

# TECHKNOW SERIES

#### Introduction



Metric belt numbers are numbers universally used from manufacturer to manufacturer.

Though the metric number may not cross reference in the Dayco interchange system, the metric number does include all the necessary information to easily look up the belt on Dayco's website, if Dayco offers a belt with the same or similar dimensions.

If you have a belt that you're looking to interchange either for yourself, or a customer, you can first try to interchange the belt part number on <a href="the-Dayco">the Dayco</a> <a href="aftermarket website">aftermarket website</a> but if your part number doesn't interchange for you, you can get the metric number of the belt and begin trying to turn the metric number into a valid Dayco part number that fits your application.

#### **What Metric Numbers Look Like**



So, what does a metric number look like? Let's use an example. You've got a belt, and the only number you can find on it is this number:

#### 10PK1410

You type it into the Dayco interchange, but no results are found for a Dayco cross reference number. Let's break down what this metric number means to help find the correct Dayco belt:

#### **10**PK1410:

This first number is the number of ribs the belt has. In this case, the belt has 10 ribs.

# **Understanding the PK Number**



10PK1410: Often people will refer to the metric number as the *PK number*. The P indicates that it is a belt number with metric measurements, and the K means its an automotive, "K," section serpentine belt. As of right now, all Dayco serpentine belts are K section. **K just indicates the width of each of the belt's ribs**. J section belts are typically for industrial applications along with anything other than a K section belt and have different rib widths.

Belt width is determined by number of ribs and section type.

As an example: All 6 rib K section belts (6PK) will be the same width regardless of length. The only way to get a wider or narrower 6 rib belt K section belt, is if it's no longer a K section belt. This rings true for the belts no matter how many ribs. A few more examples would be:

- All Dayco 4 rib K section (4PK) belts are the same width. You won't be able to get a
  4PK belt that's wider, unless you went with a 5PK belt with an additional rib, or
  narrower with a 3PK belt that has one less rib.
- A 10PK1410 belt, and a 10PK1300 belt are the SAME WIDTH because they're K section belts that both have 10 ribs.





Looking at the same part number from the previous example, the final four numbers indicate the length of the belt.

#### 10PK**1410**

This is the **effective length** of the belt in millimeters.

So, to summarize, a 10PK1410 is a metric belt number belt has 10 ribs, is a K section serpentine belt, that is 1410 mm long.



**Step 1:** To use Dayco's dimensional look up on the <u>Dayco aftermarket website</u>, you'll first need to convert the belt size from millimeters to inches.

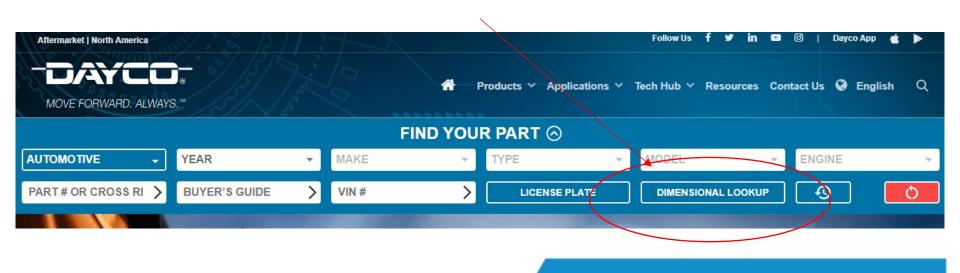
Google: Click here for the Google mm to in converter

It may be convenient to bookmark it for ease of access.



