

OIL & GAS INDUSTRIAL BELTS

BANDO

A large industrial pumpjack (oil pump) is the central focus, painted in bright blue and red. It stands on a concrete base in a sandy, open field. In the background, two more similar structures are visible, along with some utility poles and a small building under a bright blue sky with scattered white clouds.

**PREMIUM QUALITY
POWER TRANSMISSION V-BELTS**

S I N C E 1 9 0 6

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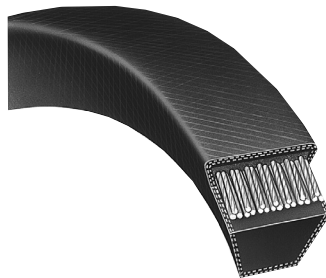
Power Ace® Aramid Combo V-Belts
 8VK Section03
Power Ace® Combo V-Belts
 8V Section04
Power King® V-Belts
 B Section 05-06
 C Section06
Power King® Combo V-Belts
 C Section07



POWER ACE® ARAMID COMBO V-BELTS
POWER ACE® COMBO V-BELTS

Power Ace® Aramid Combo belts are constructed with high modulus aramid cords to maintain length stability and to withstand severe shock loads, making them ideally suited for oil and gas industry applications. Size listing on page 3.

Power Ace® Combo belts are built to eliminate belt whip, flip over or belts jumping off the sheaves due to shock load, pulsation or misalignment. Size listing on page 4.



POWER KING® B & C CROSS SECTION V-BELTS

Still the most practical, economical, and dependable belts for most drives. Innovations in materials, design, and manufacturing methods help Power King® set the pace for industry's increasing demands for long, trouble-free belt service. Size listing of B section V-belts on pages 5 and 6 and C section V-belts on page 6.



POWER KING® COMBO V-BELTS

We start with our individual premium quality classical section V-belts, and join them with a tough tie band that when cured, welds the belts together permanently. This tie band assures lateral rigidity and guides the belts into the sheave grooves in a straight line so the belts can't flip over or jump off the sheaves, even under severe shock loads. Size listing on page 7.

All Bando V-belts are oil, heat and ozone resistant to protect the belts' inner components for maximum service life.

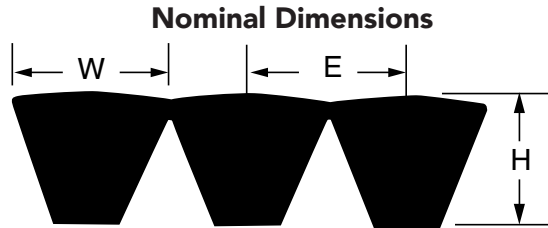
Bando V-belts are built to conform with the Association for Rubber Products Manufacturers (ARPM) requirements for static conductivity as specified by publication IP-3-3.

BANDO USA, INC., 1149 W BRYN MAWR, ITASCA, IL 60143
 EMAIL: SERVICEEXPRESS@BANDOUSA.COM | OFFICE: 800-829-6612 | FAX: 630-773-6912

BANDO | PREMIUM V-BELTS FOR OIL & GAS INDUSTRIES



ARAMID CORD



Belt Section	Top Width W (Inches)	Thickness H (Inches)	Pitch Between Belts E (Inches)
8V	1.00	0.98	1.13

POWER ACE® ARAMID COMBO V-BELTS

Belt Number	Weight Rib* (Approx.) Lbs.	Nominal Outside Length (Inches)
8VK1060	4.22	107
8VK1120	4.46	113
8VK1180	4.70	119
8VK1250	4.98	126
8VK1320	5.26	133
8VK1400	5.58	141
8VK1500	5.98	151
8VK1600	6.38	161
8VK1700	6.77	171
8VK1800	7.20	181
8VK1900	7.60	191
8VK2000	8.00	201
8VK2120	8.60	213
8VK2240	9.00	225
8VK2360	9.40	237
8VK2370	10.88	274
8VK2500	10.00	251
8VK2650	10.60	266
8VK2800	11.40	281
8VK3000	12.20	301
8VK3150	13.00	316
8VK3350	13.60	336
8VK3550	14.00	356
8VK3750	15.20	376
8VK4000	16.20	401
8VK4250	17.20	426
8VK4500	18.20	451
8VK4750	19.20	476
8VK5000	20.20	501
8VK5600	22.80	561

* Weights shown are approximate and in some cases may be calculated.
10 ribs maximum width for 8VK.

