



FLEXONIC®

INSTALLING THE FLEXONIC®

The **FleXonic®** belts can be installed on all standard Poly V® pulleys (ISO 9982 norm). In certain cases, smooth pulleys can be used.

Installing the **FleXonic®** can be done in record time.

Hutchinson offers a wide range of installation tools.

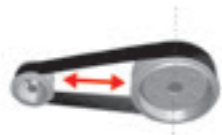
We can also work with you to develop a custom solution.

At the installation stage, Hutchinson's **Easytec** tension meter checks the tension of your belt and optimises the lifespan of your transmission.



Various installation methods are possible:

Possible to vary center distance



Installation with center distance adjustment.



Installation with an eccentric pulley adjustment.

Fixed center distance

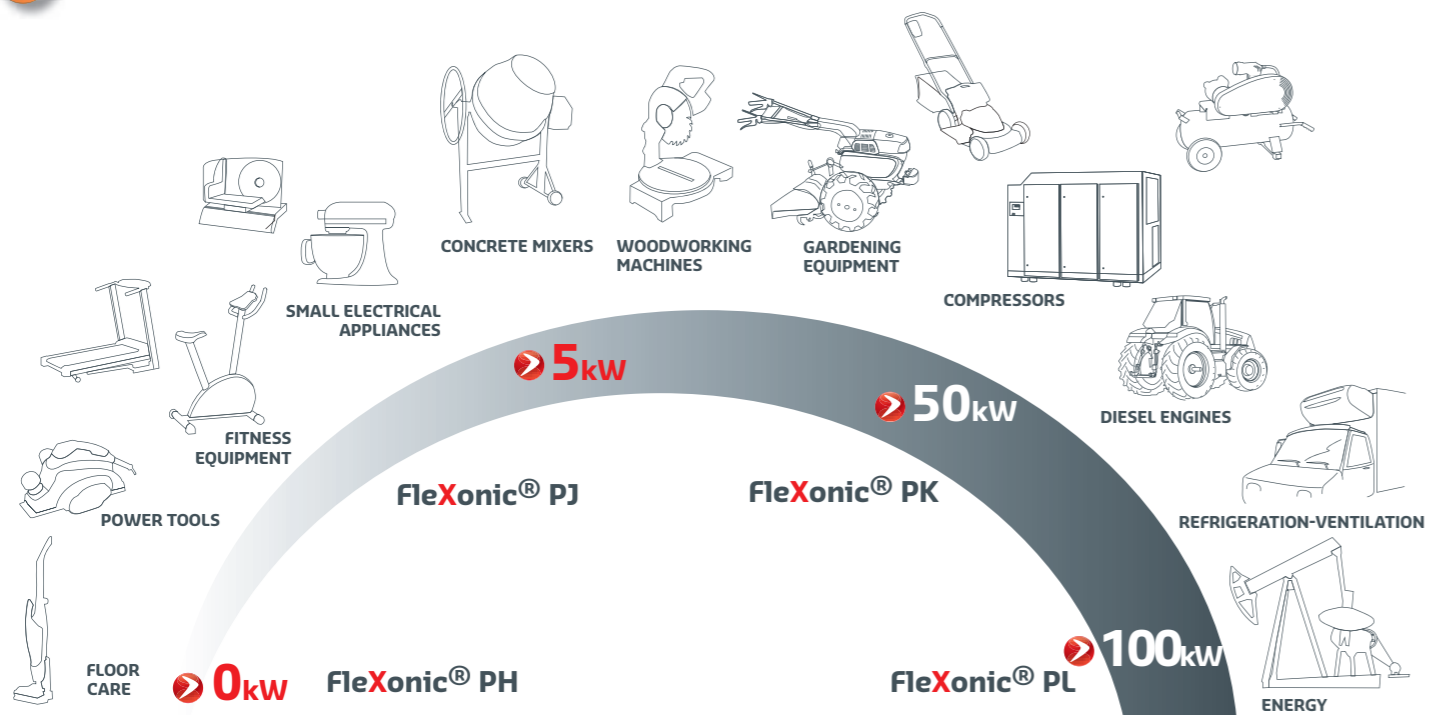


Directly fitting the belt to the main pulley without a tool



Fitting the belt to the main pulley with a SNAP ON tool

APPLICATIONS



CONTACTS

HUTCHINSON DISTRIBUTOR



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FLEXONIC®

THE ORIGINAL ELASTIC BELT FOR INDUSTRY

We make it **possible**



The **FleXonic®** is a power transmission elastic belt featuring multiple longitudinal ribs.

