

1. Power Ace Product Introduction

Power Ace is a narrow V-belt for high power transmission capability that significantly enhanced various characteristics and performance such as power transmission capability, high speed, and reliability by changing the cross-sectional structure of the previous V-belt. (Prescribed as Narrow V-belts for power transmission in JIS K 6368.)

Features

■ Allows miniaturization and cost reduction of power transmission devices.

Power Ace has an extremely high power transmission capability, and the space for the power transmission device is about one-third of that of the standard V-belt.

Unlike chain transmission or gear transmission, it requires no lubrication device, allowing the equipment cost and maintenance cost to be reduced.

■ Allows high-speed operation.

Power Ace has an extremely high power transmission capability per belt and has a reduced loss in power transmission by centrifugal force; hence, it is also suitable for high-speed operation and can be used up to a speed of 40 m/s.

■ Allows labor-saving in maintenance.

Power Ace has little belt elongation during operation and rarely requires re-tensioning. Unlike chain transmission and gear transmission, it requires no lubrication, allowing significant labor-saving in maintenance.

■ Long belt service life and excellent reliability.

Power Ace, based on the ideal profile that was made by studying the power transmission theory as well as on the manufacturing technology on the highest standard, has a long service life and rarely incurs trouble during operation.

■ Excellent physical characteristics.

● Excellent heat resistance.

Generally, the higher the ambient temperature, the shorter the belt service life becomes; however, Power Ace can withstand high temperature compared to the standard V-belt.

● Static electricity prevention.

It has an electric resistance performance that conforms to the U.S. RMA standard.

*RMA (An abbreviation for Rubber Manufacturers Association)

● Excellent flame resistance.

The specially compounded chloroprene rubber used in Power Ace has a self-anti-inflammation property and therefore can be used at ease.

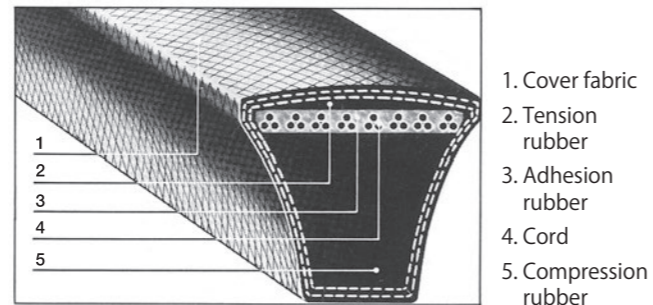
● Excellent oil resistance.

It can be used even with slight adhesion of oil mist, oil, or grease.

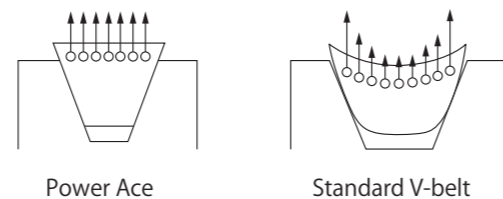
● Excellent weather resistance and ozone resistance.

It can also be used outdoors and in coastline areas without problems. Where the belt is exposed to direct sunlight, please protect the belt with a belt cover of the like if possible.

Structure

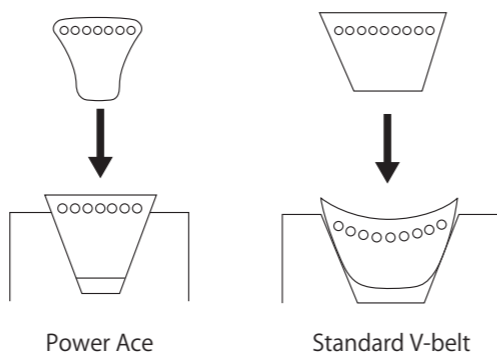


- **Cord**
It uses a polyester cord, has extremely little elongation, and has no concern for peeling of the cord layer.
- **Compression rubber**
The specially compounded chloroprene rubber reduces heat generation during running and increases the belt service life.
- **Cover canvas**
The special canvas has only a little tension and strain on the fiber even when it is wound around a small-diameter pulley, reducing losses in power transmission due to bending stress. It is also excellent in protection of the inside of the belt.
- **Arched top**
At the time of operation, it prevents cross-sectional deformation of the belt and maintains the group of tension members at a normal position; hence the group of tension members receives a uniform force, leading to a longer belt service life.