2 - 10 Ribs available

Engineering for Pumping Units

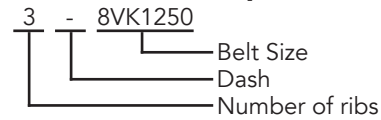
Engine (Motor) Sheave Diameter - Unit

Strokes - Engine (Motor) R.P.M.

- Correct Engine (Motor) Sheave Diameter = $USPM \times GR \times PD \div E$
- Unit Strokes Per Minute = $E \times p.d. \div (GR \times PD)$
- Engine (Motor) r.p.m. = $USPM \times GR \times (PD \div p.d.)$

KEY	
Acronym	Meaning
USPM	Unit Strokes Required Per Minute
GR	Unit Internal Gear Ration
PD	Unit V-Belt Sheave Pitch Diameter
E	Engine or Electric Motor Speed (r.p.m.)
p.d.	Engine or Electric Motor Sheave Pitch Diameter
C	Distance between Shaft Centers

Part Number Example



For example, a 3 rib 8VK1250 belt is part number 3-8VK1250. Use dash between ribs and belt size. No spaces.

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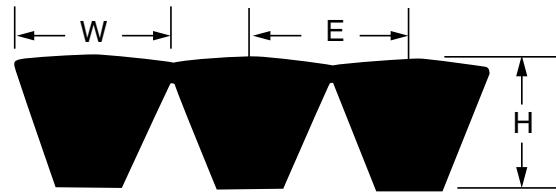
POWER KING® V-BELTS

POWER KING® COMBO V-BELTS

POWER ACE® COMBO V-BELTS - 8V SECTION

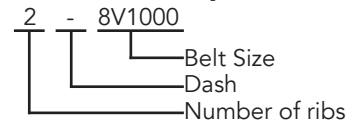
Belt Number	Weight Rib* (Approx.) Lbs.	Nominal Outside Length (Inches)
8V1000	3.99	101.00
8V1060	4.22	107.00
8V1120	4.46	113.00
8V1180	4.70	119.00
8V1250	4.98	126.00
8V1320	5.26	133.00
8V1400	5.58	141.00
8V1500	5.98	151.00
8V1600	6.38	161.00
8V1700	6.77	171.00
8V1800	7.17	181.00
8V1900	7.57	191.00
8V2000	7.97	201.00
8V2120	8.45	213.00
8V2240	8.92	225.00
8V2360	9.40	237.00
8V2500	9.96	251.00
8V2650	10.56	266.00
8V2800	11.15	281.00
8V3000	11.95	301.00
8V3150	12.55	316.00
8V3350	13.35	336.00
8V3550	14.14	356.00
8V3750	14.94	376.00
8V4000	15.93	401.00
8V4250	16.93	426.00
8V4500	17.93	451.00
8V4750	18.92	476.00
8V5000	19.92	501.00
8V5600	22.31	561.00
8V6000	23.90	601.00

Nominal Dimensions



Belt Section	Top Width W (Inches)	Thickness H (Inches)	Pitch Between Belts E (Inches)
8V	1.00	0.98	1.13

Part Number Example

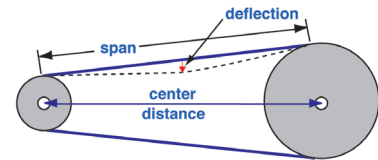


For example, a 2 rib 8V1000 belt is part number 2-8V1000. Use dash between ribs and belt size. No spaces.