Each **FleXonic®** belt is custom sized for your application. Our technical teams calculate and decide what belt size you need.

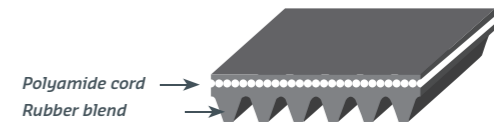
The **FleXonic®** belt can be installed on a fixed center distance. Its elastic polyamide cord gives it unrivalled advantages:

- ▶ Reliability and high quality transmission
- ▶ Absorbs vibrations and reduces noise levels
- ▶ No need for a belt tensioner device
- ▶ Reduced costs
- ▶ etc.

STRUCTURE

The **FleXonic®** elastic polyamide cord has better mechanical properties. It can tolerate temperatures of over 100 °C and maintains an identical tension throughout the transmission's lifespan.

Range of main structures (polychloroprene, polybutadiene and EPDM).



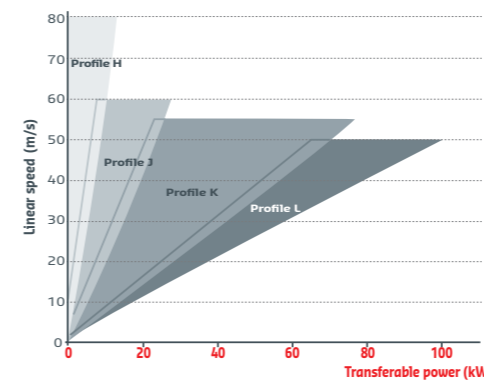
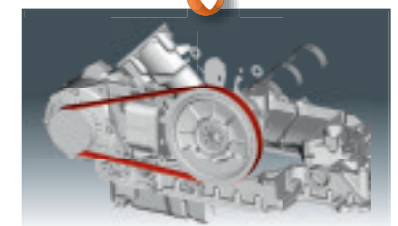
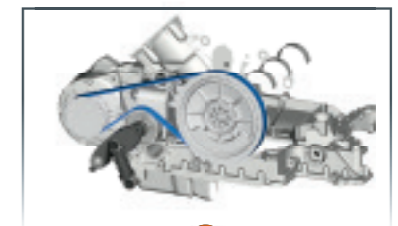
Hutchinson cord, patented technology

CHARACTERISTICS

- ▶ Level of **tension adapted** to each transmission.
- ▶ Due to its composition it can adapt to **temperature variations**: from -40°C to +120°C.
- ▶ Wide power range: from **0 to 100 kW**.
- ▶ Compatible with **standard Poly V® pulleys** in accordance with the ISO 9982 norm.
- ▶ Possible to install on **fixed center distances**.
- ▶ No need to re-tension the installation.

POWER RANGE

The different profiles offer a **wide range of power and speed settings**.



	FleXonic® PH	FleXonic® PJ	FleXonic® PK	FleXonic® PL
Thickness*	2.3mm / 2.5mm	3.2mm / 3.3mm / 3.5mm	4.6mm	7mm
Minimum pulley diameter	9mm	18mm	45mm	70mm
Maximum linear speed	80m/s	60m/s	55m/s	50m/s
Setting tension	25 to 35 N/rib/span	35 to 50 N/rib/span	90 to 110 N/rib/span	135 to 200 N/rib/span
Available structures	Polychloroprene Polybutadiene	Polychloroprene Polybutadiene EPDM	Polychloroprene Polybutadiene EPDM	Polychloroprene Polybutadiene

*values for information

June 2013, non-binding documentation. Hutchinson reserves the right to modify all or part of this document without prior notification. Concept: www.letb-synergie.com