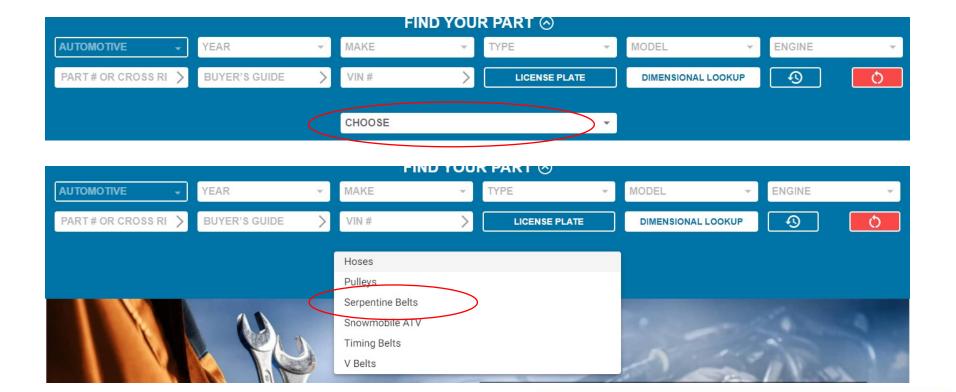
**Step 2:** In converting 1410 mm, you'll find that it's 55.5 inches (Google is going to give you a whole bunch of decimal places when you use their converter, just use the first one or two it gives you.) Next use the website to begin the dimensional look up.

Step 3: Click the, "Dimensional look up," button at the top of the page



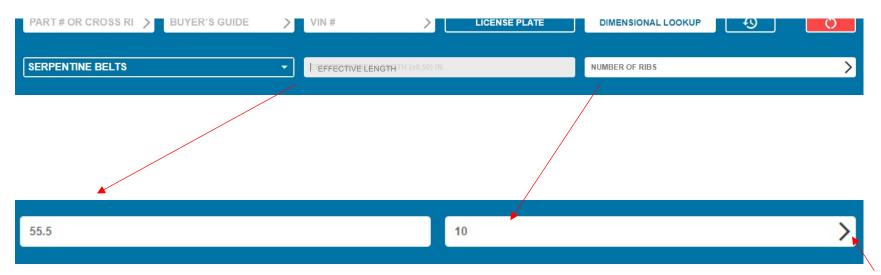


**Step 4:** A New drop down menu should have appeared that says, "Choose," Click on it, and select, "Serpentine belt."





**Step 5:** It will take a moment to load, so before you begin to type, let it load first. Then two boxes will appear. One that says, "Effective length," and one that says, "Number of ribs." In this case, we know we're looking for a 10PK1410. So we need a 10 rib, 1410mm long belt, that we converted to 55.5 inches. So we'll type that in, and hit enter



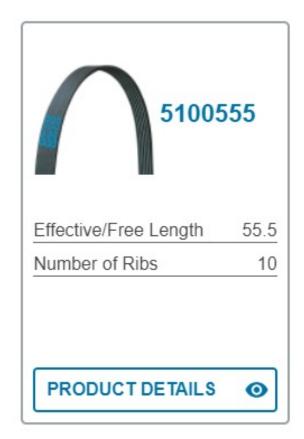
Click Enter or click this arrow icon once you have your numbers inputted.





All of the belt selections that are within .5 inches of the dimensions entered will now appear.

In this case, it looks like Dayco offers an equivalent to the 10PK1410.





**Step 6:**. Click on the 5100555 belt that populated after your search, and see what the metric number is for that Dayco belt. The listed Metric number is 10PK1410. We have successfully changed a metric number into a Dayco number. Understanding what the metric number means, it's as simple as converting the mm to inches, identifying the number of ribs, and using the Dayco site to find your part.

#### 5100555 Poly Rib Belt HD

#### **Specifications**

Description: Poly Rib Belt HD Compound: EPDM, Aramid Reinforced Backside Material: Rubber Rib Depth: Standard Top Width: 1.38 Metric Part: 10PK1410 Number of Ribs: 10 Rib Profile: Straight Rib Thickness: .169 Effective Length (in): 55.5

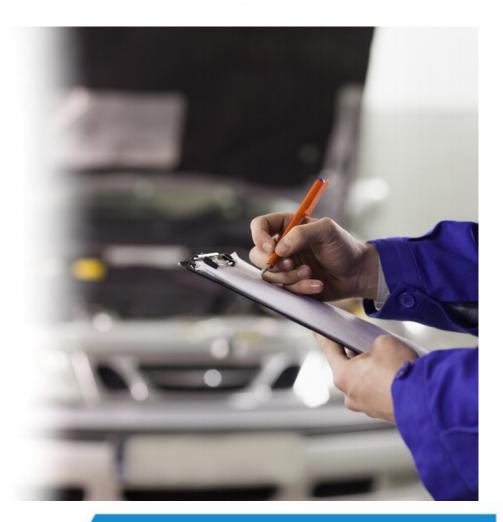


### **Troubleshooting Conversion Issues**



# What if the metric number doesn't convert to an exact Dayco number?

- This means that Dayco doesn't currently carry an exact belt for that metric number.
- The dimensional look up will show all belts within .5 inches, so if there's something close, you can tell the customer that there's no exact belt match, but there is a belt offered that is close to the same specs.
- If nothing populates after entering the dimensions, Dayco doesn't have an option within .5 inches bigger or smaller.