Tensioning Procedures

1. Measure the span length (L) in Fig. 1.
2. At the center of the span (L) apply a force perpendicular to the belt measuring the force needed to deflect the belt 1/64" per inch of span length (L).
3. Compare the force required in step 2 to the recommended range(s) in the appropriate table. Tighten or loosen the belt tension to bring the tension into the recommended range.
4. For V-belts, run the drive for five (5) or ten (10) minutes to seat the belt and then recheck the tension.
5. Check belt tension after 24-48 hours to assure that it falls between the maximum and minimum values shown in the table.

V-Belt Cross Section	Small Sheave Diameter Range (Inches)	Recommended Deflection Force (Lbs.)*	
		Initial Installation	Retensioning
			Maximum
B	5.4 - 4.6	8.7	7.5
	5.7 - 7.0	9.3	8.1
	7.1	10.0	8.8
C	9.0	15.0	13.0
	9.1 - 12.0	18.0	16.3
	12.1	19.5	16.9
8V	12.5 - 16.0	39.0*	33.8*
	17.0 - 20.0	45.0*	39.0*
	21.2	51.0*	44.2*
8VK	12.5 - 16.0	62.4*	54.1*
	17.0 - 20.0	72.0*	62.4*
	21.2	81.6*	70.7*



Note: For banded belts, multiply the force in the table by the number of belts in the band.
* 1/2 of this deflection force can be used, but substitute deflection amount of 1/128" per every inch.

Belt Length

$$\text{Belt length} = 2C + 1.57(D + d) + \frac{(D-d)^2}{4C}$$

Where C = center distance
D = large sheave pitch diameter
d = small sheave pitch diameter

Belt Speed

$$V = \frac{PD(\text{rpm})}{3.82} = (PD)(\text{rpm})(.262)$$

Where V = belt speed in feet per minute
PD = pitch diameter of sheave or pulley
RPM = revolutions per minute of the same sheave or pulley

Torque to Horsepower

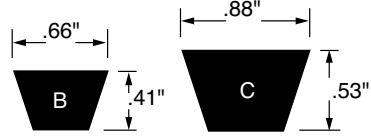
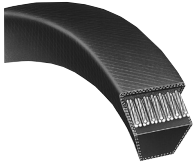
$$\text{Horsepower} = \frac{(\text{Torque, pound-inches})(\text{rpm})}{63,025}$$

$$\text{Horsepower} = \frac{(\text{Torque, pound-feet})(\text{rpm})}{5,252}$$

Useful Conversions

Power (kW) = HP x .7457 Meters x 3.2808 = feet
kW x 1.3405 = HP Inches x 25.40 = mm
mm x 0.0394 = inches Inches x 0.0254 = meters
Meters x 39.3701 = inches