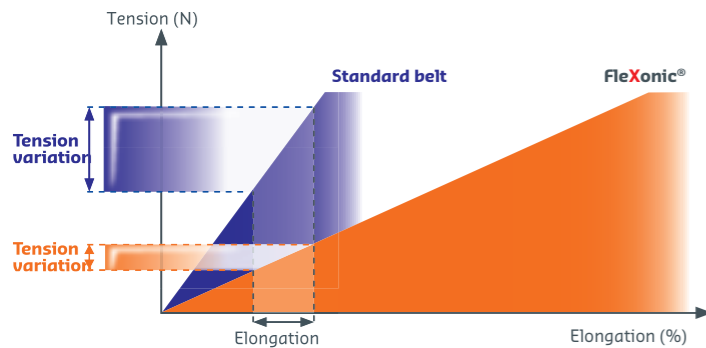




FLEXONIC®

TENSION AND ELONGATION

The module which is lower than a standard belt results in (for identical elongation variations) a lower tension variation that can attenuate the majority of process dispersions.



STANDARD = 1	PH	PJ	PK	PL
∞	7	7	3	2.5

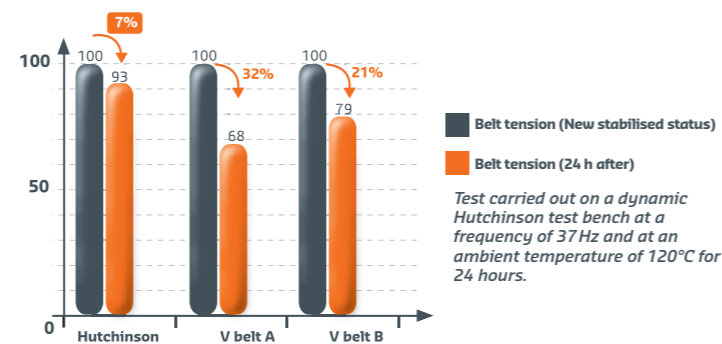
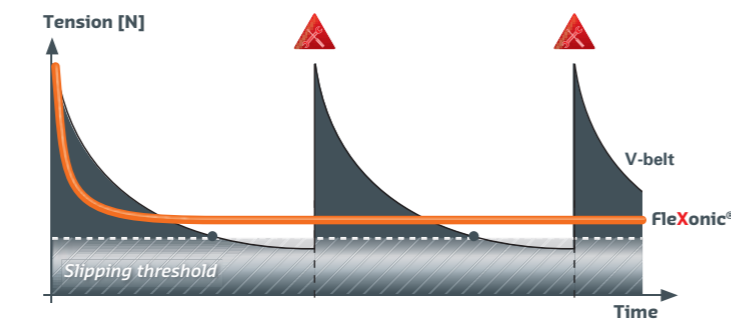
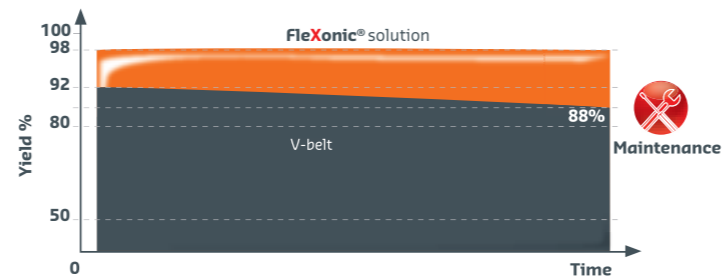
$$\left(\infty = \frac{\text{variation of tension with a standard belt}}{\text{variation of tension with the Flexonic® belt}} \right)$$

TENSION RELIABILITY AND STABILITY

The Flexonic's® tension can be stabilised after just a few minutes in dynamic performance mode. Tension will not change throughout the lifetime of the belt.

No need for maintenance operations to re-tension V-belts.
The Flexonic® belt's elastic properties guarantee automatic and continuous tension.

The Flexonic® belt maintains its tension over time and thus improves transmission (98%).