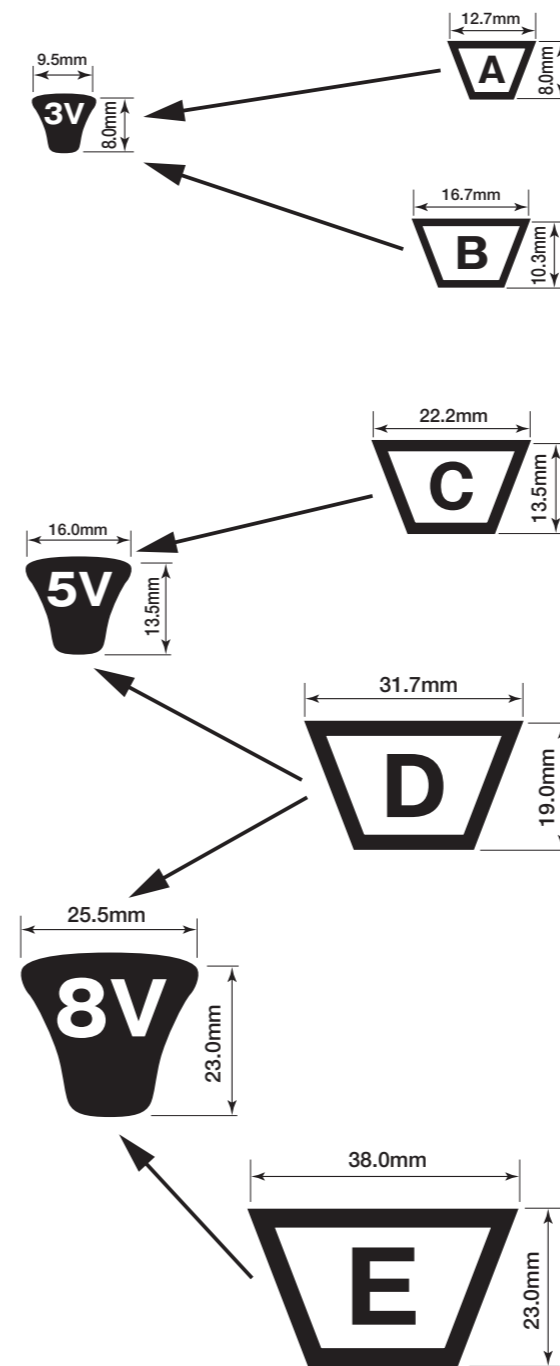


● Concave side wall

When the belt is wound around a pulley, the belt side face becomes straight and comes in uniform contact with the pulley, which increases the power transmission capability. The abrasion on the belt side face is uniform, which extends the belt service life.



Type

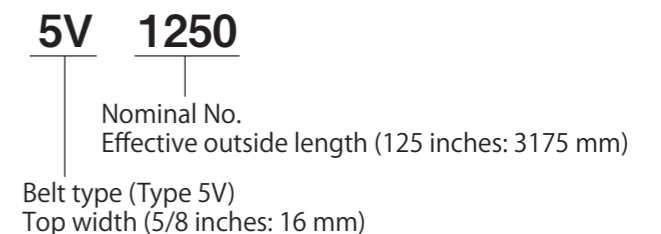


■ Belt size

Type 3V		Type 5V		Type 8V	
Nominal No.	Effective outside length (mm)	Nominal No.	Effective outside length (mm)	Nominal No.	Effective outside length (mm)
250	635	500	1270	1000	2540
265	673	530	1346	1060	2692
280	711	560	1422	1120	2845
300	762	600	1524	1180	2997
315	800	630	1600	1250	3175
335	851	670	1702	1320	3353
355	902	710	1803	1400	3556
375	953	750	1905	1500	3810
400	1016	800	2032	1600	4064
425	1080	850	2159	1700	4318
450	1143	900	2286	1800	4572
475	1207	950	2413	1900	4826
500	1270	1000	2540	2000	5080
530	1346	1060	2692	2120	5385
560	1422	1120	2845	2240	5690
600	1524	1180	2997	2360	5994
630	1600	1250	3175	2500	6350
670	1702	1320	3353	2650	6731
710	1803	1400	3556	2800	7112
750	1905	1500	3810	3000	7620
800	2032	1600	4064	3150	8001
850	2159	1700	4318	3350	8509
900	2286	1800	4572	3550	9017
950	2413	1900	4826	3750	9525
1000	2540	2000	5080	4000	10160
1060	2692	2120	5385	4250	10795
1120	2845	2240	5690	4500	11430
1180	2997	2360	5994	4750	12065
1250	3175	2500	6350	5000	12700
1320	3353	2650	6731	5600	14224
1400	3556	2800	7112		
		3000	7620		
		3150	8001		
		3350	8509		
		3550	9017		

When using multiple belts, please specify a matched set.

Indication Example



(Note) The cross-sectional dimensions of Power Ace are nominal dimensions.