BANDO | PREMIUM V-BELTS FOR OIL & GAS INDUSTRIES



POWER KING® V-BELTS - B SECTION

Belt Number	Weight* (Approx.) Lbs.	Outside Length (Inches)	Datum Length (Inches)	Belt Number	Weight* (Approx.) Lbs.	Outside Length (Inches)	Datum Length (Inches)
B25	0.26	28.00	26.80	B90	0.95	93.00	91.80
B26	0.27	29.00	27.80	B91	0.96	94.00	92.80
B27	0.28	30.00	28.80	B92	0.97	95.00	93.80
B28	0.30	31.00	29.80	B93	0.98	96.00	94.80
B29	0.31	32.00	30.80	B94	0.99	97.00	95.80
B30	0.32	33.00	31.80	B95	1.00	98.00	96.80
B31	0.33	34.00	32.80	B96	1.01	99.00	97.80
B32	0.34	35.00	33.80	B97	1.02	100.00	98.80
B33	0.35	36.00	34.80	B98	1.03	101.00	99.80
B34	0.36	37.00	35.80	B99	1.04	102.00	100.80
B35	0.37	38.00	36.80	B100	1.05	103.00	101.80
B36	0.38	39.00	37.80	B101	1.06	104.00	102.80
B37	0.39	40.00	38.80	B102	1.07	105.00	103.80
B38	0.40	41.00	39.80	B103	1.08	106.00	104.80
B39	0.41	42.00	40.80	B104	1.09	107.00	105.80
B40	0.42	43.00	41.80	B105	1.10	108.00	106.80
B41	0.43	44.00	42.80	B106	1.11	109.00	107.80
B42	0.44	45.00	43.80	B107	1.13	110.00	108.80
B43	0.45	46.00	44.80	B108	1.14	111.00	109.80
B44	0.46	47.00	45.80	B110	1.16	113.00	111.80
B45	0.47	48.00	46.80	B111	1.17	114.00	112.80
B46	0.48	49.00	47.80	B112	1.18	115.00	113.80
B47	0.49	50.00	48.80	B114	1.20	117.00	115.80
B48	0.51	51.00	49.80	B115	1.21	118.00	116.80
B49	0.52	52.00	50.80	B116	1.22	119.00	117.80
B50	0.53	53.00	51.80	B117	1.23	120.00	118.80
B51	0.54	54.00	52.80	B118	1.24	121.00	119.80
B52	0.55	55.00	53.80	B120	1.26	123.00	121.80
B53	0.56	56.00	54.80	B122	1.28	125.00	123.80
B54	0.57	57.00	55.80	B123	1.29	126.00	124.80
B55	0.58	58.00	56.80	B124	1.30	127.00	125.80
B56	0.59	59.00	57.80	B126	1.33	129.00	127.80
B57	0.60	60.00	58.80	B128	1.35	131.00	129.80
B58	0.61	61.00	59.80	B130	1.36	133.00	131.80
B59	0.62	62.00	60.80	B131	1.38	134.00	132.80
B60	0.63	63.00	61.80	B133	1.40	136.00	134.80
B61	0.64	64.00	62.80	B134	1.41	137.00	135.80
B62	0.65	65.00	63.80	B135	1.42	138.00	136.80
B63	0.66	66.00	64.80	B136	1.43	139.00	137.80
B64	0.67	67.00	65.80	B137	1.44	140.00	138.80
B65	0.68	68.00	66.80	B138	1.45	141.00	139.80
B66	0.69	69.00	67.80	B140	1.47	143.00	141.80
B67	0.71	70.00	68.80	B141	1.49	144.00	142.80
B68	0.72	71.00	69.80	B142	1.50	145.00	143.80
B69	0.73	72.00	70.80	B144	1.52	147.00	145.80
B70	0.74	73.00	71.80	B147	1.55	150.00	148.80
B71	0.75	74.00	72.80	B148	1.56	151.00	149.80
B72	0.76	75.00	73.80	B150	1.58	153.00	151.80
B73	0.77	76.00	74.80	B152	1.60	155.00	153.80
B74	0.78	77.00	75.80	B153	1.61	156.00	154.80
B75	0.79	78.00	76.80	B154	1.62	157.00	155.80
B76	0.80	79.00	77.80	B156	1.64	159.00	157.80
B77	0.81	80.00	78.80	B158	1.66	161.00	159.80
B78	0.82	81.00	79.80	B160	1.68	163.00	161.80
B79	0.83	82.00	80.80	B162	1.70	165.00	166.30
B80	0.84	83.00	81.80	B165	1.73	168.00	165.80
B81	0.85	84.00	82.80	B168	1.77	171.00	169.80
B82	0.86	85.00	83.80	B170	1.79	173.00	171.80
B83	0.87	86.00	84.80	B172	1.81	175.00	173.80
B84	0.88	87.00	85.80	B173	1.82	176.00	174.80
B85	0.89	88.00	86.80	B175	1.84	178.00	176.80
B86	0.91	89.00	87.80	B180	1.89	183.00	181.80
B87	0.92	90.00	88.80	B185	1.95	188.00	186.80
B88	0.93	91.00	89.80	B190	2.00	193.00	191.80
B89	0.94	92.00	90.80	B195	2.05	198.00	196.80

*Weights shown are approximate and in some cases may be calculated.
For intermediate sizes not shown, consult Bando for availability and price.

