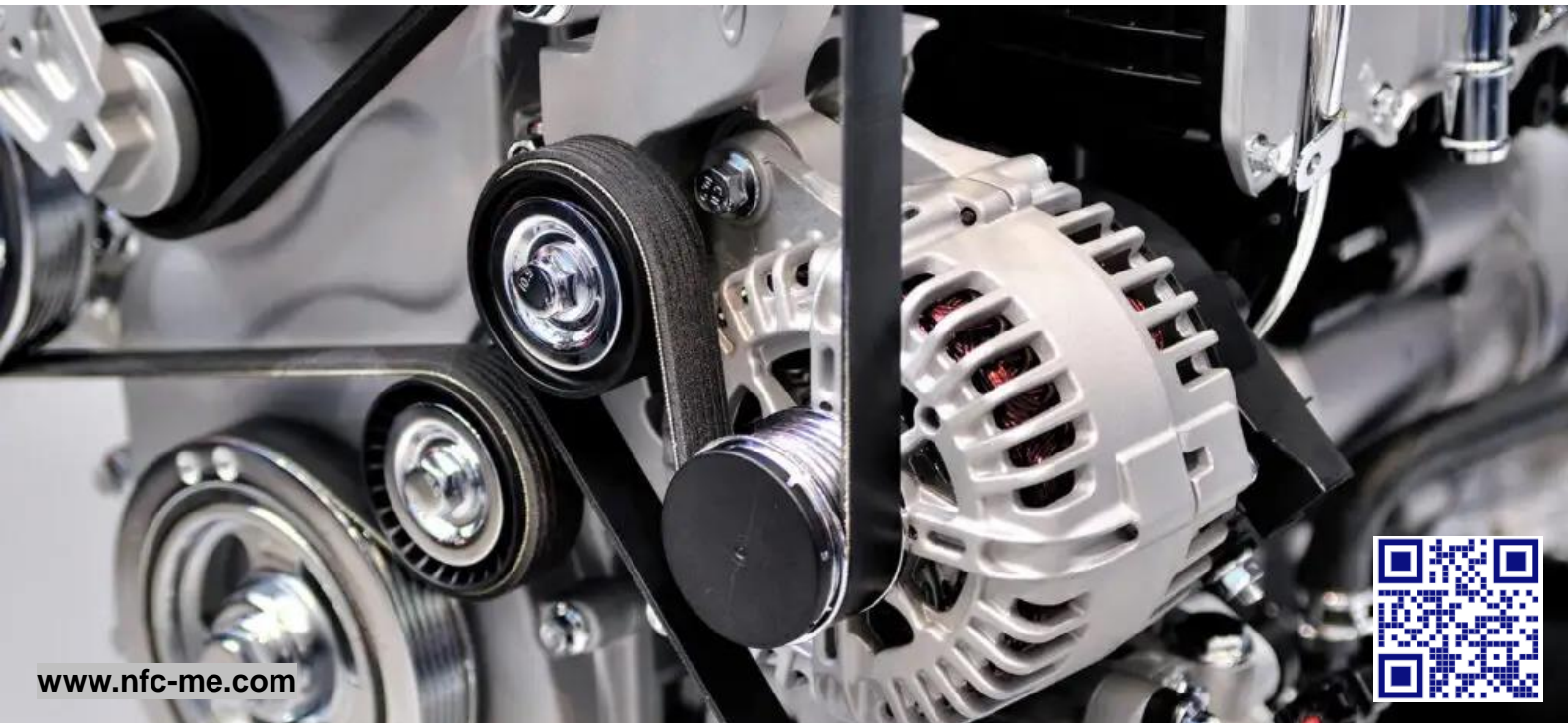





# POWER TRANSMISSION BELTS





# PRODUCT OVERVIEW

1. NFC Belts - Areas of Application
  2. Power Transmission Belt Types
  3. V Belts
    - i. Wrapped V Belt (A,B,C, SPA, SPZ)
    - ii. Cogged V Belt (AX, BX, CX, XPA, XPZ)
      - Belt Identification
      - Features
      - Uses
      - Belt Construction (Materials)
  4. Raw Edge Type V Belt
  5. Micro V Belt (PK)
    - Belt Identification
    - Features
    - Uses
    - Belt Construction (Materials)
  6. Timing Belt
    - Belt Identification
    - Features
    - Uses
    - Belt Construction (Materials)
  7. NFC Belts Packaging & Design
- 