#### When a Metric Number Doesn't Convert

Let's use a real example of what this means. You have a customer on the phone, and they're looking for a **5PK1240**. Well, we know that this is a 5 rib serpentine belt that's 48.81 inches in length. Lets look that up in our Dayco website dimensional look up:



These are the two options that show up when you do that dimensional search, and neither one are 48.81 inches. Click on the first one, and see what the metric number is, and how long it is in inches.









The first belt is 48.62 inches in length. The belt the customer is looking for is 48.81 inches. So we know this belt is .19 inches shorter. Now look at the metric number. The customer wanted a 5PK1240, but this is a 5PK1235. So that tells us this belt is 5 millimeters too short. This is a very small size difference, but the customer must choose if it will work for them.

#### 5050486 Poly Rib Belt

#### **Specifications**

Description: Poly Rib Belt Compound: EPDM. Aramid Reinforced Backside Material: Rubber Rib Depth: Standard Top Width: .68 Metric Part: 5PK1235 Number of Ribs: Rib Profile: Straight Rib .169 Thickness: 48.62 Effective Length (in):



# **Analyzing Belt 2**



The second belt is 49.02 inches in length, so it is .21 inches longer than the 48.81 inches the customer wanted. The metric number is 5PK1245 so it is about 5 millimeters longer. While these options aren't exactly what the customer is looking for, they're close. Dayco cannot guarantee it will work for the intended application since it is longer than the original belt.

5050490 Poly Rib Belt	
Specifications	
Description:	Poly Rib Belt
Compound:	EPDM, Aramid Reinforced
Backside Material:	Rubber
Rib Depth:	Standard
Top Width:	.68
Metric Part:	5PK1245
Number of Ribs:	5
Rib Profile:	Straight Rib
Thickness:	.169
Effective Length (in):	49.02





- K section belts with the same number of ribs are the same width
- Belt 5050490 and 5050496 have five ribs and both are .68 inches in top width with every rib being approx. .14 inches wide. If a customer wants a five rib belt, that's .56 inches wide, and not .68 inches wide. We do not carry that. That is not a K section belt.
- All five rib K section belts are .68 inches wide.



Ribs	Belt width
3	.40 inches
4	.54 inches
<mark>5</mark>	.68 inches
6	.82 inches
7	.96 inches
8	1.10 inches
9	1.24 inches
10	1.38 inches
11	1.52 inches
12	1.66 inches
13	We do not sell a 13 rib belt
14	1.94 inches
15	2.08 inches



#### **Serpentine Belt Numbers**

- You can tell the size of a Dayco belt based on its part number. However, some of Dayco's belts have ribs on both sides. Typically customers aren't looking for those. Usually they're looking for one with a smooth side, and ribs on the other. For an example, 5100555:
- 5100555: The first 5 tells us it's a one-sided serpentine belt. Most all Dayco belts start with this except the double-sided belts. Those start with a 6.
- **5100555**: These next two digits indicate the number of ribs. In this one it's 10. If the belt number was 5060555, that would mean it's a 6-rib belt.
- 5100555: The last four represent the length of the belt in inches. This belt is 55.5 inches, so it's 0555. If there is a 10-rib belt that is 101.5 inches in circumference, that belt would be 5101015.



- Find serpentine belts by metric number and Dayco part number by using the serpentine belt dimensional guide located here.
- If you get a number for any part and don't have luck interchanging a part number with Dayco's interchange tools, email Dayco at:

partssupport@dayco.com

 If someone calls with a serpentine belt number like 2PJ786, that is a J section belt metric number and Dayco does not carry J section serpentine belts.







# Thank you

daycoaftermarket.com 800-848-7902