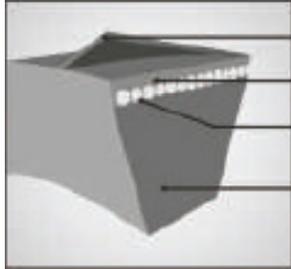


PIX V-BELTS

BELT CONTRUCTION

PIX-X'set® Wrap Construction Belts

Construction:



- Wear resistant bias cut neoprene rubberised polyester cotton fabric
- High tensile cord embedding cushion rubber compound
- High tenacity, low stretch, specially treated polyester & kevlar cords
- Specially compounded high modulus compression rubber

- Raw material composition and treatment of cord effects the strength of the belt and its resistance to stretching
- Rubber compound composition effects the life of the belt by managing the heat absorption
- Precision of molds and curing processes affect the final outcome of the belt

Assuming the belts are made to the right dimensions it is the quality of raw materials and construction processes that will determine the life of the belt.

COMMON BRANDS IN AUSTRALIAN MARKET

Grouped with brands of equivalent quality

NB. This is a subjective ranking based on customer feedback industry experience)

Premium Grade Brands-Makes

- Gates \$\$\$\$
- Contitech \$\$\$\$

High Grade Brands-Makes

- PIX** \$\$
- Dayco/Carlisle \$\$\$
- Opti-Belt \$\$\$

Lower Grade Brands-Makes

- Total Rubber \$\$
- Challenge \$
- Rexon \$\$
- SKF

DIFFERENCES BETWEEN BRANDS OF BELTS

The Key Structural Difference between belt brands would be in:

- Rubber Composition
- Cord Quality
- Jacketing

The better brands such as PIX will have greater consistency in these areas of production



PIX V-BELTS

MOST COMMON CAUSES FOR BELT FAILURE

- **Wrong belt** being used for the application (e.g. Using Industrial Belts on mower decks instead of Dyr Cover Kevlar Cords)
- **Poor Tension**: Slippage is one of the most common causes for failure because maintenance teams do not always retension belts
- **Pulley Diameters Too Small**: It can cause slippage or force belts to bend beyond their ideal working radius and wear excessively on the belt
- **Pulley Condition & Alignment**: If the pulleys are in bad condition or out of alignment it will wear excessively on the belts and reduce its life
- **Overloaded Drive**

“I WANT A MATCHED SET!” - NO MORE

Free Set Concept is applicable for industrial belts which are produced in accordance with the standard BS 3790. Tolerance followed by PIX Free Set Belts are much more stringent than the “Matched Set Tolerances” given in the standard BS 3790.

There is low variation in the length of individual belts & every single belt produced is measured before dispatch.

Customers need to run the belts for at least 24 hours and then check to see if re-tensioning is required and then they will be bed in.

Refer any difficult customers to our website or us if they need detailed explanation.

HOW TO SUBSTITUTE BELTS (CLASSICAL TO WEDGE)

If your customer is running SPA,SPB or SPC pulleys you can interchange Classical Belts (A,B,C) for Wedge Belts (SPA, SPB, SPC) and vice versa.

NB. Please be cautious of substituting Wedge to Classical because these belts have a higher power rating and you do not want the drive to have belts that cannot handle the design power

Classical to Wedge

Calculate the length in millimetres and add the Inside Length to Pitch Length (Li to Lp) factor from the Finer Catalogue (PIX Belts - Classical Dimensions) and look for the closest Wedge Belt to that size.

E.g. A-89: 89 Inches x 25.54mm = 2273mm Inside Length
2273mm + 30mm (Li-Lp Factor from Tables) = 2303 Pitch Length
Substitute: SPA-2300



COUPLINGS

COUPLING PRE-SELECTION CHART

Selection Criterion	Rigid	Chain	Gear	Taper Grid	HRC	Jaw	Curved Jaw (Rotex)	Cone Ring	Tyre	Max Dynamic (Omega Equivalent)
Torque Range (Nm)	Up to 11300	217-8786	1138-135242	47-25980	31-3150	3.5-280	10-3600	50-15140	24-3770	21-19230
Speed Capability	Fair	Good	Excellent	Excellent	Good	Good	Excellent	Fair	Good	Excellent
Shaft Size Range - mm	11mm-125mm	14mm-110mm	13mm-255mm	12mm-184mm	25mm-90mm	14mm-60mm	6mm-100mm	12mm-150mm	10mm-75mm	35mm-124mm
Bore Types	Taperlock	Pilotbore	Pilotbore	Pilotbore	Taperlock & Pilotbore	Pilotbore + Bore & Keyed Range	Taperlock & Pilotbore	Taperlock & Pilotbore	Taperlock	Pilotbore & Taperlock
Misalignment Capability (Maximum Angular - Deg.)	0	1	1.5	0.25	0.2-1.7	1	0.8-1.2	0.2-1.7	4	4
Temperature Range Standard Element		-10C to +60C	-40C to +100C	-18C to +70C	-40C to +100C	-40C to +100C	-4C to +120C	Up to +70C	-50C to +50C	Up to +120C
Ease of Installation	Easy	Easy	Fair	Fair	Easy	Easy	Easy	Easy	Fair	Fair
Damping Capacity	Poor	Fair	Poor	Fair	Good	Good	Good	Good	Excellent	Excellent

V-BELT AND COUPLING DRIVE SELECTION CHECKLIST

V-Belt Drive

- Speed (RPM)
- Power (kW or Hp)
- Shaft Sizes
- Centre Distance

Coupling Drive

- Speed (RPM)
- Power (kW or Hp)
- Shaft Sizes