# Areas of Application

- ✓ NFC Belts are produced with high grade refined **Chloroprene Rubber Compound with transverse oriented fiber** which enhances the overall quality of the belts. (International ASTM/DIN-abbreviation: CR)
- ✓ The material is ideal for applications that require excellent resistance to oils and fuels. Wear resistant fabric increases protection from dust. Its high performance property is the primary reason for its application in automobile components, agricultural industries, and industrial machinery.
- ✓ NFC Belts are strictly made with ISO standard certified factories and have a warranty of 60,000km...

## Industrial Machinery



## Medical Equipment



## Agricultural Equipments

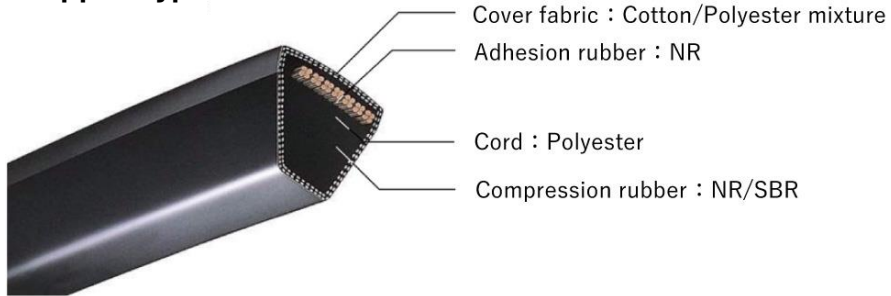


## Automotive Engines

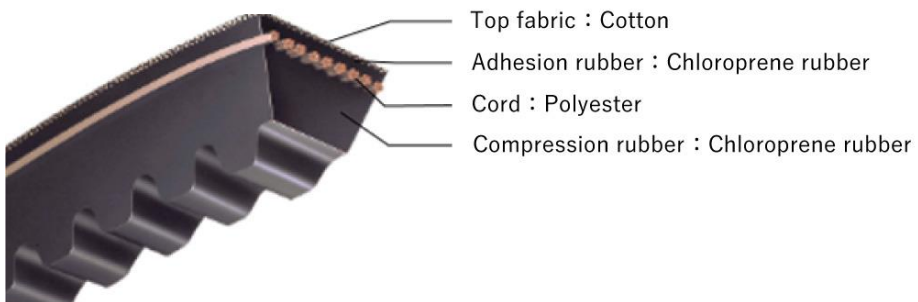


# Industrial & Automotive Belt Types

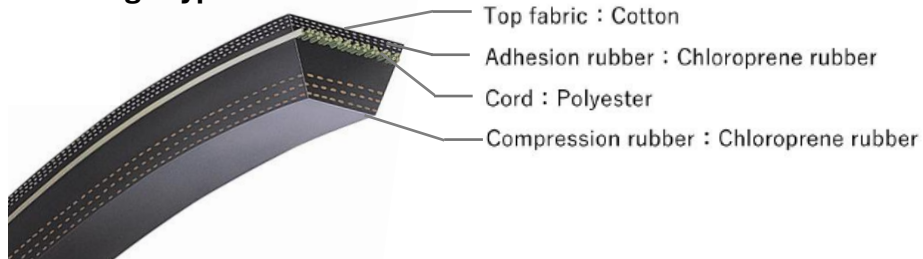
## Wrapped Type V Belt



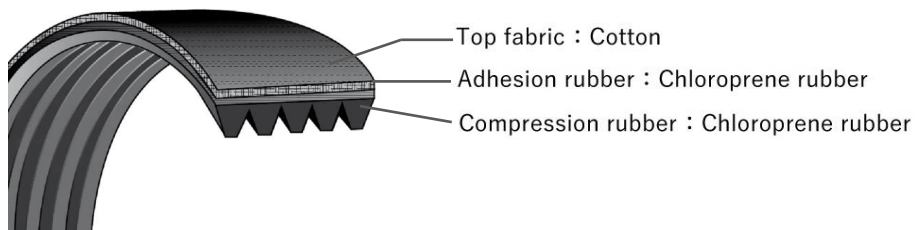
## Cogged Type V Belt



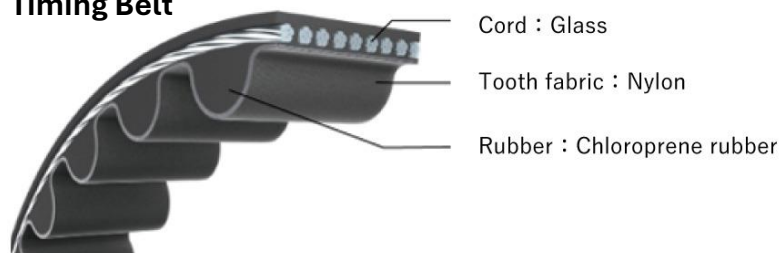
## Raw Edge Type V Belt



## Micro V Belt (PK)



## Timing Belt



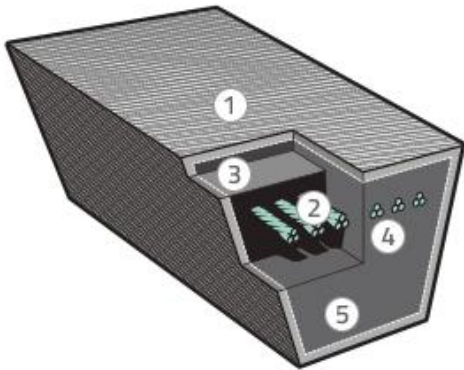


