disrupting the drive. The Fenaflex® coupling also has excellent shock absorbing properties while reducing vibration and torsional oscillations.

- Simple time saving installation - motor and machine remains undisturbed whilst tyre is changed.
- Large misalignment capability, 4° angular, up to 6mm parallel and 8mm axial.
- Very good shock absorption - couplings "wind-up" approx. 12° at maximum torque to absorb shocks in a system.
- Internal load carrying cords are wound in both directions, so there is no problem on reversing drives.
- Complete freedom from backlash, ideal for reversing applications, especially with geared drives.
- Excellent at solving torsional vibration problems, as alternative stiffness tyres are available.
- Tyres are available in standard and FRAS (Fire Resistant Anti-Static) construction - so no static build up of electricity and fire resistant.
- Compact design with TaperLock™ fixing and short length TaperLock™ bushes.

Larger T/L's available on certain 'F' flanges to increase maximum bore capacity.

- Also available in Spacer and Flywheel types.
- Lubrication free shaft coupling.
- Visual inspection of tyre to detect wear - no machine strip down.

- All Tyres are produced in the UK - Improved availability and consistent high quality.
- Wide variation of flanges available: TaperLock™, Pilot Bored, Spacer etc.
- Design Powers to 900kW at 1440 rpm



## JAW COUPLINGS



### FENNER® JAW COUPLINGS

Fenner® Jaw Couplings offer a low cost flexible solution for most applications. They absorb incidental misalignment, shock loads and small amplitude vibrations.

- TaperLock™ and Thro'bored flanges available from stock.
- Ease of alignment using straight edge and machined outside diameters.
- Fail-Safe shaft connection due to interacting dog design.
- Design powers to 475kW at 1440 rpm.
- Fire Resistant / Anti Static elements available from stock.



## HRC COUPLING



### FENNER® HRC COUPLINGS

Fenner® HRC is a semi-elastic general purpose coupling ideal for use on motor shafts. They permit quick easy installation by means of a TaperLock™ bush and offer quick alignment.

- HRC Couplings are the simplest and most straight forward method of connecting a drive.
- Ease of alignment and fitting using straight edge and machined outside diameters.
- Fail-Safe design due to interacting dog design.
- Accommodates incidental misalignment.
- Low cost to performance, when compared to other brand couplings.
- Power ratings are matched to standard motor sizes.
- Standard and Fire Resistant / Anti Static elements available from stock.
- Taper Lock and pilot bored flanges available from stock.

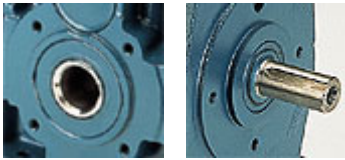


## MOTORS



The Fenner® LV industrial motor range is design to meet today's industrial requirements; quality, long life and value for money.

- Complete range from 0.18 to 315kw with 2, 4 and 6 poles.
- Aluminium and cast iron frames with B3 or B5 mounting.
- Energy efficient (EFF 2) performance.
- Stator uses high grade electrical steel.
- Surface cooled to IC 411 according to IEC 34-6.
- Manufactured to comply with all international standards.
- IP 55 protection with class F insulation and class B temperature rise.
- Full technical support.



## VARIABLE SPEED MOTOR



## FENNER® GT VARIABLE SPEED MOTOR

From small spiral bevel to the Economic Tempo coaxial geared motor, motorised or non-motorised, Fenner® has a solution.

The Fenner® GT Variable Speed Motor is a simple, cost effective integrated motor that can be fitted to any one of a wide range of gearheads.

Motor operation is simple with the large calibrated control knob providing precise speed control. Start, stop and reverse button options are available.

- Ideal for use with Fenner Series M, C, F & K geared motors
- 15 power outputs between 0.25 to 11 kW
- IP 65 protection, suitable for wet environments
- Simple to operate local control knob
- Built in vibration & humidity protection
- Electromagnetic compatibility without shielded cable
- Suitable for wet environments
- Minimum 200% starting torque



## ALUMINIUM WORM GEARBOXES - FENNER® W SERIES



## ALUMINIUM WORM GEARBOXES - FENNER SERIES W

The Fenner Series W is the ultimate light weight aluminum worm gearbox range.

Available in 11 sizes from 0.06kW to 11 kW with a wide range of sizes, ratios and output options it provides a dependable and cost effective drive solution for a wide range of applications.

The units use a patented modular light weight aluminum gear case, which combines rigidity with strength to ensure a long reliable working life.

Series W geared motors are available with a single stage worm reduction with ratios from 5:1 to 100:1. This range is extended to 300:1 with helical input gears, and up to 5000:1 by using worm gearboxes in combination.

- Modern modular lightweight patented gear case design
- Cast in feet
- Wide range of output hub bore options
- Dimensionally interchangeable with similar type products
- Worm and helical worm reductions
- Motorised or Reducer versions
- Universal Mounting
- Accepts Standard IEC motors
- Wide Range of accessories
- Hardened and ground worm
- ATEX certification available
- 11 sizes



## EURO MOUNTING



Exact dimensional interchangeability with other European makes is where the comparison stops!

In all other aspects the Fenner® Series K, M, C and F range are market leaders. Innovative design features allow for a wide ratio and size range build within 30 minutes from stock using standard motors.

### **SERIES K BEVEL HELICAL GEARED MOTOR**

- Highly efficient right angled drive
- Ratios from 8:1 to 160:1 available from stock
- Dimensionally interchangeable with other manufacturers
- Accepts standard IEC motors without modification
- ATEX certification available

### **SERIES M COAXIAL GEARED MOTOR**

- Highly efficient drive system
- Standard IEC motors
- Helical pre reduction enables a wide range of ratios



- Available in foot or flange mounting versions

#### **SERIES C RIGHT ANGLED GEARED MOTOR**

- Wide range of ratios
- Highly efficient drive from helical pre-reduction
- Innovative design
- Interchangeability with other manufactures

#### **SERIES F PARALLEL SPEED REDUCER**

- Highly efficient drive system
- Standard IEC motors
- Helical pre reduction enables a wide range of ratios
- Available in foot or flange mounting versions