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POWER KING® V-BELTS - B SECTION (CONTINUED)

Belt Number	Weight* (Approx.) Lbs.	Outside Length (Inches)	Datum Length (Inches)	Belt Number	Weight* (Approx.) Lbs.	Outside Length (Inches)	Datum Length (Inches)
B205	2.16	208.00	206.8	B290	3.05	291.00	290.3
B206	2.17	209.00	207.8	B292	3.07	293.00	292.3
B210	2.21	213.00	211.8	B293	3.08	294.00	293.3
B224	2.35	225.00	224.3	B300	3.16	301.00	300.3
B225	2.37	226.00	225.3	B315	3.31	316.00	315.3
B237	2.49	238.00	237.3	B330	3.35	331.00	330.3
B238	2.50	239.00	238.3	B345	3.62	346.00	345.3
B240	2.53	241.00	240.3	B360	3.81	361.00	360.3
B255	2.68	256.00	255.3	B433	4.42	434.00	433.3
B270	2.84	271.00	270.3	B472	4.97	473.00	472.3
B285	3.00	286.00	285.3				

POWER KING® V-BELTS - C SECTION

Belt Number	Weight* (Approx.) Lbs.	Outside Length (Inches)	Datum Length (Inches)	Belt Number	Weight* (Approx.) Lbs.	Outside Length (Inches)	Datum Length (Inches)
C38	0.68	42.00	40.90	C117	2.10	121.00	119.90
C42	0.75	46.00	44.90	C118	2.12	122.00	120.90
C50	0.82	54.00	52.90	C120	2.16	124.00	122.90
C51	0.92	55.00	53.90	C122	2.17	126.00	124.90
C53	0.95	57.00	55.90	C124	2.23	128.00	126.90
C54	0.96	58.00	56.90	C125	2.25	129.00	127.90
C55	0.99	59.00	57.90	C126	2.26	130.00	128.90
C56	0.99	60.00	58.90	C128	2.30	132.00	130.90
C57	1.02	61.00	59.90	C130	2.34	134.00	132.90
C58	1.05	62.00	60.90	C131	2.35	135.00	133.90
C59	1.07	63.00	61.90	C132	2.37	136.00	134.90
C60	1.08	64.00	62.90	C135	2.43	139.00	137.90
C62	1.11	66.00	64.90	C136	2.44	140.00	138.90
C64	1.15	68.00	66.90	C140	2.52	144.00	142.90
C65	1.17	69.00	67.90	C141	2.53	145.00	143.90
C68	1.22	72.00	70.90	C144	2.59	148.00	146.90
C70	1.26	74.00	72.90	C147	2.64	151.00	149.90
C71	1.28	75.00	73.90	C148	2.66	152.00	150.90
C72	1.29	76.00	74.90	C150	2.70	154.00	152.90
C73	1.31	77.00	75.90	C151	2.71	155.00	153.90
C75	1.35	79.00	77.90	C152	2.73	156.00	154.90
C76	1.37	80.00	78.90	C156	2.80	160.00	158.90
C78	1.40	82.00	80.90	C158	2.84	162.00	160.90
C79	1.43	83.00	81.90	C160	2.85	164.00	162.90
C80	1.45	84.00	82.90	C161	2.86	165.00	163.90
C81	1.46	85.00	83.90	C162	2.91	166.00	164.90
C82	1.47	86.00	84.90	C169	3.04	173.00	171.90
C83	1.49	87.00	85.90	C170	3.06	174.00	172.90
C84	1.51	88.00	86.90	C173	3.11	177.00	175.90
C85	1.53	89.00	87.90	C175	3.15	179.00	177.90
C86	1.55	90.00	88.90	C177	3.18	181.00	179.90
C87	1.56	91.00	89.90	C180	3.24	184.00	182.90
C89	1.60	93.00	91.90	C185	3.32	189.00	187.90
C90	1.62	94.00	92.90	C186	3.34	190.00	188.90
C91	1.64	95.00	93.90	C187	3.35	191.00	189.90
C93	1.67	97.00	95.90	C190	3.41	194.00	192.90
C94	1.68	98.00	96.90	C195	3.50	199.00	197.90
C95	1.71	99.00	97.90	C206	3.70	210.00	208.90
C96	1.73	100.00	98.90	C208	3.73	212.00	210.90
C97	1.74	101.00	99.90	C210	3.77	214.00	212.90
C98	1.76	102.00	100.90	C220	3.95	224.00	222.90
C99	1.78	103.00	101.90	C225	4.04	227.00	225.90
C100	1.80	104.00	102.90	C240	4.31	242.00	240.90
C103	1.85	107.00	105.90	C255	4.58	257.00	255.90
C104	1.87	108.00	106.90	C270	4.85	272.00	270.90
C105	1.89	109.00	107.90	C285	5.12	287.00	285.90
C106	1.91	110.00	108.90	C300	5.39	302.00	300.90
C107	1.92	111.00	109.90	C315	5.66	317.00	315.90
C108	1.94	112.00	110.90	C330	5.93	332.00	330.90
C109	1.96	113.00	111.90	C345	6.20	347.00	345.90
C110	1.98	114.00	112.90	C360	6.47	362.00	360.90
C111	2.00	115.00	113.90	C390	7.01	392.00	390.90
C112	2.01	116.00	114.90	C420	7.55	422.00	420.90
C115	2.07	119.00	117.90	C450	8.09	452.00	450.90
C116	2.08	120.00	118.90	C480	8.63	482.00	480.90