# Wrapped Type Classic V Belt

Classic V Belt is a flexible and efficient power transmission device capable of transferring power from one shaft to another. It is known for its trapezoidal shape that wedges securely into the sheaves of a shaft. The unique shape of V-belts helps them fit tightly and snugly into the grooves of a sheave, giving them additional surface contact and increased stability.

## Features:

- Cover fabrics shield internal components & increase longevity.
- Cords with unique design prolong durability & length stability.
- High resistance towards heat, oil & water.
- CR material ensures prevention of static electricity making belts safe to use.



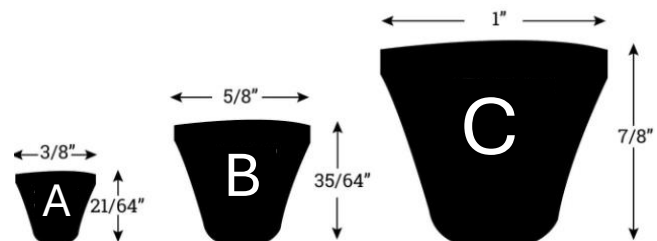
\*Refer to below table for Belt Construction details

### BELT IDENTIFICATION

Belt Number: A, B, C, SPA, SPB, SPX

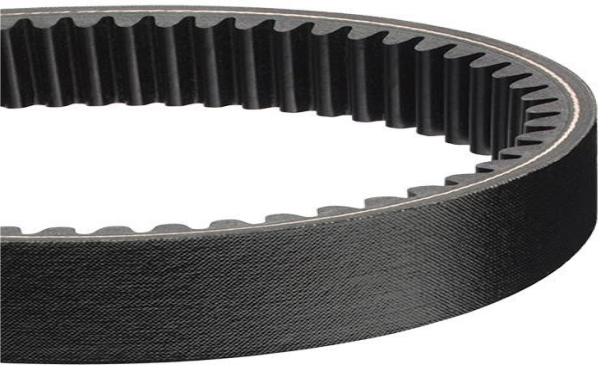
## Uses:

- Wrapped V Belts are used in all types of agricultural machinery and equipment such as Harvester, Rice huller, Bailer, Loaders, Hedge cutter, Reaper, Brush cutter and Tiller etc.
- All industrial applications including V-Flat Drives
- Due to its composite multipurpose construction these belts resist oils, heat, ozone, sunlight, weather and aging. Hence can be used in all open drives.