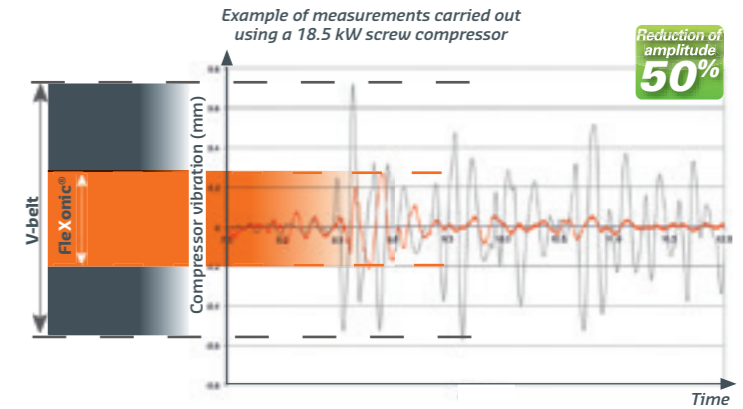


ABSORBS VIBRATIONS AND REDUCES NOISE LEVELS

The cord's elastic properties ensure a good level of absorption of the dynamic of the installation and NVH (Noise, Vibration and Harshness).

Comparison of the Flexonic® belt and a V-belt:

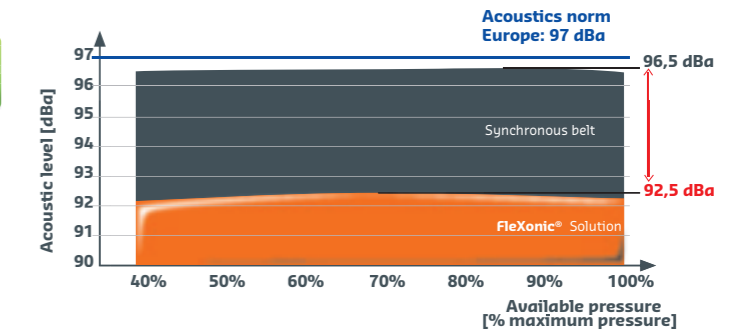
The Flexonic® monoblock belt replaces several V-belts, absorbs shocks and eliminates belt flapping.



Comparison of the Flexonic® belt and a synchronous belt for a portable compressor:

The Flexonic® belt absorbs vibrations and eliminates operating noises (e.g. squealing) common to synchronous belt transmissions.

Noise pollution
-4dBa



REDUCED COSTS

- 1 Reduced development time.
- 2 Reduced acquisition costs, no need for tensioning device.
 - Reduced weight and compactness of transmission.
 - Reduced pulley diameter.
- 3 Standardisation and rationalisation of references.
- 4 Simplified installation on site: saves time and increases productivity.
 - Installed on fixed center distance with standard grooved pulleys (Poly V®).
 - Auto matic tensioning.
- 5 Increased lifespan of transmission components.
 - Using the Flexonic® belt avoid the need to adjust the tension. Over-tensioning due to repeated maintenance operations and adjustment errors is also eliminated.
- 6 Reduced energy costs (better transmission efficiency).

Energy savings -5%
- 7 Reduced maintenance budget:
 - No need for re-tensioning and verification operations.
 - Increased lifespan of the belt.

Maintenance costs -10%

2 Example on an industrial engine

Flexonic® solution

1 belt
2 "standard" pulleys
Acquisition costs -40%

3

3 V-belt transmissions
3 different sets of 3 belts
2 pulleys / 1 tensioning device

1 single belt
2 "standard" pulleys
Unique system x3

4

V-belt

Flexonic®

Installing belt n°1
Installing belt n°2
Installing belt n°3
Pre-adjusting the center distance
Checking the tension
Adjusting the center distance
Checking the tension

CAPTIVE AFTERMARKET

As the Flexonic® belt is specially dimensioned for your application, you can reinforce your position in the spare parts market as well as improving customer follow-up.

7

Flexonic® Solution

V-belt

Preventative maintenance

Lifespan of motor

Initial installation

- Buying a new belt
- Installing the new belt
- Tension adjusted to specific values
- Checking N/span tensions
- Adjusting
- Running in belts
- New checks
- New tensions (if necessary)

Maintenance

- Buying a new belt
- De-tensioning the installation
- Removing belts
- Installing the new belt
- Tension adjusted to specific values
- Checking N/span tensions
- Adjusting
- Running in belts
- New checks
- New tensions (if necessary)