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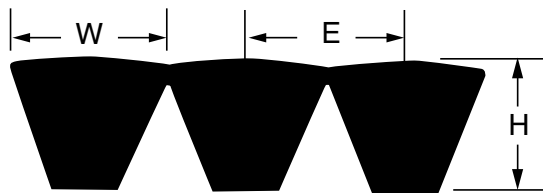
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BANDO | PREMIUM V-BELTS FOR OIL & GAS INDUSTRIES



Nominal Dimensions

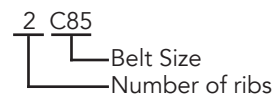


Belt Section	Top Width W (Inches)	Thickness H (Inches)	Pitch Between Belts E (Inches)
C	0.88	0.63	1.00

POWER KING® COMBO V-BELTS - C SECTION

Belt Number	Weight Rib* (Approx.) Lbs.	Outside Length (Inches)	Datum Length (Inches)
C85	2.41	89.88	87.90
C90	2.55	94.88	92.90
C96	2.72	100.88	98.90
C100	2.83	104.88	102.90
C105	2.97	109.88	107.90
C108	3.05	112.88	110.90
C109	3.08	113.88	111.90
C112	3.16	116.88	114.90
C120	3.39	124.88	122.90
C123	3.47	127.88	125.90
C124	3.50	128.88	126.90
C126	3.56	130.88	128.90
C128	3.62	132.88	130.90
C136	3.84	140.88	138.90
C144	4.07	148.88	146.90
C158	4.46	162.88	160.90
C162	4.58	166.88	164.90
C173	4.89	177.88	175.90
C180	5.08	184.88	182.90
C195	5.51	199.88	197.90
C210	5.93	214.88	212.90
C225	6.35	227.88	225.90
C230	6.49	232.88	230.90
C240	6.78	242.88	240.90
C255	7.20	257.88	255.90
C270	7.62	272.88	270.90
C285	8.05	287.88	285.90
C300	8.47	302.88	300.90
C315	8.89	317.88	315.90
C330	9.32	332.88	330.90
C345	9.74	347.88	345.90
C360	10.17	362.88	360.90
C375	10.59	377.88	375.90
C390	11.01	392.88	390.90
C420	11.86	422.88	420.90

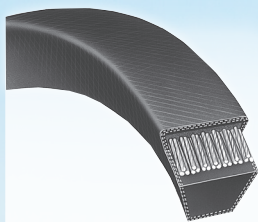
Part Number Example



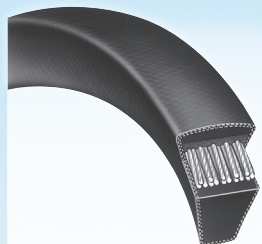
For example, a 2 rib C85 belt is part number 2C85.
No spaces in the part number.