### Wrapped Type Belt (V Belt)

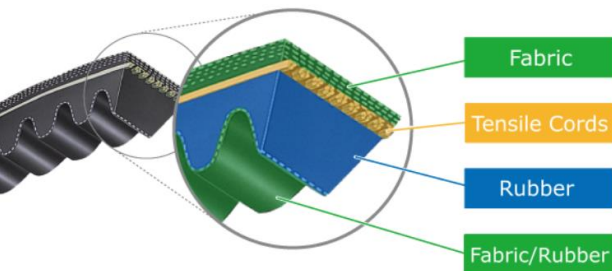
No.	Construction	Functions
1	Cover fabric	Protection for the tension member
2	Tension member	Primary material for transfer of power
3	Top compression rubber	Maintenance of belt shape(upper)
4	Adhesive rubber	Support and protection of tension member adhesion
5	Bottom compression rubber	Belt shape maintaining (lower)



# Cogged Type V Belt

They are used in a wide range of engines from small cars to automobiles, trucks, buses, and construction machinery. Used in harsh load fluctuation and high temperature environments, they have excellent heat resistance, abrasion resistance, and deformation resistance.

The bottom of the belt is cog-shaped to improve flexibility and extend service life.



## Features:

- Superior durability and flexibility in driving
- Specially constructed cords optimize durability and length stability.
- Excellent resistance to heat, oil, and wear. High transmission of power efficiency.
- Can be utilized with small pulleys.
- Show stable performance in high-speed rotation.

*\*Refer to below table for Belt Construction details*

### BELT IDENTIFICATION

**Belt Number: 9.5 x XXXXLA COG  
AX, BX, CX, XPA, XPB, XPZ**

## Uses:

- Flexible, fabric-free raw edge v-belts are used in the engines of automobiles, trucks, buses, and construction machinery. Ideal in harsh load fluctuation and high-temperature environments, these belts have excellent heat resistance, abrasion resistance, and deformation resistance.
- A cogged bottom belt structure reduces the energy loss caused by bending. As a result, it fits small pulleys and gives stable performance at high speeds.

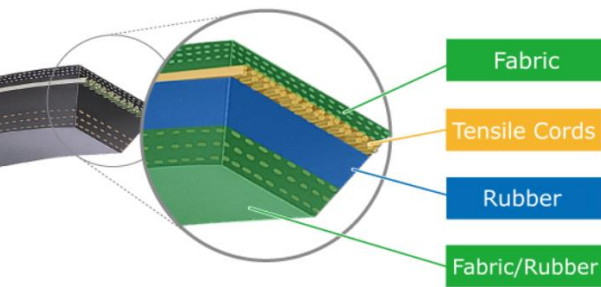
### Raw Edge Cogged Belt (V Belt)

No.	Construction	Functions
1	Top fabric	Protection for the tension member
2	Tension member	Primary material for transferring power
3	Compression rubber	Sectional shape maintaining by side pressure
4	Bottom rubber	Shock absorption and prevention from compression rubber crack

# Raw Edge Type Classic V Belt



Raw edge V-belts do not have covers at their flanks. This means the elastomer core is exposed and in contact with the surface of the pulley. The elastomer core has a higher coefficient of friction than the fabric-covered ones, allowing for better grip. The elastomer core of raw edge v-belts has higher wear resistance than the core found on wrapped v-belts.



## Features:

- Superior durability and flexibility in driving
- Specially constructed cords optimize durability and length stability.
- Excellent resistance to heat, oil, and wear. High transmission of power efficiency.
- Can be utilized with small pulleys.
- Show stable performance in high-speed rotation.

\*Refer to below table for Belt Construction details

BELT IDENTIFICATION
Belt Number: 9.5 x XXXX, RAF, RPF, HM, FM

## Uses:

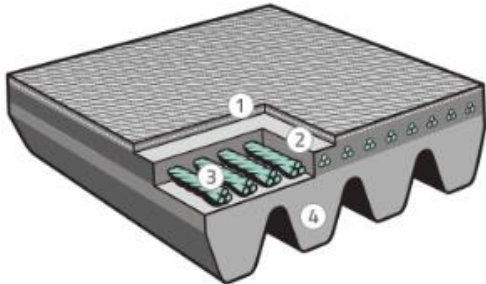
- Flexible, fabric-free raw edge v-belts are used in the engines of automobiles, trucks, buses, and construction machinery. Ideal in harsh load fluctuation and high-temperature environments, these belts have excellent heat resistance, abrasion resistance, and deformation resistance.
- A cogged bottom belt structure reduces the energy loss caused by bending. As a result, it fits small pulleys and gives stable performance at high speeds.

Raw Edge Cogged Belt (V Belt)		
No.	Construction	Functions
1	Top fabric	Protection for the tension member
2	Tension member	Primary material for transferring power
3	Compression rubber	Sectional shape maintaining by side pressure
4	Bottom rubber	Shock absorption and prevention from compression rubber crack



# Micro V Belt (PK Type)

Ribbed Belts are specially designed for automotive engines applications, providing excellent power transmission and reduced vibration, ensuring optimal performance and longevity for vehicle engines and accessories.



\*Refer to below table for Belt Construction details

## BELT IDENTIFICATION

Belt Number: 3PK, 4PK, 5PK, 6PK, 7PK, 8PK, 9PK, 10PK

## Features:

- Excellent flexibility is provided by the wide breadth and thin height.
- High power transmission using reverse bending, a small diameter pulley, and high speed rotation operating conditions uses high tension and low shrinkage cables to maintain constant tension throughout operation.
- Reduces slip during operation to improve power transfer efficiency; excellent resistance to heat, oil, and wear.

## Uses:

PK belts are produced for auxiliary transmissions of cars, commercial vehicles, heavy duty vehicles and buses. Service belts control almost all auxiliary systems. They have very important functions controlling the correct operation of

- The climate control compressor
- The power steering pump
- Water pump
- The alternator

They cover a multitude of industrial applications and are suitable for industrial drives in washing machines, textile machines, vacuum cleaners, lawn mowers, machine tools, medical equipment and many more.

### V-Ribbed Belt (Micro-V Belt PK)

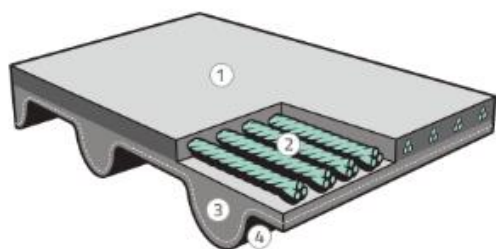
No.	Construction	Functions
1	Upper fabric	Protection for the inner tension member
2	Adhesive rubber	Support and protection of tension member adhesion
3	Tension member	Primary material for transferring power
4	Compression rubber	Belt shape maintaining and enhancement of side pressure



# Timing Belt

Timing belts are devices usually fitted to the rotary mechanisms of a power transmission system. They're most often found playing a highly critical role in the smooth running of internal combustion engines, where they connect the crankshaft to the camshafts to maintain precise alignments (timings) between these two key components as they rotate at different - but consistent, relative to one another - speeds.

CURVILINEAR TOOTH PROFILE



*\*Refer to below table for Belt Construction details*

## BELT IDENTIFICATION

**Belt Number: RU, ZA**

## Features:

- Addresses issues with deteriorating power transmission, lubricant leakage when utilizing a chain at high speeds.
- Reduces belt elasticity by employing a tension member made of glass fiber.
- Outstanding resistance to wear, heat, and oil ensures optimal power transmission efficiency in fast-paced, highly variable driving conditions.
- Display consistent performance when rotating at a high speed.


## Uses:

- Automotive Engines – Used in internal combustion engines to synchronize the rotation of the crankshaft & camshaft.
- Industrial Machinery – Used in conveyors, packaging equipment, printing presses etc.
- Agricultural Equipment – Used to combine harvesters & seeders to synchronize operations.
- Medical Devices – Infusion pumps, diagnostic equipment, surgical instruments to ensure precise and controlled movement.
- Textile Machinery – Used in Textile Looms.

Timing Belt		
No.	Construction	Functions
1	Rear fabric	Protection of tension member
2	Tension member	Primary material for transferring power
3	Teeth rubber	Tension member protection and belt shape maintaining
4	Bottom fabric	Belt and teeth maintaining

# NFC Belts Packaging & Design



	7PK1628	M113	C05176
	7PK1628	M113	C05176
	7PK1628	M113	C05176
	7PK1628	M113	C05176

↑  
BRAND

↑  
BELT NO.

↑  
MANUFACTURING DATE  
(November 2023)



High Performance...  
High Quality...