*Weights shown are approximate and in some cases may be calculated.
For intermediate sizes not shown, consult Bando for availability and price.

WORLD-WIDE MANUFACTURING • WORLD CLASS QUALITY



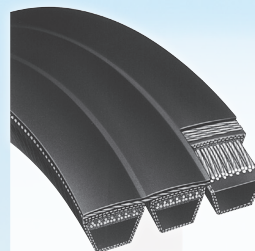
BAN/SET
Power King®



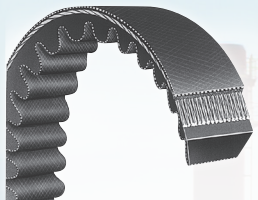
BAN/SET
Power Ace® Narrow



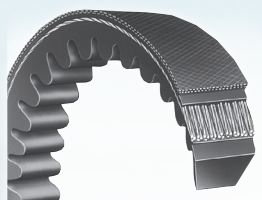
BAN/SET
Power King® Combo



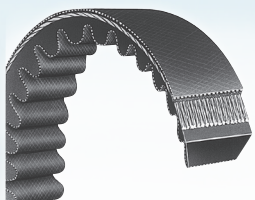
BAN/SET
Power Ace®
Aramid Combo
Power Ace® Combo



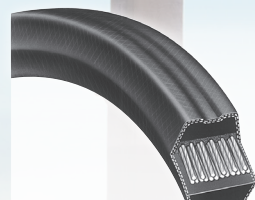
Power Max®



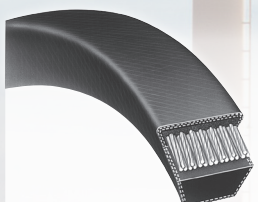
BAN/SET
Power King® Cog



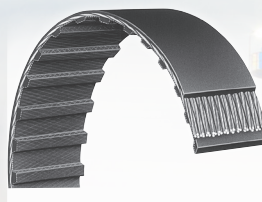
BAN/SET
Power Ace® Cog



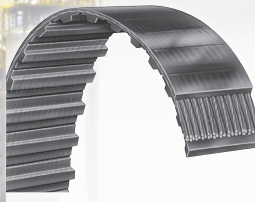
Double V



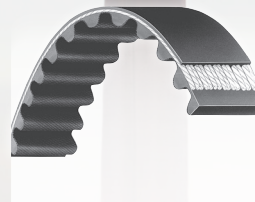
Duraflex GL®



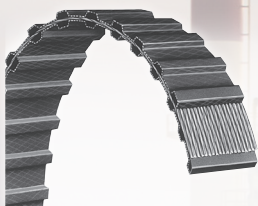
Synchro-Link® Rubber



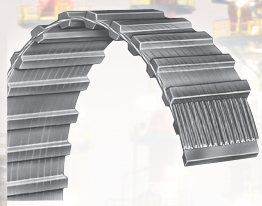
Synchro-Link®
Polyurethane



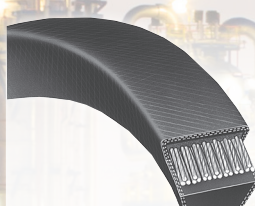
Synchro-Link®
High Torque



Synchro-Link®
Double-Sided
Rubber



Synchro-Link®
Double-Sided
Polyurethane



BAN/SET
Metric V-Belts



KPS II
High Torque
Polyurethane

BAN/SET® System eliminates matching requirements.

Distributed by:

BANDO USA, INC., 1149 W BRYN MAWR, ITASCA, IL 60143

EMAIL: SERVICEEXPRESS@BANDOUSA.COM

OFFICE: 800-829-6612 | FAX: 630-773-6912

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